WATER RESOURCES REGIONAL PLAN CUSTOMER RESEARCH MARCH 2023 UPDATE

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Water Resources West is developing its regional plan

A strategic regional plan

Water Resources West (WRW) has been set up to provide strategic oversight and co-ordinate water resources planning across the west of England and Wales region, combining five water companies. The companies wish to work together between 2020 and 2023 to develop a long-term strategic regional plan, in line with regulatory thinking.











With up-to-date input from customers

Customer input will be vital to a successful regional plan.

In March 2021, Shed conducted a thematic triangulation of all customer research from WRW companies, mainly from PR19 and WRMP19 research. This gave you robust insight into customers' views pre-COVID-19.

A similar exercise was completed in May 2022, based on the latest research and including customer and stakeholder research relating to the COVID-19 pandemic, COP26, coverage of storm overflows, and the cost-of-living crisis.

To make sure input into your regional plan is based on the most up-to-date research, you needed to conduct another triangulation of your latest research in March 2023.

Our method for triangulating your research

TRIANGULATED

OUR APPROACH

March 2021 57 studies. mainly PR19 and WRMP19



May 2022 38 studies. mainly WRMP24 and external published reports



March 2023

25 pieces of research. including willingness to pay and draft WRMP24 acceptability

REPRESENTATIVENESS

In total, this triangulation includes research with around 75,000 customers and 250 stakeholders across the WRW region.

Studies included in this triangulation all used different methods. However, the majority of quantitative studies were representative of the demographic profile of each companies' customers. Qualitative studies tended to use quotas to guarantee a range of views were captured.

1. Collated all available data sources and metadata



2. Reviewed all research and completed RAG bias assessment for each



4. Produced this report of the main insight suitable for sharing with a wider audience



3. Visualised insight using an interactive "mind map" including any trends, similarities/differences, and gaps

THEMATIC FRAMEWORK



- Water salience
- Water companies
- Resilience
- Quality and aesthetics
- Environment





- Water efficiency
- Metering
- Smart meters
- Leakage
- Interruptions



- Source preference
- Water trading and transfers

A full list of the research included in all three stages of the analysis and the full detail of our triangulation method can be found in the appendices.

This report brings together three pieces of triangulation across all WRW companies

- In this report, we synthesise the main themes emerging from our three triangulations
- For each theme, we walk through the main insight in 2021, 2022 and now 2023
- Throughout the report, we:

Label 2021 insight Label 2022 insight Label 2023 insight Quote household (HH), future bill payers (FBP) and non-household (NHH) customers as well as stakeholders

If available, show differences by region or customer type*

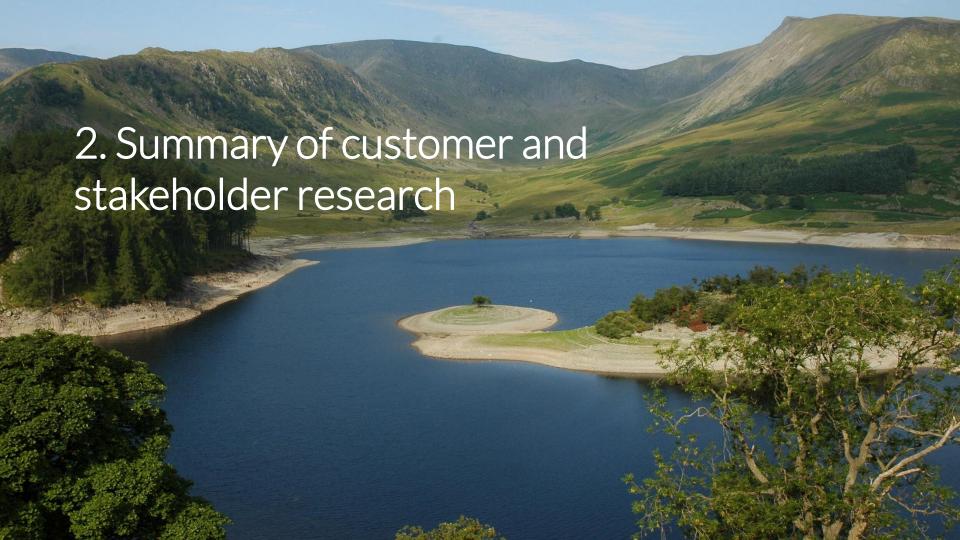




- We use abbreviations for each company: HD** = Hafren Dyfrdwy; SSW = South Staffs Water; ST = Severn Trent; UU = United Utilities; and DCWW = Dwr Cymru Welsh Water
- We give an aggregated view for the region. We don't aim to replicate individual company research
- Insights in this report apply to all water companies, regions, or customer types unless stated otherwise
- It's not always possible to highlight differences by company, customer type or region. Lack of insight on a particular theme should not be read as confirmation it doesn't exist. Just, that it wasn't investigated and/or identified in the available research

^{*} Where no differences are mentioned, this is because either (1) there is no difference or (2) no differences were reported in the individual reports so we can assume no differences existed

^{**} HD's research was included in the March 2021 synthesis while it was still an associate member of WRW. We included one small piece of WRMP customer research from HD in the May 2022 update but no new HD research was available in 2023



Summary of customer research by theme



Context

- Customers don't think about water often and few worry about water resilience. But they expect their water company to plan for the future
- Customers want water companies to prioritise safe, clean, reliable, affordable water
- •The cost of living has become the number one issue for most customers over the past two years
- But this isn't focused on water bills the majority see their water bills as good value for money
- •The environment has risen in importance in recent years. But it has been pushed to a long-term issue, with the cost of living dominating
- Storm overflows and pollution are eroding trust in the whole sector



Demand

- •Leaks are a very emotive subject and customers' favoured demand solution
- Customers want metering prioritised.
 Support for universal, fully-smart metering is widespread, as long as vulnerable customers are supported
- Few engage with water efficiency, but most want education and help
- Many customers want water companies to push beyond existing water efficiency, leakage and smart metering targets
- •In 2022, customers were calling reductions in the likelihood of TUBs/NEUB and for drought resilience targets to be brought forward. After the restrictions of 2022, and in the current economic climate, it's less clear in 2023



Supply

- Customers favour demand management over increasing supply
- They would like to expand existing infrastructure rather than build new
- Customers assess supply solutions based on whether they encourage responsible water use, provide value for money, are long-term solutions, and protect the environment
- •This means reservoir storage and (to a lesser extent) water transfers tend to be customers' preferred options. Both are long-term solutions and potential boosts to local economies
- River abstraction (and any other water removed from the environment) should be minimised.
 Desalination is seen as a last resort

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Summary of draft WRMP24 acceptability and stakeholder research



Acceptability of draft WRMPs

- •Before bill impact is explained, the majority of customers (HHs and NHHs) support water companies' draft WRMPs
- Those who find plans acceptable like the long-term thinking, feel they offer value for money, and agree with their aims. This tends to be higher income, older and metered customers
- •Those who find plans unacceptable are concerned about costs, believe it's not their responsibility, and feel water co's dividends/profits are unacceptable. This tends to be lower income, vulnerable and unmetered customers
- •Once the impact on bills is explained, acceptability decreases. But this should be viewed in the context of research carried out during a period of high inflation. There is some evidence that customers may be willing to pay more than proposed bill increases

Stakeholders' views

- •On most issues, stakeholders share customers' views:
- oThey feel progress on leaks is a prerequisite to talking about water efficiency
- oThey support proactive smart metering and welcome compulsion (if anything, more than customers)
- OAnd they show little appetite for hard-engineering supply solutions, favouring demand management instead
- •Stakeholders too are concerned about the cost of living and the affordability of water bills, in particular for low income and vulnerable HHs. They want these groups protected and supported during any universal metering roll-out
- They want water co's to push beyond existing environmental targets, with particular focus on reducing pollution, improving water quality and avoiding habitat loss
- Stakeholders want long-term, holistic planning around water resilience e.g. sustainable abstraction



Customers don't often think about water, but they largely trust their water company

Water is low salience

- Most customers don't think about water day-to-day*
- Water's importance and the impact it has on people's lives, only comes to the fore when supply is interrupted in some way

You just always expect that it's going to be there, and so we just don't think about it. HH customer It's only when you lose water service that you realise how much of a big deal it is, and how much we rely on it. HH customer

Water companies are trusted

- Customers generally have limited knowledge of all water company activities
- However, they largely trust them to get on with what customers see as their most important job – providing a clean, safe, reliable water supply
- This is based on their personal experience i.e. having enjoyed years of reliable water supply

They've always been there the moment that we needed them.

NHH customer

Well, I've been drinking the water that comes out of the tap for 37 years!

HH customer

2021 sources: UU5, ST7, ST9, HD4, HD13

^{*} Non-household (NHH) customers running water-intense businesses are the exception – they're very conscious of reliability and are very engaged with water/their water company

This trust extends to building long-term water resilience

It's good that WRW is in place, with a coordinated plan in place. Hopefully, with this level of cooperation, it will be resource efficient, avoid duplication and lead to great VFM bills whilst making sure we are kept supplied in the future!

HH customer

* Population growth can be a salient issue in specific areas where people feel local infrastructure is under pressure from significant development e.g. Haverfordwest Customers are reassured that WRMPs (and WRW, if made aware of it in research) exist to create a resilient water supply for the future



Customers assume water co's are thinking about long-term supply e.g. investing in infrastructure, planning for population growth*

Customers have limited understanding of water cycle and water supply/demand challenges



There's little concern about water scarcity - it appears abundant in the region, especially rainfall in Wales - and a reliable service doesn't suggest an issue



Messaging: Customers call for more information about challenges to the water supply and reassurance about the steps taken to guarantee a reliable supply

We just don't think we have a water problem. Vulnerable HH customer

2021 sources: SS4, SS5, ST1, ST5, UU5, DC2

Appearance gives reassurance and seems more important than taste, smell or hardness

- Customers are particularly sensitive to changes in appearance (given the vast majority drink tap water)
- Customers aren't willing to accept any discolouration - it signals to them water may be unsafe to drink or use (expect for flushing toilet)
- However, a change for a few hours is acceptable. Most issues resolve themselves within this timescale

APPFARANCE

ST9. UU6-8.

UU14, DC1



- •Customers appear to be less sensitive to changes in taste and smell (and are less likely to contact water companies about such changes)
- •And there's little appetite to pay more to resolve taste/smell issues
- However, taste and smell may build longer-term negative perceptions and is a particular issue when customers move supply regions

TASTE / SMELL



- Hard water is raised spontaneously by a vocal minority, but doesn't seem to be a widespread issue in the region
- •Where it exists, it can cause dissatisfaction e.g. there's empirical evidence of complaints around limescale in kettles
- Although there are signs hardness doesn't affect overall customer satisfaction scores

I'm sick to death of replacing kettles. washing machine, because of the super super hard water. HH customer

HARDNESS



2021 sources: NB: The vast majority of HH and HD8. SS2. SS4. NHH seem to go back to using SS6, SS8, ST2, water as before after water quality or aesthetic incidents



Messaging: It's important to inform customers (HH and NHH) directly about variations in water quality immediately (text and email). They want to know the cause, actions taken and likely duration. A banner on a water company website is also welcome. Indirect communication via local news is less useful.

The environment isn't a top concern - but it's growing and customers want it addressed

Interest in the environment and climate change rose markedly between PR14 and PR19 (Blue Planet effect), and more recent research suggests it's a growing concern.

It's just not something I would ever think about.

HH customer

In rural settings, maintaining land and managing the pollution of water courses is a key priority

However, it still isn't top-of-mind:

1. It's too large an issue to contemplate

2. It's too hard to predict

3. There's no clear link between water co' actions and the environment

Customers do however want water co's to be planning for the impact of climate change and building a long-term, sustainable supply. And when fully-considering the issue, customers feel they have some part to play in this.

COVID-19: During the pandemic, 16-34s were more likely to use extra water, especially for recreation. This challenges the normal assumption younger customers care more about the environment and again, suggests the link between water and the environment/climate change isn't clear in customers' minds

My gut reaction is for the next generation we should be doing everything we can. NHH customer In Wales, especially in areas of high biodiversity, customers place a high value on Wales' natural assets and want to see this local resource cherished

Customers' main priority in 2021 was safe, clean, reliable, and affordable water



COVID-19: With increased time at home, it's even more important water co's "steady the ship" with continuous supply

More important if experienced service failure

More important for vulnerable / lower income



Primary

Safe, clean drinking water

Reliable supply

Keeping bills affordable

covidence consumption on next bill

Secondary

Environmental impact/climate change

Reduce leakage

Promote metering and water efficiency education

Greater priority when customers are exposed to all supply/demand challenges and options

Tertiary

Corporate social responsibility

Investing for the future e.g. infrastructure and new water efficiency tech Customer services inc. communication and accurate billing

COVID-19: Pandemic brought vulnerable communities to the fore. Need to consider support for them

COVID-19: Rising concern.

But some evidence it was deprioritised during lockdown in favour of recreation

 $2021\,sources: HD10, SS1, SS6, ST2, ST4, ST6, UU1, UU2, UU3, UU12, UU16, DC3$

NB: Each WRW water company used a different qualitative research methodology to establish the priorities of their HH and NHH customers. This chart gives an aggregate view of priorities for the whole region.



In 2022, little has changed around how people think about water or water companies

Water salience

- Customers still pay little attention to water
- Awareness of water scarcity is low
- No fundamental differences in how Welsh and English customers see water or water companies

People are less likely to agree water is plentiful in waterstressed areas

2022 sources: 8, 9, 11, 15, 20, 22, 24, 25, 29, 30, 36

Water resilience

- •As in 2021, perceived plentiful water in the landscape, rainfall, and limited interruptions, mean few worry about long-term supply
- Some drops in consumer confidence about the long-term water supply but few are *statistically significant*

NHH and vulnerable customers are more concerned about water supply in the future (because it's more critical for them)

Appearance, taste, smell, hardness

- Not major issues
- •UU taste tests suggest around two-thirds are satisfied with the taste of their current supply
- •SSW research suggests hardness, taste and smell tend to be weaker drivers of value for money (compared to affordability)
- However, SSW and ST get some reports of limescale being an issue but this isn't widespread

Views of water companies

- Customers (HH and NHH) continue to be satisfied and any movement in scores is minor
- Negative media coverage of storm overflows in Q4 2021 doesn't seem to have significantly impacted perceptions
- Overall, water companies are still trusted

I thought how disgusting [storm overflows are] but then when they explained why it happened, even though it's wrong it kind of made a little bit of sense. I can't really remember the full story that I read or saw, I think it was on the news I saw it.

ST HH (digitally excluded)

However, in early 2022, people became much more concerned about affordability

- Worries about the wider economic situation, inflation and the cost of fuel, energy and food in particular, have fuelled a growing concern about affordability
- This is now the number one concern for consumers*:

Affordability is a bigger concern for lower income / vulnerable HHs

But it's a concern across regions and demographics e.g. Poverty/cost of living is #1 concern among ST customers* (Mar-22) e.g. UU cust. saw a +30%pt increase in concern about HH finances (Sep-21 to Mar-22) My gas bill has gone up £150 a month. My council tax has gone up as well £30 and just basically trying to get some quality of life [from] what I earn and what has to go out.

SSW HH (ABC1)

- NHHs too are finding this economic uncertainty alarming and they are becoming more short-term in their focus as a result
- While water bill anxiety is growing, customers are much more focused on energy prices and food than on water bills (perhaps unsurprising given the relative cost of each)

To be honest my water bill is not the thing that's most important right now – I've got so much stress on an everyday basis running a million-pound turnover business.

SSW NHH

2022 sources: 3, 8, 10, 15, 17, 22, 23, 25

The environment rose up the agenda in 2021 but has since been pushed to a long-term issue

A rising concern

- Continuing the trend seen in our 2021 synthesis, the environment continues to be a big concern for all audiences, especially Future Bill Payers
- Nationally, concern peaked during coverage of COP26, which coincided with coverage of storm overflows
- •There's a general feeling than climate change is happening now and the impacts are already being felt in the UK i.e. more extreme weather, mixing seasons

2022 sources: 1, 3, 4, 8, 9, 11, 13, 17, 23, 24, 25, 31

Still a concern but a longer-term one

- •In the first months of 2022, concerns about the environment became dwarfed by short-term personal economic concerns
- •The environment is still taken very seriously and is a significant concern but it has been **pushed to a longer-term issue**

Customers expect water companies to do no harm

- Consumers see climate change as the Government's responsibility, and then water companies, and finally consumers in that order
- When it comes to water companies' activities, consumers are focused on preventing pollution and avoiding loss of habitats more than carbon emissions

Younger consumers care more about the environment but older consumers are more likely to take practical actions to limit their impact

I think the environment is such a big part of who we are and what we think is important, and companies that focus on that and advertise that, are a lot more attractive in that sense. It makes you feel better about paying those bills; it makes you feel that you're doing something good.

UU Future Bill Payer

Customers seem to favour an enhanced environmental destination and may be WTP for it

HHs and NHHs ARE SPLIT BETWEEN LEVELS 2 AND 3

Spontaneously, they tend to favour the more ambitious level 3 (especially the most environmentally-engaged). But when exposed to the full issues, they slightly tend towards level 2, mainly because of its more balanced approach to cost

> Level 2 (Level 1 + improved environment)

water

Level 3 (Enhanced wider environment)

Related to the **Fnvironment**

Level 1 (BAU) Agency's

National

Framework

levels:

2022 sources:

4.20

LEVEL 1 (BAU) FAVOURED BY FEW

Most customers and stakeholders reject BAU as insufficient given the scale of environmental challenges. Those who favour this option tend to be the most cost-conscious consumers

A note on the research:

- Environmental destinations will have a different impact on different companies. As such, this slide is based on research from SSW and ST customers
- We have no research among UU or DCWW customers as there will be little or no impact on them
- Preferences were given based on theoretical cost levels rather than actual values
- Other research suggests customers favour more "expensive" options when they see actual value of water bill increases i.e. increases are not as great as customers fear

I think we must strive to have the best environmental standards and look after our waterways and the surrounding environment. This will cost more but our water bills are relatively low and I for one would be prepared to pay more for these improvements.

ST HH

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While the environment continues to be important in 2023, affordability still dominates

Affordability

- •By Feb 2023, the economy/inflation was still the no.1 public concern
- •NHHs are exercising cost control and HHs are budgeting
- •Cost is the lens through which customers view any WRMP plans
- •That said, as we saw in 2022, water bills are not as significant an expense as other household costs (e.g. energy) and increases are tolerable
- Indeed, most customers across the region still see their current water bills as good value for money

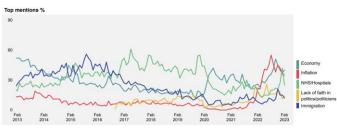
UU research showed HH customers are prepared to pay £23.05 extra for WRMP plans but the planned bill impact is actually around half (£12.67)

Environment

- •UU analysis (and research by WRE/WRSE) shows that in some situations, customers place higher weight on environmental or carbon impacts than on either bill, economic or social impacts
- Detailed SSW analysis suggests HH customers are WTP a small amount to support nature and wildlife
- •But in early 2023, ST research shows the environment is secondary in customers' minds to affordability
- National polling confirms this showing the environment is no longer in the top five concerns of the British public
- •ST and SSW studies suggest the majority of customers prefer a middle ground of balancing investing in environmental improvements but reducing bill impact

Top five concerns for February 2023: trend data

What do you see as the most/other important issues facing Britain today?



Base: representative sample of c.1,000 Bittish adults age 18+ each month, interviewed face-to-face in his H.B. April 2020 data onwards is collected by telephone; previous months are face-to-face. Source: Ipsos

"[In Nov 2021] I was really pleased ST was taking a lead and had some ambitious targets. Obviously since then we have a cost-of-living crisis making paying certain bills more difficult. I just hope this crisis does not knock us off track for dealing with environmental concerns"

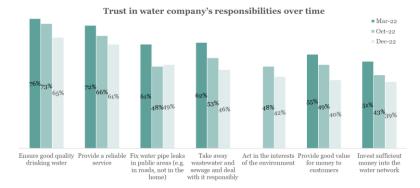
ST Future Bill Payer

Up to March 2023, storm overflows in particular are starting to impact trust

Source: Savanta

- Overall, satisfaction across the water sector is steady
- But awareness of storm overflows and river pollution is high and satisfaction with sewerage services has fallen 8%pts (2020-2021)
- While understanding is low, overflows and pollution are seen as within water co's control
- And it is starting to erode trust in the whole sector
 - All WRW companies saw trust fall at end of 2022
 - Fewer now think water co's care about the services they provide or put customers' interests first
- Other negative stories around dividends, director pay and bonuses aren't yet top of mind but there are signs these may emerge in future (e.g. an ST study shows the public massively overestimate size of dividend payments)

2023 sources: 8, 9, 14, 22



Half think water co's put the interests of shareholders first and two-fifths describe the sector as "profit first"

Only two-fifths of customers are confident water companies are taking action to improve water quality

In 2021, 63% say water/sewerage companies care about the service provided to customers (significantly down from 71% in 2020)

But there are few significant changes elsewhere

Water salience

- Customers still don't think about water often
- •There's widespread low awareness of and understanding of water-related issues
- And customer engagement with the water industry is low

2050 is 28 years away, which is a lot of time. The plan needs to be broken down into short term and long term so that there is an impact on the here and now.

ST NHH

Water resilience

- There's still limited concern around future supply – both HH and NHH assume water is plentiful
- •There was a small fall in confidence in future supply - driven by restrictions in 2022 and also longer-term fears around climate change
- •That said, when informed of the issues about future supply during WRMP consultations, concern rises and customers want water co's to be acting now in the long-term interests of water supply

+29%pt increase in ST customer concern about availability of future water supplies once informed of long-term supply/demand issues

Quality and aesthetics

- •WRE research shows hardness is the most commonly cited "water issue" experienced by customers
- And nationally, it consistently shows the lowest satisfaction scores of all aspects of water supply
- But it only comes up as an issue in the WRW region e.g. SSW research with HHs (but less so for NHHs)

32% of SSW customers are dissatisfied with hardness/softness and this has increased in the past two years



Leakage is highly emotive – reducing it is customers' favoured demand solution

Leakage reduction is a "no brainer" and a "non-negotiable":

It's seen as "careless", "wasteful", "shocking", and "immoral"

It has a positive environmental impact

(To those who've witnessed it) it's very visible (To NHH) it suggests water co's are inefficiently-run businesses

Reducing leakage is also a pre-requisite for building authority to talk about water efficiency (WE). Customers expect there will be a combination of repairing pipes (reactive) and replacing infrastructure (proactive)

We cannot afford to lose water. Thousands of gallons can be lost. We are all encouraged to use less so if leaks are not repaired it is all to no avail. HH customer As such, customers like the idea of ODI and incentives related to leakage reduction. But customers would like water companies to go even further than current commitments

They perform well against that, but it's a terrible target isn't it. I'm shocked at the amount of water that gets wasted each day.

HH customer



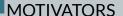
COVID-19: Recent research shows customers still want companies to go further, with 20% reduction in leakage seen as ideal

Few customers engage with WE

- Most customers use water freely with little thought, but agree they could do more to use less
- Most aren't actively taking steps to reduce their consumption but neither are they deliberately wasteful

When you use water you need to wash your clothes and you need to have a bath and you need to brush your teeth. You never just leave the tap on and walk off and forget about it on purpose. Whereas you might leave the light on and just think, "I can't be bothered."

HH customer



- •Saving money is the main motivation (however this only applies to metered customers)
- The environment is only motivating for those already environmentally-engaged

The only way people are going to use less water is if their bills get bigger

HH customer

BARRIERS

- There's little evidence customers appreciate why they need to save water
- There's **no financial incentive for unmetered** and a perception that "water is cheap"
- Customers would rather water companies reduced leakage than they change behaviours



COVID-19: Customers became more conscious of consumption over the summer. But behaviours and attitudes to WE didn't fundamentally change



Messaging: Green messages can work for families but need wider support from ambassadors and should adopt the language of plastics e.g. "single use". Use terms that customers understand (e.g. "bathtubs") not abstract (e.g. "mega litres")

Customers want WE devices <u>and</u> education but research suggests this may not be enough

They're not really promoting that you need to save the water. They've not really gone out there and touched the public about the whole issue.

HH customer



Messaging:

Customers want proactive comms about how to save water (especially low effort/maximum impact actions)



- •Limited knowledge of need to save water
- Customers want to know more about how to save water
- •Want water co's to take a lead
- School visits are viewed very positively as a way to engage the young

Devices

- Limited awareness of free WE devices
- Favour "fit and forget"
- However, a field trial shows devices and audits have limited impact on consumption (shortlived and confined to those already using less water i.e. older customers)





High consumption, little incentive to save water i.e. unmetered. Env. messaging and highlighting consumption could have most impact



Families = engage through children

Highest consumption and tend to prioritise own needs. Do engage in recycling so mirroring language might work



Empty nesters = most receptive Like idea of minimizing "waste", but already lowest consumption. Interested in innovative ways to "save or preserve"

2021 sources: HD1, HD6, SS2, SS4, SS5, SS7, ST4, ST1. ST12. ST16. UU1. UU4. UU5. DC2. DC4

COVID-19: Under 35s were the highest users over the summer, especially for recreation, and least likely to say "I do all I can to

save water"

Customers prioritise metering more when they understand the whole picture

Metering isn't a spontaneous priority

Customers install them primarily to save money, but also to monitor their usage. Environmental concerns or spotting leaks are less motivating.

Highest interest in metering among more affluent households

Low interest among future/shared bill payers (who like predictable bills for easy splitting)

There are several barriers to metering:

1. FEAR OF INCREASED COST

Suspicion meters are a way to increase bills, especially if compulsory

2. UNCERTAINTY

Most HHs have never had a meter so taking one would be a leap into the unknown

3. LACK OF KNOWLEDGE

Little awareness of twoyear reversions or bill guarantees in place

However, when fully evaluating <u>all supply and</u> <u>demand options</u>, metering comes out on top

Mainly because it's a long-term solution, it saves money, is environmentally-friendly, and it encourages personal responsibility.

I think they should promote meters. You see a lot of waste at home because I'm not on a meter and I think if I was...I would think twice about what I was using. But I'm not sure if it's just the tariff going up for not being on a water meters at home that I'm seeing a price difference compared to the business.

NHH customer (Café)



covidence covide

Customers assess whether interruptions are acceptable by several criteria

1. TYPE OF INTERRUPTION

Low pressure is more acceptable and not considered a major issue (especially when rebates are available) compared to no water at all

2. CAUSE

Interruption arising from natural events are more acceptable than failure because of ageing assets or poor maintenance

3. FREQUENCY

Shorter, more frequent interruptions (12hrs every 2 months) are more acceptable than longer, less frequent (3 months every 10 years)

4. DURATION

An interruption of 3-6hrs is manageable but 8-12hrs has a bigger impact, and over 24hrs is unacceptable

5. SIZE

Willingness to pay for fewer HHs affected is higher than to reduce average resolution time

6. CRITICALITY

Even short-term water deprivation can have huge implications for high water dependent NHHs or vulnerable HHs



Messaging: Multi-channel communication during interruptions is vital. As with aesthetic incidents, messages should reassure customers around cause, resolution, and available support. This should be direct comms to all customers and website banners (younger customers would initially search online).

2021 sources: HD9, HD13, ST2, ST8, UU11, UU15, UU16, DC1



Customers are largely relaxed about current levels of restrictions

People may get the hump, because they won't be able to use things how they want to, but I don't think it would have hardly any impact. HH customer (commenting on TUB)

There's little willingness to pay (WTP) more to reduce these levels further

Many have little direct experience of restrictions e.g. last severe restrictions (standpipes) in Wales were 1976

Perceived

abundance of

water in the region

means customers

seldom worry

It seems far away, it's quite an unlikely scenario really. HH customer (commenting on emergency drought order)

NHH and vulnerable customers who are very dependent on water are less relaxed about restrictions

If we didn't have water for certain parts of the day we'd have to close. NHH customer (Hotel)

> 2021 sources: SS2, ST1. UU15, UU16, DC1, DC2

Acceptable **TUBs NEUBs** Drought levels order UU Once a 1 in 10 1 in 20 year years years 1 in 80 SS 1 in 40 Not covered years years DC 1 in 20 Not tested but relaxed about restrictions given lack years of direct experience and heavy rainfall ST 1 in 33 1 in 33 1 in 200 vears vears vears

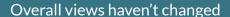
Customers are broadly happy with current service levels (no matter what levels were tested qualitatively*)

* This suggests further research may be needed to assess customers' true tolerance for different service levels



Views on leaks are consistent with 2021 and there's still appetite for going beyond targets





- Reducing leaks is still consistently customers' most favoured demand/supply solution
- It's seen as wasteful and a highly emotive topic
- Customers feel action on leaks is needed before any meaningful conversation with customers about WE



There's broad support for 50% reduction by 2050

- When not aware of the issues, customers want leaks to be "as close to zero as possible"
- When informed, they accept it's impossible to irradicate all leaks
- In high-level quantitative research, support for the existing leak reduction target is strong



But in-depth studies suggest targets don't go far enough

- In more detailed qualitative research (by ST and SSW), there's an appetite to go further i.e. 15% reduction by 2025 and 50% by 2050 is seen as not fast enough
- These studies also suggest customers are WTP for this, given it should mean lower future bills

2022 sources: 1, 4, 7, 10, 17, 22, 25, 29, 39

Why wait when it will eventually have to be done regardless? Although disruptive and expensive, long term a solution will have to be found.... Surely, long term, fixing these problems sooner would benefit HD and allow them to produce a significant amount less, bringing costs down long term.

HD Financially vulnerable HH

Customers' views on WE are also consistent and they want targets expedited here too

	Consistent with 2021	New insight in 2022
Behaviours	 Few act to reduce their consumption and most feel their consumption is average Little awareness of current consumption (HHs or NHHs) Young families continue to be heaviest users 	 In-depth, national observational studies in kitchens and gardens show a weak connection between reported and actual behaviours (suggesting future studies on reported behaviour are unreliable)
Attitudes	 Few know how to reduce consumption, why it's important or see it as an environmentally-friendly activity But, when informed, WE is seen as the most important WRMP priority (alongside leak reduction) Customers want help from water co's (raising awareness, knowledge and providing tools) and feel water companies could do more to communicate the need for WE (especially as metering is rolled out) 	Feedback from the majority of SSW customers suggests current target for 110L PCC by 2040 should be brought forward, with the focus being on expediting targets rather than increasing them e.g. 80L

2022 sources: 1, 3, 7, 8, 9, 10, 12, 22, 25, 27, 33, 34, 35, 37

I think it's a joint effort – us doing our bit but Welsh Water educating us, too.

DCWW HH customer

I would like to see this achieved more quickly, if possible by 2040, as we could save a huge amount of water between 2040 and 2050 allowing for population growth. SSW HH customer

There's growing acceptance of the inevitability of smart and mandatory metering

Metering is still supported

- •Seen as the fairest way to pay for water and reduce demand
- Again, after deliberating over the full range of options, metering is the favoured solution to address future challenges

Over 50% of SSW customers say they would pay more to roll out universal metering

The same barriers exist

- Same perceived barriers exist
 unpredictable bills,
 irreversibility and hassle
- These tend to be stronger among unmetered customers.
 But they are open to these being challenged
- Customers worry about the impact on vulnerable customers (as do vulnerable customers themselves) i.e. price hikes or unpredictably of bills

Smart metering is seen as the direction of travel

- •There's lower support for proactive smart metering from heavy-using NHHs e.g. farmers
- •But there's national acceptance smart tech is the "new normal"
- Energy smart meters frame this view and customers expect the same service e.g. IHDs and real-time usage data
- And SSW research suggests there is some WTP for smart metering (£4.20/yr for AMI)

Mandatory metering also seems inevitable

- At a headline level, there is some resistance among customers e.g. 83% of DCWW customers support it being not compulsory*
- •However, in-depth qualitative research** shows that, when exposed to the full range of supply/demand options, customers are supportive of the idea, even those originally against it

2022 sources: 2, 4, 5, 7, 12, 21, 22, 24, 32

** SSW, UU and ST all undertook detailed, deliberative studies here

I'd like to see real time readings to see how much my shower, washing machine, hose use. All to an app. I've got smart meters for everything else."

UU HH customer

^{*} Single question from a headline survey

There are signs customers *may* be willing to pay for improved <u>TUBs & NEUBs</u> service levels

While there's the same overall view around restrictions (i.e. little direct experience, few concerns and contentment with the status quo), some newer UU research suggests customers *may* be willing to pay for improved service levels (i.e. reducing the likelihood of restrictions), given the actual increase in cost which would be involved.



SSW

- Customers support the need for TUBs and NEUBs – they are the most popular way to reduce demand during the summer months (e.g. versus higher charges for the highest consumers)
- Most customers expect more frequent restrictions than the existing TUB and NEUB service levels





- HHs favour improving TUB service levels to 1 in 40*
 - •60% of HH customers would be WTP £4.75 to achieve this**
 - •WTP for improvements in TUBs increases with age





- Few experienced interruptions
- Customers accept existing service levels i.e. NEUBs and TUBs at 1 in 33
- •Limited appetite for paying more to reduce these occurrences from HH and NHH (NB: this was un-costed and customers assumed costs would be prohibitive)

NB: No additional insight from DCWW

2022 sources: 1, 4, 10, 20, 23

^{*} From WRMP24 research conducted by DJS Research in April 2022 (report 10 - see appendix)

^{**} Only UU directly addressed willingness to pay (WTP) for improving restriction levels. It used real values and we've seen in other studies, theoretical WTP question elicit a more negative reaction than research with actual figures, we can be confident there is some appetite for this. However, more WTP research may be needed

Customers also want <u>drought resilience</u> targets brought forward and *may* be willing to pay



25W

- Current restrictions and EA targets seen as acceptable
- •When informed of issues, around half (HH and NHH customers) support reducing risk to 1 in 500 years by 2040
- •Three in ten would like this even sooner than 2040





- Preference for improving extreme event service levels (only 14% prefer the status quo)
- HH have a stronger preference for improving levels than NHH
- •Average WTP to improve from 1 in 500 by 2039 to as soon as possible was £4.56*





- High acceptability among HH and NHH for existing emergency service levels (1 in 200)
- Customers are split on whether to bring forward emergency measures targets (NB: this was uncosted and customers assumed costs would be prohibitive)



DCWV

- Accept current restrictions are necessary
- And taking all demand-side solutions together, DCWW customers are WTP a limited amount here**

2022 sources: 1, 4, 10, 20, 22, 23, 26

^{*} Again, only UU directly addressed willingness to pay (WTP) for restriction levels. It used actual figures so we can be confident there is some appetite for this. However, more WTP research may be needed

^{**} DCWW questions covered WTP for \underline{all} demand-side options together rather than individually (66% support paying £4/yr)



In 2023, there are still widespread calls to increase leak reduction targets

- Leaks continue to be an emotive topic and the number one preferred supply/demand option for both HHs and NHHs
- Given TUBs in parts of the UK during the summer of 2022, customers make causal links between restrictions and leaks
- There's overwhelming support for leakage reduction targets and appetite for targets to go further:

UU

Majority of HH, NHH and FBP customers support WRMP to reduce leaks by 25% by 2030

But almost four in ten want UU to go further and reduce further in that timeframe and (qualitatively) there's willingness to pay for this

"I'm stuck between [wastage] and the bill increasing. But this is something that needs to be tackled and 35% is enough" UU HH customer

ST

62% of customers find Ofwat's target of 15% reduction by 2025 acceptable

Most customers are willing to pay £5/yr for an increased target

"By 2045, 50%, is that good enough?"
ST HH customer

SSW

Plan to reduce leakage by 50% fully supported but some question whether it could be achieved sooner than 2050

Detailed analysis suggests HH customers are WTP to reduce % of water lost to leaks

Only vulnerable and lower income customers are unwilling to pay for reducing leaks

Where hosepipe bans were in place there was significantly more awareness of leaks

87% believe water/sewerage co's should be responsible for water leaks

ST HH customers say an average of 8% of water leaking is acceptable but they <u>perceive</u> 42% of water treated by ST is currently leaking

"30% leakage in customer homes is very, very high! I think SSW should do everything, with our help as consumers, to help solve these issues as soon as possible" SSW NHH customer

2023 sources: 5, 6, 9, 18, 19, 20, 22, 23

Most now support smart metering, including universal roll-out

 Support for universal and/or smart metering increases when customers understand the future challenges around water supply Understanding what usage should look like, sharing best practices with similar businesses in the area will help implement best practices and save water and money" UU NHH customer

71% of ST HH customers support universal metering by 2035 and 90% of NHHs support the smart meter roll-out Unmetered ST customers favour a shorter timeframe for rolling out smart meters (2025-35 rather than 2025-2040) SSW customers support universal metering as long as vulnerable are supported (but detailed analysis shows limited WTP for smart metering)

Majority of UU customers (HH, NHH, FBP) support UU's plan to provide smart meters to 25% of customers by 2030 NB: UU isn't planning universal metering

- Most customers are comfortable with smart devices and relaxed about data sharing
- Those who reject *water* smart meters tend to also reject *energy* smart meters (they don't see the benefit and doubt savings)
- Customers prefer fully smart meters (to semi-smart or non-smart meters) because of the data visibility and consumption data they would bring
- But customers have the same concerns about smart meters as for metering in general (they worry about increased bills, especially larger HHs or unmetered)

"As the mother of 3 young children I use a significant quantity of water. I could potentially end up paying more than what I do now"

UU HH customer

In 2023, views on water efficiency haven't changed, with appetite for advice and audits

Overall, views on water efficiency haven't moved significantly

35% of customers want to learn more from about how they can save water

Seven out of ten customers know/think their water co is encouraging people to reduce water use



ST research shows messaging around saving £50 per year by using only full washing loads is more believable than a family of four saving £700 per year by cutting shower times*

HH VIEWS

- There's little compelling people to save water – especially unmetered customers
- Most use some form of water efficiency device
- Customers want to hear more from water companies about how to save water

NHH VIEWS

- All but the highestconsumers are complacent about their water use
- NHHs find the idea of water usage audits very attractive

"[An audit is] a no brainer. Save money and be more sustainable too - we'd definitely go for it" ST NHH customer

"They need to be more proactive to get the message across book direct appointments with high users" ST NHH customer

2023 sources: 1, 12, 13, 14, 20, 23, 24, 25

^{*£700} saving includes money saved on water <u>and</u> energy bills

There's a mixed picture of whether more frequent restrictions are acceptable or not

In the past year, customers have had more direct experience of restrictions	 67% have heard about drought/hosepipe bans in the few months to Nov 22 And the majority accept the need to use less water in dry periods
Most customers support current plans around restriction levels	 When informed, SSW customers are largely in favour of current plans and targets i.e. 1 in 500-year emergency drought target The vast majority of UU customers (HH and NHH) support UU's proposed improvement of its TUB service level i.e. from the current 23% chance of a TUB over five years to 12.5% (in line with neighbouring water companies)
There's some support for more frequent restrictions if necessary	 Three quarters of SSW customers support the use of more frequent TUBs/NEUBs, particularly during long periods of dry weather, to protect long-term water resilience (and there is limited WTP for reducing frequency of TUBs)
Whereas others would like them less frequently	 ST customers are willing to pay more rather than risk service failures in the future SSW NHHs are more likely than HHs to raise concerns about NEUBs given experiences in lockdown

2023 sources: 6, 9, 10, 13, 21, 23

"[I think when you see the term 40/80/500 years, as a consumer it makes you feel like it's not really going to happen often enough to be worried about it"

SSW HH customer



Customers evaluate supply-side options by cost, sustainability, and the environment

When actively involved in the decisions, customers evaluate source options by four questions (*in no particular order*):

Does it encourage responsible use of water?



Is it long-term and sustainable?



Does it offer good value for money?



Does it harm the environment?

They favour options which encourage customers and water co's to use water responsibly

They want to avoid short-term fixes

They favour lower risk i.e. several smaller sources rather than one larger one

They favour value over lowest cost

They favour the middle ground – investing for the future, but not too much that might not be needed

They favour minimising damage to the environment if it can be avoided

2021 sources: SS1, ST1, ST5, UU1, UU17, UU18, DC2, DC4

For supply solutions, customers favour reservoirs or water trading/transfers

MOST FAVOURED LEAST FAVOURED

Reservoir storage

- Popular for reliability, low environmental impact (if using existing) and cost
- But reopening old reservoirs seen as expensive and high env impact

Water transfers/trading

- •Sensible to share resources as long as donor region doesn't suffer
- Inexpensive
- •Less-favoured when travelling longer distances (environmental damage, cost, and greater reluctance to share)

Welsh customers favour sharing water WITHIN Wales (making the most of a natural asset) but are less positive about sharing further afield

Groundwater abstraction

- •Comfortable if using existing bore holes
- And surprisingly cost-effective
- But seen as environmentallydamaging to build new

Wastewater recycling

- •Assumed already done
- •Some taste concerns but trust water co's on safety
- Less support if called "effluent re-use" and when consider chemicals used

Very unpopular in ST region

– seen as a short-term fix
and putting pressure on
stressed rivers

River abstraction

- Very expensive, hard to deliver, env impact
- But seen as good investment in future sustainable supply

Desalination

 Very unpopular option once costs and environmental impact are considered

I notice when the reservoirs are low, and the rivers, and I think what a shame. It stops your environment and nature, the beauty. It's upsetting and you want to do something about it.

HH customer

Why don't you just pump it into the existing reservoirs? You don't have to open up other disused reservoirs... Surely that would be the cheapest option. NHH customer

2021 sources: HD12 SS1, SS7, ST1, UU15, UU16, UU17, DC1, DC2, DC4

NB: Each water co. used a different methodology and compared different sources to establish preferences. While not possible 45 to give a quantitative aggregated view, we are able to pick out a general pattern of views across the qualitative research.



Beyond what we heard in 2021, there's a strong preference for improving supply-side efficiency before building new infrastructure



Customers (whether HH or NHH) agree. They favour demand-side options (e.g. reducing leaks, behaviour change, restrictions, or recycling more water at home/business) before looking at supply-side options



As much as I would love to have more supply of water, I know that the impact to the environment is mostly negative and if there is more water supply the consumption will increase and we will still be in the same position. However, I feel like our way of life requires more water maybe because we have taken things for granted SSW Future Bill Payer

It makes sense to maximise productivity of existing treatment works which should be more cost effective ST HH

More efficient use of water allows existing supplies to go further UU HH

Supply <u>and</u> demand options were prioritised together, but views seem consistent with 2021

WRW companies looked at a different set of options, combining different supply and demand options*. Hence, direct comparisons aren't possible in 2022. The following table summarises the hierarchy expressed by each company's customers.

	Mos	Most favoured							Least favoured	
	Reduce leakage	Reduce water use (education and advice)	Recycle water at home / business	Recycle waste water indirectly	Increase size of existing reservoirs	Universal metering	Ground water abstraction	Water transfers	Restrictions	River abstraction
	Reduce leakage	Improve WE	Recycle water indirectly	Manage land to improve water quality	Install water meters	Increase capacity at treatment works	Increase size of existing reservoirs	Ground water abstraction	Water transfers	River / lake abstraction
ER	Recycle water indirectly	Increase size of reservoirs	Maximise output of treatment works	Increase capacity at treatment works	Increase connectivi- ty of supply system	New water treatment works for river water	Water transfers	Additional surface storage	Ground water abstraction	NB: ST mandated demand solutions so not something be chosen by customers
	Reduce leakage	Make homes more water efficient	Raise awareness of how to reduce use	Water transfers	Expanding existing reservoirs	De- salination	Increase metering	Re-using wastewater	Restrictions	Ground water abstraction

VlaquS

Demand

NB: For SSW, UU and ST, the views of HH and NHH match **

Views on transfers remain the same but UU research suggests water quality is more important than origin



Consistent with 2021

- Water transfers are broadly supported it feels like the right moral thing to do
- Customers have several questions about transfers i.e. who pays, environmental impact, and the reliability of their own supply. They need reassurance around these
- Water-rich areas (e.g. Wales and Cumbria) have more reservations around transfers than potential beneficiaries (e.g. SVT), but even then the majority support the idea

New in 2022

- UU-focused research on transfers shows customers are more concerned about the appearance/quality of their water than where it is sourced from*
- Transfers in Wales are less popular with social tariff customers

Done properly, I think it is a good idea. I wouldn't want to stand by and watch people go without necessary water, while we have too much and vice versa.

HD NHH customer

2022 sources: 2, 14, 15, 39 / * That said, the majority of UU customers are unable to clearly distinguish between the quality of different Tworts especially when it comes to taste

NB: this additional slide focuses specifically on transfers as these are a key priority in the regional plan. Other supply-side feedback hasn't significantly changed since 2021



In 2023, there's nothing to suggest views of supply sources have changed "If you add up all the benefits you get wo litres per day, but then if you're leaking to suggest views of supply sources have changed "If you add up all the benefits you get wo litres per day, but then if you're leaking to suggest views of supply sources have changed "If you add up all the benefits you get wo litres per day, but then if you're leaking to suggest views of supply sources have changed "If you add up all the benefits you get wo litres per day, but then if you're leaking to suggest views of supply sources have changed "If you add up all the benefits you get wo litres per day, but then if you're leaking to supply sources have changed "If you add up all the benefits you get wo litres per day, but then if you're leaking to supply sources have changed "If you add up all the benefits you're leaking to supply sources have changed "If you add up all the benefits you're leaking to supply sources have changed" it is not supply sources have changed "If you add up all the benefits you're leaking to supply sources have changed "If you add up all the benefits you're leaking to supply sources have changed "If you add up all the benefits you're leaking to supply sources have changed "If you add up all the benefits you're leaking to supply sources have the sup

Customers still prefer managing demand side to increasing supply

"If you add up all the benefits you get what, 40 million litres per day, but then if you're leaking 400 million litres per day then it seems like there are much more important places to put all your infrastructure into" ST FBP

Reservoirs Water transfers Wastewater recycling Customers are favourable towards Reservoir expansion is seen as a WRE research confirms the "yuck" factor persists for HHs and is hard good idea to capture as much transfers, especially the positive rainfall as possible e.g. SSW raising impact on local economies during to overcome the Blithfield reservoir by 2m installation. But they worry about cost and environmental impact "It's a vision, if it works it'll also be jobs "It's a no brainer. Just get on with it!" for people, beneficial in so many ways" SSW HH customer ST HH customer NHHs are in favour because it. High-usage NHHs find idea of There are some concerns about new reservoirs impacting wildlife shows long-term planning and water recycling appealing but only and habitats, but they have the water co's working together from a cost saving point of view additional benefit of providing a local amenity / leisure destination

Ideally, customers would like to minimise the amount of water taken out of the environment

Majority of UU customers
(HH, NHH and FBP) support
UU's plan to keep taking current level from rivers, underground, reservoirs*

2023 sources: 10, 11, 12, 18, 19, 20, 23 / * Support was around 80% for rivers, reservoirs or rivers. But customers weren't given the option to take <u>less</u> water from any source so support for keeping existing levels may be lower than the research suggests *NB: No further feedback of note on other sources in 2023 research*



Overall, customers accept the draft WRMPs, but affordability is their big concern

ACCEPTABILITY

- Before costs are explained, the majority of water companies' customers support their respective draft WRMPs
- NHHs find plans more acceptable than HHs

WILLINGNESS TO PAY

- When costs are explained, acceptability decreases (c.20-30% for HHs and c.10-30% for NHHs)
- This should be viewed in the context of research during a period of high inflation
- But UU research suggests customers are willing to pay more than its proposed bill increases (c.80% more for HHs and c.40% for NHHs)









Detailed views on draft WRMP acceptability

Water companies use different methods to assess their <u>draft</u> WRMP, therefore direct comparison is difficult. The following table shows the relevant feedback from each available draft WRMP24 acceptability study:

2023 sources: 4, 23, 25

	ST	UU	SSW
WRMP acceptability (uncosted)	WRMP acceptability: • 84% HHs • 92% NHHs	Simulated preference for WRMP: • 63% HHs • 68% NHHs	WRMP acceptability: • 71% uninformed HHs (62% informed) • 84% uninformed NHHs (72% informed)
Willingness to pay (WTP)	WRMP acceptability (costed):HHs decreased 17% pts to 67%NHHs decreased 9%pts to 83%	 WTP greater than proposed increases: HHs WTP £23.05 (proposal is £12.67) NHHs WTP 4.21% (proposal is 3%) 	Plan affordability: • HHs 43% • NHHs 52%
Reasons for accepting	Balance of reducing demand and increasing supply, support for long-term planning by ST	No feedback on plan overall beyond	Necessary to meet long-term, acceptable increase/value for money, agree with aims of plan, focused in right areas
Reasons for not accepting	Cost concerns/wider cost of living, not feeling responsible for cost, over-reliance on reducing water use, lack of trust in ST	feedback given to individual elements (discussed elsewhere in this report)	Too expensive/customers pay enough already/others should pay, unacceptable due to profits and dividends, cost of living
Most likely to accept WRMP	Costed: Find bills easy to afford, most trust/satisfied with ST, concerned about future supply, metered/open to meter, 65+	Uncosted: Most vulnerable, unmetered, rural/inner city, under 35, C2DEs, micro/small businesses	Costed: ABs, high income, metered
Least likely to accept WRMP	Costed: Find bills difficult, least trust ST, reluctant/unmetered, unconcerned about future supply, vulnerable	Uncosted: Least vulnerable, suburban, ABC1s, 55+, large businesses	Costed: DEs, low income, vulnerable, BAME, unmetered, 18-24



Stakeholders want water co's to push harder on environmental targets but they worry about the impact on vulnerable customers

	Affordability	In 2022, customer concern about the cost-of-living crisis is mirrored by stakeholders. They particularly worry about the impact of bill rises on vulnerable customers
CONTEXT	Environment	Stakeholder want water companies to focus on preventing pollution, improving water quality and avoiding loss of habitats. They are more concerned about algae blooms, storm overflows and pesticide run-off than carbon emissions
	Water resilience	Stakeholders (especially environmental groups) argue for a holistic approach to managing resilience in the future e.g. restoring peatlands and sustainable abstraction

"Our river resources are worsening in quality and are not meeting the standards that they should be, so we need a step change to meet a specific baseline. Some of the work that needs to be done will inevitably be covered by the water companies, which will impact on the bills, so that needs to be considered."

Stakeholder (Charity)

79% of stakeholders want WRW to enact the enhanced level 3 environmental ambition (especially water quality and pollution)

"We can't fall into that cycle of punishing people on the breadline again and again and again" Stakeholder "The idea of keeping the current regulation when rivers are failing in England and Wales tells you that it's not working. We have to up our game"

Stakeholder (Local authority)

On other issues, stakeholders largely share customers' views

SUPPLY DEMAND	Leakage	Like customers, stakeholders feel progress on tackling leaks is a prerequisite for having a meaningful dialogue about water efficiency.			
	Water efficiency	Stakeholders would like the Government to intervene on water efficiency. Those with experience in water-related matters would also like the current target for 110L PCC by 2040 to be brought forward (rather than increasing to the target to say 80L) and they would like to see subsidised water saving products			
	Metering Stakeholders strongly support proactive smart metering and they welcon compulsion. But they worry about the impact on vulnerable customers i.e price hikes and the unpredictability of bills				
	Drought resilience	The majority support bringing forward standards to 1 in 500 years by 2025 (from 2050)			
	Sources	Stakeholders show little appetite for 'hard engineering' solutions (e.g. new reservoirs). They feel demand management should take priority and there is enthusiasm for grey-water recycling (low impact and minimal disruption to customers)			
	Transfers	Stakeholders too feel it's sensible to share water but they accept it may be "politically-divisive" i.e. sharing resources with the South and therefore losing out on development opportunities			

"Water companies need to change their behaviours first and lead by example before coming to us, the consumers" Stakeholder (Env. Group)

89% of WRW stakeholders support the government measures to reduce consumption alongside measures water companies can take (e.g. leakage)

72% of stakeholders support proactive smart metering

75% of stakeholders support sharing water resources

© Shed Research Consulting Limited, 2023 2021 Sources: HD3, ST10, ST13 2022 Sources: 6, 19



There are some small gaps in your insight but none warrant further exploration

You have a significant amount of insight across the region so gaps in your insight are limited:

- 1. DCWW NHH There is currently no research among Welsh business customers but we have no reason to believe Welsh NHHs would give a different views to NHHs in England
- 2. DCWW AFFORDABILITY You don't have any insight on affordability/cost of living being an issue for DCWW customers. However, national polling shows it's an issue which cuts across demography and geography so we can assume it applies to Welsh customers too
- 3. WTP FOR INDIVIDUAL ELEMENTS OF WRMPs You have some WTP insight using true monetary values (e.g. DCWW for combined supply and demand options) and for total WRMPs (e.g. UU and ST). Only SSW has a study looking at WTP for individual elements of these plans (report 6). However, a WRE/WRSE study (2023 report 7) shows that taking WTP for individual elements of social value and totalling them isn't a fair indication of total WTP (which is much lower). As such, there may be limited additional insight to be gained from other companies taking this approach
- 4. WATER QUALITY, AESTHETICS, TASTE, SMELL You have a detailed UU hall test, SSW research around hardness, and some low priority mentions in ST research (as well as a WRE/WRSE club project). However, in all these pieces of research, these are not major customer issues. This suggests there's little to be gained by investigating them further*



Sources used in March 2021

HAFREN DYFRDWY

HD1: Customer needs deliberative research, Oct-Dec 2017

HD2: Customer needs co-creation, Nov 2017

HD3: PR19 Stakeholder research, Dec 2017

HD4: Customer priorities research, Aug-Sep 2016

HD5: Acquisition of Dee Valley: customers' reactions and views. Apr-May 2017

HD6: Customer satisfaction tracking research (Dee Valley), Sep 2016-Mar 2017

HD7: Customer satisfaction tracking research (Mid and North Wales), Jan-Feb 2018

HD8: Valuation research – willingness to pay, Oct 2017-Jan2018

HD9: Asset health and resilience research, Apr 2018

HD10: Performance commitments, investment choices and incentives research, Apr-May 2018

HD11: Acceptability research (wave 1 and 2), June 2018

HD12: Water Trading report, July 2018 HD13: Customer Needs – Wales Pen Portraits, Jan 2017

SEVERN TRENT

ST1: Strategic Challenges - Supply and Demand, Oct 2017

ST2: Strategic Challenges – Resilience, Oct 2017 ST3: Water Trading report, July 2018 (same as HD12 and UU18)

ST4: Tap Chat – water efficiency campaign, June 2018

ST5: Real Options approach – deliberative research, July 2018

ST6: Real Options approach – quant research, June 2018

ST7: Customer needs research and co-creation – Oct-Dec 2017

ST8: Customer needs – future customers and shared/non-direct bill-payers, Oct 2017

ST9: What Matter to You (Tap Chat discussion), Mar-May 2018

ST10: In house consultation with 100 ST stakeholders. Dec 2017

ST11: Marketing plan focus groups, Feb 2017

ST12: Customer satisfaction tracker survey, Jan-Mar 2018

ST13: Needs of large developers, May 2018

ST14: Choices research – depths with large NHH customers. June 2018

ST15: Best in class customer service and experience, Oct-Dec 2017

SOUTH STAFFS / CAMBRIDGE WATER

SS1: WRMP19 main research report – qual and quant, Oct 2017

SS2: WRMP customer engagement paper - customer research findings summary

SS3: Metering research, July 2017

SS4: PR19 Foundation Research (customer priorities, 2017)

SS5: H2Online HH customer community feedback SS6: PR24 Customer Priorities Tracking (qual),

SS7: Segmentation study, April 2018 SS8: Water Quality Review, March 2021

DWR CYMRU

Oct 2020

DC1: Willingness to Pay qual

DC2: WRMP Qual

DC3: WRMP Qual and Quant

DC4: WRMP full final report

DC5: WRMP cog testing (quant qre) report

UNITED UTILITIES

UU1: YourChoice customer priorities, June 2016 UU2: YourChoice customer priorities, June 2016

UU3: Service valuation for PR19 WtP, June 2017

UU4: Water Efficiency research, Feb 2018

UU5: Synthesis of water efficiency research, Nov 2020

UU6: Customer research into the impact of Lancashire water quality incident, October 2015

UU7: Customer research into the impact of Lancashire water quality incident, Jan 2016

UU8: Tameside water quality incident, Jan 2016

UU9: Manchester and Pennine resilience study, Dec 2017

UU10: Household long term supply interruptions – immersive research, July 2017

UU11: Non-household long term supply interruptions – immersive research, Oct 2017

UU12: Leakage reduction (WtP), June 2017

UU13: Safe, clean drinking water, Aug 2017

UU14: Drinking water taste, smell and appearance. July 2017

UU15: Short term interruptions to water supply, Sept 2017

UU16: WRMP qual – stage 1, Aug-Sep 2016 UU17: Water Abstraction research, Jan-Feb 2018 UU18: Water trading research, July 2018 (same as HD12 and ST3)

Sources used in May 2022

Ref.	Co.	Data source	Date	Ref.	Co.	Data source	Date
1	SSW	SSC WRMP24 WRAP customer research – Community Research	Jul-21	20	ST	Strategic priorities research – Community research	Nov-21
2	SSW	SSC WRMP24 WRAP customer research -	Oct-21	21	ST	Proactive metering – DJS research	May-21
_		Community Research		22	ST	WRMP options and water resilience – Britain	Apr-22
3	SSW	SSC WRMP24 customer research – Accent	Jan/Feb-22			Thinks	
4	SSW	SSC WRMP24 customer research - Accent	Feb/Mar-22	23	ST	WRW club research project – WRMP24 (DJS)	Jan/Feb-22
	SSW	SSC WRMP24 WRAP customer research –	Feb 2022	24a-d	ST	Tap Chat research	Dec-21 on
5		Community Research		25a-c	ST	Social barometer	Oct-21, Dec-21, Mar-22
6	SSW	SSC stakeholder roundtables	Oct-21	26	DCWW	DCWW- WRMP PR24 research	Nov-21
7	SSW	SSC - H2Online Customer Communities	On-going	27	DCWW	DCWW- WRMP PR24 research	Oct-21
8	SSW	SSC – customer priorities tracker	On-going	28	DCWW	DCWW-Investigating WTP	Feb-22
9	SSW	SSC – customer promises tracker	On-going	29	External	CCW - Water Voice Views of current customers on water resources	Apr-21
10	UU	WRW club research project - WRMP24	Jan/Feb-22	30	External	CCW - public views on the water environment	Feb-21
11	UU	Customer Priorities Research - Impact MR	Nov-21	31	External	Blue Marble studies	Summer 2021
12	UU	WRMP & DWMP Immersive Research - Insights	Apr-21	32	External	Arquiva / Waterwise / Frontier	2021
13	UU	Consulting Climate Change & Resilience Research	Dec-20 to Jan-21	33	External	RWG water efficiency end user customer survey	Summer 2021
14	UU	Water Quality Research - DJS	Dec-20	34	External	Understanding water usage in the garden – Blue	Aug/Sep-21
15	UU	Hall tests - DJS	Jan-22	35	External	Marble Sink Sense - Kitchen sink habits caught on camera	a lan/Mar-21
16	UU	State of the Nation Research - Sep 2021	Sep-21	36		CCW Water Matters Tracker	Jun-21
17	UU	State of the Nation Research - Mar 2022	Mar-22	37		CCW Water Awareness	May-22
18	UU	Smart metering forum topic	May-21	38	ST	Environmental Destinations Research	May-22
19	All	WRW Emerging Plan Stakeholder Workshops	Jan/Feb-22	39	HD	WRMP Customer Research Debrief	Apr/May-22
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Sources used in March 2023

Ref.	Co.	Data source	Date	Ref.	Co.	Data source	Date
1	SSW	Customer Tracker - brand and service perceptions	Oct-22	13	WRE	Garden Behavioural Use	Oct-22
2	SSW	Customer Priorities HH Tracker - year 3	Oct-22	14	External	Ofwat - Trust and perceptions: People's views on the water sector	Dec-22
3	SSW	H2Online Community WRMP24 acceptability testing	Sep-22	15	External	Ipsos Issues Index	Feb-23
4	SSW	Turquoise draft plan acceptability testing quant study, wave 1	Sep-22	16	ST	Compulsory metering deliberative research	Jun-22
5	SSW	Community Research draft plan acceptability testing qual study, wave 1	Aug-22	17	ST	Environmental destination and compulsory metering survey	May-22
6	SSW	PR24 WTP study	Dec-22	18	ST	Environmental destination deliberative research	Jun-22
7	WRE/WRSE	Public Value SRO including WTP	Nov-22	19	ST	WRMP acceptability qualitative report (interim)	Jan-23
/	VVKE/VVKSE	Public Value SRO including WTP	NOV-22	20	ST	WRMP and water efficiency for NHHs research	Jan-23
8	External	CCW Water Matters report	Mar-22	21	ST	Drought permit research	Oct-22
9	External	CCW Bridging the gap: Awareness and Understanding of Water Issues	Nov-22	22	ST	Leakage and reputation research	Dec-22
10	SSW	Thematic review of WRMPs	Sep-22	23	UU	Water Acceptability research (WTP)	Aug-22
11	WRE	Water Source Change study	Jun-22	24	UU	Smart metering	Nov-22
12	WRE	NHH market demand reduction	Jul-22	25	ST	WRMP acceptability (full report)	Mar-23

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Triangulation method (1)

- This research synthesis triangulated 120 different pieces of qualitative and quantitative customer and stakeholder research
- It provides an up-to-date summary of customer and stakeholder views across WRW companies using the following thematic framework:



- Water salience
- · Water companies
- Resilience
- Quality and aesthetics
- Environment



Source preference

Water trading and transfers

- Water efficiency
- Metering
- Smart meters
- Leakage
- Interruptions

- It was conducted in three stages March 2021, May 2022 and March 2023. Each stage builds on a previous stage and looks at:
 - TRENDS: How have customer and stakeholder views changed since the start of 2021 (PR19 / WRMP19 research)? And what has driven any changes (e.g. the pandemic or the cost of living)?
 - 2. SIMILARITIES & DIFFERENCES: How these changes differ (or not) across the four water companies? Any differences by customers or stakeholder? And what has driven any differences e.g. research method, timing of the research, demographics?
 - 3. GAPS: What gaps there are in the research undertaken?

Triangulation method (2)

• We have followed the principles laid out in the CCW/SIA report on best practice for triangulating customer evidence. This means we have:

a. Made sure customer input to this process is ongoing

How we did this:

Included the most up-to-date insight available to WRW companies

b. Used a standardised, transparent triangulation process

How we did this: Outlined in our triangulation approach (i.e. this method statement) c. Captured the metadata for each piece of research

How we did this: Record the source, timings, method, agency used and water company involved for each data source d. Made balanced judgements where we find research from different companies disagrees

How we did this:

Produced a RAG status
for each study based on
our bias assessment
(including any reasons)
and explain any
judgements made in this
report

• We employ the same approach for quantitative and qualitative research i.e. we focus on what each is telling us (the insight), consider the method used and timing of the research (the metadata), and how these individual insights create a coherent story around particular themes (the triangulation)

Triangulation method (3)

Our approach converged three main types of triangulation:

- a) Data source triangulation taking multiple different perspectives from different water companies' customers, we used both inductive (drawing findings from the data sources) and deductive (using the data to test the insight developed from March 2021 and May 2022 syntheses)
- b) Theory triangulation used the thematic framework developed from the original synthesis (see section 2) to compare and contrast with the most recent research
- c) Between or across method triangulation used both qualitative and quantitative methods

We followed four discreet stages:

1. Collate

 We organised all the available data sources and recorded metadata for each study

2. Review

 We reviewed all the research and recorded our RAG bias assessment for each (links to <u>2022</u> and 2023)

3. Visualise

 We produced an interactive "mind map" of insight including any trends, similarities/differences, and gaps (links to 2022 and 2023)

4. Report

• We produced this PowerPoint report of the main insight suitable for sharing with a wider audience

