

WRMP & Long Term Resilience Customer Engagement Insight

Full Report
September 2017

Bringing the voices of communities into the heart of organisations

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Objectives and method

Bringing the voices of communities into the heart of organisations

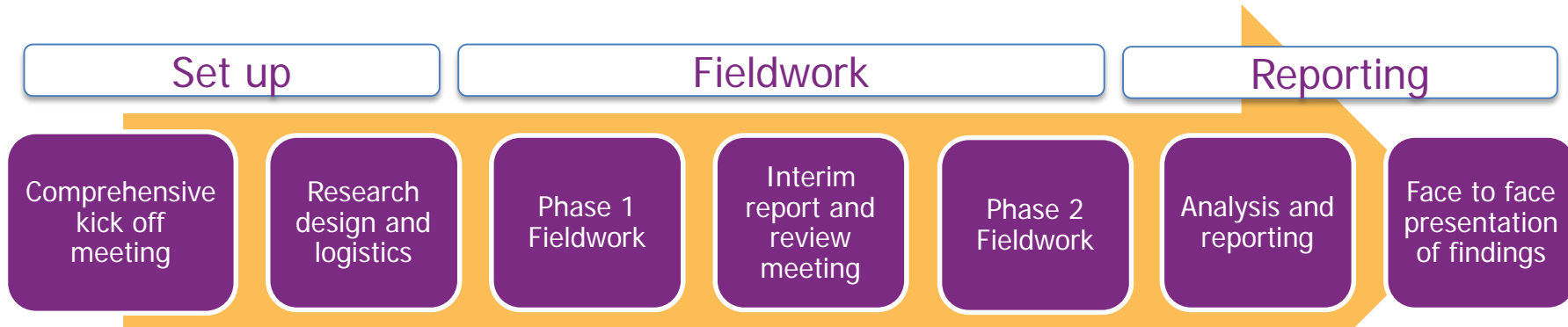
Your Objectives

- SSC will use the research findings from **Phase One** to support the development of their WRMP in both regions, specifically understanding customers' views on:
 - Levels of service
 - Leakage
 - Water efficiency
 - Metering

If possible, also covering:

 - Environmental impact
 - Initial thoughts on options for the future
- The research findings from **Phase Two** were intended to inform investment choices, by giving customers the opportunity to feed into SSC's strategic challenges.

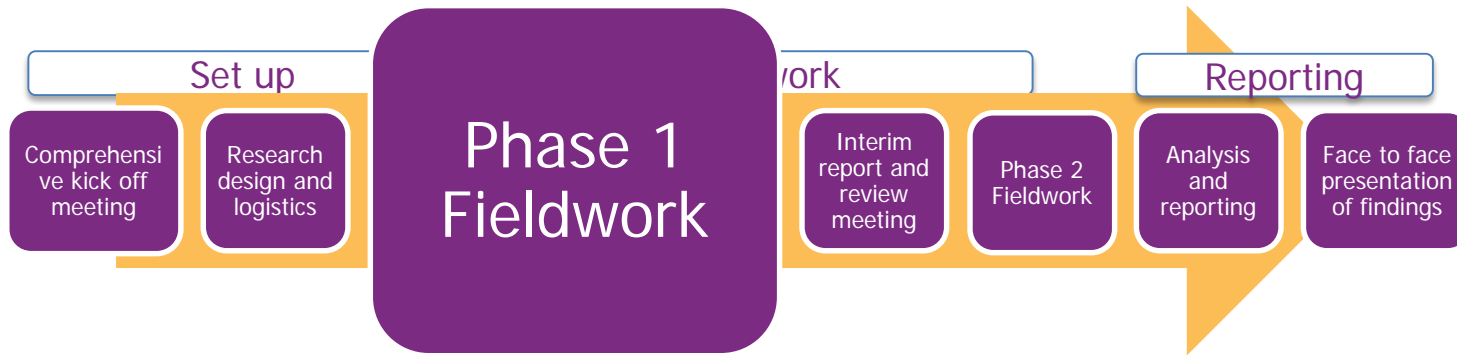
Approach in summary



- 2 x day long workshops with c.32 people at each

- 2 x reconvened half day workshops
- 2 x stakeholder / large business workshops
- Quantitative survey

Further detail



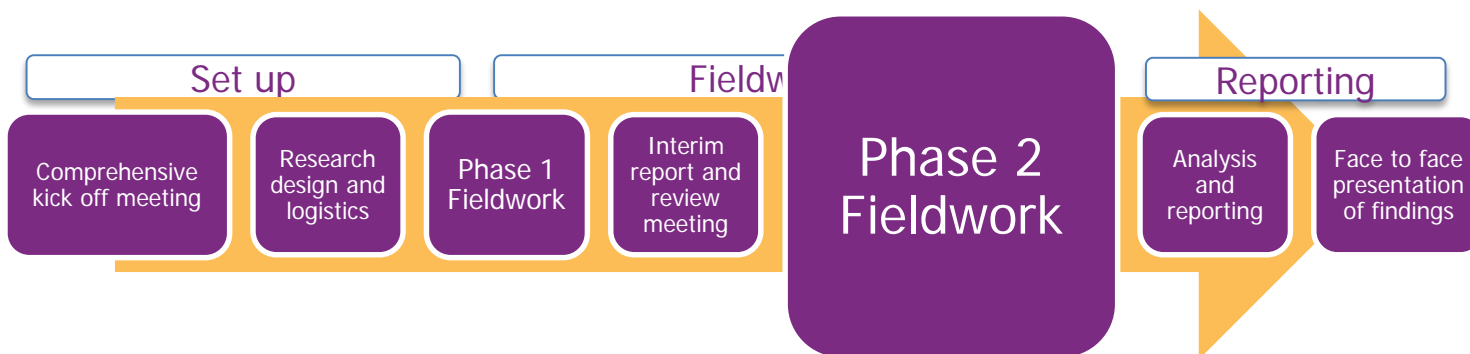
- Day long workshops in SSW and Cambs
- c. 30 participants at each
- Two tables of domestic customers
- 1 table of SME owners / managers
- 1 table of future customers
- Each table with a facilitator
- Voting keypads
- Filmed in Cambridge
- Graphic visualiser in Walsall
- Informed dialogue process
 - Quiz
 - Handouts
 - Animations

Further detail



- Handouts
- Animations

Further detail



- 2 x reconvened half day workshops in SSW with the participants from Phase 1
 - 'Top Trumps' game to consider strategic options
- 2 x half day workshops with large business and stakeholder representatives (11 at each session)
- An online survey:
 - 300 responses in SSW
 - 200 responses in Camb
 - Conducted via a market research panel
 - Quotas set to try to match populations
 - Data weighted to adjust for discrepancies between sample and population

'Top Trumps' approach allowed us to engage with customers in an innovative way

detail

Leakage reduction (1)



Reducing leaks
above and
beyond current
targets

Volume	6 ml/d
Future proofing	1
Cost to build	
Deliverability	
Environmental impact	

Smart metering



Installing meters
that allow

Volume	
Future proofing	2
Cost	£
Deliverability	Medium
Environmental	Positive

Increasing the amount of water in Blithfield reservoir



We could increase the amount of water in the reservoir, for example by diverting water from canals

Volume	10ml/d
Future proofing	2
Cost	£14m
Deliverability	Easy
Environmental impact	Negative

Reporting

Analysis and reporting

Face to face presentation of findings

- 2 x rec
- particip
- 'Top
- 2 x half day stakeholder
- An online su
 - 300 res
 - 200 res
 - Conduc
 - Quotas
 - Data we
 - between

Top
Trumps!

Interpreting the data

Workshops

Not statistically robust, but not intended to be

Participants got more informed and (therefore) less representative

Survey

Whilst more robust, sample sizes are still quite small, especially for sub group analysis

Data has been weighted to reflect regional population

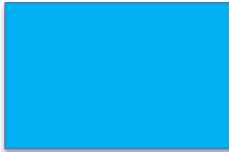
Not a random sample of the wider customer base

Colour key

Region



South Staffs Water sample – all / household customers (by default)



Cambridge Water sample – all / household customers (by default)

Audience (for quotations)



Future customers



SME's



Large business / stakeholder

Achieved sample – workshops

South Staffs attendees		Cambridge attendees	
Business	8	Business	7
Water reliant	7	Water reliant	7
50-249 employees	3	50-249 employees	2
Non retail	4	Non retail	4
Non-bill payers	8	Non-bill payers	8
Male	4	Male	4
Female	4	Female	4
Student	3	Student	3
Working	3	Working	3
Not working	2	Not working	2
Bill payers	16	Bill payers	15
Metered	6	Metered	7
Unmetered	10	Unmetered	8
Rural	3	Rural	8
Vulnerable - payment difficulties	3	Vulnerable - payment difficulties	4
Vulnerable - unemployed	3	Vulnerable - unemployed	3
Vulnerable - disabled person in household	4	Vulnerable - disabled person in household	5
ABC1	8	ABC1**	9
C2DE	8	C2DE	6
Total	32	Total	30

**8 of these were C1

Achieved sample – workshops

South Staffs attendees

Business	8
Water reliant	7
50-249 employees	3
Non retail	4

1 future customer did not return the 2nd session (at our request)

vulnerable - disabled person in household	4
ABC1	8
C2DE	8
Total	32

**8 of these were C1

Cambridge attendees

Business	7
Water reliant	7
50-249 emp	2
Non retail	4

Non-bill

Male
Female
Student
Working
Not working

Bill for

Meter
Unmetered
Rural
Vulnerable
Vulnerable

household
ABC1**
C2DE
Total

- 2 household customers did not return
- 2 future customers did not return (1 at our request)
- 1 new AB household customer was added

5
4
3
5
9
6
30

Achieved sample – Survey

		Quotas		Number achieved	% Achieved
South Staffs Water					
		100%	300	305	
Gender	Male	51	153	122	80%
	Female	49	147	183	124%
Age	18-29	21	68	40	59%
	30-44	25	78	89	114%
	45-59	25	75	84	112%
	60+	29	87	92	106%
Social Grade	AB	19	57	74	130%
	C1	28	84	97	115%
	C2	24	72	54	75%
	DE	29	87	80	92%
Metering	Metered	30	90	125	139%
	Unmetered/DK	70	210	180	86%
Cambridge Water					
		100%	200	207	
Gender	Male	51	102	115	113%
	Female	49	98	92	94%
Age	18-29	21	42	30	71%
	30-44	27	54	68	126%
	45-59	25	50	51	102%
	60+	28	56	58	104%
Social Grade	AB	24	48	93	194%
	C1	31	62	54	87%
	C2	23	69	20	29%
	DE	22	44	40	91%
Metering	Metered	70	140	148	106%
	Unmetered/DK	30	60	59	98%

Weighting has been applied to the data to adjust for discrepancies

Achieved sample – Business and Stakeholder Round Tables

South Staffs

- 11 attendees
- Represented organisations:
 - Sandwell MBC
 - Walsall MBC
 - Lichfield DC
 - East Staffs BC
 - Citizens Advice
 - NFU
 - Taylor Wimpey
 - Barrat Homes
 - Environment Agency
 - Florette
 - Toyota

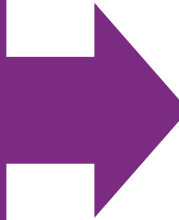
Cambridge

- 10 attendees
- Represented organisations:
 - Cambridge City/ South Cambs DC
 - Wildlife Trust
 - Environment Agency
 - NFU
 - Wellcome Trust (x2)
 - Marshall Aerospace and Defence
 - Countryside Properties
 - Bovis
 - Taylor Wimpey

Involving The Customer Panel

Customer Panel feedback was sought and taken on board throughout the project at various stages:

- Input into the design of the initial workshops
- Input into the design of the second stage workshops.
- Following direct observation of some workshops.
- Specific drafting points within the online survey.



Wherever feasible, feedback from the customer panel was incorporated.

Where not possible, the reasons for this were discussed and explained.

A report covering all Customer Panel feedback and questions was produced, providing a full audit trail of all such input.

Conclusions and Next Steps

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Key conclusions – WRMP

Customers' **PRIORITIES** in both regions

- Ensuring water quality
- Keeping bills affordable
- Reducing leakage

Learning more about the issues leads customers to give greater priority to increased metering and education.

Most believe that **METERING** is the fairest way to charge. Views on compulsory metering are more mixed, with suspicion about water company motives and concern about leakage a disincentive for some. Smart metering (an indoor device giving a real time reading) is popular.

Avoiding **RESTRICTIONS** is not a priority. Levels of service could potentially be reduced – few would worry if this were the case.

The message on **LEAKAGE** is very clear – all audiences want the company to do more, going beyond current targets. The moral imperative outweighs the economics for many. It can act as a barrier to reducing consumption for some

Over half of customers agree they could do more to **REDUCE WATER USAGE**. Lack of awareness that a water shortage is likely, may mean that many see no reason to do so. Both passive and pro-active education and support are welcomed

Key conclusions – strategic challenges

Demand management options, especially reduced leakage and increased metering, are most appealing to customers in **both** regions. Customers feel they should be included by the company as part of the strategy

In **Cambs**, the most popular supply side option is a new reservoir, with workshop participants torn as to whether or not this should be a shared resource.

Abstracting **more** groundwater has least appeal in both regions among supply side options, mainly driven by environmental impact concerns. However, customers attending the workshop viewed re-

In **SSW**, no clear cut supply side 'winner.' workshop participants most positive about trading but this is not reflected in the survey. In terms of asset management, two medium treatment works are preferred over one mega works as seen as safer option in terms of ensuring reliability

Key conclusions – Other

Although most customers say they think water is a precious resource, many do not seem to reflect this in their behaviour. More work is needed to raise water consciousness.

The environment is not a top-of-mind concern for most customers, many of whom do not make a link between their water company's actions and the environment. When prompted to do so, avoiding negative environmental impact becomes more of a priority.

Although not discussed in detail, there is spontaneous interest from customers and stakeholders in sustainable homes / water recycling that would benefit from further research.

Customers' views on specific issues (not options)

Overall priorities

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Spontaneous Priorities

- Spontaneous priorities were in a similar vein across regions and customer audiences:
 - Reliability
 - Water quality / cleanliness
 - Cost
 - Customer service
 - (For some) leakage
- Stakeholders and larger business customers' spontaneous priorities clearly came from a more informed position and concerned planning for the future and ensuring resilience of supply.



Spontaneous priorities focus on hygiene factors – as found in your PR19 foundation research

Spontaneous Priorities

Household Customers	Future Customers	SMEs	Large Businesses /Stakeholders
<ul style="list-style-type: none"> • Water quality • Price / affordability/ bills • Leakage <p>Also some mentions of:</p> <ul style="list-style-type: none"> • Pressure • Sustainability • Environment • Customer Comms 	<ul style="list-style-type: none"> • Reducing waste of water • Cleanliness / quality of water <p>Also some mentions of:</p> <ul style="list-style-type: none"> • Environment • Pollution • Customer interactions • Affordability / cost 	<ul style="list-style-type: none"> • Consistency / reliability of supply • Cost • Customer service <p>Also some mentions of:</p> <ul style="list-style-type: none"> • Environment • Water quality 	<ul style="list-style-type: none"> • Security of supply • Planning for future population growth & development • Improving infrastructure • Protecting the environment • Resilience • Sustainability

Spontaneous Priorities - quotes

“I can’t even drink the water at home – so actually healthy and good tasting water.” Walsall

“To ensure continuity of supply to ensure that networks can match the rapid growth of Cambridge and the adjacent developments around its fringe.”
Cambs

“Ideally, we want water that’s as natural as possible e.g. what are the side effects of the fluoride? We know it’s good for teeth, but does it have a downside too? And what about the effects of other chemicals in water?”

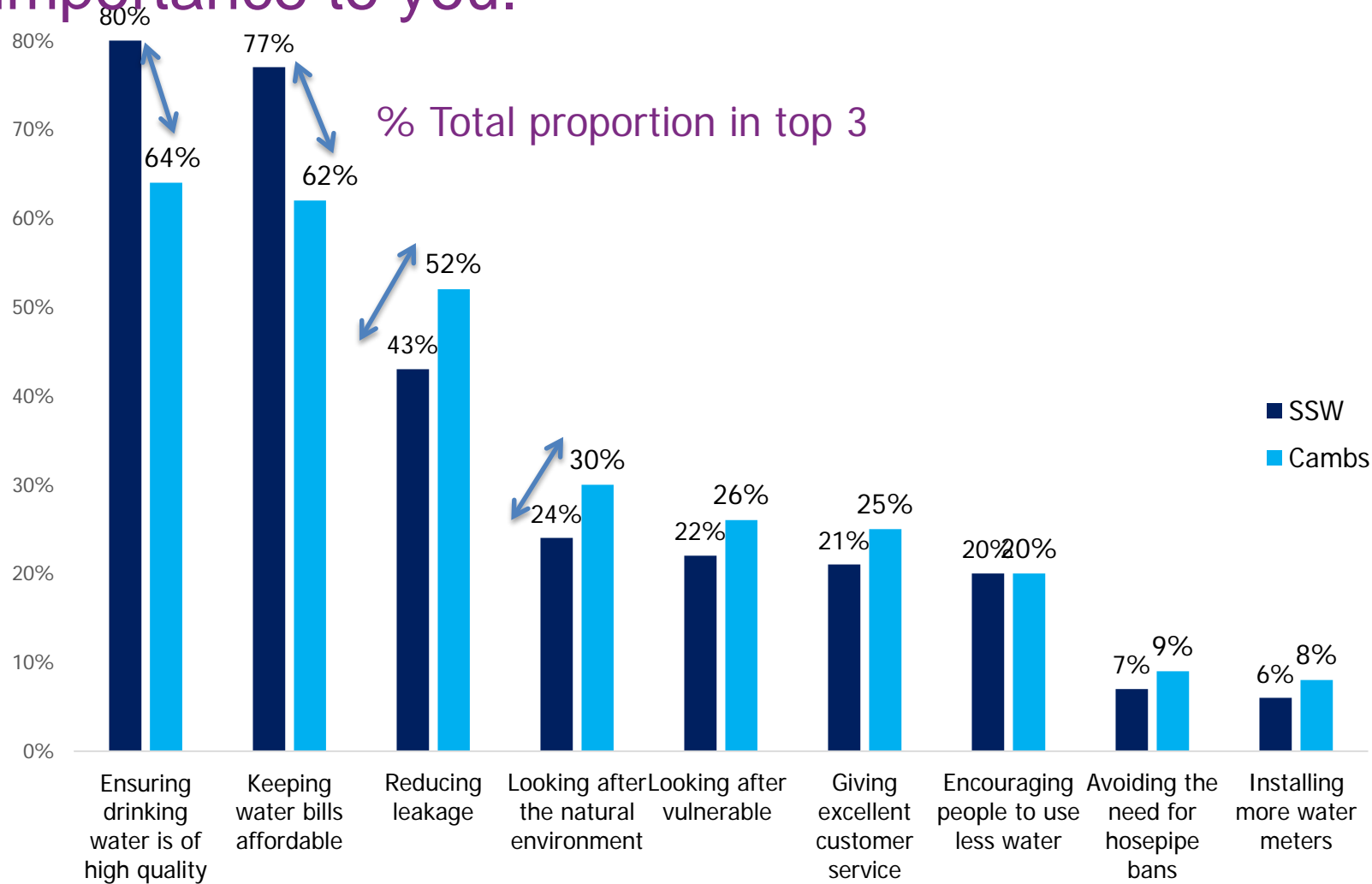
“Maintaining and upgrading the existing water main infrastructure and delivery to new developments.”
Walsall

Listed Priorities

- Provided with a list of the main challenges faced by water companies and asked to rank them in order of importance, the top three priorities (amongst uninformed customers – in both survey and workshops) was highly consistent:
 - Ensuring water quality
 - Keeping bills affordable
 - Reducing leakage
- In the survey, Cambridge customers assigned greater priority (compared with SSW customers) to:
 - Looking after the natural environment
 - Reducing leakage
 - Encouraging people to use less water
- At the end of the first workshop (i.e. after provision of information) priorities were reassessed. In both regions this saw increased importance being placed on:
 - Encouraging people to use less water
 - Installing more meters



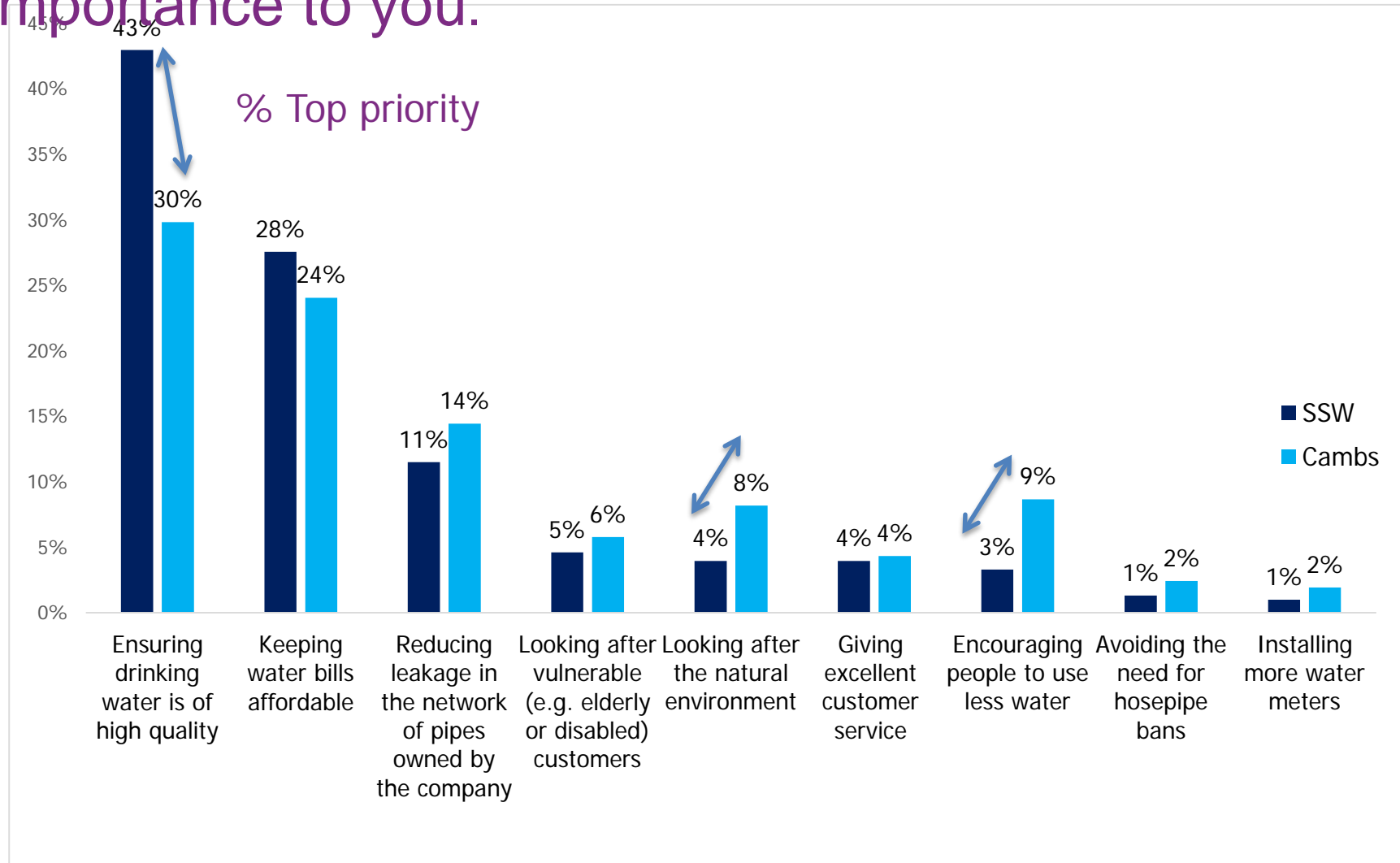
Here are some of the main challenges faced by water companies. Please rank the top three in order of importance to you.



Base: South Staffs 305, Cambridge 207

Arrows show statistically significant differences between regions

Here are some of the main challenges faced by water companies. Please rank the top three in order of importance to you.



Base: South Staffs 305, Cambridge 207

Arrows show statistically significant differences between regions

Here are some of the main challenges faced by water companies. Please rank the top three in order of importance to you.

Variations by sub-group, as follows:

- Those with a disabled person in their household less likely to choose 'encouraging people to use less water' in their top 3 – 13% vs 20%.
- This same group also more likely to choose 'looking after vulnerable (elderly and disabled customers)' – 31% vs 22%.
- Those who are in financial difficulty or 'just about managing' are more likely to choose 'keeping water bills affordable' – 90% vs 77%.
- Those aged over 60 more likely to choose leakage in their top 3 – 52% vs.43%.

Variations by sub-group, as follows:

- Those with a disabled person in their household less likely to choose 'encouraging people to use less water' in their top 3 – 12% vs 20%.
- This same group also more likely to choose 'looking after vulnerable (elderly and disabled customers)' – 32% vs 25%.
- Those aged 45-59 and 60+ are more likely to choose 'ensuring water quality' and 'keeping bills affordable' in their top 3.
- Those aged over 60 more likely to choose leakage in their top 3 – 65% vs.52%.

Large Business and Stakeholders' Listed Priorities

South Staffs

- Top three priorities (assigned scores)
 - Ensuring drinking water is high quality
 - Keeping bills affordable
 - Reducing leakage

BUT:
Resilience / security
of supply / future
planning not one of
these options

Cambridge

- Top three priorities (assigned scores)
 - Looking after the natural environment
 - Equal scores for:
 - Keeping water bills affordable
 - Encouraging people to use less water
 - Giving excellent customer service

How priorities changed – Walsall workshop

- 64 Ensuring drinking water is of high quality
- 51 Keeping water bills affordable
- 20 Reducing leakage in the system
- 18 Looking after the natural environment
- 16 Giving excellent customer service
- 8 Encouraging people to use less water
- 8 Looking after vulnerable (e.g. elderly or disabled) customers
- 5 Avoiding the need for hosepipe bans
- 1 Installing more water meters

A.M. Vote (uninformed)

- 30 Installing more water meters
- 27 Ensuring drinking water is of high quality
- 26 Encouraging people to use less water
- 24 Looking after the natural environment
- 22 Reducing leakage in the system
- 20 Keeping water bills affordable
- 5 Giving excellent customer service
- 1 Looking after vulnerable (e.g. elderly or disabled) customers
- 0 Avoiding the need for hosepipe bans

P.M. Vote (informed)

How priorities changed – Cambridge workshop

- 45 Keeping water bills affordable
- 31 Reducing leakage in the system
- 29 Ensuring drinking water is of high quality
- 27 Looking after the natural environment
- 19 Looking after vulnerable (e.g. elderly or disabled) customers
- 8 Giving excellent customer service
- 6 Encouraging people to use less water
- 2 Avoiding the need for hosepipe bans
- 0 Installing more water meters

A.M. Vote (uninformed)

- 54 Reducing leakage in the system
- 32 Keeping water bills affordable
- 21 Encouraging people to use less water
- 20 Looking after the natural environment
- 17 Ensuring drinking water is of high quality
- 10 Looking after vulnerable (e.g. elderly or disabled) customers
- 7 Installing more water meters
- 4 Giving excellent customer service
- 2 Avoiding the need for hosepipe bans

P.M. Vote (informed)

Metering

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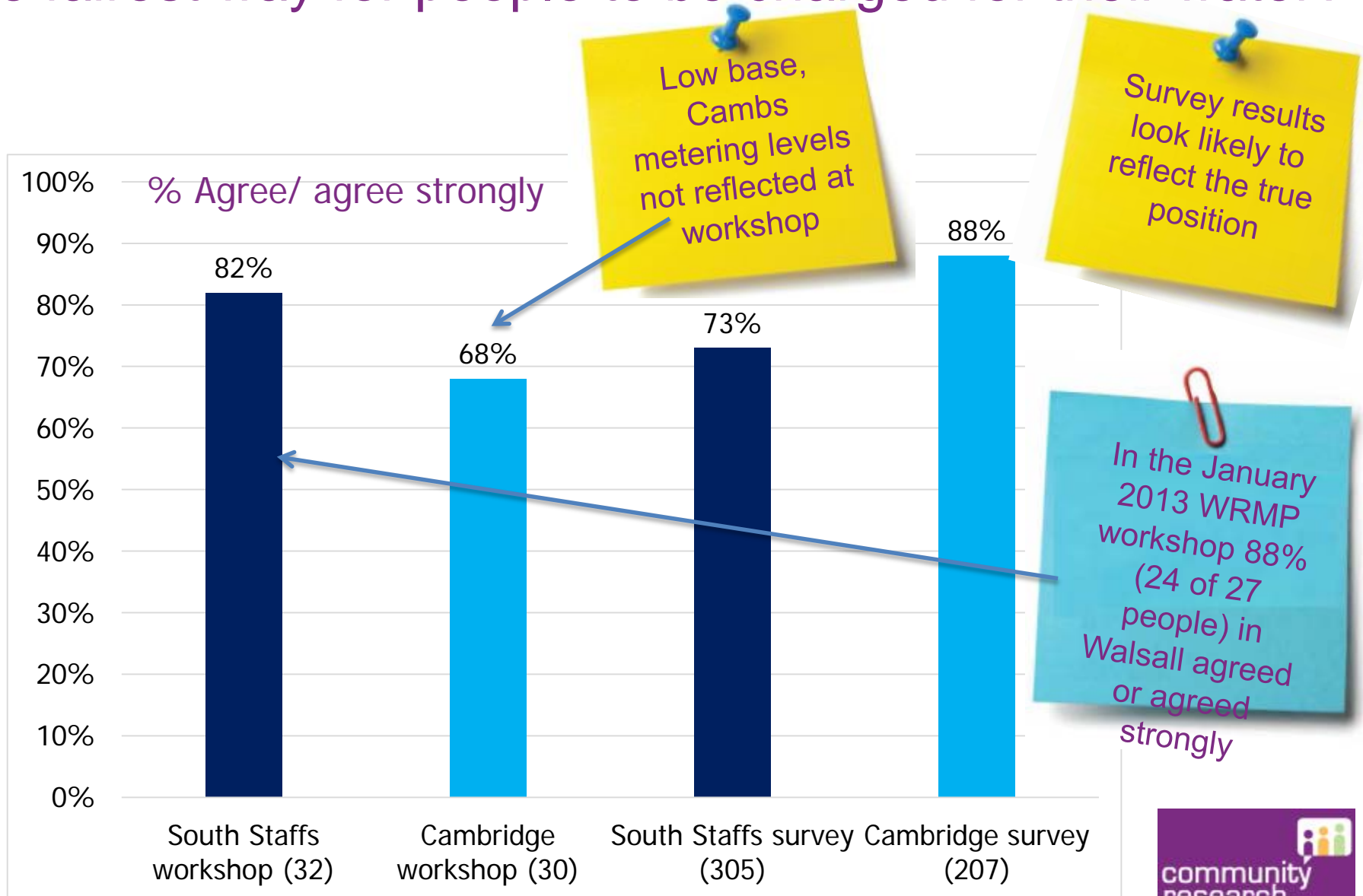
Metering 1

- Many workshop participants not aware that you can choose to have a meter and then revert to unmetred billing. CC Water research shows 25%-30% awareness of this all around the country.
- Increasing the level of water metering was not a prominent spontaneous issue amongst customers or stakeholders.
- Knowledge of the potential positive impact of metering on water consumption and leak detection increases support for this as a priority.
 - In Walsall, by the end of the first workshop, this had become a top priority.
- In both regions, across all audiences, most workshop participants felt increasing metering is ethically the right thing to do, because:
 - It is fairer to pay for what you use and
 - It will help people to think about and reduce their water use.

Metering 2

- Views on compulsory metering were more mixed
 - Concerns about vulnerable customers (especially in Cambs.)
 - Some are suspicious of SSC's motives – it was assumed that anything compulsory would be for the benefit of the company i.e. for profit.
- Survey responses show consistent differences between those on a meter and those who are not.
 - Metered customers were much more likely to say metering is fairest charging method and to support compulsory metering.
 - Consequently Cambridge region is more in agreement on both of these measures.
- Metered customers in both regions agree that having a meter positively changes their behaviour and consumption.
- Young people were supportive of the idea of smart meters in particular, but these were assumed to be akin to energy smart meters (i.e. giving customers real time data.)

How far do you agree or disagree that water meters are the fairest way for people to be charged for their water?



How far do you agree or disagree that water meters are the fairest way for people to be charged for their water?

South Staffs survey – 73% agree / agree strongly; 16% disagree / disagree strongly and 11% don't know.

Variations by sub-group, as follows:

- Metered customers more likely to agree – (98%)
- AB's and C1's more likely to agree – (85% and 82%)
- DE's more likely to disagree (22%)

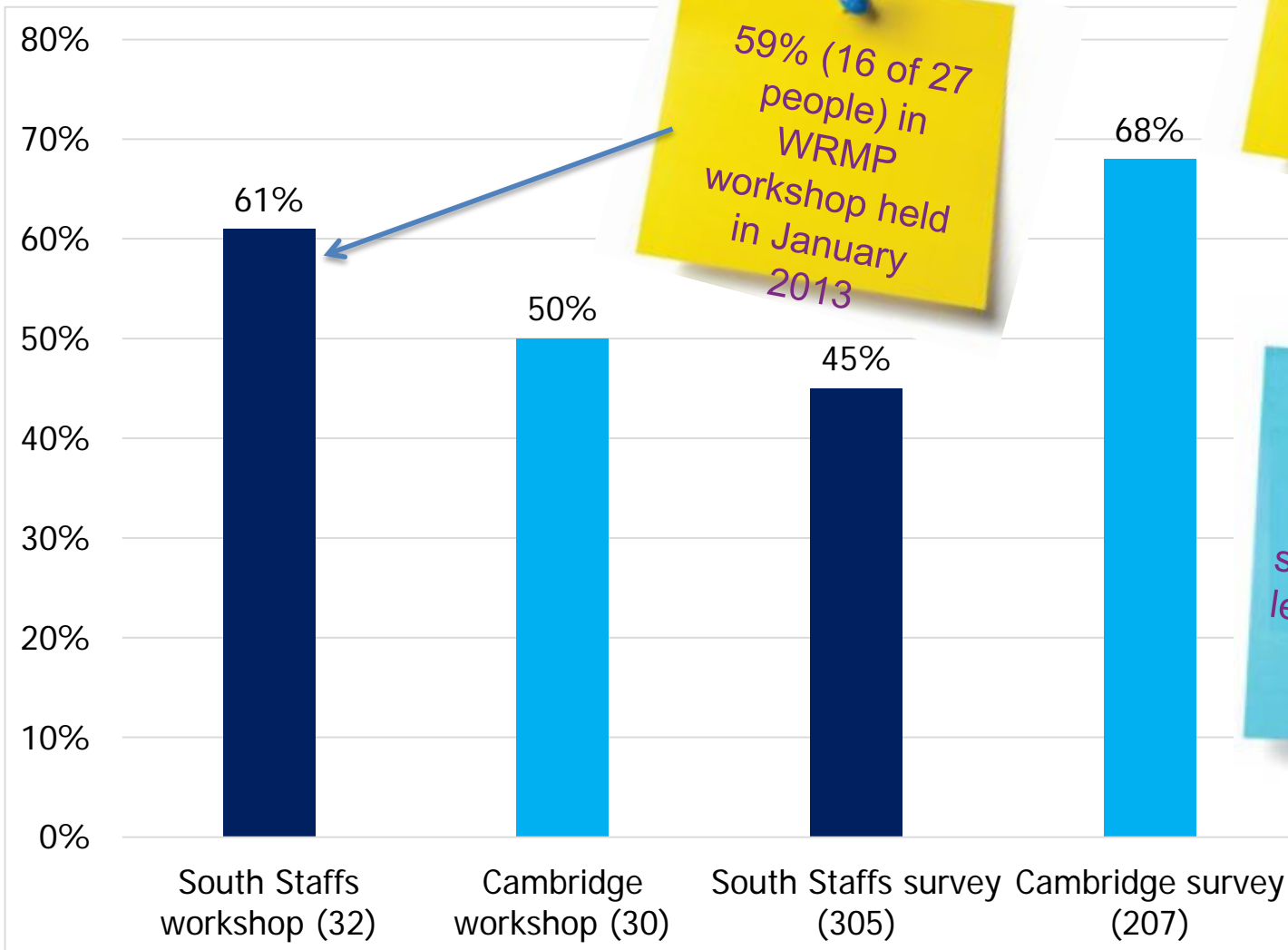
Cambridge survey – 88% agree / agree strongly; 7% disagree / disagree strongly and 6% don't know.

Variations by sub-group, as follows:

- Metered customers more likely to agree – (94%)
- 30-44 yr olds more likely to agree (95%)
- AB's more likely to agree – (94%)

How far do you agree or disagree that water meters should be compulsory for everyone?

% Agree/ agree strongly



59% (16 of 27 people) in WRMP workshop held in January 2013

Survey results look likely to reflect the true position

Similar question in recent survey of unmetred customers only, showed much lower levels of support for compulsory metering (12%)

How far do you agree or disagree that water meters should be compulsory for everyone?

South Staffs survey – 45% agree / agree strongly; 44% disagree / disagree strongly and 11% don't know.

Variations by sub-group, as follows:

- Metered customers more likely to agree (84%)
- ABs and C1s more like to agree (61% & 54%)
- C2s and DEs more likely to disagree (56% & 53%)

Cambridge survey – 68% agree / agree strongly; 27% disagree / disagree strongly and 6% don't know.

Variations by sub-group, as follows:

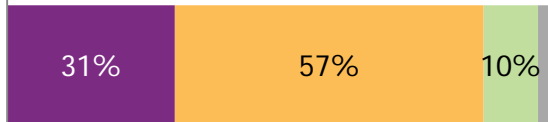
- Metered customer more likely to agree (80%)
- 30-44 yr olds more likely to agree (88%)

Most of those with water meters, in both regions, agree it positively affects their behaviour

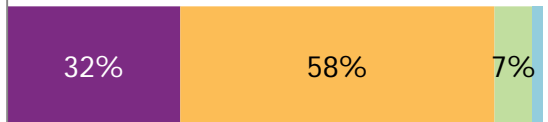
South Staffs metered customers (125)

0% 20% 40% 60% 80% 100%

Having a water meter makes me use water more carefully



Paying for what I use means I can control the amount I'm billed

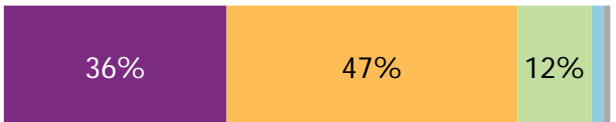
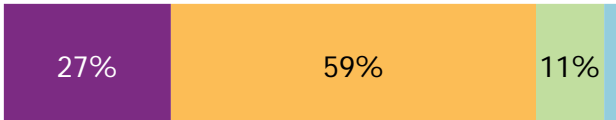


Having a water meter makes me more aware of the water I use



Cambridge metered customers (148)

0% 20% 40% 60% 80% 100%



■ Agree strongly ■ Agree ■ Disagree ■ Disagree strongly ■ Don't know

Metering quotes



"They should make an app!"
Walsall

"Because I think it should still remain a choice to have them or not. I think that all new builds should have them fitted as standard & introduce them that way rather than making it compulsory."

"I think it is important to charge people for what they actually use. This in turn, I believe, will encourage people to use only what they need to rather than say leave a tap running, etc."

"Every household has different needs but that doesn't mean they can afford bigger water bills. Such as a disabled person with a skin condition."



Leakage

Leakage 1

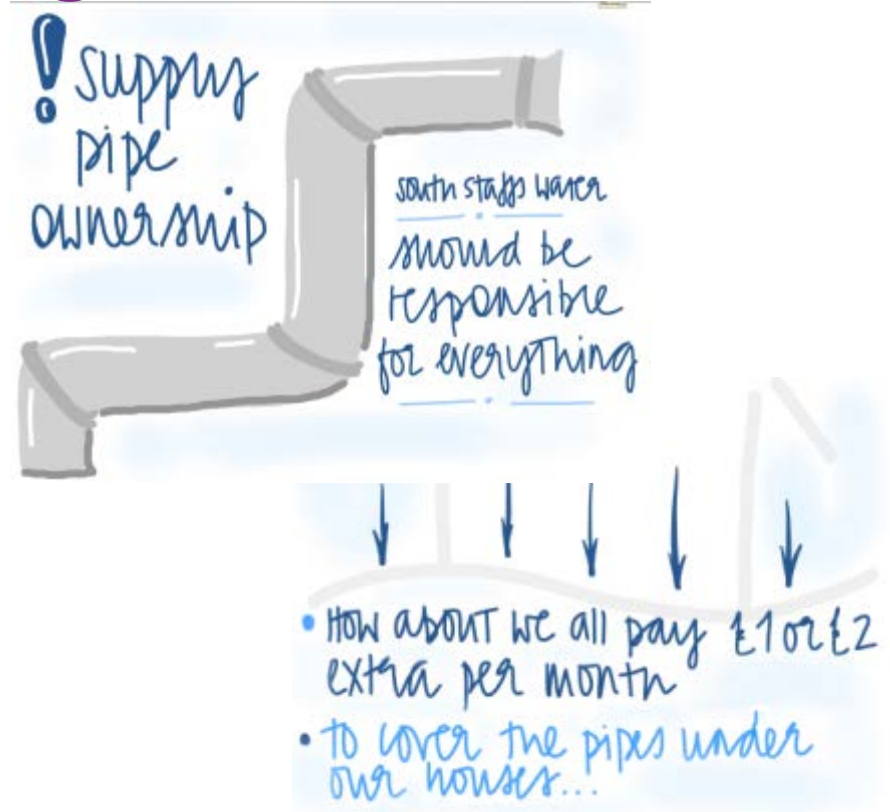


“If we’re supposed to do our part, they need to do their part too... Preaching at us about how we use water, then wasting loads.”
Cambs

- There is a clear and consistent message on leakage from all audiences and in both regions:
 - The company should do more, going beyond current targets, if possible.
- The moral imperative not to allow waste, outweighs potential economic arguments, for most.
- Existing leakage levels are seen as shocking.
- Concern that customers are paying for lots of lost water.
- Annoyance, from some, that company makes a profit for shareholders, while this continues.

Leakage 2

- SELL was not easily understood by customers.
- Economic arguments tended to get pushed back:
 - Perception from customers that small leaks will grow big – therefore false economy.
 - Stakeholders and larger business audience point to wider societal and environmental costs.
- Many call for the company to adopt supply pipes and /or provide support for repair.
 - Willing to pay for this, if required*.
- Seen as unfair that those with a meter might notice leaks and then have to pay for their repair – acts as a disincentive to metering and a disincentive to finding leaks. Company adoption would overcome this. Calls for an 'amnesty'.



"It's a bit alarming that not everyone knows about leaks by their house – that's why they all need a meter."

Leakage - survey results

CW/SSW should not waste money fixing more leaks if it doesn't make financial sense to do so.



It's morally wrong for water to be wasted through leaks and so CW/SSW should invest more money in fixing them.

1

10

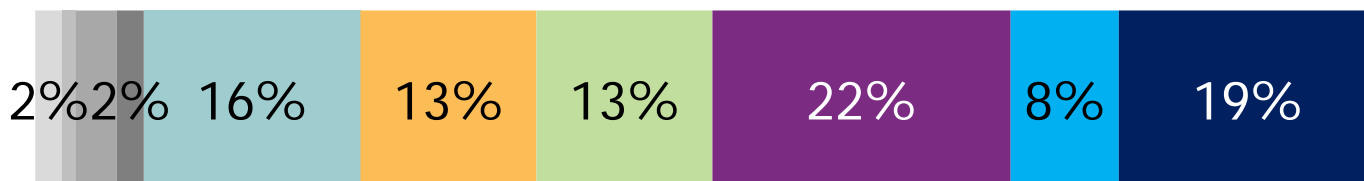
These results are highly consistent across ages, genders, SEG etc.

Mean scores:
SSW - 7.16
Cambridge - 7.17

Leakage - survey results

75% or more of the sample gave a score of 6 or more in both areas

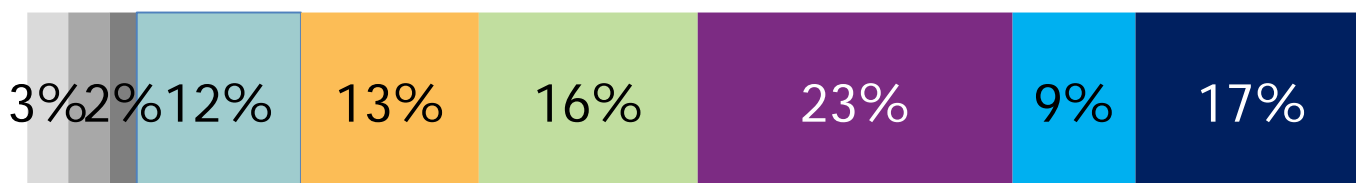
Cambridge



South Staffs Water should not waste money fixing more leaks if it doesn't make financial sense to do so

It's morally wrong for water to be wasted through leaks and so South Staffs Water should invest more money in fixing them

South Staffs



1 2 3 4 5 6 7 8 9 10

Base: 305 South Staffs, 207 Cambridge

Leakage - survey results

Half the sample was told the % of treated water lost to leakage before answering this question and half was not.

These results are highly consistent across ages, genders, SEG etc.

This made only a marginal difference to the average scores

CW: 7.06 vs 7.29

SSW: 7.11 vs. 7.2
(told vs. not)

Mean scores:

SSW - 7.16

Cambridge - 7.17

Leakage as a priority

- In the survey 14% of Cambridge customers and 11% of South Staffs customers assigned 'reducing leakage in the network of pipes owned by the company' as the top priority amongst challenges facing the water company.
- 52% of Cambridge respondents and 43% of those in South Staffs put this somewhere in their top three priorities.
 - In both areas propensity to prioritise this increased with age.

"Lots of water escapes and no-one sees it. Keep leaks to a minimum to maximise available water."

"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."

"Water is a necessity for living, wastage can cause problems to households, road, communities etc.."

"It's been ignored for years - rather than blaming consumers for waste, companies need to get their own act together."

Workshop Polling on Leakage

How far do you agree or disagree with this statement?

“SSW /CW is doing enough to reduce leakage in the water system.”

Walsall
63% disagree or
disagree
strongly

Cambridge
72% disagree
or disagree
strongly

Following your discussions what do you think the company should do?

Walsall
87% feel the
company should do
more to reduce
leakage below
current levels

Cambridge
79% feel the
company should do
more to reduce
leakage below
current levels

Leakage quotes

"Makes me feel that what I do isn't going to make that much difference."

Cambs

"It will get worse, and is just water wasted."

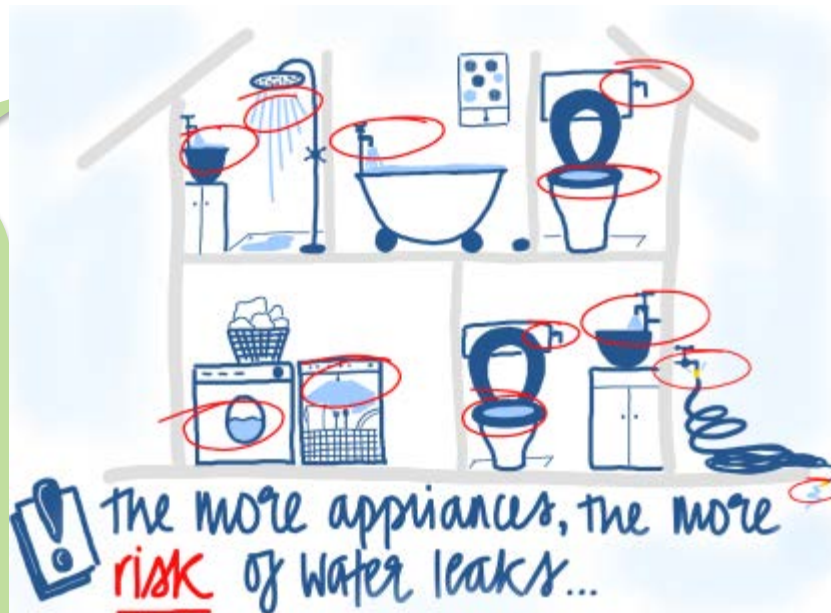
"That's a hell of a lot of water. If they're saying that eventually we're going to start running out of water, then how can we afford to lose that much water? Surely that's something that's got to be addressed immediately... It's a necessity. You can't worry about how much it's going to cost."

Cambs

"It gives more weight to wanting customers to reduce their usage. It's a PR benefit.

Objections to reservoirs will be mitigated if you say you are doing all you can for leakage."

Cambs



"What damage is the leakage doing e.g. is a leak in the road causing pot holes?... What are the knock-on effects?"

Restrictions

Bringing the voices of communities into the heart of organisations

Restrictions

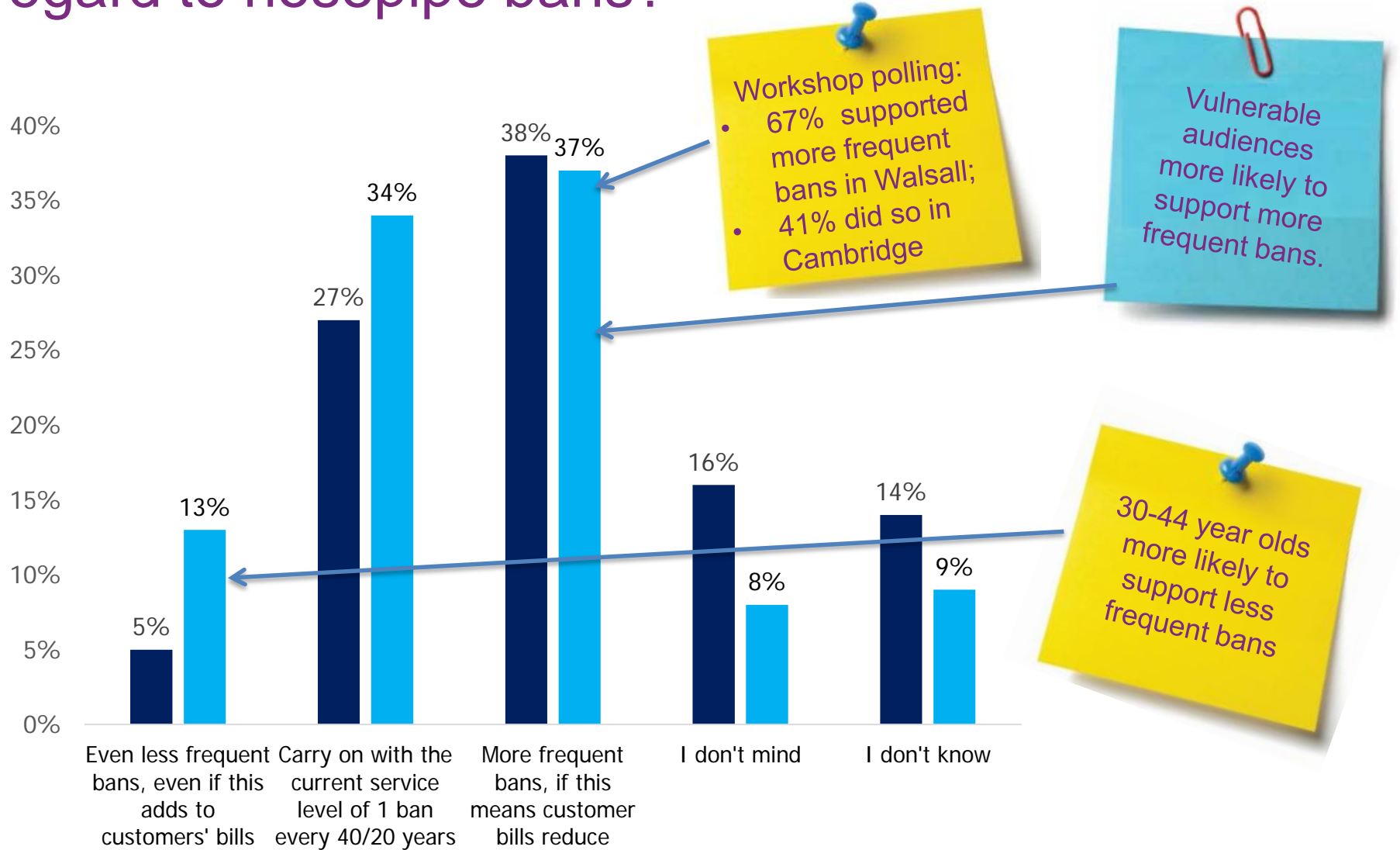
- Avoiding the need for bans was not a priority either at the start or at the end of the workshops. It was also assigned the lowest priority in the survey in both regions.
- Many perceive there have been more recent hosepipe bans than is the case, in reality.
- Lack of knowledge and lack of concern about bans (partly because of lack of experience?)
 - e.g. how long they last, what they cover.
- Current service levels seen as very easy to cope with – many say they would be happy with more frequent bans (in both areas).
- More severe restrictions seen as reasonable in exceptional circumstances (severe drought), but again, customers have no experience to draw on.
- BUT - concerns expressed to protect vulnerable customers and small water reliant businesses.

Restrictions

- Some business customers were more concerned about the impacts of a NEU bans, but were unclear what constitutes 'essential'.
- Businesses might be willing to consider bespoke arrangements to reduce water use on request, if there were potential to reduce their ongoing costs.
- Similarly, questions asked about the possibility of arrangements parallel to the solar FIT for customers who have greywater systems installed.
- For larger business users cost levers could be effective.



In future, what would you like to see happen with regard to hosepipe bans?



Base: 305 South Staffs, 207 Cambridge

Restrictions quotes

“Only twice in my life? That’s a fair number.”
Walsall

“1 in 80 years – most people wouldn’t run a business for 80 years.” Walsall

“People ..would moan, but if we can say ‘it takes £5 off bill to have a ban every 20 or 30 years’, people would rather have money off the bill.”
Walsall

“I wouldn’t be upset by a ban and not being able to wash my car.”

“A month ban would have serious impact.”
Walsall

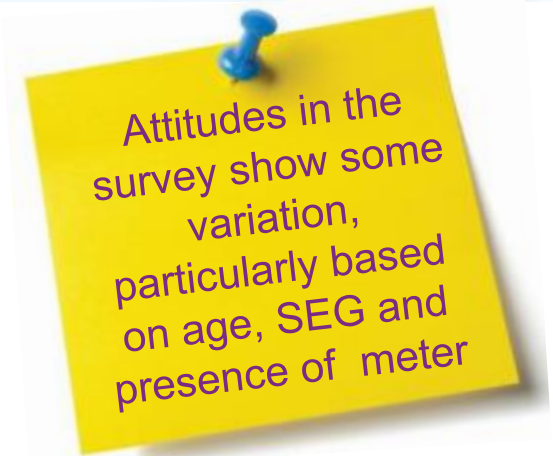


Water Efficiency

Bringing the voices of communities into the heart of organisations

Water efficiency

- Survey results are very consistent between the 2 areas. Just over half agree they could do more to reduce their water usage
- Many workshop participants admitted to not being as careful with water as they could be.
 - Post discussion polling in the workshop sessions had agreement they could do more at over 80%. Discussing behaviours made people realise what more they could do.
- Higher proportions (60%/ 67%) believe SSW/ CW should do more to reduce everyone's usage.
- Whilst over 90% agree "water is a precious resource that we all have responsibility to conserve", over half (and almost two thirds in Cambridge) agree "there is plenty of water to go around in this country."
- This backs up workshop findings that in both regions there was **limited awareness of any current or impending water shortage.**



Water efficiency

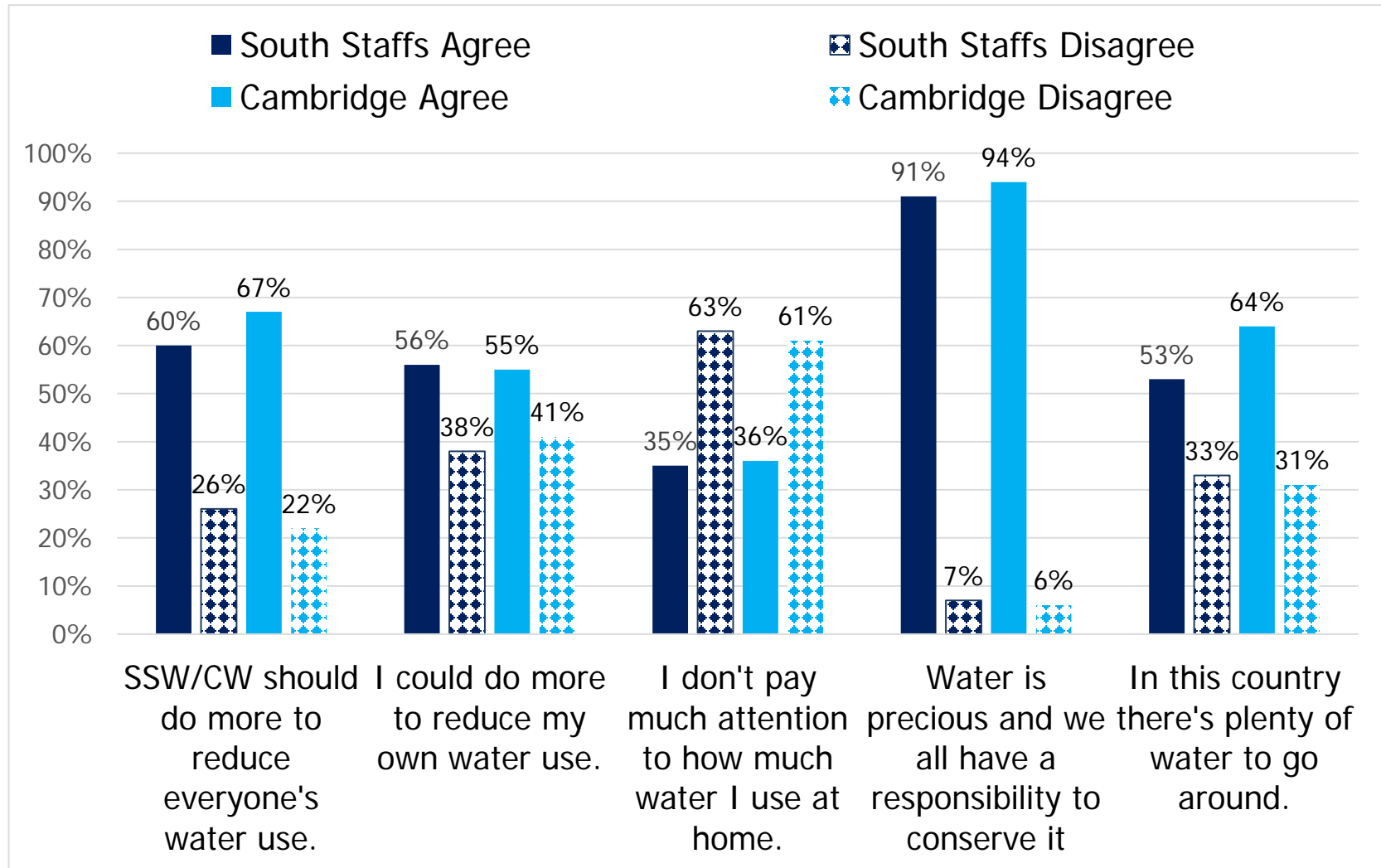
Your service tracker shows low scores for "They help me to save water" compared to other brand attributes



- Limited awareness of SSC's activities to reduce customer consumption.
- Passive water efficiency activities (e.g. the provision of water-saving devices) were seen as more likely to be effective.
- Wide calls for greater education and support – proactively disseminated not just via website.
 - Low cost of water mean habits may be hard to change.
 - Lack of understanding that there is / may be a shortage – this means people don't know why their behaviour needs to change.
- All audiences recognise the need for a culture change.

- General leakage levels make their individual efforts seem paltry in comparison – creates a barrier.
- Stakeholders see this work as symbolically important, even if it delivers little in terms of volume saved.

How far do you agree or disagree with the following statement statements?



Base: South Staffs 305, Cambridge 207

How far do you agree or disagree with the following statements: SSW / CW should do more to reduce everyone's water use.

South Staffs survey – 60% agree / agree strongly; 26% disagree / disagree strongly and 15% don't know.

Variations by sub-group, as follows:

- Metered customers more likely to agree – (73%)
- AB's and C1's more likely to agree – (76% and 70%)

Cambridge survey – 67% agree / agree strongly; 22% disagree / disagree strongly and 10% don't know.

Variations by sub-group, as follows:

- Metered customers more likely to agree – (71%)
- Men more likely to agree (74%)
- AB's more likely to agree – (76%)

How far do you agree or disagree with the following statements: I could do more to reduce my own water use.

South Staffs survey – 56% agree / agree strongly; 38% disagree / disagree strongly and 7% don't know.

Variations by sub-group, as follows:

- Younger age groups more likely to agree (18-29, 67%; 30-44, 65%)
- 60+ more likely to disagree (51%)
- AB's more likely to agree (72%)

Cambridge survey – 55% agree / agree strongly; 41% disagree / disagree strongly and 4% don't know.

Variations by sub-group, as follows:

- Men more likely to agree (64%)
- Younger age groups more likely to agree (18-29, 73%; 30-44, 76%)
- Older more likely to disagree (45-59, 51%; 60+, 63%)
- AB's more likely to agree (64%)

How far do you agree or disagree with the following statements: I don't pay much attention to how much water I use at home.

South Staffs survey – 35% agree / agree strongly; 63% disagree / disagree strongly and 3% don't know.

Variations by sub-group, as follows:

- Younger age groups more likely to agree (18-29, 45%; 30-44, 46%)
- Older people more likely to disagree (45-59, 69%; 60+, 78%)
- Those with a meter more likely to disagree (72%)

Cambridge survey – 36% agree / agree strongly; 61% disagree / disagree strongly and 4% don't know.

Variations by sub-group, as follows:

- Younger age groups more likely to agree (18-29, 46%; 30-44, 57%)
- Older people more likely to disagree (45-59, 69%; 60+, 88%)

How far do you agree or disagree with the following statements: Water is precious and we all have a responsibility to conserve it.

South Staffs survey – 91% agree / agree strongly; 7% disagree / disagree strongly and 2% don't know.

Variations by sub-group, as follows:

- 18-29 more likely to disagree (17%)
- Those with a water meter more likely to agree (96%)

Cambridge survey – 94% agree / agree strongly; 6% disagree / disagree strongly and 1% don't know.

Little variation by sub-group, except:

- 18-29 more likely to disagree (14%)

How far do you agree or disagree with the following statements: In this country there's plenty of water to go around.

South Staffs survey – 53% agree / agree strongly; 33% disagree / disagree strongly and 14% don't know.

Variations by sub-group, as follows:

- Men more likely to agree – (60%)
- Those aged over 60 more likely to disagree (45%)
- Those with a meter more likely to disagree (42%)

Cambridge survey – 61% agree / agree strongly; 31% disagree / disagree strongly and 4% don't know.

Variations by sub-group, as follows:


- Men more likely to agree (76%)
- Younger people more likely to agree (18-29, 76%; 30-44, 81%)
- Those aged over 60 more likely to disagree (48%)

Workshop Polling on Water use. How far do you agree or disagree with this statement?

“I could do more to reduce my own water use.”



Walsall
86%
agree or
agree
strongly

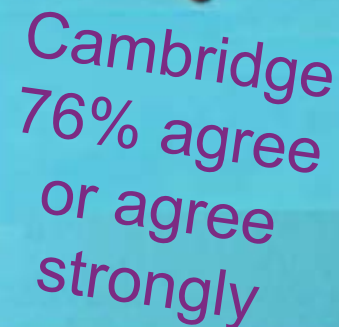


Cambridge
83%
agree or
agree
strongly

“SSW /CW should do more to reduce everyone's water use.”



Walsall
89% agree
or agree
strongly



Cambridge
76% agree
or agree
strongly

Water efficiency quotes

"At the moment we don't really know what it [using lots of water] does to the environment. Why do we need to cut down on water? At the moment we all seem to be doing alright. What is going on behind the scenes which means we need to cut down on water." Cambs

"We're so spoilt in the western world, and not used to anything being taken away and restricted. It'll take a shock before people wake up."

"Mum does that about energy but not about water, maybe because it doesn't cost as much."
Walsall

"With gas and electric, the cost comes in but water costs are so minimal, you ignore it. If I leave the bath running, I don't panic, it's not like leaving the lights on."



Sustainable homes / recycling

Sustainable homes / recycling

- Whilst not discussed in detail at workshops with domestic customers (and not covered in the survey); where it was touched upon water recycling was a very popular concept.
- Domestic customers were shocked that 30% of water is flushed away and some raised spontaneously that this water need not be drinking water.
 - There was some awareness of greywater systems in other countries.



Sustainable homes / recycling

- Developers and local authority stakeholders raised practical barriers to wider sustainable design in new build development. They cited:
 - The need for incentives for developers.
 - Whilst customers may like the idea they are not willing to pay a premium for water efficient homes.
 - One developer (Cambs) with experience of development specific wastewater recycling plant cites that there have been many problems, with the project severely delayed.
- It was suggested that even if this can't be achieved currently, new developments should be created with the ability to retrofit greywater systems at a later stage.
- This may need to be built into building regulations at a national level.

The environment

Bringing the voices of communities into the heart of organisations

The environment

Customers and SME's

- The natural environment is important for some, but there seems little understanding of the possible impacts a water company could have and many are quite disconnected from the natural environment.
- In the survey 8% of Cambridge customers and 4% of South Staffs customers assigned 'looking after the natural environment' the top priority amongst challenges facing the water company.
- However 30% of Cambridge respondents and 24% of those in South Staffs put this somewhere in their top three priorities.
 - In both areas 30-44 year olds were the most likely to place this in their top three (41% and 32% respectively.)
- Prior to examining detailed options, there was little discussion of environmental considerations.
- However, when discussing the options such considerations were important (this will be covered later.)

"Because the environment is constantly under threat from human building work and using our natural resources. Once these are gone, there is no way back. I understand water has to get to homes, but would like everything to be as 'nature friendly' as possible."

The environment

Stakeholders

- For stakeholders environmental considerations were far more 'top of mind' from the very start.
- Many amongst this audience have a clear understanding of the balance that needs to be reached between ensuring sufficient supply and protecting the environment.
- Developers and Councils are keen to see incentives to encourage high standards of sustainability in new developments.
- NGO's and farming representatives want to see close collaboration in managing abstractions, catchment management and protecting wildlife.

“Ensure environmentally sustainable abstraction limits.”
Cambridge

“Minimise energy use for maximum supply with maximum recycling (vs. minimum abstraction.)”
Walsall

Investment options and trade-offs

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What we did - workshops

- Participants saw, discussed and prioritised demand management and supply side options on 'Top Trumps' cards (without full details on volume and costs, at first.)
 - Each card gave them a feel for the relative attributes of each option in terms volume, cost, environmental impact and future proofing, using verbal and visual scales.
 - There were 9 options in SSW and 10 options in Cambs.
- They were given six 'votes' to allocate individually across these options, using stickers.
- They were also allowed to identify one option they liked the least.
- In groups, they then saw the more detailed options (showing volume and cost figures) with asset management options added to the mix.
 - This added 4 further options (including treatment works options in SSW and 2 in Cambs).
- They were given a volume and cost target and asked to co-develop a plan.

Abstracting more groundwater



Groundwater is water held underground in the soil or in pores and crevices in rock. We could create new boreholes or reuse existing out-of-use boreholes

Volume	
Future proofing	High
Cost	££
Deliverability	Medium
Environmental impact	Negative

community research

Cambridges Water Options

YOUR VOTES:

Please stick your votes on the options you like best. You can spread the votes between any of the options. You can also stick your votes on the options you like least. Please stick the square red sticker on the options you like the least.

Option	Volume	Cost	Future proofing	Deliverability	Environmental impact
Reducing demand (1)					
Reducing demand (2)					
Reducing demand (3)					
Reducing demand (4)					
Reducing demand (5)					
Reducing demand (6)					
Reducing demand (7)					
Reducing demand (8)					
Reducing demand (9)					
Reducing demand (10)					
Reducing demand (11)					
Reducing demand (12)					
Reducing demand (13)					
Reducing demand (14)					
Reducing demand (15)					
Reducing demand (16)					
Reducing demand (17)					
Reducing demand (18)					
Reducing demand (19)					
Reducing demand (20)					

Abstracting more groundwater



Groundwater is water held underground in the soil or in pores and crevices in rock. We could create new boreholes or reuse existing out-of-use boreholes

Volume	3 ml/d
Future proofing	High
Cost	£7m
Deliverability	Medium
Environmental impact	Negative

community research

TABLE 4

Option	Volume	Cost
6	7	
3	5	
6	2.5	
2	2	
40	50	
15	8	
300	250	
Total	471	£326.5

£55m fighting Cambs

What we did – the survey

- Respondents saw, demand management and supply side options on within the survey.
 - Each option had a short description and gave them a feel for its attributes in terms volume, cost and environmental impact, using verbal scales.
- They were asked to indicate whether they were 'for' or 'against' each option using a slider on a 5 point scale. Options were rotated across the sample, to counter any order effects.
- They were then shown all the options together (with the chance to review the detailed information on each) and asked to indicate the options they liked best and least.
- In SSW only, two options for asset management were shown, in a separate section of the survey.
- Because of the time constraints within this format the number of options was fewer than was the case in the workshops.
 - 7 options in SSW and 6 in Cambs.

More education campaigns

The water company could encourage customers to use less water through education and advertising. Providing people with more information about how and why to use water carefully may help people to consume less, but there are no guarantees people will reduce the amount they use.

Amount of water this could provide	Very low, less than 1% of total water demand
Cost	Low (£)
Environmental impact	Positive as more water is saved

TOP TIPS FOR AVOIDING WASTING WATER

To what extent are you for or against South Stafford Water doing this?

Strongly for Strongly against

Continue »

Now that you have looked at all the options, which of the options do you like the best?

Please select the titles to look back at the detailed information for each option.

- ☐ Increasing the amount of water in the Blithfield reservoir
- ☐ Reducing leakage
- ☐ Installing smart meters
- ☒ More education campaigns
- ☐ Taking water from the River Trent
- ☐ Trading water with another water company
- ☐ Taking more groundwater

Continue »

More education campaigns

The water company could encourage customers to use less water through education and advertising. Providing people with more information about how and why to use water carefully may help people to consume less, but there are no guarantees people will reduce the amount they use.

Amount of water this could provide	Very low, less than 1% of total water demand
Cost	Low (£)
Environmental impact	Positive as more water is saved

TOP TIPS FOR AVOIDING WASTING WATER

close

Limitations and outputs

- The research findings from **Phase Two** were intended to inform investment choices.
- The options shared were necessarily far fewer than the company really faces. They were simplified hybrid options, taken from the real process the company is going through as part of WRMP and PR19.
- The criteria and the information shared about each option were necessarily at a high level. Some key elements were not covered at all (e.g. timescale / phasing of delivery.)
- Fewer options and fewer details about each option could be shared in the online survey than in the workshop.
- Workshops participants heard a presentation explaining the options and could ask questions. So, from them we have more considered choices from a position of greater understanding – but the sample is small.
- Survey respondents provide us with a more robust sample but their choices are less considered and based on less understanding.
- Together, the findings have given us a clear hierarchy of options in both regions, which the company can feed into its decision making process, but the above limitations should be borne in mind.

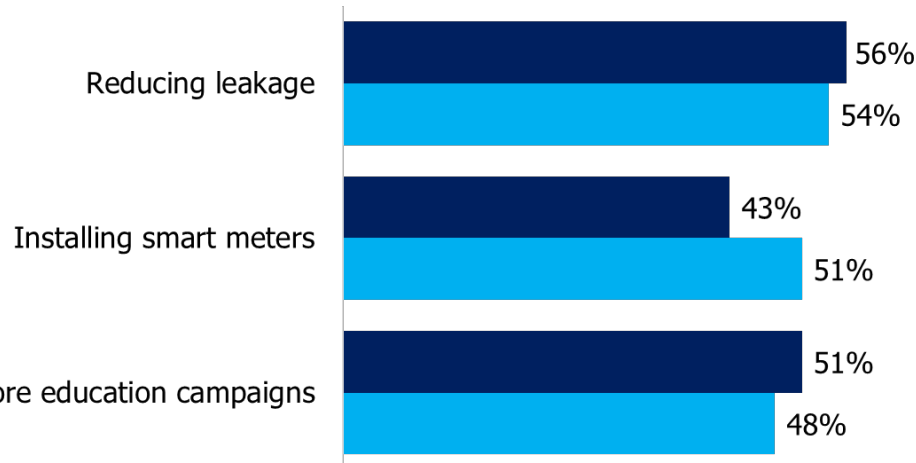
Demand management options

Bringing the voices of communities into the heart of organisations

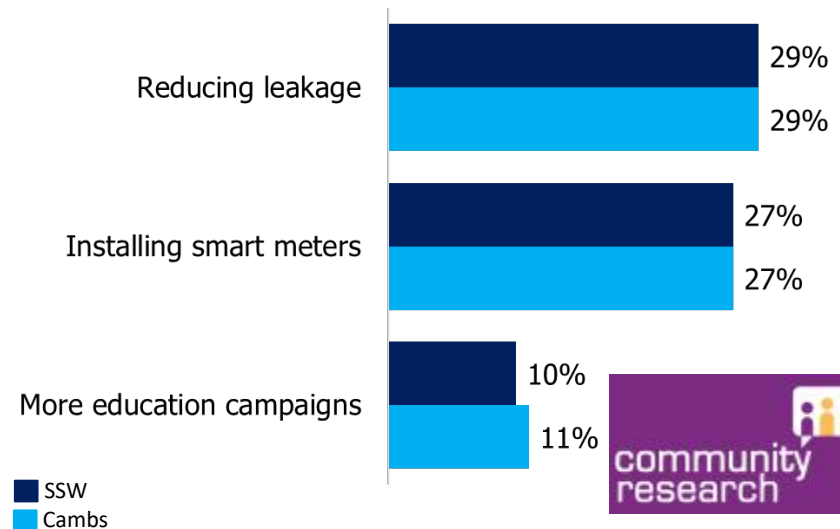
Demand side options - overview

- The demand management options were consistently more appealing to customers than supply side options.
 - Metering and leakage were ultimately more popular than education campaigns.
 - But often people felt that education should come as part of a 'package' with metering.
- Support for the three options in the survey were near identical in Cambridge and South Staffs.

Proportion 'for' the option



Preferred option



Leakage reduction

Reducing leakage

The water company could reduce leakage **above and beyond current targets** by using new approaches. Approximately 23% of all water in the pipe network is lost per day due to leaks but it becomes increasingly expensive to fix leaks and so may not be the best use of money – it might cost more to find and repair the leak than the value of the lost water.

Amount of water this could provide	Low, around 3% of total water demand
Cost	Medium (££)
Environmental impact	Positive as more water is saved

Reducing leakage

The water company could reduce leakage **above and beyond current targets** by using new approaches. Approximately 18% of all water in the pipe network is lost per day due to leaks but it becomes increasingly expensive to fix leaks and so may not be the best use of money – it might cost more to find and repair the leak than the value of the lost water.

Amount of water this could provide	Medium, around 7% of total water demand
Cost	Medium (££)
Environmental impact	Positive as more water is saved



The option with the highest levels of support overall

- Further emphasising feedback from the first workshops, reducing leakage was a hugely popular option in both the reconvened workshops and the survey.
 - One of the two leakage options made it into every final plan.
 - It was the most popular option in the survey in both regions.
- Although the different criteria were taken into account in decision making, for many, there was a moral imperative to reduce leakage – people really disliked the idea of wastage

Leakage reduction

Positives

- Less water would be wasted
- It was relatively inexpensive and had a positive environmental impact

Negatives

- Some recognised that cost efficiencies would be lost the more leaks were fixed
- The amount of water saved was small by comparison to some of the other options

"I have to pay if I have a leak, or pay for the water I use / lose. It's only right that water companies fix the leaks. I don't hear of gas companies having 23% of gas lost due to leaks!!" Survey respondent

"I would imagine that it's a huge task and very expensive for the amount of water saved this way." Survey respondent

"It just makes more sense to try and stop losing water rather than getting more to compensate from another source." Survey respondent

Less popular amongst 30-44 year olds

Leakage reduction 1 vs 2

- In the workshops, the appeal of the two different leakage options was fairly evenly spread.*
 - In South Staffs four groups chose Leakage 1 (and two chose Leakage 2) in their final plan whereas in Cambridge it was half and half.

Leakage reduction (1)



Reducing leaks above and beyond current targets

Volume	Low
Future proofing	Low
Cost	£
Deliverability	Easy
Environmental impact	Positive

NOTE: If you choose this you cannot choose Leakage 2

Seen as a 'no brainer', with many feeling that this should be done as a matter of course. It was almost a 'hygiene factor'.

"Why wouldn't you do this? It's easy and positive."

Leakage reduction (2)



Significantly reducing leaks above and beyond current targets by using new approaches

Volume	Low
Future proofing	Low
Cost	££
Deliverability	Hard
Environmental impact	Positives and negatives

NOTE: If you choose this you cannot choose Leakage 1


Seen as a bit more drastic – some felt that it was important to do everything possible to cut leaks, but others started questioning whether the expense and potential negative environmental effects would be worth it.

"If they install the technology, in the long run it will be better."


* In South Staffs, participants could only choose Leakage 2 if they had chosen Leakage 1 whereas in Cambridge participants could only choose Leakage 1 OR Leakage 2

Increased metering


Increased metering (not smart meters)



Installing more water meters in households across the region

Volume	
Future proofing	Low
Cost	£
Deliverability	Hard
Environmental impact	Positive

NOTE: If you choose this you cannot choose Smart Metering



“It’s already been proven that people use less water if they have a meter so surely people will use less.” Cambs

“If you’re going to have meters, you might as well have smart meters.”


“The only way people are going to use less water is if their bill gets bigger.”

Walsall


- Building on findings from the first workshops, the option of installing more water meters was popular in both regions.
 - As well as encouraging reduced water consumption, participants also liked the idea of meters picking up leaks.
- However, many felt that behaviour change would only occur if it came hand in hand with information and / or support.
- As a result most people would go straight for the smart metering option.

Smart metering


Smart metering



Installing meters that allow customers to see and monitor their own water usage

Volume	
Future proofing	Medium
Cost	££
Deliverability	Medium
Environmental impact	Positive

NOTE: If you choose this you cannot choose Increased Metering



This was a
very
popular
option
overall



- Smart metering was the most popular option in the workshops and second most popular in the survey in both regions.
 - It was in ten of the twelve final plans.
 - Over a quarter chose it as their preferred option.
- However, a minority actively opposed this option, and it was the second least preferred option in the survey, chosen by a fifth of customers in both regions.

Smart metering

Positives

- People thought that they would be more likely to encourage behaviour change because people could see in real time how much water they were using.
- They were seen to be a natural progression with smart energy meters having paved the way.

Negatives

- A few were sceptical that they would make any long term difference to people's water consumption.
- And some were not confident in the technology.
- There was also concern amongst some that they were being used to generate more money for water companies.

"It's the way forward, especially for new generations." South Staffs


"I might not put the washing machine on as much if I knew how much I'm using – you can control and monitor usage yourself."

"As has been demonstrated by the energy industry, smart meters are far from reliable, will not work in many locations... Also their main effect is in passing their cost to the consumer when the only advantages are to the supplier."


More popular with younger people in both locations, and with those on water meters in South Staffs. Less popular amongst customers in households with people with disabilities or long term health conditions

Reducing customer water usage

Reducing customer water usage



Encouraging water efficient behaviours through education, advertising and providing water saving devices

Volume	
Future proofing	Low
Cost	£
Deliverability	Hard
Environmental impact	Positive

community research

This was less popular than other demand management options

- Although customers thought that it was important to encourage reduced water usage through education campaigns etc., other demand management options had more appeal.
 - Around half of survey respondents were 'for' this option, but only around one in ten chose this as their best liked option overall.
 - It was slightly more popular in South Staffs where it made it into the final plans of most workshop participants (compared to only one in Cambridge.)

Reducing customer water usage

Positives

- Seen as an obvious and important thing to do.
- It was inexpensive and could make a difference.
- People in the workshops felt that they were good examples of how increased knowledge and support can make a change to behaviour.

Negatives

- Some people were simply not convinced that people's behaviour would change and that investment could be better used elsewhere.

"It's a slow burn but it is necessary."
Cambs

"There is a need to keep reminding people not to take water for granted." Survey respondent

More popular with younger people in Cambridge

"I liked the idea of educating people but having those things [water saving devices] doesn't mean that people will use them. You could spend money on something more efficient." Cambs

Supply side options South Staffs

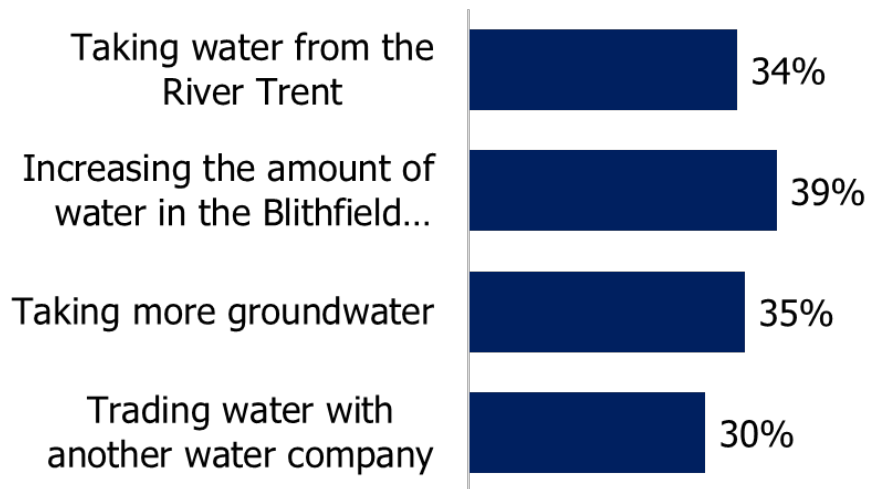
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Supply side options – SSW

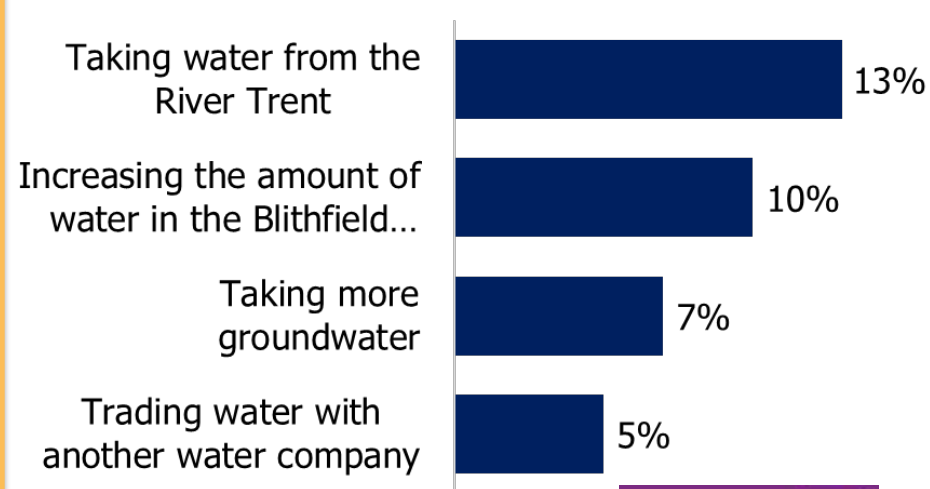
overview

- The supply side options were less popular than the demand management options in South Staffs
 - Around a third of participants were broadly positive towards each of the supply side options; however, very few chose any as their overall preferred option

Proportion 'for' the option




Preferred option




Increasing Blithfield

Increasing the amount of water in Blithfield reservoir



We could increase the amount of water in the reservoir, for example by diverting water from canals

Volume	💧💧
Future proofing	2
Cost	££
Deliverability	Easy
Environmental impact	High



Overall,
this was
not a
popular
option

- Customers didn't hate the idea of increasing the amount of water in Blithfield reservoir, but they didn't love it either.
- It didn't feature in any final plans and was only chosen by around a third of workshop participants overall.
 - Likewise, response to this option in the survey was fairly lukewarm.
- Overall it didn't seem to bring enough big benefits to appeal (i.e. volume high but not that high, future proofing good but not great etc.)

Increasing Blithfield

Positives

- Easy to get heads around.
- Nothing new – just improving something that's already there.
- Monitored by the Environment Agency.
- Seemed to have less of a negative environmental impact than some of the other supply side options.

Negatives

- Many still put off by the environmental impact.
- And a few concerns about impact on canals.
- In the survey, some people were put off by the cost.

“I think during the year we have a lot of rain which could be stored, other countries have less rainfall, but store more water.” Survey respondent


“It seems less negative than trading water... It's the lesser of two evils.”

“The canals are the only pretty stuff in Birmingham.”

Younger customers least positive about this option

Abstracting groundwater (SSW)

Abstracting more groundwater



Groundwater is water held underground in the soil or in pores and crevices in rock. We could create new boreholes or reuse existing out-of-use boreholes

Volume	💧💧
Future proofing	3
Cost	££
Deliverability	Medium
Environmental impact	Negative

community research

This was consistently the least popular option

- Abstracting more groundwater was not viewed positively, mainly due to concerns about the environmental impact.
 - This was particularly in relation to creating new boreholes (reusing existing boreholes had more appeal.)
- In the workshops, around a third chose it as their least preferred option, and it was not included in any final plans.
- It was the least preferred option in the survey, and over a third were against the idea.

Abstracting groundwater (SSW)

Positives

- The high future proofing score was reassuring.
- It wasn't as expensive as some of the other options.
- Reusing existing boreholes was seen as a good use of resources.

Negatives

- High levels of concern about the negative environmental impact, particularly in relation to creating new boreholes.
- Seen as a finite resource.

"I imagine there's water underground that the trees aren't using if you go deep enough not to affect the environment as much."

"If you can use the old boreholes it could be positive on the environment."

"Groundwater is a finite resource – where is it going to come from?"


Caveat that customers were not told it would be a 'sustainable level of water abstraction, but they were against drilling NEW boreholes on environmental grounds.

It appealed most to older customers and those from DE households




Taking Water from River Trent

Taking water from the River Trent



This would be a new abstraction point on the River Trent and a new treatment works.

Volume	🔹🔹🔹
Future proofing	3
Cost	£££££
Deliverability	Hard
Environmental impact	Negative



This was
one of the
most
polarising
options

- Taking water from the River Trent was an appealing option for some, with nearly half the groups including it in their final plan, but it was also strongly disliked by many.
 - In the workshops around half chose it as their least preferred and it was the third least popular option in the survey.
- It was felt to be a radical option (very expensive and very hard to deliver but much higher volume than any other options) – which appealed to some more than others.

Taking Water from River Trent

Positives

- This was seen to be a good investment in the future supply of water.
- It delivered a much higher volume of water than other options.

Negatives

- The expense was a key concern for many (although less so when the bill impact was revealed).
- And some were concerned about the environmental impact – and the impact of the construction work that would be necessary.

“Instead of doing lots of little things, do something that is more certain.”

“It doesn’t make sense to go for a very expensive option now when there are less expensive options available.”

“I think it's the better option as it's the only option to offer more than 10% of total water needed, I would however be a bit worried about how it would affect my future water bills.”

It appealed most to older customers

Trading water with another water company

Trading water with another water company



Buying and transferring treated water via pipes from a neighbouring water company

Volume	💧💧
Future proofing	2
Cost	£
Deliverability	Medium
Environmental impact	Neutral

community research

This was popular with workshop participants, but not survey respondents

- In the workshops trading water was the most appealing of all the supply side options overall with nearly all participants choosing it as one of their preferred options and all bar one group including it in their final plan.
 - Its more 'neutral' scores were reassuring for many.
- However, this option did not fare so well in the survey.
 - It got one of the lowest scores overall.

Trading water with another water company

Positives

- Seemed to provide a decent volume of water without being too expensive or environmentally damaging.
- Was seen as a 'no brainer' – if others had a surplus of water then it made sense for another area to take it.

Negatives

- Some were concerned that this option wasn't really tackling the overall issue i.e. it wasn't 'producing' more water.
- And recognised that there were no guarantees if overly reliant on other companies.

"It makes sense to share it more evenly."

"[Trading water] makes sense: if there is water there, they've already done the job of sourcing it."

"What would happen if, for instance, we got water from Scotland and then devolution happened? Would prices increase dramatically?"

"It doesn't increase the amount of water the country has."

It was slightly more likely to appeal to older customers

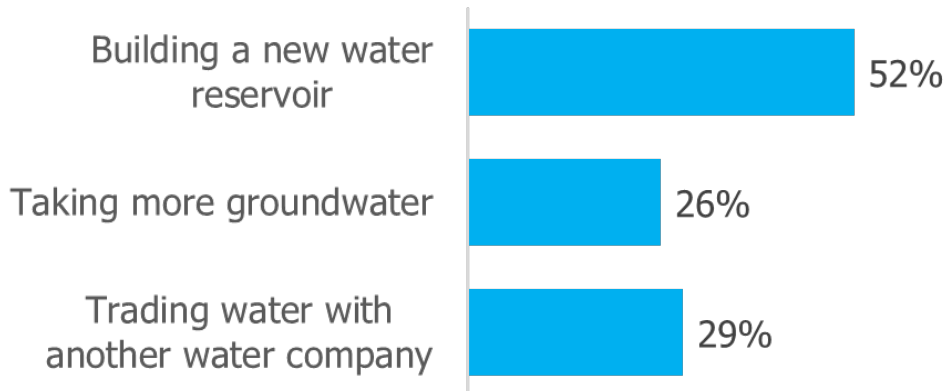
Supply side options Cambridge

Bringing the voices of communities into the heart of organisations

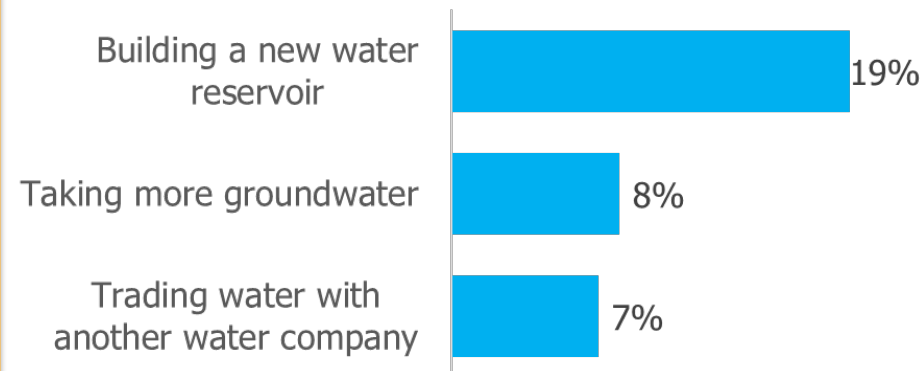
Supply side options – Cambs overview

- As in South Staffs, the supply side options were less popular than the demand management options in Cambridge
 - A new reservoir was the exception to this, with customers generally positive towards this option

Proportion 'for' the option

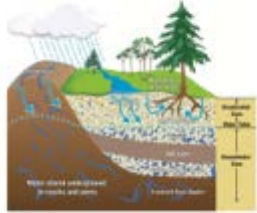


Preferred option



Abstracting groundwater (Cambs)

Abstracting more groundwater



Groundwater is water held underground in the soil or in pores and crevices in rock. We could create new boreholes or reuse existing out-of-use boreholes

Volume	
Future proofing	High
Cost	££
Deliverability	Medium
Environmental impact	Negative



This was
very
unpopular
across the
board

- Reflecting findings from South Staffs, the idea of abstracting groundwater clearly did not appeal in Cambridge.
 - This was particularly in relation to creating new boreholes (reusing existing boreholes had more appeal.)
 - Half the workshop attendees chose it as their least preferred option and it was not in any final plan.
 - Survey respondents were even more emphatic in their rejection of this option – it was the least preferred for a quarter and received the lowest scores overall.
- Concern about this option was largely driven by its perceived impact on the environment.

Abstracting groundwater (Cambs)

Positives

- It was viewed as a relatively inexpensive option.
- Reusing existing boreholes was felt to be a good use of resources.

Negatives

- This was seen as very damaging to the environment.
- People assumed that there was not an infinite supply of water.
- Some also saw it as expensive for what it delivered.

Caveat that customers were not told it would be a 'sustainable level of water abstraction, but they were against drilling NEW boreholes on environmental grounds.

"Will the water run out if more is taken out?"

"It interferes with nature."

"The boreholes would have been closed for a reason."

"I like the idea of using existing boreholes so you're not creating more which is beneficial to the environment as you're not digging holes."

This option appealed slightly more to people from C2DE households



New surface water reservoir

New surface water reservoir



We can start using surface water in Cambridge and build a new reservoir and treatment works to capture water and store it.

Volume	★★★★
Future proofing	High
Cost	£££££
Deliverability	Hard
Environmental impact	Negative during construction then Neutral

community research

This [or combined] was the most popular of the supply side options

- A new reservoir was well liked by workshop participants and survey respondents alike.
 - It featured in half the final plans and was the preferred supply side option and achieved the highest mean score in the survey (NB combined reservoir was not an option.)
- Customers felt that while it was an expensive option and would take time to build, it was the most sensible option in the long term.

New surface water reservoir

Positives

- It was seen as a long term solution i.e. great future proofing.
- It also offered the opportunity for social and environmental benefits.

Negatives

- Participants recognised how expensive this option would be.
- They also knew that it would not be available immediately and wondered who would pay for it.
- There were some questions about feasibility and finding a suitable location.

“will it create a sense of entitlement from the public, that they can use water willy nilly once it’s built?”


“It’s a massive outlay, but it will go down over time.”

” In 10 years the demand will be a lot higher so when the reservoir comes into use it will be really helpful.”

This option appealed most to women and older people


New combined surface reservoir

New combined surface reservoir



We can team up with another water company to build a new reservoir to increase the amount of water captured and stored. Both companies would draw water to supply customers

Volume	🔹🔹🔹
Future proofing	Medium
Cost	££££
Deliverability	Medium
Environmental impact	Negative during construction then Neutral



Popular for having the benefits of a reservoir but sharing the risk

- Sharing a reservoir with another water company was an appealing option for many, with four of the six groups putting it into their final plan.
- It was seen to be more practical to share the cost and some liked the idea of teaming up.
- However, others felt that there was a risk to being overly reliant on another water company.

Trading water with another company

Trading water with another water company (1)



Buying and transferring a large volume of treated water via pipes from a neighbouring water company.

NOTE: If you choose this you cannot choose Trading Water 2

Trading water with another water company (2)



Buying and transferring a lower volume of treated water via pipes from a neighbouring water company

NOTE: If you choose this you cannot choose Trading Water 1

Volume	Two water droplets icon
Future proofing	Medium
Cost	£
Deliverability	Easy
Environmental impact	Neutral



This option did not have much appeal

- Unlike in South Staffs, trading water with another company as an overall concept received a fairly lukewarm response in Cambridge.
 - It made it into four of the six plans in the workshops, but wasn't a particularly popular option.
 - In the survey it was one of the least popular options (although it seemed to be more a case of indifference than active dislike.)
- Although there was an equal split of support for the two different trading water options in the plans, individually people tended to prefer Trading Water 2 as they felt it was a 'safer' approach.

Trading water with another company

Positives

- It was seen to provide a decent volume without being prohibitively expensive or detrimental to the environment.
- Some people liked the idea of working with other water companies and felt it was an efficient way to work.

Negatives

- Some didn't like the idea of being reliant on another company, especially if they might run into water supply issues themselves – they wanted to stay self sufficient.
- Some felt that this wasn't solving the fundamental problems with water supply.

"It makes sense to build relationships with other companies because they might have more water."

"It could be a useful back up in emergencies, when there really is a proper drought."

"This becomes a dependency on another company from another region that could have its own shortage and therefore not be able to support our needs."

This option had most appeal amongst 30-44 year olds

Asset management options

Bringing the voices of communities into the heart of organisations

Treatment works (SSW)

- Participants all rejected the single large treatment works option but were torn between the mega treatment works and two medium treatment works.
 - Across the six groups, there was an even split in the final plans but considerable debate within groups to get to that point.
- Those who chose the mega treatment works ultimately made that decision because of the volume of water it provided.
 - And stakeholders were reassured to find out that it could have a smaller land footprint due to new technology.
- Whilst those who preferred two medium treatment works preferred it for being more future proofed.
 - They felt that the mega treatment works would be 'putting all their eggs in one basket.'

Treatment works (SSW)

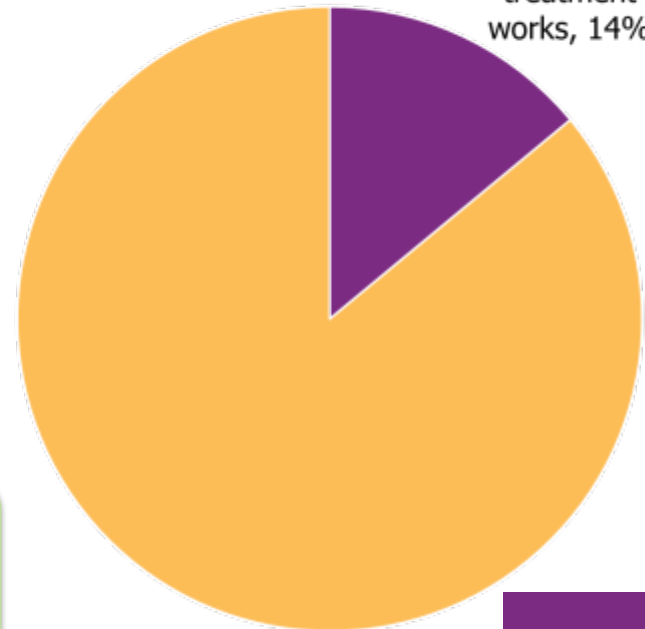
- Survey respondents were asked to choose between the mega treatment works and two medium works only and overwhelmingly chose to refurbish two treatment works.
 - It seems likely that expense and resilience were prioritised over volume amongst these respondents (who did not take part in discussions about potential water shortages in the future and were not trying to meet a volume target.)
 - The mega treatment works was preferred by men and those on a water meter.

“Safety in numbers. Shut down one big plant and there is no water. Shut down one of two smaller plants and at least you maintain some capacity.”
Survey respondent

“It’s good to spread the risk.”

Maintain two medium treatment works, 86%

Build one mega treatment works, 14%



Base: South Staffs 305

Boreholes (both regions)

- Each group in the South Staffs workshops and all bar one of the groups in Cambridge chose to ensure that **all** boreholes (as opposed to most) are fit for purpose and future proofed in their final plans.
- The option was liked for seeming to deliver a high volume of water for a relatively low cost, having a strong future proofing score, and for being neutral to the environment.
 - On balance, it was felt that the extra cost (compared to the 'most boreholes' option) was worth it for the future proofing element.

"The infrastructure's
already there."
Cambs

"Use what you've
already got."
Cambs

Investment options and trade-offs

Criteria and trade-offs

- Participants did tend to stay loyal to their initial views of the different options when putting their plans together.
- Cost was important to most participants on the face of it; however, eight out of the twelve designed a plan that went over budget
 - For the majority, the bill impact was not significant, and there was a sense that it was more important to go for the 'right' plan, rather than the cheapest.
- Even though they acknowledged the demand management options did not provide significant volume, most felt that it was important to include them for moral reasons.
 - Even if this meant going over budget or 'target' volume.
 - Some deliberately added them when they realised they were under budget in their plans.

Criteria and trade-offs

- While other criteria (namely volume) were the main drivers of preference, negative environmental impact was a key factor when choosing which options were liked least.
 - As a result, the supply side options with the greatest environmental impact tended to be viewed most negatively, particularly groundwater abstraction.
 - And when an option perceived to be environmentally unfriendly was included, it was 'balanced out' by the other options in the plan.
 - Participants differentiated between options that would have a temporary negative environmental impact (i.e. during construction) and those that would have a long term impact, with the former being deemed much more acceptable.
- Future proofing tended not to be something that participants placed great value on – while they generally tried to ensure an option with a good future proofing score was included, this was not a key driver, rather an added bonus.

Final plans – South Staffs

- The different workshop groups were highly consistent in their final plans:
 - All chose to ensure all boreholes were fit for purpose and future proofed.
 - All bar one stakeholder group chose to include smart metering.
 - All bar one HH group chose to trade water with another water company.
 - Most chose the first leakage option.
 - The two stakeholder / business groups chose the second leakage option.
 - And four of the six chose to reduce customer water usage through education and advertising.

TABLE 4

Option	Volume	Cost
6	7	
3	5	
6	2.5	
2	2	
40	50	
15	8	
300	250	
Total	471	1320.5

755m fighting leaks

Option

Option	Volume	Cost
6	7	
3	5	
6	2.5	
2	2	
40	50	
15	8	
300	250	
Total	471	1320.5

Option

Option	Volume	Cost
6	7	
3	5	
6	2.5	
2	2	
40	50	
15	8	
300	250	
Total	471	1320.5

Final plan – Cambs

- Groups in the Cambridge workshops were also fairly consistent in their plans:
 - Each group chose to include a reservoir (one group chose to have both reservoir options.)
 - All bar one chose smart metering (and none chose to increase metering.)
 - All bar one chose to ensure all boreholes were fit for purpose.
 - None of the groups chose to abstract more groundwater.
 - The two leakage options and two trading options were equally split across groups.

Option	Volume	Cost
100	30m	
6	6m	
3	5m	
25	30m	

Option	Volume	Cost
	75ml	25m
	25ml	30m
	20ml	20m
	2ml	1m
	15ml	8m
	137ml	84m
	10ml extra	13m

Option	Volume	Cost
	3m	5m
	150m	36m
	25m	25m
	6m	6m
	5m	5m
	75m	134m
		£70m

Preferred options

Bringing the voices of communities into the heart of organisations

Preferred options – South Staffs

- There was broad consistency in South Staffs regardless of customer / stakeholder type.
- Similarly results from the survey were largely in line with findings from the workshop, with some clear winners and losers in both areas.

Winners

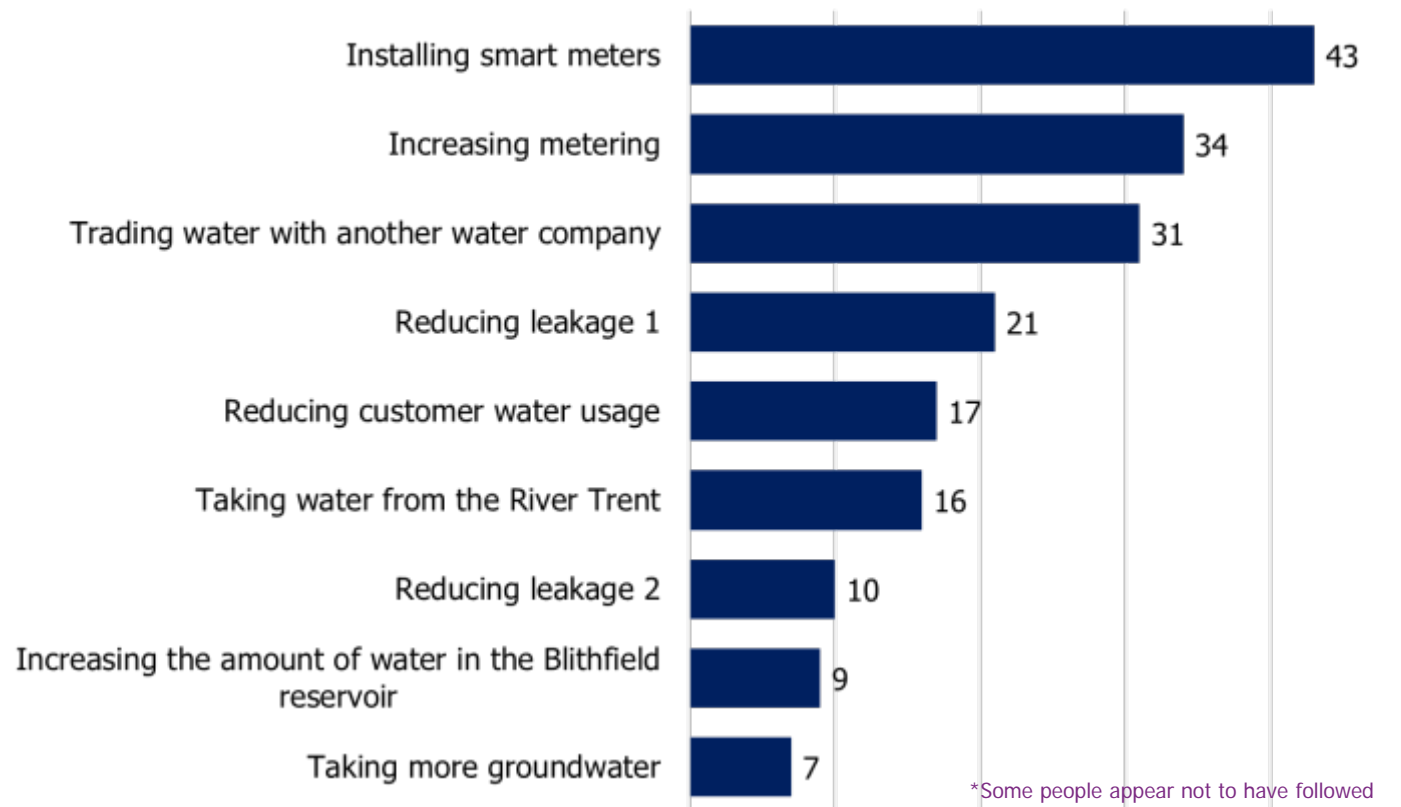
- Metering (particularly smart metering)
- Reducing leakage
- Trading (workshop only)
- Two medium treatment works
- Ensuring all boreholes are fit for purpose

Losers

- Abstracting more groundwater (although at workshops main focus against was on drilling NEW boreholes)
- Taking water from River Trent
- (Smart meters – with a vocal minority)

Preferred options – South Staffs

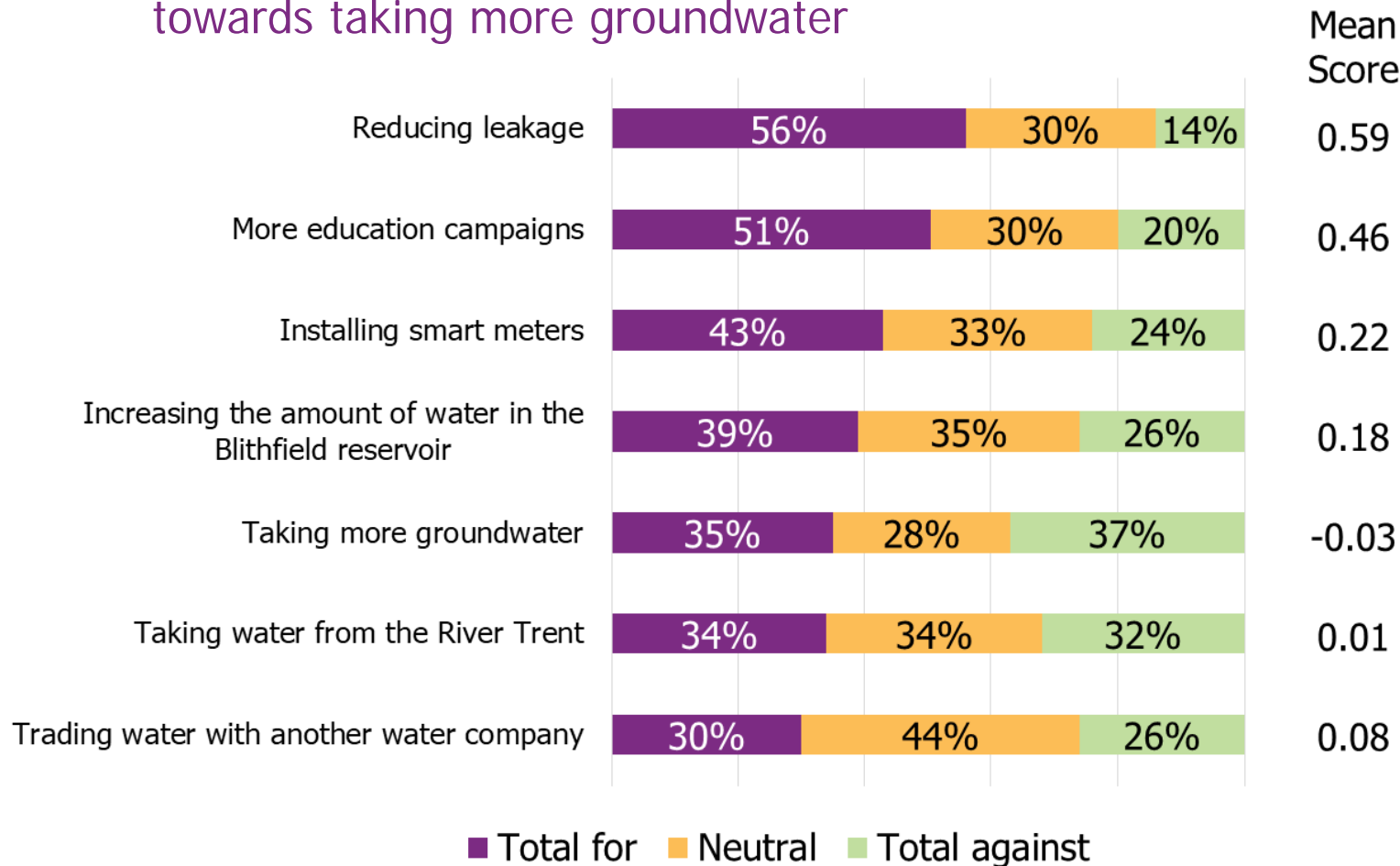
- **Workshop participants** were given six 'votes' that they could allocate across options in any way they chose.*
- At this stage, supply side options, particularly metering were most popular (NB customers could only choose smart metering if they also chose increasing metering.)



*Some people appear not to have followed instructions – therefore totals may not add exactly to 6 x number of participants.

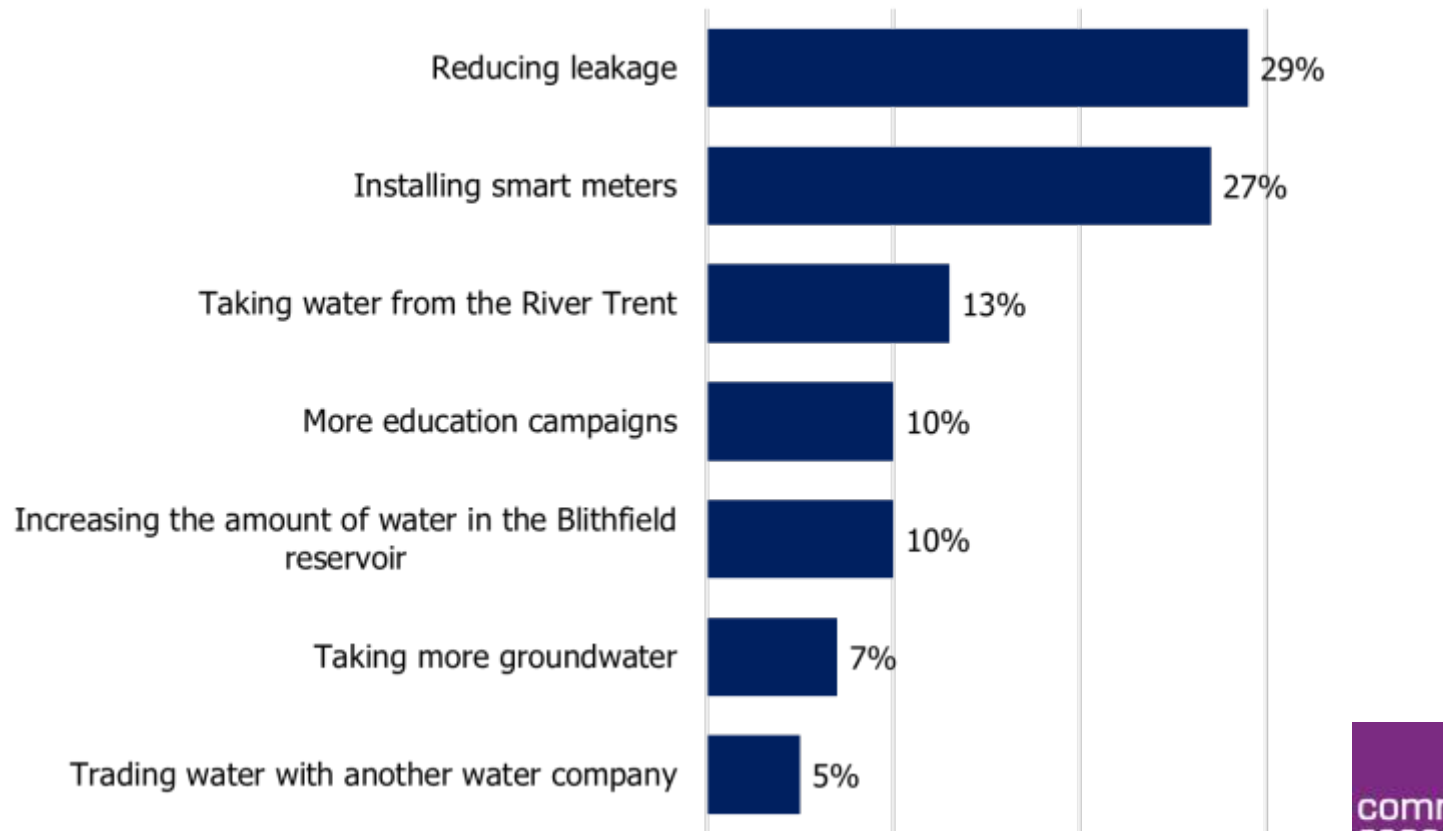
Preferred options – South

- **Survey respondents** were asked to give each option a score to show the extent to which they were 'for' or 'against' each option on a 5 point scale, where +2 = strongly for and -2 = strongly against and 0 is the mid point, neutral option.
 - Respondents were most positive towards reducing leakage, and least towards taking more groundwater



Preferred options – South Staffs

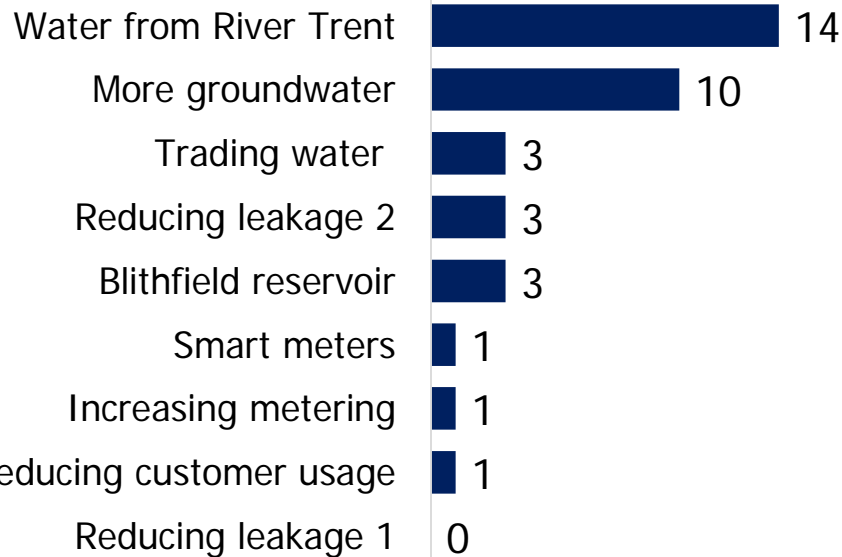
- Survey respondents were then asked to choose the option they liked the best, leakage was most popular overall, reflecting spontaneous views from workshop participants.
- However, smart meters also had strong appeal, chosen as the best liked option by over a quarter.



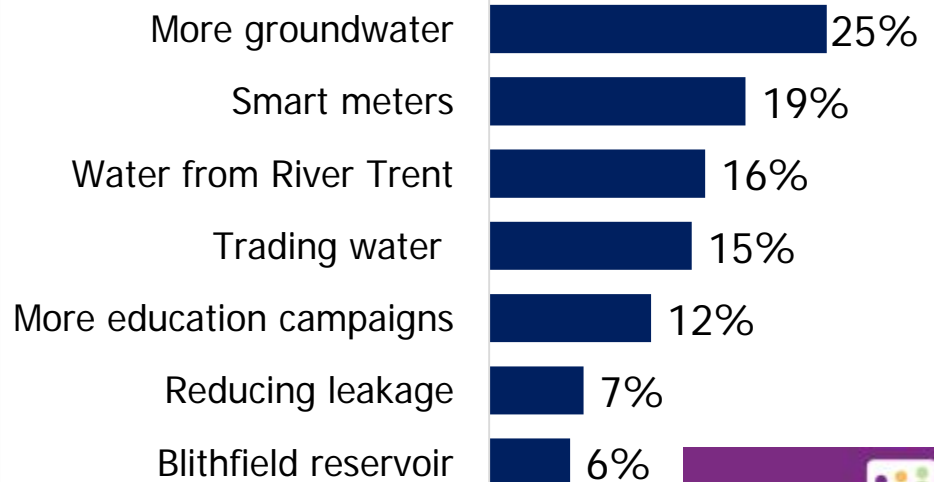
Least preferred options – South Staffs

- Survey results reflected feedback from the workshops in that taking more groundwater was unpopular, with a quarter of participants choosing this as the option they liked the least.
- Taking water from the River Trent was more unpopular in the workshops, while smart metering was disliked by a fifth of survey respondents (NB this was very polarising with over a quarter choosing this as their best liked option.)

Workshop voting



Survey – least liked



Base: 31 (workshop), 305 (survey)

Quotes on options – South Staffs

“Get rid of Leakage 2: the amount of water gained for an extra 10million, not worth it, it’s harder to do and has negative impact on the environment.”

“We are including the things that customers would want to see a responsible company do.”

“If trading is to be done, leakage reduction is needed – if paying for water from other companies, it makes sense to ensure that it isn’t being lost through leaks.”

“I like the idea of a back up plant in case one of them has a major fault.” Survey respondent

“Money doesn’t matter so much as long as we get the volume.”

Preferred options – Cambs

- Results from the Cambridge workshops and survey broadly matched those from South Staffs in terms of response to the demand management options.
- In terms of supply side option, there is most appetite for a reservoir, primarily for the volume of water this would bring compared to other options, but also for the perceived long term benefits.

Winners

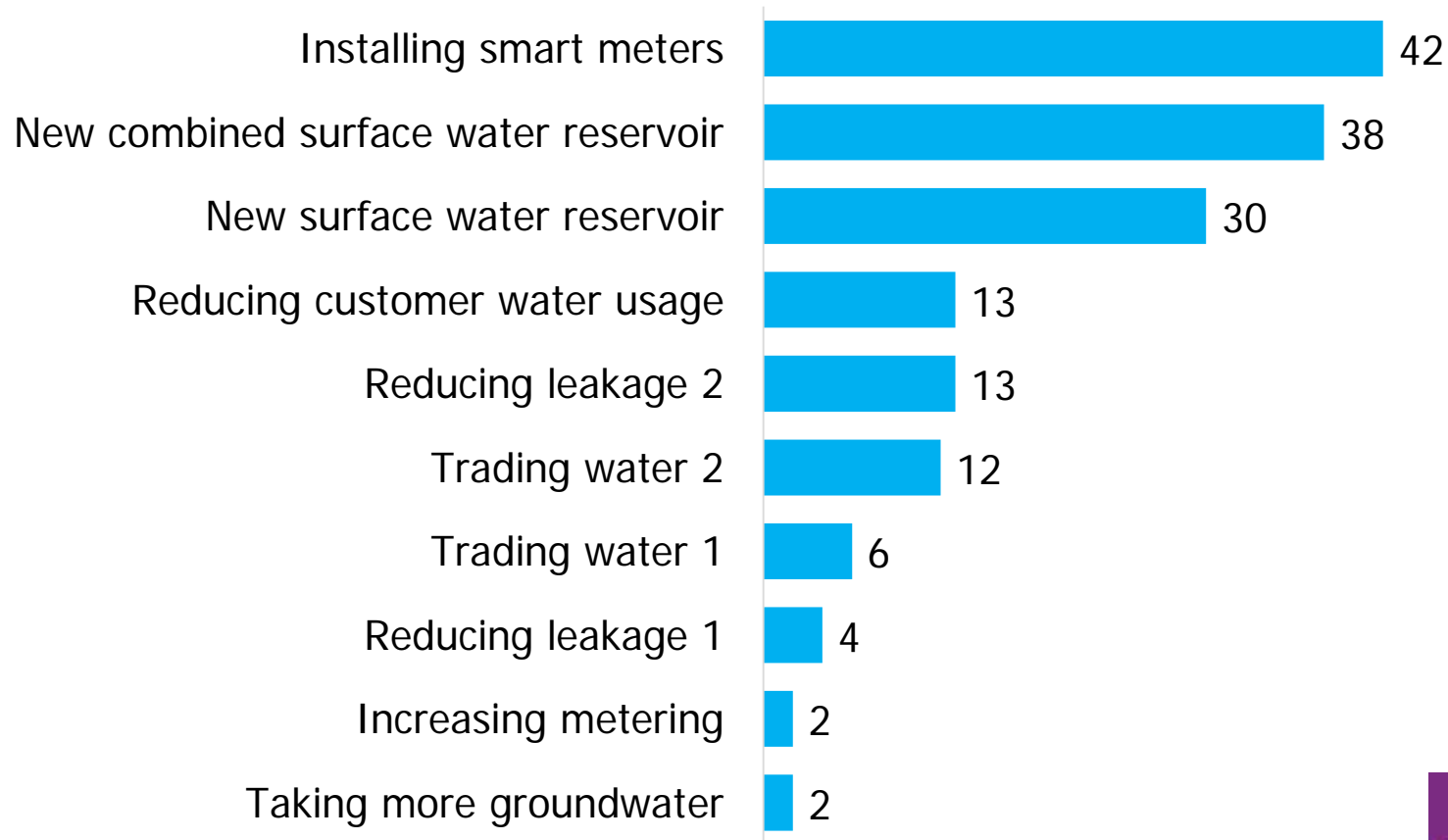
- Metering (particularly smart metering)
- Reducing leakage
- A reservoir of some description
- Ensuring all boreholes are fit for purpose

Losers

- Abstracting more groundwater (although at workshops main focus against was on drilling NEW boreholes)
- (Smart meters – with a vocal minority)

Preferred options – Cambridge

- Although smart meters received the most individual workshop votes overall, when combined, the two reservoir options were most popular.
 - The other supply side options received very little support at this stage.

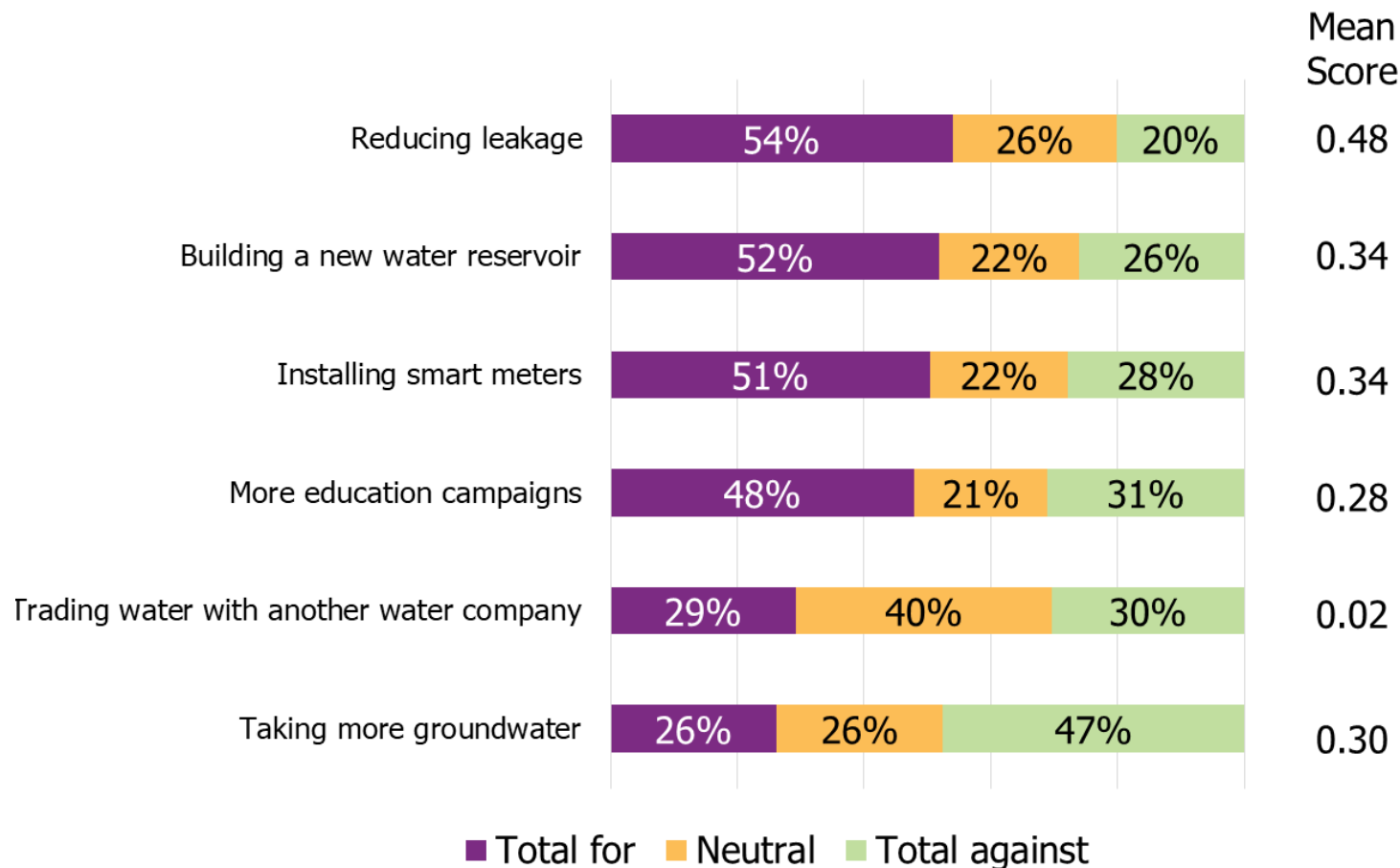


Base: 27 (workshop)

Preferred options –

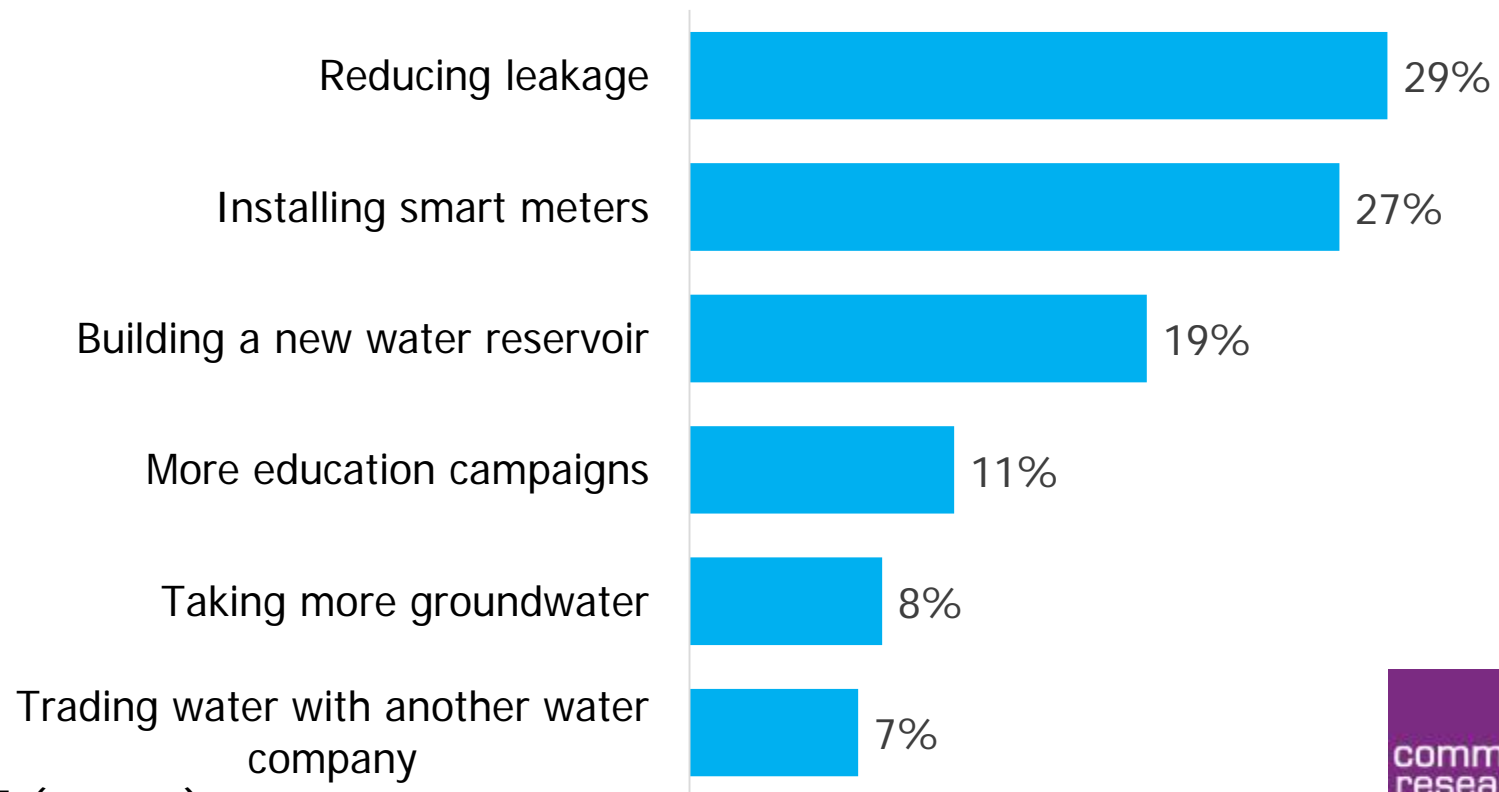
Cambridge

- Survey results reflected these findings, with the demand side options and a new reservoir gaining higher levels of those ‘for’ them, than the other supply side options.
 - As in South Staffs, respondents were most positive towards reducing leakage and least towards taking more groundwater



Preferred options – Cambridge

- Reflecting the findings from South Staffs, the best liked options were reducing leakage and installing smart meters, with well over a quarter each choosing these.
 - Liking for these options were consistently strong across demographics.
- The reservoir was chosen by a fifth overall.
 - However, women were most likely to choose a new reservoir as their best liked option overall.

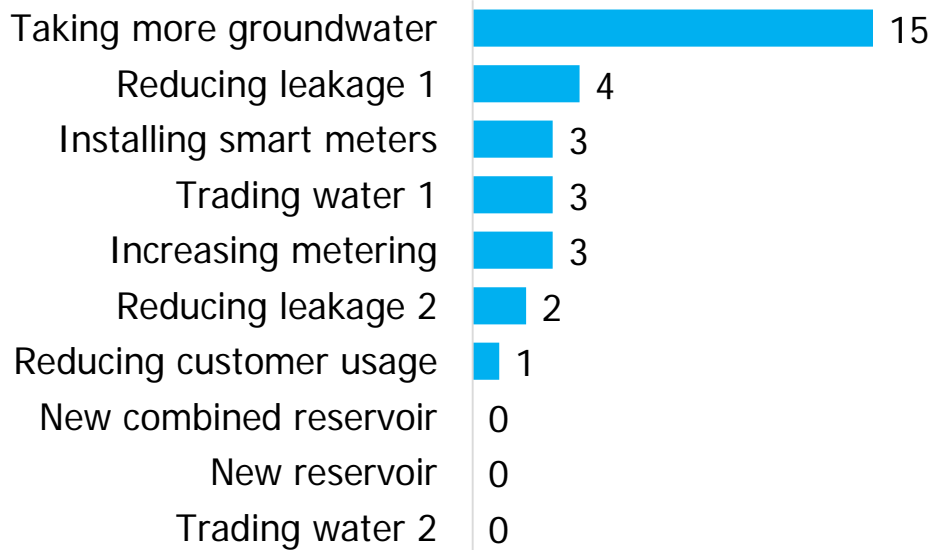


Base: 207 (survey)

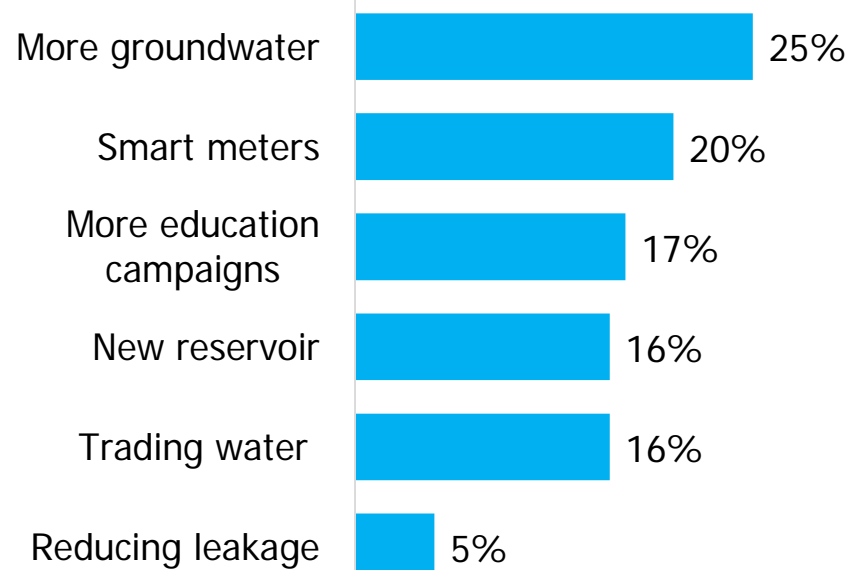
Least preferred options – Cambs

- Taking more groundwater was by far the least popular option in the workshops, and this was backed up in the survey.
 - There were no other clear ‘losers.’

Workshop voting



Survey - least liked



Quotes on options - Cambs

"I think once the initial reservoir has been built water will be utilised for many years to come. Also the reservoir can be used for leisure purposes." Survey respondent

"Leakage reduction needs to be above what is being done. It gives more weight to wanting customers to reduce their usage. It's a PR benefit. Objections to reservoirs will be mitigated if you say you are doing all you can for leakage."

"The price is so insignificant that we might as well put it [leakage] in."

"We've got two reservoirs so don't need to do it [trading]."

"If we're under budget, I'd still go for smart meters because once they're fitted, they're fitted."

Summary of Strategic options

Bringing the voices of communities into the heart of organisations

Workshop summary - SSW

Option	Overall score	Votes allocated	Least preferred	Included in plans	Key points
Leakage 1*	1	21	0	4	Seen to be the 'moral' thing to do
Increased metering**	1	43	1	5	Seen as a necessary and important thing to do, but should provide support and information to customers alongside this
Smart metering	1	34	1	5	Makes logical sense to give customers real time information to help them reduce their water consumption
Trading with another water company	2	31	3	5	Seen as a no brainer to use surplus of water from other regions and less expensive than other supply side options
Reducing customer water usage	2	17	1	4	Seen as an important thing to do, particularly when combined with metering, but some less convinced in its efficacy
Leakage 2	3	10	3	2	Some still feel there is a moral imperative to reduce leakage even further; others feel that it makes less economic sense
Increasing Blithfield	3/4	9	3	0	Not seen to bring major benefits to warrant expense but no major concerns either
Taking water from River Trent	3/4	16	14	3	Mixed views with some seeing this as a bold move but others concerned that it would be too much of a risk
Abstracting groundwater	5	7	10	0	Serious concerns about the long term negative environmental impact, but mainly directed at drilling NEW boreholes

*Could only choose Leakage 2 if had chosen Leakage 1

**Could only choose Smart metering if had chosen Increased metering

Survey summary - SSW

Option	Mean score	Proportion for	Most preferred	Least preferred
Reducing leakage	0.59	56%	29%	7%
Customer education	0.46	51%	10%	12%
Smart metering	0.22	43%	27%	19%
Increasing Blithfield	0.18	39%	10%	6%
Trading with another water company	0.08	30%	5%	15%
Taking water from River Trent	0.01	34%	13%	16%
Abstracting groundwater	-0.03	35%	7%	25%

Workshop summary - Cambs

Option	Overall score	Votes allocated	Least preferred	Included in plans	Key points
Leakage 1*	1	4	0	3	Seen to be the 'moral' thing to do
Increased metering**	1	2	4	0	Seen as a necessary and important thing to do, but should provide support and information to customers alongside this
Smart metering	1	42	3	5	Makes logical sense to give customers real time information to help them reduce their water consumption
New surface water reservoir	1	30	0	3	The idea of a new reservoir was popular for being a long term solution with environmental and social benefits
New combined reservoir	1	38	0	4	Many people preferred the idea of sharing the cost and the burden although others were concerned about the risk
Reducing customer water usage	2	13	1	1	Seen as an important thing to do, particularly when combined with metering, but some less convinced in its efficacy
Leakage 2	2	13	2	3	Many still feel there is a moral imperative to reduce leakage even further; others feel that it makes less economic sense
Trading 2	2/3	12	0	2	Seen as a slightly 'safer' option than Trading 1 as lower volume of water and so fewer risks involved
Trading 1	3	6	3	2	Seen to provide a decent volume of water without too many negatives but some concern about relying on another company
Abstracting groundwater	5	2	15	0	Serious concerns about the long term negative environmental impact, but mainly directed at drilling <u>NEW</u> boreholes

*Could only choose Leakage 1 OR Leakage 2 **Could only choose Increased metering OR Smart metering

Survey summary - Cambs

Option	Mean score	Proportion for	Most preferred	Least preferred
Reducing leakage	0.48	54%	29%	5%
Smart metering	0.34	51%	27%	20%
Building a new reservoir	0.34	52%	19%	16%
Customer education	0.28	48%	11%	17%
Trading water with another water company	-0.02	29%	7%	16%
Taking more groundwater	-0.30	26%	8%	25%

Key

- Workshop

- **Overall score** = a qualitative measure based on all feedback (1 = very positive, 2 = positive, 3 = neutral / polarising, 4 = negative, 5 = very negative)
- **Votes allocated** = the number of overall votes an option received (participants had six votes each to spread out as they saw fit)
- **Least preferred** = the number of people who chose this as the option they liked least (participants could vote for one option only)
- **Included in plan** = how many final plans this option featured in (out of six – four from the workshops, two from the roundtables)

- Survey

[Participants were asked to what extent they were for or against each option from +2 = 'strongly for' ; -2 = 'strongly against' and 0= neutral mid point]

- **Mean score** = an average figure taking into account all responses to the above question
- **Proportion for** = the proportion of people scoring the option 1 or 2 in the above question
- **Most preferred** = the proportion of people choosing this as the option they liked best overall
- **Least preferred** = the proportion of people choosing this as the option they liked least overall

Evaluation of Engagement Approach

Bringing the voices of communities into the heart of organisations

Key evaluation points

98% of survey respondents said most survey questions were very or quite easy to understand

16 customer workshop attendees have asked to receive copies of the report and draft plan

98% of workshop attendees said the workshop was enjoyable

Only 3 people did not return to the 2nd workshop (not counting those who were not re-invited)

All stakeholder and large business attendees have received copies of workshop slides (as per their request)

100% of workshop attendees agreed both workshops were well organised and structured

Quotes from workshop feedback forms

“Great second session – much more interactive and enjoyable. People seemed keen to join in.”

“Really enjoyed the day and has honestly made me more conscious of my water use.”

“It was wonderful.”

“Bit apprehensive before on whether it would be fun and enjoyable, but really enjoyed it.”

“Enlightening and interesting.”

“Really well organised and fun. Excellent educational piece – learnt a lot!”

“Very informative and enjoyable.”

Quotes from survey feedback

"Good topic to sample opinions on, especially when this one will cost money and is deeply strategic. Well done Cambridge!"

"It is thought provoking. I always take water for granted with amount of rain we have!"

"It was a good use of my time and encouraged me more to save water after doing this survey."

"I really enjoyed this survey. It was an eye opener."

"It was interesting to learn more about the way water companies work - a very good survey."

"Very interesting survey about matters that concern everyone."

"A very interesting survey with useful information about the company. I wish more surveys were like this!"

"I would personally benefit from some more water saving education. Send around some information in the CB4 area!"