Using Water Wisely

A deliberative consultation commissioned by

CONSUMER COUNCIL FOR Water

Final Report
October 2006

Contents

1. Executive Summary

Background

Against a background of increasing concern about our future water supply, the Water Saving Group agreed an action plan which tasked the Consumer Council for Water with securing a wider and better understanding of consumers' knowledge of water resources and their views on water efficiency and consumption.

To meet that end, the Consumer Council for Water commissioned Opinion Leader Research to carry out a programme of research which aimed to:

- Gain a holistic view of consumers' awareness, attitudes and behaviours towards water and its value in their lives;
- Seek consumers' considered opinions about a number of approaches to using water wisely in the future; and
- Identify effective ways of communicating to consumers changes in philosophy and behaviour with regard to using water.

The research is to be used to help develop communications and ultimately change the behaviour of consumers.

Methodology

A deliberative approach was chosen for this research. Deliberative research involves providing participants with relevant evidence, and giving them the time and space to absorb information and arguments. The process involved engaging with consumers in four locations in England:

- London
- Brighton
- Cambridge
- Newcastle

First of all participants attended a three hour event in their home town. This allowed data to be gathered about consumers' current thoughts and feelings on water, prior to being given relevant information and listening to the points of view of various stakeholders. After this workshop, they were given a number of factsheets to consider, and were then reconvened at a central location in London, where they heard from expert speakers and debated how to best

address the issues of water conservation across England and Wales. The day also included keypad voting on key questions, as well as breakout work where participants collaborated to develop their own communications campaigns.

The Context

Water is currently a very topical subject. Recent hosepipe bans, the summer heatwave and media reports on levels of leakage in the water infrastructure have unavoidably framed the consultation. Participants are very aware of these issues, and a lot of anger surrounds the perceived mismanagement of the water supply by water companies. This theme ran throughout the consultation. However, there were some clear and constructive findings that arose.

The deliberative process showed that while levels of understanding and awareness rose over the course of the consultation, views on who is to 'blame' for the water shortage did not change significantly. But the passion and anger evident shows that once engaged, there is little complacency over the issue of water conservation. The consultation shows that there is a strong need for the public to be provided with more information about water conservation, without being preached to or blamed. And in common with other issues surrounding behaviour change and the environment, people are willing to make changes, as long as they are seen as part of a larger effort – in this case in particular, seeing what the water companies are doing. It was felt that the water industry is clearly not doing enough at present.

There is a need for leadership and communication on this important issue and to engage with, provide incentive to and encourage the public. Moreover, communications must be targeted according to respondent type. Demographic factors, particularly age and family status affect willingness and ability to act in using water more wisely.

Due to the nature of the deliberative research and the sample size involved, statistically significant differences based on demographic factors cannot be stated. However, where differences were noted in the qualitative research, we have indicated this in the text.

The remainder of this summary outlines in stages how these findings arose during the deliberative process, before we present a full and frank account of the process.

Evening workshops

- Initial associations suggest water holds a central place in people's lives. The most common spontaneous associations with water are words that relate strongly to 'hygiene', 'life' and 'bodies of water'.

- Water is historically 'embedded' in a number of other contexts
    - History – We have never been without water in the past
    - Geography – The UK is an island surrounded by water and plenty of rain
    - Physics – It is naturally occurring and makes up a substantial part of the planet
    - Language – It is embedded in our language – e.g. 'On tap' meaning 'plentiful'

- Many use water freely and without any great consideration of supply, but at the same time, they find it hard to conceptualise what volumes they are using.

    "Water has always been there, and we are getting used to using water too much."

- But for a minority, conservation is moving up the agenda
    - And those with water meters have greater awareness, if only financially rather than in terms of volumes used.

- Attitudes and behaviour towards meters and water saving devices showed some lack of awareness, and even actual misinformation
    - Few were aware of the opportunity to have their supply metered for free, or of the potential benefits
    - And a small minority were actually misinformed (e.g. having to pay to have one fitted)
    - Many claimed not to use any specific water saving devices
    - But at the same time many acknowledged they did upon prompting, suggesting that certain devices are not clearly linked to saving water (or not seen in this context)

- Perceptions of water companies and whether supply is scarce varies considerably across regions:

- – In London and Brighton, there is a real awareness of the shortage of water, but many are angry and blame the water companies.
- – In Cambridge and Newcastle however, the problem is less pronounced, and participants see less of an issue; they are also more favourable towards their water companies.

- There are a number of issues that have challenged deeply held assumptions about the place of water in everyday life
  - – The fact that climate change is rising up the agenda – how will this affect the water supply?
  - – Recently publicised hosepipe bans – are we really using more than we can sustain or is it down to water company resource mismanagement?
  - – How could it be that such an important resource has been privatised and sold at a profit?
  - – How can such a precious resource be left to get into such a state of disrepair?

- These issues in turn tend to evoke a range of responses
  - – Pragmatic – Assimilate, evaluate and accept changing circumstances – attempt to change basic assumptions and behaviour
  - – Refusal to engage – Resistance to considering the challenges – often because they are perceived as distant and do not impact directly (e.g. in water plentiful areas)
  - – Anger and blame – Threatened and fearful – seeking someone to blame
  - – Denying reality – Looking to re-establish historical status quo – *"there is not really a shortage, it is caused by mismanagement [of supply] by the water companies."*

Deliberative forum

- Once respondents returned to the debate, having been given information on water supplies and the water industry (see appendix), there was a broad spectrum of responses:
    - The majority had not moved far from their original view on water scarcity issues, but had a greater awareness of the issue and how behaviour can affect this;
    - A minority had no change in their views and refused to engage; and
    - A minority changed their views completely and plan to take action in the future to use water more wisely.

- 'Water diaries' completed by participants show how focusing on the issue can help people to identify areas where they are wasting water unnecessarily.

- However, it was made clear on the day that participants feel strongly that leakage and supply mismanagement are the main causes of the water shortage.
    - This view changed little throughout the course of the day and was reinforced when figures about industry leakage were disclosed.
    - These dwarfed the amounts of water potentially in a domestic setting, casting the industry in a more negative light.

- Nonetheless, over half of participants agreed that 'all of us' are responsible for dealing with the water shortage in England
    - But the water companies also received a large number of votes, more so towards the end of the day.
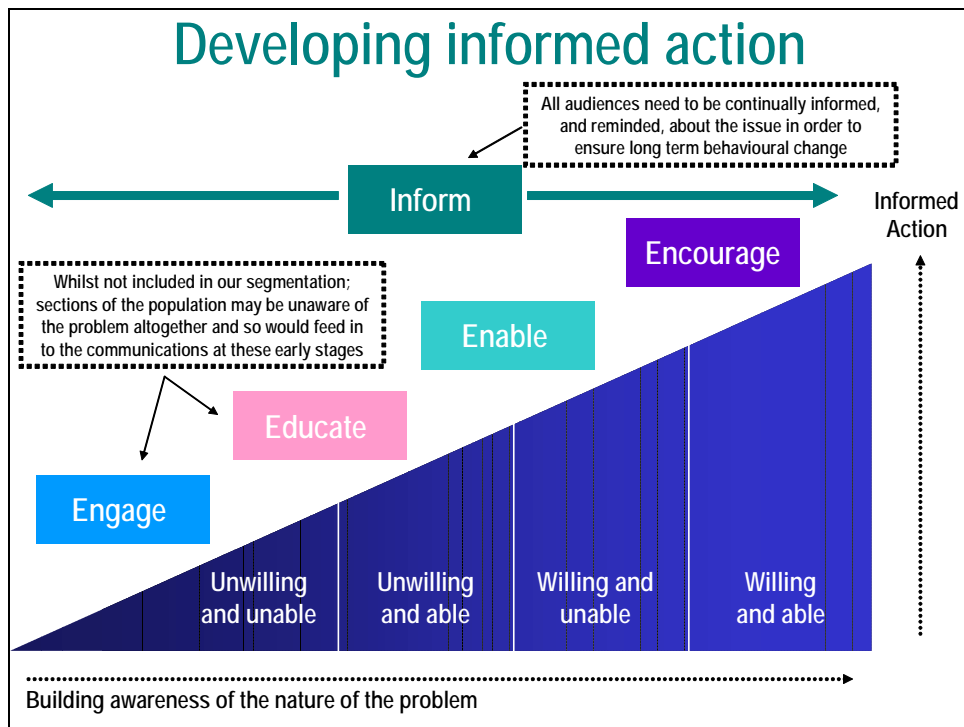
- Indeed, in the right circumstances, some participants expressed a willingness to pay more for water efficient products such as white goods
    - However this must be as part of a 'joint effort' alongside other stakeholders
    - For example this might be if the water companies are seen to be cutting leakage, or the producers of white goods are lowering their profit margins in order to keep the cost of water efficient goods lower.

- The main themes that arose from the deliberative process were:
  - The requirement for a 'superordinate goal' – a need for all stakeholders to work together to reduce wastage and create greater water efficiency in the UK.
  - *"We have a role to play, it's a team effort, but others need to recognise it too."*
  - Industry leakage remains a strong concern – the industry needs to step up efforts to ensure a less wasteful system and to lead by example.
  - There is a great deal of scepticism about water company motivations and a feeling that they are only really responsible to their shareholders.
  - This in turn creates suspicion for some about why water companies are trying to get people to use less water – surely metering people will mean less revenue?

- Other strong themes that arose concerned:
  - The need for better and more holistic information about the situation
    - Including realistic and useful practices for reducing water wastage at least cost to the water user.
  - A requirement for Government to legislate to ensure that water efficient devices are available and affordable.
  - The potential knock-on effects on the wider environment and wildlife is an area that resonates with respondents.
  - The potential benefits of metering both as a cost saving approach and in terms of the reduction in wastage it might encourage (a double win).

- Consideration of the psychographic variables of participants (e.g. lifestyle, values, attitudes) lent itself to the creation of two axes on which people can be categorised in terms of their stance on saving water; willingness and ability:
  - Willing and able
  - Willing but unable
  - Unwilling but able
  - Unwilling and unable

- This, in combination with demographic variables, allowed for the development of a communications campaign to lock in to each of these attitudinal and situational typologies:

Developing informed action

- *Engage*
  - The first priority for those who are unaware, or disbelieving of the problem, is to engage with them and start to build awareness of the issue at a basic level
- *Educate*
  - Those who are 'unwilling but able' to affect change need further evidence of the problem in order to convince them to take action
  - *"I grew up ignorant of water. I really shocked myself - I didn't even know water meters existed. I feel it's important to educate everyone"*
- *Enable*
  - There are some quick wins to be had with those who are 'willing' but are, or at least feel that they are, unable to take action. For example, providing them with hippos, crystals, or other simple water saving devices which currently exist, or communicating simple water saving tips to them, would enable easy behaviour changes
- *Encourage*
  - Those who are willing and able to take action need continual encouragement that they are making a difference to propagate their positive behaviour

- Indeed, with encouragement such people can also have a significant influence over other consumers, who trust them to provide unbiased testimony
- These people are 'willing and able' are ripe for sophisticated behavioural changes, such as having a water meter fitted, if targeted appropriately

- *Inform*
  - Linked to the desire for 'joined up' action with all stakeholders working together to reduce wastage and create greater water efficiency in Britain, it is important to use communications to continually inform the public of how their actions fit into the wider context; and what actions other parties are also taking

- Communications campaigns developed by participants as part of the deliberation process threw up a number of key criteria in keeping with the above messages:
  - That communications should be small and manageable
  - That messages should build slowly
  - Accompany every call to action with a message about what the 'bigger power' (e.g. Government and industry) are already doing
  - Accompany every call to action with information about how this feeds into the superordinate goal
  - Ensure that the language used in messaging is 'fit for purpose' and does not appear to blame consumers
    - E.g. 'Reducing wastage' as opposed to 'Saving more'

- There is currently a void in terms of a trusted source for communication, but at the same time a real need for consistent, independent and trustworthy communications
  - The majority call for independent influencers and environmental organisation to tale up this mantle
  - The government and the water industry are unlikely to be successful in this role
  - But the Consumer Council for Water is in a very strong position due to its independent nature

.

2. Introduction

2.1 Background to research

Against a background of increasing concern about our future water supply, the Water Saving Group agreed an action plan which tasked the Consumer Council for Water with securing a wider and better understanding of consumers' knowledge of water resources and their views on water efficiency and consumption.

To meet that end, the Consumer Council for Water commissioned Opinion Leader Research to carry out a programme of research which aimed to;

- Gain an holistic view of consumers' awareness, attitudes and behaviours towards water and its value in their lives
- Seek consumers' considered opinions about a number of approaches to using water wisely in the future
- Identify effective ways of communicating to consumers changes in philosophy and behaviour with regard to using water

2.2 The research objectives

The top level objectives of the research were to secure a wider and better understanding of:

- Consumers' knowledge of water resources
- Their behaviour and attitudes to water consumption and water efficient practices

These objectives break down into a number of more detailed requirements of the research, as shown below:

In more detail the research should explore the following:

Awareness of water as a resource
- Explore whether consumers relate the water they use in the home to a natural resource, exploring their understanding of the source of tap water and the water cycle

- Explore the importance consumers attach to water as a resource compared to other environmental issues such as energy, pollution, transport, recycling

- Explore whether consumers understand the impact of weather and increased demand (rising consumption and new developments) on water resources and supply

- Explore whether consumers link climate change to potential water shortages and/or increased flooding

Behaviour and attitudes to use of water in the home

Exploring:

- Personal water usage habits

- Water appliances e.g. washing machines, dishwashers

- Water efficient devices e.g. cistern displacement units such as hippos, shower aerators

- Non essential use e.g. hosepipes, pressure washers, garden watering, car washing

- Retro fit of water efficiency devices such as dual flush

- Replacement of bathroom and water appliances

- How the role of plumbers may influence consumers' views in their choice of fitting showers and baths etc.

Awareness of volume of water used

- Explore whether consumers are aware of the volume of water used around the home for individual activities such as personal hygiene (shower v bath, flushing WC), cooking, cleaning, - dishwashing and laundry (hand washing v washing machine/dishwasher), garden use, car washing etc.

Awareness of water efficiency messages

- Explore the impact of existing water efficiency messages and whether the media format and/or source or conveyor of the message makes a difference

- Explore the actions taken by consumers when they have received or seen water efficiency messages and understand what motivated them to take action

- Explore what types of actions would influence change and how these should be designed to deliver greatest impact

- Explore the barriers to adoption of water efficiency, messages and application of practices

- Explore how consumers would react to water efficiency labelling on appliances

- Explore customers' willingness to pay for water efficiency measures, whether it is in the form of increases in bills or by buying replacement appliances on the basis of their water efficiency

Susceptibility to take up

- Explore the form of media that consumers would prefer if companies were to retrofit water efficiency devices. This might be through:
  - Telephone or letter to arrange an appointment
  - Impromptu visit to the home

- Explore whether consumers would prefer a plumber or water company staff to undertake the work

- Explore which householders would be more likely to accept water efficiency measures

- Are these consumers who have accepted energy saving measures through the Energy Saving Trust for example?

Attitude to water company restrictions on use and demand management approaches

- Explore consumers' views on water company restrictions on use of the water supply through:
  - Hosepipe bans
  - Drought orders
  - Bans on non-essential use
  - Standpipes and rota cuts
  - The prospect of compulsory metering in water scarce areas

- Explore consumers' attitudes to water company demand management actions on leakage and use of pressure reductions

- Explore leakage to get an understanding of what customers perceive leakage to be, what the economic level of leakage is about, the issue if cost effectiveness of leakage detection and remediation, impact on bills of tackling all leakage

Attitude to metering

- Explore whether consumers see metering as a fair method of charging for water services and how would they react to being metered on a compulsory basis

- Explore whether the type and location of a water meter affects consumer's behaviour in monitoring their consumption and employing water efficiency measures
- Explore consumer reaction to the potential use of price signals through metered tariffs, e.g., rising block, seasonal, time of day tariffs, and whether these would impact on consumption patterns
- Explore whether more information about the opt-out option would make customers consider having a meter fitted

Education/Social marketing

- Explore whom consumers trust for advice and whom they will listen to
- Explore what media will grasp consumers' attention when conveying messages
- Explore how consumers prefer to access information and the format it should be in
- Explore how to engage with consumers to encourage them to think more about their use of water and to value it as a resource
- To determine how best to employ social marketing tools to effect change and make an impact

2.3 Our approach

Previous research conducted by Opinion Leader Research[1] on behalf of the Consumer Council for Water has shown there are a number of issues to be considered when working with consumers on water issues:

- People do not consider water to be a very serious issue in terms of consumption patterns. They rarely think about water unless something goes wrong.
- They have low awareness of water meters. They have little notion that people can choose to have a water meter and that money can be saved by going down this route.
- There is disgruntlement over a perceived lack of transparency in the cost of water and how their bill is calculated.
- People are aware of leakage from media reports and are angry about the perceived lack of investment.

---

[1]   'Shaping the Consumer Council for Water', Opinion Leader Research, 2005

- While there is an acknowledgment that change is needed, there is a tendency to shift the onus on to government and business to bring about that change.
- People feel the need to be working in collaboration rather than in isolation. They prefer to work in the context of wider social norms rather than feeling that they are making an individual sacrifice.
- From a consumer perspective there needs to be a double win benefit. They want to see a clear personal benefit as well as a benefit to society and the environment in order to be fully engaged.

The document published by the Sustainable Consumption Roundtable in 2005, 'I Will If You Will',[2] suggests that people are willing to engage in exploring a wide range of policy options but that a tendency to want to devolve responsibility is a problem.

Our research programme was designed to move people beyond this stage and to encourage them to take ownership of the problem as individuals. After initial exploration one must enable participants to move beyond discussion of what they already know and their existing behaviours. At every stage they were encouraged to voice any issues and opinions about the role of government and business and then moved on to a more productive debate about issues and ways forward.

2.3.1 Rationale for using deliberative workshops and reconvened approach

Given the complexity of the evidence, a deliberative approach was deemed most suitable. Deliberative research involves providing participants with evidence and giving them time and space to absorb information and arguments. Such a methodology typically involves plenary work as well as small breakout groups that enable participants to discuss and exchange points of view. The principal benefit of using a deliberative approach to consult on complex issues is that it enables participants to reach informed, considered viewpoints at the end of the process.

Due to the number of objectives to be covered it was decided that that consultation should run as a series of preliminary workshops, each lasting 3.5 hours, followed by a full day reconvened forum. Preliminary evening workshops were held to allow consumers to express their current

---

[2] http://www.sd-commission.org.uk/publications/downloads/I_Will_If_You_Will.pdf

thoughts and feelings about water – to get a baseline level of understanding before moving beyond this in the full day deliberative forum. If such an exercise were to be conducted in the forum itself, there may be difficulty experienced in moving beyond current perceptions, which in turn can contaminate the deliberative process.

The full day forum allowed for a representative sample of adults in England and Wales to come together and share views and experiences, and to be given the space, time and information they need to be able to make informed decisions about how to best address the issues of water conservation in England and Wales. A deliberative approach also benefits from bringing together participants from a range of ages and backgrounds to enable people to consider others' viewpoints; the scale of the event (92 people in this case) also helps to convey both the importance of the issues and their input.

Deliberative research is primarily a qualitative methodology, and therefore responses throughout simply indicate whether the views expressed were held by a majority or minority of participants. However, this consultation also contained a quantitative element, where participants voted on issues via electronic keypads. This allowed us to look at (for example) where they felt the responsibility lies for water conservation both at the beginning of the deliberative process, and at the end once they had assimilated key information and been allowed to discuss it. Respondents' views can be therefore tracked to check whether views shifted over the course of the day.

A more detailed outline of both the deliberative evening workshops and the deliberative forum can be seen below.

2.3.2   Deliberative workshops

Deliberative workshops took place in four different locations:

Location	Location Status	Number of participants
London	Water stretched	24
Brighton	Water stretched	26
Cambridge	Borderline	17
Newcastle	Water plentiful	25

Across the four locations, respondents were nationally representative of the criteria below, however as far as possible this was fitted to local demographics in order to ensure participants fitted the local picture as well.

- Recruitment criteria;

- Age
- Gender
- Ethnicity
- Faith
- Socio-Economic Group
- Possession of Water Meter
- Bill Payer/Non Bill Payer (split 50/50)

This form of recruitment ensured that we received responses from a broad cross-section of society, taking into account the needs and requirements of all public stakeholders. A full and detailed breakdown of participants can be seen in appendix 1.

The workshops covered the following topics: (The full agenda can be seen in appendix 2)

- *Collecting Attitudes and behaviour*
  - Spontaneous associations with 'Water'
  - Attitudes to water in homes
  - Behaviour with water in homes
  - Quiz on awareness of volumes of water used
  - Awareness of the processes involved in delivering clean water to homes

- *Your Water Supply*
  - How is water paid for?
  - Metering
  - What attitudes do people have towards water companies
  - Awareness of water efficiency messages
  - Use of water saving devices
  - Awareness of water as a resource
  - How credible is the argument that water is a scarce resource

At the end of the workshops, participants were given a 'water diary'. This asked them to keep a record of water use between the workshop and forum, to note instances where they felt their water use was fixed and necessary, where they felt they could have saved water and to collect any media stories that they saw in the interim period relating to water. The water diaries were designed to sensitise participants to their actual water usage habits rather than their perceived habits. Participants were also given a number of factsheets detailing information on water and the water industry. These comprised:

- Factsheet 1 – General Facts and Figures
- Factsheet 2 – The Water Cycle
- Factsheet 3 – How do we Use Water?
- Factsheet 4 – How Much Water do we Use?
- Factsheet 5 – Water Use of Household and Garden Activities
- Factsheet 6 – How the Water Industry is Managed
- Factsheet 7 – Water shortages – Wider Implications
- Factsheet 8 – Leakages Facts and Figures 2004 - 2005

The above were designated 'essential reading' in order to take part in the full day forum to ensure participants had similar levels of knowledge and that they arrived with greater knowledge of the water industry, equipped to take part in a more informed discussion. They were also given other, more detailed information that was optional to read. This comprised:

- Optional Factsheet 1 – Finding Out About Water
- Optional Factsheet 2 – How the Water Industry is Managed – Further Information
- Useful Web Links
- BBC Report on Level of Drought Restrictions
- Environment Agency Water Resources document

All factsheets can be found in appendix 5.

2.3.3   The deliberative forum

The deliberative forum brought together participants from the workshops around the country to a central location in London on 22nd July 2006. In total, there were 92 participants.

As outlined above, one of the key elements of deliberative research is that throughout the course of the consultation participants are exposed to a wide variety of information from different sources.   Ex-BBC weatherman Bill Giles opened the day, with a speech outlining the necessity of looking after our water supply. There were also a number of expert speakers sitting on a panel to provide different points of view on the state of our current water supply and the need to conserve water. The panellists and issues they discussed were as follows:

Jacob Tompkins – Director of Waterwise

- Waterwise's role in using water wisely
- Comparisons with other countries
- Why they are different
- Context of why they are different - price, government, habit

Peter Midgley – Environment Agency Regional Strategic Unit – Southern Area

- Overall resource availability in England
- Pressure on resources
- Growth in demand for water
- Making better use of what we have

Ruth Davis – Head of Policy, RSPB

- The role of water in our environment in terms of wetlands and wildlife
- The impact of increased abstraction to meet growing demand for water on wetlands and wildlife

Barrie Clark – Director of Communications, Water UK

- The process of creating a reliable supply of water
- What the water industry is doing to ensure a supply of water for now and the future
- The water industry's action to control leakage

Philip Fletcher – Chairman, Ofwat

- What the economic regulator does
- How water supply is planned and how Ofwat regulates to secure the supplies
- Leakage – why is there leakage and how does Ofwat set leakage targets for companies?

Christine Sefton – University of Bradford

- The psychological and sociological aspects of water use

Dame Yve Buckland, Chair of the Consumer Council of Water also opened the event and spoke again at the end of the day, along with Richard Wood, Head of Water Supply and Regulation at Defra, to thank participants for giving up their time to take part in this consultation and for providing them with the opportunity to hear consumers talk about using water wisely in their own words.

There was also discussion or demonstration of various water-saving devices, including:
- Water Butts
- Dual Flush Toilets

- Aerated Showerheads
- Grey Water Recycling Units
- Hippos
- Shower Timers

The forum covered the following broad topics (the full agenda can be seen in appendix 3):

- Introduction and welcome back
- Responses to water diaries, press cuttings and info packs
- Panel discussion
- Responses to panel discussion
- Panel question and answer session
- Consideration of panellist viewpoints
- Presentation of sociological and psychological information
- Consideration of water saving devices and behaviour change
- Consideration of water communications
- Collaborative building of communications campaign
- Wrapping up and presenting back campaigns

The day also featured a number of quantitative questions which participants were asked to vote on; these are reported at the appropriate points in this document, and the full list of questions can be seen in appendix 4.

3. Main Findings

3.1   Attitudes and behaviours towards water – responses arising from the workshops

At the workshops participants explored basic or top-of-mind attitudes and understandings about water. They thought about their relationship with water as a necessary resource in their lives, stating numerous historical, geographical, language and physical reasons why water was an extremely important and fundamental element in their lives.

Participants also discussed their usage habits, classifying these according to perceived importance. Drinking, cooking and cleaning were regarded as the most important uses.

Participants then explored their attitudes to metering of the water supply in detail. They demonstrated some confusion and misunderstandings about the process involved in having a meter fitted, however those participants who have had meters fitted explained the processes and many talked enthusiastically about the cost saving and environmental benefits they had experienced.

Use of and attitudes towards water saving devices were also discussed during the workshops. During discussions many participants realised they using more devices than they realised. Attitudes to water saving devices, as well as towards water efficiency messages were also discussed.

It became clear during the workshops that many attitudes were strongly shaped by feelings about the water industry and in about privatisation and wastage. In the current circumstances it was strongly felt it would be unfair to ask consumers to accept higher prices or put up with rota cuts when large amounts were being through leakage or mismanagement and when water companies continued to achieve large profits.
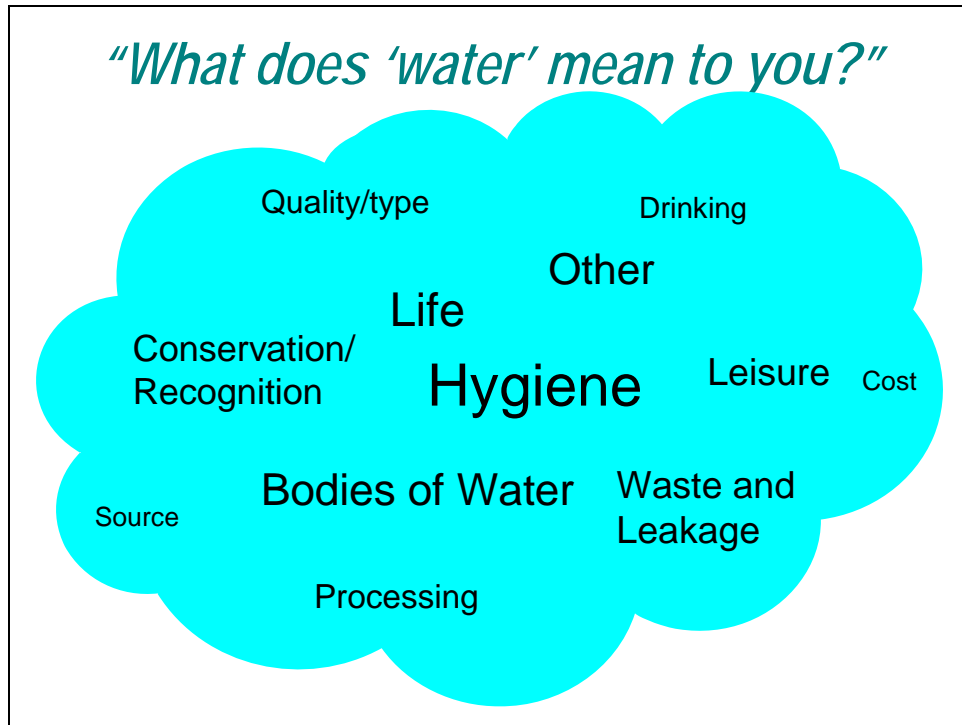
Finally, participants explored the challenges that they would face in changing their attitudes and behaviour, many of which were related to their deep-seated attitudes and the fundamental place of water in their lives.

3.1.1   Spontaneous associations with water

In opening up a discussion about water, it is important to understand top of mind associations i.e. what people spontaneously think about when they are considering water.

The figure below details the variety of associations mentioned in the workshops. The relative size of the font reflects the number of mentioned each issues receives; the larger the font, the more common the association.

Fig 1: What water means to participants

"What does 'water' mean to you?"

Quality/type

Drinking

Other

Life

Conservation/
Recognition

Hygiene

Leisure

Cost

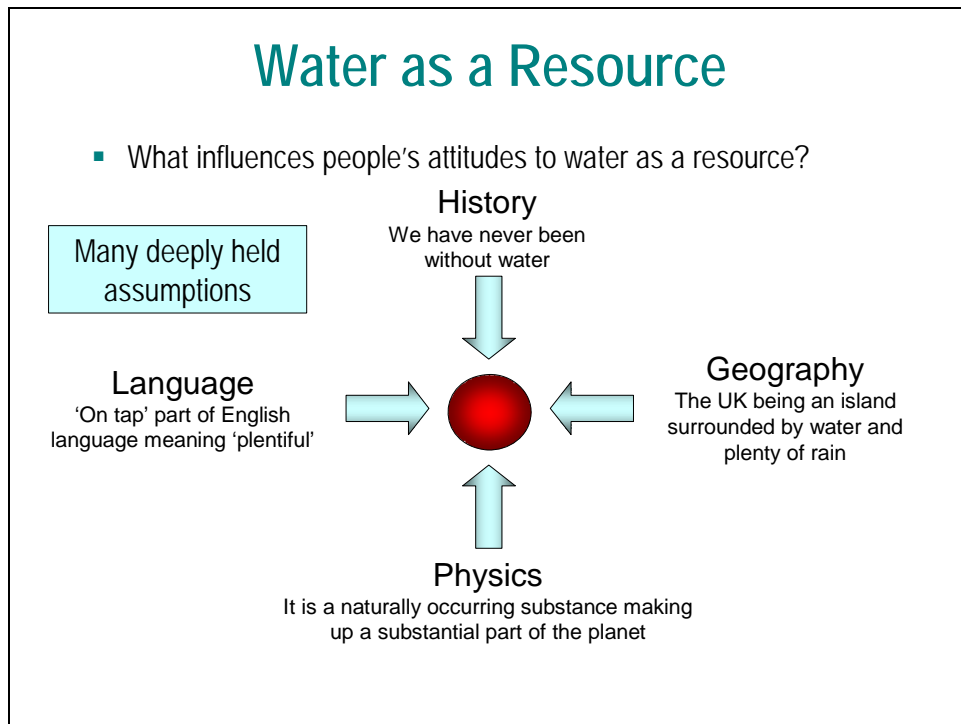Bodies of Water

Waste and
Leakage

Source

Processing

Spontaneous associations with water vary considerably, but the most common theme is that of using water in hygiene activities. Many talk of bathing, washing and cleaning activities – areas where there is likely to physical contact with water.

Other important associations include 'life' (whereby water is equated with survival and words like 'essential'), 'leisure activities' such as fishing and swimming and also 'bodies of water' – the sea, lakes and reservoirs.

Although only at a very early stage in the research process, there is a considerable amount of awareness of issues surrounding conservation and the recognition that there may be a scarcity problem. There are also a number of participants who talk about wasting water and leakage levels. This indicates that for many participants, there is already an awareness of problems with the water supply.

> _"I'd not really considered it properly before to be honest, but you're right, I could save a lot and it does seem silly not to."_
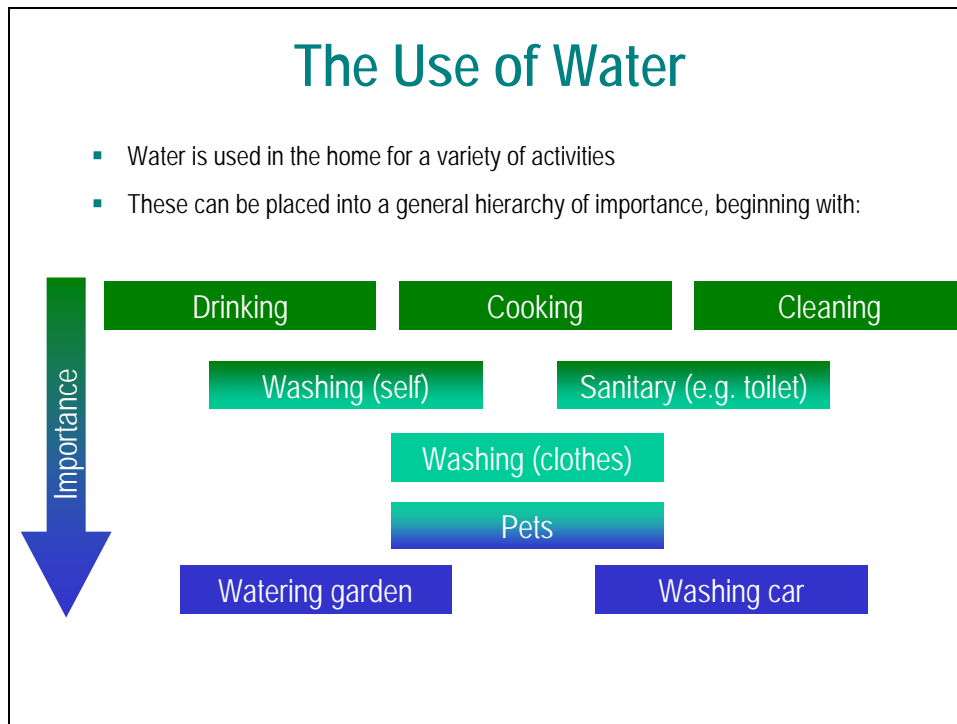
Fig 2: Water as a resource

Water as a Resource

- What influences people's attitudes to water as a resource?

Many deeply held assumptions

History
We have never been without water

Language
'On tap' part of English language meaning 'plentiful'

Geography
The UK being an island surrounded by water and plenty of rain

Physics
It is a naturally occurring substance making up a substantial part of the planet

3.1.2   Attitudes and Uses of Water

Participants' feelings towards water have traditionally been shaped by a number of deeply held assumptions that are part and parcel of people's lives – therefore these feelings can be hard to shift. Nonetheless, people are aware of the hierarchy of importance involved in different activities relating to water. This is detailed overleaf.

Fig 3: The use of water

The Use of Water

- Water is used in the home for a variety of activities
- These can be placed into a general hierarchy of importance, beginning with:

Importance (arrow pointing down)

Drinking | Cooking | Cleaning

Washing (self) | Sanitary (e.g. toilet)

Washing (clothes)

Pets

Watering garden | Washing car

Again, participants talk about issues related to hygiene and survival. Activities which are more 'cosmetic' or non-essential, such as washing the car tend to be lower down the list. There is, however, considerable variation in the way water as a resource is treated. Many claim to use water freely and without any great consideration to whether supplies are limited or stretched.

> *"We don't see water as a resource. It's a basic human right, seen as 'just there'…"*

> *"I never think about it really. Its just there and you only really think about it [how much you use] when there's a drought or something."*

However, a minority view water as a resource that needs to be treasured, whilst conservation is moving up the agenda for some.

> *"I'd say I'm pretty careful with water. I do what I can, like water my plants with washing up water and turn the tap off when I'm brushing my teeth. I just think that's what you do though – it makes sense."*

"Water has always been there, and we are getting used to using water too much."

One of the key barriers to consumers adapting their behaviour to use water more carefully seems to be a lack of awareness of the volumes they are actually using. During the workshops, participants took part in a quiz to test them on their expectations of the volumes of water used by certain activities (e.g. flushing the toilet). Knowledge was relatively poor; in nearly all instances participants underestimated the volumes used, for example; many were surprised when told that leaving the tap on when your teeth can waste up to 10 litres a minute, as many guessed it would only waste 3-5 litres.

This simple exercise gave an indication that the majority of people find it difficult to conceptualise volumes used in the home. Perhaps because traditional rateable value charging methods do not provide users with any kind of reference point as to volumes; there appears to be greater recognition of the amount of water used by those with meters, although even then this generally tends to be understood in monetary rather than volume terms.

Another key point to note is that there is little understanding of what goes on 'behind the scenes'. Consumers are more adept at understanding the volumes used in activities where water is wholly visible (i.e. activities which use taps), but activities such as flushing the toilet and the workings of sewerage systems are further from people's minds. Generally an 'out of sight, out of mind' mindset is evident.

3.1.3   Attitudes towards the water companies

Discussions with participants demonstrate a great deal of distrust exists towards water companies and much scepticism surrounds their aims. Many feel that since the water industry was privatised their bills have increased year on year, whilst stories about leakage and water shortages have become more commonplace. However, within this overall sense of distrust and scepticism it is clear that attitudes towards water and the water industry vary by region, and equally, according to whether the region was 'water stretched' or not at the time of the research.

Participants in Newcastle, a water plentiful area, expressed far less concern around issues of water conservation and expressed generally more favourable attitudes towards Northumbrian
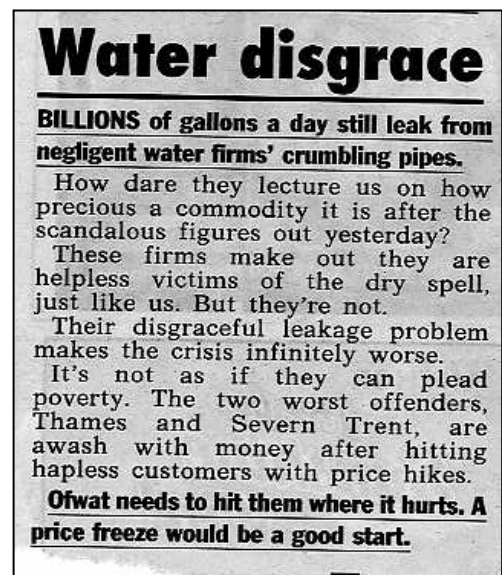
Water as a supplier than those from London or Brighton. Most are aware of the fact that they have one of the largest reservoirs in the country and so feel confident that their future water supply is secure. Cambridge residents were also less concerned about water shortages than participants in London and Brighton, and the feelings of distrust towards water companies are less strongly voiced.

Participants in London and Brighton tended to be more fearful of the fact that water shortages were being discussed. In these locations participants voice the strongest discontent with their water companies, and are more likely to accuse their water companies of being ineffective and not managing leakage correctly.

> *"If you look at the industry total leakage, it's really clear that the water companies could be doing so much more. It's all over the papers every week at the moment."*

This difference in attitudes towards water and the water industry was particularly evident when examining the variety of media clippings participants bought with them to the forum. Participants from London and Brighton were far more likely to have seen and chosen clippings of local relevance, such as the ones below, which tended to place the blame wholly on their local water companies, whilst participants from Newcastle and Cambridge were more likely to bring articles talking about water usage generally, and pricing. Those participants from Newcastle and Cambridge who did bring in clippings such as the ones below saw these as confirmation of their views that water shortage is not a huge issue for them locally given the articles referenced mismanagement by water companies based in the South-East rather than those based in their local areas.

Despite the strong differences of opinion on these issues between respondents from different areas, however, almost all agreed that water represented good value for money. This opinion existed independently of attitudes to water companies or the government. Water was also largely seen as significantly better value for money than gas or electricity.

More detail about consumers' attitudes towards water companies, and how this changed during the deliberative process can be seen in section 3.4.2.2.

3.1.4   Attitudes towards metering

Metering was a subject that raised a number of questions and demonstrated the extent to which many consumers are actually misinformed. 23% of participants who took part in the research had water meters fitted, reflecting the proportion of meters fitted in households across the UK.

Those who have had meters fitted were generally very positive about them and the benefits they can provide. Many said that the presence of a meter had had a significant effect on water use in their homes.

> *"I was paying through the roof given it's just me and my husband who live there. We got a meter about [5 years ago] and it's great. We're paying much less now."*

> *"I'll admit I was sceptical but I'm pleased we did it..."*

However, although the majority of those who had water meters were positive about them, several said they did not know exactly where they were located in their homes. Even including those who did know where their meter was, many more said they did not really know how to read them. For these consumers the important difference was in measuring changes in their water bill rather than knowledge of volumes of water consumed. These participants therefore argued that they did not need to know where the meter was or how to read it in order to measure whether their expenditure on water had decreased.

Indeed, based largely on reduced costs they had experienced, those who had water meters fitted at home tended to advocate them to other participants during the workshops as well as at the later deliberative event. This is discussed more fully in the analysis of the themes that came up during this event (see point 3.2.4.2).

One major point of discussion between those who had meters fitted and those who did not was regarding the process of having a meter installed. Among the sample there was a significant minority who were actually misinformed about this process. For example, one participant in Cambridge had heard that the cost of fitting a water meter was around £200, whilst many others had heard that once a water meter is fitted, you cannot revert to your old charging system.

> *"It's a lot cheaper to get the meter but it costs a lot to fit it, £200 or something to get it put in isn't it, that's the problem."*

> *"Once you have a water meter, you're not allowed to get it out; you're stuck with paying it that way."*

A smaller minority of participants are suspicious of water meters and the water company's motives. Some question how a water company, which they perceive as essentially focused on making a profit, can want to fit water meters when this is likely to reduce revenue? There was a feeling from a handful of participants that this is an attempt at water company 'control' over what people are using, although no rational explanations as to why this might be were forthcoming.

> *"Why on earth would profit-making companies want us to install something which supposedly will save us money?"*

> *"If we're saving money, they're losing money, so they'll just put their costs up once we've all got them."*

However, once the information on meter installation contained on the workshop discussion guide (see appendix 2) had been explained to them, participants showed themselves to be more open to the idea. This was in part because they discovered that having a meter fitted would not initially cost them any money and in part because they realised that should it prove to be significantly more expensive they could revert to their previous charging mechanism.

Beyond those who had meters fitted, few were able to talk in an informed manner about the advantages and disadvantages of having a water meter fitted. Some argued hypothetically that the increased uncertainty that a water meter could bring would be a major disadvantage. For example, if grandparents came to live, this could lead to an increase in water bills. Others suggested that the increased ability to monitor usage would allow them to increase water efficiency and would encourage them to think more about their usage. However, most participants did not feel they were able to discuss this in detail when they were asked to do so.

As became increasingly clear throughout the workshops, this was in part because water charging in general only really became an issue for people when they are confronted by the costs and perceived inequalities and asked to discuss them. During the course of this discussion dismay was evident about perceived discrepancies in charging when on rateable value, when compared to friends and neighbours. This is no surprise and has been raised in previous research studies. However, there is a distinct feeling that consumers have less power in this market, and the lack of alternative suppliers is a concern for some (who are in turn angry about the way that some water companies are perceived to be mismanaging the water supplies).

> *"We truly believe that company's responsibilities are to themselves and to their stakeholders and that means profit."*

3.1.5   Awareness and use of water saving devices

Current use of water saving devices is quite high, and indeed higher than participants initially believed. When asked to spontaneously name any water saving devices that they were using in home, the majority initially claimed not to be using any. There was some awareness of hippos, water butts and double flush toilets, but low awareness overall, although those who demonstrate a 'green' attitude to their lives are more likely to already have adopted water saving measures than others. (For more detail please see the consumer segmentation section at 3.3).

However, on prompting about these devices, many admitted that they did in fact have them in their homes. An example of this is the double flush toilet; while many may have these it does not necessarily mean that they know what they are for, and in some cases the full flush may be used as the default. On prompting, participants also highlighted several existing water saving habits they adopt.

Overall, water saving devices and activities comprised of the following:
- Hippos or bricks in the cistern
- Dual flush toilets
- Re-using water (e.g. washing up water)
- Only using the washing machine when it is full
- Switching tap off when brushing teeth
- Showers not baths
- Timed taps
- Aerated taps ('fluffy water')
- Collecting water for plants while running it cold

Many participants stated that they would be willing to pay a certain amount extra to increase their water efficiency, for example some said that they would be willing to pay a little more for more water efficient white goods. However, as detailed in the discussion of the superordinate goal in point 3.2.4, consumers are only willing to act and to make sacrifices if they perceive that their actions are being matched by the other major players. Participants say that manufacturers of white goods would need to demonstrate that they have offset some of the extra cost through lowering profit margins. In such a case consumers felt they too would be

happy to meet increased costs. Any suggestion that companies might be increasing their profits through raising prices for more efficient products was met with anger and extreme resistance.

Under current circumstances most customers stated they would not be willing to pay increased bills for achieve greater water efficiency. As detailed in point 3.1.3, while so many consumers have suspicions that water shortages are caused by water company mismanagement and profiteering, the suggestion that bills should be increased in order to pay for the upgrading the water system is met with resistance. If the water companies could however demonstrate that they were making significant efforts to reduce wastage and increase efficiency, in particular if they were meeting any extra costs incurred from their own resources, participants were more receptive to the idea that their might be an increase in their bills to do their bit to help reduce wastage and improve efficiency, and some even felt that this increase would be right and justified.

The same attitude was strongly expressed during discussion of possible rota cuts or pressure reductions. While consumers said they would be willing to put up with such restrictions in a context where all parties could be seen to be doing their bit, they felt that such usage restrictions in a context of leakage and large water company profits would be extremely unfair.

3.1.6   Awareness of water efficiency messages

Most participants did not spontaneously recall seeing water efficiency messages targeted at them. When prompted however some London participants did remember the recent Thames Water campaign detailing how much water was bring saved through the fitting of new water pipes – although this was recognised as more of a PR or advertising campaign than any kind of effort to persuade consumes to reduce their usage and wastage.

Some participants commented negatively on the absence of meaningful messages aimed at persuading them to reduce their usage and wastage. Several recalled messages aimed at reducing electricity or gas consumption from other utility companies, or which attempt to persuade people to improve the insulation in their houses. Participants generally felt that these messages had been effective and many wondered why the water companies had so far failed to do anything similar.

Overall participants felt that they would be likely to respond to messages providing they were well targeted and contained information in a relevant and approachable format. For detail on participants preferred methods of communication see section 3.4.5.

3.1.7   Challenges to existing attitudes and beliefs towards water

Overall, a limited amount of change was evident in consumers' attitudes throughout the events as a result of their exposure to information. The nature and extent of this change is discussed in more detail in point 3.2.1.

It is important to note here that while there is some awareness of issues surrounding conservation, and that some participants are currently taking steps to save water (albeit some not doing so consciously), tackling the problem is not as simple as encouraging more people join in. There are a number of issues in recent years that have challenged people's deeply held beliefs around water and reactions to these issues vary considerably.

Firstly, climate change has climbed dramatically in people's thinking. In terms of people's attitudes to water shortages people were unsure whether climate change would affect us directly, and it if would, the specific forms this might take.

> *"Yes, but can you be totally certain that the water shortage really related to climate change?"*

> *"It's probably going to be the kids who are really affected by climate change."*

Secondly, the imposition of hosepipe bans in recent months to this research had caused people to question whether we are really using more water than we can sustain. People were unsure if this was a function of a real shortage of water in the country or in fact the result of leakage and mismanagement on the part of the water companies.

> *"All the publicity about loads of leaks, shortages of water and vast profits just doesn't add up. Why should I change when they are making big profits?"*

Thirdly, the privatisation of the UK water industry, although it took place some 17 years ago, is still causing people to question how such an apparently abundant natural resource can be privatised and sold at a profit. Continual public exposure to news about shortages and on failures by water companies to meet leakage reduction targets serves to keep this issue at the forefront of people's minds.

Finally, as well as causing the privatisation question to remain at the forefront of people's minds, continual media reporting of the water issue also causes people to question how something so important could have been allowed to slip into such a state of disrepair by those who were trusted to look after it; namely the government and the water industry.

The challenges to people's beliefs evoked a range of responses. These are examined in detail in the following chart:

Fig 4: The ranges of responses challenges evoke

Challenges evoke a range of responses

Pragmatic response	**Anger and blame**
Assimilating, evaluating and accepting conditions	Threatened and fearful. Very strong emotions turn to anger and accusation
Focusing on the bigger picture	
– accepting changing conditions and privatisation	Narrower focus – seeking someone to blame for the situation
Attempting to change basic assumptions and behaviour	No attempt to re-evaluate basic assumptions
Refusal to engage	**Denying reality**
Resistant to considering the challenges and refusal to focus on the situation	Often a subset of blame and anger
	Looking for a way to re-establish historical status quo
Often because the challenges are distant and do not directly impact on their lives, for example, in water plentiful areas	Denial of the situation and finding proxy reasons – *'there is not really a water shortage, it is caused by mismanagement of the water companies'*

Many displayed a pragmatic response to the challenge to their established views on water. This usually took the form of thinking carefully about what was happening and trying hard to

focus on the bigger picture, while at the same time avoiding becoming preoccupied only with the impact of changes on the individual.

In order to achieve this, participants tried hard to come to terms with the changes in the water industry over recent years. An important element of this is a focused attempt to question underlying assumptions, and where appropriate to change them.

However, many other respondents did not feel able to engage with the changing circumstances. This most often manifests itself as a refusal to engage with challenges and to focus on the situation, either in terms of the bigger picture or the individual viewpoint. In many cases this took the form of a refusal to accept that the situation was serious. Indeed, this response was most detectable among those who were not directly affected by the situation, for example those living in water plentiful areas.

At the other extreme, those living in water stretched areas often reacted with anger and blame. Feeling threatened and fearful these participants displayed very strong emotions which often turned to anger and a narrower focus on the issue. This narrow focus often manifested itself in terms of a strong desire to apportion blame.

These participants made little or no attempt to re-evaluate their assumptions about the water issue in general or regarding their own behaviour.

The final general response type was an active denial that there was a situation at all. This response was often a subset of anger and blame and participants appeared able to move back and forth between the two types of response.

The most commonly expressed concern here was to try and re-establish a vision of an older status quo. Proxy reasons were sought to explain any problems that could not be denied, such as the claim that there was no real water shortage, but only a failure of management by the water companies which meant the supply infrastructure could not meet demand.

The range of responses evoked by challenges to peoples' beliefs evolved further during the full day deliberative forum, as detailed in section 3.2.

3.2 Responses arising from the deliberative forum

During the forum it became clear that most respondents' attitudes had not changed dramatically as a result of the information presented to them, although in most cases participants displayed a greater awareness and an ability to discuss the issues in more detailed terms as a result of taking part.

Early in the event participants discussed their water diaries and explored in groups areas where water savings could be made or areas where use was seen as essential. In most cases these reflected the hierarchy of use discussed during the workshops (see fig. 3).

They also explored the perceived causes of water shortages, with many blaming industry leakage and mismanagement. However, wastage on the part of consumers was also seen as an important factor.

Crucially, responsibility for dealing with shortage was seen as the responsibility of everybody. This reflected a growing desire among participants to establish a 'superordinate goal' which could overcome differences between different stakeholders and could help all interested parties to work together. Participants then developed a model of how 'joined up action' might work.

As well as the superordinate goal, participants' discussions could be categorised according to a number of different themes: industry leakage, the agenda and motivation of the water companies, and the government, use of water, the need for more information, the impact of water shortage and the seriousness of the situation and participants' ability to make a difference and change their behaviour.

Many stated that they would be willing to accept higher prices for water efficient products or even for water itself if this was part of a cohesive attempt by 'all of us' involved to tackle water issues. Providing water companies, government and business are seen to be 'doing their bit,' therefore, there was a strong sense at the event that many consumers would also be willing to consider making changes to their attitudes and behaviour.

3.2.1 Spectrum of Responses

As detailed in figure 5 below, a broad spectrum of different responses was evident in reaction to the evidence presented to participants, and on account of their discussions with each other during the course of the deliberative forum.

In terms of mapping these responses, at one end of the spectrum a very small number displayed no change whatsoever in their attitudes from the start of the workshops to the end of the forum, and stated that they would not be changing their behaviour as a result of the day. At the other end of the spectrum, a small number stated that their attitudes had changed dramatically and they would be making radical changes to their behaviour. Most participants'

views however did not shift far from their original standpoint, however a greater awareness and realisation of the issues, and of their personal behaviours, was evident as a result of taking part in this process.

Fig 5: The spectrum of responses arising from the forum

Spectrum of responses

A minority

The majority

A minority

No change at all in views

Not moved far from original view but greater awareness of issue and realisation of behaviours

Views completely changed – going to take more action
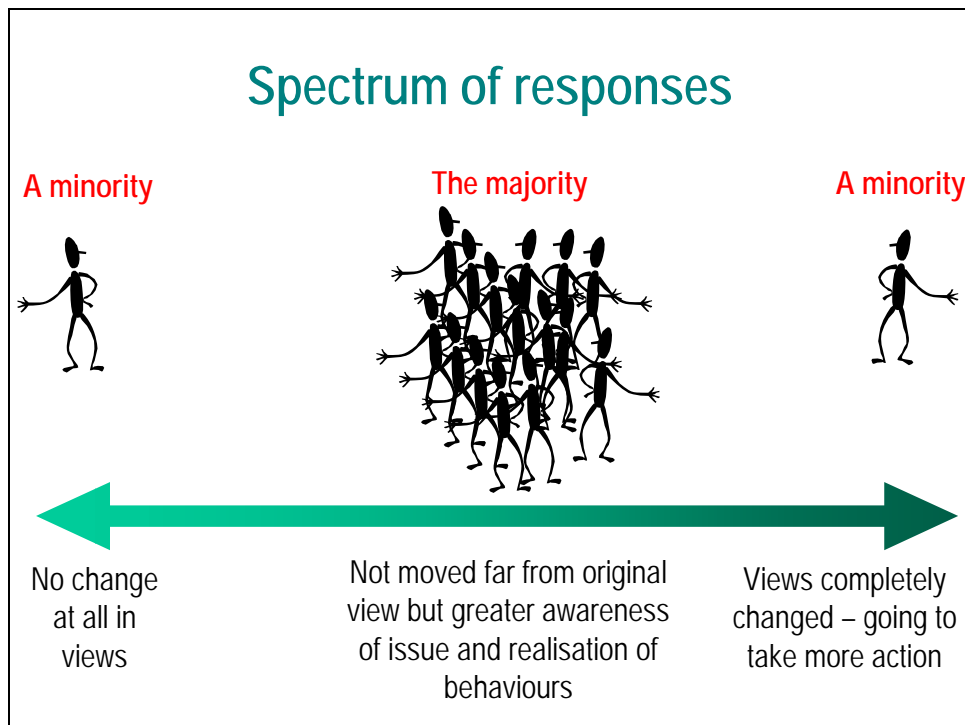
Many of those who stated that they had not changed their views at all were those who had been the most 'bullish' throughout the whole period of the research. These participants had come to the evening workshops with very strongly held opinions with regards to water, and had appeared unwilling to engage in dialogue with other participants or with the factual material with which they were presented. Instead they tended to try and dominate discussion and to force others to take their point of view.

Equally, those who displayed the most radical changes in behaviour and attitudes were in many cases those who had come to the evening workshop events expressing particular eagerness to learn about the water issue. These participants often engaged very eagerly in group discussions, taking an active interest not only in the water issues under discussion but

also in the research process, and in the Consumer Council for Water as the commissioner of the work.

However the majority of respondents stated that they had been uncertain what the research would involve and had simply decided to 'give it a go.' This approach meant that they had not come to 'defend an opinion,' nor had they come with the express intention of changing their behaviour or of 'learning from experts.' In the deliberative process it is often participants who come with an open mind on issues and who do not bring an agenda to the event that are the most interesting, and representative of the public at large.

3.2.2. The Water Diaries

Between the evening workshops and the deliberative forum participants were asked to complete water diaries detailing their water usage over a seven day period, and asking them to distinguish between essential and avoidable use. They were also asked to report areas where they were already saving water.

Many participants reported that this had been a very interesting exercise that had caused them to think seriously about their water consumption, in many cases for the first time. Others who stated that they had already given this issue some thought in the past felt that the exercise had been very useful in terms of helping them to quantify their usage, and also to identify those areas where their use was non-essential.

> _"I'd never thought about any of this before… wow, it's a real eye-opener isn't it?"_

Analysis of the water diaries shows considerable homogeneity in terms of which aspects of water use are deemed fixed and necessary, and where water could have been saved, or usage reduced.

- Fixed and Necessary Water Use

There was considerable variance in perceived fixed and necessary water use. The most popular responses were showering, making drinks, using the toilet and washing clothes or

dishes. Other important uses were brushing teeth and personal washing. However, the range and number of responses, as well as discussion during the forum, showed a broad range of attitudes regarding what was seen as necessary and fixed. For example, for some watering plants or washing the car was seen as an important use of water while for others these were perfect examples of wastage.

- Areas where water use could have been reduced

A broad range of suggestions were made regarding areas where water use could be reduced. Most numerous were references to reductions in volume or frequency of toilet flushing while turning off taps while brushing teeth and substituting showering for bathing were also seen as major ways that usage could be reduced.

Again the range of responses demonstrates that perceptions of potential water saving areas can vary widely. As with areas of fixed use, in discussion it became clear that for some behaviour such as washing the car was not an area where savings could reasonably be expected while for others, reducing 'wastage' in this area was very straightforward.

- Areas where participants were already saving water

Some participants recorded ways they were already saving water in their water diaries. These included brushing their teeth while in the shower, flushing the toilet only when necessary, recycling waste / washing water for watering the garden and filling water jugs from baths or when running water cold from the tap.

The diaries demonstrate many are amenable to altering their behaviour and recognise ways in which they could do so in their day to day lives when asked to focus on it. However they also clearly reveal the extent to which people's priorities can vary widely. This highlights the need for careful and well-considered communications.

3.2.3 Perceived Causes of Water Shortages

Throughout the day, when asked about the causes of the water shortage participants tended to place most of the blame on others, in most cases the water industry in one form or another.

The following figure displays keypad voting data on participants' perceptions regarding the causes of water shortages, both at the beginning and at the end of the forum.

Participants were asked to rate their agreement with each 'cause' on a scale of one to five, with one being strongly disagree and five strongly agree. As shown below, participants' views change little throughout the day.

Fig 6: Perceived causes of the water shortage
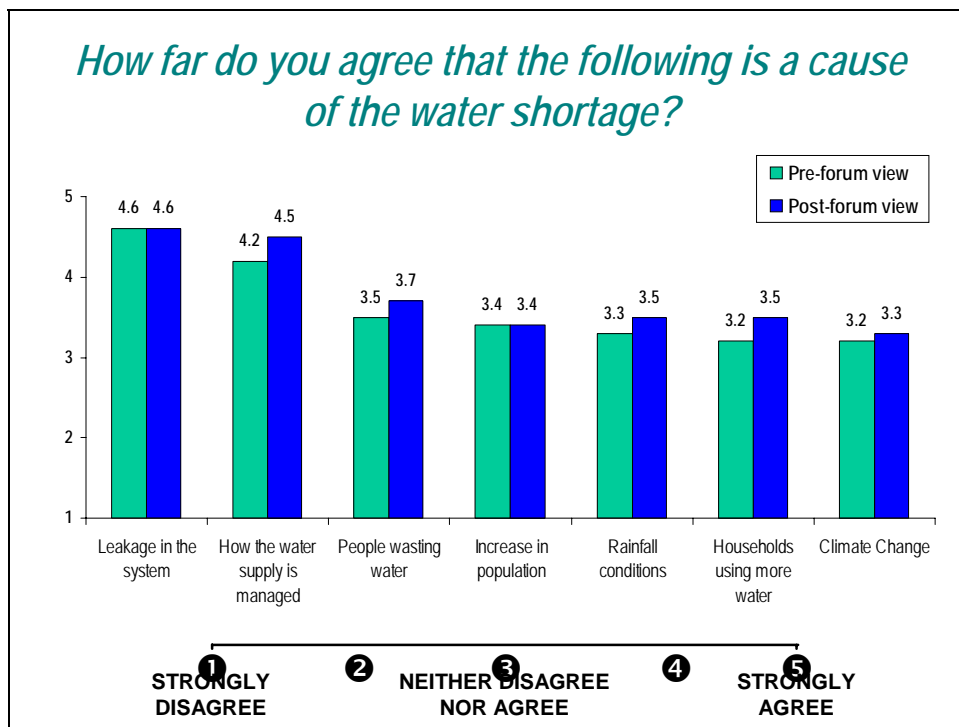
The figure above shows that leakage in the system and the way in which the water supply is managed remained the most important causes of shortage for participants both before and after the event. While perceptions of the importance of leakages remained consistently high both before and after deliberation, exposure to the evidence presented and engagement in discussion with others did cause some slight changes in perception. For example, the perceived importance of water supply management as a cause of shortage increased slightly, while there was also a small increase in the perceived importance of people wasting water, rainfall conditions, a rise of household consumption and climate change.

While there is no statistically significant difference across the range of factors that are seen as contributing to water shortages, the results from the keypad voting section of the day tend to support the findings of qualitative investigation.

During our analysis it became clear that the information presented throughout the course of the research did little to alter or challenge people's deeply held historical, geographical and cultural beliefs. Rather, participants formed a stronger factual basis for discussion with each other of how, or why, they believed industry leakage, rather than domestic over-use, was the cause of the water shortage.

For example, finding out exactly how many litres of water was lost to industry wastage each day, in comparison to the amount lost in a domestic setting, served to reinforce people's existing opinions.

Given the current strength of concern with climate change, as well as people's views on Britain as a historically and geographically 'wet island', it is particularly interesting that general environmental conditions were seen by most participants as the least important factor among causes of the water shortages.

Analysis of the qualitative discussions that took place on this issue brought into even sharper light the strength of people's opinions on water industry leakage and mismanagement of the supply. Again, the information presented during the day tended to give participants facts and figures to back up their existing feelings on this, rather than causing any meaningful changes in opinion.

As opinions on the causes of water shortage and on who was to blame did not change dramatically, it is not surprising that there was no dramatic change detected in participants' overall views. Rather, throughout the event the participants displayed a strong sense that responsibility for water shortages must be _shared_. As can be seen from the chart below, both before and after the event, over half of the total respondents stated that 'all of us' are responsible for dealing with the shortage.

The only marked impact of the evidence presented and discussion of the issues that took place during the event is a small shift in perceptions of responsibility away from the government and

towards water companies. The very small number (1%) of respondents stating that water users should take sole responsibility echoes the findings of the qualitative phase of the research.

Fig 7: Perceived responsibility for the water shortage

Which of the following do you think is mostly responsible for dealing with the water shortage in England?
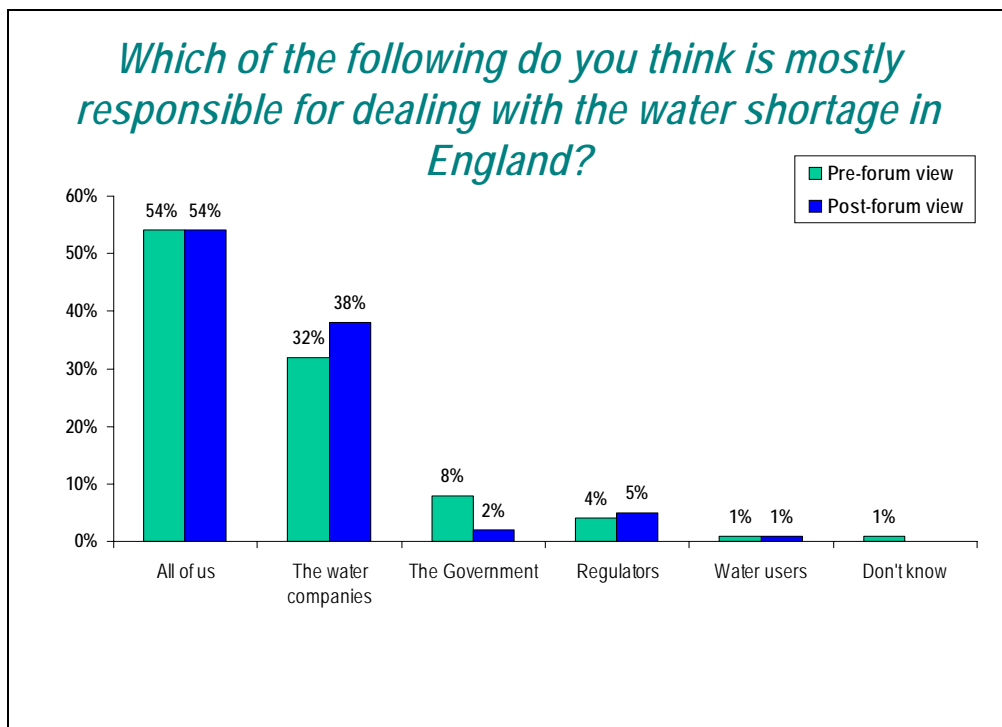
Despite perceptions of responsibility remaining constant throughout, it was clear that engagement in the deliberative process did have an impact on participants' awareness of _what_ they might do to alter their behaviour. Particularly when compared to the opinions expressed in the initial workshops, it was abundantly clear that participants were developing an increased understanding of their possible roles, of _what exactly_ 'all of us' might mean in terms of their own actions and also in terms of what they might reasonably expect from the water industry.

The key outcome of their engagement with the topic was that participants were encouraged to see that using water wisely is a collective issue. While it was strongly felt to be unfair for the blame to be attributed to consumers alone, most were nonetheless willing to play a part in finding a solution. Indeed, initially angry and highly confrontational attitudes to the water companies were in many cases transformed into a more constructive determination to achieve meaningful resolution of the issues. Furthermore, our qualitative analysis suggests that the

tendency primarily to blame others – in particular the government and the water industry – was due to a general perception of powerlessness, following a 'what difference can I make on my own' mentality. Engagement with each other and with the information presented during the event was able to break down this sense of powerlessness and to help participants feel that alongside the industry and the government, their own actions could also achieve something.

3.2.4 Themes arising from the forum

3.2.4.1 The Superordinate Goal

Based on detailed analysis of the qualitative and quantitative data gathered throughout the deliberative forum, several key themes emerged.

Above all else, the most clearly expressed theme was the need for a "superordinate goal." This can be defined as:

> *"A goal that transcends the separate goals of parties to a conflict, and that can best be achieved when the parties join efforts."* (Wikipedia)

Specifically, participants expressed a strong desire for all stakeholders to work together to reduce wastage and create greater water efficiency in Britain. Reflecting the '*I will if you will*' mentality, participants made it clear that realistic and meaningful action was only possible if any efforts made by them were matched by both the government and the water industry.

> *"We have a role to play, it's a team effort, but others need to recognise that too."*

This was most strongly expressed as a desire for 'joined up' action on a *national* level, whereby government, industry, the water companies and consumers are all working together in a meaningful way. This desire was felt and articulated with increasing strength as the event progressed. Analysis shows that there was an increasingly strong perception that consumers must not be seen merely as customers but also as *partners* in a *joint* effort to reduce wastage.

With the help of the evidence presented and working together through their discussion and debate, participants developed the following model of how this might work:

Fig 8:   How joined up action would work

How participants envisage 'joined up' action would work…

The Water Companies

Water companies should continue to improve their leakage targets. They should also go to each home they service to fit hippos and any other water saving devices that are freely available but not currently used widely.

Industry

Manufacturers should be forced to make water efficient technology as standard and ensure it is competitively priced, to ensure consumers are purchasing the 'right' products.

All stakeholders working together to reduce wastage and to create greater water efficiency in Britain

The Public

The public should try to reduce water wastage wherever possible and consider water efficiency in their day to day lives to a greater extent - particularly when making purchases or decisions which could impact their usage habits.

Government

Government has a responsibility to enforce minimum standards across the board, and to legislate where necessary. A stronger stance must be taken with regard to the water industry and business in general.

There was an increasingly strongly held view evident throughout the research that water companies should continue to improve their leakage targets. More importantly, they should also work harder to *meet* those targets more regularly. Many people felt that water companies could take a far more proactive approach to working with consumers, for example visiting people's homes to help them fit water-saving devices. These are regarded as being freely available, however they are not widely utilised, in many cases because people are not confident about how, or where, to fit them. Many participants felt that if water companies were really taking water saving devices seriously, they could be doing a lot more to work to promote them and to ensure they are installed in homes; for example as when Channel 5 visited people's homes in order to retune videos:

> *"Why could Channel 5 make the effort to come and see me, but the water company won't? Surely you'd have thought that water was more important than telly!"*

Many participants felt that different branches of industry should do more to help consumers reduce wastage. For example, kitchen appliances such as dishwashers and washing machines should be made water efficient as standard. While energy ratings are now common

44

for many kitchen appliances there is no similar system of rating appliances for water efficiency in evidence.

Any suggestion that companies might attempt 'cashing in' on consumers' desire to reduce water consumption was met with anger. In many cases participants took this as evidence that business view any desire for environmentally friendly action among consumers more as an opportunity for exploitation rather than as a chance to work in partnership. Water efficient devices must be made competitively priced and several argued that it should be the government's responsibility to ensure that this was the case.

> *"Consumers are willing to pay a premium for water efficient products but not pay through the nose."*

In many cases as a result of the research, participants expressed a strong willingness to think more about their own water use and ways of reducing wastage. The focus on reducing *waste* as opposed to simply *use* helped them to move beyond feeling blamed by water companies for the problems we face. Given their assessment of the scale of industry versus domestic waste, feeling as if the water companies were targeting them made many very angry.

> *"They want US to save water? The cheek of it! What would be better is companies leading by example."*

However, when viewed as a partnership, it was argued that consumers certainly did have a role to play. Particularly as a result of the water diary exercise, many felt that simply considering use and thinking about possible wastage was an important step forward that could make a real difference to usage volumes. This was seen as especially the case when making purchasing decisions, for example kitchen appliances such as washing machines.

Government was seen as the stakeholder with overall responsibility for ensuring that joined up action was a workable concept. It has a duty to ensure that minimum standards are maintained by the water industry and by business in general. It also has the power to legislate where necessary to ensure that industry, business and consumers can work together towards the superordinate goal.

It was argued by many that government must take a stronger stance with regard to the water industry. Some even felt that the government would be inclined to take the industry side against consumers. However, most participants believed that the government had the power to make real and significant changes to the current situation and to make joined up action an achievable possibility.

3.2.4.2 Other Themes

A number of other key themes also emerged as a result of the participants' engagement with the material presented to them and their discussions with each other. While initial reactions and topics of discussion were often negative, in all but two areas the deliberative experience allowed participants to adopt a broader and more balanced view of the issue. The focus of deliberative research on trying to see the perspectives of other stakeholders greatly increased the tendency to think in terms of 'all of us' as responsible for doing something to alleviate shortages.

The two thematic areas where this did not occur were concerning industry leakage and the motivations of the water industry and government. Other themes where participants did express positive views concerned their own use of water, the impact of water shortages and the seriousness of the situation; the need for more information, the potential benefits of metering as a means of cost-saving, and also perceptions of their own ability to make a difference and change their own behaviour.

- Industry Leakage

Throughout the event industry leakage remained a key concern. Upon prompting it is clear that until recently participants possessed little knowledge of the volumes of water being leaked or the reasons for this, but media coverage in the weeks preceding the forum had heightened the issue, and transformed levels of knowledge and engagement. Most participants feel leakage is the result of mismanagement of the water infrastructure, and a lack of investment on the part of the water companies, although they possess little or no knowledge of the cost of addressing leakage, and the cost-effectiveness of doing so.

As part of the presentation given by Philip Fletcher from Ofwat, participants were presented with more information about the current level of industry leakage and the future targets for addressing leakage. This prompted discussion about the cost-effectiveness of addressing leakage and a realisation among participants that actions taken by industry to detect and remediate leakage beyond a certain level would impact customers' bills. Whilst most participants said they would not be prepared to pay more on their bills to tackle leakage (as they firmly believe that this is an industry problem and therefore it should be industry who addresses this), some thought that this would be acceptable and said they would be willing to pay more over a clearly defined period if this meant leakage would be tackled once and for all.

> *"Yes I'd be willing to pay more to tackle leakage if it meant that we could go on using water as we wished."*

> *"I'd pay more but how do we know that we wouldn't just continue to pay more forever? You'd have to have assurances that bills would return to their original levels."*

It is however important to note that we did not have access to information detailing what these costs might be, and the duration over which they would have to be paid.

Information presented to participants did little to dispel the notion that any efforts made by domestic consumers to save water by customers were futile in comparison with the impact water companies could have. This was particularly strongly voiced by participants from water-stretched areas. These participants expressed great reluctance to change their behaviour in a dramatic way until the industry is seen to be actively taking the appropriate steps.

> *"We're trying to save water, and yet they are not willing to do the repairs, so why bother."*

> *"If you look at the industry total leakage, did somebody take their eye off the ball in 2001? It seems as though the water companies could be doing so much more too."*

> *"It's all about us and what we should, or rather, are being told, we have to do. What about everyone else? They've known about this for years."*

However, those participants from the water plentiful area did not consider leakage to be such a concern. This was in part to do with the fact that there is less of a sense of needing to conserve water. However, many of those from the water plentiful area also stated that their water company was far more in tune with their needs and was seen as very efficient in terms of fixing leaks and maintaining pipes in general. For these participants the idea of partnership and 'joined up action' appeared a far more realistic prospect.

- The agenda and motivation of the water companies and the government
Many participants expressed uncertainty and even suspicion concerning the agenda of both the water companies and the government. Again, these views persisted throughout the event and despite evidence from expert speakers on the panel (for example from Barrie Clark from Water UK), participants' views did not change significantly.

> _"We truly believe that company's responsibilities are to themselves and to their stakeholders and that means profit."_

> _"It doesn't make sense to me that companies would tell us to use less water"_

Many participants expressed an inherent scepticism concerning big business. This was unsurprising following concerns expressed about the morality of selling water for profit during the initial evening workshops, given that it is seen as a natural resource that in theory belonged to all.

Moreover, the notion of saving water does not fit with their understanding that business exists in order to maximise profit; for them to use less means the companies are billing less, which in turn _lowers_ their profits. Trying to understand the logic of this arrangement was very difficult for people and in many cases led to angry accusations that the water industry was only out for itself and was trying to conceal the truth about its motivation from its customers.

> _"A phenomenal amount of water is wasted due to leaks and then we hear on the news that they are not going to mend them for 3 years. Water companies are more interested in making money than the environment. I think that the government should take more control and put restrictions on them and make them re-invest"._

In particular, this scepticism had a major impact for many on attitudes to metering, because claims that water companies wanted to encourage metering in order to reduce wastage were treated with scepticism. This led several respondents to argue that there must be some other motivation for metering to be encouraged by the companies, such as making everybody use a meter and then increasing prices, or wanting to be able to monitor consumption.

Overall, this strongly highlighted the requirement for communications regarding metering and other similar issues to come from an impartial and where possible previously trusted source.

- Use of water

Carrying out the water diary exercise had a major impact on many of the participants, many of whom claimed never to have thought about their own use before. Moreover, recording and thinking about use over the period of a week caused many to realise that they could reduce their usage, sometimes dramatically, through relatively easy, quick and painless changes to daily routine and behaviour.

Behaviour changes mentioned included turning the tap off when brushing teeth, re-using grey water, only using appliances such as the dishwasher or the washing machine when they are full or keeping water in the fridge rather than running it cold.

One of the main issues cited as preventing people from making changes to their behaviour or routine was a shortage of clear and unbiased information. This again highlighted the need for an unbiased and therefore trustworthy source of information for consumers. It also re-emphasised the need for participants to feel part of a joined up solution in order to overcome the prevalent lack of motivation to try and change things or the confidence that it is possible.

> _"I found some of the facts, like how much water a shower uses, quite astounding. This is not focused on in the media. There is a need for education like this."_

> _"This is all very well but how do I know the best way to save water? I need help and direction."_

> _"We've heard from all these people but how do we know what the definitive truth is? Everyone has their own agendas."_

49

- The need for more information

The information presented to the participants in many cases caused them to realise how many questions they had and how much more they wished or needed to know about the issue.

Many felt that they lacked a holistic or 'definitive' view of the water issue, something that was not provided in the course of the event. The participants instead felt that they had heard the views of various discrete stakeholder groups, for example the government and industry. These views often only encouraged participants' latent suspicion, and in some cases caused them to continue to feel that such partisan and biased information would make the situation worse rather than better.

Moreover, many argued that they remained unable to develop this kind of holistic view in the future due to a lack of guidance from a trusted source. This guidance might involve information on useful and realistic actions as well as greater communication on the current water saving devices available and their application. The need for a non-partisan source of information for consumers was very clear here if consumers are to be encouraged to work in partnership with other stakeholders, all of whom are seen to have their own sources of information and advice.

> "*Responsible information should be by someone neutral. What we need is public awareness without the guilt. It should not be from water companies".*

> "*We need to give more information that is honest and educational".*

- The impact of water shortages and the seriousness of the situation

Most participants felt that the information they had received and the debates in which they had been involved as part of the deliberative experience had made a significant impact on their understanding of the seriousness of the water situation.

While some (predominantly those who demonstrate a 'green' attitude to their lives) stated that they had given some thought to the way that water shortages fit into the wider environmental context, prior to the deliberative forum many had not considered the impact on the living environment. The presented by Ruth Davis from RSPB during her panel presentation of green pastures being replaced by dry scrubland, or the idea of depleting fish stocks and threatened

birds brought a new dimension to the issue for many. In discussion with each other they were able to develop on these specific examples and share others that they themselves could bring to the table. This in turn helped them a great deal in developing a meaningful and personal understanding of the issue and of the impact that water shortages could and were having on the environment.

Despite the fact that climate change was not seen as a major _cause_ of water shortage, therefore, it is clear that damage to the environment as a _result_ of water shortage was at the forefront of participants' minds. For example, while they were developing their own communication strategies during the later phase of the event, many references to the environmental impact of potential water shortages were apparent.

> _"I come from abroad in a country where water is a precious resource and find it fascinating that the British water industry has been allowed to get in to such a mess. You worry about the impact on the environment really, I mean, we're all ok, we can get drinking water, but what is it doing to conservation?"_

- The potential benefits of metering as a means of cost-saving
As a result of the information presented and the discussions that took place during the day many participants developed a more positive attitude to the idea of water metering and its usefulness as a means of monitoring and reducing usage and therefore cost. This was despite the suspicions described earlier concerning the motivations of water companies over metering.

> _"I am astounded by the difference in prices. I would definitely think about getting a meter because of the amount of money I could save"_

> _"I'd not really considered it properly before to be honest, but you're right, I could save a lot and it does seem silly not to."_

In many important ways this change was as a result of some participants' own experiences of water meters. In many cases the most active and trusted advocates for metering came not from the water industry or from the expert panel but from among the participants. This was particularly effective because although they were from different areas and different situations,

participants developed a strong sense of 'being in the same boat' during the event and were very willing to listen to and trust each others' opinions.

One other important and convincing factor for many was the 12 month 'get out clause'. This helped participants realise they could experiment with metering without having to commit to a possibly more expensive means of paying for their water. Knowledge of this fact led some participants to believe that having a water meter fitted would give them more control over their water bills, and could potentially be financially beneficial.

> *"I didn't know that [you could return to your old charge within 12 months] why don't they tell you that?"*

> *"Basically, you can get one of these fitted, see if it works out, and then if it's not cheaper revert back to your old bills? That's worth a think isn't it?"*

 - Participants' ability to make a difference and change their behaviour
During the course of the event many participants began to spontaneously come up with ideas and suggestions for conserving water and in many cases appeared surprised by their own ability to make useful contributions.

> *"I thought I was doing everything I could, but that's obviously not the case is it? I should have a shower instead of a bath"*

> *"Really we should make sure that the dishwasher and washing machine are always full"*

> *"We could use the bath water to water the garden rather than running fresh water"*

Many stated that they had entered the forum feeling that they were already doing all they could to conserve water and reduce wastage. However, exposure to information and water saving devices as well as involvement in debate and discussion with each other and with the experts prompted many to think of and suggest new ways in which they could use water more wisely, for example through using grey water.

However, whilst many participants suggested new ways in which they could use water more wisely, their overall views in terms of the causes and responsibility for the water shortage, did not change in any meaningful way during the process. This strongly suggests that information presented in its current form will not be successful in changing participants' attitudes or in helping them to accept responsibility and ultimately change some aspects of their behaviour.

It is clear that information is not currently targeted enough in terms of what specific things are being conveyed to whom. A 'one size fits all' approach to communications and the provision of information to water consumers will not penetrate existing social norms, habits, prejudices and behaviours. In some cases such an approach will lead participants to feel more alienated and even less willing to listen to information provided by the water industry or the government, or to engage with them in anything other than a hostile manner.

> *"I get angry about the obscene amount of profits that these companies make so why should I feel guilty when I leave the tap running."*

> *"Water companies made £3.6 billion in profit last year - it's obscene".*

What the deliberative process has shown is that consumer segmentation needs to be considered in far more detail.

3.3 Consumer segmentation

> One of our key research objectives was to understand consumers' attitudes and behaviour and the drivers of that behaviour.
>
> Our analysis of the findings from the research project in totality reveals that consumers can be segmented in two ways regarding behaviour and attitudes to water; according to psychographic and demographic variables, which determine people's willingness and ability to engage with issues around water and to modify their actions to conserve water.

3.3.1 Psychographic segmentation

Analysis of psychographic variables such as personality, lifestyle, values and attitudes allow us to build a broad psychographic profile of consumers. Two main axes emerge as indicators of people's propensity to engage with issues around water and devices to conserve water:
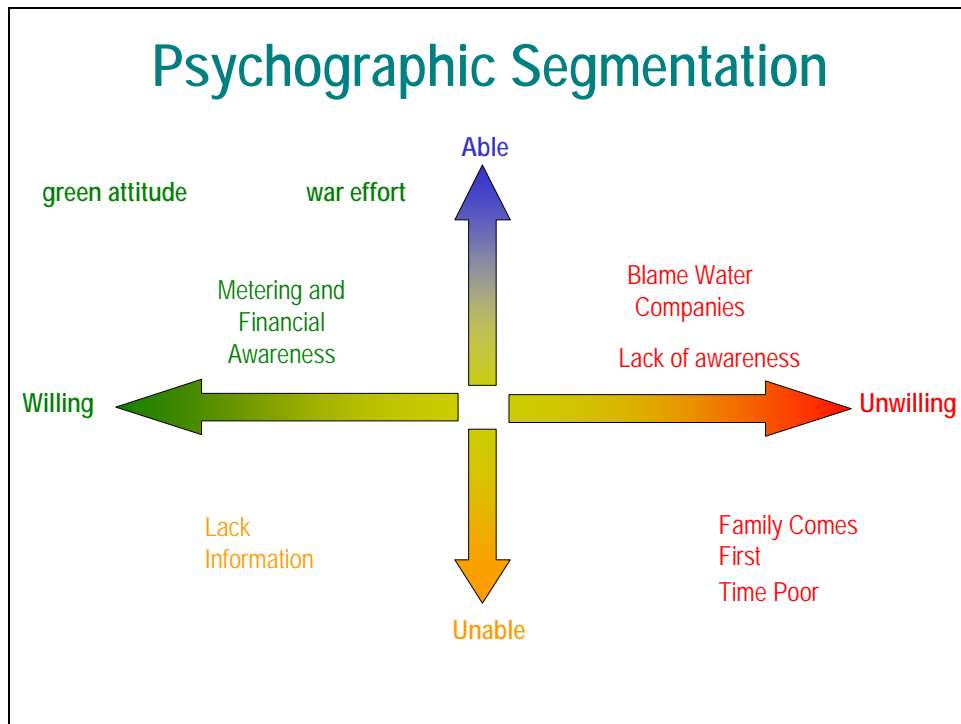
- Willingness or lack of willingness to take action
- Ability or lack of ability to take action

Participants who displayed a willingness to take action take a pragmatic response to changing conditions. Conversely, it was clear that participants who displayed a lack of willingness to take action did so usually as the result of anger, blame and a refusal to acknowledge changing conditions.

Circumstances such as tenure and family status, dictate consumers' ability to take action. Through our research we engaged participants with a range of abilities to alter their behaviour towards water which governed their responses throughout as much as their pre-existing attitudes, beliefs and values.

Our psychographic segmentation therefore reveals four key types of consumer detailed in the figure below.

Fig 9:   Psychographic segmentation

Psychographic Segmentation

green attitude   war effort

Able

Metering and Financial Awareness

Blame Water Companies

Lack of awareness

Willing ← → Unwilling

Lack Information

Family Comes First
Time Poor

Unable

In order to highlight the kinds of attitudes and behaviour that characterise the different consumer segments, we have created some fictional 'pen portrait' characters. These imaginary characters exist solely to demonstrate the *kinds of attitudes* displayed across the entire participant group and are in no way based on any of the individuals involved in the research.

- *Willing and able*

Participants who fall into this segment tend to display a 'green attitude'; water consumption is one of many consumption issues they are thinking about and tackling. They engage in the debate willingly and are keen to find out about further ways they can modify their behaviour to effect change.

Older participants (60 years +) also feature in this segment as they tend to have the resources and time to act, as well as the inclination to do so. Many for example, have already been targeted for meters. Furthermore, they are used to being asked to 'save' commodities and to modify their behaviour, as many have lived through wars, electricity shortages and strikes, and

can automatically click into a 'war effort' approach to restricting waste and reducing consumption.

Jane

Jane was an elderly lady from Cambridge. She had been retired for some years. She showed great energy and enthusiasm for the issue of using water wisely and also for the research in general and it was clear she greatly appreciated being asked her opinion.

When discussing water saving methods, Jane was keen to tell the others in her group about what she had been doing. She has been using a water butt for some years and since the most recent water shortages have threatened, she has also been making efforts to turn the taps off when she is brushing her teeth and to shower more quickly.

Jane showed great interest in the things that others in the group were doing to save water and she told everyone that she would certainly try and implement some of the techniques that others used.

Her overall attitude to saving was very characteristic of the 'war effort' mentality displayed by many of the older participants in the research. As she said, people these days had grown up in a world where everything they needed was available 'on tap;' it was difficult for them to imagine why they should make efforts to save. She and her peers remembered only being allowed 5 inches of water for their baths.

Jane recognised that younger people might find it more difficult than she did to make real savings, but she also felt that if she could do it, so could they. During the event she missed no opportunity to try and offer her younger table-mates encouragement and support.

Michael

Michael was in his late forties and lived in London. He was a self-employed joiner.

Michael's attitude to water saving was very much a part of a wider attitude to 'green' behaviour. He took the subject of climate change extremely seriously and did not display much sympathy for those whom he felt they were not taking the issue seriously enough or who claimed that saving water was too difficult.

Michael had made huge efforts to reduce his 'climate impact' as he called it. He did not own a car and had given up travelling by aircraft. He had invested in the most expensive insulation he could afford for his home, had bought a new and highly efficient boiler and he went out of his way to save water and to encourage others to do so. He made use of water butts collecting rainwater and also reused his bath water and washing up water. He also said that he was increasingly avoiding using his washing machine because it used so much water and energy.

In general Michael found it hard to understand why others did not take the climate change issue as seriously as he did. He had made big efforts to ensure that he was able to make lifestyle changes that he felt were important and it annoyed him that others were not willing to make these kinds of sacrifice as he felt they were just being lazy.

He also took a cynical view of claims by government and the water industry that they were doing all they could to make or encourage others to make savings. He did not think that real efforts were being made, or that that reasons cited for doing so were genuine. He stated that his own efforts were made despite, not because of the perceived attitude of government and industry.

- *Unwilling but able*

Participants who fall into this segment are primarily those who tend to shift responsibility onto others. Many in this segment are in a 'middle' life stage (be that in terms of age, or in terms of family status), and while they may have the financial, or information, resources needed to change their behaviour, other factors take priority; for example their family, or financial responsibilities such as mortgages.

A tendency to blame others, particularly the water companies, is also evident in this segment, and a "why should I act if the companies are not doing enough?" mentality can dominate.

> *"We shouldn't have to feel guilty. Why is the onus always on the consumer?"*

> *"We are being told that you have to pay more. The water companies should make savings by cutting leaks"*

Social pressure is often keenly felt in this segment, with many referring to the pressure to be seen to conform to hygiene norms as reasons for their unwillingness to change, or modify their behaviour.

Anne

Anne was in her late thirties and came from the north of England. She was a housewife in a well-off home, looking after five children of her own as well as being daytime carer for her two young nieces.

Although Anne professed to be concerned about climate change and had some knowledge about the issue of water shortages, she did not feel that she had the time or the energy to do much about it. She had her hands full with the children and she did not feel that it was fair for her to be asked to make even more effort in her already very hectic life. For her to save water might mean not being seen to keep her children properly clean or to provide a proper environment for them to grow up in.

Anne also felt that the water issue was not something that was particularly important in Newcastle, given the existence of the Kielder Reservoir. Moreover she was relatively happy with the service she has received from Northumbrian Water and did not recall any communications from them regarding leaks or saving water.

Indeed, a major reason she feels no need to make real efforts to save water is that she perceived this as a problem for the south, not the north of the country. She was well aware of the leakage and wastage issues in the south and did not feel that people in the north should have to pay the price if the south cannot manage their water supply properly.

Nick

Nick was a young man from Brighton who had worked as a plumber in the past, although he had since retrained as a computer engineer.

Although Nick was aware that he could make quite straightforward changes to his lifestyle in order to reduce his water consumption he had made a conscious decision not to do so. While he was ideologically opposed to the idea that the water industry should be private, he felt that since it was, he had no choice but to try and exercise his supposed freedoms as a consumer by resisting campaigns to make him reduce his usage.

Nick was exasperated that the water company in his area could not do more to reduce its own wastage and felt that by asking consumers to reduce their own usage they were simply trying to pass the buck. He stated loudly that he felt no personal responsibility for any shortage, and indeed was suspicious that there was a real shortage at all, wondering aloud on more than one occasion whether the real problem was not that the supply could not be managed well enough to provide enough water in the right place at the right time.

Recalling his time as a plumber Nick argued that had he been called to fix leaking pipes, if he failed to fix them properly and quickly his customer would quite rightly not pay him, and might even claim for compensation. He wondered why the same was not true for the water companies, arguing that the system as it existed allowed them too easily to devolve responsibility and to escape blame.

- *Willing but unable*

Participants who fall into the 'willing and unable' segment are those who are open to taking responsibility but who are unable to do so due to circumstances. Many in this segment lack the resources necessary to make meaningful changes in attitude or behaviour, and lack of information is often cited as a key reason.

Living arrangements are also important in this segment. Whether people live in rented accommodation or not greatly impacts their ability to effect change as people who rent believe they can only do so much to change their consumption, as ultimately they are constrained by the fittings and fixtures installed by the landlord. Younger people, and those often still living with their parents or in shared houses, are also common in this segment for the same reasons.

Bev

Bev was a young student from Cambridge who lived in a shared house with two friends.

Bev argued that she took her responsibility to the environment very seriously, and stated that she had already given a lot of thought to her water use before being recruited to take part in the research. She had taken part in a number of protest marches on environmental issues.

However, when thinking about her home life, she was only too aware that any changes that she or her housemates had made to their household consumption could at best be described as token. The difficulty of taking shared responsibility in a student house, with people coming and going regularly and large numbers of guests had proved too much. While she remained very willing, therefore, Bev had accepted that at the moment there was little she could really do to make a difference.

Moreover, because they were living in rented accommodation, Bev and her housemates had very little say over the possibility of having a water meter fitted or in terms of choice of household appliances. While they could of course make requests to their landlord, Bev remained convinced that it was only price and convenience that would make him choose a particular product, rather than any requests from student tenants that would not be in residence for a long period.

Andy

Andy was a 17 year old A' level student living with his parents in London.

Andy proudly described himself as the most green-conscious boy in his class at school. He read a great deal on this issue in his spare time and had been to a number of meetings and events. This was despite the fact that, as he said, his parents refused to take the issue seriously enough. Indeed, as Andy told it, he was his parents' sole source of information on the subject as they did not get enough trustworthy facts and figures from anywhere else.

Like Bev and many of the younger participants in the research, Andy wished he could do more than he was currently able to make a difference to his water consumption habits. While he had changed his own behaviour in a number of ways – turning off the taps whilst brushing his teeth, for example – he did not feel that as a household he and his family were making nearly enough effort. Although he had tried repeatedly to get his parents to change their behaviour, they always claimed they were too old to pick up new habits now, and that saving water or other 'green behaviour' was the responsibility of younger generations such as his.

Andy enquired on several occasions during the research why it was that people could not work together more effectively in partnership. He seemed to find the issue of the water companies and industry wastage very hard to comprehend, arguing that it was so obviously in everyone's best interest to work together. On one occasion during the forum he was told not to be so naïve by one of his table-mates.

- *Unwilling and unable*

Those who are 'unwilling and unable' tend to be the most 'time poor' participants. Family is often their main priority and takes precedent above any propensity to change their attitudes and behaviour.

Furthermore, many are unwilling to acknowledge the severity of the problem as it is simpler to do this than to acknowledge a refusal to take personal responsibility to act.

Low income parents and those with lots of children are prevalent in this segment, with many talking about metering as a kind of 'family tax'.


Sara

Sara was a young single mother of two children aged 3 and 7. She came from Brighton. She worked part-time in her local organic supermarket as well as caring for her children when they were not at playgroup or school.

Sara complained that she had no time to make changes to her lifestyle and when asked about this responded angrily that she was already living right at the edge of her means and could hardly be accused of being profligate with her consumption as things were. As she said, she had no means to make further savings, and no inclination to do so either.

One of her main complaints was that she was being asked to make savings in her water consumption because of a shortage while her local water company allowed millions of gallons of water to be wasted every year. She was struggling to pay her water bills, and she felt that her already scarce financial resources were being taken away to help already rich people grow richer. At the same time these people were sidestepping the responsibility to upgrade or even properly maintain the system and trying to pass the buck for wasting water onto the consumer.

When it was suggested to her that she might be better off switching to a metered water supply Sara angrily asked how she was supposed to afford the cost of having one fitted. This was, she said, another example of the water companies trying to screw consumers for everything they could while dressing it up as doing them a favour. When someone explained that she might be able to have a meter fitted for free she claimed that a meter was really just a tax for single parents who needed to use a lot of water because of their children. It would take a lot of work, she claimed, to make her convinced that any kind of change in behaviour was worthwhile or justifiably could be expected from her.

James
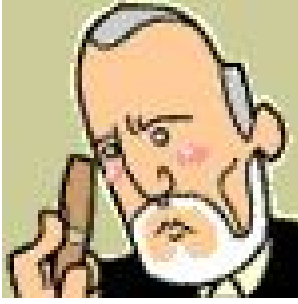
James was an elderly gentleman from Newcastle. He had retired several years before although he maintained an active role as secretary of his local bowls club and as an assistant in a charity shop in the city centre.

James argued that he had been around for too long to make radical changes to his behaviour for no reason. The water issue was not something that affected people in the north and he did not know anyone who took it particularly seriously. Moreover, he was not convinced that the problem in the south was anything like as bad as it was made out to be and he had a strong suspicion that it was just another example of media hype.

For him, it was too late to make a change to his behaviour as he did not have enough knowledge or energy to do so. However, James argued that if the issue was really that serious, then it was up to the water industry and the government to take a lead anyway, not members of the paying public like him.

3.3.2   Demographic segmentation

It was apparent across the workshops and the forum that attitudinally people fall into three broad life stages with regard to water:

- Younger participants, single or young couples, have received knowledge from school or university but they often lack the resources to turn this into action
- Middle life stage participants, usually with families, are focussed on cost and routine, and not always motivated to engage or take action
- Older participants, often widowed and retired, are far more knowledgeable, engaged and actively involved in water conservation

It should be noted that this segmentation is indicative of attitudes rather than a quantitative segmentation.

Fig 10: Overlaying demographic and psychographic segmentations

Demographic and Psychographic Picture

Able

older people

middle life stage participants

Willing

Unwilling

younger people

Time Poor

Unable
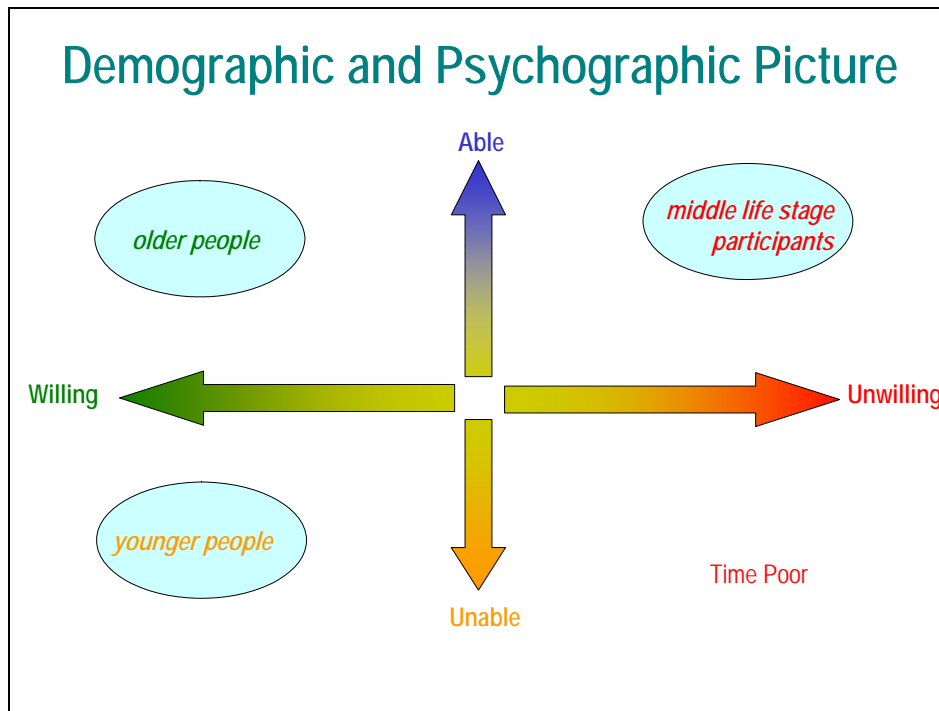
3.4   Building communications

Different communications messages are needed to engage, and appeal to, each of the different population segments, and so to ensure maximum behavioural change. As such, a multi-strand communications campaign is optimal, and should seek to, **educate**, **enable**, **encourage** and **inform** the population, whilst working towards the ultimate goal of facilitating ever larger behaviour changes, or developing 'informed action'.

Communications campaigns developed by participants as part of the deliberative process highlight a number of key criteria for communications moving forwards which should act as the basis for developing a communications strategy. This included a desire to see consistency in the language used to talk about the issue.

There is currently a void in terms of a trusted source for communication, but at the same time a real need for consistent, independent and trustworthy communications in order to prompt consumers to adopt water efficient practices. The majority of participants call for independent influencers and environmental organisation to take up this leadership mantel, whilst government and the water industry are unlikely to be successful in this role.

3.4.1   Communications Planning

As detailed in section 3.3, segmentation of the public demonstrates a variety of current mindsets and behaviours that exist; from 'unwilling and unable' to alter their behaviour, through to 'willing and able' to change. This segmentation should be borne in mind when devising a communications approach in order to maximise the effectiveness of communications.

Our research demonstrates that a 'one size fits all' approach to communications is not the most effective way to change water behaviours given the variety of current positions the public occupy, and that existing communications materials are not sufficient to affect change. For example, it is clear that some people fundamentally do not believe there is a need to 'use water wisely', and so would need to be presented with the evidence for doing so in the first instance, whilst others recognise the scale of the issue we are facing and are poised to make substantial behavioural changes and just need to be prompted to do so.

Clearly, different messages are needed to engage, and appeal to, each of the different population segments, and so to ensure maximum behavioural change.

3.4.2 Developing a communications model

The most successful communications approach would comprise various individual communications strands. These individual strands should seek to **engage**, **educate**, **enable**, **encourage** and **inform** the population, whilst working towards the ultimate goal of facilitating ever larger behaviour changes, or developing 'informed action'.

These individual communications strands should be part of a continual communications strategy which people will identify with and buy in to at different points according to their current attitudes, circumstances and lifestyles. Communicating sophisticated behavioural change goals to those who need more evidence of the problem will be ineffective; equally, it would be missing an opportunity to waste time 'preaching to the converted' when they could be taking valuable action given the necessary information and tools. A strategy is therefore needed which 'speaks' to the public at their current levels of willingness and ability to change, as detailed in the sections below:

- _Engage_

The first priority for those who are unaware, or disbelieving of the problem, is to engage with them and start to build awareness of the issue at a basic level.

- _Educate_

Those who are 'unwilling but able' to affect change need further evidence of the problem in order to convince them to take action.

> _"I grew up ignorant of water. I really shocked myself - I didn't even know water meters existed. I feel it's important to educate everyone"_

- _Enable_

There are some quick wins to be had with those who are 'willing' but are, or at least feel that they are, unable to take action. For example, providing them with hippos, crystals, or other simple water saving devices which currently exist, or communicating simple water saving tips to them, would enable easy behaviour changes.

-   *Encourage*

Those who are willing and able to take action need continual encouragement that they are making a difference to propagate their positive behaviour.
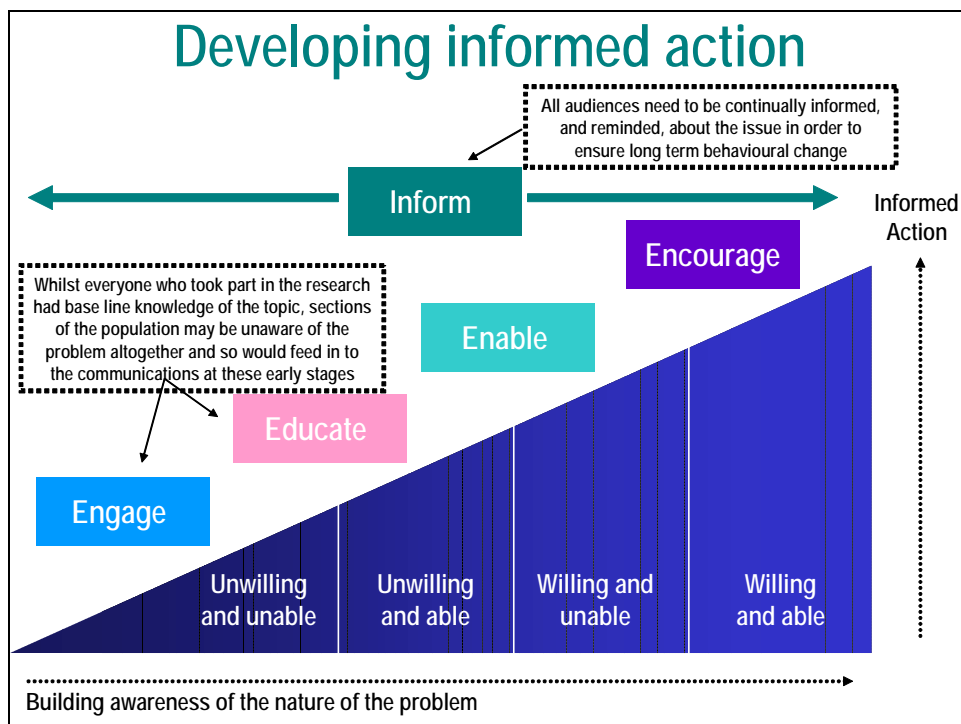
People who are 'willing and able' are ripe for sophisticated behavioural changes, such as having a water meter fitted, if targeted appropriately.

-   *Inform*

Linked to the desire for 'joined up' action with all stakeholders working together to reduce wastage and create greater water efficiency in Britain, it is important to use communications to continually inform the public of how their actions fit into the wider context; and what actions other parties are also taking.

'Informing' is as valid for the public at the 'engaging' stage as it is for those who need 'encouraging'.

Fig 11: Developing informed action: Building a communications campaign

Developing informed action

All audiences need to be continually informed, and reminded, about the issue in order to ensure long term behavioural change

Inform

Informed Action

Encourage

Enable

Whilst everyone who took part in the research had base line knowledge of the topic, sections of the population may be unaware of the problem altogether and so would feed in to the communications at these early stages

Educate

Engage

| Unwilling and unable | Unwilling and able | Willing and unable | Willing and able |

Building awareness of the nature of the problem

3.4.3 Key Communications Criteria

During the course of the forum, each table was asked to devise a communications campaign for using water wisely. Analysis of the communications messages participants were asked to develop, as well as observation of the 'lightning' moments identifiable throughout the process reveals a set of core criteria, or principles, for all communications material.

People are looking for communications that are;

- Small and manageable
- Focus on 'chunking up' (i.e. build messages up slowly)
- Accompany every call for action with a message about what the 'bigger' powers (i.e. Government and Industry) are doing
- Accompany every call for action with information about how this feeds into the superordinate goal

In addition to these underlying principles which should inform all communications tools, **language** is also key to ensuring acceptance of any communications. It was clear throughout the forum that participants responded very differently to the same message when phrased in different ways. Furthermore, much frustration was evident that different phraseology was used throughout the day, as this confused many, and appeared to undermine, or dilute, key messages. In order to maximise effectiveness, a 'universal water message' must be therefore be developed.

3.4.3.1 The 'universal water message'

The 'universal water message' should talk about 'reducing wastage' rather than 'reducing usage'.

- Firstly, 'reducing wastage' is something that everyone recognises they can do.

- 'Reducing wastage' places the emphasis on the public as a whole, highlighting that this is a national, rather than a local, or regional, issue.

- 'Reducing wastage' also implies the need for long term behavioural change, whereas 'reducing usage' implies the need for short term action to counter a specific problem.

- Furthermore, 'reducing wastage' gets to the root of the issue, moving the focus away from the impact on, and perceived potential benefits for the water industry, whereas people are sceptical about the commercial agenda behind 'reducing usage'.

- Finally, 'reducing wastage' makes sense (people are used to this message), whilst 'reducing usage' has connotations of government interventionism.

3.4.4   Sources of Communications

Both qualitatively and quantitatively during the course of the forum, participants were asked which source would be most likely to convince them to change their behaviour with regards to their water behaviour.

It is clear that there is a void in terms of strong, trusted sources with regards to water and that there is a definite opportunity for a body to assume the role as the spokesperson for using water wisely.

Quantitatively, participants' preference is for an independent influencer or environmental organisation to take the lead with regards to communicating using water wisely; however, qualitatively it is clear that there is no obvious voice of authority in this field.

> *"We've heard so much information you just don't know what to believe as they all seem to be conflicting a bit. Why can't we just have one story and one message?"*

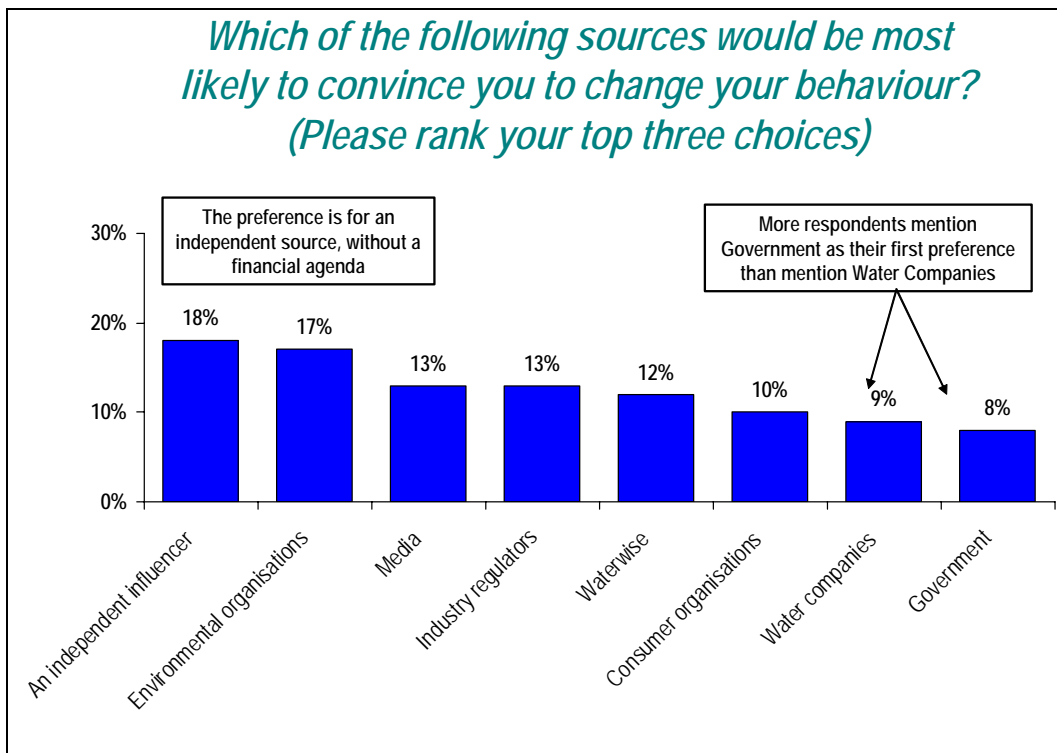> *"Perhaps there should be a Bob Geldof or Jamie Oliver for water."*

Participants are united in the view that information with regards to water and using water wisely cannot come from the water industry itself for several reasons. Firstly, the public are inherently sceptical of big business and their motivations, and for most, it does not make intuitive sense that the water industry would want to reduce the amount of water consumers are using, even when this is framed in terms of reducing wastage.

Furthermore, water companies are each seen to have their individual commercial agendas and the drive to use water wisely must be presented as a national issue, with national solutions in order to be fully accepted.

Finally, as stated earlier, awareness of the performance problems that many water companies are currently, or have recently, experienced is widespread. In this context the public are very unwilling to consider altering their behaviour in any way which might seemingly help the water companies address their own problems, problems that they are very much seen as being responsible for causing.

Government is not trusted as a source of information with regards to water either. However, if it is a choice between industry and government, then government wins as the preferred choice for communications.

Fig 12: Most influential communications sources

Which of the following sources would be most likely to convince you to change your behaviour? (Please rank your top three choices)

The preference is for an independent source, without a financial agenda

More respondents mention Government as their first preference than mention Water Companies

An independent influencer	18%
Environmental organisations	17%
Media	13%
Industry regulators	13%
Waterwise	12%
Consumer organisations	10%
Water companies	9%
Government	8%

3.4.5   Communications channels

During the course of the forum, participants were shown a range of current communications materials from various water companies to consider.

Communications which contained simple, clear messages in imaginative formats were seen to be the most successful, and the repetition of simple messages is seen as important. Stickers, laminated postcards, and games were highlighted as examples of attention grabbing communications.

> *"You need simple messages in fun, appealing formats, like these stickers. You can just see them in bathrooms reminding people."*

Participants did not like communications which looked too corporate, or which overloaded them with information as too much information is considered counter-productive. Brochure-style communications are seen as particularly inaccessible.
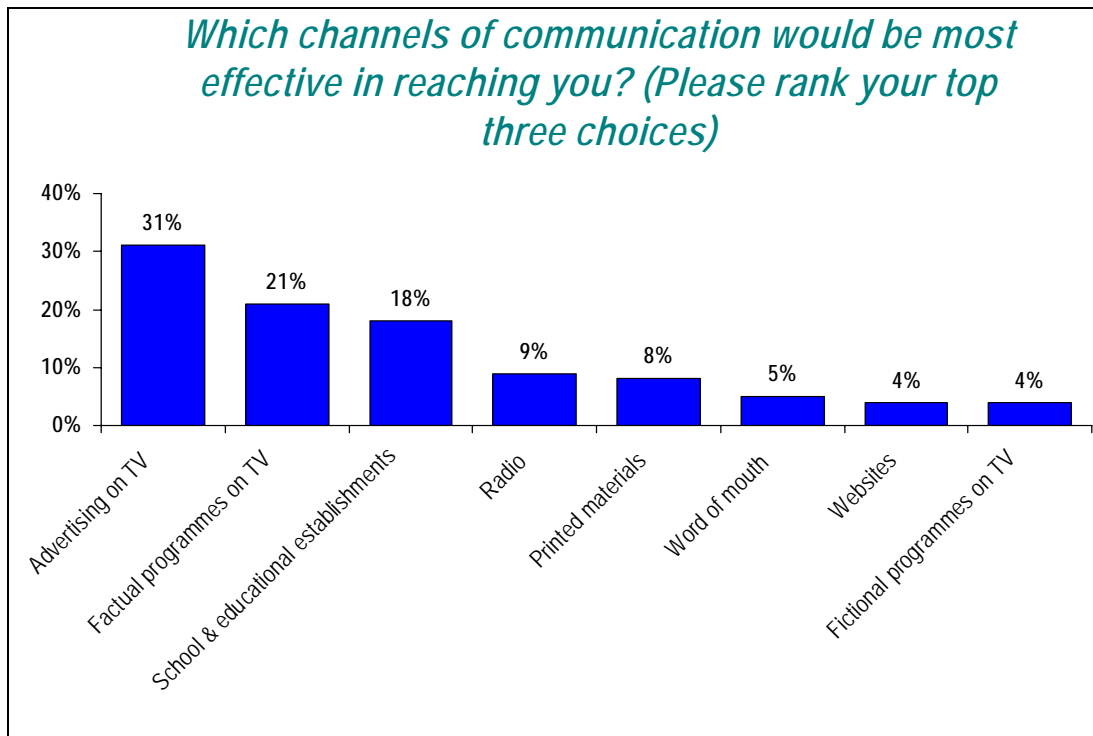
> *"The brochures look like they're trying to sell you something."*

> *"There's just too much information, it would just get chucked away – it's too corporate."*

> *"Some are just too long and boring; there are too many messages which you'd never look at."*

When asked which channels of communication would be most effective in reaching them, the most popular suggestion (voted for by one third of participants) is for adverts on television. Following this, one in five participants believes factual programmes on television would be effective.

Fig 13: Preferred communications channels

Which channels of communication would be most effective in reaching you? (Please rank your top three choices)

Channel	Percentage
Advertising on TV	31%
Factual programmes on TV	21%
School & educational establishments	18%
Radio	9%
Printed materials	8%
Word of mouth	5%
Websites	4%
Fictional programmes on TV	4%

Support for these forms of communication reflects participants' desire to ensure that the need to use water wisely is communicated widely, on a national level, to as broad an audience as possible.

Furthermore, some participants believe that using television advertising (which is known to be expensive) would prove that the issue is being taken seriously, and therefore would be more likely to prompt people to take action.

3.4.6   Specific campaign ideas

A number of key principles for communications emerge through analysis of responses to the current communications materials, and analysis of the communications campaigns devised by each table at the forum.

Participants believe that successful communications will be: fun and engaging; short; simple; easily digestible; impactful; informative; and gently persuasive (rather than trying to make people feel guilty). They are looking for campaigns which embody all, or most of these key criteria.

The figure overleaf highlights the desire for some of these criteria in participants' own words.

Fig 14: Key principles for campaigns (as demonstrated by participants' communications ideas)

"SPEED KILLS"

SHOCK TACTICS

SHORT

Simple

"THINK WATER" THINK NO WATER

• Everyones Responsibility
• Water companies are doing their level
• Future of Britain.
• Britain is not a green wet island

SAVING WATER IS FUN + COSTS YOU NOTHING (+ EASY!)

Key Messages:

Conservation

Reality of the situation

Gentle Persuasion. NO Guilt
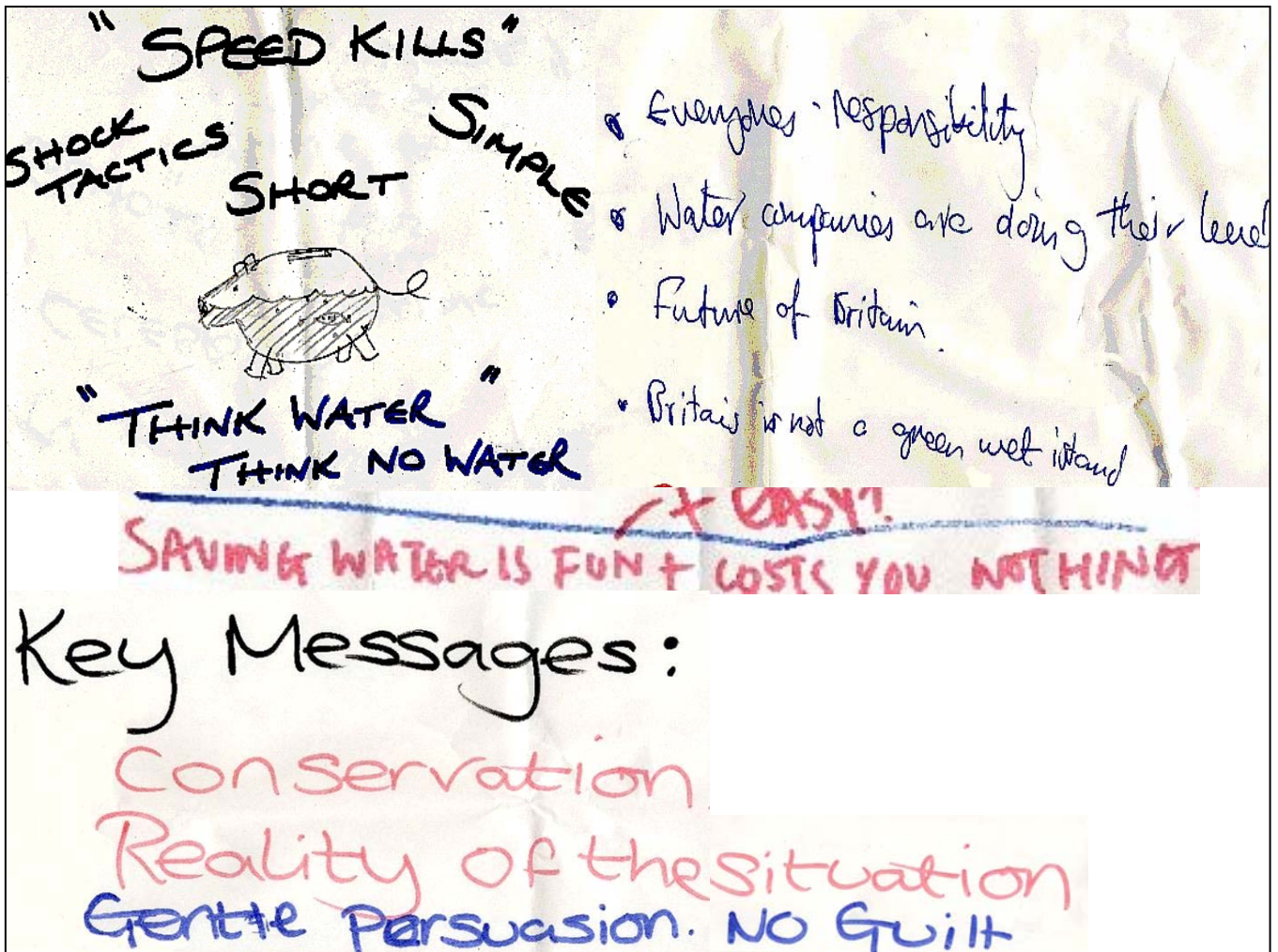
Participants spontaneously recall a number of campaigns which they believe have been successful and which could be emulated. All of these campaigns are seen to meet all, or most, of the key principles for communications. These campaigns include:

- Government drink driving adverts
- 'When will I see you again' Food Standards Agency campaign
- Anti-smoking campaigns with clogged up arteries
- Anti-speeding adverts with shocking images

Building on these discussions, participants were asked to come up with their own campaign ideas which are detailed below.

Fig 15: Communications campaign ideas

4. Conclusions – Moving forward

The deliberative process has shown overall that respondents are capable of taking on considerable quantities of detailed information on a subject that affects them on a deep level. They are also able to engage with topics that involve a number of different stakeholders (e.g. users, water companies, government and others). A particularly powerful aspect of the deliberative process displayed in this work was the effect of engagement with other participants across a range of different backgrounds to themselves. The interaction between them has raised question, debate, information sharing and sought solutions

Through this process, it has become clear that:

- Participants strongly believe that we are all responsible for action to tackle the water shortage
- Despite the fact that many acknowledge there are ways in which they can use water more wisely, many are not willing to act unilaterally without evidence that other stakeholders are engaging with them in 'joined up action' – all stakeholders need to work together to reduce wastage and create greater water efficiency in Britain
- After deliberation, many are open to the idea of the use of water saving devices and potentially moving to a metered supply
- The water industry in particular has considerable work to do in order to offset the mistrust that has built up over the last few years
- There is a lack of a single trusted source of information
- Information as it is currently provided is fractured and can produce the opposite effect to that desired (e.g. water company requests for consumers to reduce consumption leading to a growth in resistance towards attitudinal and behavioural change)

The research demonstrates that not all water users are the same, and their attitudes to using water more wisely varies quite considerably as a function of both their willingness to take on board the scale of the problem and of their ability to make changes to their behaviour given their circumstances.

With this in mind, it is critical that communications campaigns are sensitive to these demographic and psychographic typologies which we have summarised as follows:

Willing and Able:

- 'Green attitude – water is one of the many consumption issues that are being considered and tackled
- Engage willingly in debate
- Also characteristic of older participants who have the resources and time to act and may have had experience of rationing and related behaviour modification in the past (e.g. during the war, strikes etc.)

Willing but Unable:

- Open to taking responsibility but unable to do so due to circumstances beyond their control
- Many may lack the resources and information necessary to make meaningful changes in attitudes or behaviour
- Tenure is also important in this segment; rented accommodation may limit actions that can be taken to save water

Unwilling and Able:

- Generally those who shift responsibility onto others, for example the water companies, fall into this category
- May have the necessary resources to change but other factors take priority, for example family or financial responsibilities

Unwilling and Unable:

- Generally the most time poor, with family often the main priority
- Many are unwilling to acknowledge the severity of the problem as it is simpler to deny responsibility than to acknowledge the need for behavioural change

Any prospective communications campaign must be able to carefully target each of these segments. Our proposed model for achieving this is reiterated below:

Developing informed action

All audiences need to be continually informed, and reminded, about the issue in order to ensure long term behavioural change

Inform

Informed Action

Encourage

Whilst everyone who took part in the research had base line knowledge of the topic, sections of the population may be unaware of the problem altogether and so would feed in to the communications at these early stages

Enable

Educate

Engage

| Unwilling and unable | Unwilling and able | Willing and unable | Willing and able |

Building awareness of the nature of the problem

The process of engaging, educating, enabling and encouraging is continuous. It requires that efforts and outcomes be fed back to all stakeholders to identify and recognise their input into the overall super-ordinate goal.

This research has shown that while consumers are often happy to consider changes to their attitudes and behaviour and even to act on these, they cannot simply be expected to lead the way. Rather, evidence is required both that the water industry is making clear efforts and that there are potential financial benefits for doing so. It is also important to recognise that the potential benefits of any efforts on the part of consumers must be made clear to them in a way they can easily understand.

In this way water consumers are more likely to engage in water efficient behaviour by virtue of a greater sense of partnership and empowerment.

5. APPENDICES

Appendix 1 – Recruitment Specification

SAMPLE TYPE	NUMBERS REQUIRED (over-recruit by 10%)	Thames	Southern	Eastern	North
Gender	**110**	**28**	**27**	**28**	**27**
Male	**53**	**14**	**13**	**13**	**13**
Female	**57**	**14**	**14**	**15**	**14**
Age					
16-24 (18-24 only for North)	**15**	**4**	**4**	**4**	**3**
25-34	**20**	**5**	**5**	**5**	**5**
35-44	**21**	**5**	**5**	**6**	**5**
45-60	**26**	**7**	**6**	**6**	**7**
61-75	**18**	**5**	**4**	**5**	**4**
75+	**10**	**2**	**3**	**2**	**3**
Ethnicity					
White	**88**	**16**	**21**	**26**	**25**
Indian	**5**	**2**	**3**		
Pakistani	**4**	**4**			
Black African / Carribbean	**6**	**6**			
Other	**7**		**3**	**2**	**2**
Faith					
Christian	**AREA DEPENDENT**				
Hindu	**AREA DEPENDENT**	**approx 2**	**approx 2**		
Buddhist	**AREA DEPENDENT**				
Sikh	**AREA DEPENDENT**		**approx 2**		
Jewish	**AREA DEPENDENT**				
Muslim	**AREA DEPENDENT**	**approx 3**			
Other	**AREA DEPENDENT**				
Atheist	**AREA DEPENDENT**				
SEG					
AB	**16**	**4**	**4**	**4**	**4**
C1	**32**	**8**	**8**	**8**	**8**
C2	**26**	**7**	**6**	**7**	**6**
D	**23**	**6**	**6**	**5**	**6**
E	**13**	**3**	**3**	**4**	**3**
Unemployed	**5**	**2**	**1**	**1**	**1**
Permanently sick/disabled	**6**	**1**	**2**	**2**	**1**
Water bill payers					
Bill payers	**55**	**14**	**13**	**14**	**14**
Non-bill payers	**55**	**14**	**14**	**14**	**13**
Water meters					
Have water meter	**31**	**6**	**8**	**13**	**4**
Do not have water meter	**79**	**22**	**19**	**15**	**23**

Appendix 2 – Evening Worksop Discussion Guide

Consumer Council for Water – Using Water Wisely

3 Hour Pre-Forum Workshop

Timing	Task	Materials
6.00-6.30	**ARRIVAL & REGISTRATION**	▪ Name labels ▪ Pre Workshop q'naires
6.30- 6.45	**INTRODUCTION** *In plenary* ▪ OLR to introduce themselves and explain: – Purpose of this workshop – Brief outline of purpose of the reconvened workshop in London – How the session will run (whole group, breakout groups) – Participants' role – OLR's role – Confidentiality – taping, video recording – Housekeeping (food, drink, toilets, timing, fire escape, mobiles) ▪ Paired introductions – participants to talk to the person sitting next to them and introduce their neighbour (first names, where they live, what they'd be doing if they weren't here)	

Timing	Task	Materials

6.45 – 7.10	**COLLECTING ATTITUDES & BEHAVIOUR**
	In 3 breakout groups
	▪ **Spontaneous associations with 'Water'**
	▪ I want each person in the group to write down the three words that they most associate with 'Water'
	▪ *Moderator to write the word 'Water' in the middle of the flipchart, and write down all the words suggested.*
	▪ *Highlight those that come up several times, draw out themes*
	▪ *Ask if there are any other words they would like to add*
	
	▪ **Attitudes to water in homes**
	▪ How much do you value having a water supply to your home?
	    o How important is water compared to other utilities such as electricity, gas?
	▪ How do you/your family view water in the home?
	    o A precious resource or a plentiful supply?
	    o Clean or of questionable quality?
	    o Always available or frequently/occasionally interrupted supply?
	    o Good value or expensive for what you get?
	
	▪ **Behaviour with water in homes**
	▪ Which activities and tasks do you use water for in the home?
	Flipchart
	▪ How important are each of these activities in your daily life? Please rank them on the flipchart in terms of how essential each activity is to you and your family
		Flipcharts
		
		Flipcharts

7.10-7.15	*In plenary* **Participants to remain on tables for this plenary session** Moderators to feed back on importance of water and associations for each group. Lead facilitator to introduce short quiz in plenary – quiz then conducted in groups	

Timing	Task	Materials
7.15-7.30	*In 3 breakout groups* ■ **Awareness of volumes of water used** will need answers in litres and gallons ■ **Lead facilitator to run quiz** ■ How much water do think you would use, on average, for each of the following tasks? *Allow respondents to formulate their answers as a group* ○ Running a bath ○ Having a 5 minute regular shower (not a power shower) ○ Have a 5 minute power shower ○ Leaving the tap on for 1 minute while you brush your teeth ○ Flushing the toilet ○ Washing an average sized 'full load' of your clothes ○ Using a hosepipe for half an hour to water garden or wash car ○ Using a sprinkler for an half an hour **Quiz answers to be revealed at the next plenary session**	Examples of quantities of water (e.g. buckets representing amount wasted when brushing teeth)
7.30-7.40	*In 3 breakout groups* ■ **Awareness of the processes involved in delivering clean water to homes** ■ Where do you think the water comes from that is supplied to your homes ■ What processes do you think are involved in delivering clean water to your homes? ■ How simple or complex do you think these processes are? ■ *Flipchart responses* ■	Flipchart
7.40-7.50	*In plenary* ■ Lead facilitator to provide answers to quiz ■ Provide information on the activities/tasks that create the greatest amount of water wastage ■ *Lead facilitator to introduce short coffee break*	Figures on typical volumes of water used for tasks and typically wasteful activities
7.50-8.00	Coffee Break	

Timing	Task	Materials

8.00-8.15	**YOUR WATER SUPPLY**
	
	In 3 breakout groups
	▪ **How is water paid for?**
	▪ *Explore who is metered/non-metered*
	▪ *Do metered customers know where their meter is/how to read it?*
	▪ How would non-metered customers feel about having a water meter fitted
	▪ What are the advantages and disadvantages of a metered and non-metered supply?
	▪ **Explain: A meter is not used for collecting debt, simply to measure and charge the amount of water used. If you have a water meter fitted you may revert to your original unmetered bill within 12 months of installation. But if you move into a property where a meter has already been fitted, you cannot have it removed.**
	▪ Explore whether this makes a difference to perceptions of metering vs. non-metered supplies and attitudes to a metered supply
	▪ Would unmetered customers consider having one fitted?
	▪ How would you feel about a flexible tariff? This would mean (for example) a higher cost per unit of water once you use over a certain amount, or a different price depending on whethert you are using water in the summer or the winter.
	▪ Revisit themes in terms of
	    o You and your family
	    o The environment
	    o The water companies
	    o	

Timing	Task	Materials

8.15-8.35	■ **What attitudes do people have towards water companies**
	■ How well do you think your water company is managing the water supply to your home?
	    o Well? Why/why not?
	    o Not well? Why/why not?
	Note and probe any responses relating to leakages in the area and any restrictions on water use and attitudes towards them
	■ **Prompt:** Are you aware of any issues surrounding leakage in the water supply in you area?
	    o Are there restrictions on water use in your area?
	■ How could your water company improve the level of service that you get from them?
	■ What one or two things would you like to see them do for their customers?
	Awareness of water efficiency messages
	■ Have you seen any messages specifically related to the more efficient use of water in your home?
	    o Where did you see this?
	    o What effect did it have in you and your household water consumption?
	    o What was it about the message that:
	        ■ Helped you change your water consumption
	        ■ Had no effect on your water consumption
	■ *Show examples of water efficiency messages*
	■ Have you seen any of these messages/communications?
	■ Do you think these messages are effective/not effective?
	    o Why/why not?
	■ What could have been done differently in order to improve the effectiveness of these water efficiency messages?
	■ Do you think that you receive enough information on issues relating to water and its use?
	■ What other kinds of communications would be useful to you?
	■ From whom would you like to receive these communications?
	    o Personalities? Who/why?
	    o Television/newspapers/magazine? Which/why?
	■ Which sources of information are the most trustworthy to you?	

Timing	Task	Materials
8.35-8.50	**Use of water saving devices** - What devices or systems are you aware of that can help to save water in the home? Explore spontaneously then prompt: - Hippos/cistern water displacement devices - Dual flush toilets - Over-bath showers - Water butts - Aerated taps 'Grey water' recycling units - Rain water harvesting using a water butt – e.g. collecting rainwater for garden watering - How many are using each device or system? *Record for feedback* *Record responses* - How did you come to use these devices/systems? - Where did you get them? - Where did you hear about them? - What effect have they had on your water consumption? Is it noticeable or not? *Probe in terms of size of bill* - Is there anything that you think is stopping you from being more careful about your household water consumption or from using water saving devices? *Record for feedback* - When purchasing devices that use water (e.g. bathroom fittings/washing machines), does water efficiency form part of the decision making process? - Explore any references to the availability of water efficient devices *Moderator to feedback or nominate group member to feed back*	Moderator to record devices and techniques people are using to save water for feeding back in plenary Also to record what is stopping people from being more careful about water consumption

Timing	Task	Materials
8.50-9.00	*In plenary* • Moderator/group member to feed back to all what types of devices people are using • *Show of hands* – *Doing nothing, turning taps off when remembered, turning taps off all the time, using specific devices* • Moderator/group member to feed back to all what is preventing people from being more efficient in their household water consumption	

9.00-9.20
 	
5 minute discussion
 	
10 minutes preparing flipchart
 	
5 minutes for groups to talk through issues
	AWARENESS AND FEELINGS ABOUT WATER AS A SCARCE RESOURCE
	In 3 breakout groups
	• **Awareness of water as a resource**
	• *Group to create flipchart presentation and nominate member to feed back in plenary*
	• What are your 5 main worries and concerns around the supply of water to you and your homes?
	• *If time allows, group to also answer the following questions*
	• Do you see water as a scarce resource?
	   o How credible are the arguments that you have seen about water being an increasingly scarce resource?
	   o How important do you see the careful use of water compared to (for example) recycling household waste, taking steps to save electricity, using lower emission vehicles/public transport?
	   • Have anybody noticed any changes in their local environment/wider environment related to lack of water
	   • What/how?
		Flipchart, pens, paper, felt tip markers

Timing	Task	Materials

9.20-9.30	**WRAPPING UP**
	
	In plenary
	■ Lead facilitator to thank all for their input and hard work and to explain
	  – What will happen next time
	  – What they need to do in the meantime – briefing pack (including going through what is in it, what they must read for the next workshop, what is background reading)
	  – Pre forum tasks (tbc)
	  – Travel arrangements
	
	■ **CLOSE**
		Briefing packs, any pre forum task material, post workshop questionnaires

Appendix 3 – Forum Discussion Guide

Public Consultation on Using Water Wisely – forum agenda

Novotel Euston – 22nd July 2006

Timing	Task
9.30 - 10.00	**ARRIVAL & REGISTRATION**

10.00 - 10.30 (30mins)	**INTRODUCTION** *In plenary* **(10 minutes)**
	■ Welcome back
	■ OLR to introduce people in room
	■ OLR to remind participants:
	  – Purpose of this workshop
	  – How the session will run (whole group, breakout groups, panel discussion)
	  – Participants' role
	  – OLR's role
	  – Confidentiality – taping
	  – Housekeeping (food, drink, toilets, timing, fire escape, mobiles)
	
	● Dame Yve Buckland from CCWater to introduce day **(5 minutes)**
	● Bill Giles to give opening talk **(15 minutes)**

Timing	Task

10.30–11.00 (30mins)	RESPONSE TO DIARIES, CUTTINGS AND PACK OF MATERIALS
	
	In 10 break out groups of 10, mixing up different regions
	
	• Discussion of diaries – what are the main themes? Where was water fixed and necessary and where could you have saved water?
	
	• Discussion of stories/clippings collected
	
	Discussion of pack materials – how did you find the reading?
	
	What did you find most interesting? Least interesting?
	
	Any new/ surprising facts/ perspectives you hadn't previously considered?
	
	Have your views changed at all?
	   – How?
	   – What made you change your mind? [*probe specific facts/ viewpoints*]
	Moderators to prepare respondents for Q&A, look out for and be aware of any potential questions/issues suitable for the panel Q&A

11.00 – 11.20	*Key pad training and voting and initial questions:(see attached sheet)*
11.20 – 11.45 (25mins)	PANEL DISCUSSION *In plenary* • lead facilitator to introduce panellists • inform participants each table will have opportunity to ask panellists a question and to bear this in mind when listening • each panellist to give 3 minute presentation on their perspective/issue **Panelllists** Jacob Tompkins – Director of Waterwise Peter Midgley – Environmental Agency Regional Strategic Unit – Southern Area Ruth Davis – Head of Water Policy – RSPB Barrie Clark – Director of Water Communications at Water UK Philip Fletcher – Chairman, Ofwat

Timing	Task
11.45-12.20 (35mins)	**PANEL Q & A SESSION** *In breakout groups (5 minutes only)* What questions do you have for the panellists? Each group to produce a group question. (probing questions to move beyond information gathering) Moderator to flipchart questions*)* ***Moderator to capture any other questions there is not time to ask*** *In plenary, chaired by lead facilitator* • one member of each group to put the group question to the panellists • remaining questions from the floor
12.20-13.00 (40mins)	**LUNCH**
13.00-13.45 (45mins)	**CONSIDERATION OF PANELLISTS′ VIEWPOINTS** *In breakout groups of 10* Consider bullet points of the panellists′ talks (5 bullet points per talk) Spontaneous responses – how did you find the panel discussion overall? Which facts/ points of view did you find most compelling? Least compelling? Any new/ surprising facts/ perspectives you hadn′t previously considered? Taking each of the perspectives in turn – How compelling are their points of view? Has hearing the different arguments changed your mind on the issue of water as resource? How? What made you change your mind [*probe specific facts/ viewpoints]* Where does the responsibility for water conservation lie? *[Has there been any shift in opinions on who is responsible since the panel session]*
13.45-14.00	*Key pad voting* *Trade offs on issues arising from panellist talks*
14.00-14.10	**PRESENTATION OF SOCIOLOGICAL/PSYCHOLOGICAL INFORMATION** Christine Sefton – University of Bradford

Timing	Task

14.10-14.40 (30mins)	**CONSIDERATION OF WATER SAVING DEVICES – CHANGING BEHAVIOUR**
	 In 10 break out groups of 10
	 Spontaneous responses to the sociologial/psychological information
	 How does this affect your views about your behaviour?
	
	 Show stimulus material – different devices **also use Water Saving Devices handout**
	    – Discussion of different devices
	    – Advantages/disadvantages of each
	    – How likely would it be to change behaviour?
	 Flip chart how devices might change behaviour and under what circumstances – reflect on how socio-psychological info might affect behaviour, and behaviour with devices

14.40-14.50 (10 mins)	**TEA BREAK**
	PLEASE TURN OVER

Timing	Task

14.50-15.35
(45mins)
	CONSIDERATION OF COMMUNICATIONS
	
	In 10break out groups of 10 (5 minutes)
	
	• Discuss the role of communications in informing/changing behaviour
	
	• each group to consider a wide range of messages from different sources **–** leaflets/advertising
	
	• the impact of each of these approaches – benefits/disadvantages/likelihood to change behaviour
	
	Exercise in threes (15mins)
	
	Using available stimulus material
	
	    • Think of a campaign you have seen/heard that changed your behaviour? Why did it work for you?
	
	    • Build your own communications campaign – how would you persuade people to change their behaviour? Use the principles from the campaign that changed your own behaviour. What other methods/materials would you use?
	
	        o Consider which body (e.g. government, water companies) should be responsible for which messages
	
	        o Consider how messages/communications channels might vary for young people, older people, people with families, people living on their own
	
	        o Consider what other actions would be required by different bodies (e.g. government, water companies, water users) to ensure the effectiveness of the campaign
	
	Discussion (10mins)
	
	Present back to the rest of the group
	    – Moderator to note similarities/ differences between pairs/ trios
	
	Building a group communication campaign – either a composite based on the ideas shown be each threesome, an entirely new one having shared ideas, or a development of one of the threesome or pair's existing ideas
	
	Flipchart presentation (15 mins)
	
	All participants to prepare table presentation
	    – Using same template as under 'exercise in threes' above
	    – Encourage creativity where possible and include whom should be responsible for messages, variations in message by audience and actions required by other bodies (e.g. government, water companies, water users, regulator etc)

Timing	Task
15.35-16.05 (30 mins)	WRAPPING UP *In plenary* Representatives from the groups to present back their groups' communications campaigns (the number of groups to feed back to be discussed) *Defra and CCWater to receive the results* **Discuss** Similarities and differences between groups Anything you've heard from other groups you hadn't considered before?
16.05-16.15 (10 mins)	**KEY PAD VOTING** *Repeating initial questions of the day bar question 1 and 2.. Additional questions about communications*
16.15-16.30 (15 mins)	**Sum up** Address by Defra Address by CCWater – what happens next **Thanks and close** Participants to complete post-workshop questionnaires Incentives

Slide 1

Slide 2

Slide 3

How did you get here today?

❶ **Walk**

❷ **Bicycle**

❸ **Car**

❹ **Bus**

❺ **Tube**

❻ **Train**

❼ **Rocket Sled**

Slide 4

***Which of the following do you most enjoy
doing with water?***

❶ **Crushing ice-cubes with your teeth**

❷ **Sitting in the sauna**

❸ **Running through sprinklers**

❹ **Cleaning the bath**

Slide 5

**INITIAL SESSION
"The Nature of the Problem"**

Slide 6

*How serious do you think the water shortage
is where you live?*

❶ Very serious

❷ Quite serious

❸ Not very serious

❹ Not at all serious

❺ Don't know

OPINION
LEADER
RESEARCH

Slide 7

How serious do you think the water shortage is in England?

❶ Very serious

❷ Quite serious

❸ Not very serious

❹ Not at all serious

❺ Don't know

Slide 8

How far do you agree that each of the following is a cause of the water shortage?

Climate change

Rainfall conditions

Households using more water

People wasting water

How the water companies manage the water supply

Leakage in the system

Increase in the population in some areas

❶	❷	Ž	❹	❺
STRONGLY DISAGREE		NEITHER DISAGREE NOR AGREE		STRONGLY AGREE

Slide 9

Which of the following do you think is mostly responsible for dealing with the water shortage in England?

❶ **The government**

❷ **The regulators (i.e. Ofwat, Environment Agency)**

❸ **The water users (i.e. the general public)**

❹ **The water companies**

❺ **All of us (the government, the regulators, the water users and the water companies)**

❻ **Don't know**

Slide 10

At times of water shortages if you felt your water company had done everything it reasonably could to save water, how willing would you be to accept the following restrictions on water use?

Hosepipe bans (e.g. for watering the garden and washing cars)

Water restrictions that go beyond hosepipe bans (e.g. bans on washing windows/cars)

Standpipes

Rota cuts (cut off a supply of an area for a determined period e.g. no water from midnight to 2am)

Drought permits that allow companies to take more water from rivers but which put more strain on fish and other wildlife

❶ **VERY UNWILLING** ❷ Ž **NEITHER WILLING NOR UNWILLING** ❹ ❺ **VERY WILLING**

Slide 11

In the long term, some areas of the country are likely to face pressures on the amount of water that can be supplied. How willing would you be to accept the following in that case?

Personal action to reduce consumption

Installation of meters so that people pay for the water they use

Higher bills to pay for reservoirs or other means of securing increased supplies of water

Higher bills to pay for more action on leakage

❶	❷	Ž	❹	❺
VERY UNWILLING		NEITHER WILLING NOR UNWILLING		VERY WILLING

OPINION LEADER RESEARCH

Slide 12

POST PANEL TESTING SESSION
"Testing Potential Solutions"

Slide 13

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

We should make more careful use of the water we have

The water companies should invest more in making better use of what we have.

All households in England should have a water meter fitted

All households in areas where there is a water shortage should have a meter fitted

I would be willing to pay extra on my bill to avoid hosepipe bans.

The water companies should invest more in new water supplies to avoid water shortages in future

There is a need to conserve water to look after our wetlands and wildlife

❶ **STRONGLY DISAGREE** ❷ Ž **NEITHER DISAGREE NOR AGREE** ❹ ❺ **STRONGLY AGREE**

OPINION LEADER RESEARCH

Slide 14

Who of the following do you think is mostly responsible for ensuring water is not wasted?

❶ The government

❷ The regulators (i.e. Ofwat, Environment Agency)

❸ The water users (i.e. the general public)

❹ The water companies

❺ All of us (the government, the regulators, the water users and the water companies)

❻ Don't know

OPINION LEADER RESEARCH

Slide 15

FINAL SESSION

Slide 16

How far do you agree that each of the following is a cause of the water shortage?

Climate change

Rainfall conditions

Households using more water

People wasting water

How the water companies manage the water supply

Leakage in the system

Increase in the population in some areas

❶   ❷   Ž   ❹   ❺

STRONGLY   NEITHER DISAGREE   STRONGLY
DISAGREE   NOR AGREE   AGREE

OPINION
LEADER
RESEARCH

Slide 17

Which of the following do you think is mostly responsible for dealing with the water shortage in England?

❶ **The government**

❷ **The regulators (i.e. Ofwat, Environment Agency)**

❸ **The water users (i.e. the general public)**

❹ **The water companies**

❺ **All of us (the government, the regulators, the water users and the water companies)**

❻ **Don't know**

Slide 18

At times of water shortages if you felt your water company had done everything it reasonably could to save water, how willing would you be to accept the following restrictions on water use?

Hosepipe bans (e.g. for watering the garden and washing cars)

Water restrictions that go beyond hosepipe bans (e.g. bans on washing windows/cars)

Standpipes

Rota cuts (cut off a supply of an area for a determined period e.g. no water from midnight to 2am)

Drought permits that allow companies to take more water from rivers but which put more strain on fish and other wildlife

❶ ❷ Ž ❹ ❺
VERY UNWILLING **NEITHER WILLING NOR UNWILLING** **VERY WILLING**

Slide 19

In the long term, some areas of the country are likely to face pressures on the amount of water that can be supplied. How willing would you be to accept the following in that case?

Personal action to reduce consumption

Installation of meters so that people pay for the water they use

Higher bills to pay for reservoirs or other means of securing increased supplies of water

Higher bills to pay for more action on leakage

❶ VERY UNWILLING
❷
Ž NEITHER WILLING NOR UNWILLING
❹
❺ VERY WILLING

OPINION LEADER RESEARCH

Slide 20

Which of the following sources would be most likely to convince you to change your behaviour?   Please rank your top three sources

❶ The Government (e.g. Defra)

❷ The water companies

❸ The industry regulators (Ofwat and the Environment Agency)

❹ Waterwise

❺ Environmental organisations (e.g. RSPB, WWF, Greenpeace, Friends of the Earth)

❻ Consumer organisations (e.g. Consumer Council for Water)

❼ The media

❽ An independent influencer (a well known individual or individuals who care about the problem)

OPINION LEADER RESEARCH

Factsheet 1

General facts and figures

The UK water industry collects, treats and then supplies over **16 billion litres of water to homes and businesses every year**. It also collects and treats over **10 billion litres of waste water** (Water UK).

The UK water industry has more than 700,000 kilometres of mains and sewers (640,206 kilometres in England and Wales), **enough to stretch to the moon and back** (Water UK).

In 2005-06 approximately 28% of households in England and Wales were on metered charges. This is expected to rise to 30% by March 2007 (Ofwat).

The UK water industry has 1,584 boreholes, 666 reservoirs and takes water from 602 different river sites. **Two-thirds of our water comes from surface water and one-third from groundwater** (Water UK).

Water covers 75% of the Earth's surface. Fresh water lakes and rivers make up only 0.009% of water on Earth and ground water makes up 0.28%.

The total amount of water on Earth remains about the same from one year to the next as it circulates between the oceans, land and atmosphere in a cycle of evaporation and precipitation.

Fresh water lakes and rivers make up only 0.009% of the water on the Earth; ground water makes up 0.28% (BBC NEWS).
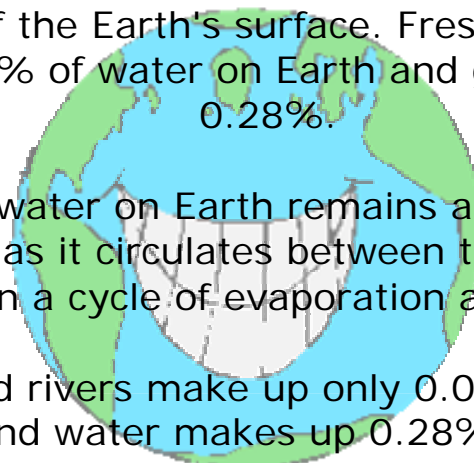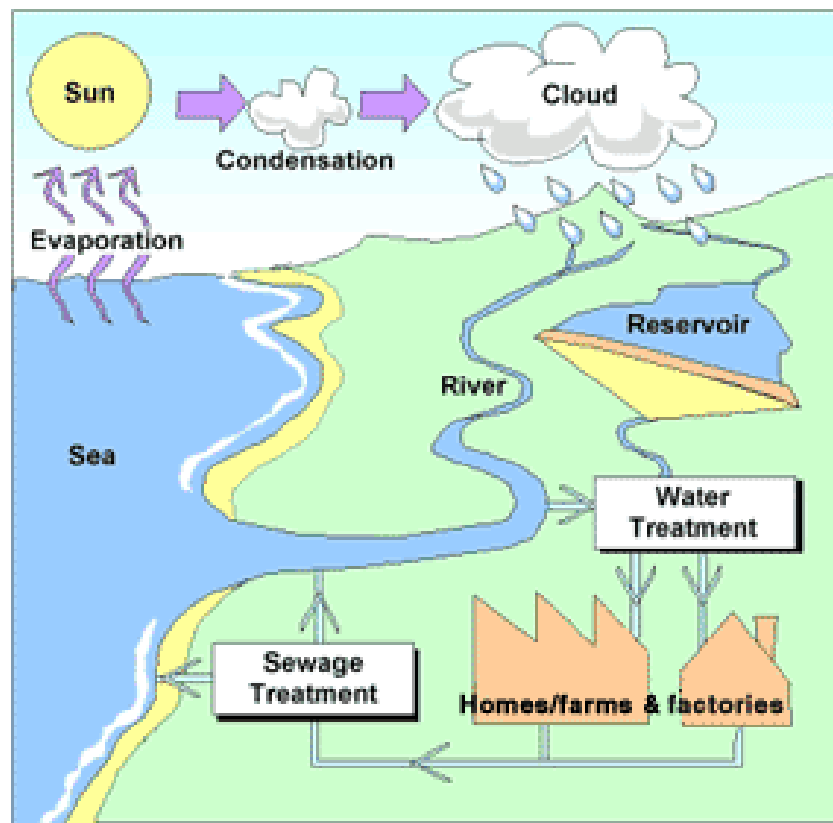
Factsheet 2

The water cycle

Water is constantly being recycled. We are using the same water used by dinosaurs millions of years ago. This constant recycling of water is known as the 'water cycle'.

The heat of the sun evaporates water from the oceans. The wind transports water vapour around the world. Moisture rises when it meets high ground and forms clouds which release rain, hail or snow. Some rain soaks into the ground, the rest runs into rivers and returns to the sea.

Factsheet 2

The role of the UK's water companies

Man controls the water cycle by building **reservoirs** to collect and store water during rainy seasons so that enough is available in drier seasons.

Reservoirs are formed by building a **dam** across a river valley to hold back the water. **Dams** constantly feed water into the original river valley so that the river continues to run. Some reservoirs supply water to a **water treatment works**, others are used to keep river levels topped up.

Water companies also take water from rivers for treatment. River water quality is much less predictable as rivers can sometimes be dirty or polluted. Careful checks are made on river water before it enters a treatment works to discover what it contains.

The rain that falls on the ground usually soaks down through the soil and into the rock beneath. Here it forms natural underground reservoirs called **aquifers**. Water companies take water from aquifers by drilling a hole, called a **borehole**, into the rock and inserting a pump at the bottom.

Based on material from Northumbrian Water's website

THREE VALLEYS WATER

North West Water
a United Utilities company

awg

Dŵr Cymru
Welsh Water

Wessex Water

NORTHUMBRIAN WATER

Thames Water

HOW DO WE USE WATER?

Many different things influence water use and attitudes to water. The role of water in people's lives changes all the time.

We can say that:

Water is a commodity – something that we pay for.

Water is a natural environmental resource.

Water is a basic human right and necessary for life.

Water is of religious significance in some faiths.

We use water in different ways. Some people use water carefully because they have a water meter. Others use as much as they want because they have paid for a service.

Water use and our daily routines

In our daily routines and personal hygiene preferences habits can take over. Water-use often has to fit in with our daily routine. For example: many people will use a shower in the morning because it is quick and convenient. Sociologists are interested in how water use routines are developed and how they fit in with the other routines of our daily lives.

Consider an average morning getting out of bed, getting the kids off to school and self off to work.

Water use should be considered in this wider context.

Factsheet 4

How much water do we use?

	Average household water consumption (2004-05) litres per head per day	Average consumption for metered households (2004-05) litres per head per day	Average consumption for non-metered households (2004-05) litres per head per day
NORTHUMBRIAN WATER	146	143	147
Thames Water	159	153	161
Southern Water	157	153	162
CAMBRIDGE WATER COMPANY	148	122	155
UK AVERAGE	150	139	154

## What can you do with 150 litres of water a day?

- Have a shower – the average shower uses 45 litres of water (Bathroom Manufacturers Association)
- Brush your teeth twice a day without leaving the tap running – half a litre
- Put the kettle on for a cup of tea in the morning – half a litre
- Drink the recommended 1.2 litres of tap water a day, plus an additional litre for every hour of exercise (Food Standards Agency)
- What goes in must come out – flush a dual-flush toilet the average of 5 times a day at 4.5 litres to use 22.5 litres (Bathroom Manufacturers Association)
- Put the washing machine on when it's full – 50 litres per cycle if machine is under 10 years old (Environment Agency)
- Put the dishwasher on when it's full – 15 litres per cycle if machine is under 10 years old (waterwise)
- Water garden with 3 watering cans, average of 4 litres per can.

OR

- Use a lawn sprinkler for around 17 minutes (uses up to 500 litres of water an hour – source Wessex Water website).
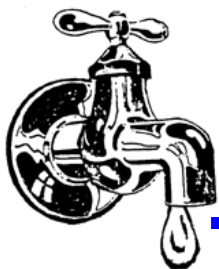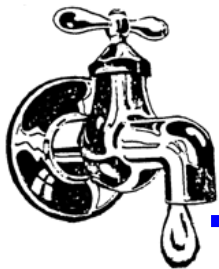
Factsheet 5

Water use of household and garden activities

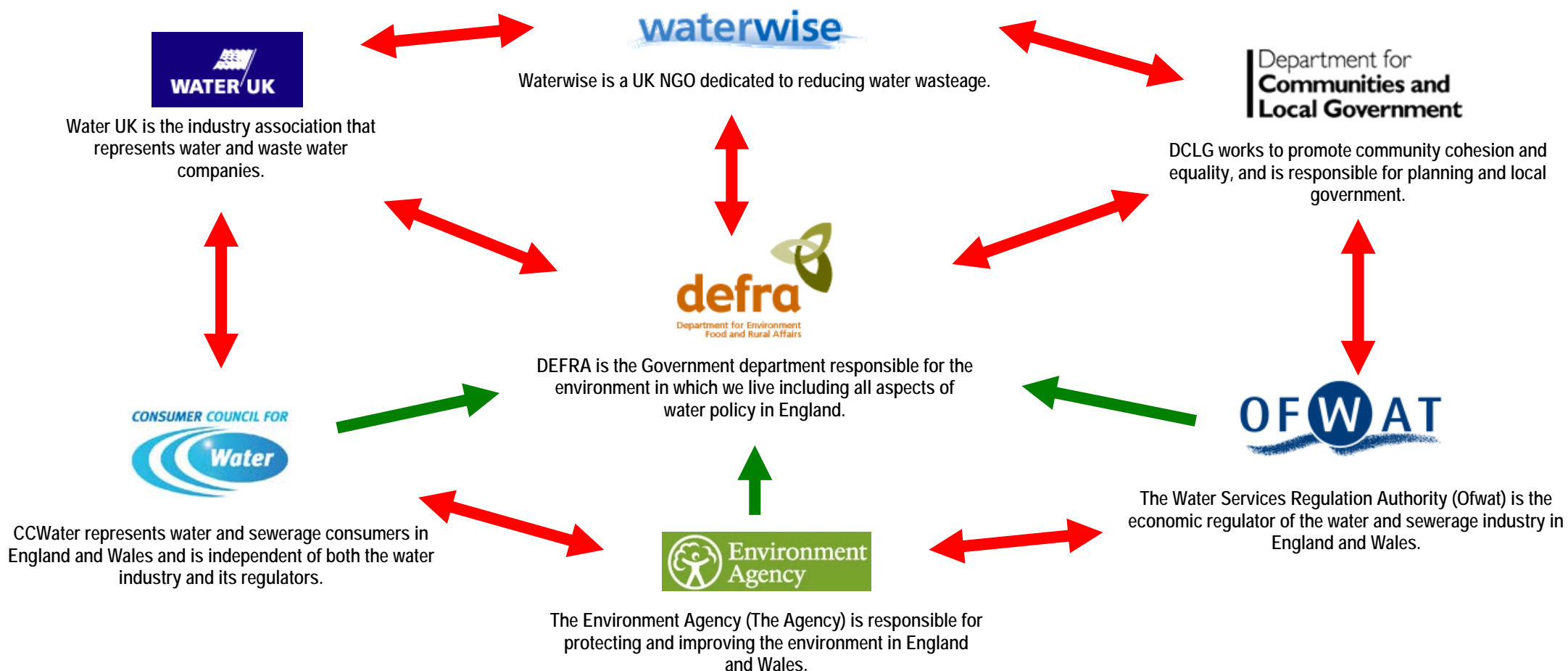*NB. Figures are estimates – exact figures will vary according to appliances, flow-rate and design.*

Activity	Approach	Litres	Approach	Litres
Brushing teeth	Fill a beaker to rinse twice a day, don't leave the tap running	1	Brush for 5 minutes a day with the tap running – 5 x up to 10 litres	50
Personal hygiene	Shower – 5 minutes x flow of 9 litres a minute for average shower	45	Bath – average size	100
			Power shower – 5 minutes x 20 litres	100
Washing the dishes	Dishwasher under 10 yrs old – full load	15	Dishwasher under 10 yrs old – half load or less	15 plus
			NB. Running two half loads will use more than one full load.	
	Handwashing dishes in a bowl without running the tap (family *might* use 63 litres when using a bowl to wash up)	63 aprx.	Handwashing dishes under a running tap	150
Washing machine	Washing machine under 10 yrs old – full load	50	Washing machine under than 10 yrs old – half load	
	Washing machine more than 10 yrs old – full load	100	Washing machine more than 10 yrs old – half load	27.5
			NB. Running two half loads will use more than one full load.	55
Flushing the toilet five times a day	Dual flush toilet 6/4 litres	22	Older toilet – 1950's	65
	Modern toilet – standard 6 litre per flush but save 1 litre with a hippo, save-a-flush or other cistern displacement device	25	Older toilet – 1960's	45
			Older toilet – 1980's	37.5
Preparing fruit and vegetables to eat	Wash in a bowl without leaving the tap running	2-3	Wash under a running tap for a couple of minutes 2 x 6 litres	12
Watering the garden	Use a watering can filled with tap water	8-10	Use a sprinkler for an hour	500 plus
	Use a watering can filled with water from a water butt	0	Use a hosepipe for 10 minutes at approx. 18 litres of water per minute	180
	Re-use water from washing the dishes	0		
	Re-use water for preparation of fruit and vegetables	0		

Sources: Bathroom Manufacturers Association; Water Wise; Environment Agency

Factsheet 6

How the water industry is managed

waterwise

Waterwise is a UK NGO dedicated to reducing water wasteage.

WATER UK

Water UK is the industry association that represents water and waste water companies.

Department for **Communities and Local Government**

DCLG works to promote community cohesion and equality, and is responsible for planning and local government.

defra — Department for Environment Food and Rural Affairs

DEFRA is the Government department responsible for the environment in which we live including all aspects of water policy in England.

CONSUMER COUNCIL FOR Water

CCWater represents water and sewerage consumers in England and Wales and is independent of both the water industry and its regulators.

OFWAT

The Water Services Regulation Authority (Ofwat) is the economic regulator of the water and sewerage industry in England and Wales.

Environment Agency

The Environment Agency (The Agency) is responsible for protecting and improving the environment in England and Wales.

There is two way dialogue between all the parties but Ofwat, the Agency and CCWater report directly to Defra

Water Shortages – Wider Implications

Implications for agriculture

Drought also affects natural vegetation and crops; the reduction of available water for crops could lead to a reduced harvest.

Farmers may ask the Environment Agency if they can take more water from rivers/boreholes to help them water their crops.

Implications for businesses

Drought orders may restrict some small business activities such as window cleaning and car washing.

Businesses growing bedding plants for local authorities/councils may also be affected by watering restrictions, and potentially by a downturn in demand.

Implications for the environment

In long periods of dry weather, water levels in rivers and in the ground drop and the amount of water in aquifers (water-bearing rocks below ground) and reservoirs falls, This impacts on wildlife, fish and navigation.

Flow rates in rivers fall resulting in more environmental problems leading to fish deaths and algal blooms.

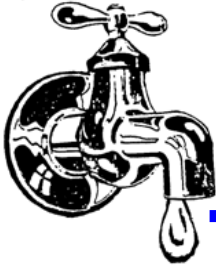More algae in ponds and rivers.

More concentrated pollution in rivers

Low flows also reduce fish spawning.

Water plants will find it hard to survive when rivers and streams dry out.

The number of wading birds on wetlands may decrease as their habitat is lost.
(Source: Environment Agency website)

Implications for the water industry

Customer satisfaction with service levels may fall as restrictions kick in.

This may lead to difficulties in engaging the public to increase awareness of the issues and adopt more water efficient behaviours.

The water industry will need to increase awareness of issues and encourage people to use water more efficiently.

Implications for the general public

More frequent use of water restrictions such as hosepipe bans and drought orders.

Concerns for vulnerable consumers, such as the elderly, as water restrictions are introduced.

Rising prices.

Need for increase in spending on infrastructure, such as reservoirs, desalination plants etc.

Need to conserve water through water metering and improve leakage management
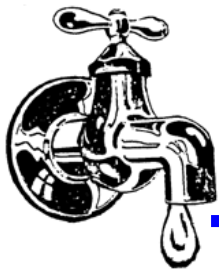
Factsheet 8

Leakage - facts and figures

Source: Ofwat

	Leakage from the distribution network (ltrs per property per day) *Water company responsible for these pipes*	Estimated leakage from underground supply pipes (ltrs per property per day) *Householder responsible* (see below)	Total estimated leakage (ltrs per property per day)
NORTHUMBRIAN WATER	94.3	40.2	134.5
Thames Water	188.5	72.2	260.6
Southern Water	69.8	19.5	89.4
CAMBRIDGE WATER COMPANY	84.5	30.6	115.0
UK AVERAGE	108.1	42.8	151

*The supply pipe runs from the water main in the road into each property. Responsibility for repairing leakage from the supply pipe is split between the water company and the householder. The water company is responsible for the supply pipe from the water main in the road to the property boundary. The householder is responsible for the supply pipe from the property boundary into their house.
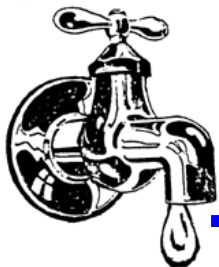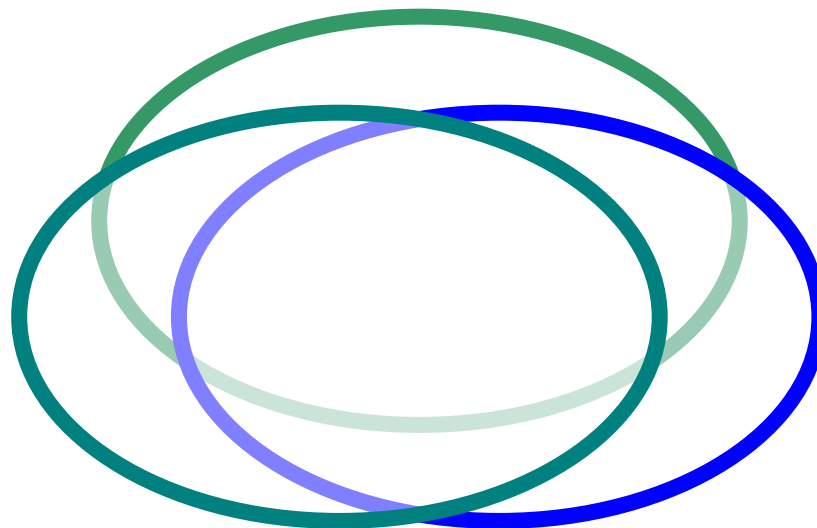
Leakage - facts and figures

A megalitre (Ml) is one million litres of water. An Olympic sized swimming pool holds 2.5 Ml of water.

The water that leaks daily through broken pipes costs between £1,512,000 and £3,600,000 to treat and will cost the same to treat again after going through the water cycle and back to treatment plants (Source: BBC website 'What happens to water from leaking pipes?' 23 May 2006).

In 1994-95 total industry leakage was 5112 Ml a day (Source: Ofwat).

There are more than 300,000 km of water mains pipework in England and Wales.

In 2004-05 total industry leakage was 3608 Ml a day, a reduction of 1504 Ml a day (Source: Ofwat).

Over the last five years, the water companies have spent £770 million finding, detecting and mending leaks (Source: Beat the drought website).

This reduction is equal to the daily needs of nearly ten million domestic customers - equivalent to the combined populations of London, Birmingham, Leeds, Sheffield, Bristol and Newcastle-upon-Tyne (Source: Ofwat website).
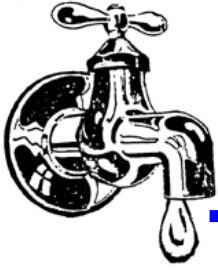
Optional 1

Finding out about water

Information on how to save water and water resources should filter through to the public, create a gradual increase in awareness about personal water use and water resources, and then encourage a change in behaviour.

However it is often difficult to get this message out to the public.

Psychologists think this is partly because rain is part of our culture - we think of the UK as being a wet country. People often don't believe that parts of the UK are in fact very dry.

Water issues are part of bigger problems such as climate change. For some, climate change is so overwhelming that they don't think anything can be done.

How the water industry is managed

Department for the Environment, Food and Rural Affairs (DEFRA) is the Government Department that works for the essentials of life: water, food, air, land, people, animals and plants. Defra is responsible for all aspects of water policy in England, including water supply and resources, and the regulatory systems for the water environment and the water industry. These include drinking water quality, the quality of water in rivers, lakes and estuaries, coastal and marine waters, sewage treatment and reservoir safety.

Department for Communities and Local Government (DCLG) was created on 5 May 2006 with a powerful remit to promote community cohesion and equality, as well as responsibility for housing, urban regeneration, planning and local government.

The **Water Services Regulation Authority – Ofwat** - is the economic regulator of the water and sewerage industry in England and Wales. Ofwat:
- Sets limits on the prices which companies can charge;
- Ensures companies are able to carry out and finance their legal duties to supply water and treat sewerage;
- Encourages companies to be more efficient;
- Protects customers by ensuring there is no undue discrimination and that standards of service are safeguarded.

Ofwat reports to Defra.

The **Environment Agency (the Agency)** is responsible for protecting and improving the environment in England and Wales. The Agency:
- Has a duty to ensure the proper use of water resources in England and Wales; this is achieved through a mix of regulating the amounts of water taken and the quality of water returned to the environment.
- Monitors water in the environment and decides who can take water from rivers, lakes or groundwater and how much they can take;

The Agency reports to Defra.

The **Consumer Council for Water (CCWater)** represents users of the water as sewerage network in England and Wales and is independent of both the water industry and its regulators. They deal with complaints about the water industry, and represent consumer views to the regulators and the water industry.

CCWater reports to Defra.

Waterwise is an organisation dedicated to reducing water wastage in the UK. Set up in September 2005, Waterwise is a small organisation with close links to Government, regulators, industry and other non-governmental organisations. Waterwise will run for 5 years and has a specific aim of promoting water efficiency.

Waterwise is governed by an independent board.

Water UK is the industry association that represents all statutory UK water and wastewater service providers at national and European level. It actively seeks to develop policy and improve understanding of areas that involve the water industry, its customers and stakeholders. Its key aim is a sustainable water industry.

Useful Web Links

Website links

Defra Water Saving Group
http://www.defra.gov.uk/environment/water/conserve/wsg/index.htm
This website outlines the work of the Water Saving Group, and includes a link to the action plan, of which this research project is a part.

Ofwat's water resources pages
http://www.ofwat.gov.uk/aptrix/ofwat/publish.nsf/Content/WaterResources
This includes questions and answers on leakage, water company's responsibilities and water use restrictions.

Environment Agency drought pages
http://www.environment-agency.gov.uk/subjects/waterres/1014767/?lang=_e
Latest information on the drought including environmental impacts and location of water use restrictions.

Water wise information about water saving devices
http://www.waterwise.org.uk/index.php?option=com_content&task=view&id=54&Itemid=69

Water UK water resources updates and related briefing papers
http://www.water.org.uk/home/news/in-focus/resources-07june06

The Water Family – educational resource/game on water efficiency in the home
http://www.thewaterfamily.co.uk/

BBC website – saving water in the garden
http://www.bbc.co.uk/gardening/basics/techniques/watering_savingwater.shtml

Hampshire Water Festival – information on their event in August
http://www.hampshireswater.org.uk/festival.html

my water diary

please record the occasions on which you and your family use water at home.

Water Diary

What we would like you to do before the Forum on 22nd July, is to keep a diary of occasions on which you and your family use water in your home.

We have given you a pre-printed diary to make it easy for you to record this information.

Once you have completed this diary, we would then like you to think about these occasions, and note down on which occasions you feel water use is fixed and necessary, and on which occasions you feel you could have saved water. On page 8, you will find space to record these instances.

Finally, we would like you to make a record of any stories, reports and conversations you hear about water. Please feel free to include any newspaper clippings that you might have seen.

my water diary

please record the occasions on which you and your family use water at home.

day 1:   **morning**

           afternoon

           evening

my water diary

please record the occasions on which you and your family use water at home.

day 2:   **morning**

afternoon

evening

my water diary

please record the occasions on which you and your family use water at home.

day 3:   **morning**

       afternoon

       evening

OPINION
LEADER
RESEARCH

my water diary

please record the occasions on which you and your family use water at home.

day 4:   **morning**

afternoon

evening

OPINION
LEADER
RESEARCH

my water diary

please record the occasions on which you and your family use water at home.

day 5:   **morning**

afternoon

evening

OPINION
LEADER
RESEARCH

my water diary

please record the occasions on which you and your family use water at home.

day 6:   **morning**

                 afternoon

                 evening

my water diary

please record the occasions on which you and your family use water at home.

day 7:   **morning**

afternoon

evening

my water diary

please record the occasions on which you and your family use water at home.

On which occasions that you have recorded in your diary do you feel your water use is fixed and necessary (i.e. you had to use that amount of water) and on which occasions do you think you could have saved water?

Please give some examples below.

Fixed and necessary	Could have saved water

my water diary

please record the occasions on which you and your family use water at home.

Stories and newspaper clippings

Please note down here any stories or messages that you have seen about water. You could also include some newspaper clippings if you have seen any.