

Towards Water Neutrality in the Thames Gateway

Public acceptability on water efficiency scenarios

Research and analysis for



July 2007

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1 Introduction

This report presents the findings from a deliberative research project into what residents in the Thames Gateway feel is acceptable to achieve water neutrality.

The Thames Gateway is Europe's largest regeneration project and stretches for 40 miles along the Thames Estuary from London Docklands to Southend in Essex and Sheerness in Kent. The Thames Gateway Strategic Partnership intends to create conditions for 160,000 homes to be built in the Gateway between 2001 and 2016.

According to the Environment Agency, the Thames Gateway is an area of relatively low rainfall and currently unsustainable levels of water abstraction. The new homes planned for the Gateway, together with an increase rise in living standards and population growth, will lead to an increase in total demand for water with could have a negative impact on water quality and the wider environment.

Communities and Local Government (CLG), the Department of the Environment, Food and Rural Affairs (Defra) and the Environment Agency are conducting a study to investigate the concept and feasibility of making the Thames Gateway development water neutral. There is debate over what the term 'water neutral' means but for the purposes of this project it has been agreed that water neutrality will be achieved *if the total water used after new development is equal or less than total water use in the Thames Gateway before the development.*

There are a number of measures that will move the Gateway towards water neutrality:

Building new homes to high standards in terms of water efficiency – this might include the installation of water efficient taps, shower or dual flush toilets, as well as recycling grey-water or rain harvesting;

Retro-fitting existing homes – this would mean updating and replacing water appliances such as taps and toilets with more water efficient models;

More widespread or compulsory metering – it is established that domestic use of water is reduced when residents are placed on a water meter and pay for the amount of water they use;

Education or social marketing – this can be used to raise awareness of the need to reduce water use, and inform residents of simple behavioural changes or devices that will help them achieve this.

The purpose of this research project is to determine the public acceptability of different scenarios that use a combination of these mechanisms to achieve water neutrality.

2 Executive Summary

2.1 Current attitudes and behaviour in terms of water consumption

The research showed that attitudes to water appear to be evolving at present. Historically, the majority of our participants had perceived water as an abundant resource, and had not felt an impetus to regulate their use of it. This attitude was encouraged by perceptions of the British climate being the 'wettest in Europe' and the fact, that in contrast to other utilities, water is not universally metered. However, publicity around the recent drought of 2004-06 (and previous water shortages and associated hosepipe bans) had challenged for some the idea that water is an abundant resource, at least in the South East region.

Those who were concerned about water shortages felt that more needed to be done with regard to managing water resources and looked for stronger leadership from the Government on the issue.

The majority of participants claimed to be aware of their water use, although further probing showed many were in fact surprised by the volumes of water used in household tasks. The factors that seemed to raise awareness in terms of water use were the presence of water meters, publicity around the drought of 2004-06, negative feelings towards waste in general and a wider global perspective on how water is valued elsewhere in the world.

These factors not only raised awareness of the amount of water used but also encouraged greater water efficiency in the home. Water meters were seen as particularly effective in that they provided people with a financial incentive not to waste water and focussed people's minds on how they use water.

Other factors that also seemed to play a part in encouraging water efficiency included: persistent reminders from partners or parents (most typically wives, mothers and girlfriends); concern about the environment in general; and action by local councils / water companies to make water efficiency more affordable or convenient.

In contrast, factors that discouraged water efficiency included: people's aspirations in terms of their homes or lifestyle; the presence of teenage children; a lack of a sustained media campaign on water efficiency; a perceived lack of financial incentive to act; and a perceived lack of action from the Government or the water companies in terms of making new homes more water efficient or reducing leakage.

These drivers validated the segmentation identified in a research project for the Consumer Council for Water (CC Water) completed in 2006.

2.2 Scope for change in attitudes and behaviour in water consumption

The research identified that there is scope for change in terms of how water is perceived. Participants felt that in the next 10 to 20 years water might be seen as a more scarce resource. They anticipated there would be future water shortages due to increased demand (from rising living standards and immigration). Climate change and failure to tackle leakage were identified as two other factors that might make the situation worse.

The stimulus material on the regional climate and plans for the Thames Gateway showed there was further potential to change attitudes to water as a resource. Facts about the level of rainfall in the region surprised some and encouraged them to focus on the issue. However, a sizeable minority, including those most engaged with the issue of water efficiency were frustrated at the fact that additional housing was being placed in an area that was recognised as water stressed. For some, this incited a rebellious attitude to the notion of 'doing your bit'.

The majority of participants claimed to have saved water in the tasking phase. However, only a minority (about one in four) felt they had made substantial savings, while about half made minor savings and a quarter did not reduce their water use in the tasking phase. Larger savers of water tended to be single person households, couples with no children, or with younger children. Smaller water savers included many young couples as well as families with teenage children. Finally those unable to save water tended to be older people with meters who felt they were already doing all they could to be water efficient.

There was limited evidence of any geographical differences in terms of water savings, although participants from Kent and Essex seemed more likely to be engaged with the issue initially.

The key factor that helped the participants to become more water efficient was increased awareness of how much water household activities use. This was backed up by persistent reminders to other household members and simple suggestions on where savings could be made, for example, keeping a jug of water in the fridge.

Barriers to change included concerns over the effectiveness of the devices supplied in the tasking phase (both in terms of fitting them and reducing water consumption); how sustainable some of the changes were in the long run; a lack of time; and a failure to persuade teenage children to get on board. These barriers might be negotiated if the participants received more information on how the devices worked, if they concentrated on making one change at a time, or if they used fix and forget solutions. The latter solution would help participants who were 'time poor' or could not persuade other household members to change their behaviour.

2.3 Planning for change: responses to water neutrality scenarios

Participants were presented with two possible scenarios to achieve water neutrality. The first, Flush and Go, focused on technology with a universal retro-fit programme. The second, Water Watch, sought to influence behavioural change with education and information campaigns plus compulsory water metering with variable tariffs.

Participants found technological solutions appealing. This was due to their convenience - once in place they did not have to think about them. This would extend water efficiency to some who did not have the time or inclination to engage. However a universal retro-fit programme was seen as too interventionist, and participants were also concerned as to who would bear the cost.

Education and information again had strong appeal, although participants argued it would have to be sustained to change attitudes and support householders policing water efficiency in the home. This should be delivered by the Government (and/or local councils) rather than the water companies.

Compulsory water meters received broad acceptance, from both those who were on meters and those who weren't. It was felt to be more fair than the current system where a significant proportion of the public were on meters but had no choice in this.

However, participants objected to the idea of variable tariffs. If compulsory meters were adopted householders would pay for what they use and so variable tariffs were regarded as exploitative. However, many participants were more familiar with the idea of metering than variable tariffs. If there was more discussion of variable tariffs in the media and how they might work then attitudes might shift. Indeed a research report for the Consumer Council for Water¹ suggested there is support for a rising block tariff.

The preferred scenario combined the most publicly acceptable elements of the two scenarios presented to the public. It is not claimed this would deliver water neutrality, but demonstrates the type of measures that would be more publicly acceptable. This included:

Social marketing and education to prime the public on the issue of water efficiency. This should comprise of some shock tactics on the regional climate and or water stress, balanced with positive messages that on simple steps the public can take to prevent future water shortages.

The campaigns would need to demonstrate that the water companies and the

¹ Corr Willbourn Research, *Deliberative Research into Consumer Views on fair charging for the Consumer Council of Water*, February 2007

Government are working in partnership between the public

The participants were broadly supportive of the following top-down measures:

Compulsory water meters – meters were perceived as effective in changing behaviour and raising awareness of water use. However, it was recognised that some vulnerable groups may need to be protected from pressure to reduce water use too far.

All new homes built to a high standard – participants were accepting of new homes being built to a high standard. They felt the cost of this could be passed on to the homeowner.

Legislation to ban non-water efficient appliances – many participants expressed surprise at why non-water efficient appliances were still available, and wanted the Government to regulate more actively.

Grants and incentives to encourage homeowners to retro-fit – while compulsory retro-fit was seen as too interventionist and costly, it was felt that grants should be made available to encourage the public to retro-fit their homes.

Widespread distribution of water efficiency packs from the water companies - water efficiency needed to be made convenient with the most effective devices being distributed free of charge.

In response to the education and top down measures the public said they would look to alter their own perceptions of water as a resource, as well as police domestic water use more actively.

3 Research aims and process

3.1 Aims

The Environment Agency commissioned Ipsos MORI to explore what would be publicly acceptable in ensuring the current development in the Thames Gateway is water neutral². We need to understand which of the various policy options available may be the most effective in delivering water neutrality, and identify any additional approaches that may help towards reducing local public demand.

In order to achieve this overall goal, the brief outlines three areas for the inquiry:

“Baseline”: Gauge existing public attitudes and behaviours towards (current) water consumption among communities in the Thames Gateway region and what is driving them (for example, household composition or perceptions of water stress);

“Business as usual”: Anticipated attitudes and behaviours towards water consumption looking ahead, both *spontaneously* and *prompted* (in response to stimulus data outlining the pressures on water supply in the region (for example climate change, population increases). How, if at all, does information and deliberation shift people away from their baseline attitudes and behaviours towards a more sustainable approach?

“Scenario responses”: Public appeal and feasibility of various demand reduction strategies and policy options under pathway scenarios identified by the Environment Agency.

3.2 Process

In response to these aims, Ipsos MORI proposed a deliberative research project. The project was comprised of the following elements:

Setup phase and desk research: This phase included a review of existing research into attitudes to water and water efficiency. A key piece of research was a project commissioned by the Consumer Council for Water (CC Water), upon which this project builds. In the set-up phase we also designed and agreed the following documents: a recruitment specification for fieldwork (see Appendix A); facilitation plans for the fieldwork (see Appendix B), stimulus

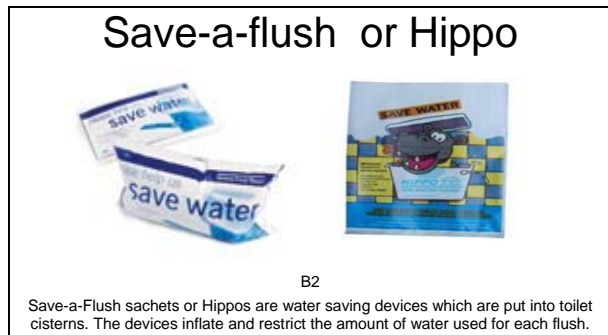
² For the purposes of this project it has been agreed that the Thames Gateway would be water neutral if the total water used after new development is equal or less than total water use in the Thames Gateway before the development

materials for fieldwork, a polling questionnaire and a tasking pack.

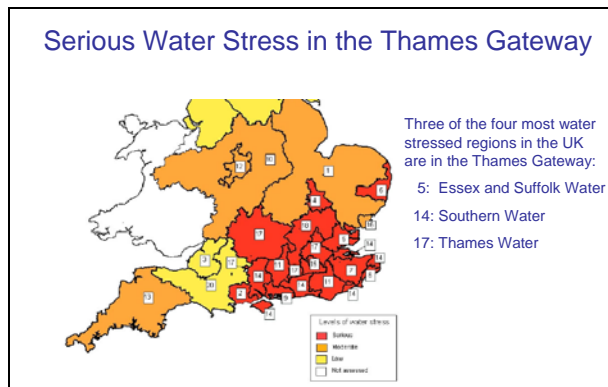
Regional focus groups: Six two-hour focus groups were held in three locations (Stratford, Chatham and Basildon) across the Thames Gateway. The participants recruited were broadly representative of the region (see Appendix A for recruitment specification and details of participants). The discussion groups explored current attitudes and behaviours in relation to water as a resource and water efficiency. Stimulus materials were used to prompt for possible scope for change in these attitudes or behaviour.

The stimulus materials included details of domestic water use and where savings could be made, as well as a short presentation which outlined the Thames Gateway development and the rationale for moving towards water neutrality. Extracts from these materials are shown below.

Showcard from discussion group



Slide from stimulus presentation



Tasking phase: Participants left the discussion groups with a task pack. This included the following:

Information pack – this was a more detailed version of the slides included in the presentation. It was designed to encourage debate and prime participants for further discussion at the water summit (see below);

A water diary – to record their household water use for one week. The first half of the week they were asked to continue to use water as normal. In the

second half they were asked to try different behaviours or devices (see below) designed to save water. They were also encouraged to record any thoughts or feelings they had from doing this experiment;

Water saving devices – these were devices designed to save water or remind householders to do so and included:

A shower timer;

A 'save-a-flush' bag which is placed in the toilet cistern and saves up to 1 litre of water per flush;

A low flow shower head;

Tap aerators to reduce the flow from taps;

A fridge magnet reminding householders to save water;

An Environment Agency water efficiency poster depicting a house, showing how much water different activities use and how water use can be reduced.

One in three householders completed and returned their diaries in the freepost enveloped provided. This response rate was in line with expectations. An extract of one of the diaries is shown below.

Page from diary

Ipsos MORI 13

My water diary

Please write down on pages 13-14 any feelings you have or observations you make from keeping your water diary?

How easy was it to change your behaviour in the second half of the week? What made it easy or hard to do? Did you notice a reduction in the amount of water you used?

Did you use the water efficiency devices supplied? How easy were they to use? Would you continue to use them?

Did you come up with any water saving ideas of your own?

Are there any further measures you would consider taking?

In general, how, if at all did the week affect your thoughts and habits about water use at home.

Please provide details in the space below:

A very busy week - not much time to really think that much about saving water. However, I did try some of the water saving devices that were given. The shower timer was the best for me as I did not have a clock in the bathroom and I am sure that I have spent less time in the shower. I tried the tap aerators but felt that they did not really work for me. I just spent longer waiting for the amount of water I needed. This idea may be good for some people that are not aware that the water they use is so wasteful. I have no time to look at shower heads. The save-a-flush bag is easy to install and causes no problems, so if they save water then that's good.

Have you tried the water calculator at www.diy.com or the water calculator at the back of the diary

Water summit: Half of the participants who attended the discussion groups were invited back to attend a four hour workshop at the Design Museum in London. Those who were invited back were selected to ensure a representative sample of the Thames Gateway population.

In the first half of the workshop participants were asked to reflect on the tasking phase and identify from their experiences those measures they feel would be most effective in reducing water use in the Thames Gateway.

In the second half of the workshop, representatives from Communities and Local Government and the Environment Agency presented two possible scenarios for achieving water neutrality in the Thames Gateway. The scenarios are detailed in section 6.1. Participants were asked to consider the pros and cons of each and arrive at what would be their preferred solution.

Polling questionnaire: Participants completed a questionnaire at the start and end of the discussion groups to capture their attitudes to water as a resource and how best to manage it. Those participants who took part in the water summit also completed the same questionnaire at the start and the end of the summit. This allowed Ipsos MORI to track the impact of the deliberative process on participants' attitudes.

3.3 Analysis

At both the discussion groups and water summit, note-takers were present to record key points in terms of what the participants said. Our analysis has been largely based on these notes. In addition to this we have reviewed the data that came out of the water diaries and the polling questionnaires.

It should be noted that the polling questionnaires are indicative of participants' feelings on the day. They are not a statistically robust poll of residents in the Thames Gateway.

The project team held three internal debriefs (one following the discussion groups, and two following the water summit) to analyse our findings and develop the conclusions and recommendations for this report.

4 Current attitudes and perceptions

4.1 Perceptions of water as a resource

The research showed that the participants' attitudes to water appear to be evolving at present. A sizeable minority seemed to be shifting from a position where water was seen as cheap and abundant resource, to one where water was seen as more scarce and would have to be managed more effectively.

The majority of participants continued to perceive water as a right as opposed to a commodity. It was seen as essential to life and it was taken for granted that when you turn the tap on it would be there. However, there was little understanding of how it arrived there.

Again the majority felt water was a cheap and abundant resource. Many participants believed Britain to be one of the wettest countries in Europe, and this had shaped their view of water as an abundant resource (in this country at least).

A further factor that encouraged the view that water is abundant is that it is not metered universally. This set it apart from other utilities such as gas and electricity. It was seen as relatively cheap in comparison to these utilities, which again reinforced the idea it is plentiful.

"I think if it's on a meter it makes a difference, if the phone was free you'd use it differently, and it's the same as if you have a meter."

18-39, C2DE

However, the water shortages of recent years had challenged some of these perceptions. This was more visible with participants from Kent and Essex than in London. They displayed a higher awareness that their region had suffered from water shortages in the recent past (both in the group discussions and through the polling questionnaire). However, to some it seemed an anathema to talk about water shortages when the region is surrounded by water.

In Kent and Essex there was a higher level of spontaneous discussion of what potential solutions to the water situation might be. This indicates that participants had discussed or thought about the issue prior to the groups.

Some participants looked to supply side solutions such as new reservoirs, desalination or transporting water from other parts of the country. They also mentioned leakage although did not focus upon this as an issue.

Other participants countered or tempered the arguments for supply side solutions. They did not know where the water would come from to fill new reservoirs, and felt

that desalination and schemes to transport water would be costly and impractical. These participants placed greater emphasis on demand side solutions.

Many participants (including those arguing for supply side solutions) seem to be resigned to the fact that compulsory water metering would be introduced to try to address water shortages in the region. They were sceptical over how much investment would be placed in other demand side options that might recycle grey water.

I think water meters will be imposed upon us, because it will cost too much to put in the correct infrastructure to save all our waste water. It will happen a long time before they start saving all our rain water

60+, ABC1

Across the discussion groups participants voiced negative feelings about water privatisation and the ownership of water companies by foreign companies. They perceived the water companies and their owners as serving the interests of shareholders rather than the public. Participants called upon the government to manage the situation and guard against water shortages.

"We cannot live without water, so it's the Government's job to look after it."

60+, ABC1

Participants felt there was a lack of leadership and that too many organisations were involved. While some participants were aware of the Environment Agency, in particular older and more educated people, they had little understanding of its role in terms of managing water resources. Any references were to the Environment Agency were in relation to its role in flood risk management.

4.2 Domestic water use

4.2.1 Awareness of domestic water use

The majority of participants claimed to be aware of the amount of water they use (approximately four out of five according to the polling questionnaire). Awareness cut across different demographics such as gender, and social background. However, this did not necessarily mean they were particularly efficient in their water use.

In general those who were less aware tended to be younger participants. Some of these lived with their parents and did not take ownership of household affairs. Others, however, seemed to be 'time poor', balancing a family with full time work and leaving them little time to think about their water use.

Those participants who claimed to be aware of their water use referred to a number of factors that had prompted or raised their awareness:

The presence of water meters in the home;

Publicity around the recent drought of 2004-06;

Lifelong attitudes in terms of waste; and

A wider global perspective of issues around water.

Water meters were critical in raising awareness of water use for those participants who were on them. It was seen as an effective tool in raising awareness.

"I think about it when my boyfriend puts the dishwasher on half full, and I think you could've waited a couple of hours. But then I've always been on a water meter."

18-39, C2DE

The 2004-06 drought, and previous water shortages and associated hosepipe bans also had an impact in raising awareness of water use. As already noted participants in Kent and Essex seemed to be more conscious of the drought than in East London. This was possibly because they were more likely to have gardens. They spoke spontaneously about not being able to water their lawns or not putting out hanging baskets. These experiences had focused their attention in terms of the amount of water they use.

For some participants awareness of water use was a result of attitudes that had been learnt over a lifetime. This mostly, but not exclusively, related to older participants who had lived through the war and rationing. They were discouraged from a young age not to be wasteful. This applied to water as well as other areas of their life. As well as raising awareness of how much water they used this also encouraged them to

be more water efficient. One older man described how he had been in the merchant navy and this had taught him to be mindful of how much water he used.

A less frequently mentioned factor, but important to a few participants, was a wider global perspective in terms of issues around water. They noted that other countries suffered water shortfalls and people in these countries valued water differently to Britain. This perspective had raised their awareness of how much water they use. One woman commented that her partner was from Zimbabwe, where there were serious problems in terms of water shortages, and this had made her more aware of her own water use. Another woman regularly spent time visiting relatives in Jamaica where she said the tap was turned off for two hours.

In the discussion groups participants were generally able to accurately rank devices or behaviours that use most water. Interestingly, many participants believed (incorrectly) that taking a bath would use more water or the same as other activities such as washing the car with a hosepipe or watering the lawn with a sprinkler. Participants often expressed surprise at the volume of water used by these and some other activities such as brushing your teeth (with the tap running) or taking a power shower.

Not everyone accepted the figures, in particular some older participants. It was recognised that there are many variables that can affect them. However, for some participants the information provided to them in the discussion groups on the amount of water household activities use encouraged them to modify their behaviour in the tasking phase.

4.2.2 Levels of water efficiency

Many of the participants said they did their bit to try and save water. This could be observed throughout the sample but was particularly strong amongst older participants and those on water meters. Participants described a variety of means through which they tried to save water in the home. These included:

- Hippos, save-a-flush bags or bricks placed in the toilet cistern;

- Water butts;

- Shorter showers;

- Dual flush toilets;

- Turning the tap off when brushing their teeth;

- Using cooking or washing-up water on the garden;

- Changing plants in the garden to drought resistant varieties;

Checking energy efficiency ratings of products;

Letting the lawn die in the summer; and

Washing the car with a bucket (although men would mostly rinse this off with a hose).

While many participants were aware of how they could save water, and made efforts to do so, it was recognised that some habits were hard to break. For instance several participants mentioned they forget to turn off the tap when brushing their teeth or would instinctively flush the toilet, even when not necessary, for example to get rid of toilet paper.

Families, especially those in the higher social grades and with teenage children, were less likely to be water efficient. One working mother described herself as extravagant in terms of her water use. While she sometimes felt guilty about this it did not stop her.

“I don’t wait for a full load. If something needs washing. It needs washing.”

40-59, C2DE

4.2.3 Factors influencing water efficiency

A number of factors emerged in the discussion groups which shaped people’s attitudes in terms of their domestic water use and water efficiency. They are summarised in the table below.

Factors that encouraged water efficiency	Factors that discouraged water efficiency
The presence of water meters and the motivation to reduce cost	Aspirations in terms of home or lifestyle
Negative attitudes to waste	Presence of teenage children
Reminders from partners or parents	Lack of sustained media attention
Reaction to the recent drought and media attention	Lack of financial incentive to act
‘Green’ lifestyle or attitudes	Perceived lack of action by the Government and water companies
Action by local councils / water companies	

Reasons for being water efficient

Many of those participants with water meters acknowledged it had made the difference in terms of being more water efficient. They had a financial incentive to reduce their water use. They had changed their behaviour or bought simple water saving devices such as hippos or water butts to reduce their water bill.

“You are more careful on a meter. You know how much it’s costing you, every time you turn the tap on.”

60+, ABC1

“We changed to a meter, and now do full loads, and shower instead of wasting water.”

60+, C2DE

Some participants had inherited water meters when they moved into a new home while others had contacted their water company to have it installed. In particular older households, which typically comprised of a couple or a single person, recognised it could save them money.

Older participants felt that meters were suitable for their situation, not only because of the composition of their household but also because they were more conscious of waste than younger people. They came from a generation when water was not ‘on tap’. They had lived through the rationing of the 1940s and it has been instilled in them to guard against waste. However, negative feelings about waste also encouraged younger participants to be more water efficient, in particular mothers.

Indeed women often found themselves in the role of policing water use. For the most part they did domestic chores including the washing-up and laundry.

“I control it. My husband doesn’t know how the washing machine works – when the kids were small I would do half loads but now I think twice.”

60+ C2DE

Persistent reminding was a common tactic used by some wives and mothers to encourage others in their household to be more water efficient and in many cases they achieved results. When it came to policing children’s water use, most parents felt they were able to do so up to age of about 10, but found it much harder to influence teenagers.

Some participants acknowledged that the drought of 2006 and lack of rainfall in the South East in recent years had changed their behaviour. They had picked up on messages in the media to save water.

“I’ve only been worried about it since I’ve come over from Ireland ... Last year and the year before, there has been a water shortage, and they keep banging this message out, and its like a subliminal message and you start to take on this role of being more frugal.”

18-39, C2DE

Media discussion of standpipes in the street had kick-started some participants into changing their behaviour, in particular those who could remember the 1970s when these measures were last in place.

A few participants, mostly in their 30s and 40s embraced water efficiency as part of a wider green lifestyle. One woman who had three water butts, a water saving gel in the garden and kept a glass of water to brush her teeth with (as did her nine year old daughter). She led a green lifestyle, but wanted to do more.

‘My home was built in 1905 and I would love to swap it for an eco home. I like the idea of using water from the washing machine to flush the toilet.’

40-59, ABC1

Finally a number of participants spoke of action by both local council and water companies to encourage water efficiency. One man had bought a water butt because his local council had been doing them cheap while others said they used hippos as they had received one free through the post.

Reasons for not being water efficient

One of the key factors that prevented participants from being more water efficient was aspirations and comfort in terms of their lifestyle and home. They had become accustomed to labour saving devices as dishwashers and were unwilling to relinquish them.

“Nothing would stop me using my dishwasher.”

60+, ABC1

Similarly those participants with power showers enjoyed the experience and were not prepared to compromise on comfort.

“I’ve tried both [electric and power shower] and there is so much difference, the power shower is great.”

18-39, C2DE

Domestic aspirations had also led some participants to ignore last year’s drought

restrictions. One man described how he had broken the hosepipe ban because he wanted his garden to look good for his child's christening. As far as he was concerned he paid his water bill and was entitled to use as much water as he wished. This was a common justification used by more water prolific participants.

Other participants made trade-offs in terms of their water behaviour. One older man had continued to water his garden during the hosepipe ban because he lived by himself and so used less water than many households.

The presence of older children and teenagers in the home meant some homes were not as water efficient as they could be. While some parents noted that it was easier to educate and influence younger children, it was felt that teenage children showed little interest in being water efficient and in some cases abandoned good practices they had been taught.

"At the age of seven you can manipulate them. But all of a sudden they're leaving the tap on. Now and again I remind them. 'Oi turn it off.'"

40-59, ABC1

It has been noted how the publicity around the 2004-06 drought raised awareness of domestic water use for some participants, and encouraged greater water efficiency. However, the absence of a sustained media campaign, coupled with messages that the drought was over, meant some participants no longer felt any impetus to continue their efforts to be more water efficient. They had beaten the drought and did not see a long term goal for water efficiency.

For some participants, in particular those from middle class backgrounds, there was simply not the financial motivation to be more water efficient. Water was seen as relatively cheap and so there was no impetus to try to save water and reduce their bills. This was weighed against what was seen as a significant outlay in terms of installing a water efficient bathroom. One business manager felt the Government could do more to get round this by offering incentives.

'From a business and personal point of view I'm looking for tax breaks. If there were incentives for installing eco-friendly toilets I would use them.'

18-39, ABC1

The Government was also criticised for not doing more to ensure that new homes were built to a higher standard. To some extent this was an example of participants passing the buck. There were a number of participants who did not have the time or inclination to engage with the issue themselves and felt it could be tackled through Government regulation of the house building industry.

Finally the water companies were criticised for not doing more to address leakage, although feelings were not as strong on this issue as we had expected.

4.3 The Thames Gateway

In the discussion groups, participants were asked where they came from. Participants identified with particular towns, local authorities or counties. Not a single participant identified with the Thames Gateway, and some even actively dismissed it.

“We are not in the Thames Gateway, that’s a political idea.”

60+, ABC1

There were indications of a geographical split in terms of awareness of the Thames Gateway. This split was between participants in East London, who had a very low awareness of the Gateway, and those in Kent and Essex, where it was higher.

The few participants in East London who had heard of Thames Gateway had a very basic understanding of its geography or the regeneration plans for the region. The most common perception was that it was something to do with the Thames Barrier. The London participants were largely aware of the regeneration that was taking place on their doorstep as part of the Olympics but did not associate this with the Thames Gateway.

The majority of participants in Kent and Essex were aware of the Thames Gateway. Those participants who were aware of the Thames Gateway referred to the geography that it covers, the Olympics, the planned increase in house building and job creation.

Attitudes to the Thames Gateway were mixed. Those participants of working age were generally positive about job creation and economic prosperity, in particular younger participants. However, increases in the volume of housing attracted negative comments from many participants in Kent and Essex.

For some this was linked to negative attitudes about increased migration into their areas, in particular of East Europeans. Concern was also raised that proposed plans for house building in the region would result in towns merging into one and the formation of concrete jungles.

This is not to say that participants were not positive about the idea of regeneration or recognised the need for it. Participants in Basildon, in particular described the town as a dump and having been neglected. However, it was felt the focus of regeneration should be on improving existing areas rather than adding to them.

Participants also spontaneously raised concerns over the impact that the extra housing would place on water supplies.

“The amount of building work the Government have commissioned and they haven’t got enough water to support it”

18-39, C2DE

‘I don’t understand why they are building more housing when we have water shortages’

40-59, ABC1

A further concern was voiced, by a minority of participants as to where houses would be built.

‘Another thing is that there will be so much flooding, cos we would have to build over so much land, there will be nowhere for the water to run off’

60+, ABC1

All of these factors in combination: concrete jungles; water stress and flood risk; meant there was a prevailing negative feeling towards building new homes in the Thames Gateway. However, it was accepted that many areas needed to be revitalised and would benefit from new jobs.

4.4 Customer segmentation

In 2006 CC Water commissioned a piece of deliberative research to gain a holistic overview of consumers' awareness, attitudes and behaviours towards water. Customers were segmented in terms of their propensity to engage with water efficiency. This was achieved through analysis of psychographic variables such as personality, lifestyle, values and attitudes.

The two key determinants in this segmentation were people's *willingness* or not to take action, and their *ability* to do so. This created four segments:

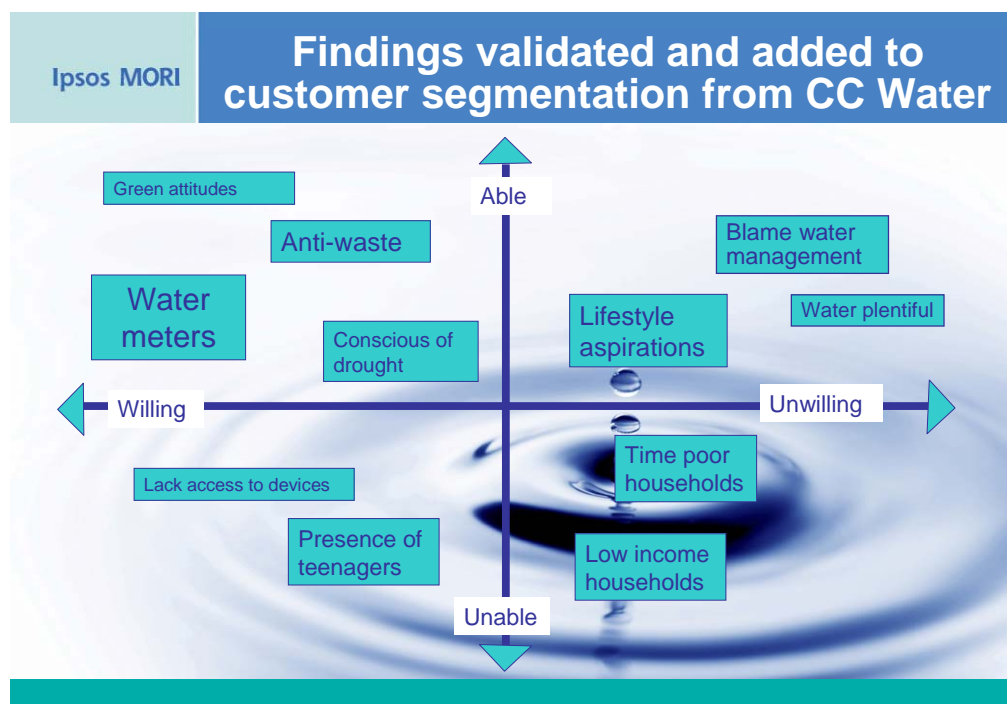
Willing and able;

Unwilling but able;

Willing but unable;

Unwilling and unable.

The research findings from this project validated this segmentation, and many of the key factors in these segments. However, some refinements were made in respect to our sample. The refined segmentation is shown below.



Further details of the segments are given below.

Willing and able - Many of the participants in this segment had water meters and therefore increased awareness of their water use and a financial incentive to engage with the issue. Others were not motivated by cost, but negative feelings about waste or positive feelings about the environment.

One factor not identified in the CC Water research was an awareness of water stress (primarily in connection with the drought) which we found motivated some participants to engage with water efficiency.

Like the CC Water research we found that a lot of participants in this segment were older people who had the resources, time and inclination to act.

Able but unwilling - Participants in this segment had the resources and knowledge as to how to take action but frequently did not. They were reluctant to engage with the issue either because they expected to be able to live a certain way or because they simply did not accept there was a water shortfall. Either way they frequently shifted the blame for the situation on to the water companies and the Government in terms of a perceived failure to manage water resources either through supply side solutions, reducing leakage or ensuring new homes were built to high standards in terms of water efficiency.

Once again like the CC Water research we found that a lot of participants in this segment were in the middle life stage in terms of age.

Willing but unable - Participants in this segment who were open to taking responsibility but were unable to due to circumstances, such as the presence of teenage children whose water use they were unable to police. Other participants lacked information on what they could do or awareness of the water they used.

Unwilling and unable - Those who were unwilling and unable were often 'time poor'. This could be for a variety of reasons but include family commitments. Some on low incomes, in particular larger families, felt they did not have the resources to be water efficient and were fearful they would be penalised under meters.

5 Scope for change

5.1 Perceptions of water as a resource

In the discussion groups the moderators showed participants a short presentation on the Thames Gateway. The presentation introduced the idea of water neutrality and the rationale behind the policy.

Before the presentation participants were asked to spontaneously describe how the region might change in the next 10 or 20 years. Future water resources were a key concern for some participants, although this should be set against the fact they had previously been discussing their attitudes to water as a resource and their own water consumption behaviour. They felt the region would suffer from more frequent water shortages and water would be perceived as increasingly scarce. The key reason behind this was increased demand, but participants also spoke about climate change and failures to tackle leakage.

The increase in demand was strongly linked to immigration to the area, and to a lesser extent raised expectations in terms of people's homes (for example more bathrooms and power showers).

“As a society we're becoming more affluent. There are lots and lots of properties going up. As a generation we're putting more demand on the system.”

18-39, ABC1

A few participants also felt climate change would result in a higher number of droughts putting pressure on water resources. They anticipated that people would have to adapt by using drought resistant plants, and that increasingly there would be fewer green spaces with gardens being paved over.

For many participants in Kent and Essex, the presentation shown in the discussion group on the Thames Gateway, raised existing concerns about water stress. Once again participants debated supply side versus demand side solutions.

Many younger participants expressed shock and surprise at some of the facts in the presentation in terms of rainfall, in particular some comparisons made with Syria and Sudan. This seemed to encourage them to reassess their opinion of water as an abundant resource.

“You have made it more of a concern than it was when I came through the door, how you should save water, and the thing that caught me was the Sudan and Syria, its shocking!”

18-39, ABC1

The polling questionnaire also indicated that participants reassessed their perception of water as a resource. One in ten participants changed their opinion during the discussion group as to whether their region currently suffers from water shortages, which made it the majority opinion. Fear of future shortages also increased, with three out of five saying they were very concerned about this at the end of the group compared to two out of five at the start.

5.2 Scope for change in domestic water use

5.2.1 Initial responses from discussion groups

Participants in the discussion groups were prompted with a number of measures (some appliances and some behaviour changes) that could save water. The reaction to these devices was largely positive, and the subsequent discussion persuaded some participants that it was easier than they thought to save water.

The polling questionnaire showed that three out of five participants felt it would be very or fairly easy to reduce the amount of water they used in the home before the discussion group started. This increased to four out of five at the end of the group.

The key factors that seemed to dictate participants' reactions to these devices were effectiveness, convenience and cost. All participants were concerned that the devices should be effective, but convenience was a greater priority for younger participants with families and busy lives. A case in point is the Water Green.

Older participants were enthused about the 'water green' a siphon that allows householders to recycle bath water (shown opposite). At a cost of £20 some felt it was reasonably priced but others felt the water companies should provide it free of charge or at a discounted price of £5. However, the water green drew a less favourable response from many younger participants with families who said it sounded like too much hassle.



Those with families were more impressed with devices such as the water crystals or hippo. In their favour they required little effort to use but could result in relatively large savings over time. However, others (including those who currently had them installed) expressed concern over how effective they might be. They feared they might have to flush twice.



The water meter was seen by many as critical in encouraging greater water efficiency. However, some participants felt its impact would be limited in terms of larger families, in particular those with teenage children. One woman commented that her son had two teenage boys and both he and the boys played a lot of sport. They would shower first thing when getting in and the washing machine was always on.

Greater awareness of how much water different behaviours or appliances used was seen as an important factor in encouraging people to reduce their water use. For instance many participants expressed surprise at how much water washing the car with a hose used in comparison to a bucket.

“It’s changed my view seeing how much water the hose used.”

18-39, ABC1

5.2.2 Responses from tasking phase

As noted above the participants seem to come away from the groups with a more optimistic attitude as to how easy it is to save water in the home. However, this optimism seemed to have ebbed away again at the start of the water summit, back to what it was at the start of the discussion group. There was no apparent explanation for this in terms of the participants’ demographics or their household composition. Interestingly, optimism rose once again at the end of the water summit.

Despite this ebb and flow in optimism about how easy it is to save water, the feedback from the tasking phase was largely positive as to scope for change in reducing domestic water use. The majority of participants found they had saved water in the experiment. Seventeen of the 22 participants who returned their diaries had made some sort of saving. A crude analysis of the diaries showed that average consumption per person per day fell from 150 litres per person per day to 100 litres per person per day. A saving of 50 litres or about five buckets of water!

Volume of water saved per person per day



However, the reader should bear in mind this was not a scientific experiment. The diary included a water calculator to help participants estimate their savings and the extent to which we were able to verify these estimates was limited. The conclusion from the diaries (and indeed feedback at the summit) is that there is scope for participants to use less water.

Analysis of the diaries and indeed feedback from the summit shows that the sample broke down into three groups in the experiment: those who were not able to reduce their water use at all; those who felt they had made relatively small savings; and those who felt they had made larger savings. Those who were unable to save water represented about a quarter of participants, small water savers half the sample and large water savers about a quarter. Further details of the groups are outlined below.

Unable to reduce water use

This group represented a minority of the sample (about a quarter). Participants who said they were unable to reduce their domestic water use were mostly older participants, often with water meters, who were already conscious about their water use and doing all they could.

“Since installing a water meter 5 months ago I have been very conscious of water usage and cannot reduce anymore”

60+, ABC1

They did not achieve savings through the water efficiency devices included in the task pack. This was because they either already had them in place, the devices could not be used with their fixtures or they found them to be ineffective.

“The showerhead just meant that we couldn’t actually stand under it because the water wasn’t powerful enough to reach us in the bath where the shower is positioned.”

40-59, ABC1

Small water savers

This group seemed to constitute about half the sample. Again it included many older participants but it also included younger couples and some families with teenage children. In general these participants were aware of how much water they used, sometimes through meters, and felt there was little more they could do to save water.

“We use water economically. For example, brushing our teeth and not letting the water run. Making sure there is a full load in the washing machine. We are conscious of the water we use because we have a meter.”

18-39, C2DE

However, despite being conscious of the amount water they used and being water efficient, they did seem to identify small ways in which they could change reduce their use. These included:

- Steaming vegetables in the microwave;
- Cooking rice by absorption method;
- Using a bowl for washing-up;

Flushing the toilet less often;

Using the shower timer included in the pack; and

Using the save-a-flush bag in the toilet cistern device.

Some, but not all, of the participants had found the shower timers and either/or the save-a-flush bag to be helpful in allowing them to reduce their water use. The tap aerators were not a success with this group, either because they could not be installed or because they felt they ended up using the same amount of water anyway. The shower head also proved to be unpopular. Some participants could not fix it to their shower while others found it was not effective.

“The showerhead was a no no. It took twice as long and had no power. Forget it.”

18-39, ABC1

Some of the participants in this group were willing and able to make more substantial changes to the amount of water they used. However, their efforts were undermined by their teenage children.

“My daughters have no respect for the amount of water used. I have turned into a miserable frustrated mother trying to get the message across to them.”

18-39, ABC1

“Only the wife was sympathetic. The kids were like ‘you pay for it so what’s the point?’”

18-39, ABC1

Larger water savers

The larger water savers tended to be single person households, or couples with no children or young children (aged under 10). Single-person or childless couples had more time to think about the issue and act, while it was easier for parents with young children to police their behaviour, than it was for those with teenagers. They found the following things worked:

Greater awareness;

Washing fruit and veg in a bowl;

Using a steamer for vegetables;

Using a bowl for washing-up;

Using the devices in the task pack.

Many of the participants in this group said the experiment had opened their eyes in terms of how much water they wasted, even some participants who had previously thought of themselves as conscious of their water use. Heightened awareness had led these participants to change their behaviour.

“I didn’t realise just how much water you wasted rinsing fruit and veg. In the 2nd week I used a bowl of water.”

18-39, ABC1

There was also strong up-take by participants of many of the devices included in the task pack. In part this was because they found them easy to install and compatible with their water fittings, but also because other members of their household were also enthused. The shower timers in particular proved popular with parents of younger children.

“The shower timer is a great success with the kids and educating tool for saving water. I will continue to use the toilet bag and timer.”

18-39, C2DE

One interesting observation was that there heightened awareness of the issue had encouraged some participants to become advocates for water efficiency in their homes and communities. The knowledge they had acquired in terms of what different activities used had empowered them.

“I didn’t realise how much water it took washing a car, and I’ve nagged my Dad and he’s changed what he does.”

18-39, C2DE

“I was in the cinema this week, and someone was making me a coffee and left the water running. I watched him for a while, but then I told him and he switched it off. I would never have said anything before.”

18-39, C2DE

5.2.3 Barriers to change

The water diaries and the water summit identified a number of barriers to change in terms of domestic water use, some of which have been identified in sections 5.2.1 and 5.2.2. These barriers and possible ways in which they might be negotiated are

discussed below.

Doing all I can – as already noted some participants felt they were doing all they could, at least in terms of changing their behaviour. The participants that fell into this groups were frequently older participants on water meters but not exclusively so, as this diary entry shows:

“As a family in the South East with last year’s shortage still in our minds I think we already have a water saving system in place.”

40-59, ABC1

Some of these participants did however feel they could make further savings through retro-fitting.

Concerns over effectiveness of devices – many participants said the low flow showerheads or tap aerators were not suitable for their appliances. Some participants who did fix them were sceptical as to whether they saved water as it took them longer to shower, or run the water they required.

“I found the showerhead pretty useless. It took twice as long to have a decent shower.”

60+, ABC1

This barrier might be negotiated through further information on the benefits of the devices.

Changes were not sustainable – some participants expressed concern over whether they would maintain changed behaviours in the long term. For instance not flushing tissues down the toilet or washing-up more often instead of using the dishwasher.

“Remembering to change is difficult. It’s a process to get used to, in order to change old routines.”

40-59, C2DE

Participants felt they would be more likely to incorporate behaviour changes into their routine if they concentrated on just making one change at a time.

Time pressure and busy lifestyle – lack of time proved to be a barrier for some participants in terms of from engaging with water efficiency.

“I am a water abuser. I’ve got five kids. ... I’m not frightened of change I just didn’t have the time.”

40-59, C2DE

These participants were unlikely to change their behaviour but some did make use of the save-a-flush bag as it required little effort to install.

Teenage children – participants with teenage children frequently complained of the difficulties in getting them on board, and some also felt they undermined their efforts by spending longer in the shower or leaving taps running.

“If you’re looking after younger kids you have a lot more control over the time they spend in the shower. With teenagers, forget it”.

18-39, C2DE

It was felt this barrier could not be easily overcome, but again fix and forget solutions would be of assistance. There was also discussion of the need to support parents through education in schools and public information campaigns.

5.3 Scope for change in views of The Thames Gateway

Participants were surprised by the scale of the Thames Gateway development as outlined in the discussion group presentation. The potential impact on the economy in particular surprised and impressed some participants.

However, the scale of the house building programme prompted negative attitudes from participants. Those in Essex and Kent in particular, expressed concern over what the additional housing would mean in terms of the environment.

“Is the whole of the UK gonna be like lego land? No greenery just blocks everywhere.”

18-39, C2DE

A sizeable minority of participants were left baffled and indeed angered as to why significant numbers of new homes were being built in areas that the authorities recognised as being water stressed. This created a backlash from a few participants who were most pro-active in terms of being water efficient.

“It makes me angry. They’re building homes and making the problem worse”

40-59, ABC1

For other participants, who admitted they were extravagant water users, the stimulus material seemed to give them a get out clause.

“It makes you rebellious. What’s the point in me doing my bit?”

40-59, ABC1

The presentations in the discussion groups introduced the idea of water neutrality. Participants were broadly supportive of better management of water resources, and to this end water neutrality was seen as a desirable goal. However, they were sceptical as to whether it could be achieved.

“If you are going to try and make something water neutral you are going to have to get current house hold usage down which I think will be a problem, I haven’t seen any drive or anything.”

18-39, C2DE

“It’s written by an academic with his head in the sand”

60+, ABC1

Resentment was also expressed at the fact that water neutrality put the onus on the public to reduce their water use. In order for the public to accept greater water efficiency, the Government and the water companies would need to be seen to be taking action as well.

“It has to be a partnership, a two way street.”

40-59, ABC1

“It’s everyone’s responsibility, the individual but also the government and the water company.”

18-39, C2DE

Participants did give consideration to how the situation might be resolved. They looked to the Government to take action. Some of the ideas discussed included putting water efficient devices in new homes as standard, compulsory metering, incentives for people to adopt water efficient devices and wider distribution of these devices.

“They need to make sure new houses have green devices as standard, and everyone is on water meters.”

40-59, ABC1

“It’s like the energy saving light bulbs they give out, if they can do that, they can do it with the hippo bag.”

18-39, C2DE

There was further discussion around the solutions to water neutrality at the water summit. This deliberation seemed to encourage some participants that this was in fact an achievable goal.

“I think it could be achieved. I went away from the other meeting quite depressed. Having seen all these things that could be done though, I feel a lot better”

40-59, ABC1

5.4 Scope for change to customer segments

Section 4.4 details a psychographic segmentation. An objective of the research was to explore the potential for participants to move across segments. Reactions to the tasking phase and the stimulus material on the Thames Gateway highlighted that there was in fact potential for some changes. These are detailed below.

Willing and able – this group were engaged with the issue of water efficiency and remained so. For many the research process reinforced attitudes they already held and encouraged them to take further steps, or to become advocates of water efficiency in their communities. However, some participants in this group were de-motivated by the scale of Thames Gateway development. They felt this undermined their efforts. This needs to be considered in communications.

Unwilling but able – the stimulus material and discussions helped to shift some participants in this group towards the willing and able segment. It raised their awareness of the value of water and its scarcity. While they still looked to a response from water companies and the government, they acknowledged they also had a role to play. The recent drought had encouraged some participants to engage with the issue and possibly move them from the unwilling but able to the willing and able. Others might also shift if climate change does result in more frequent droughts, but were not convinced as yet.

Willing but unable – information on how much water households tasks use and how water can be saved had empowered some within this group to make changes to their water use. This moved them into the willing and able group. Some parents with teenage children were motivated by the stimulus material and discussion but their efforts were frustrated by their families.

Unwilling and unable – there was no discernible shifts amongst the majority of participants in this group. Some on low incomes seemed unable to get past strong feelings that they should not be penalised for using a vital resource, and their fear of having a metered supply. Some of the water efficiency devices could help people in this group to make savings but not necessarily engage with the issue.

6 Planning for change

This section details the public reaction to two scenarios designed to achieve water neutrality. An outline of their preferred scenario is detailed, plus the terms and conditions they placed on it.

6.1 Water neutrality scenarios

In order to facilitate debate the two scenarios presented to the public at the water summit emphasised different policy options. The first scenario, 'Flush and Go', focused on technology while the second, 'Water Watch', relied on different mechanisms to affect behaviour change.

6.1.1 Flush and Go

The 'Flush and Go' scenario included the following:



Mandatory retro-fitting of existing homes in the Thames Gateway. Ninety percent of homes would have dual/low flush toilets and spray taps;

Building all new homes to be as water efficient as possible, with two supply pipes, one for drinking water and another for rain/grey water for toilet flushing;

Less domestic water use at work, which would be achieved through more efficient appliances, retro-fitting and rainwater use; and

Compulsory water meters so residents and businesses would pay for what they use.

6.1.2 Water Watch

The 'Water Watch' scenario included the following:



Education and information to encourage the up-take of water efficiency devices and behavioural change;

Some new homes would be made very water efficient with two supply pipes for drinking water and rain/grey water. Others would be less water efficient but include water efficient taps, toilets and showers;

There would be a more limited retro-fit programme with 40% of homes with dual/low flush toilets and spray taps; and

Compulsory water metering with variable tariffs so residents and businesses would pay for what they use. The tariffs outlined to the participants in the summit were a seasonal tariff and a rising block tariff. A seasonal tariff would mean water would cost more per unit in the summer when resources are at

their most scarce. A rising block tariff would mean that households would pay progressively more per unit of water. Due to time constraints, it was not made clear that overall revenue to water companies would remain the same and so individual bills could decrease as well as increase with the implementation of variable tariff structures.

6.2 Pros and cons of water neutrality scenarios

6.2.1 'Flush and Go'

Pros

The key advantage of the 'Flush and Go' scenario was that it did not require the public to change their behaviour. The retro-fit programme would extend water efficiency to sectors of the population who might not otherwise be willing or able to engage with the issue. There was relatively little objection to the retro-fit appliances themselves, provided they were effective.

Participants were also broadly in favour of making all new homes as water efficient as possible. The idea of two separate water supplies was a popular one, allowing grey/rain water to be used on the garden or for flushing the toilet. However, some participants, in particular older women, did have some concerns about the hygiene aspect of using grey water in the toilet.

"The only thing [problem] could be using grey water in the toilet water. Otherwise there's no argument."

Some participants advocated the fairness of the 'Flush and Go' scenario. They approved of the fact that, where practical, all existing homes would be retro-fitted, all new homes would be built to a high standard and water meters would be made compulsory. Together these measures would create a level playing field, and the onus would not simply be on those who were more water conscious. However, many others objected to the mandatory retro-fit programme as noted below.

Cons

The principle objections to the 'Flush and Go' scenario were that it would be too interventionist and large sections of the public would be unwilling or unable to pay for it.

A mandatory retro-fit programme was seen by some as being too interventionist and would not gain acceptability. Participants were uncomfortable with the idea of enforced changes to their homes, which they had invested time and effort in.

"People's homes are their castles. They're resistant to enforced change in their own homes."

18-39, ABC1

Some participants expressed concern as to whether new appliances would match the colour and style of their existing fittings.

The issue of cost was perceived by many as a negative in terms of the 'Flush and Go'

scenario. Participants were anxious that they would be hit with the cost and this would adversely impact those on low incomes or in older houses (which were perceived as more difficult to retro-fit).

“In old homes the cost of retrofit is the big issue. Why should I as a home owner have to pay?”

18-39, ABC1

It was felt that this issue of cost could be negated to some extent if the Government or water companies offered incentives or grants to install water efficient devices. Comparisons were made to British Gas who help out with the cost of changing boilers, or facilities grants that can be obtained for home improvements such as loft insulation.

A lesser concern was the possible disruption to people's lives that retro-fitting might cause, in particular families with young children or babies. However, others took the view that the disruption would be minimum, limited to a day at the most, and this was felt to be acceptable.

6.2.2 'Water Watch'

Pros

Participants were very positive about the idea of increased education and information.

Education and inclusion of water efficiency into the school curriculum (at primary and secondary level) was perceived as a positive way of encouraging future generations to value water differently. This would also lend support to parents having to remind their children.

“Education is best place to start because you're rearing for the future.”

40-59, ABC1

A number observed how the information they had received in the research process had changed their own position.

“Before I came on this programme I never thought about it or worried about water.”

18-39, ABC1

Participants spoke of the need to make information campaigns effective. They had to include simple ways in which people could make changes in their lives. The delivery of the message was also important. There was agreement that people were more

likely to accept messages from the Government (sometimes at a more local level) than the water companies.

A number of participants took the view Water Watch was more achievable than Flush and Go. They felt the mandatory retro-fit programme would be logistically difficult to organise and implement and that the associated costs would make the Flush and Go more expensive.

As with the Flush and Go scenario participants were positive about the idea of compulsory water meters. It could provide a financial incentive for people to reduce their water use. It would also raise consciousness of how much water was used.

“It’s only [because of] the fact that I’ve got a water meter that I worry. If I didn’t have I wouldn’t care. It’s the only way it’s going to happen.”

18-39, C2DE

It would also create a more level playing field, as it was recognised some people had water meters imposed on them by virtue of moving into a new home or an existing home where it had already been installed. However, compulsory metering coupled with variable tariffs received a negative reaction as detailed below.

Cons

While participants were often very enthusiastic about education and information campaigns they felt this needed to be sustained over a period of time in order to change attitudes.

Participants expressed surprise that not all new homes would be made as water efficient as possible. It was felt the cost of doing this would not be substantial in comparison to the cost of a new home and could be passed on to the buyer.

The principle objection to this scenario though was the use of variable tariffs.

Many participants felt it was unfair if they had to pay more in summer for their water under a seasonal tariff. As far as they were concerned compulsory metering would mean they would already be paying for what they use. In this context seasonal tariffs were seen by many as a way of exploiting the public. Parallels were also made with other utilities which they did not believe varied.

“It’s not fair if water costs more in the summer as you’re paying for what you use. Gas and electricity are not more expensive in winter.”

18-39, C2DE

However a minority of participants felt seasonal tariffs were an excellent idea as they were a very effective way of managing demand at times when water is at its most scarce.

An objection to rising block tariffs came from some participants on low incomes with larger families who felt they would be exploited as the level at which the tariff was applied would not take into account household composition. In contrast it was felt that such tariffs might not influence middle class participants who could afford them without thinking.

These objections possibly represent a knee-jerk reaction to an unfamiliar idea. This was in contrast to water meters, where many participants had experience and knowledge of (either they were on a meter or they knew someone who was on a meter). Time restrictions at the water summit did not allow for more detailed exploration.

However, the Consumer Council for Water has also conducted research into the public acceptability of variable tariffs. Their findings are somewhat mixed. A research project reported in November 2006 found that people were generally unsupportive of the potential use of variable tariffs such as tariffs related to peak/off peak demand, rising block type tariffs and higher prices when restrictions are in place³. A later research project⁴, which explored charging options in more depth than the first, did find some support for the rising block tariff, although not seasonal tariffs. A rising block tariff was perceived as a way in which bills could be reduced, by use of a first 'free' / low cost block. To this end the description of the rising block tariff sounds different to that put to participants in the Thames Gateway research. The description in the Thames Gateway research was of a standard meter charge but with higher blocks for profligate water users. Thus it can be seen that public acceptability of a rising block tariff may vary depending on how it's structured.

³ Consumer Council for Water, *Using Water Wisely – Report of Consumer Findings and Recommendations for Action*, November 2006

⁴ Corr Willbourn Research, *Deliberative Research into Consumer Views on fair charging for the Consumer Council of Water*, February 2007

6.3 Preferred solution

6.3.1 Outline of solution

As outlined in the previous section, both scenarios had elements that the majority of participants supported, and elements they felt would be unacceptable. From their deliberation a third scenario emerged which had very broad if not universal support. It is not, however, claimed that this third scenario would achieve water neutrality.

The scenario comprised of the most popular elements of the two presented to the participants, but they came attached with a number of terms and conditions. In essence the scenario was based upon social marketing / education to prime the public; before introducing a number of top-down measures. The preferred solution is fleshed out below, including a number of terms and conditions that were attached.

Priming people with social marketing / education

Education campaigns were felt to be essential in raising awareness amongst the public of the need to be water efficient. The public needed to be made aware that water efficiency is a long term goal and not a knee jerk reaction to the occasional dry summer. Perceptions, or more correctly, misperceptions of the regional climate needed to be challenged and the consequences of not taking action explained. That is the region would suffer more frequent water shortages, and more draconian measures would need to be in place.

“Education has got to be the cornerstone of it because otherwise you can put all these things in place but without changing attitudes it won’t work.”

18-39, ABC1

While the participants felt shock tactics were necessary to raise awareness of the issue, they felt this should be balanced with positive messages on simple steps that the public can take to help safeguard future supplies. It was felt important to empower the public by raising awareness of how much water household activities use and what the alternatives are.

“People need to feel ownership so that they’re part of the solution rather they feel they are being told to control the situation.”

18-39, C2DE

However, throughout the research process it was argued strongly that the public could not take sole responsibility for the solution and that it had to be a partnership between the public, water companies and the Government. Any education campaign would need to highlight what action the authorities were taking to reduce leakage, make new homes more water efficient and help existing

homeowners become more water efficient.

Acceptance of top-down measures

The participants were accepting of a number of top-down measures from Government to address water efficiency. The key measure was the introduction of compulsory water meters. They were felt to provide an incentive for many to reduce their water wastage, but they would also raise awareness of water use.

However, it was felt that vulnerable groups needed to be protected from cutting their water use too far. For instance some participants expressed concern that larger families on low incomes might be pushed into being less hygienic. They might require water-relief, in the same way older people receive payments to help them with their fuel bills.

Participants did express anxiety that once compulsory metering was introduced the water companies might hike up the cost as people became more water efficient in order to protect profits and their revenues. They argued for strong regulation to prevent this.

In addition the majority of participants did not wish compulsory metering to be accompanied with variable tariffs. As noted in section 6.2.2 they were felt to be unfair as people would already be paying for the water they use. However, the concept of tariffs was a relatively new one for participants. With more discussion together with clearer explanation that any tariff scheme would be revenue neutral, it is conceivable they would be seen as more acceptable over time. It has been observed that work for CC Water shows support for a rising block tariff⁵.

Participants wanted the Government to ensure all new homes to be built to a high standard in terms of water efficiency. This would include dual flush toilets, spray taps, energy efficient devices and use of grey water to flush toilets or water the garden. This was felt to be an easy win in terms of improved water efficiency. The cost could be passed on to new home owners as this would not add greatly to the cost of a new home.

It could be argued that this was the public shifting the buck to new homeowners. However, the participants included owners of new builds who expressed surprise that their homes did not include water efficient devices other than possibly a dual flush toilet.

In a similar vein there was also support for legislation which restricted the types of devices that could be installed.

⁵ Corr Willbourn Research, *Deliberative Research into Consumer Views on fair charging for the Consumer Council of Water*, February 2007

“You’ve got to ask yourself why it’s possible to buy toilets without a dual flush. If the Government are serious about it then why don’t they ban it?”

40-59, ABC1

There were comparisons made with the recent legislation changes in terms of energy efficient bulbs, which received support from the participants. However, they did not broadly support imposed retro-fitting, seeing it as too interventionist, and instead favouring regulation of the market place. This would mean that when people changed their bathroom suite or kitchen they would only be able to buy water efficient appliances.

While the majority of participants argued against compulsory retro-fitting, it was strongly felt grants and incentives should be made available to encourage households and indeed businesses to retro-fit their homes.

The final top down measure that the public wanted to see in place was universal distribution of packs with simple water devices that could be introduced in the home. They did not want the cost of the packs to be passed on to customers and felt the water companies should invest in these from the profits they make.

Bottom-up measures

In addition to the top-down measures the public expected from the authorities they also outlined a number of bottom-up measures they would be prepared to take to work in partnership towards water neutrality.

This included ‘nagging’ and ‘policing’ of water use in the home. However, participants, in particular parents of teenagers, wanted the education / social marketing campaigns in place to support them in this.

Participants also spoke about changing their perception of water as compulsory meters were introduced and the education campaign explained the challenges facing the region in terms of securing future water supplies.

“We don’t have unlimited use of gas and electric do we, so why water?”

18-39, C2DE

6.3.2 Criteria used for selecting this solution

The participants were motivated by cost, convenience and fairness in selecting their preferred solution.

They were searching for a solution which they felt would minimise the cost on households in terms of moving towards water neutrality. They wanted the scenario to be convenient, for instance, sending packs out to households or that new homes are built to be as efficient as possible.

A sense of fairness also seemed to motivate the participants. Compulsory water meters were favoured as it was felt this was a more equitable situation than the current one where a significant minority are on meters, but cannot chose to have them removed. For instance, if they moved into a new build or had inherited the meter from previous occupants.

7 Conclusions and recommendations

7.1 Conclusions

7.1.1 Conclusions from the deliberative research

Current attitudes and behaviour in terms of water consumption

The research showed that attitudes to water appear to be evolving at present. Historically, the majority of our participants had perceived water as an abundant resource, and had not felt an impetus to regulate their use of it. This attitude was encouraged by perceptions of the British climate being the 'wettest in Europe' and the fact, that in contrast to other utilities, water is not universally metered. However, publicity around the recent drought of 2004-06 (and previous water shortages and associated hosepipe bans) had challenged for some the idea that water is an abundant resource, at least in the South East region.

Those who were concerned about water shortages felt that more needed to be done with regard to managing water resources and looked for stronger leadership from the Government on the issue.

The majority of participants claimed to be aware of their water use, although further probing showed many were in fact surprised by the volumes of water used in household tasks. The factors that seemed to raise awareness in terms of water use were the presence of water meters, publicity around the drought of 2004-06, negative feelings towards waste in general and a wider global perspective on how water is valued elsewhere in the world.

These factors not only raised awareness of the amount of water used but also encouraged greater water efficiency in the home. Water meters were seen as particularly effective in that they provided people with a financial incentive not to waste water and focussed people's minds on how they use water.

Other factors that also seemed to play a part in encouraging water efficiency included: persistent reminders from partners or parents (most typically wives, mothers and girlfriends); concern about the environment in general; and action by local councils / water companies to make water efficiency more affordable or convenient.

In contrast, factors that discouraged water efficiency included: people's aspirations in terms of their homes or lifestyle; the presence of teenage children; a lack of a sustained media campaign on water efficiency; a lack of financial incentive to act; and a lack of perceived action from the Government or the water companies in terms of new homes more water efficient or reducing leakage.

These drivers validated the segmentation identified in a research project for CC

Water completed in 2006.

Scope for change in attitudes and behaviour in water consumption

The research identified that there is scope for change in terms of how water is perceived. Participants felt that in the next 10 to 20 years water might be seen as a more scarce resource. They anticipated there would be future water shortages due to increased demand (from rising living standards and immigration). Climate change and failure to tackle leakage were identified as two other factors that might make the situation worse.

The stimulus material on the regional climate and plans for the Thames Gateway showed there was further potential to change attitudes to water as a resource. Facts about the level of rainfall in the region surprised some and encouraged them to focus on the issue. However, a sizeable minority, including those most engaged with the issue of water efficiency were frustrated at the fact that additional housing was being placed in area that was recognised as water stressed. For some this incited a rebellious attitude to the notion of doing your bit.

The majority of participants claimed to have saved water in the tasking phase, However, only a minority (about one in four) felt they had made substantial savings, while about half made minor savings and a quarter did not reduce their water use in the tasking phase. Larger savers of water tended to be single person households, couples with no children, or with younger children. Smaller water savers included many young couples as well as families with teenage children. Finally those unable to save water tended to be older people with meters who felt they were already doing all they could to be water efficient.

There was limited evidence of any geographical differences in terms of water savings, although participants from Kent and Essex seemed more likely to be engaged with the issue initially.

. The key factor that helped the participants to become more water efficient was increased awareness of how much water household activities use. This was backed up by persistent reminding of other household members and simple suggestions on where savings could be made, for example, keeping a jug of water in the fridge.

Barriers to change included concerns over the effectiveness of the devices supplied in the tasking phase (both in terms of fitting them and reducing water consumption); how sustainable some of the changes were in the long run; a lack of time; and a failure to persuade teenage children to get on board. These barriers might be negotiated if the participants received more information on how

the devices worked, if they concentrated on making one change at a time, or if they used fix and forget solutions. The latter solution would help participants who were 'time poor' or could not persuade other household members to change their behaviour.

Planning for change: responses to water neutrality scenarios

Participants were presented with two possible scenarios to achieve water neutrality. The first, Flush and Go, focused on technology with a universal retro-fit programme. The second, Water Watch, sought to influence behavioural change with education and information campaigns plus compulsory water metering with tariffs.

Participants found technological solutions appealing. This was due to their convenience, once in place they did not have to think about them. This would extend water efficiency to some who did not have the time or inclination to engage. However a universal retro-fit programme was seen as too interventionist, and participants were also concerned as to who would bear the cost.

Education and information again had strong appeal, although participants argued it would have to be sustained to change attitudes and support householders policing water efficiency in the home. This should be delivered by the Government (and/or local councils) rather than the water companies.

Compulsory water meters received broad acceptance, from both those who were on meters and those who weren't. It was felt to be more fair than the current system where a significant proportion of the public were on meters but had no choice in this.

However, participants objected to the idea of variable tariffs. If compulsory meters were adopted householders would pay for what they use and so variable tariffs were regarded as exploitative. However, many participants were more familiar with the idea of metering than tariffs. If there was more discussion of variable tariffs in the media, how they might work, and who the likely winners and losers will be, then attitudes might shift. Indeed a research report for the Consumer Council for Water⁶ suggested there is support for a rising block tariff.

⁶ Corr Willbourn Research, *Deliberative Research into Consumer Views on fair charging for the Consumer Council of Water*, February 2007

7.1.2 Conclusions set in wider context

As already noted CC Water commissioned research in 2006 to understand how consumers use water and what would motivate them to engage with water efficiency. In advance of this research they undertook a review of existing research undertaken with consumers on their behaviour and attitudes to water use in the home. The conclusions from the Thames Gateway project are validated by a number of the key points that emerged from the literature review. These are detailed below:

Consumers with water meters generally have more awareness of their water use, and of ways to save water, than unmetered customers;

Older people were less likely to waste water than younger people;

Consumers generally have positive attitudes to simple retro fit devices;

Most consumers (around two-thirds of those surveyed in a MORI poll for the Greater London Assembly) supported a statement to the effect that all households should be metered.

In addition, the findings from the Thames Gateway project validated the customer segmentation presented in CC Water's research.

7.1.3 Limitations of research

It is recognised there are a number of limitations with this piece of research that should be considered when reviewing these conclusions. These are detailed below:

As with any piece of qualitative research, this project is based on a relatively small but broadly representative sample of the Thames Gateway. The project was not designed to quantify attitudes and behaviour towards water but to understand what they are, why they are held and what scope there was for change. In addition, while our sample was broadly representative of the present Thames Gateway population we were not able to include people who would consider moving into the Thames Gateway in future.

We need to treat with caution claims people make in terms of saving water and what they would be prepared to do. There is evidence from the polling questionnaire that the discussion groups raised participants' optimism of what they can or would be prepared to do, but this has ebbed away again by the start of the summit, only to increase again by the end of the day. This said there seems to be clear indications from the diaries that savings were made.

It was not possible for participants to directly experience how a retro-fit programme might work. The devices provided were all self-fit, while the

measures considered under the Water Neutrality study would be likely to require a plumber to come into the house. An exact comparison cannot be drawn between the two. This might have advantages in that the plumber could ensure the devices are correctly installed and explain how they work. However, there may also be negatives in terms of the time and inconvenience of a plumber coming into the home.

Due to time restrictions for the research process, the tasking phase was limited to a few weeks. This means we have a snapshot in terms of behaviour change. We do not know how these behaviours may change over a longer period of time and whether water savings would tail off. However, this point was picked up by a minority of participants who spoke of the need for reminders and questioned how sustainable some changes to their lifestyle might be.

In contrast, the acceptability of some measures might increase over time as people get used to an appliance.

7.2 Recommendations

7.2.1 Preferred scenario

The preferred scenario which received broad support combined the most publicly acceptable elements of the two scenarios presented to the public. This scenario forms the main recommendations from the research.

The preferred scenario included:

1 Social marketing and education to prime the public on the issue of water efficiency

The public needs to understand why water efficiency, in the context of wider water resource management, is a long-term goal and not a short term response to the occasional severe drought. This requires some shock tactics on regional climate and or water stress. However, this should be balanced with positive messages that there are simple steps the public can take to guard against future water shortages and more draconian restrictions.

Any campaigns would also need to emphasise that the Government and water companies are taking measures to ensure new homes are more water efficient, help residents of existing homes to improve their efficiency and reduce the volume of leakage. The drive towards a more water efficient society had to be a partnership between the public, the Government and the water companies.

2 Top down measures from Government / water companies

The participants were broadly supportive of the following top-down measures, albeit with some terms and conditions attached:

Compulsory water meters – meters were perceived as effective in changing behaviour and raising awareness of water use. A compulsory system was seen as more fair than the current half-way house. However, it was recognised that some vulnerable groups may need to be protected from pressure to reduce water use too far.

All new homes built to a high standard – participants were accepting of new homes being built to a high standard. This could include dual flush toilets, spray taps and grey water for flushing toilets and watering the garden. They felt the cost of this would not be significant when compared to the cost of a new home and could be passed on to the homeowner.

Legislation to ban non-water efficient appliances – many participants expressed surprise at why non-water efficient appliances were still

available, and wanted the Government to regulate the market more actively.

Grants and incentives to encourage homeowners to retro-fit – while compulsory retro-fit was seen as too interventionist and costly, it was felt that grants should be made available to encourage the public to retro-fit their homes.

Widespread distribution of water efficiency packs from the water companies - water efficiency needed to be made convenient with the most effective devices being distributed free of charge.

In response to the education and top down measures the participants said they would look to alter their own perceptions of water as a resource, as well as police domestic water use more actively.

7.2.2 Implications for communications from research findings

As already noted, communications have a key role in terms of persuading the public to engage with water efficiency. The following recommendations emerged with regards communications.

Use shock tactics to raise awareness that the South East region is water stressed, but balance this with a positive message, that there are simple steps we can all take to waste less water. It needs to be emphasized that collectively households can have a measurable impact as witnessed in the public's response to the 2006 'beat the drought' campaign.

Water neutrality, as defined under this project, needs to be carefully communicated if it is to receive buy-in. Water neutrality is a difficult concept to sell to residents as it was tied up with the development in the Thames Gateway. The scale of the development was de-motivating to some of those in the region most willing and able to engage with water efficiency. Water neutrality was seen as a worthy aim, but there was a lack of trust/belief that such an aim could be delivered by the Government. It is important to emphasise the need to reduce waste as opposed to reducing water use, to safeguard future supplies in the region. It sounds less interventionist than reducing use.

Refer to the challenge facing the South East region in terms of its climate and or increased demand from lifestyle changes, as opposed to increased demand from large scale house building in the Thames Gateway. Again references to the Thames Gateway development could incite a back-lash

from those most engaged with water efficiency and provide a get-out clause for those less engaged.

Emphasise that all parties are working towards the goal of reducing wastage to safeguard future supplies. Communications need to build a sense of working together in partnership if they are to be accepted by many of those who are able but unwilling to engage with water efficiency.

“In our fast moving hectic lifestyles I don’t think people tend to think much about saving water until they are reminded by adverts or their families. I agree we need to do more to look at saving water to not only save our way of living and environment but also to save money. I think this is a three way plan. It’s not just the responsibility of householders but also the water companies and the Government. ... If we all do our bit I think we should be OK.”

40-59, ABC1

Appendix A: Recruitment specification and sample

The table below shows the target specification in terms of the key recruitment criteria, and the number of participants that attended the discussion groups and water summit within each of the criteria.

The percentages for the discussion groups and water summit are broadly in line with the recruitment specification. There were a higher proportion of water meter users in the discussion groups (50%) compared to the recruitment specification (35%) but this was reduced at the water summit (43%).

	Target agreed on recruitment specification	Discussion group participants	Water summit participants
Number of participants	60	60	28
Location			
London (Stratford)	20 (33%)	21 (33%)	9 (32%)
Essex (Basildon)	20 (33%)	20 (33%)	10 (36%)
Kent (Chatham)	20 (33%)	19 (33%)	9 (32%)
Gender			
Male	30 (50%)	26 (43%)	13 (46%)
Female	30 (50%)	34 (57%)	15 (54%)
Age			
18-39	20 (33%)	21 (35%)	10 (36%)
40-59	20 (33%)	19 (32%)	10 (36%)
60+	20 (33%)	20 (33%)	8 (29%)
Social grade			
ABC1	30 (50%)	29 (48%)	16 (57%)
C2DE	30 (50%)	31 (52%)	12 (43%)
Presence of water meter in home			
Meter	21 (35%)	30 (50%)	12 (43%)
No meter	39 (65%)	30 (50%)	16 (57%)
Engagement with water efficiency			
I always do my bit to save water	30 (50%)	28 (47%)	11 (39%)
I sometime / never do my bit to save water	30 (50%)	32 (53%)	17 (61%)

Appendix B: Facilitation plans

Environment Agency - Thames Gateway water neutrality

Regional group discussions: Facilitation Plan

Summary of regional group discussions

6 x 2hr groups, two on each of three nights (starting at 6.15pm and 8.30pm). Each comprises c. 8 participants (recruiting 10 for 8). Three regional centres: Kent, Essex, London (precise locations to be agreed)

Objectives and coverage

Gauge baseline (spontaneous) attitudes and behaviours towards domestic water use. To understand what hooks to use in any future communications, as well as attractors/barriers to the adoption of efficiency measures

Understand spontaneous perceptions of the Thames Gateway region, and both the severity and causes of any water stresses

Explore the expectations of the public looking ahead (Business as Usual). This will help us identify the scale of the challenge in persuading the public to adopt water efficiency measures.

Introduce them to stimulus material outlining the scale and nature of the water shortage issue in the Gateway region, both now and projected forward to 2016 and beyond.

Explore the effect of this information on perceptions and priorities and prepare participants for further deliberation at tasking and Summit phases.

Timing	Coverage	Materials
10mins	<p>1. Welcome and introductions</p> <p>Welcome participants. Introduce team; outline nature of project; explain confidentiality, housekeeping, and reassure about the “rules” of the event (no right or wrong answers etc).</p> <p>Quick personal introductions: first name; how long lived in area; one word, memory or association that comes to mind when you think about using water at home (capture on flipchart). Write in column down left of flipchart</p>	Flipchart

<p>45mins (Elapsed: 10mins) c. 10mins</p>	<p>2. Baseline: Water attitudes and behaviours</p> <p>Baseline water attitudes</p> <p>Reflect on these associations and elaborate where interesting. Provide oppositions if appropriate (in right column). Pick out themes (emotional, functional etc).</p> <p>Is use of domestic water distinct from use of water in other contexts? e.g. for public spaces, industry, farming? Why?</p> <p>Explore whether domestic water is seen as analogous to other resources, commodities and utilities – e.g. electricity, petrol, gas. Where does the analogy work or break down? Or is it more like a natural right: i.e. air, grass, sunlight? How does this help to reveal the group’s attitude towards it? A right or a responsibility?</p> <p>Point out within-group differences and ask what influences our attitudes to domestic water: PROBE on Values; Technology (e.g. meters); Age/Lifestage; Upbringing; Wealth; Education; Personality, Lifestyle & aspirations; Perceptions of plenty/scarcity (e.g. climate change)?</p> <p>How have attitudes/associations evolved over time, if at all? E.g. older participants remembering stand pipes but also less frequent drought orders. Younger people being taught about climate change at school</p>	<p>Flipchart</p>
<p>c. 10mins</p>	<p>Baseline water habits/behaviours</p> <p>how do we act with respect to water at home? Give examples of typical water habits and behaviours e.g. during typical day. When are they most conscious about using it? How are they conscious – i.e. quality or quantity?</p> <p>How fixed do these habits seem? E.g. demands of an active family. How much scope for change do they perceive? Where? Why? How realistic is this?</p> <p>When have they changed their habits? What did they change and what</p>	

<p>c. 10mins</p>	<p>prompted this?</p> <p>Where/when are they most conscious of <u>water wastage</u>? Why? (e.g. is it only drought orders; what about in daily habits). Where would they place themselves on a scale of water usage?</p> <p>TASK: Baseline awareness of usage</p> <p>Sort cards with names and images of typical domestic water appliances and a measure of use</p> <p>e.g. “Dishwasher: one full load”; “Power shower: 10 minutes”; “Washing machine: full load”; “Hose pipe: 10 minutes”</p> <p>Around 6-7 cards in total.</p> <p>Group works together (on table or stuck on flipchart) to rank them (top to bottom) firstly in order of relative water consumption.</p> <p>Then attempt, using stickers on the cards, each representing a bucket of water (X litres), to quantify the consumption for each appliance.</p> <p>Show them the actual amounts (pre-made cards with stickers on them.</p> <p>Discuss: How far wide of the mark were they? Does this surprise them? Do the amounts surprise them? What stands out?</p>	<p>Images and sort cards of appliances.</p> <p>Voting stickers.</p>
<p>c. 15mins</p>	<p>Baseline awareness and attitudes towards water efficient appliances</p> <p>Spontaneous awareness and usage of water efficient appliances</p> <p>What do they believe qualifies as “water efficient”?</p> <p>If anyone already has them fitted, how did this change their attitudes/habits? E.g. meter being fitted. Why?</p> <p>Call out names of some appliances and display show cards (without description); gauge awareness and</p>	

	<p>perceived definition</p> <p>Awareness and effectiveness of any communications campaigns and information. What made them memorable? Did any conscious change result? Why/why not?</p> <p>How far are they away from having to adopt these kinds of measures at home?</p> <p>Task: gauging scale of savings with devices</p> <p>Return to sort cards of existing appliances.</p> <p>Now group must place saving devices firstly in relative order of water saved, over a given period for a typical house. (NB need to define parameters so that they can make a like for like comparison). If possible to compare with existing appliances. E.g. power shower vs electric shower.</p> <p>Then vote with stickers on how many buckets used by item.</p> <p>Discuss: compare with existing appliances. Does scale of savings surprise? Why? Why not?</p>	<p>Sort cards for water efficient appliances.</p> <p>Hippo, water butt etc.</p> <p>Gives name and brief description</p>
<p>15mins (EI: 55mins)</p>	<p>3. Looking ahead: Thames Gateway</p> <p>Area identification and perceived water stress</p> <p>If a foreigner asked you where you live in England what would you say? Do you feel a sense of “belonging” to an area/locality? How do you define that locality?</p> <p>Perception of water supply in their area?</p> <p>Where does your water come from? Who else shares your water?</p> <p>Is water plentiful or stressed? Why? What’s causing it?</p> <p>PROBE AWARENESS/PERCEPTION: climate change/rainfall; water cos and</p>	<p>Flipchart</p> <p>Capture on flipchart</p>

10mins)	Guided fantasy exercise:	pens.
10mins for projective	Ask group to close eyes and project themselves back to their homes.	Collect in at the end.
10mins for feedback	Imagine the clock is wound forward 20 years time to 2027. They're 20 years older. Create image of what they'll be doing/lifestyle/household etc, assuming that they've stayed near where they currently live.	
	How do you use water in your house? <i>Open eyes and privately record impressions on pad.</i>	
	Close eyes again. Then pan outwards. Imagine you're flying above your street, your town.	
	What changes have their been? Think about a range of things? What are people driving? Where are they working? What are their houses like? What's the environment like? What are they happy about? Sad about? Worried about? What are they doing differently? What about the water they're using? How are they using it? Same or different?	
	<i>Open eyes and privately record impressions on pad.</i>	
	Close eyes again and now pan out wider. You're flying over the TG region? What do you see beneath you? Picture the communities you see, the landscape, the river? What sounds, smells, sensations are there? What's happening to the water in the region? How much/little? Why? What's being done about it?	
	<i>Open eyes and privately record impressions on pad.</i>	
	Moderator goes through each stage of the	

	<p>journey, getting stories from individual participants on key elements.</p> <p>Focus on water but also on context of water use.</p> <p>Are these fantasies realistic? Play devil's advocate if too positive or negative</p> <p>Is this an aspirational future or a negative one?</p> <p>How different are everyone's futures and why?</p> <p>PROBE: on associations – if pessimistic/optimistic why? What seem to be most pressing concerns – housing; immigration; employment, environment etc.</p> <p>What set of events/factors got us here to this world.</p>	
<p>15mins (EI: 1 hr 25mins</p>	<p>5. Stimulus presentation (ppt – delivered by moderator)</p> <p>Slides to cover:</p> <p>Some basic Thames Gateway stats: population, resources etc; current level of water stress and abstraction; breakdown of demand by different source – including leakage;</p> <p>Projected housing and development to 2016 Projected water stress, rainfall etc. Some potential solutions.</p> <p>Global context (i.e. success of SE UK as a global centre); Visioning material and forecasts for the region;</p> <p>Water neutrality aspiration for 2016 and beyond and what this means. Definitions and aspiration for region to be a pioneer for this approach.</p>	<p>Powerpoint slides. Data pulled from various sources (e.g. Entec; Environment Agency)</p>

<p>20mins (EI: 1 hr 45mins)</p>	<p>6. Response to stimulus material</p> <p>Headline responses: Initial thoughts?</p> <p>PROBE: projected water stress? Preferred definition of water neutrality. Which factors are motivating and which discouraging? Fairness?</p> <p>How if at all does this affect their outlook for the TG outlined in their visions?</p> <p>How does their anticipated water consumption seem to them in light of this information? What if anything has changed? Why? What arguments or data prompted this change?</p> <p>What are the most compelling arguments/statistics etc either for or against tackling public demand?</p> <p>How motivating is the concept of a collective goal for all the Gateway communities? Is this a cause you can rally behind or is it empty?</p> <p>What makes them more inclined to pursue other solutions?</p> <p>What kinds of trade-offs do we face? What are our options? Pros and cons of each?</p> <p>What are we prepared to do? What should others be doing?</p> <p>What's helping us/standing in our way?</p>	<p>Flipchart</p>
<p>10mins (EI: 1 hr 55mins)</p>	<p>8. Explain tasking pack</p> <p>Hand out tasking pack and go through explaining requirements and answering questions.</p>	<p>Tasking pack</p>
<p>5mins (EI: 2 hrs)</p>	<p>9. Thank and close</p>	<p>Incentive money</p>

Water Summit Draft Facilitation Plan

Environment Agency - Thames Gateway water neutrality

Final: 20/04/07

Summary:

4 hour workshop at the Design Museum. Shad Thames, London SE1 2YD

Saturday April 21st: 1pm for 1.30pm start. Closes at 5.30pm

Aiming for 25-30 to attend, selected from regional stage. Representative of TG region

Ipsos MORI team attending: Julian Thompson (Chair); Ed Langley, Chris Perry and Joe Ballantyne (Moderators); Paul Kent, Corinne Wilkins and Andrew McQuade (notetakers)

EA team: Julie Foley, Martin Townsend

Entec: Rob Lawson.

CLG: Victoria Walker, Katrina Doyle.

CC Water Thames: David Bland

Objectives and coverage:

Understand impact of tasking phase on perceptions of water issue, and which aspects of behavioural change and messaging might work to influence public perceptions of demand

Gauge relative acceptability of different demand management strategies, and criteria for deciding acceptability

Examine how acceptability varies under different circumstances (i.e. possible future change, for different members of the TG community)

Look at the prospects for achieving water neutrality by 2016 and the extent of any shortfall in meeting the target: what are the key barriers and opportunities for success and what would the public advocate as means to achieve it

Stimulus requirements:

3 x large double sided white boards with paper and pins (Ipsos MORI)

Hexagonal and other post-its; pens; collage materials (Ipsos MORI)

EA/other stimulus presentation on neutrality aspiration, TG development plans and scenarios (EA)

3 x hypothetical TG households (Ipsos MORI)

Template grids (large, printed, for capturing water strategies for each scenario/case study family) (Ipsos MORI)

Flipcharts and pens

Timing	Coverage	Materials
1pm-1.30pm (NB Ipsos MORI Team have access from 12.30pm)	<p>1. Arrival, registration and lunch</p> <p>Participants arrive. Get name badges/register with team member – colour coded for each breakout group.</p> <p>Given poll metric to complete and post into a box.</p> <p>Buffet lunch served.</p> <p>Moderators circulate to put people at ease.</p>	Registration form Name badges (colour coded for break-out groups) Poll questionnaires
1.30pm-1.45pm	<p>2. Welcome and introductions (PLENARY)</p> <p>Welcome participants. Introduce team; outline nature of project; explain confidentiality, housekeeping, and reassure about the “rules” of the event (no right or wrong answers etc).</p> <p>Roadmap of the day, including breaks etc</p> <p>Explain that we are going to start from where we left off at the regional events, but then go further to think about the future i.e. how we might change the way we consume water in our region over next 10-20 years.</p> <p>EA/wider team here to help us do that. They don't have the answers and are wrestling with these issues too so are keen to find out “what works” from your perspective. But they can also help us learn more about the situation and identify what's realistic/feasible.</p> <p>SLIDES (JT) -Tasking: what we learned.</p> <p>Present back data on how much water people seemed to be saving by adapting their behaviour. How difficult was it to achieve this?</p>	Ppt slides

	Introduce first section of the afternoon's discussions.	
1.45 – 2.45pm	<p>3. Lessons from tasking: “What works” (BREAKOUTS)</p> <p>Go into three breakout groups, each based on life-stage composition, using colour coding on badges.</p> <p>EA/stakeholder team can float between.</p> <p>Personal introductions: + something that's either changed or confirmed how they feel about water (either way) as a result of this experience.</p> <p>Initial (brief) warm-up discussion:</p> <p>Overview of the lessons learnt/anything that had influenced their view from:</p> <ul style="list-style-type: none"> The regional events: what ideas, facts, learnings from other people The tasking phase: what did they find easy/hard? What discussions or changes did it spark at home? What new information did they come across that altered their perspective in any way <p>Quick brainstorm on flipchart: “what works” – based on lessons learnt, identify most effective attitudes, behaviours, habits, policies, appliances etc that made or could make any kind of difference to reduce their water demand.</p> <p>Get each suggestion on an individual post-it note and stick them all up on the board.</p> <p>Quick prioritisation: high/medium/low effectiveness on their consumption</p> <p>Then choose top 5-6 (or more if time) and work through them in the task:</p> <p>TASK: “What works” (to reduce our household demand)</p> <p>Introduce A1 poster template grid on board. The grid would include spaces for water saving</p>	<p>Flipchart</p> <p>Ppt slide handouts with charts</p> <p>Flipchart and post-its</p>

	<p>measures to be stuck on in the side headings, then information on each measure would be collected in the columns.</p> <p>Moderator scribes to fill in columns as group</p> <p>Moderator can include prompts for group's consideration (e.g. compulsory metering).</p> <p>NB these can include anything in the mix, providing it is related to <i>demand</i> management – referring back to the water neutrality definition.</p> <p>Once they have been explored: Moderator reflects back to group on any emerging pattern. And asks 'What are our underlying criteria for deciding "what works"? Capture on flipchart.</p> <p><i>Request volunteers from among group to present back the findings from that group's discussions. E.g in pairs if easier</i></p>	<p>Big white boards with template grid and flipchart</p> <p>Stickers for water measures</p>
<p>2.45pm-3pm</p>	<p>4. Group feedback presentations: "What works" (PLENARY)</p> <p>Short summary presentations from each of the three groups about "what works" from their perspective and where the most significant challenges lie.</p> <p>Moderators comment on any similarities/ differences between groups.</p> <p>Based on all this, how optimistic/pessimistic are they about the scale of the challenge?</p> <p>What are their current perceptions of the neutrality goal? Is it a worthwhile one? Explore different definitions. What would it take?</p>	

3-3.15pm	5. Coffee break on terrace	
3.15-3.40pm	<p>6. EA stimulus presentation</p> <p><i>EA/wider team present stimulus material on the challenge of water neutrality.</i></p> <p><i>What the vision for the TG region is and the implications for water resources. Explain why we have been focused on demand and will continue to do so for second half of summit. Explain why we are not focusing on supply side solutions (e.g. cost, time required to implement and environmental impact).</i></p> <p><i>Explain that water neutrality does not include leakage reduction. It assumes water co.s doing all they can to reduce this.</i></p> <p><i>Explain some of the different mechanisms they could apply to reduce demand, including any the group haven't already considered (e.g. smart metering technology).</i></p> <p><i>Also any wider changes that may affect the goal that they may not have considered (e.g. projected climate change to 2016)</i></p> <p><i>If possible reflect on how close the public's vision from the first half of the summit would be towards achieving actual neutrality.</i></p> <p><i>Present 2 alternative scenarios of how we might have achieved actual neutrality by 2016, applying different mix of mechanisms. NB may not necessarily correspond to Pathway scenarios if not appropriate.</i></p> <p><i>'Water watch' – this scenario would again focus on changing behaviour, but this time taking a more aggressive approach through compulsory metering, and the use of seasonal or rising block tariffs. This would however be accompanied by information on how to save water</i></p> <p><i>'Flush and go' – this scenario would rely on a widespread retrofit programme. New housing stock would also be made as water efficient as possible – including recycling water at a community level. Greater use of minimally treated water in homes. This scenario would not involve the public changing behaviour but would it prove acceptable.</i></p> <p>Ipsos MORI presentation follows on...</p> <p>What would these mean for a typical household?</p>	<p>EA ppt presentation.</p> <p>Making the pathway data accessible to the public</p> <p>Providing some wider context and additional stimulus</p>

	<p>Describe 3 hypothetical households from the TG (one from each of Essex, E.London, Kent)</p> <p>Each with a different composition and home type.</p> <p>Some images to describe the family and their needs.</p> <p>Describe some of the wider changes that might occur over the next 10 years in technology, society, politics etc to add a wider perspective. Things they might be grappling with.</p>	<p>Some trend data from Sigma Scan to enrich on wider trends</p>
<p>3.40pm – 4.30pm</p>	<p>7. Using the scenarios to develop a demand reduction mandate (breakout groups)</p> <p><i>Same or mixed breakout groups, depending on mood – second colour coded badges.</i></p> <p><i>Each group views the two scenarios through the eyes of a different fictional household.</i></p> <p>First, briefly start by getting more “into character”. Describe some of the characteristics of this future family and their world/lives in 2016. What’s life like for them in this new Thames Gateway? What’s good/bad about their lives and how do these affect them?</p> <p>Top of mind response as to which scenario would work best for their family and why?</p> <p>TASK 7A: road-testing the scenarios using the families</p> <p>Using the family as a thinking device/lens, the group works through the poster template for each of the two scenarios.</p> <p>Encourage people to use their own experiences from tasking etc, to inform how they evaluate the scenarios and the fictional family’s response.</p> <p>Along the way, moderator teases out underlying pattern of thinking in the debate:</p>	<p>Another poster template.</p> <p>One column for each scenario, with rows as described left.</p>

	<p>What “works” to reduce demand in either scenario.</p> <p>What criteria do people seem to have in deciding what works?</p> <p>What trade-offs do they seem prepared/reluctant to make? E.g. are people prepared to accept appliances/devices such as grey water recycling at a development level, if not at a household level?</p> <p>What practically and attitudinally stands in the way of rolling out new approaches to demand management?</p> <p>How (in)surmountable are these obstacles</p> <p>Along the way, get comment on how this would work for their <i>actual</i> households as well as the fictional one</p> <p>NB keep playing devil’s advocate if people seem either unnaturally positive/negative about prospects. Refer them back to their tasking experiences etc as a reality check.</p> <p>NB If this isn’t working/participants don’t seem to need the structure of the exercise, go straight to 7B.</p> <p>Task 7B: “Best-case scenario”</p> <p>Once the 7A exercise has been completed, go to flipchart paper and attempt to sketch out with the group what their “best-case scenario” would be to achieve demand reduction.</p> <p>What are they prepared to accept? What interventions would they support/accept?</p> <p>Borrow the best ideas from the scenarios, tasking, regionals etc. Get some idea how close this would be to neutrality? Get EA/Entec advice on this.</p> <p>Get a couple of new volunteers ready to present this back with support.</p>	
4.30- 5pm	<p>8. Feedback</p> <p>Groups present back what they learned from the scenario exercise, and what their best-case scenarios suggested.</p>	Summarise on flipchart while

	<p>Moderator helps groups to identify which aspects of all scenarios are emerging as the most effective/acceptable.</p> <p>Comments and questions to and from the EA team at this stage to mop up any new issues/questions.</p>	<p>people are presenting back to the plenary</p>
5-5.15pm	<p>9. Taking action</p> <p>What immediate steps can be taken now to start working towards the preferred vision of water neutrality? Any consensus on these?</p> <p>Quick wins (i.e. from today)</p> <p>Medium term goals</p> <p>Longer term aspirations</p>	<p>Brainstorming on flipchart</p>
5.15-5.30pm	<p>10. Thank and close</p> <p>Closing remarks from Ipsos MORI thanking participants.</p> <p>EA to thank and explain what happens to the findings of the project.</p> <p>Administer polling metric, incentive money etc</p>	<p>Incentives</p> <p>Poll metrics</p> <p>Forms etc</p>