

## OUTLOOK FOR THE ENVIRONMENT

A consultation paper by the Environment Agency  
on the priorities for investment by water companies  
in environmental improvements

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ENVIRONMENT AGENCY



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### SUMMARY

The Environment Agency has a key role to play in the review of water companies prices. Referred to as the Periodic Review, the process is carried out by the Director General of the Office of Water Services (OFWAT) and reviews the amount the 29 water companies in England and Wales can charge customers from 1 April 2000.

The Environment Agency's role is to advise the Government on the programme of environmental improvements which should be carried out by each water company. This programme will include measures to improve water quality around our coasts and in rivers and lakes where these are affected by water companies' activities. It will also include a programme of improvements to put right the unacceptable impacts on rivers and wetlands permitted by licences granted many years ago.

The final programme will be decided by the Secretary of State for the Department of the Environment, Transport and the Regions and the Secretary of State for Wales. The Director General will then be responsible for ensuring the companies can finance the programme.

The environment is currently high on the Government's agenda and also, Agency research suggests, high on the list of public concerns. The Agency is keen to ensure that it recommends improvements which are in line with those which people want. In order to do this it is consulting widely between now and November 1998.

The Agency has already commissioned research by *NOP Social and Political* on customers' views of environmental improvements. This consultation paper - '*Outlook for the Environment*', forms the next stage of consultation.

'*Outlook for the Environment*' explains how the Periodic Review process determines the scale and timing of future environmental improvements. It looks at the key environmental issues for the water industry; how the Agency is addressing them and explains what you can do to contribute.

Feedback on '*Outlook for the Environment*' is required by 21 February 1998. Details of where to send replies and a summary form for you to complete, if you wish, are available at the end of the paper.

## **INTRODUCTION**

On 1 October 1996 the Director General of the Office of Water Services (Ofwat) announced his intention to review the amount the 29 water companies in England and Wales can charge customers for their services from 1 April 2000 to 2005.

This review is normally referred to as the Periodic Review of water company price limits.

The Environment Agency plays an integral part in the review because it is the process which determines the scale and timing of both the environmental improvements needed to put right previous under investment in the water industry and the investment required by water companies to meet future needs to protect the environment and our water resources.

The Review will also consider other investment needs such as improvements to drinking water quality, the maintenance of company assets and measures to meet growth in demand for water - all of which could potentially add costs which would fall on water customer's bills.

The purpose of this paper is to outline the key environmental issues affecting the water industry and to explain how you can help to shape the water companies' environmental investment programme for the period 2000 to 2005.

You can help the Agency in this important national debate by letting us have your views at the key stages set out here and by completing the form at the end of this paper which allows you to express a preference for the priorities for investment.

The Environment Agency also has the central role in the planning of water resources at a regional and national level, but will be dealing with these issues separately.

## **THE ENVIRONMENT AGENCY**

### **A Long-Term View**

The Environment Agency's aim is '*to provide a better environment for England and Wales both for present and future generations*'. It is required by the Government to help achieve the objective of sustainable development and has a wide range of duties and powers which it uses to help reach this goal.

At the heart of sustainable development is the balance between the needs of a healthy environment and a growing economy, and the need to take a long term view towards environmental protection.

It is vital that we protect our seas, rivers, wetlands and the wider countryside for future generations to use and enjoy. These natural assets often cannot be replaced and their protection means we must anticipate potential threats and encourage precaution, particularly where the threats are significant, have long term effects or are irreversible.

Against this background, protection and improvement of the environment is not an optional 'add-on' to any industry or business, but needs to be integral to the way any company provides its products or services.

The Environment Agency believes that the water industry, like any other industry, is no exception to this principle and that the price of water services should reflect the actions that water companies need to take to protect and where appropriate enhance the environment on which we and future generations depend.

By their very nature and size, water companies' activities have a major impact on the environment. They take water from rivers and boreholes to supply our homes and industry and dispose of it after use to rivers or the sea. In providing these essential services, water companies must comply with standards which are set to protect the environment and are enforced by the Agency.

These standards need to ensure that the water round our coasts, and our rivers and wetlands, are protected from the potentially harmful activities of water companies and others, so that wildlife can thrive and people can safely enjoy these waters for recreation or simply enjoy the countryside itself. The protection of the abundance and quality of water resources for future needs in the home, by industry or for agriculture, is also of fundamental importance, especially in the face of a changing climate.

Ensuring the protection of the environment and sustainable use of our water resources will therefore be central to setting the new price limits for water companies.

### **An Independent Regulator**

As an independent regulator, the Environment Agency will advise the Government on the environmental improvements needed to meet all European and UK laws, as well as those required to achieve further improvements where specific standards are not prescribed in the legislation.

The Government will make the final decision on the scale and timing of the environmental programme, which will be implemented by the Agency through its powers to impose controls on water companies' discharges of waste water and the amount of water they can take from the environment. This total programme of improvements will be known as the *National Environment Programme* for the water companies and will cover the period from 2000 - 2005.

In making his determination of price limits, the Director General will ensure that water companies are able to finance the proper carrying out of their functions, including compliance with the obligations of the National Environment Programme.

It is recognised that there is a price to pay for environmental protection and it is important that the Agency's programme addresses the improvements which are valued by society. This paper will therefore set out how we will involve others, including our statutory committees, in deciding which options for improvement are the most important.

## **SETTING PRIORITIES**

### **A Cleaner Environment**

The purpose of this consultation paper is not to raise alarm about the possible risks to the environment. In fact, the quality of many of our rivers has improved sharply since 1990, largely as a result of the investment already made by the water companies - a similar trend is also evident in coastal waters used for bathing. Most of our rivers have healthy fisheries which are valued by anglers.

This situation is encouraging, because if the fish and wildlife are healthy, we feel more secure about the general quality of the water and the associated risks to ourselves.

Also, clean and well-treated effluent from a sewage works, discharged to a river, is a valuable resource for people and businesses downstream. Recycling of treated effluent in this way is already common place in many parts of England and Wales. With the uncertain prospect of climate change, such resources are of increasing value. Progress has also been made with water companies to alleviate some of the effects of excessive abstraction.

However, much work remains to be done and it will be necessary to set priorities so that the National Environment Programme gives the best possible environmental improvements for the money available. In some cases, the environmental improvements will be determined by standards and timescales which are already set out in legislation, but in other cases the standards and timescales will be decided by Ministers.

The Environment Agency will make recommendations to Ministers on the priorities for the National Environment Programme and will involve others in this process as outlined later in this paper.

## **THE WATER INDUSTRY AND THE ENVIRONMENT**

Due to the large volume of water they take from rivers and boreholes and the discharge of waste water back into the environment, water companies have a major impact on the water cycle. Some of the main impacts are described below.

### **Sewers and Sewage Works**

For most of us, dirty water from our homes runs into an underground sewer which pipes the waste to a sewage treatment works. In many towns, rainwater falling onto roads and pavements (run-off) also runs into the same 'combined' sewers, diluting the strength of the waste water that originated in our homes. But in a storm, the volumes of run-off in the sewer can be vast and if the sewer is too small, the excess water will overflow into rivers or, on the coast to the sea, before it reaches a sewage treatment works where it could be treated to the correct standard.

In a well-run system, the pollution caused by these spills is innocuous because the waste is diluted by the rainfall and because spills are infrequent. But in a poor or damaged system, the spills operate too frequently and during low rainfall. The consequences can be offensive - toilet paper, cotton buds, condoms and sanitary items are the visible effects that may be seen in rivers and the sea, and even on river banks and the beach.

These spills are called 'combined sewer overflows' and an important part of the review of price limits is to make sure that water companies have enough money to ensure that all the overflows work properly, infrequently and cause no offence. It is also essential that sewers are properly maintained in the longer term.

The bulk of the flows in the sewer will be purified at the treatment works. A well-designed and well-operated works will remove all offensive material and ensure that the treated flows are clean enough to pose no threats to the rivers or seas they are discharged to.

Since the water industry was privatised in 1989, there has generally been a significant improvement in the standards of sewage treatment. Investment to improve a proportion of unsatisfactory combined sewer overflows has also delivered environmental benefits.

The price limits to be set for water companies must ensure this progress is continued, so that sewage treatment works and sewerage systems can treat flows of waste water to the right standard.

### **What Kinds of Pollution Could Result From Poor Sewage Treatment?**

- There is the solid (visible) matter which all of us would find offensive.
- The residual effects of our bodily wastes can, if too strong or undiluted, strip out the oxygen from river water and kill the wildlife. If this occurs regularly, the river will look black and may have an unpleasant smell. Dissolved ammonia is a particular problem as it is harmful to fish. It also takes oxygen out of the water which is a threat to other wildlife living in the river.
- Our household wastes can contain a variety of chemicals (eg: from domestic cleaners or shampoos) which are poisonous to wildlife and these must be removed before they are discharged to rivers and the sea. Also, it is not just our homes that discharge to sewers, many factories and businesses do so too, and any substances that they are permitted to discharge to the sewer must also be made harmless.
- Sewage may contain disease - causing organisms. Where discharges impact on bathing waters or shellfish waters, risks to human health can be minimised by adequate sewage treatment and outfall arrangements.
- Sewage contains chemicals, called nutrients, that can act as fertilisers. These nutrients are mainly derived from the food we eat, detergents and washing powders. Too much nutrient, whether from sewage effluent, use in agriculture or elsewhere, is thought to be responsible for the opaque green colour that is sometimes seen in slow-moving rivers in summer (and also seen in lakes and ponds). This effect is caused by the growth of tiny plants called algae which can grow at the expense of more important plants.

This effect is called eutrophication and often shows up as the first signs of damage by man to the natural character of some of our most precious, vulnerable and beautiful rivers. On rare occasions, mostly in lakes, certain types of algae can form dense mats or scums, some of which can kill animals or be harmful to humans.

- Treating sewage produces more than just liquid waste. The solid, called 'sludge', must also be dealt with. A lot of treated sludge is spread on farmland adding goodness to the soil and acting as a fertiliser. But care is needed to ensure that the constituents of sewage sludge do not contaminate land, rivers or underground water. Alternatively, sludge can be tipped into the sea, incinerated or placed in landfill. After 1998, disposal to sea will be required by law to stop.

An important part of the price review is to make sure the water companies have enough money to ensure that all these risks of pollution are properly controlled, both now and in the future.

### **Dried Up Rivers And Wetlands**

Water companies take water from the rivers, lakes and underground sources to meet the needs of households and industry. Sometimes the conditions of the licences which authorise these abstractions can allow companies to take more water than is good for the health of the rivers, or can cause wetland habitats to dry out. This is because the licences were granted many years ago when environmental considerations were not properly taken into account and the demand for water was a lot less than it is today.

Water companies will need to reduce or stop the amount of water taken from these sensitive sources of supply, by reducing the level of leakage from their pipes and helping everyone to use water more carefully. If necessary, companies may need to take more water from alternative sources.

These changes to the way companies manage supplies and control demand will also need to be taken into account in the new price limits for water services.

## **PREPARATION OF THE NATIONAL ENVIRONMENT PROGRAMME**

### **Wide Consultation**

The Environment Agency believes that the National Environment Programme for water companies can only deliver 'value for money' if it is developed in consultation with others and if everyone can see clearly how the priorities are decided.

As part of our preparation, we are listening to the advice of our statutory committees - eight Regional Environment Protection Advisory Committees, eight Regional Fisheries Advisory Committees, and 26 Area Environment Groups. These committees have a broad membership made up from representatives of industry, agriculture, local authorities, environmental, fisheries, conservation, sporting, recreation and navigation interests - to ensure a wide cross section of views on local and regional issues affecting the water environment. Our Local Environment Agency Plans will also help to identify the improvements which are important to local people.

Local Authorities and other organisations such as English Nature and the Countryside Council for Wales have already started to identify their priorities. Environmental organisations and consumer representatives have also had discussions with the Agency to put forward their concerns.

The Agency will also work with individual water companies and Ofwat's Customer Service Committees to take account of their views and priorities.

The Agency is however, keen that any organisation or individual has the opportunity to make their views known on the priorities for improvements. Details on how to be involved are set out later in this section.

### **Costing The Programme**

Costing the possible environmental obligations is a major activity. It is important that companies' estimates are checked, since if the estimates are too large, it would reduce the number of improvements which could be carried out and may lead to water companies making excessive profits. Ofwat will use *Reporters* (in effect a type of auditor, paid for by each water company, but with a 'primary duty of care' to the Director General), to scrutinise companies' estimates to make sure they are reasonable.

Water companies have already started to estimate the costs of some of the possible environmental obligations and the Environment Agency has published guidance for water companies to ensure there is clarity, precision and consistency on the technical issues relating to this exercise. At this stage, no decisions have been taken either on the general priorities for investment or on which particular schemes should be recommended for inclusion in the National Environment Programme. The results of this exercise will help the Agency and others to form a view on the priorities.

### **The Cost of Environmental Improvements**

The process of setting price limits for the water companies is not new. Prices were first set by the Government when the water industry was privatised in 1989 and then again by the Director General in 1994. At the time of this last price review, the cost of meeting improvements required mainly by European legislation, was estimated by Ofwat to add an average of 60p a week above inflation, to the average household bill by 2004-5 (1994-95 prices). The Government also allowed a further 3p a week to bills, to cover the cost of further environmental improvements in most parts of England and Wales, including the Mersey basin, the Aire and Calder rivers, the Norfolk Broads and a small number of dried up rivers and wetlands.

The estimate of the cost of the National Environment Programme for the period 2000-5, will be one of the important outcomes of the current price review. The scale of the programme will be decided by the Secretaries of State, taking into account the advice of the Environment Agency, the Director General and other organisations.

### **Assessment of Costs and Benefits**

One of the methods the Agency will use to help set priorities will be an assessment of the benefits of the environmental improvements under consideration. A number of approaches are available including the use of a benefit assessment manual developed by the Foundation for Water Research (FWR) and a *multi-attribute technique* being developed by the Agency. The aim of these techniques is to bring together within a common framework relevant information about the effect of a proposed improvement. In the case of the FWR manual the output is a financial valuation of the benefits of improvement.

The Environment Agency's statutory committees are being consulted on the details of the Agency's *multi-attribute technique*.

*More details of the Environment Agency's multi-attribute technique is available on request.*

### **Statutory Advisory Committees**

The views expressed following the wide consultation process described above, together with the comments we receive in response to this paper and a preliminary assessment of costs and benefits, will be considered by the Agency's statutory advisory committees in April 1998.

### **Timetable**

The timetable for all aspects of the Periodic Review process spans more than three years to allow the right information to be collected, consultation to be carried out and decisions made. The key milestones for the preparation of the National Environment Programme, which is integral to the process, are described below.

*Comments are invited now on the broad priorities, principles and benefits which should be sought from the National Environment Programme. Other comments on the overall process and issues set out in this paper would also be welcome. You may wish to use the guidance given in the later section of this paper 'Your Priorities' and the table in Annex 1 to help structure your response. Responses should be received by 21 February 1998 at the address shown at the end of this paper.*

The next step will be for the Agency to seek advice from its statutory committees in April 1998 and will in May publish its advice to the Secretaries of State for the Environment, Transport and the Regions, and for Wales, on the broad priorities for investment.

Around the same time, the Director General will set out the likely costs of environmental improvements and the impact on prices based on the best estimates available at this stage of the process. He will also seek guidance from the Secretaries of State on the scale and timing of the environmental obligations which he should allow for when setting price limits for the water companies.

You will have the opportunity to comment to the Secretaries of State on both the information provided by Ofwat and the Agency before the Government gives its initial guidance in July 1998.

Clearly, it will be for the Government to decide on the nature of the guidance it will give, but given the information which will be available at that time, it seems likely that it will be general guidance, rather than identifying individual schemes. The Government may also signal the scope for environmental improvements for each water company based on information provided by Ofwat.

When the Secretaries of State have published their guidance, the Environment Agency will begin to identify the best individual schemes for environmental improvements for each of the 29 water companies. At this stage, you may wish to give the Environment Agency further views before the Agency consults its statutory committees and publishes its priorities in November 1998.

Following publication of the priorities, you will have a further opportunity to comment before the Secretaries of State approve an environment programme for each water company in March 1999.

Final adjustments may then need to be made to the programme by the Secretaries of State following the publication of draft prices by the Director General in July 1999. These adjustments will be included in the final price limits announced in November 1999.

The total programme of environmental improvements for all water companies will then become the National Environment Programme for water companies.

These steps are listed in the table below.

Step	Phase	Period
1	Comments are invited on the broad priorities, principles and benefits which should be sought from the National Environment Programme for water companies.  Other comments on the overall process and issues set out in this paper would also be welcome.	Until 1 February 1998
2	Director General's open letter to the Secretaries of State setting out the implications for customers of the potential environmental and drinking water improvements and the possible scope for improved efficiency by water companies	April 1998
3	The Environment Agency publishes advice to Secretaries of State on broad priorities and benefits of environmental improvements.	May 1998
4	Department of Environment, Transport and the Regions and Welsh Office will be open to representation from interested parties on priorities for environmental improvements.	April to June 1998
5	Guidance issued by Secretaries of State on priorities for National Environment Programme including signals on the scope for environmental improvements for each water company.	July 1998
6	In the light of guidance from Secretaries of State, interested parties are invited to put forward their priorities for environmental improvements to Environment Agency together with an assessment of the associated benefits.	August to October 1998
7	Environment Agency publishes prioritised programme of environmental improvements for approval by Secretaries of State.	November 1998
8	Opportunity for representation from interested parties.	November 1998 to February 1999
9	Department of Environment, Transport and the Regions and Welsh Office will make decisions on environment programme for each water company for the period (2000-2005).	Early March 1999

10	Water companies submit draft business plans to support application for price limits	by 9 April 1999
11	Director General's draft determinations published for consultation	End July 1999
12	Secretaries of State may make final adjustments to environment programmes following publication of draft price limits at end of July 1999.	By early October 1999
13	Director General's final determinations published	End November 1999

## **PROGRAMMES OF EXPENDITURE**

The National Environment Programme will include schemes to help safeguard water supplies and the rivers and coastal waters of England and Wales. Schemes will be needed to achieve the standards and timescales required by European laws (Directives) and other schemes to satisfy UK legislation to the timescales required by the Government.

Some of the main Directives and other requirements are described below.

### **River Quality Objectives**

Every stretch of river has its own River Quality Objective (RQO). This defines the water quality needed to protect the needs of fish, the use of the river for recreation and to ensure water quality for abstractions for water supplies, industry and agriculture. Where necessary, these standards may augment those required in Directives to protect the special needs of individual rivers.

RQOs are already established and are regularly reviewed through consultation with local people and local interests. To some extent, similar protection can be provided by extending the application of the Freshwater Fish Directive (see below).

It is the aim of the Agency that discharge standards are set at the values needed to achieve the RQOs (and Directives). Increased investment by water companies is needed to maintain and further improve our rivers and investment to meet the RQO standards can represent effective and focused expenditure.

### **No Deterioration**

There are a number of very high quality rivers supporting a wide range of local plant and animal species, including fish, especially salmon and trout. The on-going protection of these high quality waters is a high priority and is reflected in the general policy of 'no deterioration' which is used by the Agency when it reviews consents to discharge waste water. The broader application of this policy also provides protection for all waters.

However, many consents to discharge waste water do not adequately reflect the needs of the river and although river quality may be maintained by dischargers treating waste water to a higher standard than is legally necessary, formal protection may be required by raising the legal standards written into the discharge consents.

## **Directive on Urban Waste Water Treatment (UWWTD)**

This Directive imposes standards on sewage effluents. The stringency depends on the size of the discharge and on the type of water to which it is discharged. The Directive's main impact is on coastal discharges, as in the main, discharges to rivers are already (and have long needed to be) as good as or better than required by the Directive.

Before this Directive, it had been UK practice on the coast, to provide a basic level of treatment lower than that required by the Directive, but followed by disposal via a properly located long-sea outfall. At this time, action on marine pollution was driven mainly by the Bathing Water Directive.

Extra treatment may be required by the UWWTD for certain large discharges that are thought to contribute to eutrophication, which mainly affects freshwaters. Extra treatment is also required for discharges to freshwaters that have high concentrations of nitrate and are abstraction points for supplies of drinking water.

Discharges to marine waters and estuaries are permitted a lower level of treatment if they are discharged at places where natural dilution and dispersion by the sea is shown to be particularly effective - the discharger must establish this to the satisfaction of the Agency, proving that the discharge would not pose risks to the environment.

## **Directive on Bathing Waters**

The Directive sets water quality standards at well used beaches to protect public health and the environment. Like some other Directives, there are two sets of standards. There are Imperative standards which the Government has told us must be met and Guideline standards which we should endeavour to meet - though no timescale is set for this.

Where Guideline standards have already been achieved our duty is to ensure that the present quality is maintained. Where quality is below the Guideline standards, the Agency has discretion over further improvements, taking into account likely costs and benefits.

## **Directive on Shellfish Waters**

This Directive lays down standards for waters designated as shellfisheries and aims to ensure a suitable environment for shellfish growth. Again, there are two sets of standards, the Imperative and the Guide Standards. We have discretion about how the Guide Standards have to be observed and the relevant timescales for achievement.

Where waters require further improvement to move towards a Guide Standard, we have to take account of costs and the wider benefits to people and the environment.

A related Directive, the Shellfish Hygiene Directive, lays down conditions for the production and marketing of shellfish intended for human consumption. At present the relationship between this Directive and the Shellfish Waters Directive is under review.

## **Directive on Freshwater Fish**

The purpose of this Directive is to allow freshwater fish to live in favourable conditions.

Again, there are Imperative and Guide Standards and the Agency has discretion about how to meet the latter. The United Kingdom also has discretion about which rivers are designated under the Directive.

Where waters require further improvement to progress towards meeting Guideline standards, we will again have to take into account costs and the wider benefits to people and the environment.

## **Directive on Surface Water Abstraction**

Surface water abstracted for public water supply has to comply with standards which depend upon the classification of the waters abstracted and the type of treatment provided following abstraction. There are Imperative and Guide Standards and the Agency has discretion about how to meet the latter.

Where waters require further improvement to progress towards meeting Guideline standards, we will again have to take into account costs and the wider benefits to people and the environment.

## **Habitats and Birds Directives**

A proportion of Sites of Special Scientific Interest (see below) contain species or habitats of international importance. These so called Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) are identified and designated under the Birds and Habitats Directives respectively. Together they form part of a European group of sites called *Natura 2000*. English Nature and the Countryside Council for Wales have identified SPAs and SACs considered to be adversely affected by abstractions or discharges by water companies and which will need to receive full protection from these harmful activities.

## **Sites of Special Scientific Interest (SSSIs)**

SSSIs represent the core network of protected sites, designated on the basis of their national conservation importance. English Nature and the Countryside Council for Wales have identified both river and wetland SSSIs that may be affected by abstractions or discharges by water companies. The Agency will advise the Government on the actions which will be needed to protect these sites.

## **Over-Abstraction**

Investment is needed to correct the historical impacts on rivers and wetlands of licensed abstractions that are now thought to be excessive and damaging to the environment at sites which are not already specifically protected by either European Directives or UK legislation. The loss of our national heritage and amenity resulting from the reduction in river flows through villages, towns and the countryside, is of great concern to local communities and a number of national organisations.

## **Eutrophication**

Water company investment may be required to prevent, or solve the problem of eutrophication in lakes and rivers not identified under the Habitats Directive, or the UWWTD; or at sites identified by English Nature or the Countryside Council for Wales, to protect Sites of Special Scientific Interest. It may also cover sites important for recreation in addition to conservation interest.

## **Asset Maintenance**

Long term planned maintenance of water companies' sewers and water distribution pipes is essential. Preventative maintenance should ensure that high leakage rates and unsatisfactory Combined Sewer Overflows are a thing of the past.

## **UK Biodiversity Action Plan**

Ministers have identified in their statutory guidance to the Agency, that a key component of the Agency's contribution to sustainable development is '*...the conservation and where practicable enhancement of biodiversity*'. A key means of achieving this aim is through the Agency's contribution to the UK Biodiversity Action plan. This plan, which stems from the Biodiversity Convention of the Rio Earth Summit in 1992, identifies a number of plants, animals and habitats which require action to ensure that they are looked after. The Government has given the Agency responsibility for a number of actions that will protect these species and habitats.

Whilst it is not always possible to identify specific actions which relate solely to the maintenance or improvement of biodiversity, improvements identified for other purposes will simultaneously address biodiversity needs. Improvements to meet the needs of the Habitats Directive, River SSSIs, Sensitive Areas, River Quality Objectives and Over-abstraction in particular, will benefit biodiversity.

## **MARKET RESEARCH**

In October 1997, the Environment Agency commissioned a survey to 'establish the importance to water company customers of protecting and enhancing the environment'.

The objective of the survey was to collect views on a number of issues:

- the balance between the importance of the service to customers, returns for shareholders, bills and protecting the environment;
- perceptions of whether water companies are concerned about, or are working to improve, the environment;
- attitudes to water conservation, the general environment, environmental protection and priorities for environmental expenditure; and
- customers' willingness to pay for environmental improvements.

The survey involved interviews in October 1997, with 2,489 heads of household or their partners in 12 water company areas across England and Wales. The survey represents the views of bill payers, rather than the overall population.

## Main Findings

As an introduction, respondents were read a list of *issues* and asked to what extent they were concerned about each. The list included topics such as *reducing crime*, *reducing air pollution* and particularly relevant, *preserving the environment*, about which 96% of respondents were *fairly concerned*. Specifically, to have clean rivers and seas around our coast is considered *very important* by 86% of respondents.

When it was explained that cleaning up rivers and the sea would require large investments of money, respondents were asked who they felt should contribute to the cost. They answered: *large manufacturing companies* (87%); *local water companies* or *Government* (85%); *the Environment Agency* (70%); *the European Union* (69%); *councils or local authorities* (63%). Farmers and local people scored lower.

When asked how much more on top of their water bills they were willing to pay for an adequate water supply and cleaning up rivers and coastal waters, the average amount was £3.11 per month. Less than a third said that they wanted to pay nothing extra. When asked if they would prefer lower bills and no environmental improvements, compared to the same bill but some improvements, a clear majority (95%) chose the latter.

When asked their preference on who should pay for improvements, 79% were keen on spreading the cost, so that future generations, who would see benefits, would be contributing. When asked who should pay for local improvements, respondents had no clear preference between sharing the cost nationally or paying locally.

Respondents were also asked to the best of their knowledge, where they thought water company profits were spent. There was a clear difference between where they think they are spent, and where they think they *should* be spent. For example, 13% felt that profits went on cleaning up rivers and coastal waters, compared to 96% who felt they should be. Similarly, 9% felt they were spent on preserving water resources in the environment, compared to 94% who felt they should.

Respondents were asked to rate the importance of a number of water company services. A *reliable supply at all times* was the most common answer (95% said *very important*), with *fixing leaks in pipes* (90%), *keeping bills down* (67%) and *improving the local environment* (62%).

10% of respondents felt that their local water company is doing *a great deal* to clean up the environment (with 42% who felt they were doing *a fair amount*), but over half (59%) felt they *could do more*.

Respondents were asked about what could be done to tackle problems in the water environment. The most common answers were *reduce water demand by cutting leaks* (96%); *increased sewage treatment before discharging to sea* (95%); *more advice on saving water at home* (90%); *more efficient appliances at home* (87%) and *building new reservoirs* (65%).

When asked what environmental problems exist in their local area, over half (53%) said *frequent pollutions*; 49% said *rivers and streams dry up*; 43% mentioned *dirty bathing water*; and 38% said that *wetlands and water meadows dry out*. Responses to this question varied region by region.

## **YOUR PRIORITIES**

We have set out the scope of The National Environment Programme. It will include investment to help safeguard water supplies and the rivers and coastal waters of England and Wales. We now invite your views on the relative benefits and importance of these schemes and other needs for investment so that we can take account of your priorities. The pace of investment to realise the benefits of any improvements may depend on the cost involved (where timescales are not set in legislation) and will be a programming issue to be considered later in the process.

*Please write to us at the address shown below with your views. Responses should be received by 21 February 1998. We will assume your comments are not confidential unless you state otherwise.*

*We also leave a space in the table in Annex 1 for you to record a summary view. We suggest you do this by giving yourself 100 points. You should then allocate these points between the topics according to how important they are to you.*

*If you feel that the main issue is to reduce water bills, you might give all your points to Item 1. On the other hand you may prefer to give some or all of your points to topics that protect the environment. You will see that you can express a view on the relative importance, say, of improving rivers, or improving the sea, or protecting supplies of drinking water, or enhancing conservation, or cutting your bill. You can also express a view on the importance of protecting the quality of drinking water (as measured at the tap) and on whether water companies should develop new reservoirs to meet future demand.*

*We look forward to hearing from you.*

## **ADDRESS**

*Please write to:*

*Richard Streeter Head of Periodic Review  
The Environment Agency  
Rio House  
Waterside Drive  
Aztec West  
Almondsbury  
Bristol  
BS32 4UD*

**REPLIES SHOULD BE RECEIVED BY 21 FEBRUARY 1998**

**SUMMARY OF ISSUES TO BE PRIORITISED**

**ANNEX 1**

ITEM	ISSUE	POINTS
1	Only the minimum environmental improvements required by law should be carried out to keep bills as low as possible.	
2	We should underpin recent improvements in river quality by preventing deterioration. Rivers that have deteriorated of late should be restored to their former condition.	
3	Rivers of poor quality should be improved, especially those with potential for use as water supplies.	
4	Rivers of poor quality should be improved, especially those with potential for use as fisheries, or to enhance recreation and conservation of wildlife.	
5	Rivers or wetlands damaged by over-abstraction should be restored, especially where this is a benefit to recreation and conservation.	
6	Companies should do more to further improve discharges to estuaries and the sea.	
7	Companies should do more to control eutrophication in lakes, reservoirs and rivers.	
8	Companies should ensure that no sewage litter is allowed to get into rivers or on beaches.	
9	A precautionary approach should be taken to protect Sites of Special Scientific Interest where the effects of abstraction or discharge are uncertain.	
10	Companies should ensure their assets are maintained to a higher level and so reduce the numbers of fish kills, accidents and other incidents and to prevent the recurrence of high leakage.	
11	Special precautions need to be taken to protect our water resources to deal with the uncertainty of climate change.	
12	Companies should reduce to the minimum level practical the amount of water lost in leaks in water mains.	
13	Every home should be metered to discourage wasteful use of water.	
14	Companies should develop new water resources, such as reservoirs, in order to meet the future demand for water.	
15	Companies should do more to improve the quality of drinking water at the tap.	
16	Other (please specify)	