Severn Trent Water

Stakeholder workshop reports

Water stakeholder workshop

12th June 2012

2. Contents

1. Water stakeholder workshop....1

2. Contents....2

3. Introduction....4
3.1. Date and location....4
3.2. Attendees:....4

4. Executive summary....8

5. Making sure we have enough water to supply our customers (current priorities)....19
5.1. Any other comments?....28

6. Making sure we have enough water to supply our customers (current priorities)....29
6.1. Q4: Before this session, how aware were you that we had a published Water Resources Management Plan?....29
6.2. Q5: How relevant was our current Water Resources Management Plan to your organisation?....29
6.3. Q6: To what extent do you agree with this statement?....30
6.4. Q7: To what extent do you agree with this statement?....30
6.5. Q8: What is an acceptable frequency of hosepipe bans?....31

7. Making sure we have enough water to supply our customers (future priorities)....32
7.1. Q9: How should we balance the needs of our customers and the water environment?....32
7.2. Q10: At what pace should we reduce our least environmentally sustainable abstractions?....35
7.3. Q11: Given the future challenges should all customers pay for the amount of water they use?....37
7.4. Q12: What should our role be in helping others to change their practices if it helps protect the quality of our raw water supplies?....40
7.5. Any other comments?....42

8. Making sure we have enough water to supply our customers (future priorities)....43
8.1. Q13: To what extent do you agree with the following statement?....43
8.2. Q14: To what extent do you agree with the following statement?....43
8.3. Q15: "If we had £1 on bills available how should we spend it…."....44
8.4. Q16: To what extent do you agree with the following statement?....44
8.5. Q17: All customers should have a meter:…..in the next 5, 10, 20 etc years....45

9. Keeping our services reliable (current priorities)....46
9.1. Q18 If you were going to lose one to your utilities for one hour which one would you least like to lose?....46

9.2. Q19. If you were going to lose one of your utilities for one week which one would you least like to lose? 46

10. Keeping our services reliable (current priorities) 47

10.1. Q20. Before today, how aware were you of the potential risks to your water service? 47

10.2. Q21. What are your views on our approach which considers all hazards and risks to service together? 49

10.3. Q22. Do we have the balance right in our current approach to resilience? 51

10.4. Any other comments 53

11. Keeping our services reliable (current priorities) 54

11.1. Q23. Before today, how aware were you that some of our key assets are over a hundred years old? 54

11.2. Q24. To what extent do you agree with this statement? 54

11.3. Q.25. To what extent do you agree with this statement? 55

12. Keeping our services reliable (future priorities) 56

12.1. Q26. How far and how fast should we go with our resilience programme? 56

12.2. Q27. What are your views on our favoured approach to resilience (through "growing the grid")? 58

12.3. Q28. How quickly should we aim to have the capacity in place for long-term controlled shut downs for our aqueducts? 60

13. Keeping our services reliable (future priorities) 62

13.1. Q29. STW plan to increase the resilience of populations of >20k that rely on a single source of supply over 10 years. Should we: 62

13.2. Q30. To what extent do you agree with this statement? 62

13.3. Q31. To what extent do you agree with this statement? 63

13.4. Q32. How quickly should we aim to mitigate the risk of disruption to water services presented by an aqueducts failure? 63

3. Introduction

3.1. Date and location

The Drinking Water stakeholder workshop was held on June 12th 2012 at the Severn Trent Centre, Coventry.

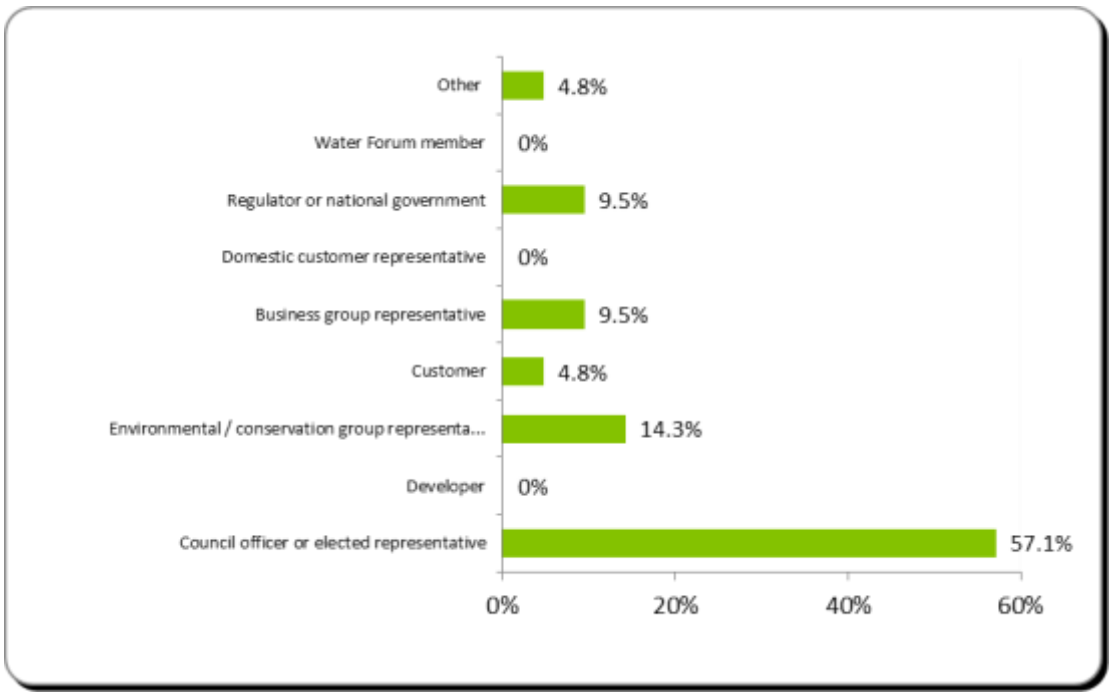
3.2. Attendees:

32 stakeholders attended the workshop. Their details are shown below:

- Alex Yendole - Planning Policy Manager, Stafford Borough Council
- Alison Williams - Principal Environmental Planning Officer (Water Resources), Environment Agency
- Chris Stoate - Allerton Project Head of Research Game & Wildlife, Conservation Trust
- Christina Blackwell - Policy Manager, CC Water
- Claire Anderson - Principal Environmental Planning Officer (Water Quality), Environment Agency
- David Smoker - Chairman, Saint Gorban/SBWWI
- David Clarke - Planning Officer, Malvern Hills District Council
- Donna Tavernor - West Midlands Regional Adviser, Country Land Association
- Frank Lucas - Conservation Manager, RSPB
- Harriet Fisher - Principal Planner, Derbyshire County Council
- Helen Perkins - Living Landscape Development Manager, Wildlife Trusts Nottinghamshire
- Helen Sanderson - Emergency Planning Officer, NHS Coventry
- Helen Roberts - Environment Interim, Birmingham City Council
- Kathy Hughes - Freshwater Programme and Policy Officer, WWF-UK
- Kerry Whitehouse - Drainage Engineer, Birmingham City Council
- Kevin Exley - Planning Policy Officer, South Derbyshire District Council
- Liz Etheridge, Staffordshire Wildlife Trust

- Manoj Mistry - FRM/Drainage Project Manager, Coventry City Council
- Mark Holden Brown - Senior Technician, Derby City Council
- Martyn Wilson - Principal Planner, Worcestershire County Council (Strategic Planning)
- Matt Doran - Regional External Affairs Manager, National Trust
- Nick Grayson - Climate Change & Sustainability Manager, Birmingham City Council
- Paul Mullord - UK Director, British Water
- Paul Tame - Regional Environment and Land Use Adviser, National Farmers Union
- Paul Julian - Water Officer, West Midlands Fire and Rescue Service
- Paul Crocket - Environmental Planning Manager (Water Resources),Environment Agency
- Philip Hulme - PR14 Manager, Environment Agency
- Rajvir Bahey - Senior Planner (Development Strategy), Rugby Borough Council
- Richard Hodson - Planning Officer, Telford & Wrekin
- Simon Cleaver - Utilities Team, British Waterways
- Sumi Lai - Planning Officer, Bromsgrove District Council
- Paul Price, Solihull Council

The split of stakeholders according to the type of organisation they were representing on the day is shown below:



Severn Trent Water

- Andy Smith - Director of Water Services (host of the event)
- Mike Keil - Climate Change and Resilience Manager (presenter and expert on hand to answer questions)
- Marcus O'Kane - Water Resources Planning Manager (presenter and expert on hand to answer questions)
- Harriet Towler - Government and Stakeholder Engagement (organiser of the event)
- Pat Spain - (expert on hand to answer questions)
- Matt Foster - (expert on hand to answer questions)
- David Essex - (expert on hand to answer questions)
- Sarah Stimpson - (expert on hand to answer questions)
- Steve Witter - (expert on hand to answer questions)
- Min Bansel - (expert on hand to answer questions)
- Matt Lovell - (manning exhibition stands)
- Elisa-Atkins Zamora (manning exhibition stands)
- Justin Bailey (manning exhibition stands)
- Doug Clarke - Water Efficiency (manning exhibition stands)
- Keiron Maher - R&D Manager Water Strategy (manning exhibition stands)
- Berndatte Ryan - Senior Process Engineer (manning exhibition stands)
- Heather Thompson - Corporate Optimisation Manager (manning exhibition stands)
- Chris Milner - Capex Manager (manning exhibition stands)
- Mark Smith - Opex Manager (manning exhibition stands)
- Katherine Bird - Regulatory Analyst (manning exhibition stands)
- Colin Church - Area Manager (manning exhibition stands)
- Dr Jodie Whitehead - Senior Catchment Management Planner (manning exhibition stands)
- Katherine Cherry - Catchment Management Planner (manning exhibition stands)
- Richard Winstanley - Senior Hydrogeologist (manning exhibition stands)

- Matilda Beatty - Principle Hydrogeologist (manning exhibition stands)
- Helen Walker - Supply Demand Analyst (manning exhibition stands)
- Chris Atkinson - Senior Hydrogeologist (manning exhibition stands)
- John Lee - Security Manager (manning exhibition stands)
- Sue Allcock - Water Quality Performance Manager (manning exhibition stands)

Green Issues Communiqué

- James Garland - Director (workshop facilitator)
- Siobhan Lavelle - Senior Consultant (workshop facilitator)
- Victoria Cross - Director (workshop facilitator)
- Simon Powell - Senior Consultant (workshop facilitator)
- Laura Edwards - Account Executive (scribe)
- Fiona McAra – Account Executive (scribe)
- David King – Account Executive (scribe)
- Floyd Jebson - Consultant (scribe)

4. Executive summary

- The content of this report reflects discussions of a stakeholder workshop held on 12 June 2012. The comments made by stakeholders were in response to a facilitated discussion. They have been recorded by Green Issues Communiqué but are not verbatim, nor have they been directly attributed to participants. The comments made are not necessarily the views of Severn Trent Water.

- The Executive Summary provides Green Issues Communiqué's overview of the discussions on the day and the outcome of the electronic voting.

4.1. Feedback from participants

- Every stakeholder who left feedback after the event stated that they had sufficient opportunity to express and discuss their views

- All stakeholders who attended the workshop and submitted their comments told us that they found the event to be 'useful' or 'very useful'. None of the stakeholders who left comments said that they had found the event to be 'not useful'

- 25 of the 27 stakeholders who left comments stated that they had received enough information at the workshop

- 26 of the 27 stakeholders who submitted comments said that the manned exhibition stands added value to the event

4.2. Making sure we have enough water to supply our customers (current priorities)

4.2.1. Questions for discussion

- Q1. Have we identified the right issues in our water resources management planning? Are there any other issues that we should take into account?

- Q2. Should hosepipe bans be used as an option to manage supplies?

- Q3. Before today, how aware were you of the concepts of 'accounted for' and 'unaccounted for water' and their component parts?

4.2.2. Overview of comments made

- Although most stakeholders present were of the view that STW had identified the right issues in its water resources management planning, it was commented that issues relating to the Water Framework Directive should have been emphasised

- The theme of the need for better partnership working, particularly with local authorities, was highlighted on a number of occasions throughout the workshop. It was felt that STW could do more to make itself more accessible and should inform local authorities when points of contact leave the company

- It was felt that incentives ought to be offered to customers to save water. Practical initiatives such as subsidising water butts so homes did not use drinking water to water their gardens or wash their cars were suggested by a number of stakeholders

- It was felt by the vast majority of stakeholders that educating customers to be more water efficient would be highly beneficial

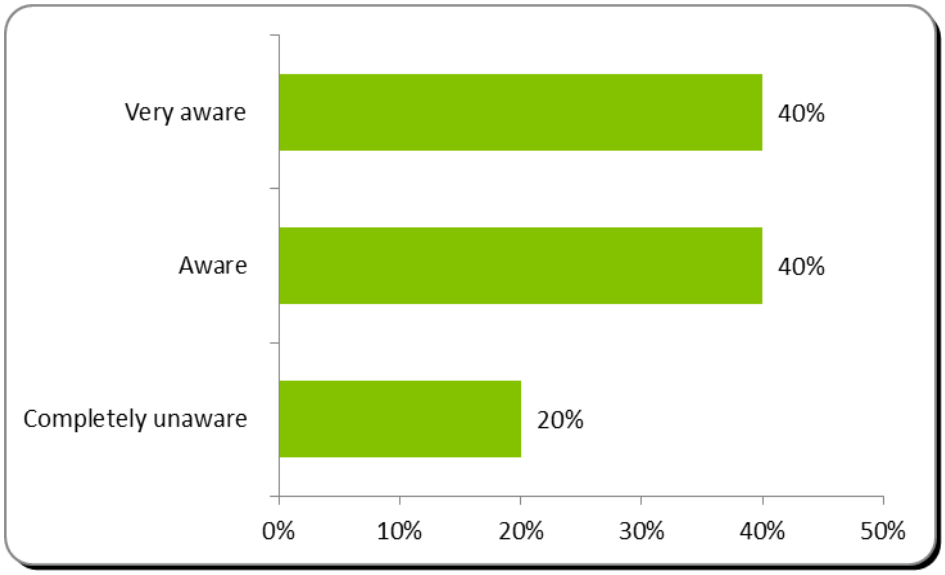
- It was felt that STW should be more vociferous in their opposition to large housing developments planned in unsuitable locations. However, it was recognised that local authorities are under pressure to meet housing targets

- There was a good deal of support for hosepipe bans. When asked to vote on whether a hosepipe ban would have been a reasonable response to exceptionally low rainfall, almost three quarters of stakeholders stated that they either 'agree' or 'strongly agree' with this statement. Over half of the stakeholders were of the view that hosepipe bans should be more frequent

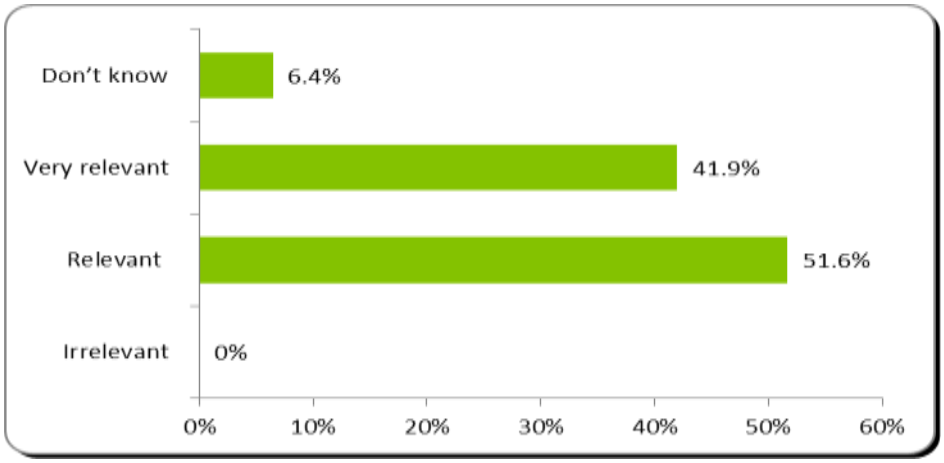
- The point was made that hosepipe bans actually help raise awareness about the issue of water scarcity. Across the group there was a feeling that three hosepipe bans in a hundred year period was a low figure and there was a will for this to be increased if necessary. It was also commented that this figure would likely increase in the future

4.2.3. Outcome of electronic voting

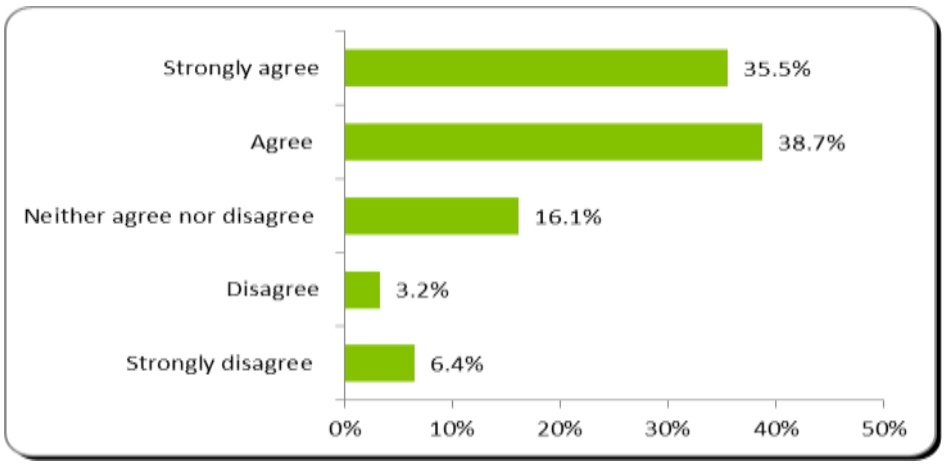
- Q4: Before this session, how aware were you that we had a published Water Resources Management Plan?



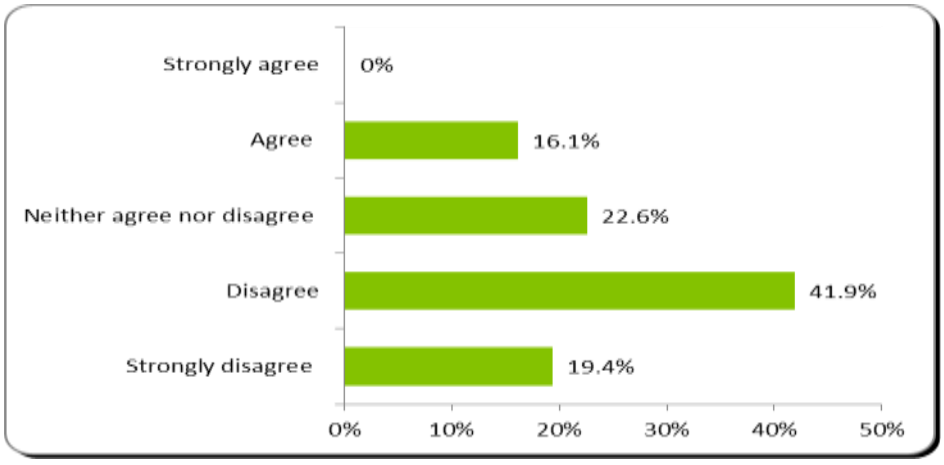
- Q5: How relevant was our current Water Resources Management Plan to your organisation?



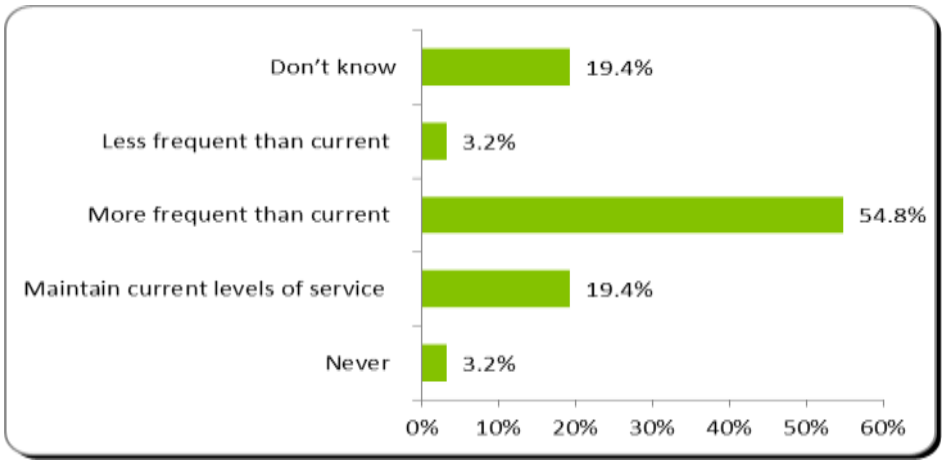
- Q6: To what extent do you agree with this statement? *"A hosepipe ban this year in the Severn Trent region would have been a reasonable response to the exceptionally low rainfall"*



- Q7: To what extent do you agree with this statement? *"Severn Trent Water is doing enough to reduce unaccounted for water"*



- Q8: What is an acceptable frequency of hosepipe bans?



4.3. Making sure we have enough water to supply our customers (future priorities)

4.3.1. Questions for discussion

- Q9: How should we balance the needs of our customers and the water environment?
- Q10: At what pace should we reduce our least environmentally sustainable abstractions?
- Q11: Given the future challenges should all customers pay for the amount of water they use?
- Q12: What should our role be in helping others to change their practices if it helps protect the quality of our raw water supplies?

4.3.2. Overview of comments made

- There was general consensus in the electronic voting, and this was reflected in discussions, that demand management measures should be prioritised over supply side
- A significant proportion of attendees were not aware of the issue of 'accounted for' and 'unaccounted for' water. The feeling across the group was that STW does not currently do enough to address unaccounted for water
- It was broadly agreed that water leakage is a major challenge facing STW. There was a will, particularly from stakeholders representing local authorities, for STW to work more effectively with councils to address water leaks
- The vast majority of stakeholders (over 90%) agreed with the view that STW should continue to focus on water resource efficiency
- Most stakeholders were of the view that STW should strive to install water meters in more homes as this will reduce wastage and it was broadly felt that the programme to install meters should be accelerated
- On the question of metering, the point was made that some people, particularly those on low incomes, would not be happy to pay significantly more for their water supply;

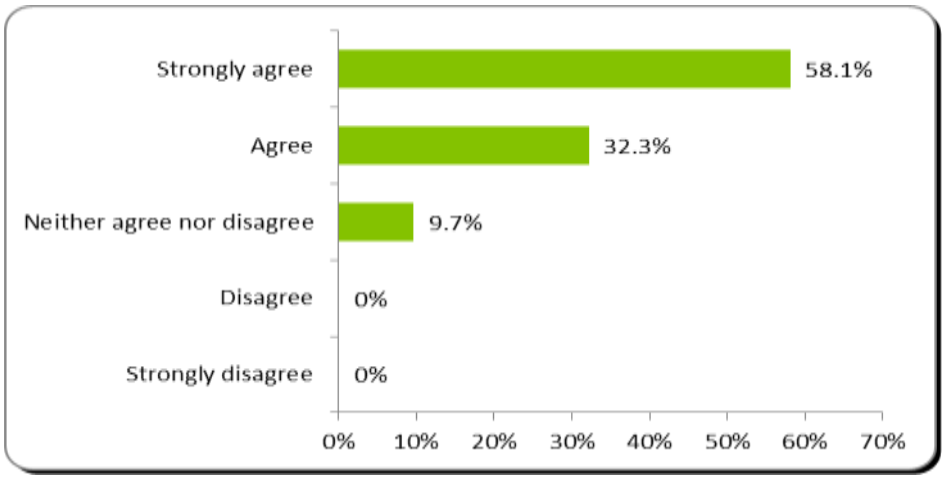
however, this opinion was countered by a significant proportion of attendees who were of the view that it is nonsensical that water is the one utility where customers do not pay for the amount they use

- It was widely felt that STW should play a greater role in communicating issues relating to both water conservation and the quality of raw water supplies. Across the group, there was a feeling that educating the public was essential as a way of addressing these issues

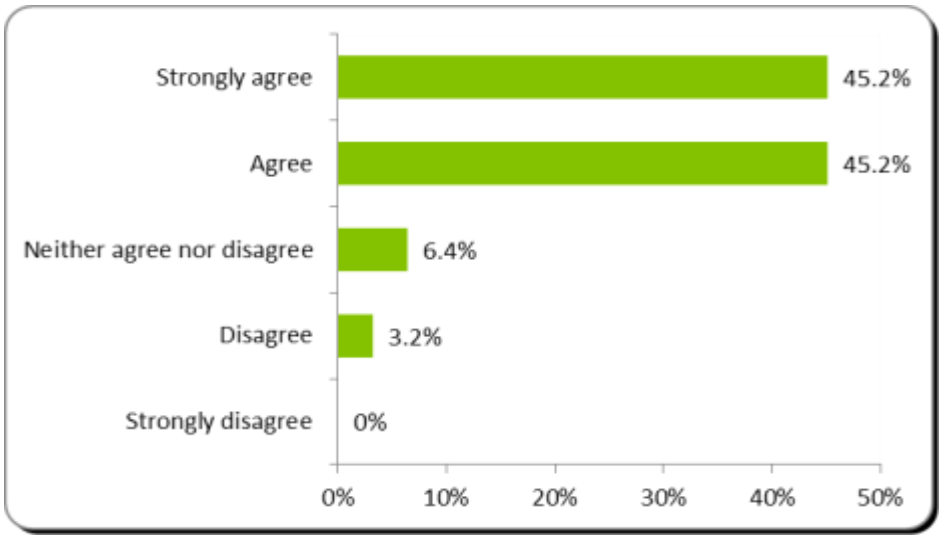
- A significant proportion of attendees were of the view that STW should work more effectively with local authorities and land owners to ensure that certain practices which affect the water supply are identified and addressed. The majority of stakeholders (almost three quarters) felt that land owners should be incentivised to change their practices in order to protect raw water supplies

4.3.3. Outcome of electronic voting

- Q13: To what extent do you agree with the following statement? *"STW should prioritise demand reduction options over new source development"*

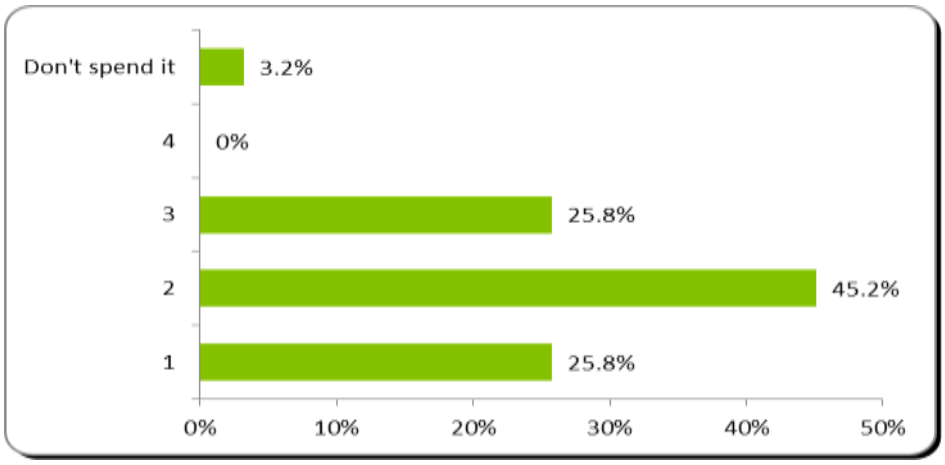


- Q14: To what extent do you agree with the following statement? *"STW should maintain its current focus on water resource efficiency (keeping the water input per customer low)"*

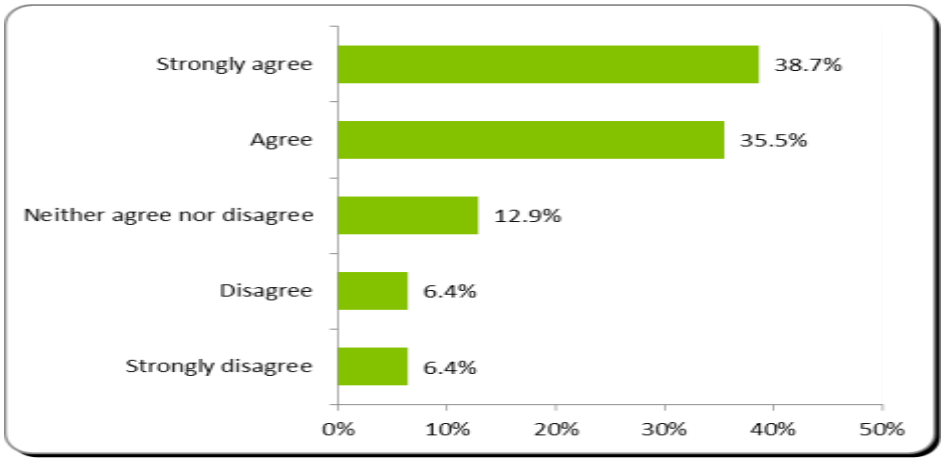


- Q15: "If we had £1 on bills available how should we spend it: Where on the following scale would you be (from 1 – 5)?

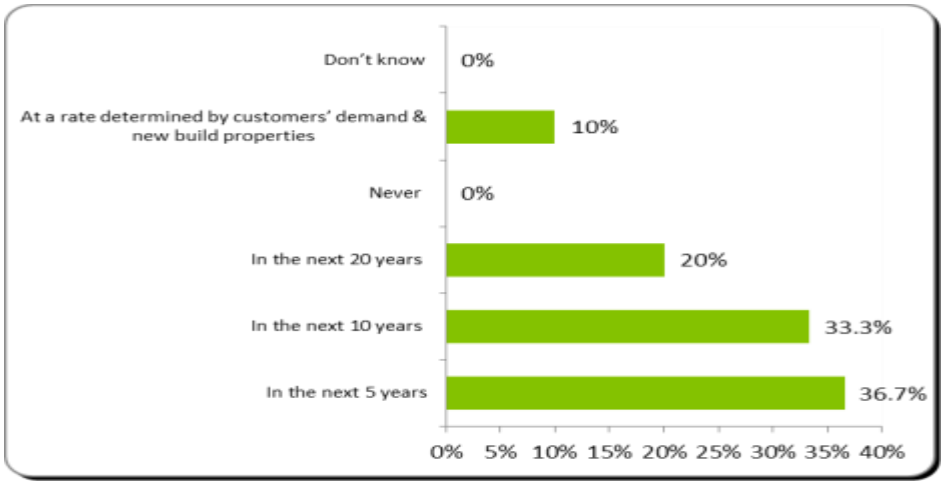
- 1 = All on environmental improvements; 4 = All on improvements to customers' level of water service; 5 = Don't spend it



- Q16: To what extent do you agree with the following statement? *"STW should incentivise land owners to change their land use practices if it protects raw water supplies"*



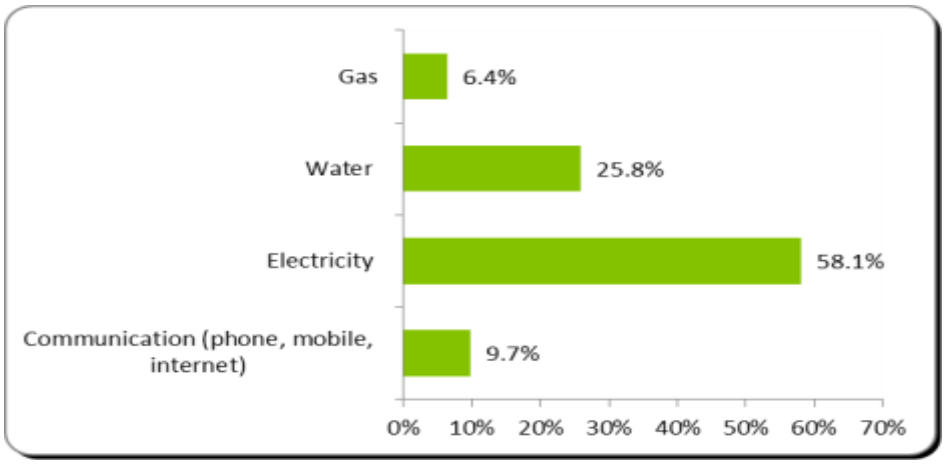
- Q17: All customers should have a meter:…..in the next 5, 10, 20 etc years



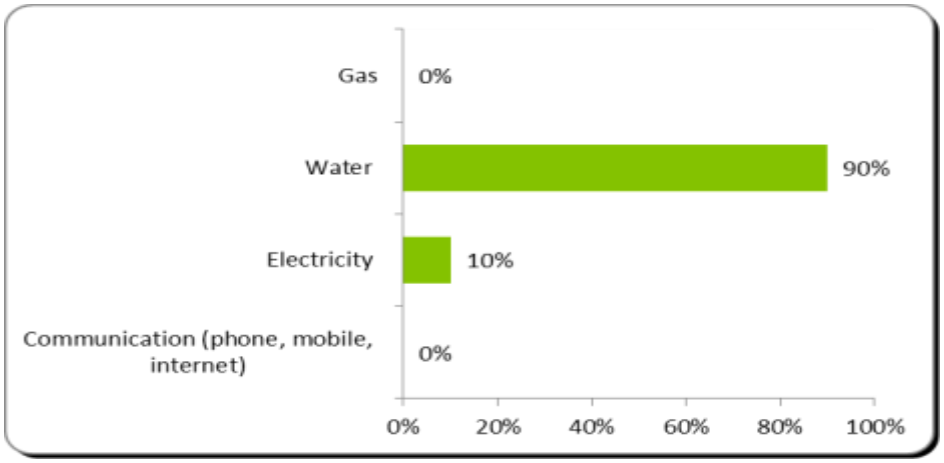
4.4. Keeping our services reliable (current priorities)

4.4.1. Outcome of electronic voting

Q18. If you were going to lose one to your utilities for one hour which one would you least like to lose?



Q19. If you were going to lose one of your utilities for one week which one would you least like to lose?



4.4.2. Questions for discussion

- Q20.Before today, how aware were you of the potential risks to your water service?
- Q21. What are your views on our approach which considers all hazards and risks to service together?
- Q22. Do we have the balance right in our current approach to resilience?

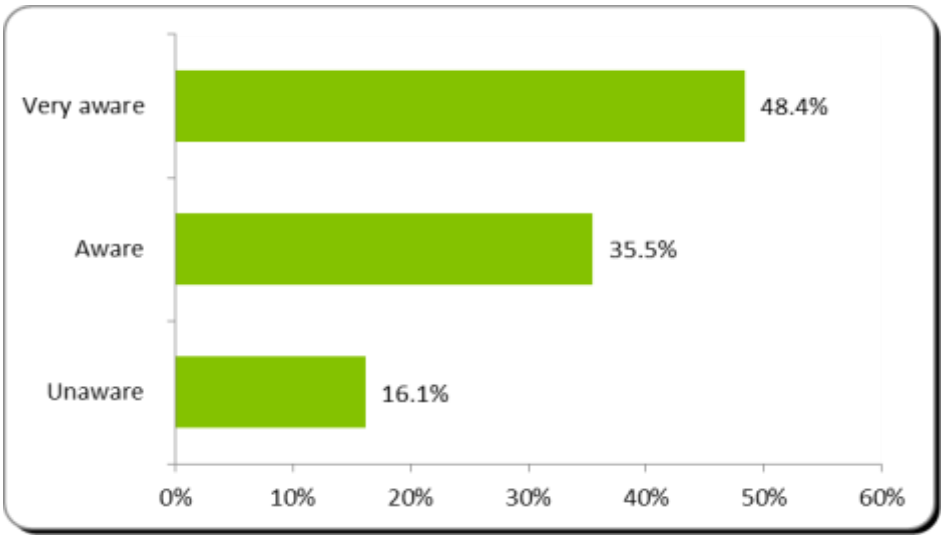
4.4.3. Overview of comments made

- There was a good deal of awareness about the potential risks to customers' water service, but a number of stakeholders highlighted that customers were generally not aware of these risks
- While the majority of the group felt that STW should do everything possible to ensure that customers receive the best possible service at all times, the point was made by a number of stakeholders that it is impossible to plan for every eventuality

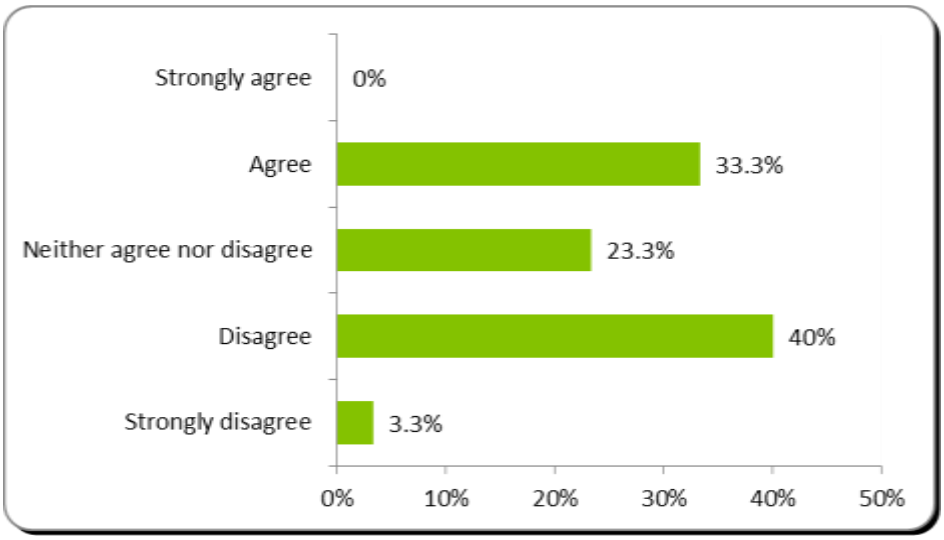
- Opinion was split on the issue of how STW should prioritise the service it gives to its customers. Some stakeholders were of the view that those living in rural areas should expect lower levels of resilience but this was not the view across the group.

4.4.4. Outcome of electronic voting

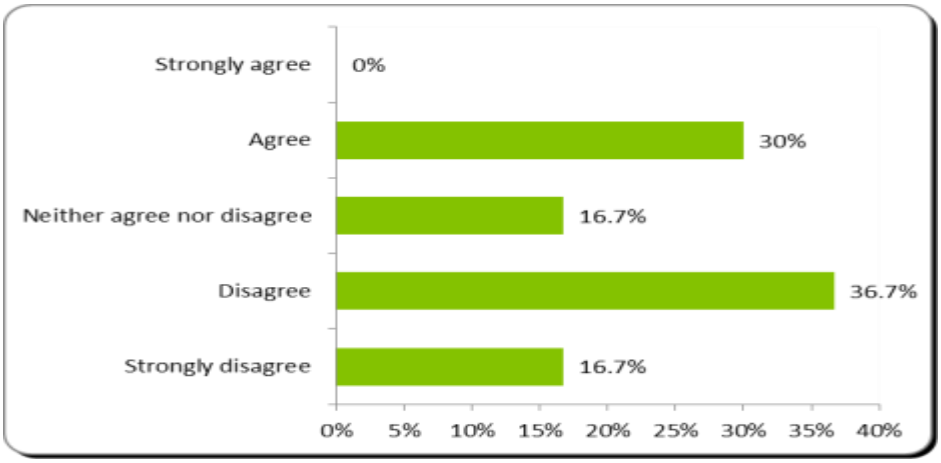
- Q23. Before today, how aware were you that some of our key assets are over a hundred years old?



- Q24. To what extent do you agree with this statement? *"STW should be able to provide piped water services under all circumstances"?*



- Q.25. To what extent do you agree with this statement? *"All our customers should benefit from the same level of resilience"*



4.5. Keeping our services reliable (future priorities)

4.5.1. Questions for discussion

- Q26. How far and how fast should we go with our resilience programme?
- Q27. What are your views on our favoured approach to resilience (through "growing the grid")?
- Q28. How quickly should we aim to have the capacity in place for long-term controlled shut downs for our aqueducts?

4.5.2. Overview of comments made

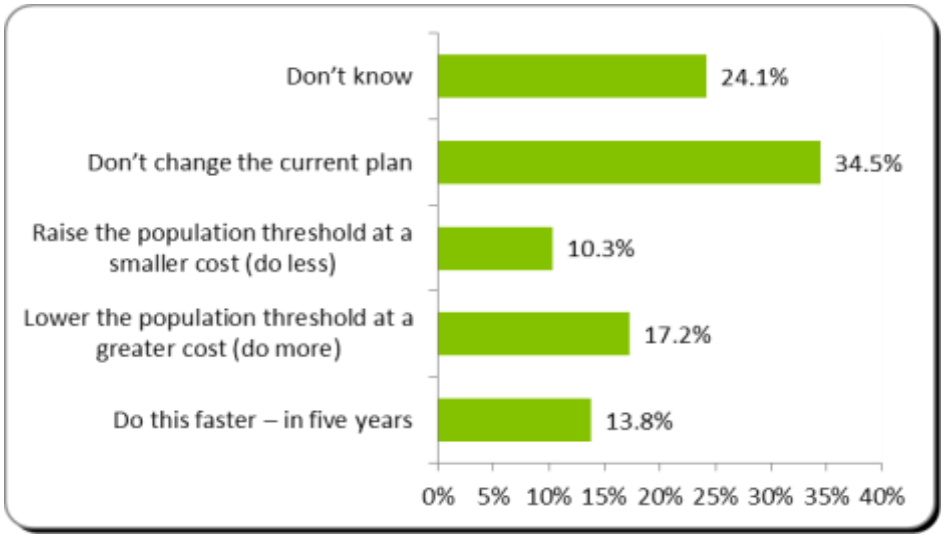
- There was some debate on the issue of STW's intention to increase the resilience of populations of more than 20,000 people that rely on a single source of supply, with certain stakeholders asking how STW had arrived at the figure. Many were of the view that a line had to be drawn somewhere but the electronic voting was divided about where this threshold should be.
- Stakeholders generally felt that STW should work to update its assets in order to improve resilience. It was commented that the need for this should be communicated to customers who may be unaware of the issues STW is facing
- Although it was stated that the best approach should always be to source water as locally as possible, most stakeholders were of the view that STW should strive to grow the grid and to work more closely with other water companies in order to improve interconnectivity
- The majority of stakeholders agreed, or strongly agreed, that STW should increase the resilience of its customers water services through growing the grid
- Working effectively with neighbouring water companies was widely viewed as a good way of helping STW's resilience in the future
- The majority of stakeholders were in agreement that certain assets are too important to be allowed to fail and that maintenance of these assets was of paramount importance

- There was consensus that STW should not adopt an approach whereby it simply fixes certain assets after they have failed. Instead, it was felt that STW should be more proactive in its approach

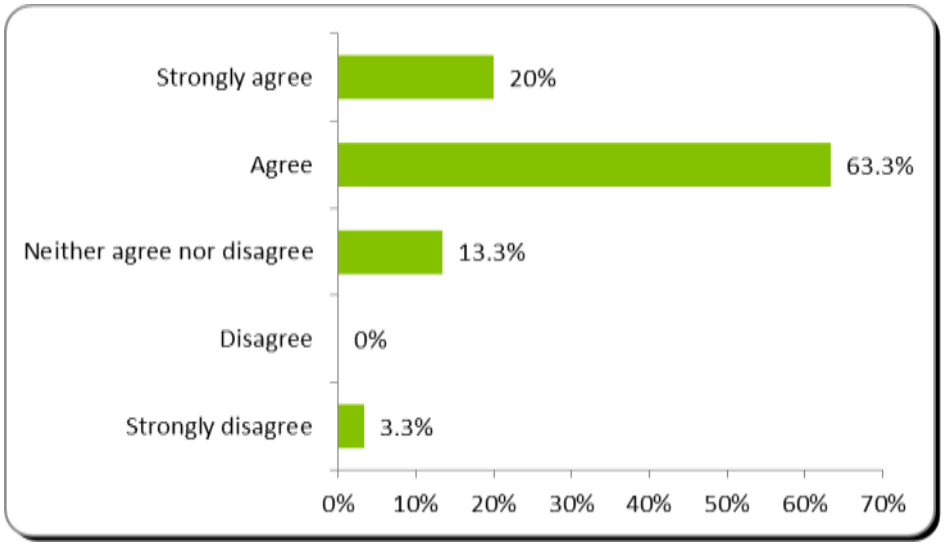
- Most stakeholders felt that STW should work quickly in order to have the capacity in place to allow for long-term controlled shutdowns of its aqueducts

4.5.3. Outcome of electronic voting

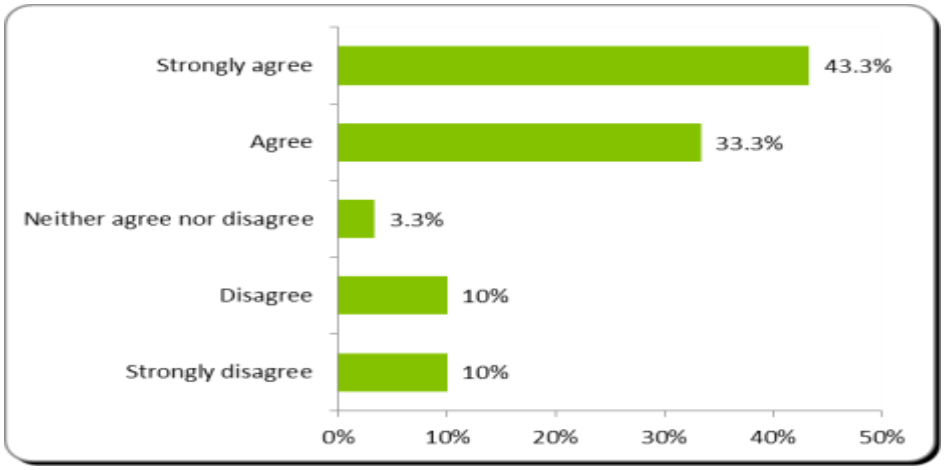
- Q29. STW plan to increase the resilience of populations of >20k that rely on a single source of supply over 10 years. Should we:



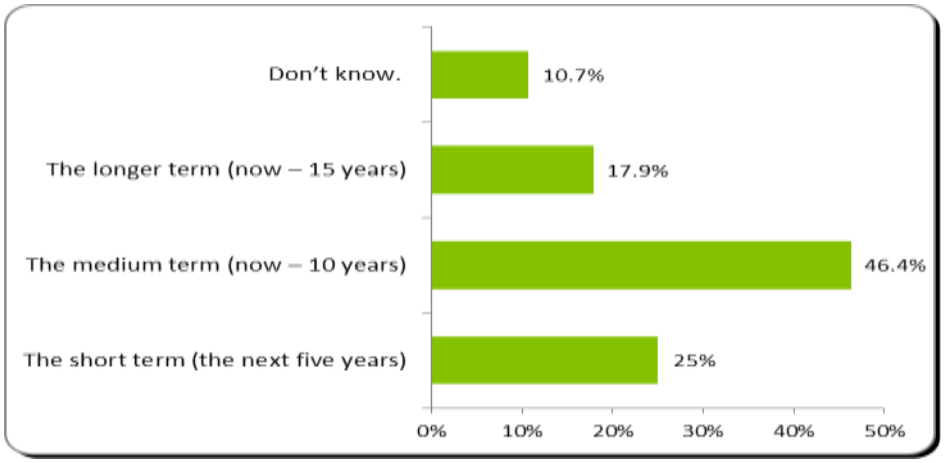
- Q30. To what extent do you agree with this statement? *"STW should increase the resilience of their customers' water services through growing the grid"*



- Q31. To what extent do you agree with this statement? *"Some assets are too critical to allow to fail under any circumstances"*



- Q32. How quickly should we aim to mitigate the risk of disruption to water services presented by an aqueducts failure?



5. Making sure we have enough water to supply our customers (current priorities)

Q1. Have we identified the right issues in our water resources management planning? Are there any other issues that we should take into account?

Table 1

- An environmental group representative made reference to the Water Framework Directive. S/he stated that 'water is being taken from the environment and could therefore have a serious impact. S/he commented that the Directive *'should have been highlighted'*
- A council officer also commented on the Water Framework Directive S/he asked *'in a few years will STW look at the issue of rain water running off and being wasted?'* S/he pointed out the Directive states that there needs to be a focus on water quality and the use of it and therefore local authorities will need to look into these issues
- A council officer was of the view that *'local authorities and STW need to work together and form a partnership'*
- A business group representative commented that STW has improved its partnership working with local authorities in recent years
- A council officer commented s/he would like to see STW arrange more meetings and workshops with stakeholders in the future
- A conservation group representative stated that *'more contact points need to be made available'* to council's and business as it is extremely difficult to contact STW and speak to the relevant person
- A council officer made the point that more STW call centres are needed
- Another council officer stated that a local point of contact in STW is needed for every area
- A council officer pointed out that s/he used to have several contacts at STW in different departments. S/he stated that s/he no longer knows who contact due to the *'high turnover of STW staff'*, adding that updates with new staff details are not being passed onto local councils
- A business group representative said that it is essential that there is a single point of contact at STW. S/he commented there is a need for STW to recognise *'STW are too big for businesses to know who to contact'.* S/he stated his / her organisation needs to

know regional teams' contact details. S/he also commented that the investment figures published need to be broken down to show the figures for each county

- A council officer agreed and commented that the map of STW's area of coverage does not relate to any county
- A council officer pointed out that *'unitary authorities have devolved from local authorities'*
- A business group representative said that catchment areas on the map issued by STW go beyond each district
- A council officer stated it is *'rare to find yourself on a border between the 2 counties'.* S/he also felt that liaising and having a point of contact with STW is *'very important'*
- A business group representative commented that public education is important. S/he felt it was important for *'STW to work in partnership'* with others to educate the population in ways to be more efficient and save water
- An environmental group representative said the water boundaries within STW are being looked at and STW should think about working with *'other water companies'*
- A conservation group representative pointed out it is *'important to engage with customers across a wider area than just STW's area of coverage*'. S/he said customers need to be told about options such as *'water trading as many customers fear hose pipe bans'*
- A business group representative commented that customers need to have an incentive to save water. S/he pointed out if they are aware of water trading; they maybe less inclined to save water. S/he said people need to embrace their options and save water but STW needs to show them how will they benefit on a personal level
- A conservation group representative said safeguards need to be in place to protect the environment. S/he pointed out that companies may not be inclined to save water if they knew water companies could buy more water from another area

Table 2

- A conservation group representative commented that s/he thought the right issues had been identified but that it was interesting to hear more
- The table agreed on this issue
- A conservation group representative continued that there were alternatives to using drinking standard water for cleaning cars etc, and that these should be considered in planning
- A council officer then asked *'is rainwater is being collected in the best way it could be; is the maximum amount being collected?'*

- A council officer expressed the opinion that a *'stick and carrot approach'* is needed regarding metering, *'for example, if you have to go on a meter, you could be offered a free water butt'*
- STW commented that they don't offer butts, but do subsidise provisions from elsewhere
- A council officer commented that s/he had responsibility for planning applications, and *'we encourage water butts in new developments'*
- A council officer enquired if STW had any water reduction technologies/options available for customers

Table 3

- A business group representative was intrigued by the water leakage information. S/he wanted to know what has happened recently and what assumptions have been made to get the figures
- STW explained leakage measurement
- A business group representative said s/he suffers from *'consultation overload'*
- A regulator assumed that lots of people in the room didn't have enough knowledge to move past preconceptions. Perhaps some education before the event would be helpful to make more decisions more informed
- A business group representative agreed. S/he believes all customers should be metered and STW should '*just get on with it'*
- A council officer suggested that the presentations needed to give more background information in order to bring people to the same level. S/he asked why there were no developers in the workshop
- STW explained developers had been invited and that they were represented at the workshops

Table 4

- A council officer stated there was lots of information on leakage, but how much of it is drinking water or is it 100% of water flow
- A business group representative was concerned about supply
- A conservation group representative mentioned that demand is critical and wanted to know if STW had enough supply to cope with the demand; adding *'does STW know exactly how much water people use and does this factor in when creating strategy?'* S/he believed STW need to compromise on cost and demand so people do not use water selfishly
- A conservation group representative agreed that some people might use water efficiently but other people being selfish is a problem

- A business group representative commented that the hosepipe ban shows there are supply and demand difficulties and that sufficient factors need to be in place
- A council officer mused as to what is happening with new houses and water, as it used to be up to local authorities as to how their constituents used water
- STW answered and explained this point
- A business group representative asked whether STW uses water runoff or takes its water directly from rivers. S/he commented that fire services use clean water and give it back *'dirty'* and asked if the fire service could just use dirty water too save time and money?
- STW stated that the water depended on the source. Local housing might be near, hence the need for clean water. STW works with agriculture to put rain harvesting processes in place, and sustainable draining systems also
- A business group representative highlighted that commercial companies could also use *'dirty water'*
- An environmental group representative was of the view that with population growth and climate change, STW must work on sustainable abstraction
- A business group representative talked about cost optimisation and how difficult it was to factor natural disasters into this

5.1. Q2. Should hosepipe bans be used as an option to manage supplies?

Table 1

- A business group representative made the point there is a need to educate the public as the general attitude is that *'customers pay so why should they be banned from using a hosepipe?'*
- A council officer commented that the aim to educate customers is a long term project. S/he went onto point out that commercial developers, over many years, have been allowed to build to huge developments in large quantities. S/he pointed out that the water companies have allowed the large increase of water usage to occur and they were wrong to do so *'they should have held back and not allowed it'*
- A council officer went onto say that local authorities and environmental groups did oppose and try to stop large developments from happening and that `*it was the water companies that allowed it to happen as there was capacity'*
- A council officer felt that STW needs to lobby the Government more effectively. S/he said that STW need to be more contentious when it comes to allowing developers free reign for using run-off water. S/he commented STW needs to promote the recycling of grey water. This includes more water butts in new builds as this will reduce the demand for clean water

- A council officer stated that using drinking water for hose pipes is very expensive as the *'treatment of water to make it drinkable is expensive'*

- A conservation group representative stated that hose pipe bans are needed. S/he commented that the target of having a hose pipe bans *'3 times every 100 years in grossly inadequate'*

- A conservation group representative commented that STW needs to avoid hose pipe bans when water levels are low. S/he went on to say that the *'UK Government needs to protect the environment by following the Water Framework Directive'*

- An environmental group representative agreed with the conservation group representative's view. S/he stated the '*statutory Directive needs to be followed but that STW should also look to deliver a good service at all times'*

- A council officer commented that education is the key point in enabling customers to understand the need to save water, therefore preventing the need to impose a hose pipe ban

- An environmental group representative made the point that drinking water is used on gardens and it is expensive. S/he said the use of hose pipes should be seen as an added benefit not a standard requirement that STW needs to provide

- All agreed 3 in 100 years is a general target for hose pipe bans but questioned where the figure come from? General consensus was that there needs to be a target which is clearly adhered to

- A conservation group representative stated that *'farmers worry about hosepipe bans because of the possible effects it could have animals'* and that they also worry about the possibility their water supply could be cut off

- A business group representative pointed out that advice notes for farmers are currently being issued. S/he agreed that large scale animal storage needs to be looked into

Table 2

- A conservation group representative asked for confirmation that just 3 hosepipe bans in 100 years was the target?

- STW confirmed this was the case

- A conservation group representative thought this was very low, and that there could easily be more

- An environmental group representative agreed and said bans should be considered more often

- A council officer commented that it *'focuses the public's mind if we have hosepipe bans, and encourages people to think ahead. It is a good public awareness exercise'*

- A council officer also noted that *'we are the 'black hole'* of the country according to the rainfall map, so it's an issue that needs to be kept in people's minds, adding that *'hosepipe bans do this'*

Table 3

- A business group representative thought it wrong that people water gardens and clean their cars using drinking water. S/he said it is *'nuts'* wasting water in this way
- A council officer thought we need to look at other water efficiency measures in order to avoid the need for hosepipe bans
- A council officer speculated that if there are extreme environmental conditions then hosepipe bans are acceptable but STW has to update it targets to reflect what is *'happening in the wider environment'*
- A regulator explained that hosepipe bans vary throughout country. In the south east they happen every 25 years. It is not known how often we will need a hosepipe ban due to changing weather conditions. S/he said we need more information to judge what is an acceptable time-frame for hosepipe bans. For the Environment Agency, the frequency of drought orders is more important than hosepipe bans
- A business group representative agreed and argued that STW needs, in addition, to show what it is doing to reduce demand
- A council officer claimed that sometimes bans seem like a *'reactionary measure'* and the perception is that something that should have been done first to avoid the need for a ban
- A council officer said that bans are always dependent on supply-side restrictions. S/he opined that the *'odd hosepipe ban is not necessarily a bad thing'*. S/he thought bans would help people understand that water is a finite resource and serves to connect people to the environment
- A council officer speculated that if bans raise awareness then they are a good thing
- A business group representative claimed there are some '*astonishing figures'* that show how much over usage exists in some areas compared to others
- An environmental group representative pointed out that some people think that if they are paying then they can use what they want
- A regulator noted that, in terms of driving people's behaviour, price is key but it is not just about money, it is also about driving social responsibility

Table 4

- A business group representative said that, *'as a customer s/he would not expect a ban but if STW hasn't got the resources then s/he would be more understanding. There are not many ways to restrict water uses. Customers have to realise that there is not a limited supply- this is the first point of limiting supply.'*

- A council officer felt that customers might accept hosepipe bans but investors might withdraw their money from STW
- A council officer believed that having a hosepipe ban only 3 times in 100 years does not encourage customers to be thrifty with water
- A conservation group representative agreed that people have no idea how to manage water effectively
- A council officer was of the opinion that, environmentally, STW is sending out the wrong message, adding *'environmentally STW should be telling customers to expect more so people are more careful'*
- A conservation group representative believed that hosepipe bans are effective
- A conservation group representative stated that STW is in an unusual situation, other corporations raise prices, for example
- A conservation group representative pondered that it would be interesting to see metered to unmetered usage as this would lead people to be more careful with water?
- A business group representative agreed that hosepipe bans are an odd concept, asking *'is there a supply deficit or not?'*
- A council officer mentioned that looking at the effects of climate change, 3 hosepipe bans in 100 years is optimistic, adding *'it could well change in the future'*
- A business group representative believed that only having 3 bans in 100 years means *'people will think water doesn't matter'*
- A conservation group representative commented that only having 3 bans in 100 years contradicts STW's other messages as it doesn't encourage people to be more thrifty
- An environmental group representative mentioned that the level of service needs to be transparent and STW needs to tell people which way it is going and why; what the impacts will be on the environment; and on their bills

5.2. Q3. Before today, how aware were you of the concepts of 'accounted for' and 'unaccounted for water' and their component parts?

Table 1

- A conservation group representative commented that s/he was *'unaware of the different concepts'* until s/he saw the notes for the workshop
- A business group representative felt that all the *'water companies need to work with environmental agencies and the Met Office in times of drought'*. S/he wants the Met Office to issue reports on rainfall when issuing the weather forecast, this will keep all customers up to date with water levels and make them aware when a potential problem maybe arising

- A conservation group representative commented on Caroline Spellman MP *'calling a drought and then calling it off a month later'*. S/he felt that people need to look at their individual water usage and farmers are regularly updated of events so they plan ahead

- A conservation group representative pointed out that *'farmers communicate well agencies and all the information farmers need is readily available'*

- An environmental group representative also felt that the public needs to be given more access to information regarding rainfall

- A business group representative agreed that more information needs to be readily available

- A council officer commented on the problems s/he encounters when trying to report a leakage to STW. S/he stated the *'council have to dig up areas and identify the source of the leak before STW is willing to take action'*. S/he felt that STW does not address enough issues and although they are being seen to spend money they are not listening to people

- A council officer agreed with this statement

- A council officer said when reporting leaks the water companies say the water is not from their supply. S/he agreed with the previous point that councils have to find the source of the leak before STW will address the problem

- A council officer accepted leaks do occur but added that STW needs to investigate leaks at the source before a surface leak occurs

- A council officer said it would help to have to have a specific contact to ring if there is a problem. S/he would like to meet with *'the relevant people'* and discuss the source of leak when one arises

Table 2

- A council officer said that STW doesn't do enough to publicise what it does to prevent leaks, and that perhaps local information on leakage prevention could be provided to customers

- A conservation group representative then went on to say s/he was surprised at the rate of customer pipe leakage and asked what can be done about leakage from customers' pipes

- STW said that if a property was metered then high use would be noticed by the customer and they will hopefully issues address the issue. Although it is the customer's responsibility for leaks from the pipes within their boundaries, STW does offer a subsidised repair service

- A council officer stated that meters should be promoted on the basis of possible cost savings, targeting those people who could potentially benefit

- A council officer added that people with two or more children probably wouldn't be better off if they were metered

- A council officer said that as demographic changes result in more elderly people, these could be focused on for metering as they could save money

- A council officer expressed the view that there should be a focus on leaks on highways as these can cause accidents. S/he said *'in the past I have discussed leaks on highways with STW who have initially denied the leaks were their responsibility, but I have then been proved right'*

- An environmental group representative said that a cost-effective approach needs to be taken by looking at whether it costs more to repair a leak than let it continue

- A council officer said people wouldn't mind paying more to ensure major and important leaks are repaired

- An environmental group representative added s/he was not sure people would be very happy to pay more

- A conservation group representative agreed with the earlier cost-effectiveness point. *'I don't want to see water wasted, but cost has to be taken into account, it has to be a realistic and practical approach'.*

- A conservation group representative made the point that environmental degradation is important, and water extraction under the Water Framework Directive should be observed, and there should be a cost / benefit analysis per abstraction. S/he said there was an importance in *'connecting the public with their water supply'*, adding '*we need to connect people to where their water comes from'*

Table 3

- A business group representative said the presentation gave a brief overview of the issue

- A regulator asked for further clarification over STW water efficiency

- STW gave an explanation of this

- There was unanimous agreement that the table didn't know leakages included unaccounted for water

- A regulator talked about the Northern Ireland water supply and the effects of cold weather

- A business group representative said there needs to be an *'industry standard.'* S/he couldn't understand why there is no industry standard to help compare across companies

- A council officer said it would help understand how consumption affects supply. S/he claimed people wanted to see the impact of water efficiency

- A council officer suggested it would be interesting to understand the relationship between investment and output in terms of leakage and water efficiency

- A regulator thought that customers would be suspicious of a water company trying to explain leakages as *'people assume targets are set centrally'*
- An environmental group representative claimed we need to be very careful about how we do it and how the message is communicated

Table 4

- A business group representative said that with 40% of customers metered, STW should get fairly accurate measurement through averages of how much water customers use
- A council officer was concerned about flow rates, asking how accurate these are, how STW measures
- A council officer was curious as to whether meters are manually or electronically read
- A business group commented that leakage is a major problem and if contractors are used to fix the problem, they should do a better job as in his / her opinion, their work was not up to standard and had to be fixed

5.3. Any other comments?

Table 1

- No comments

Table 2

- No comments

Table 3

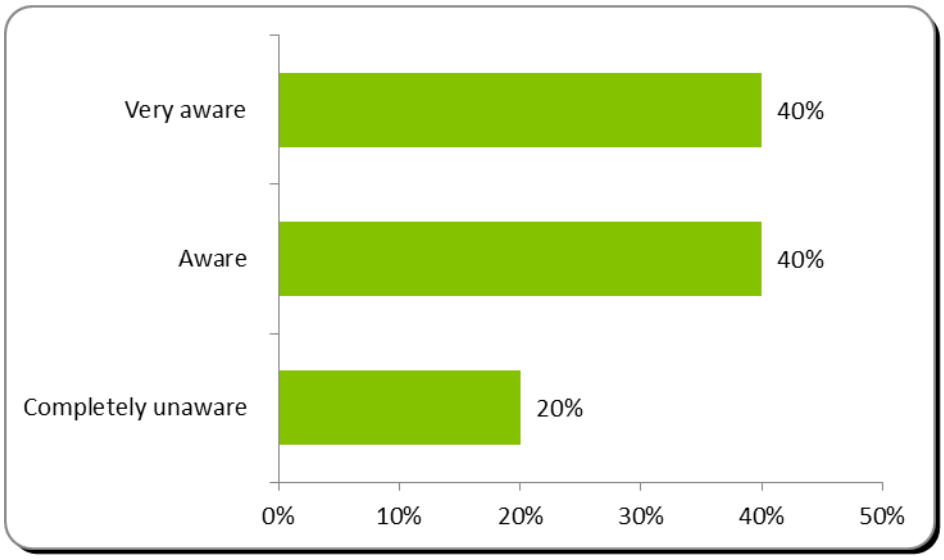
- No comments

Table 4

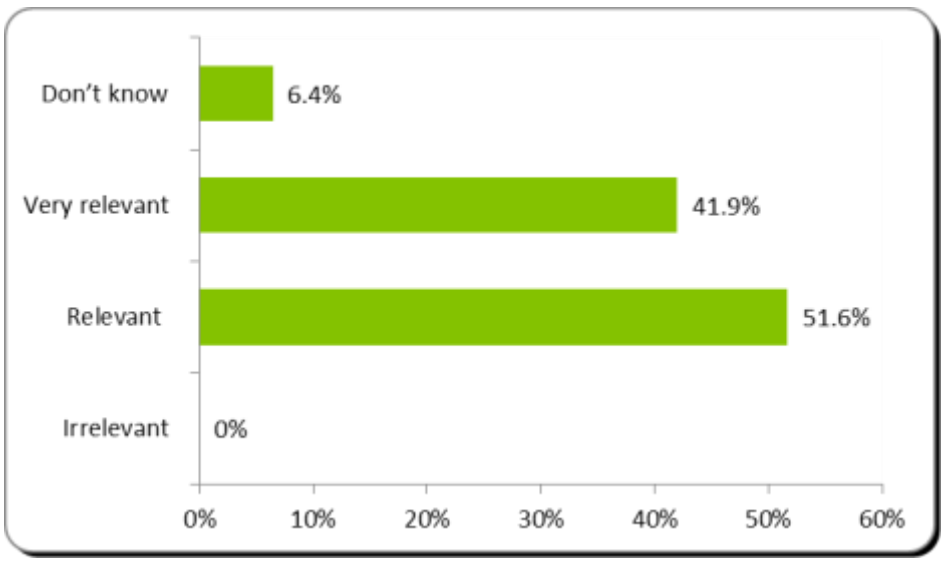
- A business group representative made the point that plastic piping puts pressure on leakage

6. Making sure we have enough water to supply our customers (current priorities)

6.1. Q4: Before this session, how aware were you that we had a published Water Resources Management Plan?

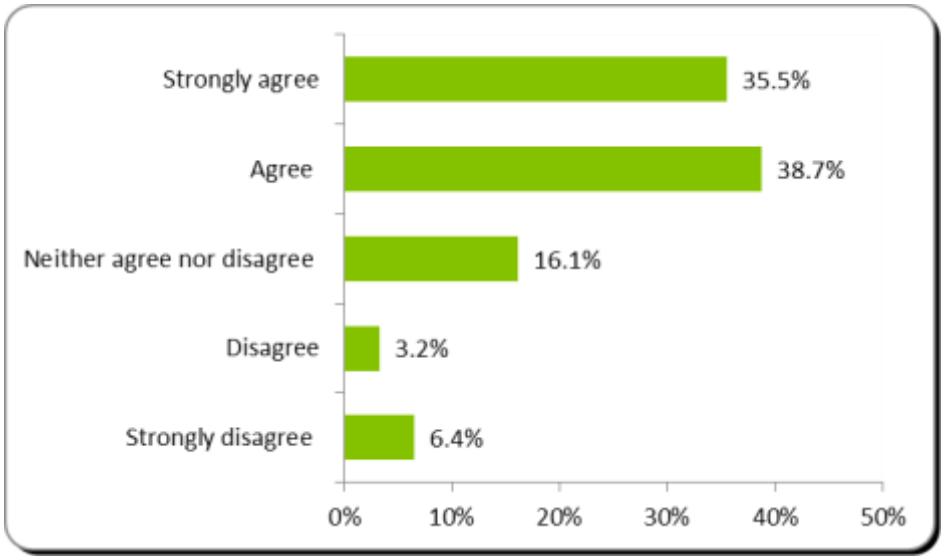


6.2. Q5: How relevant was our current Water Resources Management Plan to your organisation?



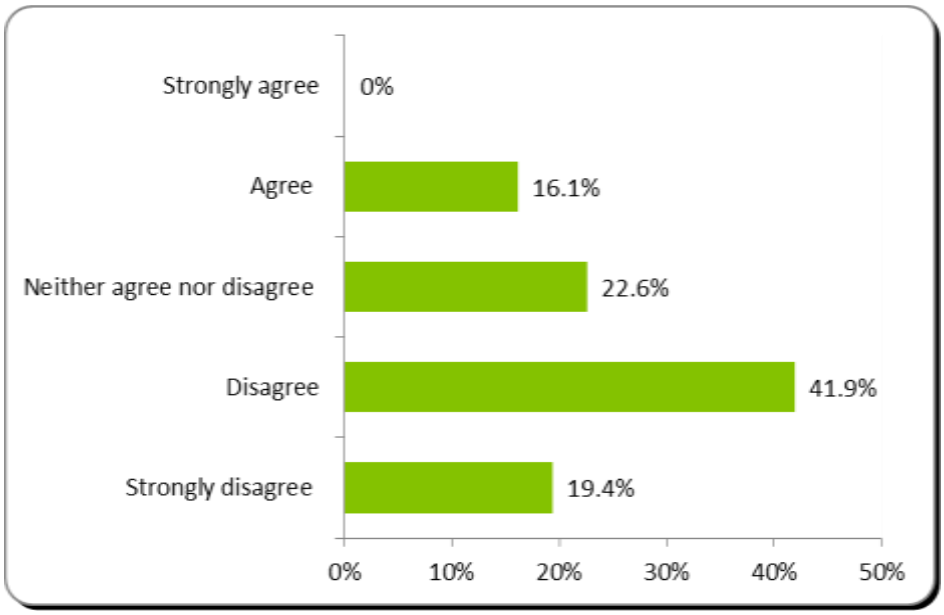
6.3. Q6: To what extent do you agree with this statement?

- *"A hosepipe ban this year in the Severn Trent region would have been a reasonable response to the exceptionally low rainfall"*

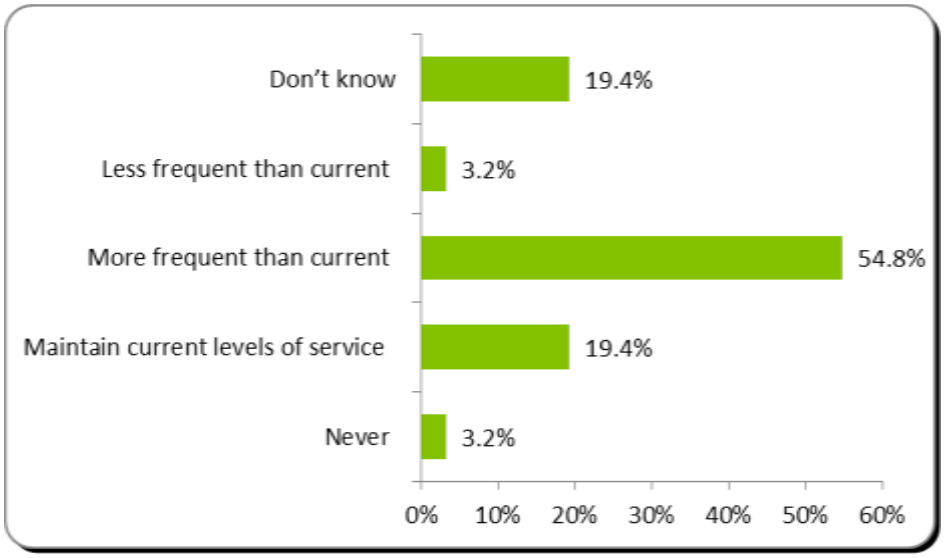


6.4. Q7: To what extent do you agree with this statement?

- *"Severn Trent Water is doing enough to reduce unaccounted for water"*



6.5. Q8: What is an acceptable frequency of hosepipe bans?



7. Making sure we have enough water to supply our customers (future priorities)

7.1. Q9: How should we balance the needs of our customers and the water environment?

Table 1

- A conservation group representative felt that the word balance needs to be challenged when there are many absences in the system. S/he made the point that *'farmers need water and their supply cannot be restricted'*. S/he stated farmers do legally comply with the Water Framework Directive
- The table wanted clarification on how the table showing different levels of high, medium and low (spend and certainty of outcome) from the presentation had been reached. STW gave an explanation
- A conservation group representative commented that *'water meters are good as they help to save water'*
- A council officer stated it will be *'difficult to install water meters in old properties'.* S/he explained this is because the water is supplied from a communal source and it will be difficult to meter due to the way the water supply is split and distributed
- A council officer commented that *'installing water meters will not guarantee that customers will reduce amount of water they use'*
- A conservation group representative stated that it has *'been proven water meters do reduce customer usage'*
- A council officer asked what the implications would be for customers who have their water metered. S/he felt there needs to be more public education
- A conservation group representative said a *'water meter calculator'* needs to be available so customers can check if switching to a meter be cheaper
- A conservation group representative felt that customers who have a water meter need to check their meters regularly and not pay an average bill as they may be unaware they are using more water than they are paying for and running up a debt
- An environmental group representative commented that STW should look into using less carbon and having less treatment options which will have multiple benefits

- An environmental group representative agreed and stated options available need to offer the best value and benefits
- An STW representative explained the pros and cons of water meters
- A business group representative suggested customers who are on a water meter may have to pay more than if they charged a *'flat rate per bill'*

Table 2

- A council officer enquired *'why is metering so expensive? In principle paying for what you use is surely right'*
- A conservation group representative made the point that catchment management can reduce the need for reservoirs, and asked what the barriers are to a stronger catchment management approach
- STW said *'it's a real challenge for the company, dealing with such a large number of different land owners'*
- An environmental group representative asked it if was an educational issue
- STW replied *'yes, when you take landowners to see what needs to happen to treat water that has an impact on their attitude and behaviour'*
- A conservation group representative said there was a need to identify win/wins for the company and the landowners
- A council officer then added that the priority should be on managing demand, not increasing supply
- This was widely agreed
- A council officer commented '*my impression is that there isn't a shortage of water, it is just in the wrong place and there is an issue with leakage'*
- An environmental group representative said *'hosepipe bans are not unreasonable to help manage demand'*
- STW said the debate was not about reducing quality of water, but perhaps taking longer to attend things such as rattling water covers on roads which weren't urgent
- An environmental group representative said *'how about using hosepipe bans when it is just a dry summer, not waiting for a drought situation, and explain it's to protect the drinking water supply. There is a need to educate people'*

Table 3

- A regulator pointed out that it is very difficult to balance the customer and the environment

- A council officer argued that the STW water resource management plan doesn't take into account sufficiently the future of water efficiency based on evidence
- A council officer noted that modelling must take into account population changes and local authorities' planning policies
- A regulator explained that the difficulty is the lack of connection between local development and local environment impact. The water efficient argument is about reducing the return of water to the environment rather than the supply of original water
- A council officer said that *'we have a water development plan which limits how much water developments can use'*. Local authorities can work with others to help them obtain their aims and objectives. Working in collaboration can bring lots of gain in infrastructure and efficiency
- A council officer said that developing new sources of is very expensive and not necessarily something that should be focused on
- A council officer highlighted that *'there will come a point where you have to spend money'*
- Another council officer agreed that focus should be on water efficiency and decreasing demand in more important than investment
- A business group representative claimed that encouraging people to use water more efficiently has failed and people don't change behaviour; therefore STW shouldn't invest money in this
- A regulator countered that there is some evidence than people do alter their behaviour
- A regulator retorted that water efficiency is different to smoking and drinking regulation as there are no multinational companies pushing the alternative agenda
- A council officer added that it is difficult to generalise about where the priorities should be
- Another council officer stated that the priority should be based on better movement of water between areas of need and excess
- A council officer said that water storage options can be problematic as it isn't necessarily efficient to store for extreme events that don't happen very often

Table 4

- An environmental group representative asserted that consumers must use what they have efficiently to help ease costs
- A conservation group representative was of the opinion that catchment schemes and long-term investment might ease the eventual problem of water shortages and rising costs

- A conservation group representative mentioned that evidence of catchment schemes shows that they do work, adding some companies have been doing it for 10 years and the long-term data is useful
- A conservation group representative agreed that customers would probably choose it if they understood it
- A council officer highlighted that environmental management needs to be considered by water companies and that they need to be party to wider schemes for protecting the environment
- A conservation group representative stated that treatment works do not have as much benefit *'cost-wise or environmentally'*
- A conservation group representative believes that STW needs to go forward to tackle environmental issues, adding *'are they just lining the pockets of farmers?'* The comment was also made that *'water companies should not bear full cost but who polices it?'*
- A council officer thought it needs to be done in conjunction with other organisations as STW can't do it by itself to implement the necessary changes for the environment.
- A conservation group representative was surprised that metering more households was a low certainty outcome
- A conservation group representative commented that if everyone was metered then tariff management could be implemented, saving water and costs

7.2. Q10: At what pace should we reduce our least environmentally sustainable abstractions?

Table 1

- An environmental group representative pointed out the Water Framework Directive has *'issued targets that need to be met by 2016 and STW was aware of these 10 years ago'*. S/he commented the target will be extended to 2027 and that is the ultimate deadline
- An environmental group representative asked whether *STW is aiming to meet targets between 2015-2020 or will it be after 2020 and done in one go?'*
- A conservation group representative asked if STW will use the Water Framework Directive as a guide
- A business group representative commented STW needs to adopt a *'long term solution'*
- A conservation group representative agreed with this statement. S/he felt a long term strategic approach should be looked at. S/he stated STW should look at everything on a *'case by case basis and look at the fastest route available'*
- A business representative commented that STW should deal with the *'quick wins first'* as it will put STW into a better position in the long-term

- A business group representative said there are '*hefty fines for local authorities if they do not comply with the EU directives'*

- Overall, it was agreed sustainable abstraction should be accelerated and unsustainable abstraction should not be stopped immediately but there should be a gradual process to fade it out

Table 2

- A conservation group representative made the point that the amount of water extracted can impact on the ecological status of the body from which it is drawn. *'We need to aim for good ecological status and the Environmental Agency knows which rivers and bodies are vulnerable'*

- A conservation group representative added that water Framework Directive targets have to be met, and where SSSIs are under threat these should be tackled. S/he added that 2015 is the date to meet the WFD directive targets and these already look like they are going to be missed

- An environmental group representative said that there was a need to start planning now to meet the 2021 deadline around abstraction

Table 3

- A business group representative noted that it is a complicated issue in terms of the unsustainability of abstraction. S/he said that there is some 'perverse regulation going on.' You can get into a '*nuts*' situation of banning one chemical for environmental reasons without taking into account the long term consequences on that action

- A regulator asked *'what is sustainable?'* Everybody has a different idea. The Environment Agency will not destabilise water supply for the public. S/he added that *'we need to make sure that we are putting forward a solution that takes into account best value as well as the certainty of supply and the environmental impact'*. This stakeholder felt *'the pace has to recognise money and certainty of solution. The difficulty is how do you calculate the benefits'*

- A council officer wondered if the pace largely driven by legislation

- STW explained about the price of water extraction for the industry

- A council officer worried that the question was too technical to answer well

- A council officer said that if the cost isn't greatly increased then there isn't an incentive to get it done now

- A business group representative claimed that from an environmental point of view it is the right thing to do to get it done quickly

Table 4

- An environmental group representative identified that pace was key and that STW should implement statutory timeframes that everyone has to work to and that certain

cycles and variables need to be built into this, such as unsustainable sources and there needs to be a high level of evidence that sources are unsustainable

- A conservation group representative wondered how many unsustainable sources STW has
- A conservation group representative highlighted that if no one looks after the environment then there will be no water for the customers, therefore '*its a no brainer*'
- A council officer asked *'who gets priority; stakeholders, such as farmers, or consumers?'*
- An environmental group representative commented that stakeholders have to prove their need for the water for a licence
- A conservation group representative mentioned that long-term planning needs to be looked at. Minimising risk is involved and the least risky way is to look after the water so there is enough supply. This stakeholder made the point that front loading expenditure to get it done may reduce risk but there are lots of variables

7.3. Q11: Given the future challenges should all customers pay for the amount of water they use?

Table 1

- A conservation group representative commented on the *'in 25 years', 75% of customers will be on a meter'*. S/he pointed out there is a need to protect low income families
- An environmental group representative stated it is a good idea but it depends on how it is going to be implemented
- A conservation group representative said an assessment of the full impact of the future plans needs to be carried out and understood
- A conservation group representative commented on the Australian system of water usage. S/he said *'customers are charged at a flat rate for an agreed base-line level, after this there is a sliding scale where the customer has to pay for a higher tariff'*
- A conservation group representative stated new affordable homes are on meters and STW is not taking a balanced approach if other customers in affordable housing do not have one
- A council officer made the point that *'low income families are often large and if water meters are introduced then families will get smaller'*. S/he felt that water will get more expensive over time
- A council officer commented on a town in Australia where they have suffered from drought for 20-30 years. S/he stated they are the only city in the world that uses *'water recycling units using waste water'*. S/he said it is efficient and should be an idea STW considers

- A business group representative said new affordable housing will have schemes and packages which will be efficient

- A council officer commented that if people have meters they need to be shown how to save and reduce usage. S/he stated this comes back to education

- A council officer said *'subsidised water butts'* would be good, adding that Anglian water offer these already. S/he pointed out a benefit of a water butt is that it can be connected to a hose for car washing

Table 2

- A council officer said that STW had an *'incredibly conservative target for metering, you pay for what you use in every other walk of life, why not water?'*

- STW explained that as it's always been this way *'we have to move hearts and minds to achieve this'*

- A council officer stated that people are resistant because it's a change, *'but if people don't attach a value to something it's often wasted'*

- STW explained that this can already be done using current legislation in water stressed areas

- A council officer asked what the position was with industry asking *'are they metered, how much are they wasting?'*

- STW explained that all commercial customers are metered, it is a domestic issue around metering

- A conservation group representative argued that the rate of metering should be speeded up, adding *'if it works for commercial customers, why not for domestic customers?'*

- STW explained that Southern Water has a compulsory metering project, but asked how practical this was, with a meter costing £200 and a £100 to install – it is a big cost

- A conservation group representative said s/he thought 10 years for the current target of 75% would be a more realistic target, asking *'wouldn't there be an economy of scale?'*

- A council officer made the point that lower income groups would need to be protected

- An environmental group representative suggested that seasonal tariffs could work and help reduce usage

- A conservation group representative said if metering was presented as inevitable, and had the impact and implications explained, it would be more accepted

- A council officer said it would make more sense to introduce meters on an area by area basis, so people don't feel they are being singled out, and costs could be managed this way

Table 3

- There was general consensus on the table that metering should be increased
- A council officer asked what the uptake will be of people taking a meter
- A regulator said that the more people who get metered, the cheaper they would become to install. S/he said there is a tipping point therefore where it becomes more cost effective
- A business group representative wondered if you were to meter 100% of the population how much money that would save
- STW explained
- A business group representative asked *'what benefit will it have for the water company?'*
- An environmental group representative said there is some research that suggests at the start, having a meter causes consumption to reduce but then it *'creeps back up.'*
- A council officer said s/he heard that you lose 30% by leakages, how much would STW save by metering an extra 30%?
- STW explained the calculations
- Some suggestion that more info is required to make an informed choice

Table 4

- A conservation group representative was of the opinion that STW has to protect vulnerable customers but, on the other hand, metering is more cost effective. More communication is needed to decide who is metered and who is not
- A conservation group representative made the point that '*water is a utility where you don't pay for what you actually use'*
- A business group representative commented that, since privatisation, usage does not reflect cost, therefore the whole structure is wrong
- A conservation group representative wondered whether the Government should not be helping to rectify this problem
- A council officer asked STW could you introduce incentives to encourage people to take up meters
- A council officer reported that on-going maintenance and meter-reading costs does make metering more expensive
- A council officer identified that supply and demand has not led to metering being compulsory

- An environmental group representative thought water meters reduce usage by 10% '*or so'*
- A council officer highlighted that there is an environmental benefit with a reduced carbon footprint
- An environmental group representative mentioned that by telling consumers of the benefits of water meters, people could save money and this could be an incentive for people, such as old people living by themselves to switch to a water meter
- A council officer asked whether water meters were discussed with the Government to put into Green Deal
- A business group representative answered that meter reading is not important enough and is a sticky subject with politicians and constituents

7.4. Q12: What should our role be in helping others to change their practices if it helps protect the quality of our raw water supplies?

Table 1

- A business group representative felt that local authorities need to be approached by STW and *'partnerships need to be created'*
- A council officer said STW needs to educate customers of the benefits of using water butts
- A conservation group representative asked if they STW is looking to improve the environment at source or to clean up after events
- A business group representative disagreed with the idea of more money added bills as s/he felt the *'extra costs are paid through tax'*. S/he said customers will need an explanation for the extra cost and the benefits the customer will receive
- A council officer was of the view that it would be *'beneficial to see private companies teaming up with the Government and DEFRA'*
- A business group representative agreed and stated s/he would like to see STW working with a mix of private and public companies
- A conservation group representative pointed out that farmers in the past were unaware that some of their actions were harming the water supply. S/he stated that since farmers have been made aware of this, they are *'now working with agencies to help improve the water supply'* and farmers have been informed that different practices can pollute water. S/he highlighted a big problem faced by farmers is that the public want pigs to be reared outdoors and although farmers are trying to prevent water problems it must be recognised small accidents will occur
- A council officer felt that *'farmers unfairly get bad press'*

- A business group representative commented that in certain businesses such as food processing companies in Worcester are already reprocessing water. S/he stated they would like to see STW working more closing with LEP's

Table 2

- A conservation group representative said that certain chemicals are *'incredibly difficult to remove from the system, but there are very good reasons why farmers use them. Perhaps they have to be incentivised not to use them, as they have been done in some areas'*
- The conservation group representative added that there should be a catchment officer from STW, recognising win/wins and advising farmers on changes they can make
- A council officer said the focus should be on education and collaborative approaches, not cash incentives
- An environmental group representative agreed, saying education was a more long-term solution rather than providing cash

Table 3

- A business group representative asked whether farmers should be forced to change their practices themselves without the help of water companies
- A council officer said ultimately STW benefits from better quality water. S/he added *'if working together can improve water then surely it is everyone's interest'*

Table 4

- An environmental group representative commented that there are conversations between the Environment Agency, water companies and the Government. The most effective ideas are taken and policies are created as a result
- A council officer was surprised STW does not take a more individual approach to getting better data regarding outcomes
- An environmental group representative replied that cost is a problem: to get good data on what needs to be done and coordinate plans costs money
- An environmental group representative pointed out that farmers and agriculture need to make sure the right water is going on the crops as farms are businesses
- A conservation group representative thought that *'customers don't care where water is going or how its being invested, they care about bills'*
- A conservation group representative responded that some people are interested and think where their water comes from
- A council officer and a conservation group representative believed that STW needs to be more proactive and tell people where the money is going, and why, so consumers understand

- A business group representative was curious as to whether STW has a schools education project?
- A business group representative continued that if children understand the problems, they may be more receptive to higher bills as they will understand the situation STW is in

7.5. Any other comments?

Table 1

- A business group representative commented they would like to see a cost benefit analysis which will show how much funding is needed

Table 2

- No comments

Table 3

- No comments

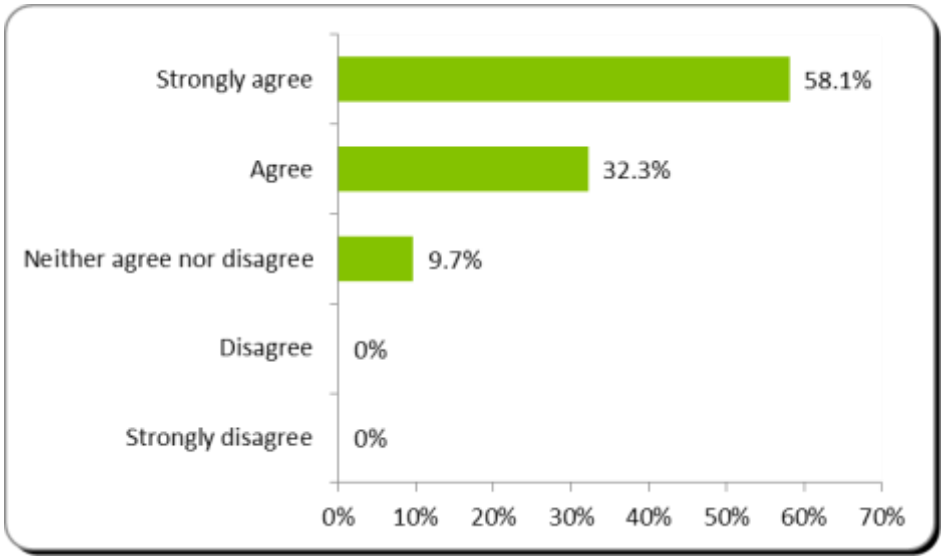
Table 4

- No comments

8. Making sure we have enough water to supply our customers (future priorities)

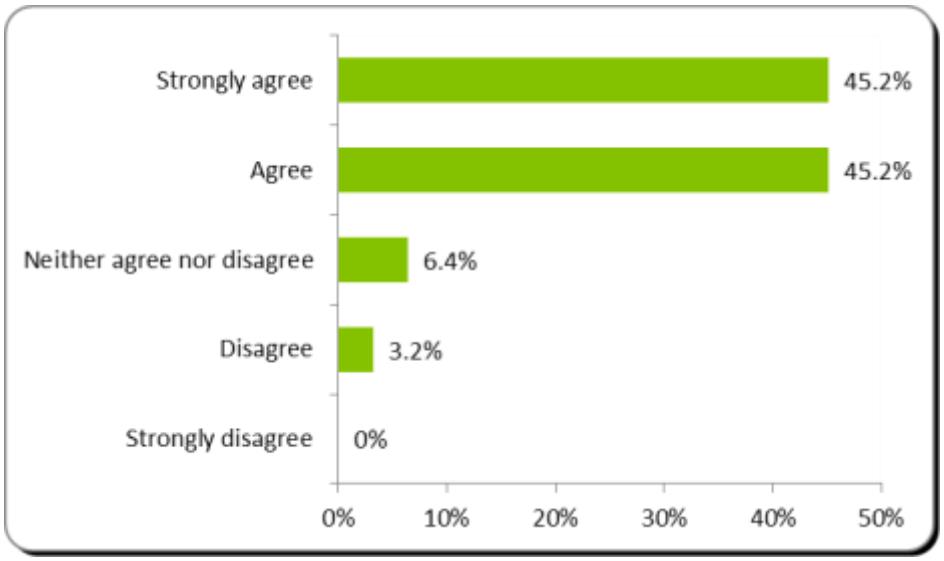
8.1. Q13: To what extent do you agree with the following statement?

- *"STW should prioritise demand reduction options over new source development"*



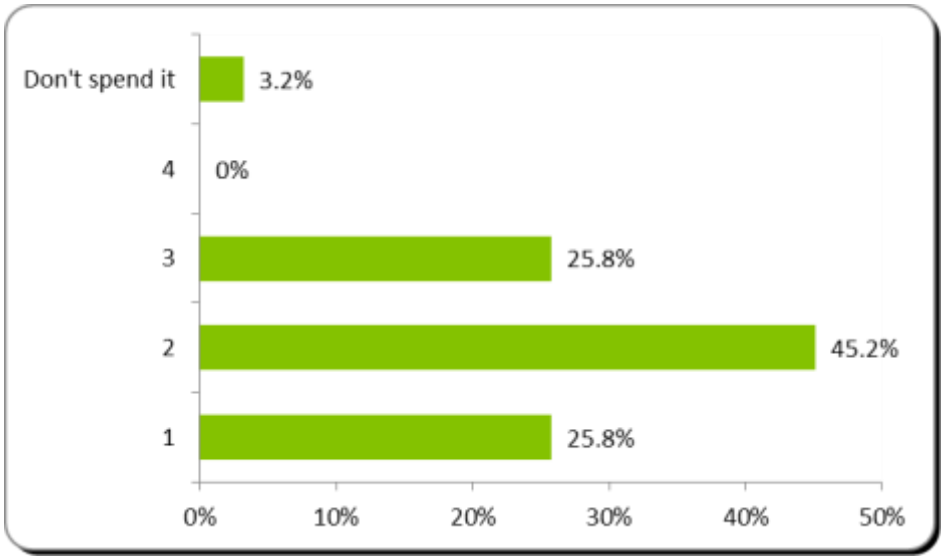
8.2. Q14: To what extent do you agree with the following statement?

- *"STW should maintain its current focus on water resource efficiency (keeping the water input per customer low)"*



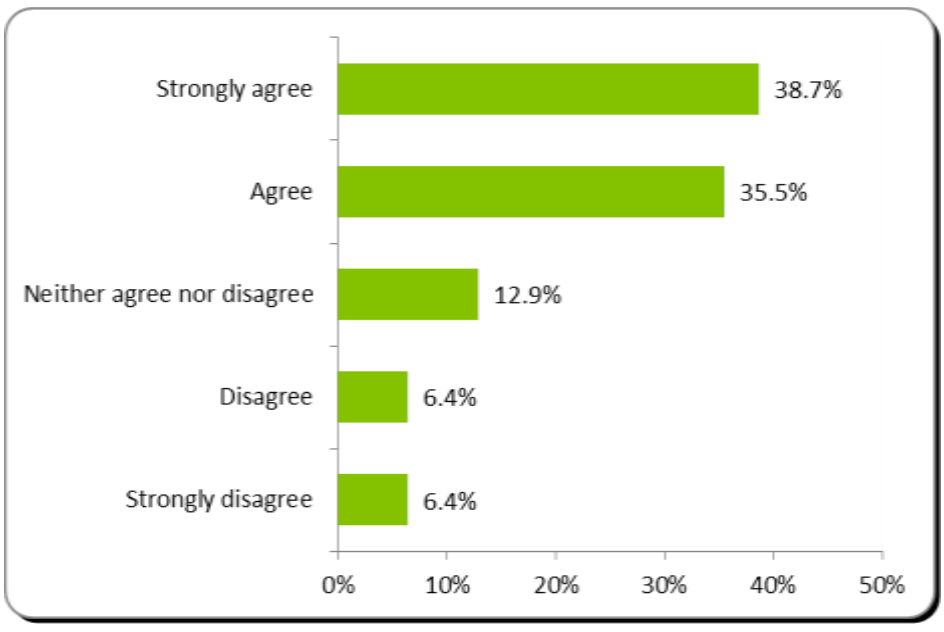
8.3. Q15: "If we had £1 on bills available how should we spend it…."

- 1 = All on environmental improvements – 4 = All on improvements to customers' level of water service
- 5 = Don't spend it
- Where on the following scale would you be (from 1 – 5)?

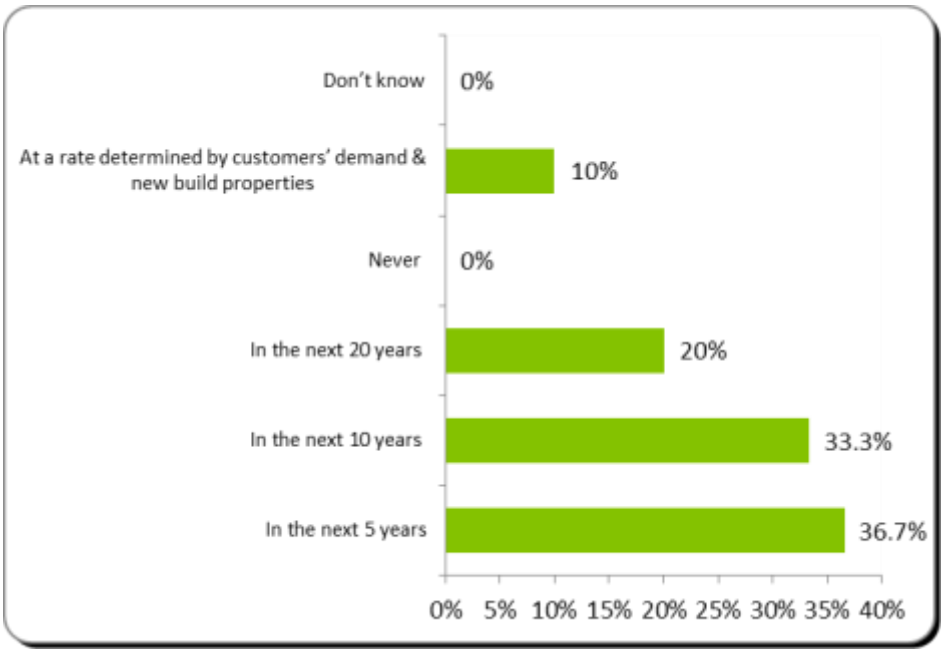


8.4. Q16: To what extent do you agree with the following statement?

- *"STW should incentivise land owners to change their land use practices if it protects raw water supplies"*

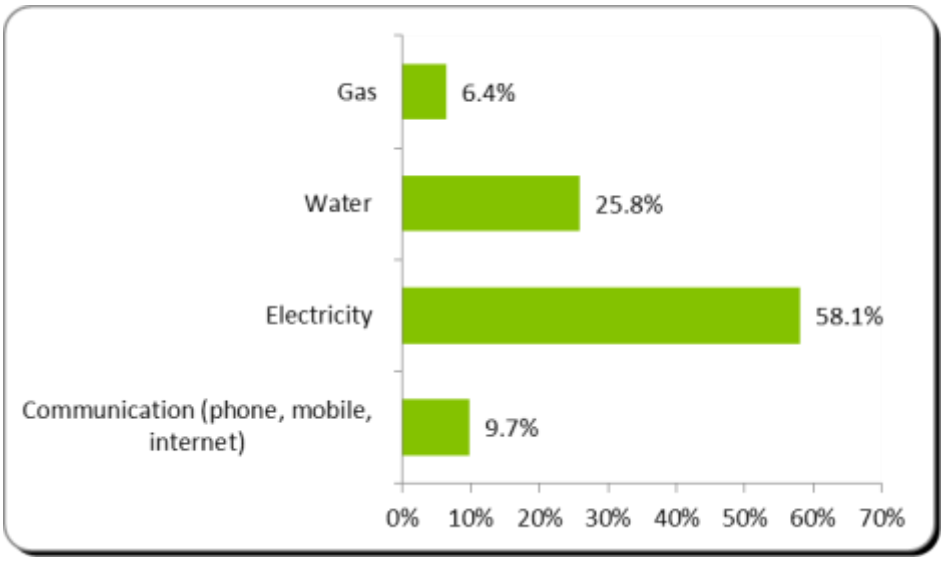


8.5. Q17: All customers should have a meter:.....in the next 5, 10, 20 etc years

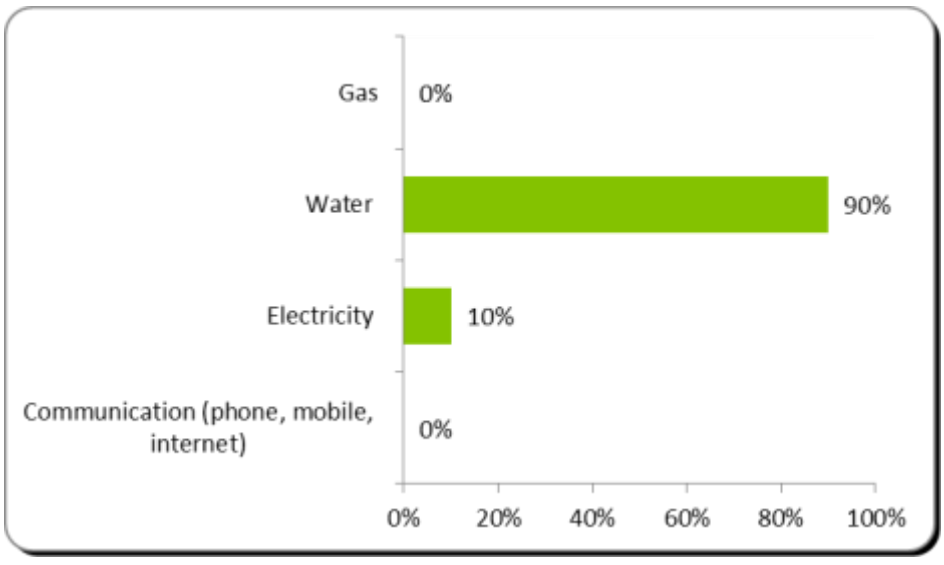


9. Keeping our services reliable (current priorities)

9.1. Q18 If you were going to lose one to your utilities for one hour which one would you least like to lose?



9.2. Q19. If you were going to lose one of your utilities for one week which one would you least like to lose?



10. Keeping our services reliable (current priorities)

10.1. Q20. Before today, how aware were you of the potential risks to your water service?

Table 1

- A business group representative stated they *'were well aware of the risks involved.'* S/he said the model for the risk assessment has been produced at a strategic level and considers fire risks and environmental problems. S/he is keen to see a national adaptation plan being produced off the back of the climate change act and commented that an adaptation committee has been formed
- A business group representative commented on the looming cost that local authorities will have to pay. S/he stated Parliamentary committees are currently advising local authorities
- A business representative said *'future infrastructure needs are being addressed'* but felt the problem is the unwillingness from utility companies to share data as it is so sensitive
- A council officer was of the view that the infrastructure is vulnerable as the whole country could come to a stand still if there is a threat of a terrorist attack
- A business group representative said the statement was a high level one and felt the country's vulnerability is at a low level

Table 2

- A conservation group representative said improved flow through catchments is something to be looked at to reduce flooding
- A council officer said that 5,000 customers without water for 12 hours in the STW region is a very low percentage, so resilience didn't seem bad
- A council officer said that some boreholes in the Cannock Chase area are drying up. S/he asked what changes in service would be proposed regarding resilience?
- A council officer said that linking with neighbouring water companies could enhance resilience
- An environmental group representative commented that it depends if you are one of the customers who has lost their supply whether you think the current level of expenditure on resilience is good value

- STW explained that anything over three hours (if unplanned) counts as an interruption of service

Table 3

- A council officer said they are the risks that affect us all
- A council officer said *'you can't plan perfectly for these things*.' S/he added: you can't eliminate risk. Sometimes it is actually better to provide compensation for people after an event
- A business group representative pointed out that 17 days without water for a hospital is different to 17 days for a house
- A business group representative said that resilience is *'being able to cope better with unexpected events'.* There are a lot of extreme weather events happening. STW should keep a list of vulnerable customers in order to target them in an emergency
- A regulator asked *'do you have planning scenarios, for example, for places that are next to rivers, is there a design standard?'*
- STW explained
- A business group representative noted that in other countries it is about making the individual more resilient rather than the institution. S/he argued that people have to take more personal responsibility
- A business group representative explained that if the farming sector lost water *'just for a couple of hours it can be a disaster. They don't have alternatives as STW has been so reliable in the past.'* S/he said when supply does break down they are immediately in an emergency situation
- A business group representative said that s/he was not sure that the population realises that they can be put on a vulnerable list
- A council officer said you can't just *'throw endless amounts of money'* on trying to prevent problems relating to extreme events
- A council officer claimed the sensitivity of the person is important to recognise. It has to be a tailored approach depending on the person
- A business group representative noted there are always events that you can't predict
- A business group representative argued a good mix of prevention and response is essential

Table 4

- A council officer and a business group representative were fully aware of the potential risks to the water service?

- A conservation group representative said s/he was not aware despite living by an aqueduct
- An environmental group representative was aware but not aware of the maintenance necessary
- A business group representative thought that resilience must encompass terrorists potentially poisoning the water supply
- A conservation group representative commented that '*customers don't think about it or expect problems to occur'*
- A business group representative thought customers *'expect water and that is that'*
- A conservation group representative was of the opinion that consumers expect water unless there is a catastrophic disaster
- A council officer stated that in 2007 there was difficulty due to flooding and customers were perplexed as to why they were flooded but didn't have water
- A business group representative highlighted that if the problem can be predicted then it should be prevented and that *'if it happens it should never happen again'*
- An environmental group representative believed that lack of maintenance is unacceptable, STW should be on top of it as it is such a big part of the service
- A conservation group representative thought there must be a degree of control over the asset; if STW hasn't invested enough in an asset it is unacceptable. S/he added, terrorism is more forgivable as it is a variable you can't control
- An environmental group representative commented water is vital to live, you can live without it for a day but longer might be a problem
- A conservation group representative replied that it is hard to answer the questions as s/he doesn't know what its like, its a hypothetical situation
- A conservation group representative mentioned that people forget about flooding and disasters very quickly
- A council officer asked whether the monitoring relates to *'old kit'* or *'new kit'* asking *'is it the plastic or the copper pipes that need repairing'*

10.2. Q21. What are your views on our approach which considers all hazards and risks to service together?

Table 1

- A conservation group representative stated STW needs to look at the infrastructure but only in certain areas

- A business group representative commented s/he would like to see buffers to ensure local communities are well protected

- An environmental group representative said we all need to learn from drought problems we have encountered in the past. S/he was of the view that natural hazards are the top priority

- A conservation group representative felt it was not possible to rank STW priorities as s/he felt more information was needed such as how likely it is to happen and what are the most severe threats?

- A council officer agreed and stated, when prioritising risks, STW needs to look at risks from a perspective of how many people will go without water and for how long

- An environmental group representative commented that *'incidents involving pollution such as extraction could put water works out of action'*

- A conservation group representative stated s/he hoped that many other risks and hazards have been identified and it was not just the few that have been discussed today

- A business group representative commented on the element of the unknown and gave the example of the loss of water in 2007

Table 2

- An environmental group representative asked *'if a single source supply to an area is known to be liable to fail, isn't it irresponsible not to replace or renew?'*

- A council officer said that the Mythe treatment works which flooded could have been walled beforehand *'but you would have been laughed at for doing it'*

- A conservation group representative said there was a need to understand the risks and hazards to resilience, and there is also a need to build in natural as well as engineered resilience

- A council officer said that customers would naturally look at who's to blame, but would be forgiving around unforeseen circumstances

Table 3

- An environmental group representative argued that it is more important to have a planning process in place. You can't foresee everything so the process has to be in place to try and mitigate when something does happen

- A regulator said he *'can't think of an argument why this shouldn't be done in a holistic way'*

- A regulator said if you have an asset that you are replacing when it gets to the end of its life it's not resilience investment, it is operation costs

- A business group representative said if you lose the big assets then you lose supply

- A council officer said if you are just replacing *'like with like that is just maintenance'*
- A business group representative said if the loss of the asses would have a major impact of service then it is resilience
- A regulator wondered what evidence exists that the asset might fail in the next few years. S/he said *'is it perception or based on evidence?'*

Table 4

- A business group representative was under the impression that STW has to consider everything as *'anything can affect supply'*
- A conservation group representative wondered how much STW is able to think about pesticides, chemicals and new products in the water, asking *'does their introduction ever spring a surprise'*
- A business group representative thought STW is spending too much on resilience instead of basics such as criteria for pipes etc. S/he saw this as '*saving the world without thinking about day-to-day upkeep'*
- A conservation group representative agreed that STW has to get it's day to day role right as it's responsibility is to the people
- A business group representative thought that STW is giving more responsibility to third parties instead of addressing the issues itself
- A business group representative mentioned that Ofwat must keep bills down so STW has to be efficient to achieve this. Cost does drive decisions, hence increased use of contractors
- A conservation group representative highlighted that STW's credibility is not top notch so asking for money to fix problems does not go down so well
- A business group representative was of the opinion that weak foundations means it is harder for STW to go forward

10.3. Q22. Do we have the balance right in our current approach to resilience?

Table 1

- A conservation group representative felt that, in rural areas, if a problem arises STW has the capabilities to reroute the water. S/he said STW will then be able to isolate the leak and felt it is extremely important that STW's excellent knowledge is not lost
- A conservation group representative stated *'in rural areas residents should pay more council tax but be prepared to receive fewer benefits than those living in urban areas'.* S/he acknowledged when water is cut off in rural areas it can be for longer lengths of time compared to those in urban areas. S/he pointed out residents in urban areas need water more as there are no services such as a laundrette etc

- An environmental group representative disagreed and felt that although customers know they risk receiving a poorer service compared to those in an urban area but there should be correlation between the amount a customer is paying and the service they receive

Table 2

- An environmental group representative said *'I accept living in rural mid-Wales that my electricity may go off, and I am at the bottom of the pile compared to an urban area'*
- A council officer said fixing things fast is essential, prevention is desirable, but when things go wrong you want them fixing fast, and there needs to be a balance
- An environmental group representative said *'for me resilience isn't about fixing things'*
- A council officer commented that there is a *'need to focus on both anticipating problems, and fixing them when they occur'*
- A council officer said s/he was not reading of regular supply problems, so the balance is probably about right
- A council officer asked *'do you have good links with other water companies, is there co-operation on issues?'*
- STW explained that there were such arrangements

Table 3

- A council officer said *'it might not necessarily fair but it is pragmatic'*
- A council officer said *'you have to focus your resources on where you can make the most difference'*
- A council officer said that it is impossible to say what the climate is going to do in the next few years, so how can STW mitigate against the extremes of climate change
- A council officer said there tends to be a reaction to extreme weather events like flooding that pressurise STW to invest more in resilience
- A business group representative said s/he has read lots of Environment Agency reports that say flood defences are becoming unsustainable

Table 4

- A council officer wondered whether drinking water is involved in resilience. From a customer point of view they don't see the divide
- A council officer was concerned that not every customer gets the same level of resilience
- A business group representative thought that resilience should be common so everyone gets the same service as consumers pay the same rate

- A council officer responded that other utilities, such as electricity or internet is dependent on area so why not water? *'There is an unequal playing field for all utilities. The demand of the rural community compared to the urban community is not very 21st century or fair but is a fact of life.'*

- A conservation group representative agreed that it is a fact of life; you expect the same level of service but this is not possible due to geographical circumstance

- A council officer emphasised that impact is considered: the uproar of a city going off compared to rural Shropshire is something s/he imagined STW considered.

- A business group representative was curious as to whether there is a major reliance on other company's infrastructure

- A council officer wanted to know if rural areas would be addressed, asking *'are they part of the bigger plan?'*

- A conservation group representative asked whether Ofwat has an opinion on minimum standard disruption. GSS guaranteed service disruption, consumers get money back for disruption so does Ofwat recognise that problems occur

- A business group representative was of the view that the opinions of the majority matter more compared to the big problems for the small communities

- A business group representative stated that it is the security of supply and that is what matters

10.4. Any other comments

Table 1

- A business group representative commented on the *'adaptation measures in place'* and questioned what the implications for Worcester would be and asked *'where are they on the list of priorities?'*

- An environmental group representative asked in regards to water resilience what is driving STW and what is its success rate? Is there any statutory law or directives being followed?

Table 2

- No comments

Table 3

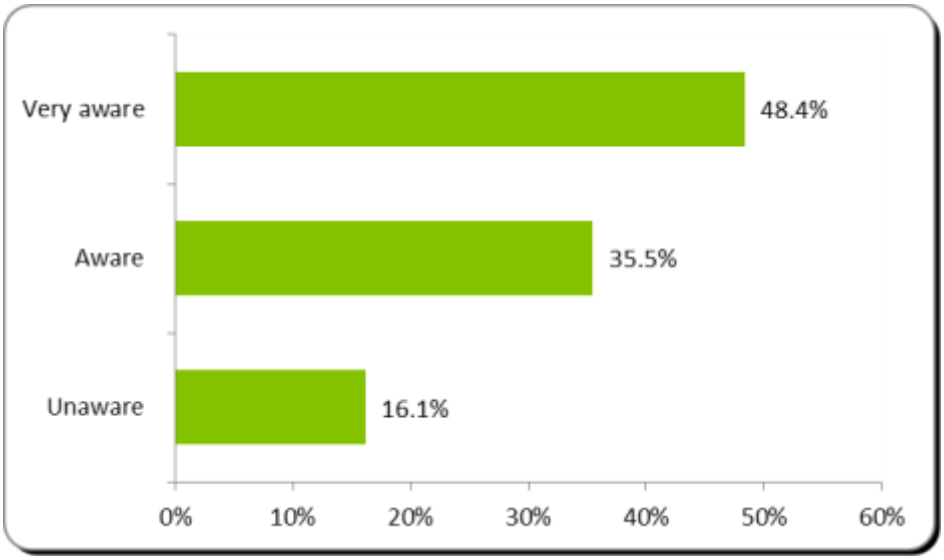
- No comments

Table 4

- No comments

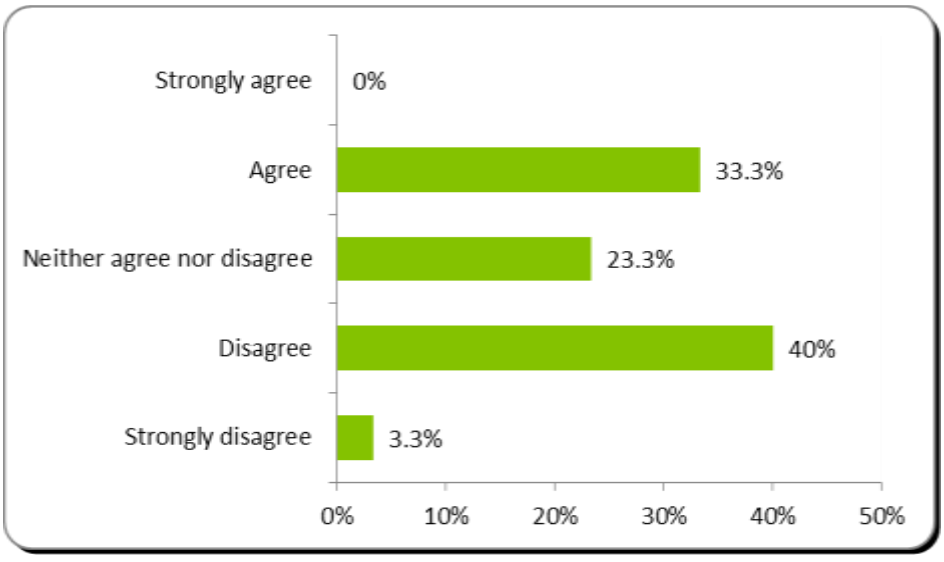
11. Keeping our services reliable (current priorities)

11.1. Q23. Before today, how aware were you that some of our key assets are over a hundred years old?



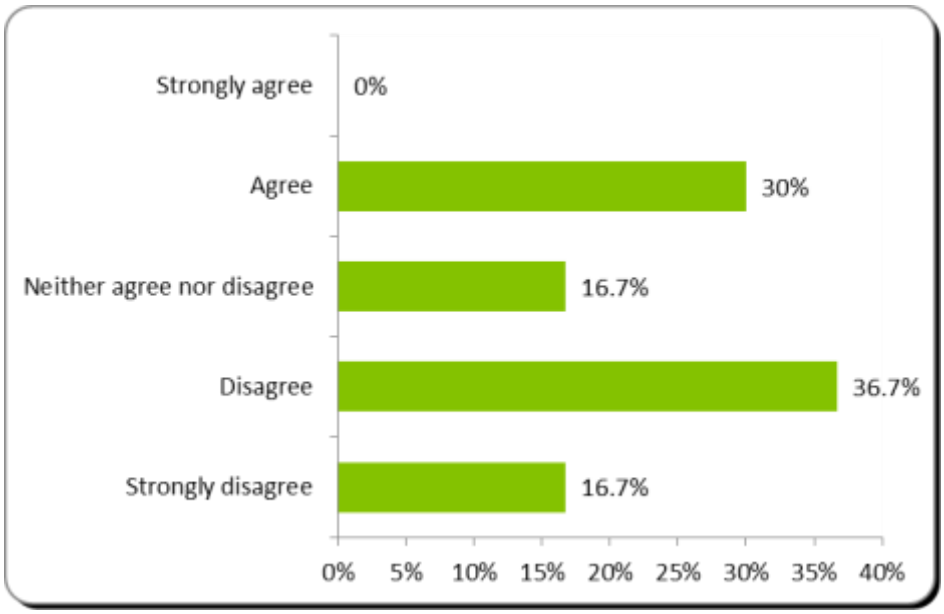
11.2. Q24. To what extent do you agree with this statement?

- *"STW should be able to provide piped water services under all circumstances"?*



11.3. Q.25. To what extent do you agree with this statement?

- *"All our customers should benefit from the same level of resilience"*



12. Keeping our services reliable (future priorities)

12.1. Q26. How far and how fast should we go with our resilience programme?

Table 1

- A conservation group representative said s/he had no view or opinion on the programme but asked, *'where did STW get its figures from; 'is it from an arbitrator or an industrial standard?'*
- STW explained the levels of resilience
- A conservation group representative asked *'what is the benchmark compared to other water companies?'*
- A council officer asked *'why are STW sticking with 20,000* (Nb: STW's emerging ten year programme is underpinned by a risk based approach which considers increasing the resilience of populations of more than 20,000 people that rely on a single source of supply)
- A council officer stated STW needs to look at other factors and duration
- A conservation group representative commented it is *'difficult to understand the 20,000 population figure when it is not known what the full cost risk analysis and impact on customer bills will be'*
- A council officer said a 1 in a 160 year occurrence which occurred in Tewkesbury is no longer a reliable figure
- A conservation group representative pointed out a minimum statutory figure should be issued and *'this is the level we need to aspire to'*
- STW explained they are going above and beyond statutory requirements
- There was general consensus that STW needs to draw a line and, although 20,000 is not a ludicrous figure, more information is needed to make an informed decision
- A conservation group representative pointed out an increase of £2-4 on bill equals roughly a 0.6% increase
- A conservation group representative commented *'if a person lives in an old house surely you would have thought about the maintenance involved'*. S/he compared this situation with STW and felt the company should have looked further ahead before now

- A council officer agreed STW should have looked at the assets years ago and addressed the upcoming problems. S/he said STW shouldn't have left it until now and respond by asking customers to incur an extra cost on their bills

- A council officer stated there are many areas along an aqueduct's line where they is not a lot of stress and in terms of maintenance only points where there is stress on the line should be looked at

Table 2

- An environmental group representative commented that an holistic approach is needed, with cost benefit analysis, and that this can't just be looked at in isolation

- A council officer asked if the programme was implemented over five years, would there be any difference in cost

- The table generally struggled to answer the question, with a council officer commenting *'I don't think we are qualified around the table to answer this, but the 20k figure feels about right for improved resilience'*

Table 3

- A business group representative said s/he can understand the programme and even though not everyone would benefit sometimes it has to be like that

- A regulator wondered if we are having to improve our resilience so much does it suggest that before it was not good enough or that there has been a new level of resilience

- A council officer asked *'what evidence is there that this has to be done now?'*

- STW explained

- A regulator pointed out that if you are changing the level of service, you need customer support for it. S/he said that living in Birmingham s/he has a concern about the aqueduct failing

- A regulator asked whether STW is less resilient than it thought it was

- A regulator said there must be an *'assessment of the trade-off between spend and resilience'*

- An environmental group representative said s/he can't answer the question without knowing the risks and long term consequences

- A council officer said resilience is *'hugely important now nationally and regionally in all organisations'*

- A business group representative said STW should be in line with other similar organisations and make assurances to the public and to industry

- A council officer said s/he would be nervous at setting the level at 20k (population). S/he wondered what happens if something happens to a community of less than 20,000 people
- A council officer said population is the best way to start if you are looking at risk and probability of risk
- A council officer said the need to have a risk-based approach is driven by cost, adding *'we need to have a way to prioritise and that is usually done by cost'*
- A council officer asked if investment is justified for a range of issues and not just resilience

Table 4

- A council officer wondered how much work needed to be done. S/he added, *'unexpected repairs are hard to account for, hence need for resilience'*
- A business group representative pointed out that STW should tell people about the changes that are needed. S/he pointed out that they will be more likely to understand if they know their bills will increase if an asset fails
- A business group representative highlighted that aqueducts in Birmingham collapsing would be disastrous compared to the water supply failing in a rural area
- A conservation group representative said that this problem is a familiar quandary as the National Trust has same issues where finance dictates pace. Things are invariably worse than you think they are so go as fast as you can to avoid a negative backlash
- A council officer asked whether aqueducts could be gradually replaced with modern materials to protect against ageing problems
- A business group representative stated STW must have the money initially to do it well
- A business group representative responded that the policy comes down to money and a cost / benefit analysis should be carried out, to ascertain the outlay compared to the cost of not doing something

12.2. Q27. What are your views on our favoured approach to resilience (through "growing the grid")?

Table 1

- A conservation group representative pointed out if the water is cut off for maintenance areas will run out of water
- A council officer agreed but would like to see certain areas in the water network being *'duplicated'* so maintenance can take place
- A conservation group representative asked, *'what does growing the grid mean?'* Does it include bigger reservoirs or opening up boar holes?

- STW answered the question
- A business group representative asked where are the single sources of supply that are 20k. S/he asked if maybe STW are facing a hard sell if customers in one area are ok but another area needs work and both have to pay an extra cost
- A conservation group representative asked if growing the grid could mean becoming '*better connected?'*
- An environmental group representative commented that STW has helped Anglian water in the past and asked if the North West could help STW? S/he felt more partnerships are needed
- A conservation group representative stated *'interconnectivity could deliver a better service to customers and lower their bills'*
- An environmental group representative said *'improving the pipes will improve resilience but will also allow water to move to areas with drought'*. S/he pointed out adding in other benefits to the scheme will look good and appeal to customers

Table 2

- A council officer argued that STW should be getting resources as locally as possible, and in principle growing the grid goes against this, *'but it actually looks like growing the grid is the cheaper option'*
- An environmental group representative said there were benefits in growing the grid making it much easier to move water around, so equalising the supply, adding *'I think you should link to South Staffs Water as they are bang in the middle of your area'*
- A council officer said that future proofing sounds good*, 'if the pipe is built to extend the grid it should be built to make it possible to extend it in the future'*
- An environmental group representative made the point that STW shouldn't *'just stop at the border of another water authority, it should collaborate with them and link up'*

Table 3

- A council officer said the need to be able to move the supply around is very important in terms of resilience
- A council officer noted if an aqueduct has never been shut down for more than a week in a hundred years it suggests that the risk isn't very high and we should use the cheaper solutions
- A council officer said STW can't reply on neighbours having supply to trade with
- A council officer pointed out the alternative would be extraction and could have higher environmental costs
- A council officer argued it makes sense to work with neighbours

- A regulator noted that it's sometimes cheaper to borrow
- A regulator said that the connections are very important in terms of scale and it is only institutional artificial barriers that are stopping it.
- A council officer said that it would be helpful if STW explained the efficiency savings the company is making in order to compare it with customers

Table 4

- A council officer suggested that growing the grid is a significant infrastructure process and this could this be *'chimed in with others'*; ie. by getting co-investors to create an integrated approach for utilities to create a more effective network
- A council officer continued that the solution does not have to be utilities, the help could come from highways and *'STW should think laterally'*
- An environmental group representative replied that working between companies might help the situation but competition gets in the way
- A conservation group representative asked if there are any negative implications of growing the grid
- A business group representative stated that incompatibility of water sources can be a problem eg. Soft water compared to hard

12.3. Q28. How quickly should we aim to have the capacity in place for long-term controlled shut downs for our aqueducts?

Table 1

- A council officer commented that waiting for systems to fail is not a good idea and STW should *'constantly maintain the aqueducts'*
- A conservation group representative stated the supply of water is a key issue
- All agreed some assets are too important for them to ever fail
- A council officer pointed out STW can create areas of redundancy in slack times when there is not a lot of demand. S/he stated the cost of a pinch point failing is less than building a new one
- STW explained the function of an aqueduct and how it is shut off it fails and how it is maintained
- A council officer said s/he would like to see duplicates even if it is on the canal network
- A conservation group representative asked *'where does Birmingham get its water from when it is on shut down?'*
- STW answered this question

- A conservation group representative was of the view it is a '*big risk'* to shut off water
- A conservation group representative asked *'how can we lengthen the period of time to shut it down and increase the resilience in the system?'*
- A council officer stated there is a need for '*dead links to store additional water'* so it could be shut down for a longer length of time
- An environmental group representative commented that *'reissuing abstraction licences even if it on a temporary basis needs to be looked at by the Environmental Agency'*

Table 2

- A council officer said that fix on fail shouldn't be an option, and that *'we can't just wait until it breaks down but what's the timescale for repairs and maintenance?'*
- A council officer made the point that aqueducts are not built to last forever, *'they will fail at some time in the future, they will crack up at some point'*
- STW explained that for a 10 day shutdown there are only three days of 24 hour working available as it takes a long time for the aqueduct to clear, and said there is a need for longer shutdowns to undertake more work and keep on top of maintenance
- A council officer suggested additional storage to give more time for work to be undertaken
- STW said it needs to shore up these assets for the future as this is the most cost effective approach
- All agreed this is the approach to be taken

Table 3

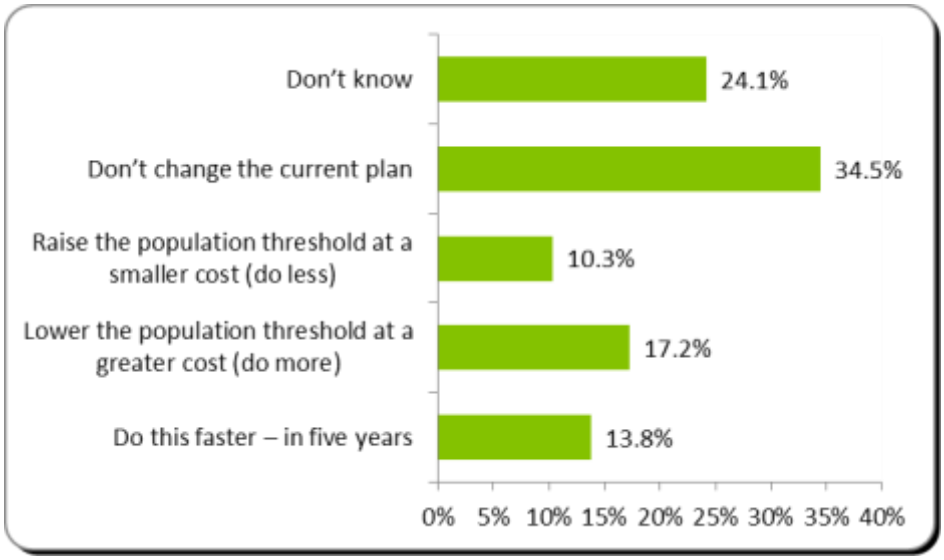
- General consensus on this issue was that it should be as soon as possible

Table 4

- A business group representative commented that policies should be there already and, if not, why? The aqueducts are too important to fail
- A conservation group representative agreed and thought most customers would also
- A business group representative asked if STW lent other companies water. Could STW get their water back? Growing the grid allows bringing water back from the borders

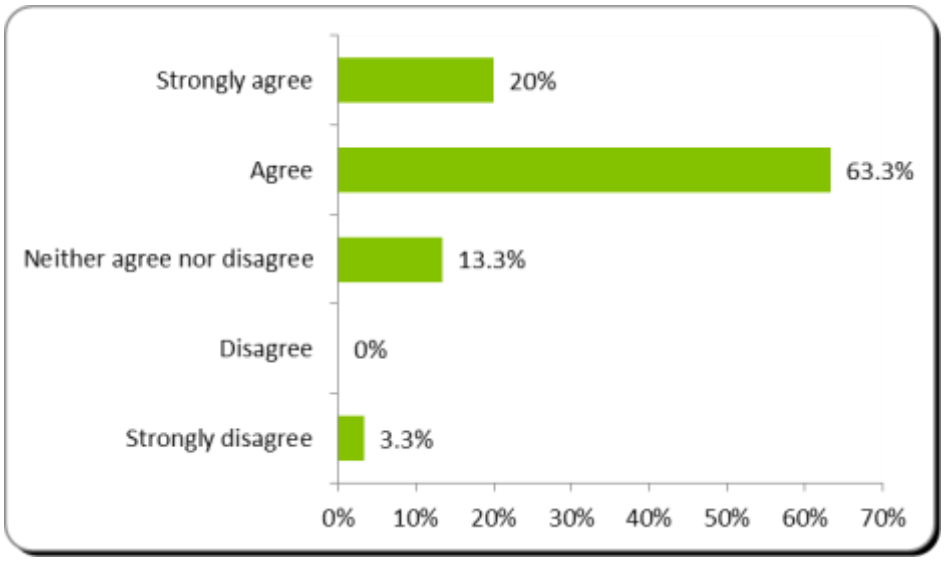
13. Keeping our services reliable (future priorities)

13.1. Q29. STW plan to increase the resilience of populations of >20k that rely on a single source of supply over 10 years. Should we:



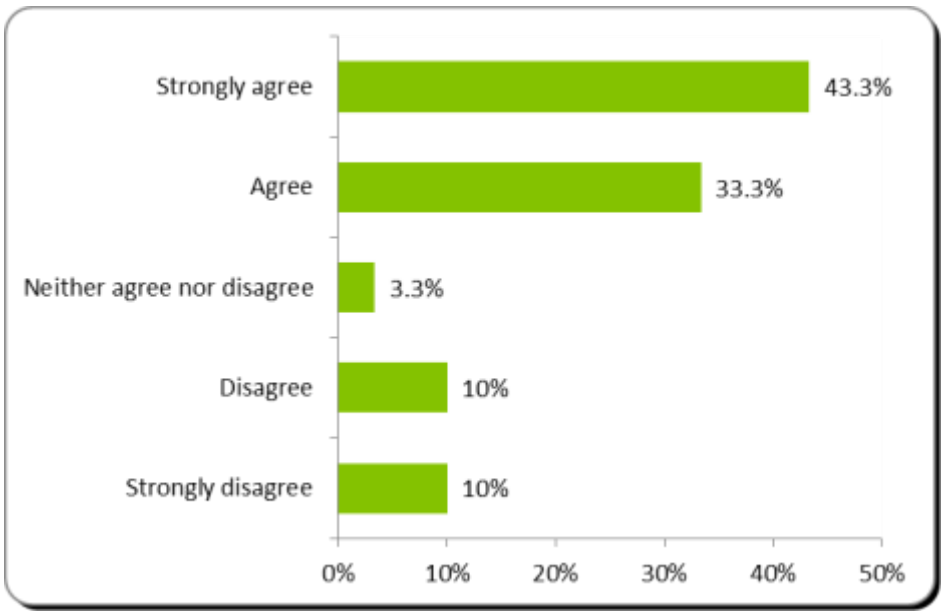
13.2. Q30. To what extent do you agree with this statement?

- *"STW should increase the resilience of their customers' water services through growing the grid"*

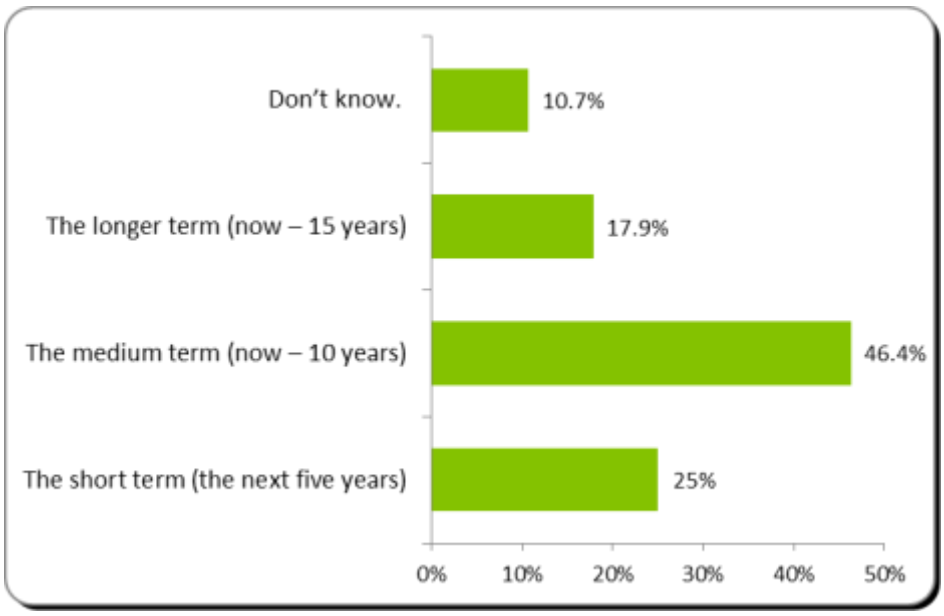


13.3. Q31. To what extent do you agree with this statement?

- *"Some assets are too critical to allow to fail under any circumstances"*



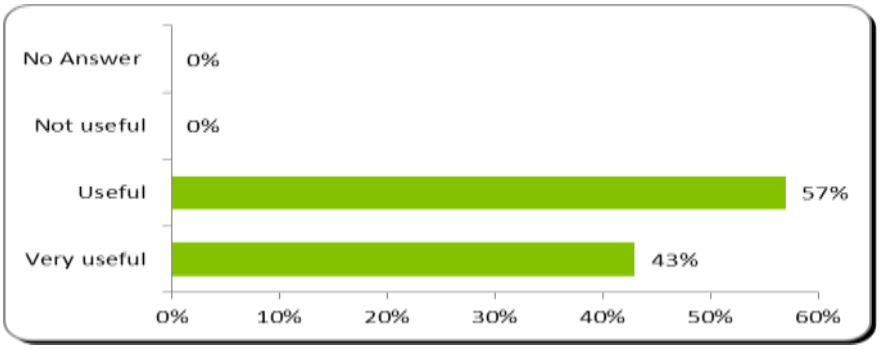
13.4. Q32. How quickly should we aim to mitigate the risk of disruption to water services presented by an aqueducts failure?



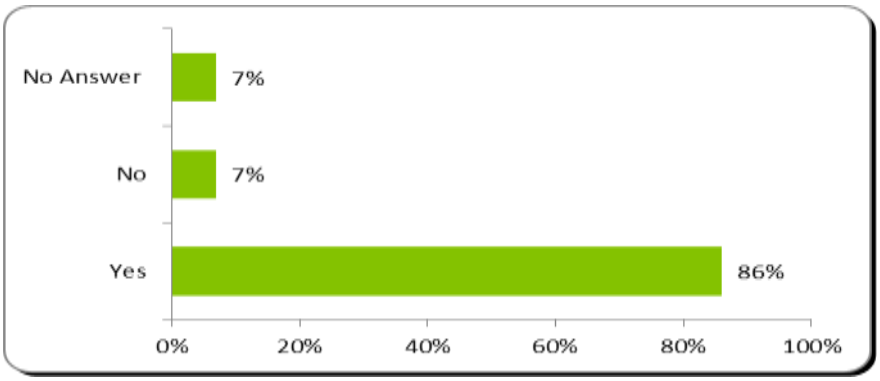
14. Appendix 1: Stakeholder feedback

After the workshop, stakeholders were asked to leave their comments. These comments are shown below:

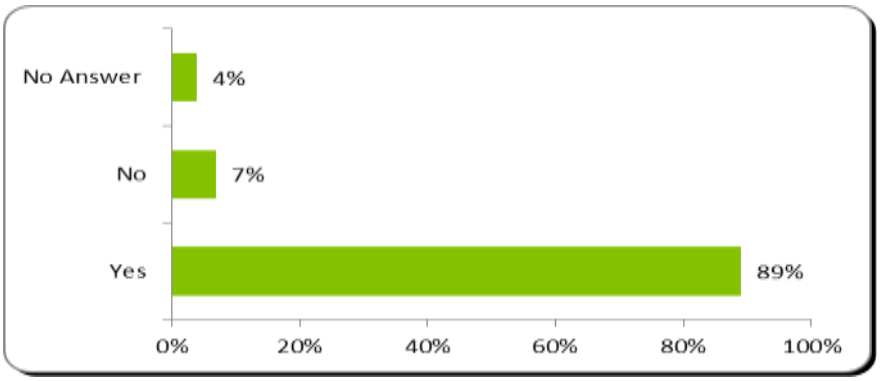
14.1. Did you find the workshop useful?



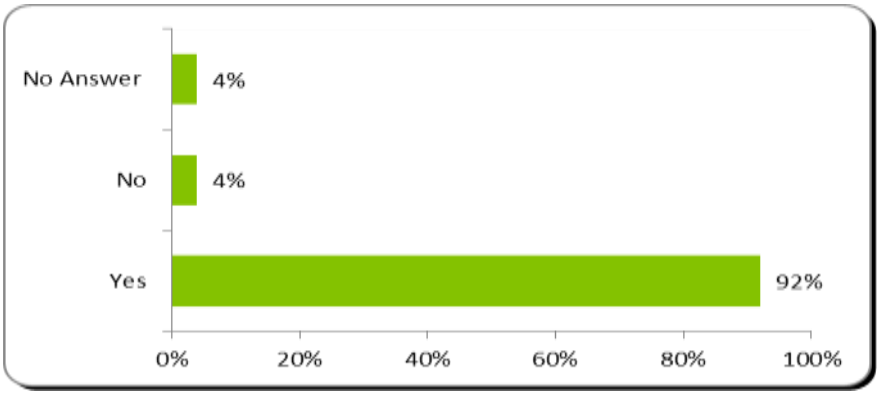
14.2. Was the venue conveniently located for you?



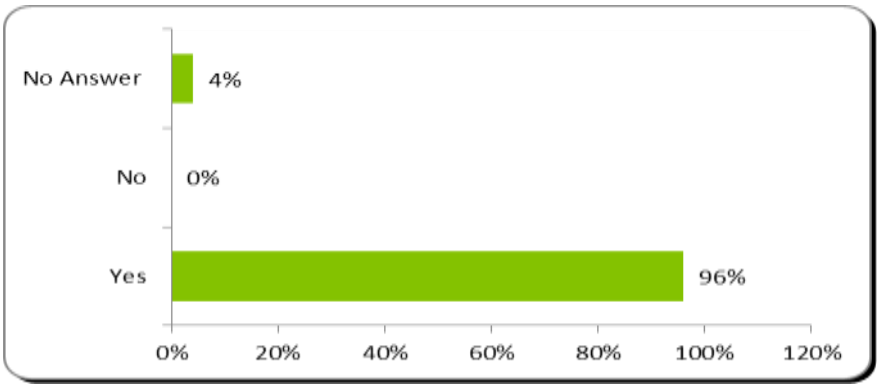
14.3. Did we provide enough information at the workshop



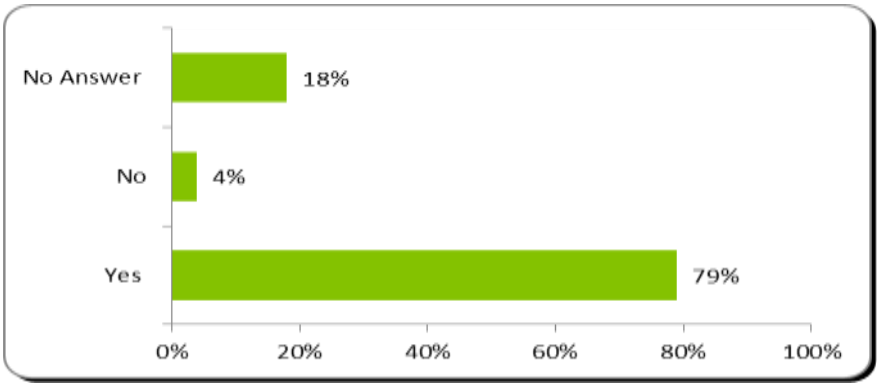
14.4. Did the information stands add value to informing you today?



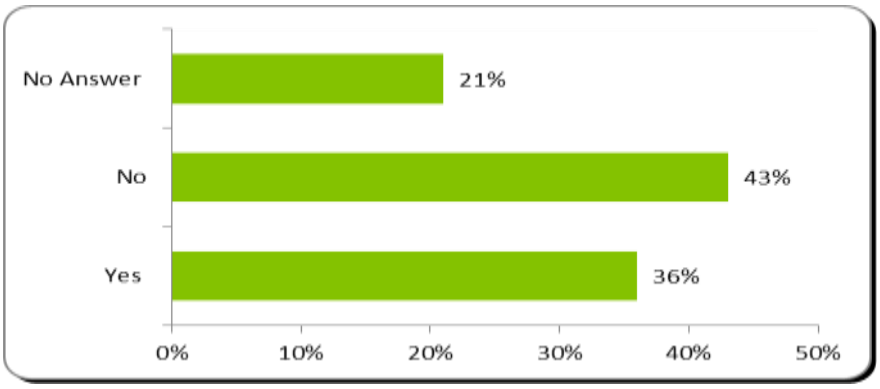
14.5. Did you feel you had sufficient opportunity to express and discuss your views today?



14.6. Do you feel we covered the right topics?



14.7. Will you be attending our upcoming workshop?



14.8. Written feedback

A number of stakeholders left written comments on their feedback forms. A selection of these comments is shown below:

- *"Very interesting and impressive"*
- *"Maybe value in more specific topic focused workshops in future?"*
- *"Very useful to have the questions prior to the event"*
- *"Excellently done, would have enjoyed more as I found it so interesting"*
- *"Openness is much appreciated"*
- *"Well run, lots of listening by STW staff"*
- *"Excellently facilitated!"*
- *"Would have preferred a single workshop covering all the issues-3 sessions is a big time commitment"*
- *"Would have been helpful if STW had more info on cost/benefit etc. before consulting. Longer presentations would have been more informative"*
- *"Your outcomes and solutions need to be "collaborative" not just STW. There is too much [sic] blinkered views from STW. This whole process needs to be widened out"*
- *"A new development can contribute a lot in reducing the future water demand, it would be useful if SWT can collaborate with local authorities"*
- *"Excellent facilities"*
- *"Would have liked to have more detail e.g. costs but I appreciate its early days"*
- *"Generally very good but appreciate the need to avoid overloading people"*