

Thames Water
Draft Water Resources
Management Plan 2019

Statement of Response

Technical Appendices

**Appendix E: Response to the CCG
representation**



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Appendix E.

Response to the CCG representation

A. Introduction

- E.1 This document sets out the main issues raised by Thames Water's Customer Challenge Group (CCG) in their representation to the public consultation on our draft Water Resources Management Plan (WRMP19), hereafter referred to as the draft plan. The structure of the appendix follows the structure of the representation submitted by the CCG. The comments from the CCG are shown in **bold font** and our consideration and response is shown in numbered paragraphs below each one. We have also set out the changes that we have made to our draft plan as a result of the issues raised or where we have not made changes, we have set out the reasons for this.

B. CCG's introductory comments

The Thames Water Customer Challenge Group (CCG) is pleased to have the opportunity to respond to Thames Water's draft Water Resources Management Plan (WRMP). The CCG exists to review the progress Thames Water is making against the commitments it gave to its customers as part of the PR14 price review process; it also has the responsibility of ensuring that Thames's future planning fully takes into account what its customers are seeking from it in the years ahead.

Over the best part of 3 years, the CCG has observed Thames Water's interactions with its customers through a variety of research and other techniques. Over that time, Thames has discussed many issues with a representative selection of customers from across its region and has made considerable efforts to engage directly with many of their customers, not only through research but also through a programme of local events and activities. This interaction has continued throughout the consultation period. Some of the research has related to topics outside the scope of the Water Resources Management Plan, but which are to be included in Thames's PR19 submission; however, much of the work has been relevant to the WRMP. The CCG's role in the process has been to comment on the research approach, questions and materials, to observe research sessions, and to use the feedback and results to develop an understanding of what Thames's customers are seeking from their water company over the next few years and over the longer term. This understanding is then used to critique Thames' approach to the DWRMP and also their PR19 submission. The CCG has encouraged Thames to develop a summary of the research and insight which they have then been using to guide their planning; the CCG has used the current version of this document (What Customers Want) in preparing its response to this consultation.



E.2 We have engaged closely with the CCG in designing and undertaking research with customers and local engagement events. The challenge and input from the CCG throughout this process has been extremely helpful and ensured we have good understanding of our customers preferences and priorities which we have used to develop our future proposals.

Thames Water has also held a number of open fora which have focussed specifically on the Water Resources Management Plan. Representatives of the CCG have attended these events and have been impressed by the efforts of the business to talk to its customers and listen to their response. There have obviously been contentious issues, but the approach taken has enabled stakeholders to debate and discuss these in an open forum. The CCG would note, however, that Thames's engagement with Non Household customers and particularly retailers has been more limited with regard to both the WRMP and the wider business plan and there is currently little, if any, specific mention of their views in What Customers Want.

E.3 We are grateful to the CCG for their contributions at stakeholder meetings throughout the development of the draft plan and objective commentary on the activity.

E.4 We note the CCG's comments on our engagement with non-household customers and, particularly, retailers. We can confirm that almost every project completed as part of our customer engagement programme included representation from non-household consumers, including research and consultation relating to the draft plan. We have included findings pertinent to this segment of customers in "What Customers Want"¹. It is worth noting that we have observed that there is great similarity between the reaction and preferences of non-household customers with those of household customers across many if not most dimensions. Furthermore business, business representatives and retailers are invited to join our Water Resources Forum to hear about our future plans, and to have the opportunity to comment and shape the plans.

C. Overall comments on Thames Water's proposed plan

Issue 1

First, the CCG wishes to state that it is pleased that the obligation for the Water Resources Management Plan is that Thames and other water companies should look beyond the previous 25 year requirement and, also, of course, the 5 year regulatory cycle. Getting the region's planning for the future right is essential if water supplies are to be secured despite the adverse factors described in the plan. Taking a short-term view is not helpful in that regard.

E.5 We welcome the CCG's comment and support for a longer term perspective with respect to water resource planning to ensure we get plans for the future right. Taking a long term perspective was also supported by our customers.

¹ What Customers Want – consolidated report v 12, Thames Water, August 2018



Issue 2

The CCG would note, though, that many of Thames’s customers have little idea that the region is “water stressed” and that there is much to be done to explain and educate around this issue.

- E.6 We note the comment made by CCG which is supported by feedback from research with our customers. We plan to develop longer term engagement and communication on water resource matters with our customers which, whilst important in itself, will also be important to gain support for the promotion of the efficient use of water and development of new water resources.

Issue 3

In considering the assumptions in Thames’s plan, the CCG acknowledges that the company must use agreed sources to underpin its thinking around population growth. The company has also had to make assumptions around such issues as the potential severity of droughts and again, the CCG believes that considering a wider range of scenarios over a longer period can only be of benefit in the planning process.

- E.7 We note the comment and confirm that we have extended the performance testing of our preferred plan to test its adaptability against a wide range of uncertain futures and ‘What-if’ scenarios. This has helped us identify the potential changes we would need to make as part of an adaptive planning process. The extended testing includes consideration of scenarios on population growth, climate forecasts, the water requirements of other companies in the south east and environmental requirements. In taking this approach we can be confident that our long term plan can adapt to the future whatever it brings. This is set out in Section 10 of the revised draft plan.

D. Customer views and priorities

Issue 4

The CCG believes that Thames has done a thorough and sustained job in seeking the views and opinions of its customers with regard to its water resources planning. Thames has used a variety of different and sometimes innovative approaches to contacting and engaging with customers and appears to have listened to their views and taken those views into account in their plans. They have also drawn on their operational interactions with customers to validate the themes that emerged from the research. Some of the research has included very detailed discussions of the key issues addressed in the plan.

- E.8 We note CCG’s comments. Over the past three years we have undertaken a wide ranging programme of research, local community engagement and consultation to ensure we have a good understanding of the views and priorities of our customers. The feedback from our customers has been important in shaping our long term planning for water resources, we



have used it to shape the planning objectives for our plan in terms of the planning period, the best value approach and building additional resilience to severe drought. The priorities and preferences of our customers is also one of the factors considered in the determination of the preferred programme. This is set out in Section 10 of our revised draft plan.

Issue 5

The feedback that customers have given overall is in general very clear: they find the current levels of leakage much too high and consider that Thames needs to address this before it undertakes other parts of its plan, although they are in principle supportive of the need to make some substantial investments. The fact that customers can see Thames is out of step with other water companies only underlines this point. Other issues that are of importance to customers include the need for better education about managing their demand for water, the fact that they would like to see the environment protected and pollution avoided and also they would wish to have greater access to Thames Water sites. They do not want to see restrictions placed on their water supplies except in the most extreme circumstances. They also feel that Thames should be a responsible company, minimising the impact of its operations and being more involved in a variety of ways at a community level as well as engaging in some depth in locations where major investments are planned.

- E.9 We note CCG's comments. The preferences and priorities of our customers are important factors in the development of our long-term plans. We have used customers' feedback in the definition of our planning principles and the development of our preferred programme. Further information on the specific points highlighted by the CCG is provided in the response below.

Issue 6

It is also worth noting that customers of all ages show spontaneous concern for the future of younger generations; water (and its supply) is seen as an essential resource to which all should contribute. Older customers believe that they have benefited from past investment, and future investment will both benefit themselves and support future generations. Younger customers feel a need to look out for each other and those who follow.

- E.10 We note CCG's comments. In response to the views and feedback from our customers on the need to plan for future generations, we developed a metric which reflects the support for inter-generational fairness. This was one factor in the decision making that led to the selection of the preferred programme of options as set out in Section 10 of the revised draft plan.

Issue 7

In summary, customers believe that it is Thames Water's responsibility to plan for and provide a water (and indeed a waste water) service that is resilient in the long term. It should be able to meet future challenges including weather changes, population growth and both man-made and natural hazards. They feel, too, that it is important that Thames should take into account a variety of factors including the



environment, deliverability and flexibility, not just cost, when constructing their plan. One good example of the need for flexibility is perhaps the increasing prevalence of plastic in water and the growing understanding of the issues it causes. It is worth noting that the presence of plastic - alongside potentially other as yet unknown pollutants – may effectively mean there is either less water available for use because it is contaminated or that treatment costs are higher which could impact on bills. Thames may wish to comment on this specific issue as part of its final plan but it illustrates well how rapidly understanding and circumstances change and the resulting need for flexibility. These points are addressed in greater detail below.

- E.11 We note CCG’s comments and agree that we need to plan for, and provide, a water service that is resilient in the long term in the face of future challenges. We have developed a suite of performance metrics covering factors such as resilience, deliverability and environmental impacts to enable this information to be taken into account alongside cost information in the selection of the preferred programme. This is in line with feedback from customers. We have also developed an innovative adaptive pathway approach which recognises that there are uncertainties in planning for the long term and various factors may affect future plans, such as emerging issues of concern like the damaging impacts of plastics in the environment, and technological innovation. The pathway approach allows for modification and flexibility in planning which will ensure that we can take account of changes and adjust our plan to continue to provide best value for our customers.

E. Stakeholder views

Issue 8

The CCG’s main focus is, of course, Thames Water’s customers. But it is probably relevant to say at this point that customers have certain expectations which are linked to the requirements of some key stakeholders, such as the Environment Agency and the Drinking Water Inspectorate. One of the most important – if not the most important – expectation of customers is that the water that comes out of their taps will be of a high quality and safe to drink. Customers set great store on keeping the safety and quality of water at a high standard. And a substantial minority (around 45%) note that any problem with the taste, smell or colour of tap water would have a lot or quite a lot of impact on their daily activities – even if it was safe to drink. How they feel about an absence of water is covered in the next section.

- E.12 These points are noted and the provision of high quality drinking water is a fundamental requirement governed by stringent legislation and we are committed to maintaining a high standard of drinking water quality.

Issue 9

Having observed many customer research groups and heard relevant feedback from others, the CCG would make two observations. First, that customers have very little awareness of what Thames actually does, apart from when things go wrong;



Thames does a great deal of positive work, but does not promote it well. This is true across most aspects of activity, but especially with regard to community involvement and work with the environment. Second, that Thames perhaps lacks ambition in terms of what it might set out to achieve during the course of the next WRMP with regard to environmental planning and aspirations. From a research point of view, it may be that Thames is not especially well sighted on what customers might want in this area but do not currently know about; it has failed to ask them about their views and appetite around some pertinent but less well known issues, for example care of chalk streams, and it would be helpful to hear more about customers' views on this and other areas. One flaw of a methodological approach which seeks to respond to what customers say they want is that customers may not be aware of what issues are out there and what potential courses of action could be available to address them.

- E.13 We note these comments made by the CCG on the perceived lack of ambition during the course of the next WRMP in respect of environmental planning and aspirations. We can confirm that we have strengthened our ambitions to reduce leakage and to promote the efficient use of water to our customers, working alongside partner organisations. We have also taken account of environmental concerns in the selection of new resource options for example, we have removed Teddington Direct River Abstraction (DRA) scheme in response to regulator, stakeholder and customer concerns and have taken into consideration how we could alleviate pressures from chalk streams and vulnerable water courses.
- E.14 We note the comments on the research and the perceived failure to ask for customers views on emerging issues and potential courses of action, for example the care of vulnerable chalk streams. This is an interesting point made by the CCG and, once the technical work has been completed to understand what is feasible in terms of protection for vulnerable water courses, we will consider what further engagement we should undertake. In recognition of this issue we have included a scenario in our revised draft plan to examine the potential impact of reduced abstraction from vulnerable water courses. We welcome CCG's input as we develop our approach.

Issue 10

To look at the chalk stream issue in a little more detail. Thames have categorically stated that they wish to reach the point where no chalk streams are affected by their abstraction activities. This is an admirable stance, but customers have not been informed, and are generally completely unaware of, the huge importance of our national chalk streams and/or the more general importance of chalk streams and the 'services' they provide (fishing, cooling climate, recreation, etc).

- E.15 We note CCGs comments on this issue. We accept that this is not a topic that has been discussed with our customers in detail. We have had feedback from wider research which indicates that environmental concern is one of a number of core trends when looking towards the future; and that rivers are important and something many use. We acknowledge that this has not been examined in sufficient detail and will consider how to engage with our customers on this topic as we continue to develop our future plans.



Issue 11

Catchment management/land use is also an area where relatively little customer research has been done. Customers have been given sparse information on exactly how some of the raw water supplies are contaminated by farming and other practices, and what can potentially be done to mitigate this. It could be surmised that if customers had been given more information on these topics during some of the customer research sessions, they might well have decided that these issues needed to be given higher priority within the WRMP, but it is, of course, impossible to know if that is actually the case.

- E.16 As part of the engagement with customers to explore different options to manage future water resources we did include catchment management as a feasible option. Customers ranked this option highly, recognising it as having wide environmental benefits but the low water yield, long lead times, as well as our lack of authority over landowners caused some to question whether this is a worthwhile option².
- E.17 Most of the successful catchment management approaches promoted to date have concentrated in upland rural areas where the potential for water resources and quality benefits are more obvious. In contrast the lowland, frequently urbanised catchment of the River Thames is subject to different challenges which will demand a more nuanced approach. In response to feedback from stakeholders and customers we are promoting our Smarter Water Catchments initiative, which through six different approaches, seek to collect the evidence to demonstrate the instances where catchment management can make a material contribution to environmental resilience in our catchment. These schemes are promoted in our Business Plan rather than the WRMP19 as they have not been designed to explicitly deliver water resource benefits but instead take an integrated approach. We will learn from these pilots, and wider industry research, to understand how to develop our approaches to managing water at a catchment scale both in terms of water quality and quantity.

Issue 12

Finally, the Thames region is a very diverse one. While Thames runs its research and engagement events across the region and is careful to ensure that customers who attend are the appropriate demographic and geographic split, it is true that on reading the draft plan, a customer would have no idea as to whether, depending on their local circumstances, they were more or less likely to be affected by the scenarios that are described. Leakage, for example, is far from uniform across the Thames Water area; the topology of the network may also mean that customers are affected by events in different ways. The CCG would suggest that in future research and indeed in future planning Thames might want to aspire to a more nuanced view of the very different situations facing its customers over the region.

- E.18 We note this comment and will consider this in developing and designing future engagement and consultation on water resource planning and wider business issues.

² What customers want, version 12, section 24 - Thames Water, August 2018



F. Maintenance of water supply

Issue 13

Thames has put a set of options into this consultation focussed around what effect a very severe drought (a once in 200 year event) would have in terms of water supply for customers and how customers would like them to respond. As noted earlier, very few customers realise that water shortages of any severity are in any way likely future events, relying on extrapolating their past experience to consider what is likely to happen in the future. On that basis, it is interesting to note that few customers who took part in Thames' research would have experienced, or consciously felt the effect of, the water restrictions imposed in 1976. While welcoming the fact that Thames is planning for at least the next 25 years, this is only what customers would expect their water company – and government to do – and customers do not want Thames to act at any cost, rather to take a more circumspect view. Other factors they consider collectively of “high importance” are the actual deliverability of schemes, the need not to waste money and be effective. Any solution should be sustainable, optimising future costs, minimising environmental impacts and hopefully even providing environmental benefits and be resilient – customers see good contingency planning as crucial. Adaptability is also important. It is also worth noting that most customers (75%) think that water supplied in drought circumstances should not create negative environmental impacts and also consider it important that current activity is delivered effectively before undertaking new initiatives.

- E.19 We note the CCG's comments and the points summarised have been taken into account in the development of our draft plan. Specifically on planning for a resilient water supply, government has given a very clear steer that we need to plan for a more resilient water supply recognising the potential social, environmental and economic impacts of failing to do this. The Water Resources Planning Guideline (July 2018) sets out the requirement for water companies to examine resilience to a severe (1 in 200 year) drought event and the National Infrastructure Commission (NIC) published a report³ in April 2018 setting out its recommendations on how to address England's water supply challenges and deliver the appropriate level of resilience for the long term. The Chairman of the NIC, Sir John Armitt, said:

“We take for granted that we will always have a reliable water supply, but despite our reputation for rain, the country risks water shortages. Climate change, an increasing population – particularly in the drier south and east of England – and the need to protect the environment bring further challenges....If we are to avoid our taps running dry, in times of extreme drought, we need the Government to act on our recommendations without delay.”

³ National Infrastructure Commission, Preparing for a drier future: England's water infrastructure needs, April 2018



Issue 14

Customers' views on specific schemes are considered later in this response. Customer views on short term interruptions to water supply are NOT considered in this response, but it is worth noting that customers accept that modest managed interruptions to supply could and should form a part of the response to a one in 200 year scenario, if carefully managed and communicated. On a practical note, both for now and for the duration of the WRMP, Thames are aware that they need to improve their understanding of the location and needs of customers who would benefit from being on their Priority Services Register. Any restrictions on water use as part of resource management would need to be accompanied by effective action to protect those for whom an interruption of supply would cause difficulties.

- E.20 We note CCG's comment and work is ongoing to ensure we provide adequate protection to vulnerable customers; a learning point from the freeze thaw incident in early 2018.

G. Water sharing across the region

Issue 15

Water trading, sharing and transfer amount to the same thing in reality, and are ultimately a financial transaction between two water companies around transferring water from one to the other. This is a topic which customers find quite difficult to address, and as a result they tend to take a somewhat protective stance, assuming that Thames would not share water under extreme drought circumstances. That said, they do assume that governments and water companies would in some way make the "right thing" happen. Overall, though, there has been limited engagement with customers on this: Thames' focus has been on the Severn transfer, where Thames would be the recipient of water. The question of Thames as a supplier to other/neighbouring water companies (eg after construction of a reservoir), and whether/how water should be "shared", has been addressed with customers, but at a very high level. The CCG would like to see further engagement in this area. The CCG is now aware of some research being conducted shortly by a number of water companies, including Thames, and welcomes the potential clarity it brings. Two members of the CCG are specifically engaged with this piece of work.

- E.21 As noted by the CCG at the beginning of 2018 we worked collaboratively with United Utilities and Severn Trent Water to examine with customers the potential for water transfers and trades across the water company areas, to explore their support for such trades and the concerns that customers had if such trades were progressed. Note Welsh Water was invited to join the research but it declined. The findings of this research is referenced in the Executive Summary and included in Appendix T of the revised draft plan. The research findings indicate that customers show a preference for water reuse and reservoirs ahead of water transfers but are not against the idea of transfers as part of a longer term solution, subject to a number of reassurances.



- E.22 Customers expressed concerns about security of supply, environmental and financial impacts and want assurances if trades are taken forwards. Thames Water, United Utilities and Severn Trent have agreed further work on transfers over the next five years and we will ensure the concerns of customers are addressed as part of this work. This is set out in Appendix J of the Statement of Response.
- E.23 CCG also raised a query around whether the situation where Thames Water acts as a supplier to other/neighbouring water companies (e.g. after construction of a reservoir), and whether/how water should be “shared”, has been sufficiently explored with customers. We will include this in the scope for further engagement.

H. Demand management options and water efficiency and education

Issue 16

By far the most important aspect to customers of demand management is the question of leakage and this is addressed in detail in the section below as is the topic of meters. That leaves the subject of how Thames helps its customers to use water efficiently.

As discussed above, few customers recognise that demand is projected to exceed supply. Once they know this, they are keen to hear more and to have practical support in managing their own water. The wasting of water is seen almost as a moral issue so they claim to be enthusiastic and committed to doing their bit. They want to see more done in schools and also to hear more about what they could do to use less water themselves, either by way of behaviour change or through “gadgets”. Freebies are welcomed! Changing behaviour is always hard, but the research suggests that explaining the bigger demand and supply issues rather than just exhorting people to save water may prove more fruitful. From what the CCG have been told, recent behaviourally focussed campaigns have had a positive effect on consumption but it is not yet clear how long this effect lasts and how quickly it tails off. The use of tariffs is acknowledged by customers as a way to change behaviour, but it does cause some concern with customers fearing they themselves would be the ones who pay more. It is however not seen as appropriate that as yet unmetered customers should be excluded from such tariffs so this option is not as yet a practical one. The CCG has heard that the “Smarter Homes” programme where Thames representatives visit customers in their home after “smart” meters have been fitted has been extremely successful, because it enables customers to receive personalised, practical and insightful advice on ways to reduce their water consumption with potential reductions to their water bills. There may be merit in considering how to expand this programme beyond the 300,000 homes that Thames has identified in its draft plan. It might also be combined with visits from other utilities for optimum impact and the minimisation of disruption. It is worth noting however, that for low income or otherwise vulnerable customers, fear of the cost implications is a significant factor. As that is often the case, access to advice about



the potential benefits of metering needs to be as close as possible to meter installation in order to address that anxiety and prepare customers for any likely change to their bill profile; it is of course a point in time when all customers are more likely to be receptive to efficiency messages. An added benefit is that such a programme can potentially help identify customers who are already struggling to pay and/or for whom metering will increase their bill, giving rise to affordability problems, and giving the opportunity to refer them for support with payment plans or access to the social tariff.

- E.24 We note the CCG comments on the need for measures to manage demand for water, and that the engagement with customers is effective and sustained.
- E.25 We received a number of comments as part of the public consultation on the draft plan supporting measures to manage demand for water, but also some consultees raised concern about over-reliance on such measures, which are not fully within the company's control. We have addressed these points in Sections 8 and 10 of the revised draft plan.
- E.26 Water efficiency is a key component to our long term plan, there are four categories of activity that make up our enhanced water efficiency Programme; Smarter Home Visit to newly metered, current metered and unmeasured households, Smarter Business Visit, Wastage Fix ('leaky loos') and Housing Association Fix. We have reviewed our proposals and enhanced our proposed activity.
- E.27 The additional activity includes working with other water companies through the Water Efficiency Network and the UK Water Efficiency Strategy Steering and Leadership Groups, as well as further consideration of non-potable supply options, alternative water supply options for large irrigation users, innovative engagement through partner digital platforms, and working closely with government and other organisations to promote water labelling. We have also reviewed the opportunities of using innovative tariffs and have suggested the introduction of such tariffs from 2035 (AMP10) once the progressive metering programme is complete. We will continue to evolve our approach integrating learning from delivery of the programme and other organisations. Further information is included in Sections 8 and 10 of the revised draft plan.
- E.28 The combined effect of our metering programme, together with a reward based incentive scheme in London, financial based incentive tariffs region-wide, proactive industry leading water efficiency activities and innovative non potable supplies to new developments will reduce the average volume of water used per person (Per Capita Consumption or PCC) to 135 l/p/d by 2024/25, 121 l/p/d by 2044/45 and 117 l/p/d by the end of the planning period 2099/00. Further information on our forecasts for reductions in PCC is presented in Section 11 of the revised draft plan.

Issue 17

Thames notes that it is to work with local authorities, housing associations, schools and businesses to promote the efficient use of water; the CCG is keen that these efforts are coordinated with and supported by the new non household (business) retailers. Working together with the retailer must be essential if the efficiencies sought are to be realised and there is at least the hypothetical potential for conflict



between the water company and the downstream retailer. Thames also needs to ensure that it works ever more closely with developers to ensure that homes and other buildings are constructed with water efficiency being a top priority. The CCG is somewhat concerned by the level of engagement by Thames: although not a supplier to NHH customers, Thames has a crucial role as wholesale supplier to the NHH market. There are, of course, questions around where the incentives should lie in reducing NHH consumption, and what role government (local and national) can and should play in promoting water efficiency by NHH customers – but this is outside the scope of this response. However, it is relevant for us to consider what Thames' customers - HH and NHH- think should be done to achieve water efficiencies in the NHH market. This has not really been explored. It would be helpful for Thames to provide some examples as to what kind of effective partnership working they should employ.

- E.29 We note the CCG's comment around the need to work with other organisations to promote the efficient use of water and that these activities are coordinated with retailers. We currently offer Smarter Business Visits which aim to support businesses to make improvements to their discretionary water usage by installing water saving devices, fixing internal leaks (wastage), converting toilets to dual-flush and installing urinal controls. We intend to engage with retailers and explore how we can continue these visits and other activities to promote the effective use of water resources; this is an emerging area following restructuring in the sector.
- E.30 Through WaterUK Thames Water and many other water companies proactively work with retailers and support the promotion of water efficiency activities and advice to the non-household market. The WaterUK National Drought Group has been particularly active in this area
- E.31 We are also developing our engagement with developers and are proposing further work to examine non-potable water opportunities including examining emerging technologies and practices to achieve long term, sustainable reductions in demand management.

Issue 18

Approach to developing preferred programme – how have shortlisted options; how have considered environment and social impacts

Thames sets out how it has created its future programme. While recognising that this is a relatively inexact science, with much judgement being needed throughout the process, the CCG is pleased to see that customers' preferences are a key dimension; and the consideration of inter- generational fairness is also important. The approach that Thames has used appears to be a transparent one and reflects what is important to customers – a combination of cost, environmental impact, deliverability and resilience and adaptability. The CCG has attended events where the detail of aspects of the plan have been shared with a variety of customers and where customers have been given the chance to discuss the prioritisation and rationale in some detail. The CCG also recognises that the approach taken shows flexibility in that events in the near future may lead to different approaches being taken in later years.



I. The CCG's comments on the specific questions asked by Thames Water

Issue 19 The CCG's views on reducing leakage

The CCG can unequivocally state that the issue of leakage is the one that causes customers the most spontaneous concern. Customers feel that leakage demonstrates poor maintenance and poor stewardship of the network. A leak is perceived to be both a waste of money in real terms but also the loss of an important resource – and this concern is exacerbated when customers begin to understand the water stressed nature of the region. Only 20% of customers agree that Thames is doing enough to address leakage; they repeatedly demand a “step change” in the amount of water Thames loses through leaks –this view is exacerbated when customers learn that Thames does not compare well with its peers in this regard. Leakage reduction is seen as something of a moral issue.

In its draft Water Resources Management Plan, Thames says it aims to reduce leakage by 15% by 2025 (in line with industry), meaning that 22% of total water into supply would be lost through leaks. Customers, though, want to see Thames lose only around 14-15% of total water into supply through leakage. And Thames itself states in its draft business plan a long-term ambition to reduce its leakage by 50%, which would take leakage to about 12-13% of water put into supply. The CCG has pressed Thames on whether 15% reduction by 2025 is enough to meet customer concerns around leakage; in the draft Business Plan which is also out for consultation, Thames has offered further (as yet unquantified) leakage reduction by 2025 which goes beyond 15%. Clearly this will need to be reflected in the WRMP. While we acknowledge Thames are 'working on' future leakage reduction, the WRMP should state where this future leakage reduction and the long term objective to halve leakage fits within the 80-year planning horizon of the WRMP: if the end-date for achieving this reduction is not stated in the WRMP it will be a meaningless promise to consumers.

Customers are sophisticated and recognise that not all leaks can be eradicated, but they believe many more can be. They recognise, too, that a major leakage programme could cause disruption and would be expensive – they are willing to pay to see leaks materially reduced and suffer some disruption but there is, eventually, a limit to that need and they know a balance between these factors needs to be found. Overall, there is a sense that customers want to see a well managed, extended programme which over time tackles the issue. This would go in hand with a robust asset health programme which would improve the overall network.

Customers feel strongly about this issue; the research suggests Thames should not be “allowed” to invest in other major projects until leakage is controlled. Given customers want Thames to achieve a leakage rate of around 14-15% of water put into supply [MI/d] and given their priority of leakage reduction over other resource options, the WRMP should stipulate the level of leakage to be achieved by Thames by the date at which each major new resource option is put into supply. This would



provide a link between (a) reducing the amount of water put into supply which is lost through leaks, and (b) introduction of new water resources. We recognise this would need to be framed carefully to enable plan flexibility/adaptability. There is also a sense that too many visible leaks undermine any education about the need to use water responsibly. Visible leaks cause great concern and irritation and slowness to address visible leaks is also not well received. However, the CCG is pleased to see that Thames are working to make it easier for customers and the public to report leaks.

The CCG would make some further, generic points. The metrics used to discuss leakage are not customer friendly or clear. It is to be hoped that the new Ofwat-prescribed commitment may help this, but leaving that aside, communications about leaks and leakage performance by Thames could be greatly improved. There is also confusion about where leaks occur and the distinction around household and company responsibility is not well understood. The CCG is pleased to note, however, that Thames have started to put a monthly leakage report on their website to inform customers.

Finally, the CCG welcomes the fact that Thames has amended its leakage goal between submitting its draft of the WRMP and publishing the revised draft. The CCG feels that Thames has listened to customers and to the CCG; it may well be though that customers seek more from Thames in this very sensitive area; some elements of Thames's research showed that customers sought a 14-15% leakage rate, as opposed to a reduction in leakage of 15%. It is not quite clear that customers fully grasp this distinction. The CCG believes that Thames should put in place a communications plan which shows over an extended period how Thames plans to tackle leaks, perhaps on a focussed geographic basis, moving its programme from an invisible activity with ill understood and rather hypothetical metrics to an investment in local infrastructure which could not only improve the network but also the wellbeing of the community and even lead to increased jobs and economic activity. The CCG continues to monitor how Thames is performing against its current leakage targets on a monthly basis and is grateful to Thames for being open about the progress that they are making in this important area, including their initiative to publish their leakage data on a regular basis.

- E.32 We note the comments made by the CCG in respect of leakage, challenging the sufficiency of the proposed target taking account of the preferences expressed by our customers, clarity around the targets and the programme to achieve the targets, and the communication of leakage more generally.
- E.33 We recognise the focus on leakage by customers, stakeholders and government and the desire to see significant reductions in the amount of water that is lost through leaks, which we support. Ofwat set out a challenge for companies to reduce leakage by 15% by 2025⁴ and the NIC recommended a longer term target of a reduction of 50% by 2050⁵. In our revised draft plan we have set out our ambition to achieve these targets; 15% reduction by 2025, this is

⁴ Ofwat, Delivering water 2020: Consulting on our methodology for the 2019 Price Review, July 2017

⁵ NIC (2018) Preparing for a drier future: England's water infrastructure needs



equivalent to around 100 Ml/d of water and is significantly beyond the sustainable economic level of leakage (SELL)⁶. We have also committed, and included in our revised draft plan, our target to reduce leakage by 50% by 2050, in line with the recommendations of the NIC.

- E.34 In London this will be achieved through a combination of customer supply pipe leakage savings associated with roll out of our progressive metering programme, pressure management and mains rehabilitation. In addition, we have introduced a range of new tools to improve analysis of the supply-demand balance and thereby improve the efficiency and effectiveness of our leakage detection and repair activity including tools for targeting mains replacement. We will continue to develop and enhance these tools. We have no doubt that there will be further innovations in leakage detection activity and mains rehabilitation techniques which will help to achieve these ambitious targets. Further information on the work completed to determine the programme of leakage reduction is presented in Sections 10 and 11 of the revised draft plan.
- E.35 In addition to activity to reduce leakage there is also a substantial programme of investment to maintain our assets through the Asset Health mains rehabilitation activity included in our Business Plan. We have ensured that these programmes are fully integrated to achieve holistic benefits for our customers.
- E.36 We have included information on our website to explain leakage and our current performance on managing leaks in clear, accessible language. We are committed to communicating on this important topic in a clear and transparent way.

Issue 20 The CCG's views on household metering programme

The CCG's views on the continuation of Thames Water's household metering programme In general, the CCG's view is that metering is to be welcomed and that it is core to reducing water use over time. Customers tend to feel that meters do encourage good water behaviour, with metering being a "fair" way to pay for water. Some have concerns that personally they will be worse off, and the CCG is keen to understand whether different groups (including vulnerable customers) are impacted differently over time by metering. It appears that customers do not necessarily understand the benefits of metering and therefore it is hard to get them to keep appointments to have meters fitted. This would suggest that better education is key to getting meters out into customers' homes and businesses and that support for vulnerable customers is especially important. The CCG are also somewhat concerned that much weight is given to using the fitting of meters to reduce water consumption and yet by Thames' own admission, the current meter rollout has gone more slowly than planned due to unforeseen difficulties. The figures quoted may be less reliable, particularly if there is customer resistance due to the reasons outlined above.

- E.37 We carefully monitor the roll out of the metering programme and have made adjustments to our communications, engagement approach and delivery to ensure it is efficient and effective.

⁶ Definition can be found on Ofwat's website at <https://www.ofwat.gov.uk/households/supply-and-standards/leakage/>



The roll out of the programme is a challenging multi-faceted programme, we actively seek feedback from customers and partners and we continue to review and learn from our experience to ensure it is successful.

Issue 21 The CCG's views on Thames Water's proposals to take more water from the River Thames at Teddington Weir

Customers in general felt positively about this as an option – in fact, it was the most popular of the options they considered. That said, they did recognise that although it provided a high yield, was apparently quick, simple and cheap, it would need to be part of a wider programme of activity and investment. Nevertheless, customers could see few downsides; the CCG understand, however, that there are a number of environmental concerns which have not been fully bottomed out and recent research with customers has shown clearly that if this option were to cause environmental deterioration this option would not be supported by customers.

- E.38 Over the past three years we have undertaken work to develop the design for a DRA scheme near Teddington Weir. This work has included appraisal of the potential impacts of the scheme on the River Thames upstream and downstream of Teddington Weir including: temperature, water level, salinity and velocity. In the draft plan we reported the need to continue work to fully understand the potential impact of the scheme on the River Thames and specifically to identify the design, operation and mitigation measures that would be required to ensure compliance with Water Framework Directive (WFD) objectives for ecology.
- E.39 Since the publication of the draft plan we have undertaken further work to address the ecological concerns, specifically the potential impact of the increase in temperature in the freshwater River Thames and estuarine Tideway. We have discussed⁷ the findings of this work with the Environment Agency and have agreed that the mitigation options considered are not sufficiently effective to be included in the scheme design and as such concerns remain around compliance with WFD objectives. As such, the Environment Agency and Thames Water have agreed⁸ to remove the Teddington DRA scheme from the constrained options list for consideration for the revised draft plan.
- E.40 We have reviewed the programmes and replaced the scheme in our preferred programme with additional demand management measures as well as resource development, including a raw water transfer via the Oxford Canal and a reuse plant at Deephams. We will continue to research the scheme; the scope of this research will be decided in consultation with stakeholders and completed by 2023 to inform WRMP24.

⁷ 1 May and 13 July 2018

⁸ TW & EA joint note on Teddington DRA, July 2018



Issue 22 The CCG's views on how Thames Water might provide new water supplies in the longer term

Point a

In general, customers seem to favour a combination of simplicity of process and supply, as well as recognising the need for a reasonable yield from the chosen approach. Value for money is also important. The Teddington option, which is seen as simple, quick, cheap and offering a high yield is therefore well supported, whereas desalination which is perceived as complex and expensive (especially in energy terms) is not. Water transfer is discussed elsewhere. The use of groundwater is recognised as being simple, inexpensive and natural but not terribly productive and therefore not an important solution.

Likewise, the management of land use (catchment management) is valued because of its environmental benefits, but again it is seen as low yield and potentially difficult for Thames to deliver given the need to engage the support of landowners. That said, exactly this is being delivered to great effect elsewhere by other water companies although the CCG does recognise that catchment management opportunities may vary depending on the locality. Engaging the support of land owners and working with other partners seems to be something Thames should be embracing to access the potential yield. Again, this comes back to needing to deliver education in a variety of ways and also the need for Thames to think innovatively in this area.

The reservoir option is in general well regarded (although not by those who live in the areas that would be directly affected by its construction) as it is simple and productive in yield term. There are also potentially wider environmental and social benefits, but it is acknowledged that in the shorter term at least there would be substantial disruption for local residents. It is worth noting that there is a close linkage between this issue and the question of chalk streams, and a more informed customer group might have come to an even more positive conclusion, had they been aware that a reservoir could have made stopping or reducing abstraction from chalk stream a potentially achievable aspiration.

- E.41 The CCG has provided a good summary of the views and preferences of customers on new resource development. There are positives and negatives to all resource options. The views of customers were taken into account in the development of the preferred programme as set out in Section 10 of the revised draft plan.
- E.42 With respect to catchment management we have included a variety of catchment management schemes in our five-year Business Plan. These have not been designed to explicitly deliver water resource benefits and hence are not set out in our revised draft plan but we recognise the importance of catchment management in providing a secure, resilient and high quality water supply and anticipate that our catchment schemes will make a contribution to water resources resilience but not on a scale that can be quantified at this time. This is an area that we are keen to develop in the future building on the learning from the schemes included in our Business Plan.



- E.43 In respect of the reservoir, this has received both strong support and strong local opposition. We have assessed the environment and social impacts and benefits of the reservoir option, during the appraisal process as described in the reservoir feasibility report and as part of the SEA. This is reported in Section 9 of the revised draft plan and associated appendices. If this scheme is taken forward there will be detailed assessments completed to support the planning application and these will consider a wide range of issues including traffic, construction and flooding. As part of these studies there will also be extensive engagement with local communities and interested stakeholders.
- E.44 As part of further consultation and engagement on our revised plan we intend to continue the conversations with customers on the options and will also cover the question of chalk streams as highlighted by the CCG.

Point b

Finally, water reuse tends to divide customers, with some finding the concept unpalatable; there is, though a consensus that it is both complex and costly and so it is not especially favoured.

- E.45 There are mixed views on water reuse, some customers consider it unpalatable, whilst others are content with proposals, and the recent research with customers on water trades⁹ indicated that water reuse was the preferred option, of the three put forward. The mixed responses from customers indicate to us that further work will need to be completed to ensure we fully understand and address customers' concerns, particularly if Deephams reuse is promoted for operation by 2030 as presented in the revised draft plan. It is worth noting that only indirect reuse options have been considered in the development of the draft plan and the reuse scheme that is being promoted is relatively small (45 Ml/d) to ensure we can fully address technological, operational and acceptability concerns.

Point c

The CCG notes that overall this is a difficult topic to research with customers, as they are not always aware of all the options; however the research processes used did give customers the chance to first understand and then explore and debate the various choices offered. The CCG also felt the comparison of programmes summarised on page 17 of the summary report was a helpful way of expressing the various options.

- E.46 We note CCG's comments and have undertaken further research with customers as part of the public consultation seeking their feedback on potential options. We also consulted our online community who provided feedback. Overall feedback from these groups was a preference for a reservoir but they did provide useful insight on all the options, perceived positives and negatives which we will consider in deciding what further research and engagement is needed.

⁹ Water trading research, Verve, June 2018



Issue 23 *The CCG's views on the option to transfer water from other water companies (in the Midlands, Wales or the North West).*

Water transfer is not an option that customers particularly favour although it is acknowledged to be a long term solution which could provide a relatively efficient way forward. Customers however perceive it to be somewhat expensive, energy intensive and complex. Customers also recognise that it would be insufficient on its own and can only be as part of a number of solutions. They also expressed concern that they would be reliant on another water company, and therefore more vulnerable in terms of their water supply, than if Thames were independently water secure.

- E.47 There has been much focus on building a regional or national network and using this to transfer water regionally and nationally. We received a large number of responses as part of the public consultation on the proposals for transfer of water via the River Severn in general and specifically the decision not to use the restored Cotswold Canals to support conveyance of water for regional water transfers.
- E.48 In developing our draft plan we have looked in great detail at transfers of water from Wales, the Midlands and the north west. We have committed to build on this work over the next five years, in partnership with the other companies, to address technical, environmental and governance aspects of transfers as well as issues raised by customers. This is set out in Appendix J of the Statement of Response. The work package will include:
- understanding the magnitude of water losses that could occur during transfer;
 - the changes that would be required to the regulation of the River Severn to ensure water is available for transfer when required and that the Severn Estuary Special Area of Conservation and Bristol Water are not detrimentally impacted by the increased upstream abstraction;
 - further environmental investigations and survey requirements for the River Severn flow augmentation options (Vyrnwy reservoir and Minworth sewage treatment works);
 - understanding water quality issues associated with how River Severn algae behave when transferred into the River Thames;
 - environmental studies for a number of supporting options, including a screening phase and more detailed investigations at a smaller number of sites;
 - more detailed engineering assessments of the scope and costs of the supporting options, supported by multi-discipline site based investigations;
 - assessment of whether changes to the magnitude of timing of River Severn support would affect water levels at Vyrnwy reservoir and the environmental effects of any changes to water level; and
 - leadership and coordination of the work on the transfer scheme across the various parties, ensuring effective governance arrangements are in place, and engagement with multiple stakeholders.
- E.49 We have included a supported Severn Thames Transfer in our revised draft plan from the 2080s, to maintain sufficient resilience for London and the south east region to the end of the

planning period in 2100. The additional work will be taken into account in future revisions to our draft WRMP19.

J. Changes made to the draft plan

E.50 We have made the following changes in our revised draft plan in response to comments raised by the CCG and new information:

- We have revised the new resource development options removing Teddington DRA from our constrained list of feasible options. This is presented in Section 7 of the revised draft plan;
- We have extended our leakage reduction and demand management programme and taken account of these activities over the duration of the revised draft plan. This is set out in Sections 8, 10 and 11 of the revised draft plan;
- We have redone the programme appraisal and have developed a revised preferred programme which includes a new reuse plant at Deephams, advancing the South East Strategic Reservoir Option (SESRO) and a supported Severn Thames Transfer. This is presented in Section 11 of the revised draft plan;
- We have extended the performance stress testing of our preferred programme to ensure it is robust to a range of future scenarios and can continue to deliver a secure supply of water to our customers and protect the environment. We have used an adaptive pathways approach to test the performance of the plan to a wide variety of uncertain futures. This is presented in Section 10 of the revised draft plan; and
- We have set out a joint programme of work with regulators and other water companies to undertake on-going work on the feasibility of the Severn Thames transfer scheme.

E.51 We have also committed to:

- develop longer term engagement and communication on water resource matters with our customers to build an understanding of the pressure on water resources, an important backdrop to the promotion of water efficiency;
- continue to explore opportunities to work with partners to promote the efficient use of water including businesses, developers and retailers;
- continue to explore opportunities for catchment management learning from the pilot schemes being promoted in the Business Plan; and
- continue to engage with customers on the revisions we have made to our draft plan and cover additional topics highlighted by CCG including opportunities for catchment management, protection of vulnerable chalk streams and water courses and the role of Thames Water working jointly with Affinity Water to promote a strategic regional water resource scheme for the south east region.