

**SOUTH EAST ENGLAND REGIONAL ASSEMBLY  
EXECUTIVE COMMITTEE**

Date: 19 October 2007

Subject: **Environment Agency Water Resource Strategy**

Report of: Director of Planning

**Recommendation:**

It is recommended that the Executive Committee agrees the response to the Environment Agency's Water Resource Strategy set out in this report.

**Purpose of Report:**

To agree the Regional Assembly's response to the Environment Agency's National Water Resource Strategy: 'Water for People and the Environment'.

**Key Issues:**

The consultation document seeks to replace the current national Water Resource Strategy published by the Environment Agency in 2001. It addresses the main water resource issues facing England and Wales over the next 25 years and beyond. It seeks views on how the Environment Agency and other stakeholders could manage water resources in the future.

This report provides an overview of the aspects covered in the Strategy and proposes the Assembly's responses to the questions set out in the consultation document. The consultation extends until 31 October 2007.

## **I. Overview of the Water Resource Strategy**

1.1 Since the production of the current Water Resource Strategy in 2001 there have been significant changes in legislation, for example in the abstraction licensing system following the Water Act 2003. Moreover, the implementation of European legislation including the Water Framework Directive and the potential impacts of climate change may put additional pressure on water resources.

1.2 The consultation document proposes a set of high-level principles to help achieve the aim of: *Abstraction of water that is environmentally and economically sustainable, providing the right amount of water for people, agriculture, commerce and industry, and an improved water-related environment.*

1.3 These principles can be summarised as:

1. The water environment contributing to people's quality of life.
2. Improvements to biodiversity and wildlife sites.
3. More efficient use of water.
4. Proper pricing of water.
5. Fewer greenhouse gas emissions through water supply and management.

1.4 A number of specific aims underpin the principles. They include:

1. The twin-track approach to managing water resources continues to be implemented in water company plans, with resource side options only promoted where demand management measures are not enough or cannot be justified in terms of cost.
2. To reduce total abstraction by water companies and others so that abstraction is sustainable and supplies remain secure without unnecessary development.
3. Water companies implement universal metering of households in areas of serious water stress by 2015.
4. Variable metering tariffs are implemented in water stressed areas to manage demand better and avoid issues of affordability as soon as practical.
5. Leakage levels continue to be reduced, along with more targeted asset replacement programmes and reductions in supply pipe leakage. There is a 25 percent reduction of supply pipe leakage levels by 2015.
6. Better information and methods are available to help make decisions about allocating water resources, protecting the environment and choosing options to avoid security of supply problems.
7. Measures will be in place to make sure that activities impacting on water resources do not prevent water bodies achieving Water Framework Directive targets.

8. Water use and abstractions are resilient to and adaptable to the impacts of climate change.

1.5 The Environment Agency will not produce separate regional strategies, as local information on water resources management will be included in River Basin Management Plans, which are required by the Water Framework Directive.

## 2. Regional Assembly's Response

2.1 The Assembly broadly supports this Strategy. We agree with the emphasis on demand management, but stress the need for the twin-track, or manage-and-invest approach to provide for growth proposed in the South East. It is essential that new water resources are developed together with improvements in water efficiency and demand management.

2.2 Our more detailed response to specific questions are set out below.

### 2.3 Question 1

**Do you believe that a flexible licensing system is necessary to enable water resources to be managed in the face of future uncertainties such as climate change? If not, why not? If so, how could this be best achieved?**

Yes, a flexible licensing system would be appropriate as climate change could have significant impacts, particularly in the South East. However, this should not reduce the certainty required by water companies to make long-term investment decisions and continued close co-operation between the Environment Agency and water companies is needed. The draft South East Plan Policy CC2 supports this approach.

### 2.4 Question 2

**In what circumstances do you believe it is appropriate for water company plans to assume no, or very infrequent, hosepipe bans and restrictions on non-essential use, given that this may result in additional resource development, environmental impact and higher bills? Is this a sustainable and proper use of water resources?**

In comparatively dry regions experiencing water stress, such as the South East of England, and in the light of likely climate change, it is important to reduce non-essential use, especially in times of drought. Therefore in the South East there should not be circumstances where hosepipe bans and other restrictions on essential use when conditions require this.

### 2.5 Question 3

**We believe that reducing the amount of water we use in our homes to levels achieved elsewhere in Europe should be an essential part of our revised strategy. To what extent do you agree with this view? What would be appropriate and achievable?**

The Assembly agrees that the amount we use in our homes should and can be reduced. The Water Resource South East (WRSE) group undertook modelling to inform the preparation of the draft Regional Spatial Strategy (South East Plan). This included an assumption of 8% efficiency savings in new buildings as being achievable following the strengthening of Building Regulations. Drawing on evidence discussed at the Examination in Public of the draft South East Plan the panel of inspectors concluded that to achieve higher savings (21% and 47% efficiency savings) would require some significant shifts in standards and critically in occupants' behaviour. This represents a major challenge and reliance on such assumptions would be a risky strategy. However, recent changes to Building Regulations and the Code for Sustainable Homes, combined with recent experience following restrictions and awareness campaigns during the drought, provide some grounds for optimism that per capita consumption can be cut beyond only modest savings of around 8%. The draft Regional Sustainability Framework for the South East includes a target for per capita consumption of 135 litres per day by 2016.

## 2.6 Question 4

**If ecology alters as a result of climate change, how should we be managing abstraction to reflect those changes?**

Building on the answer to Question 1, abstraction has to be managed in a more flexible way to enable adjustment to reflect changes and address adverse effects.

## 2.7 Question 5

**How acceptable is it that water companies are not planning to significantly reduce leakage below current levels? Given the links to the environment and ecosystems do you believe that further reductions are appropriate, and if so, to what level?**

Levels of leakage control and improvement set purely on economic grounds are not acceptable. However, there will be levels beyond which it will not be economically viable, particularly given the scale of the water supply network. A careful balance between economic cost of leakage, costs of other measures including new resources, and environmental protection will need to be struck.

## 2.8 Question 6

**To what extent do existing arrangements relating to supply pipes inhibit further leakage reduction? How should leakage from supply pipes be reduced?**

Financial support may be required to enable and encourage property owners to address leakage of supply pipes. Water companies should help to raise awareness of property owners of their responsibilities.

## 2.9 Question 7

**To what extent do you believe that measures to better target asset replacement can be effective, given current legislation and institutional arrangements?**

Asset replacement must be based on assessment of risk and fitness for purpose, and on cost-benefit.

#### 2.10 **Question 8**

**How should the water industry help to reduce carbon emissions? How could we use our role as a regulator to help water companies and other abstractors reduce carbon emissions?**

Reducing carbon emissions should be a major driver of water company plans. However, there could be a conflict between aspirations to reduce carbon emissions and some water supply options (pumping over large distances, desalination) and water treatment (energy intensive treatment to increasingly high standards required by legislation). The Environment Agency should encourage the reduction of carbon emissions by water companies by identifying and promoting lower carbon options and in some cases taking a more balanced view on the costs and benefits of achieving ever higher standards of water quality. There is also a need for better integration between water quality and water resource arms of the Environment Agency, for example over the potential effluent re-use and aquifer re-charge.

#### 2.11 **Question 9**

**To what extent do you agree with our view that the true environmental cost of water is not reflected in its price, particularly in water stressed areas? To what extent could better costing of water result in more efficient allocation and use?**

The Assembly agrees that the price of water could help to raise awareness of its scarcity and serve as a useful demand management tool. However, social impacts such as the affordability of essential water use for low-income groups would have to be taken into consideration. We provide similar views on the recent consultation on the role of compulsory metering.

#### 2.12 **Question 10**

**To what extent do you believe that the current regulatory framework is effective in ensuring a twin-track approach to balancing supply and demand?**

The current framework is effective in ensuring a twin-track approach. The twin-track, or manage-and-invest approach should mean that demand management and development of resources is pursued hand in hand given the risks attached to each, and for resources the timescale required from conception to delivery. Over-reliance on only one aspect would increase risk unacceptably in the light of growing uncertainty due to, for example, climate change, consumer behaviour, growing population and demand, and current or future legislation, including European directives.

#### 2.13 **Question 11**

**How should water resources be allocated? How could we make sure that resources are shared effectively between water companies and other users?**

#### 2.14 **Question 12**

**Do you believe the allocation of existing and future water resources should be prioritised? If not, why not? If so, what should the priorities be?**

This is in particular a challenge in the South East with its fragmented pattern of water companies. The current work of the WRSE group is exploring the more efficient use of resources through co-ordination between companies. This work will inform the emerging water company plans. Prioritisation / allocation of resources should include such strategic considerations and appraisal of a range of options against potential effects and benefits. It should also be informed and respond to spatial planning and development as this will influence future patterns of demand, which will require ongoing close liaison between the Agency, water companies, regional planning bodies and local authorities. The importance of this approach is set out in Policies NRM1 and NRM2 of the draft South East Plan.

#### 2.15 **Question 13**

**Do you think that the aims complement and support the principles of the strategy? If not, why not? What additional aims should there be?**

The principles and aims could be linked more explicitly. Those related to climate change do not match - while the principle related to climate change is about mitigation (reducing carbon emissions) the aim is about adaptation (resilience). The majority of the aims are about demand management. Due to the long lead times to plan and implement new reservoirs, the consecutive application of the twin-track approach is unrealistic and risky. The Panel Report for the draft South East Plan concludes that both tracks have to be pursued concurrently. Taking this further, this strategy should also clearly state its support of resource development where it is required to support existing and future demand. In addition, the positive environmental aspects of reservoirs, for example as an adaptation to climate change (warmer wetter winters, hotter drier summers, more likelihood of extreme event) should be acknowledged.

#### 2.16 **Question 14**

**Do you think that they will be achievable, if not, why not?**

Only a few of the aims include targets and so it is difficult to judge how achievable they are. The target for metering is already matched by Government ambitions while achieving the one for leakage reduction of supply pipes is likely to depend on Government incentives and OFWAT support. The achievement of total reduction of abstraction (second aim) depends on the scale of future demand in part driven by population growth and behaviour.

### **3. Consultation Timetable**

- 3.1 The consultation closes on 31 October 2007. The responses will inform the further development of the Strategy, which is expected to be published in December 2008.

In parallel, the consultation will also inform a series of working papers looking in more detail at

- Water resources in the south east of England.
- Managing uncertainty in water resources.
- Carbon and energy use in water resources.
- Valuing water resources.
- Governance and legislation for water resources management.

3.2 The Regional Assembly will offer to work with the Environment Agency on the development of these working papers as well as the refinement of the Water Resource Strategy to enable a close alignment with the South East Plan and the Implementation/Delivery Plan.

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