

Water Resources Management Plan

Feb/Mar 2023



Background



Yorkshire Water is implementing a long-term plan outlining how they intend to maintain a safe and reliable water supply for customers. This is called the Water Resources Management Plan (WRMP).

Yorkshire Water have written a Draft WRMP and published this on their website for consultation; this allows anyone who wants to, to give feedback on the plan before a final iteration is created.

Alongside this open consultation, Yorkshire Water are keen to undertake some primary customer research on the plan **to ensure it is meeting the needs and expectations of customers**.

Objectives

Understand whether the Draft WRMP meets customers' needs and expectations with regards to future water management in Yorkshire.

The steps needed to establish this:

- Can customers **comprehend** the draft plan / elements of the plan?
- Are customers confident in the **process** behind developing the Draft WRMP?
- Do customers believe that Yorkshire Water is committed, and able, to **deliver** for the region?
- Do they agree with the measures outlined in the plan, including target service levels?
- How do they feel about paying towards the plan through their bills?

Methodology



We ran a survey on the Your Water community

DATE: 27 Jan – 3 Feb 2023



236 respondents took part from the Your Water Community



We conducted 2 x online focus groups with Your Water community members

DATE: 22nd - 23rd Feb 2023



13 respondents took part



Key Take Outs











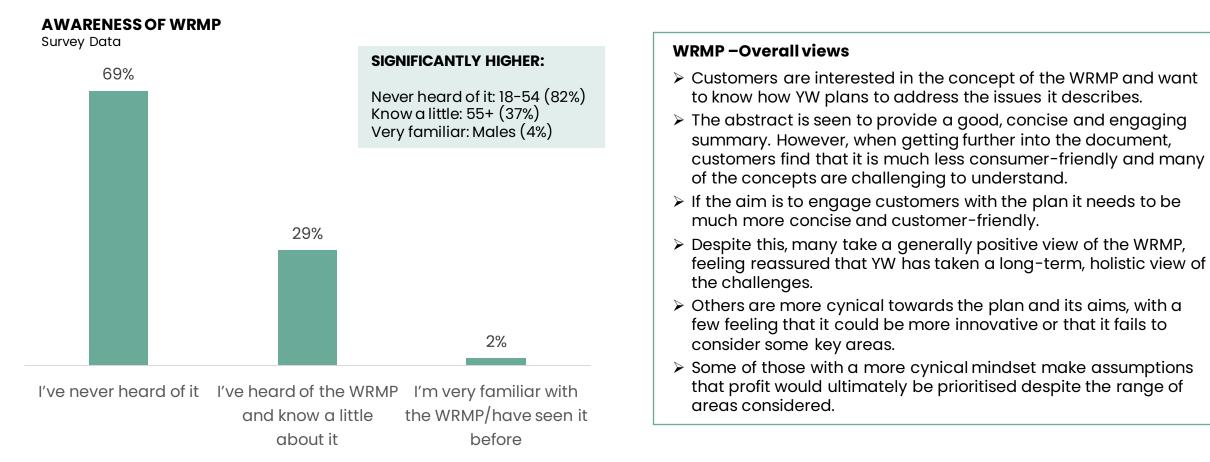
Comprehension	Shared Priorities	Trust in Process	Delivery of the plan
 The Plan's abstract provides a clear, consumer-language summary. Beyond that, the plan is too much for most people to engage with; there are lots of abstract concepts (likelihood of future events, range of future variables) and too much technical comprehension required. Overall, though, the idea that Yorkshire Water have done all this work is very reassuring. 	 Customer priorities tend to be very big picture (solve climate change) or very visible (stop water leaks). For customers, everything should centre on Yorkshire; resolve the problems 'here'. Customers are also much more motivated by 'action now' than they are by long-term targets. They want YW's focus to be on their service, and the environment, not on shareholder value/returns. 	 Customers trust that YW has the skills to plan for Water Resources. The idea of balancing cost and value broadly makes sense. Sharing a plan suggests transparency and the range of benefits and metrics outlined is positively received. A few are more cynical around underlying motivations and the role of profit in decision-making. 	 The plan is read against a backdrop of increasing concern about the environment and humanity's inability to do anything meaningful about it, so some are sceptical. The plan is predicated on so many future variables that it can become unimaginable to a regular consumer. When targets are so far off, the sense of accountability can disappear.
 The concept of the WRMP is of interest to a segment of consumers, and the process outlined within it is reassuring to them. However, a much more concise and consumer-friendly version would be required to drive genuine engagement. 	 Reassuring customers that the right level of focus is being placed on top-of-mind issues such as leaks is key. Showing customers that the environment is a key driver of YW decision-making will be welcomed. Customers expect to see use of greywater /rainwater included in supply/demand measures. There is scope to place more focus on customer behaviour and education if balanced with improvements to YW process and infrastructure. 	 Consultation is fundamentally a good thing and helps to create transparency; however, unless the Plan is more accessible some feel it perhaps isn't genuine consultation. Some consumers will need convincing around the motivations behind the selected plan and that the broader benefits delivered (for example, to people and the environment) are more than just a 'tick box'. 	 Customers seem to 'accept' climate change and that flooding, and hosepipe bans are part of their county's future – target levels of service relating to drought measures are not necessarily meaningful. Customers are open to paying towards the delivery of the plan if they feel that YW and customers are genuinely 'in it together'. They need to see their contribution making a meaningful difference (not just helping YW to deliver bigger profits).

CONSIDERATIONS

Customers are interested in the concept of the WRMP and how YW plans to tackle the issues it describes



However, the plan would need to be much more concise and customer-friendly to engage with customers



WRMP: Overall feedback



Water Supply and Demand

The scale of possible future supply and demand challenges comes as a surprise to customers



HUMANA

Climate change is assumed to be the biggest threat to water supplies, along with increased demand

INCREASED DEMAND

CLIMATE CHANGE

Top Ranked by 35% of customers

Top Ranked by 44% of customers

BIGGEST THREATS

Survey data

LEAKS / WASTAGE

When asked to think of other factors that could have been included here, it was Yorkshire Water pipe leaks and other customers (including big businesses) 'wasting' water that came most readily to mind.

I am shocked there is less water available than demand

I don't know why we have to get water from the Midlands when it never stops raining in Yorkshire and we have loads of reservoirs?

We should not be relying on other areas. We have an abundance of reservoirs in Yorkshire. We should be reducing water usage with stricter controls on households using water unnecessarily, for example people using hosepipes/pressure washers every week to wash their car. I know several neighbours on my street do this every week, particularly in the spring and summer.

REDUCED WATER ABSTRACTION NO SEVERN TRENT WATER TRANSFER

Both Top Ranked by c10% of customers

7

Customers are broadly happy with suggested Demand Reduction measures



Leakage is top of mind for many customers; some feel that this needs more focus across the plan

DEMAND REDUCTION

Survey Data

97^x
 were supportive of reducing leakage across the region to half 2017/18 levels by 2050
 support the idea of improving how/when water is used by customers and businesses (e.g., product labelling)
 81^x
 would support an increase in smart metering (all new homes would be fitted with water meters, and from 2025 these would be smart meters and properties with existing water meters would be retrofitted with a smart meter by 2040).

Why is the reduction of losses through leaks not treated with more importance? Many of us do what we can to reduce our water usage but then see millions of gallons pouring into the drain or seeping into the ground. Surely this has to be treated as a higher priority.

Those **with a water meter** sig higher support smart metering (77%) **C2DE** (90%) and **females** (86%) sig higher support

efficient labelling

Key insight

Leakage is top of mind for customers, either through personal experience or things they have seen and heard in the media. Addressing criticisms that not enough is being done in this area through the plan will help to gain customers' buy-in.

There is agreement that Yorkshire Water should educate and support customers to reduce water use



HUMANS

While some feel a firmer stance could be taken, it's important to get the balance right

It's felt that Yorkshire Water should encourage positive behaviour change relating to water usage amongst customers, with possible interventions including the following...

- Educating customers around possible future supply and demand issues
- Providing free or subsidised devices that would help people to reduce water usage
- Installing meters/smart meters in every property to encourage more people to take responsibility for the water they use
- Incentivising reduced water usage

Educate people that our planet's water resources, are not infinite. We should treat every usage as precious as all life-saving commodities.



Households should be incentivised to save water and businesses fined for wasting it.

Key insight

Anything that YW can do to educate customers about water saving behaviour is welcomed, even to the level of incentivising lower usage. However, there needs to be a balance, and some customers may respond negatively if they feel YW is placing the onus on customers ahead of getting its own house in order.

Customers tend to be positively disposed towards less technical demand reduction initiatives



Greywater recycling and rainwater harvesting are spontaneously mentioned; these are seen as being simple and effective, and as having few drawbacks

When asked what other Demand Reduction measures they would expect to see in the plan, spontaneous suggestions included the following:

- Increased recycling/usage of greywater
- Better harvesting of rainwater
- Working with property developers to ensure considerations relating to water supply and demand are considered when properties are built

HM Gov should be asking builders to install underground tanks to save rainfall.

If climate change gives us extremes then we need to be ready to harvest the excess water that the increased rainfall provides.



HUMANS

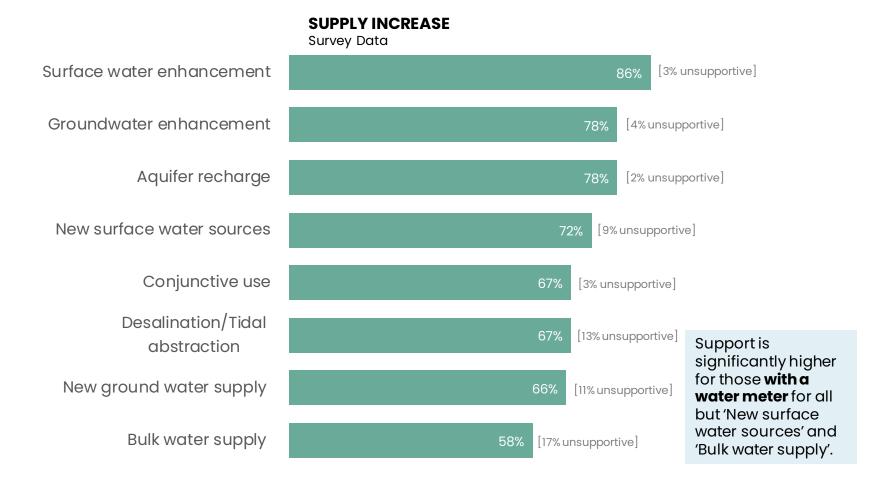
Could greywater legislation be implemented...whereby for example toilet flushing is always from water sources from rain run off, bath water etc.

It's gone through all this energy-consuming process... the end result is that we're doing things like watering the garden which could easily be done with bathwater.

Customers are most supportive of Supply Increase measures that build on existing supply



Measures that look at new supply or new processes are less well received



CUSTOMER IDEAS

- Deepen existing/develop new reservoirs
- Brown- and grey- water usage
- Think outside the box more...

Be innovative. I am not seeing any suggestions, apart from aquifer recharging and maybe desalination that shows use of imaginative ideas, just old and cheap solutions. There are plenty of examples internationally of ways to store/clean water for use.

SUPPLY INCREASE Survey + Group Responses

Key insight

Although it's recognised that a blend is needed, overall customers tend to be more positive towards measures that reduce demand rather than increasing supply.

HUMAN8

Q8: The plan proposes a range of different actions to increase the supply of water readily available in Yorkshire. How supportive are you of each of these key elements of the plan to increase supply? N=236

Drought Resilience

Customers struggle to engage with target levels of service relating to drought measures



There are too many unknowns for the targets to feel tangible or meaningful

Measure	Frequency No limit	
Level 1: Drought actions with minor environmental impacts and appeals for voluntary reductions in use		
Level 2: Introduction of temporary use bans	No more than 1 in 25 years on average	
Level 3: Supply-side drought permits / orders and non-essential use drought orders	No more than 1 in 80 years on average	
Level 4: Emergency drought orders	1 in >500 years (This is an estimate of an exceptionally rare event)	

"I think the timescale is OK, but I think the targets are somewhat unrealistic. I think we will need to see regular hosepipe bans as well as other measures."

Key questions raised:

- > Is that based on the likelihood from the past or taking climate change into account?
- > How can YW ever know if this is being achieved when the timescales are so long?
- > Is this realistic? Customers perceive that the measures are currently being used much more frequently than this.

Key insight

While consumers want Yorkshire Water to ensure drought actions aren't implemented more often than necessary, the details of how this is achieved, and specific target levels of service are of limited interest. For some, limiting the use of more basic drought actions such as hosepipe bans seems arbitrary and unnecessary.

2039 feels like it is a long way off; some want YW to aim for resilience to the most serious drought events sooner



However, drought resilience appears to be a lower priority for customers versus other Plan elements

2039 TARGET Survey data	2039 TARGET Survey + Group Responses	
I'd want water companies to reach this level even sooner 44%	56 Strategies RE: water storage, water savings, repairs	
I'd want water companies to achieve this by 2039	need to be a priority. If they're a high priority, then hopefully goals will be reached quicker.	
l'd want water companies to achieve this but it's not a priority for 2039	We've had floods these past years in Calderdale, really bad ones, so I don't feel that worried about droughts.	
I don't want water companies to focus on achieving this it's not a priority to me at all	I'm quite confused by this; what are they doing 'now' and why wait until 2039, that seems a long way off?	
	SIG HIGHER:	
Compared to other elements of the plan, this feels like a lower priority	• Reach this level even sooner: Males (55%)	

after **several years of flooding** (although people have also experienced **hosepipe bans** so are somewhat confused as to the state of play).

Achieve this by 2039: Females (44%) It's not a priority for 2039: ABC1 (19%)

• It's not a priority for me at all: No demographic differences





The 3-tier approach to environmental destination is broadly considered to be sensible



HUMANS

However, customers don't tend to feel strongly on this topic due to limited comprehension

71_%

Environmental Destination

Environmental Destination is a new requirement set out by the Department for Agriculture (Defra) and the Environment Agency (EA). This identifies environmental risks from existing water abstractions over the long term, and can lead to those abstractions being reduced or stopped altogether.

It is currently uncertain what impact this will have on Yorkshire's water supplies. However, Yorkshire Water believe this will bring about a reduction or loss of water. Therefore, Yorkshire Water have created **three scenarios** to account for this uncertainty...

- The **first** is a 'most likely' scenario that represents the current regulatory view of what could be required while recognising further work is needed to confirm any loss of supply to Yorkshire Water
- The **second** is an enhanced scenario to represent a greater impact and greater loss of supplies
- The third is a scenario to represent a low impact and minimal loss of supplies

[Full stimulus in appendix]

say they support a 3-tier approach 28% are neutral

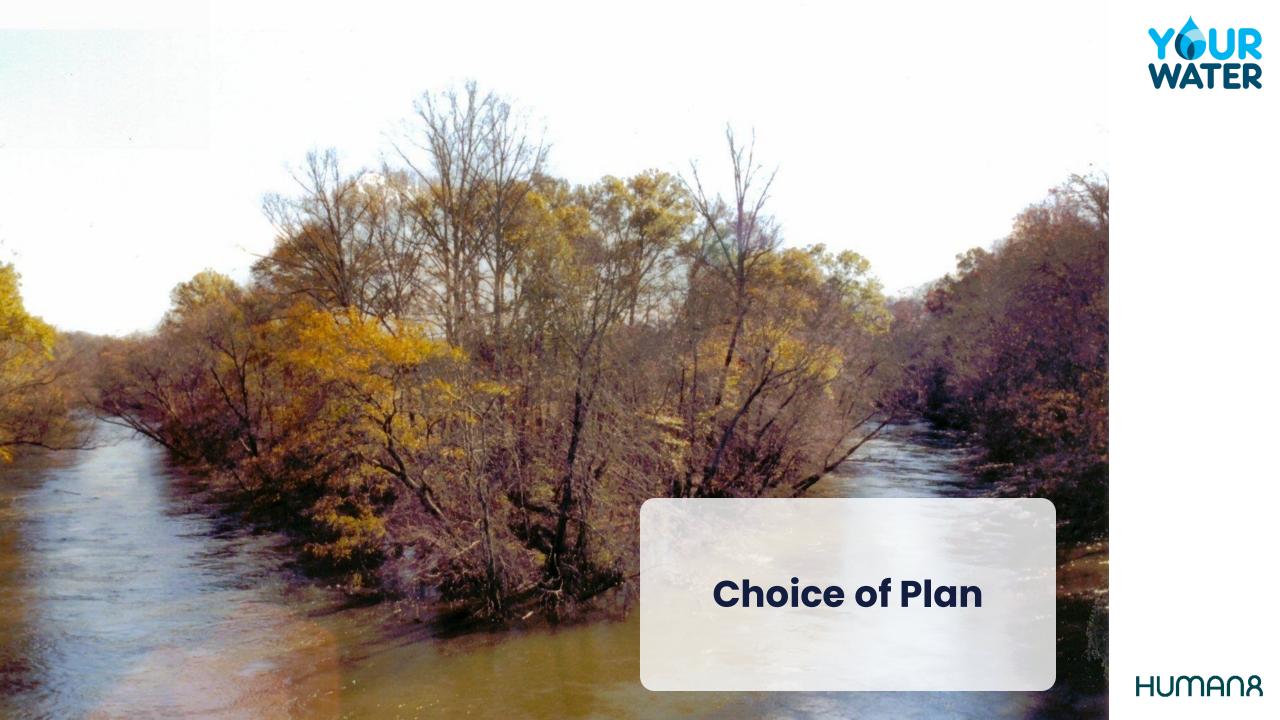
> SUPPLY INCREASE Survey Data

"I think [Environmental Destination] is essential. We need realistic scenarios and assessments and should be looking at bad case scenarios, if not worst case. It is difficult to say what the impact on the environment will be, but we need to protect the existing resources and environment."

Environmental destination – discussion groups

- > At a broad level, people think it's important that Yorkshire Water considers the environmental impact of its activities and seeks to minimise harm.
- Environment destination, therefore, is thought to be a good move overall, although this isn't an area customers feel qualified to comment on in detail.
- The terminology used in relation to this creates confusion so customers struggle to engage with the detail.
- > However, they can see the wisdom of accounting for different scenarios in the plan when there is so much uncertainty about what might happen.

16



Customers appreciate the breadth of factors considered, even if they don't fully comprehend them all





Customers generally understood the process that YW has been through, even if they are uncertain about the details. Overall, they are pleased that YW is clearly considering a wide range of potential variables.

IMPORTANT CONSIDERATIONS FOR CUSTOMERS

- All possible value metrics should be considered, but not all should be equally weighted; it's important the plan takes a holistic approach.
- There are mixed views on which of these are the most/more important. People generally felt that they are all important to a degree.
- Measures relating to protecting the natural environment are seen as being key (with a focus on reducing sewage pollution/improving water quality).
- A few picked out 'human and social wellbeing' as being of immediate importance, though wanted more information about what this means in practice.
- There's a recognition of the need for long-term goals but they also want to see positive action happening now, with more immediate benefit to customers.

LEAST COST VERSUS BEST VALUE? Customers agree with the decision to implement a best value solution, in recognition of the importance of the various goals that it will ultimately contribute towards. This is however subject to clarification on how the plan will be paid for and by whom.

Resilience

Customers are open to paying towards the plan, as long as they believe in the integrity of its intentions



If they feel that YW and customers are genuinely 'in it together' then this will help drive buy-in

In principle, customers aren't immediately against the idea of **paying a small premium** to help fund the sort of environmental initiatives they feel YW should be implementing around Water Resource Management. However, it requires a fine balance to convince them.

> Factors that do or would drive willingness / unwillingness to pay (Group Responses)

- + Plan makes believable positive environmental promises
- + Any extra costs are ring-fenced for this plan
- + Yorkshire Water also **commits extra funds** for the plan
- + There are immediate, visible actions on **leakage**
- + The plan (and extra costs) feel 'fair'
- + Required actions are primarily for YW

- Plan is vague and focuses too far into the future
- Costs amount to price rises and nothing is 'seen' to be different
- YW pays out big bonuses / dividends / posts large profits
- None of the actions are immediate or visible
- The plan lacks innovation and aims only for the minimum
- Too much onus on customers changing their behaviour

WILL PAY





WON'T PA

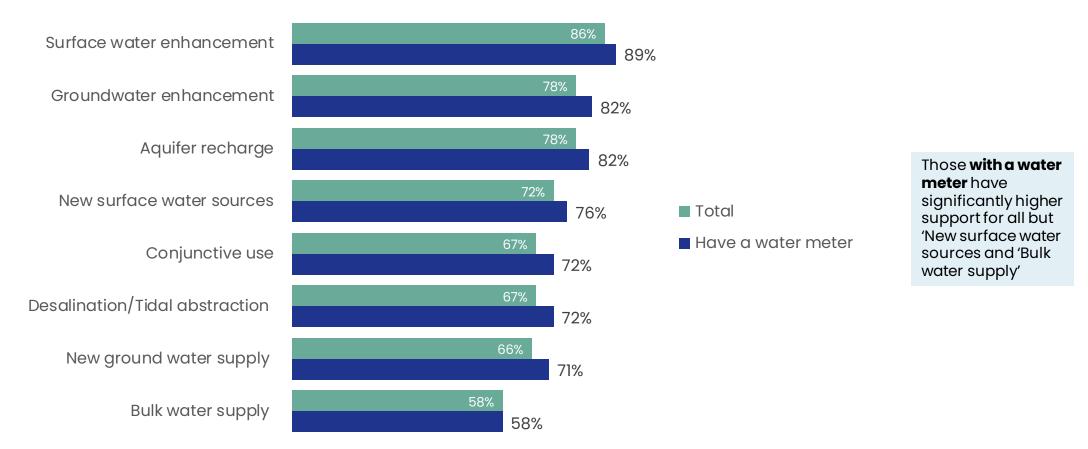


Those with a water meter are significantly more supportive of the majority of supply increase measures



SUPPLY INCREASE

Survey Data



Q8: The plan proposes a range of different actions to increase the supply of water readily available in Yorkshire. How supportive are you of each of these key elements of the plan to increase supply? N=236





About your community

With over 2,000 members, Your Water is an online research resource giving you easy access to consumers

The community offers a wide range of conventional and innovative research techniques and approaches.

Our aim is to approach every project with fresh thinking and apply methodologies that we truly believe will get you tangible, actionable results.

Any questions?

Naveed Majid

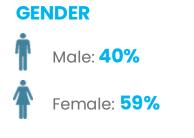
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Sample Profile: Survey (n=236)





AGE

- 18-34 years: 8%
 35-44 years: 8%
- ✓ 45-54 years: 21%
- 55-64 years: 27%
- Over 65: **35%**

HOUSEHOLD SIZE

- 1 person household: 28%
- 2 person household: 47%
- 3 person household: 16%
- 4 person household: 7%
- 5 or more person household: **3%**

SEG

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AREA OF YORKSHIRE



• North Yorkshire: 17%

WATER METER

Have water meter: 69% Don't have a water meter: 29%

VULNERABILTY



(X

Vulnerable customer: **43%**

Non-vulnerable customer: 57%

Environmental Destination Stimulus



SURVEY

Environmental Destination

Environmental destination is a new requirement for water companies set out by Defra & the Environment Agency. It aims to deliver long-term sustainability and environmental resilience in water resources planning. This requirement examines how and where water is taken from natural sources (abstractions) and assesses if they are sustainable over the long term.

Previously, water companies were required to examine their abstractions in the short term (next 5-year period), this led to some reductions in available water supply, known as sustainability reductions, to protect the environment. Environmental Destination now looks at the impact of water abstraction beyond the next 5 years. It considers the impact at a regional level and could identify a need for further abstraction reductions.

Without further investigative work to better understand what individual catchments require, it is uncertain what impact Environmental Destination policy will have on Yorkshire's water supplies. However, Yorkshire Water believe this will bring about a reduction or loss of water to supply customers at an overall level. Therefore, as part of WRMP24, Yorkshire Water have created **three** scenarios to account for this uncertainty...

- The **first** is a 'most likely' scenario that represents the current regulatory view of what could be required while recognising further work is needed to confirm any loss of supply to Yorkshire Water
- The **second** is an enhanced scenario to represent a greater impact and greater loss of supplies
- The **third** is a scenario to represent a low impact and minimal loss of supplies

GROUPS

SUPPLY AND DEMAND ISSUES: WHAT IS ENVIRONMENTAL DESTINATION?

Environmental Destination is **a new requirement for water companies** set out by the Department for Agriculture (Defra) and the Environment Agency (EA). This identifies **environmental risks from existing water abstractions** over the long term, and can lead to those abstractions being reduced or stopped altogether.

Before this, environmental sustainability was **measured in the short-term** (next 5-years). Water companies will continue to investigate short term impacts but the new requirements now factor in the longer-term impacts (beyond 5 years) as well.

In the Yorkshire Water supply area, the Environmental Destination has identified that some of our groundwater abstractions may need to be reduced in the long-term to avoid negative environmental impacts which impacts how much water there is available for supply.

Further into the future, **European legislation** could require the River Derwent, from which we abstract water, to be naturalised (i.e. restored to its natural health). This would lead to a **substantial reduction of water available**, and we have incorporated a loss of 130MI/d into our most likely plan.

Our WRMP reflects this by building in **reduced supply** from these sources over time. As the exact impact is unknown the plan includes alternative scenarios and recognises that further work is needed to confirm any loss of supply to Yorkshire Water.