Water Resources Management Plan

Appendix E – Testing the plan

Water Resource Strategy team

September 2019

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APPENDIX E – Testing the plan

E1. Stakeholder Engagement and Consultation

The review of our previous Water Resource Management Plan (WRMP) and corresponding pre-consultation activities began in September 2016.

This section explains how we engaged with our stakeholders and customers through the pre-consultation period, and the key messages that we have taken from our stakeholders to feed into the plan.

During the pre-consultation period we engaged with our stakeholders and customers in a variety of ways:

- face to face meetings
- external stakeholder technical workshops
- customer research, including willingness to pay
- discussion and scrutiny by our multi-stakeholder CCG (customer challenge group) which we refer to as Water Forum
- Severn Trent WRMP website

Face to face meetings

From September 2016 we have held a number of face to face pre-consultation meetings with specific stakeholders including:

- Natural Resources Wales / Environment Agency
- Dee Valley Water Customer Challenge Group (CCG) – now the Hafren Dyfrdwy Water Forum
- Drinking Water Inspectorate
- Ofwat
- Chester and Cheshire West Council
- Wrexham County Borough Council
- Blueprint for Water
- United Utilities
- Dwr Cymru Welsh Water

During these meetings we set out our proposed approach for developing the WRMP and sought comments from these stakeholders as to how we can best engage with them during the process, and discussed possible opportunities for future collaboration.

WRMP External Stakeholder Workshops

As part of the pre-consultation process, we held a series of technical workshops for key stakeholders, as outlined in table E1.1 below:

Date	Workshop	Objectives
15 June 2017	Powys area WRMP workshop	• Understanding water resource needs • Water quality improvements

		• Catchment management and waste water improvements
28 June 2017	Dee Valley area WRMP workshop	• Understanding water resource needs • Water quality improvements • Catchment management improvements
12 October 2017	Welsh WRMP workshop	• To review and feedback on our draft Welsh WRMP

Table E1.1 – Details of technical workshops for key stakeholders

During each of the workshops, we encouraged open discussions on a variety of topics to help gain an understanding of what aspects of the plan were particularly important to our stakeholders. The outcome of these discussions are summarised in table E1.2 below.

Workshop	Discussion summary
Powys (15th June 2017)	**Water Resources** Customer Engagement: • Water is perceived as an abundant resource in Wales so changing customer mind set will be hard • Engage with schools and local community groups • Need to have really clear messaging with well-defined benefits of being water efficient • Better collaboration needed with land owners • Make more of your visitor sites to spread message on water cycle source to tap Resilience: • Resilience is seen as a big issue in the Powys area as there is only one single source • Sustainable land management should be looked into • Understanding of consumption in the area will be low due to it being a rural area, so harder to detect leaks and metering will be low Water Quality: • There is a significant increase in pig and chicken farms in the area, this will cause water quality issues **Waste Water Improvements and Catchment Management** Customer Engagement: • Do customer tours of site improvements so they can see first-hand the work you're doing to improve the local environment • Messaging should put more emphasis on the fact that a clean water environment reduces risks to water quality, which will ultimately lead to cheaper bills Innovation: • Need to be more innovative with your campaigns • Look into what other sectors have done, need more innovative, catchment based solutions to demonstrate environmental leadership Partnership: • Work more closely with land owners, there could be lots of quick fixes here

	• Do more 'soft' catchment approaches rather than improving treatment works
	• Improvements shown have been treatment focussed, how about behavioural changes activities and landowner collaboration
	Wider Obligations
	Assets:
	• Need to do a stock take of our environmental assets – use of natural capital
	• Make sure all of your assets have multiple benefits
	• There are good opportunities round Vyrnwy e.g. peatland restoration
	Biodiversity:
	• Top 3 priorities in relation to the new biodiversity duty were felt to be:
	  ○ Invasive non-native species (INNS) – will be included in the list of NEP drivers.
	  ○ Review of land management practices at our various sites to look for enhancement of ecosystems opportunities.
	  ○ Partnership working

Wrexham (28th June 2017)	**Water Resources** Customer Engagement: • More education needed on leakage on customer's private pipes • Availability of water supply is taken for granted, need to get customers to appreciate what would happen if they lost supply • Focus on vulnerable customers, don't forget those who don't use technology • There is still a strong perception that metering will cost customers more – how to change this Resilience: • Need to balance how much money we spend on customer education vs leakage reduction • Make sure River Dee is not over abstracted • Flooding is a bigger concern than drought – what are ST doing about this? • Could be big opportunities in attenuation of water • Need to be more ambitious with leakage target • Current catchment management schemes are focussed on water quality, could they be expanded to include attenuation/slow flow etc • Utilise existing groups for partnership working Water Quality: • There are water quality issues on the Dee which haven't been mentioned in this workshop – use partnership working to help overcome these issues • Septic tanks are a big problem and will be impacting water quality • Land use changes will have a big impact on water quality in the future and could be further impacted by climate change **Wider Obligations** Assets:

	• Look into opportunities to expand reservoir storage through surrounding wetlands for flood storage • Develop assets to have multi-benefit, soft approaches Biodiversity: • What is being done around INNS? • We should support upland management e.g. peatland restoration • Top 3 biodiversity duties should be INNS, uplands, and working with farmers/land owners Customer Engagement: • A lot of work is being done with domestic customers, need to do more with land owners – there could be some quick fixes found here • Get involved in local projects, be active in local partnership groups • Education on full water cycle source to tap needed • Customers need to understand drivers pushing us from above – this is both a top down and bottom up approach Partnership: • Lead on innovative work with university research • Be ambitious, don't hold back • The Dee Valley Catchment Group should be seen as a great way of feeding into area statements • Need to build a closer relationship between CLA and Severn Trent/Dee Valley • To be most effective there needs to be 121 relationships with landowners, not through other organisations
Wrexham (12th October 2017)	Catchment and Partnership Work: • Do we understand the long term risks to land use in the Dee catchment? Due to the economics of farming and Brexit the nature of agriculture in the catchment could change dramatically, resulting in different water quality challenges in the future. • Do we need to scenario test for different land uses in the future? • Slowing the Flow type projects are expected to take off in Wales for upland management. We need to think about the role this could play for water quality and flood management • Work with NGOs in relation to delivering demand management messages – customers may value it more if the message comes from an independent source Customer: • Show the impact of leakage in different ways; such as the cost aspect involved in treating and moving more water than necessary to make up for the amount lost (and how this will reflect on their bill) • Hard to ask customers to conserve water if we're not efficient ourselves – need to show them we're doing our part • Education – rather than sending our own staff out to schools spend a few days training teachers, provide them with data, resources etc, so they can take the messages back to embed in their schools

	• Make the water cycle/water demand/flood and drought risks etc part of curriculum on GCSEs so kids learn about water resources in more detail • Water efficiency should be a national campaign involving all the water companies to reach more people. Needs to be a national step change in this area like the smoking ban or recycling campaigns. • Incentivise customers to use less. E.g. if they use less as a community they get money put into a community fund at the end of the year. This way they may get pressure from others in the community to change. Leakage and Metering: • DVW is better at leakage than ST – how do we convince customers that we are still serious on leakage? • Lobbying for full metering was encouraged • If we remove the nervousness about customers looking after their own supply pipe then they may be more comfortable with the prospect of metering. There was a view that one of the key barriers that stops people wanting a meter is that they are worried about getting a leak and having to pay for water they haven't used. • Compulsory metering would not be accepted by Welsh customers. Customers would see this as a back-door route to putting up bills. CCW experience is that customers' bills go up after switching to a meter. • The cost of supply pipe adoption should be shared between customers and companies. It has multiple benefits and the proportion of the cost associated with the leakage benefit should be paid for by water companies. Resilience: • 61% of HD water is from the Dee, if this gets polluted how long can customers go without their supply being interrupted? • Look into the future impact of tidal restrictions ad sea level rise i.e. treatment of brackish water and storage facilities • Maximise storage opportunities Other: • WRMP should cover all aspects of water management i.e. flood risk as well as drought • The flooding resilience strategy sounds more reactive than proactive – wouldn't it be better to stop the flooding occurring in the first place? • How will abstraction reform affect us? It's a concern for Canal and River Trust – is there scope to work together to look at the common impacts?

Table E1.2 – key discussion outcomes from technical workshops

Hafren Dyfrdwy Water Forum

Our Water Forum (sometimes referred to as Customer Challenge Group or CCG) is a multi-stakeholder group which includes representatives from Consumer Council for Water, Natural Resources Wales, Local Consumer Advocates and local councils. It has a remit to scrutinise both how well we engage with our customers, and how well our final business plan reflects the outcome of that engagement.

The Water Forum did not have a formal role in the assurance process for our WRMP, as there was no requirement for them to provide a statement to the Board, as with the Business Plan. However, we consulted with them very early in the WRMP process to find out much involvement they wished to have in development of the plan. Members of the Water Forum attended each of our stakeholder workshops and provided valuable feedback during those sessions. In addition, we attended Water Forum meetings at various points during the development of the WRMP to provide updates and seek feedback from the group.

E2. Customer Engagement

Since our draft WRMP was published we have continued our customer engagement programme, and the evidence we included in our PR19 submission is much more extensive than that included in our draft WRMP. Our customer engagement approach for our WRMP has been tailored taking into considerations the fact that, based on the supply and demand projections set out in this WRMP19, we believe that we will remain in supply surplus for the planning period. As such, we are not considering any 'supply-side options' (i.e. new sources or water trading). Therefore, we have been proportionate with our customers' money and have not done research on topics such as supply-side solutions.

We have explored customer views on aspects of the WRMP, including leakage, resilience and water efficiency using a range of insight sources. We have also engaged stakeholders on topics such as catchment management. We have used research techiniques ranging from deliberative research, co-creation, depths with customers in vulnerable circumstands, quantitative research including stated preference research and our regular customer tracker. We have also reviewed complaints data as many of the service issues in this outcome are amongst the top causes of complaints, including leakage. We've used a range of insight to understand our customers' views as demonstrated in Table E2.1.

Approach	Purpose
Customer needs research and co-creation	Improves our understanding of customers' needs especially when service failures occur, what's important to them, and how they might engage with water efficiency messages
Valuation research	Quantifies the importance of reducing leakage in the context of other areas of service
PC and ODI research	Explore customers' views of performance targets and incentives
Asset health and resilience deliberative research	Explores customer views on asset health and resilience through deliberative workshops with current and future customers, and depth interviews with non-household customers.
Insight from customer facing employees	Tells us what our customer facing employees feel are the most important sources of customer dissatisfaction
Customer tracker	Tracks customer satisfaction, value for money and other metrics over time, including deep diving into specific topics such as water efficiency

Joint water trading research	Explore customer views on water trading – a joint project commissioned alongside United Utilities, Thames Water and Severn Trent. Included a sample of customers in Wales, including a small sample of HD customers.
Operational insight	Expands our understanding of the causes of dissatisfaction using complaints and voice of the customer feedback

Table E2.1 - Our approaches to understand our customer's views

Our customer insight programme tells us that customers and stakeholders want us to be more ambitious in our leakage and demand management thinking, and we believe that going forward we can better meet these expectations in an affordable way. We have listened to our customers and stakeholders and have adjusted our WRMP in the areas of leakage, water efficiency and catchment management as described in Table E2.2.

Area of the plan	Our response
Leakage	We are proposing a 15% leakage target over AMP7, following feedback from customers and our Customer Challenge Group. This is a change from our initial proposal of a 15% target over 2 AMP periods.
Water efficiency	We will work more closely with our customers to explore opportunities for increasing and understanding water efficiency and demand management messages.
Catchment management	We will build on our current catchment management programme and explore opportunities for achieving wider environmental benefits by working with landowners and other partners to encourage more sustainable working practices.

Table E2.2 - Adjustments to our WRMP in response to customer and stakeholder feedback

Further details of the findings from our research

A reliable supply of tap water is a basic customer expectation voiced in almost all the research that we have conducted. Our customer needs research shows that customers take their water supply for granted, and ensuring water is always there is a basic need that, once met, is not given much further thought. Our asset health and resilience research tells us that a customer's previous experience with their water company when issues arise can reduce trust (if not dealt with well). However, in contrast, having continuously reliable service does not necessarily improve or increase the level of trust.

Leakage

Our WTP research shows that reducing leakage is a priority for improvement for household customers, however the WTP valuation in Powys was zero for household customers. It may be that leakage is a high priority for customers, but they feel this should be funded by the company and not by themselves.

Reducing leakage also emerges as a top priority in the customer tracker survey, in the context of activities we should be doing more of in order to protect or improve the natural environment. 5% of customers in Powys, and 7% in Wrexham, said they had noticed leakage in the past year. This causes dissatisfaction, particularly when repairs are not undertaken efficiently.

> ***"They fix it and then it bursts again and again and all the water keeps going in my garden."***- Household customer, Wales tracker, wave 4
>
> ***It did not affect me, but water was running down the street for about two weeks before it was repaired. ."***- Household customer, Wales tracker, wave 4
>
> ***"[DVW should] make sure that leaks are fixed quickly and give information about the leaks***." – Household customer, Wales tracker wave 4

Our insight from customer facing employees also confirms that leakage is an important front of mind issue for customers, particularly as it is in the media a lot, especially during hot weather. Our complaints data shows that leakage is one of the most common complaints.

In our PC and ODI research we found that 71% of household customers, and 69% of non-household customers, found the proposed leakage target acceptable (the target presented in the research was a reduction of 7.5%). This was the lowest acceptability of all the performance commitments presented, and there were also significant differences for household customers between Powys and Wrexham. The qualitative discussion gives us some insight into why this is the case – customers unanimously believed that reducing leakage is good, but felt that the current and target level are both still too high, even if the water company is performing comparatively well. Some customers did however feel that the target reduction is stretching.

In the context of ODIs, reducing leakage was the top priority for outperformance beyond the target.

We have listened to this feedback from customers, and to that of our Customer Challenge Group, and are now proposing a 15% leakage reduction in AMP7.

Customer views on water efficiency and per capita consumption

Our insight programme shows a mixed picture between customers actively saving water, and those who feel that water is "actually quite cheap, and used without thinking". For example, in our willingness to pay research we asked customers to identify which of the following statements best reflected their views on the value of water. The responses we received are collated in Table E2.3.

Which one of the following statements best reflects your views on the water supplied at your home?	Powys (N=250)	Wrexham (N=255)
Water is a scarce resource and society should conserve its use	39%	49%
Water is a free good, from the sky, and we people should not have to pay for it	11%	8%
Water is actually quite cheap – we use it without ever thinking how much it costs	50%	38%

Table E2.3 - Customer views of the value of water

Our customer needs research reveals that some customers are active 'water savers'. Saving water for them involves a variety of practices such as installing water saving devices, using water butts and recycling dishwater and bath water. Motivations to be water efficient seem on the surface to be primarily driven by cost savings, yet some customers in Wrexham and Powys described being environmentally motivated:

> ***"My main reason for conserving water is to keep the costs down"***
> Customer needs research, customer with health and well-being vulnerabilities.

> ***"Generally we try to be careful with water because of the environment"***
> Customer needs research.

However, the majority of the workshop participants and customers visited at home were not actively doing anything to save water. These results need to be considered in context. The customer needs project was a relatively small scale qualitative piece of research, however these provide an interesting comparison to other sources of evidence. Some customers are surprised when they consider the amount of water people use on average per day, as noted by one customer:

> ***"133 litres per person per day - good grief. If you think about 133 litre bottles of water stacked next to each other - that's a crazy amount!"***
> Customer needs research, Wrexham

There is an appetite for more engagement in this area. The customer tracker research told us that some customers would like to know more about how to reduce their water usage. There is also customer interest in us doing more to provide free water saving devices, as part of a range of activities that customers could carry out to protect or improve the natural environment. We identified that 52% of customers think we should be doing more to offer water saving advice to those on a water meter.

Our insight from customer facing employees tells us that, although not always front of mind, some customers want reassurance that we are protecting the environment and that there will be enough water to meet customer needs in the future.

Within the co-creation workshop we asked customers to work with colleagues to help design water efficiency messages. Figure E2.1 provides an example of one of these messages. Some of the things that resonated with customers were using tangible examples of water usage volumes (e.g. conversion of technical measures of water usage such as cubic litres/metres into the number of bathtubs of water) and giving simple instructions about what customers need to do to reduce their usage.

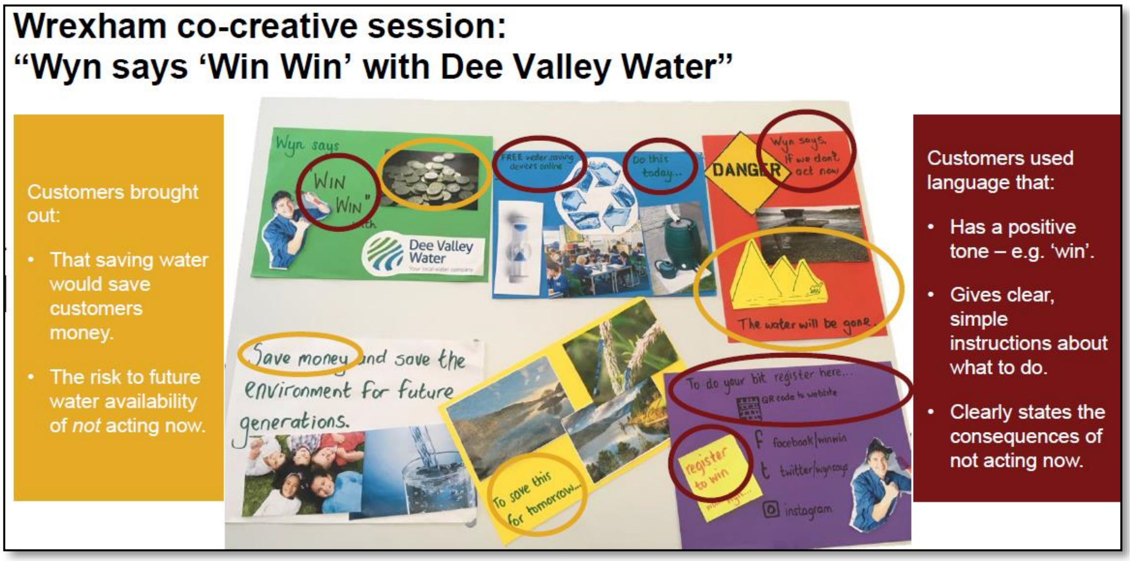

Figure E2.1 - Example of an output from our co-creation workshop

Drought Risk

We did not discuss drought risk with customers, since no improvement is required for this measure (we will maintain the current 0% of customers at risk of severe restrictions during drought), and our stakeholders and employees tell us this is not a front of mind issue in Wales. Our joint research on water trading (with United Utilities, Thames Water and Severn Trent, which included a sample of customers served by water companies in Wales) informed us that customers do not expect drought to be something that will happen in Wales:

> ***"It is a frightening thought that some areas might suffer from a severe shortage of water in such a short amount of time. It will not affect me personally in Wales but I have many friends living in areas that are facing problems in the future. It is a strange concept to think about water shortages in the UK."***
> Water trading research, household customer in Wales.
>
> ***"As far as concerns go, I do not have any as where I live there is no shortage of water and I doubt if there ever will be."***
> Water trading research, household customer in Wales.

E3. Governance and assurance

Throughout the development of our WRMP we have used a rigourous approach to ensure appropriate governance and assurance around our decision making.

Our Board's decision making and our public reporting to our customers and other stakeholders relies on sound information. We have established processes in place for ensuring risk-based assurance, using a three-lines of defence model with a clear delineation of accountabilities. Figure E3.1 illustrates the governance and assurance structure used in the decision making that informed our WRMP and our wider PR19 investment plan.

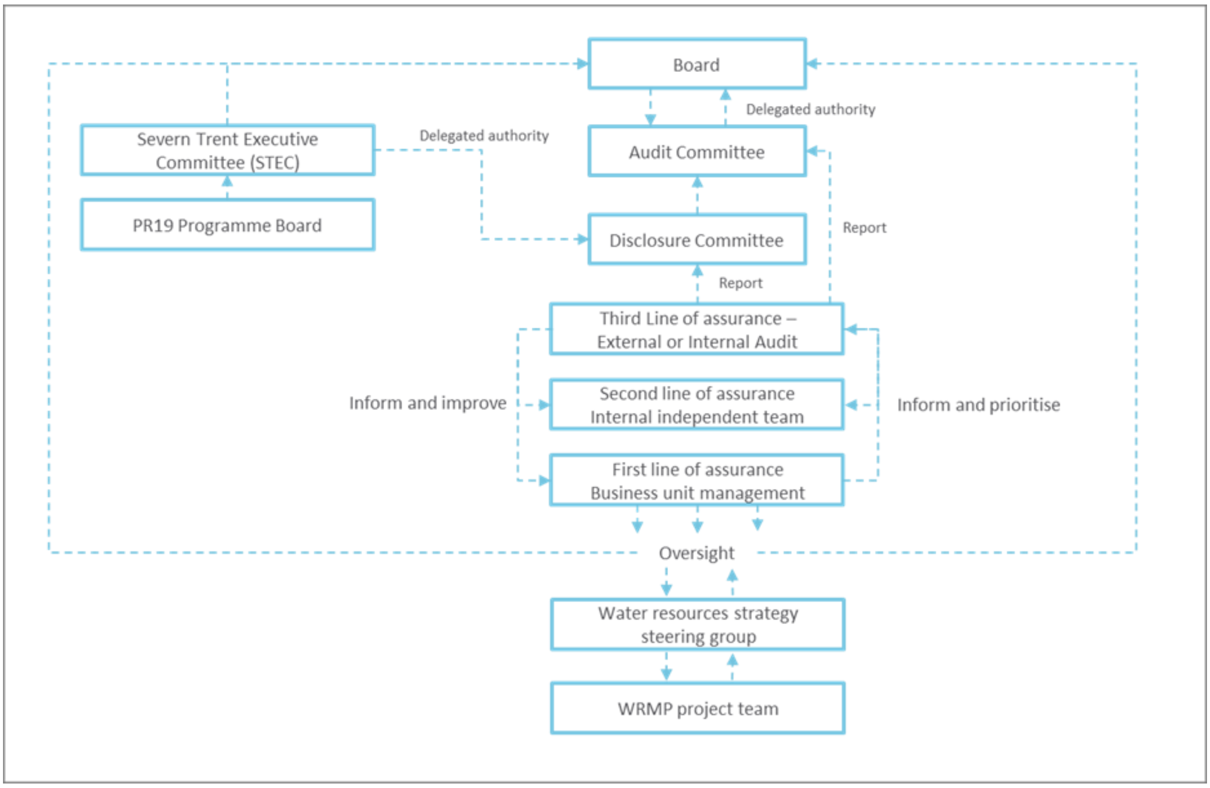

Figure E3.1 - Our WRMP governance and assurance structure