

Ensuring Water for All - Water Efficiency in South East England A Consultation

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Foreword

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“Water resources in South East England are under severe pressure from over abstraction, high consumption rates, an ambitious development programme and future climate change. As a region we need to transform the South East through changing the patterns and rate of water consumption to meet this challenge. Ensuring demand and supply are kept in balance is vital to the future economic prosperity of the region.

The aim of this project is to outline options for how water efficiency may be progressed in South East England. The project involves assessing the current status of different areas of water efficiency in the South East region, such as retrofitting existing homes with water efficient devices and encouraging a water conservation ethic amongst the general public.

Options will be proposed for how each element of water efficiency could be advanced in the future. The work will complement the existing body of knowledge on water efficiency and aims to inform regional decision-making around how to progress water efficiency as part of a wider multi stakeholder strategy.

Progress on water efficiency is consistent with the Environment Agency’s national Water Resources Strategy, the South East and Thames’ River Basin Management Plans, the Regional Spatial Strategy, the Regional Economic Strategy and the water companies’ Water Resources Management Plans. Key stakeholders for the scoping study are the seven water companies, Consumer Council for Water, Government Office South East, Natural England, Energy Saving Trust and South East England Development Agency.”

1. Introduction to water efficiency

Water is a precious, non-renewable resource, as is much of the energy used in its treatment and distribution. Water companies in England and Wales have recently planned their solutions for securing water resources for the next 25 years, with strategies based on a twin-track approach of demand management and water resource supply development. Ofwat, the water regulator, requires companies to prove that their plans are cost beneficial. As such, water is increasingly being viewed as an economic commodity. Water use is therefore being scrutinised more closely by both regulators and water companies.

The efficient use of water is characterised by minimising wastage, not necessarily by restricting use. Water companies in England and Wales have a statutory duty to promote the efficient use of water. A number of water efficiency initiatives have been and are being run by water companies in the South East as they acknowledge the need to balance demand management with development of new water resources. This approach helps ensure that water supplies are protected and environmental degradation caused by over-abstraction is minimised. However, as citizens, businesses and as the ultimate bearers of the financial and environmental burden of overuse of water, responsibility for minimising water wastage falls to every one of us.

Water efficiency can take many forms: installation of devices which physically reduce the amount of water used in the home or workplace; indirect measures such as metering and tariff setting give rise to financial incentives to reduce consumption; and raising awareness invoking behavioural change in all consumers could lead to large savings. With such an array of measures available to reduce consumption, there is a need to prioritise those which can lead to the greatest savings at the least cost to consumers. This is one of the drivers for carrying out this consultation. We would like to understand attitudes towards different measures in order to understand where efforts may be made to gain the greatest benefit.

2. The need for water efficiency in South East England

A number of drivers are currently raising the profile of water resource security in South East England and solutions for securing this in the future. The drivers are:

- South East England is under serious water stress due to the fact that it receives only 690mm of rainfall per year compared to a national average of 897mm per year, coupled with the large water demand associated with high population densities (the majority of South East England supports between 176 and 500 people per km², with Greater London reaching densities between 1,500 and 10,000 people per km²)¹.
- Population densities and associated pressures on the environment with respect to water availability will only increase in future as a result of the significant growth in housing and population planned for the region.
- The availability of additional indigenous water resources to meet future demands is limited, especially in some parts of the region.
- Nationally and internationally important environmental conservation assets in the region depend on water for their integrity, and environmental demand is increasing.
- Climate change will act to make existing supply-demand issues more significant.

The South East of England has been exposed to the most recent drought event seen in the United Kingdom, in 2006. This event raised the profile of the vulnerability of water resources in the region, and considerable public support was given to efforts to reduce consumption. These efforts need to be sustained to ensure that there is water for all in the future.

a) Do you think that Section 2 reflects the context for water efficiency, both for the South East region and specifically for your local area or community? If not, what would you add?

This is a fair assessment of the major drivers.

3. Current water efficiency initiatives

a) Is your organisation aware of the amount of water that it uses? If so, how?

- b) Is your organisation currently carrying out or planning to carry out any projects relating to water efficiency (e.g. poster campaigns, taking meter readings)? If so, what are the expected effects and impacts on water consumption/use?
- c) With the appropriate resources, would your organisation carry out further actions relating to water efficiency? If so, what would you plan to do?

4. Barriers to delivering water efficiency

a) Do you think that barriers currently exist, inhibiting the successful delivery of water efficiency?

YES.

There are a number of barriers that exist which interact and potentially reinforce each other. Although the South East has experienced a period of drought with restrictions imposed, the drought has “been & gone”, it is business as usual. The UK as a whole has not experienced periods of prolonged drought; therefore the UK population has not experienced the reality of long term water shortages and an adverse impact on daily life. Although water resource scarcity is a major issue for the South East it would be unwise to view this in isolation from the rest of the UK. It is essential that government, policy makers and water companies get the “buy in” of water users both domestic and commercial to deliver water efficiency measures. To achieve this there needs to be a cultural shift UK wide to view water efficiency as the accepted way of behaving and doing business, not the exception. Education is a key factor in achieving this cultural shift. To drink/drive was once viewed as perfectly acceptable, no longer. A sustained education of the public as to the consequences of drink/driving backed up by more stringent penalties has led to drink/driving being viewed as socially unacceptable. Ignoring water efficiency needs to achieve the same status.

There is also a need for the water industry to have the mechanisms with regards to regulatory and financial incentives to drive water efficiency within the industry. How effective the current mechanisms are is open to debate, though the perception is that the current system of a five year AMP (Asset Maintenance Period) does not allow the funding flexibility for longer term planning and work programmes required for areas such as water efficiency and climate change

b) If so, which of the following barriers should be most urgently addressed?

Please rank them in order of importance, with 1 being the most important.

- 4 Lack of regulatory incentive
- 3 Lack of financial incentive
- 1 Lack of awareness of the context as described in Section 2
- 7 Affordability
- 2 Social acceptability
- 5 Economic constraints
- 6 Unwillingness to participate in water efficiency
- Factors internal to your organisation – *please explain in the space below*
- Others – *please expand in the space below*

5. Looking beyond 2010 – planning for the future

The South East Regional Economic Strategy states that average per capita consumption of water in South East England is 15 litres per head per day (l/h/d) above the national average figure of 150l/h/d. The target set by the South East England Development Agency¹ is 135l/h/d by 2016. The aspirational target set by Defra in its strategy 'Future Water'² is an average of 130l/h/d by 2030.

Whilst these figures represent targets for domestic consumers, businesses and other non-domestic water users also have a responsibility to minimise their water consumption.

a) From the options below, which ones do you think are most significant in ensuring that water efficiency is delivered in the region?

Please rank them in order of importance, with 1 being the most important.

- Delivering in partnerships
- 8 Expanding programmes/projects in the built environment involving new buildings
- Expanding programmes/projects in the built environment involving retrofitting
- 7 Using public sector buildings as exemplars
- Combining water and energy efficiency projects
- Product labelling schemes
- Product standards and accreditation schemes
- 2 Introducing incentives (regulatory, fiscal, economic)
- 3 Amending policy and regulation at the national level
- 1 Engaging, communicating and campaigning with water consumers and communities
- 4 Water neutrality, where:
Total water use after a development is equal to or less than total water use before
- 5 Innovation in products and approaches to water efficiency
- 6 Research – please expand on the type of research in the box below
- Others – which ones? _____

Please use the space below to develop on any of the abovementioned options.

Although regulated the water industry is a commercial business. To ensure effective water efficiency measures in this area, there needs to be sufficient regulatory and financial drivers to enable meaningful long term funding of research & development for water efficiency projects. Outside of the immediate water industry there are minimal economic benefits or regulatory drivers to encourage water efficiency measures.

Research into water minimisation and reuse is key. Personal usage of water is increasing, for example the practice of taking a daily shower, rather than a wash and a bath once a week. Low cost

¹ The Regional Economic Strategy 2006-2016: A Framework for Sustainable Prosperity, SEEDA

² Future Water - The Government's water strategy for England, February 2008, Defra

efficient water using appliances across the domestic, industrial and manufacturing arenas are key to minimising water usage.

6. Innovation

Innovation in the field of water efficiency can take the form of innovation in product and technological developments, but it also encompasses approaches to water efficiency such as communication methods and enabling mechanisms.

a) Are you aware of any innovation occurring within the field of water efficiency? If so, please describe.

There are a number of grey water reuse schemes that have been trialled, which have yet to be taken up at a greater level within the UK. The issues affecting this area are those of perceived need, social acceptance and sustainable economics. Simple innovative measures such as the “Hippo” which reduces the volume of water in a toilet cistern are well known and used.

b) Do you think that more innovation in water efficiency is required? If so, are there any lessons that could be learnt from other sectors?

Water efficiency needs to be seen as part of an overall integrated strategy for the abstraction, treatment, use, re-use and ultimately disposal of the resource. **Integrated Water Management** is a term regularly used, but currently an aspiration rather than a reality. **Integrated Waste Management** is still relatively new, but is supported by government and funding bodies to encourage innovation in this area to meet agreed UK targets. Lessons learned from this approach may be useful.

c) How can the climate for fostering innovation in the South East be improved, and who should be the key groups of people involved?

Government, Water Industry, Agencies and certain NGO's will have a vested interest in achieving water efficiency measures and are obvious choices. As previously stated “minimising water wastage falls to every one of us”. Innovation thrives on ideas, thus to foster innovation it may be beneficial to conduct a process to pull ideas from across different groups, a “Dragons Den” type approach. Events such as this need impartial facilitation of the interested parties and external influences to catalyse innovation. This should encourage networking, understanding of the issue and an opportunity for participants to fully engage going forward.

7. Delivery agents

a) Who should be the delivery partners to ensure that water efficiency actions are scaled up appropriately in the South East?

Please rank them in order of importance, with 1 being the most important.

- Local Government
- Regional Government
- 1 National Government
- Local communities
- 2 Water companies
- Planning authorities
- Developers
- 3 Environment Agency
- Natural England
- 4 NGOs
- Businesses and SMEs
- Manufacturers
- Retailers
- Energy companies
- Trade associations
- Others – which ones? _____

8. How to communicate the need for delivering water efficiency

- a) What would be the most effective method of communicating messages about water efficiency to your organisation?

By implementing water efficiency as a standing item on the daily working agenda.

- b) More generally, how should messages about water efficiency be communicated to consumers, businesses and public sector organisations to encourage further participation in the delivery of water efficiency?

Please rank them in order of importance, with 1 being the most important.

- 7 Through a single coordinating body
- 5 By holding seminars
- 3 Through a website
- 2 Through general information
- 1 Through campaigns
- 4 General messages to all sectors
- 6 Targeted messages to specific sectors
- Others – which ones? _____

