

Water Supply and Demand

Summary of current ICE position

The UK must invest in new water resources, including reservoirs to guarantee long term security of supply.

The current drought in the South East of England, which is only moderately severe in terms of river flows and groundwater levels, is showing our existing supplies are barely adequate. The demand for water, especially in the South East is growing because of population growth, demographic and behavioural changes and new housing development. At the same time water available from existing supplies is falling due to increased environmental regulation to protect rivers and increased pollution of groundwater, notably from agriculture.

The ICE therefore advocates the construction of new reservoirs and other water supply infrastructure. More measures are also required to reduce leakage and control demand, including compulsory water metering. We believe consumers will have to accept higher water charges to fund an economically sustainable system. In addition new infrastructure will have to be built with due regard to its environmental impact.

A. Principles

1. Government and the Water industry must ensure that:
 - Sufficient drinking quality water is available for all households
 - Sufficient water, though not necessarily of drinking water quality is available to meet other reasonable demands
2. These goals should be achieved whilst:
 - Minimising the environmental impacts of water abstraction, storage and distribution
 - The nation should recognise the value of water and accept the need to meet the cost of its supply
3. In the context of rising demand and falling supply, ICE advocates:
 - Updating of the Environment Agency's water resource strategy for England and Wales, taking account of the latest demand forecasts and reduction in existing supplies
 - Investment in new water resources and the existing network
 - Measures to reduce demand including incentives to consumers to reduce water usage and higher performance standards for homes and appliances
4. Decisions between options for new water resources should be made on the basis of whole life economic, environmental and social costs

B. Background and key issues

1. Drought and demand

The South East of England is currently suffering from a drought caused by two winters of unusually low rainfall.

Increased personal water usage is however a nationwide phenomenon due to more use of appliances such as dishwashers and power showers. At the same time, there are few incentives to reduce water consumption – currently less than 25% of households are metered and charged by volume consumed. Demographic change, in particular the reduction in average household size is exacerbating this trend.

This increase in demand comes at a time when overall availability of supplies is shrinking due to:

- Restrictions in abstraction from rivers and groundwater to comply with legislation such as the Habitats Directive
- Reduced availability of groundwater due to increased pollution, especially from agriculture
- Increased uncertainty about availability of water from rivers and groundwater due to the uncertainty about the long term impact of climate change

2. The UK's existing water infrastructure

Post privatisation in England and Wales in 1989, there has been little investment in new reservoirs, though there has been significant investment in leakage reduction. It will now be difficult to achieve further significant leakage reduction without major investment.

The extreme age and poor condition of mains pipes in some regions, notably South East England and insufficient winter reserve storage to sustain supplies in extreme conditions add to this problem.

It needs to be recognised that the identification, planning, promotion and implementation of water resource developments is a complex and drawn out process that can take 15-20 years to complete, often faces public opposition and is commonly fraught with uncertainty along the way. This situation has led to some companies seeking shorter term solutions such as desalination plants, which may be less sustainable in the long term.

3. Future growth in South East England

In the UK demand for new development is strongest in South East England. Although drought reliable supplies exceed forecast demand in England and Wales overall, this is not the case for several areas in the South and East unless new sources of supply are developed or demand reduced.

We draw particular attention to two policy issues.

- The HM Treasury sponsored Barker Report on housing supply (March 2004), identified significant additional needs in the South and East England. There is no current water supply solution to the high housing growth it suggests, although the demands could be met by the new resource schemes currently being considered in the South East, combined with more demand management
- The forward plans of water companies in South East England include projections for new housing growth that are 20% lower (up to 2016) than the projections contained in the government's Sustainable Communities Plan. Water companies in the South East also do not allow for any increase in the non-household water use associated with economic growth that will be needed to provide employment for the region's increased population.

4. Hosepipe and non essential use bans

Hosepipe and non essential use bans are an important part of water management policy in a drought situation. However there are indications of consumer disquiet at their frequency. In addition, the legislation covering non essential use creates problems for enforcement and contains inconsistencies which users find difficult to accept, for example, watering gardens may be banned but not hosing down a patio.

C. ICE recommendations for action

1. Government

- Promote the case for new water resources to ensure that the nation's basic needs are met
- Empower OFWAT to give more emphasis to ensuring that water companies' plans for future supplies are robust, rather than the current excessive focus on keeping prices down
- Streamline planning procedures for major new water infrastructure
- Explain to the public the case for higher water charges that can be ploughed back into the nation's water infrastructure
- Introduce compulsory water metering to provide incentives for householders to save water
- Encourage reduced demand by tightening building regulations and standards for water using appliances and improving product labelling
- Recognise that water supply for upwards of half a million new homes in the South and East of England will be probably be inadequate or inappropriate unless a decision is made now about investment in new

resources and measures to implement demand management or alternatively the size of the proposed development is scaled down

- Ensure that companies are adequately funded to replace sub-standard pipes, control leakage and develop new water supplies

2. Water companies

- Bring forward investment plans for new and upgraded infrastructure
- Invest in research and development for innovative alternatives eg improving capacity and quality for recycled water, exploration of the potential for desalination plants and transferring water between regions
- In the short term hosepipe bans are a sensible measure to manage the ongoing problem of water shortage
- Promote water efficiency to consumers

3. The public

- Should realise the value of water and change its attitude towards this valuable resource