Water today, water tomorrow

From catchment to customer

Can upstream catchment management deliver a better deal for water customers and the environment?

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Artificial drainage channels on moorland help to reduce erosion and improve water quality

This is one of a series of occasional focus reports. It highlights the work we are doing on a particular policy area, with the aim of encouraging wider debate and discussion.

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1. A better deal for customers and the environment?

Our natural water environment provides us with a wide range of goods and services that are central to our way of life. These include:

- food;
- clean water, for good public health;
- protection from flooding;
- a habitat for wildlife;
- a setting for leisure activities; and
- beautiful scenery.

So, safeguarding it is essential – for our health and well-being, and for our economic prosperity.

Every day in England and Wales, we take more than 55 billion litres of fresh water out of the environment. We use about 15 billion litres in our homes and places of leisure, and at work. This is about the same as the amount of water in Lake Windermere. The remainder is used mainly by industry (particularly the energy sector), agriculture and fish farming.

The water and sewerage companies return much of the water we use to the environment after it has been treated. If the water is for public use, then customers pay the costs of this treatment in their bills.

Water catchments – what are they?

A water catchment is an area of land through which water from any form of precipitation (such as rain, melting snow or ice) drains into a body of water (such as a river, lake or reservoir, or even into underground water supplies – 'groundwater'). It could be a very large area, such as an estuary and any associated coastal waters. Or it could be relatively small – for example, the catchment of a tributary river.

There are some 8,000 water bodies in England and Wales – or about 100 principal catchments.

The state of the natural environment – and the type and extent of land management activity within a particular catchment – will affect the quality and quantity of the water bodies within them.

This, in turn, will affect the:

- quality of raw (untreated) water taken out of the environment for public use;
- extent to which the land can be effectively drained; and
- wildlife and other goods and services the water body can sustain.

Safeguarding our natural water environment is essential – for our health and well-being, and for our economic prosperity

Over the past 22 years, the quality of water in the environment has improved significantly. Today, for example:

- 86.2% of bathing waters around England and Wales meet the highest European Union (EU) guideline standards for water quality, compared with 32% in 1990;
- 73% of English and 87% of Welsh rivers are rated 'good' or 'excellent' for water quality, representing more than 20 years of continuous improvement;
- 125 species of fish have been recorded in the River Thames, with record numbers of sea trout (there were none 50 years ago); and
- otters can be found in rivers in every English county.

These achievements – and others besides – are in large part the result of substantial investment from the water and sewerage companies in England and Wales. Since privatisation in 1989, customers have paid for more than £30 billion in water quality and environmental improvements through their bills.

And there is more investment to come. In 2009, we set the price and service package each company will deliver during 2010-15 (the 2009 price review). We agreed the

companies' plans to invest a further £5.3 billion by 2015 to maintain and improve drinking water quality and environmental standards. This is part of an overall programme of capital investment, including maintaining what has already been achieved. The water and sewerage sectors have spent more on protecting the water environment than any other sector of the economy.

Even so, it is likely that the companies will have to continue to invest significant amounts in the future. For example, under the EU's Water Framework Directive (WFD) all watercourses (such as rivers and streams) in England and Wales must meet strict environmental quality standards by 2027. The companies – and their customers – will bear much of the cost of this. So, they need to look for the most socially, environmentally and financially sustainable solutions. Adopting catchment management approaches could be one such solution to address the problem of diffuse pollution at source.

Addressing the challenges of diffuse pollution

Despite the progress the companies have made so far in tackling environmental and water quality, there are still challenges ahead. And meeting them will be more difficult than before.

The National Audit Office has described diffuse pollution as the biggest challenge to improving water quality in England and Wales. It has also estimated the cumulative cost of water pollution to be between £700 million and £1.3 billion a year. And it is only likely to increase in importance as our climate changes.

This is because climate change will put more pressure on the water environment. We are likely to experience more extreme weather events. During dry periods, when there is less water in the environment, pollution (including diffuse pollutants) will be more concentrated. This could damage sensitive ecosystems, plants and wildlife.

And, when we experience extreme rainfall, this will wash more pollutants from both rural and urban land into groundwater, rivers, lakes and streams, causing further problems. So, rainwater running off exposed soil on moorland, for example, will cause further erosion and have a significant impact on water quality.

Our increasing demand for water – because of lifestyle changes in the form of, say, more single-person households – means the companies have to take more from the environment. This could affect the overall quality of the water by reducing the volume available to dilute pollutants. It could also place even more pressure on the companies to treat it to a sufficiently high standard.

So, what are the options? In the past, to deliver the good quality drinking water we all enjoy, the companies and their customers have paid for intensive treatment processes once water has been

taken from the environment. After we have used this water, it must be treated to remove pollutants before it is returned to the environment. Again, customers pay for this.

But as well as generating significant quantities of greenhouse gas emissions, this treatment capacity is expensive to build and operate. Since privatisation, the companies have invested about £1.6 billion to reduce the levels of pesticides and nitrates in untreated water. And they expect to spend a further £125 million over the period to 2015. Continuing to use such approaches would be very costly. They could also damage the environment.

Another concern is that current treatment approaches do not remove pollutants from the surrounding environment – only from water that is for public use. This means that pollution could remain in the environment where it would continue to affect the wildlife that our rivers and streams sustain.

So, there is a need to consider more sustainable solutions for customers and the environment that tackle diffuse pollution at its source.

What is diffuse pollution and where does it come from?

Diffuse pollution occurs when small amounts of pollutants – often from many different sources – are washed into a water catchment across a wide area.

On their own, the sources of this pollution can be relatively minor. But taken together, they can affect significantly the quality of the untreated water in individual catchments – and damage the wildlife and plants they support.

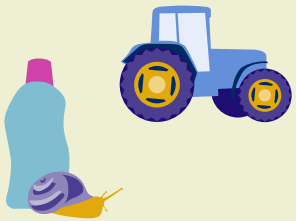
Because the sources of pollution tend to be spread out, they can be hard to spot. This can make it more difficult to stop pollutants entering catchments and prevent them from damaging the water environment.

In its report on 'Tackling diffuse pollution in England' published in July 2010, the National Audit Office identified a number of sources of diffuse pollution, including:

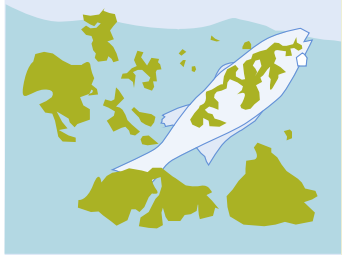
- agricultural run-off from fields in the form of nitrogen and phosphorus from pesticides and fertilisers;
- contamination from livestock;
- oil and chemicals from cars and roads;
- chemicals and detergents from misconnected sewage pipes; and
- chemicals and other toxins from activities such as car washing, as well as from industry and business.

Why is diffuse pollution a problem?

1. Diffuse pollution enters water catchments from various sources



2. This can cause toxic algae to grow, which can harm plants, animals and fish, and affect water quality



3. If the quality of the water that the companies take from the environment is poor, they will have to treat it more to make it fit to drink

4. Customers pay for the cost of extra treatment through their water bills

5. After customers have used the water, the sewerage companies take it away and treat it to make it safe to release back into the environment

6. If there are high levels of pollutants in the water, the companies have to treat it to a higher standard

7. This is so the water that goes back into the environment dilutes the pollution to meet legal standards

8. Customers pay for the cost of this treatment through their sewerage bills

Diffuse pollution is the biggest challenge to improving water quality in England and Wales – it needs sustainable solutions to tackle it at source

Time for a new approach?

Upstream catchment management schemes could be a more sustainable way of helping to ensure good quality drinking water. This is because they tackle diffuse pollution at source before it reaches a water treatment works. They may also help the companies to contribute to the requirements of the WFD at the lowest cost to customers by enabling them to find more cost-effective ways of meeting their environmental obligations.

At the 2009 price review, we supported the companies' proposals to spend £60 million on more than 100 catchment management schemes and investigations. Typically, these involve them working with farmers and landowners to investigate and address deteriorating or poor water quality in the catchment through changes to farming practice.

At the time, our support for this approach represented something of a departure for us. This is because of the significant uncertainties that surround its use.

Also, its success in delivering lower-cost services to customers is not yet proven. There is a risk that water customers may end up paying again for additional treatment if the schemes are unsuccessful so that the companies can comply with drinking water quality or environmental standards.

This document highlights the potential benefits of managing water catchments, particularly in tackling diffuse pollution. It describes the work some of the companies are doing.

It also highlights the issues that need to be addressed when considering such approaches if these schemes are to be truly socially, economically and environmentally sustainable. This is important if customers are to continue to pay for them through their water and sewerage bills.

The aim of this document is to stimulate and contribute to the debate about how the companies can manage water catchments more sustainably for the benefit of customers and the environment, both now and in the future. In particular, we seek views on the conditions in which water customers' money should be used for this purpose, and – where such funding is agreed – the best way of ensuring sustainable solutions that deliver real benefits.

This document is part of a wider piece of work we are doing on water resources and follows on from others we have published over the past 12 months, such as:

- 'Valuing water – how upstream markets could deliver for consumers and the environment', which explores how we can make

water more sustainable by determining its value; and
- 'Waste not, want not – making the best use of our water', which explores how we can contain the demands we place on our water system.

A watershed moment

In 2014, along with the companies and other regulators – including the Drinking Water Inspectorate and the Environment Agency – we will need to consider the cases the companies make for continued funding of catchment management schemes.

This means we need as much evidence and information as possible now about what works, and what does not. In the next chapter, we outline several approaches that some of the companies have adopted to date. But there is more work that needs to be done to build up the evidence base that will help us to make decisions about the services customers will receive after 2014.

Phosphates and nitrates promote excessive algae growth (see below)

2. What could catchment management deliver?

The companies are using a variety of approaches to prevent or reduce the amount of diffuse or other pollution entering water catchments. We describe some of these below.

A local solution to local problems

Catchment management approaches may be particularly suitable where there is a specific and well-targeted problem, such as use of a particular pesticide or fertiliser on a particular farm, or even a particular field.

Catchment management approaches may be particularly suitable where there is a specific problem – such as pesticide use on individual farms

For example, Wessex Water has used various means – including advice, negotiation and financial contributions – to change the practices of farmers and landowners. At one farm, the company identified 200 hectares of land where there was a particularly high risk of pesticides entering local water supplies. The company negotiated with the farmer to persuade him to change his farming practices to meet standards over and above legal agricultural requirements.

As part of this arrangement, the company used customers' money to contribute towards the cost of building a pesticide sprayer loading and washdown area. This meant the farmer was able to contain any pesticide residues and stop them entering water supplies. The company has also developed a comprehensive pesticide management plan with the farmer.

As a result, the concentration of pesticides detected at the water source the company uses has reduced. This has improved treatment flexibility and saved the company – and its customers – money.

A catchment-wide solution for a catchment-scale problem

Catchment management schemes can also involve a collaborative, large-scale approach to problem solving by all those who have an impact on the quality of the water sources the companies use. This can involve the companies working on land they own, or with farmers and other landowners. The benefits of working together can often be more effective than each participant acting alone.

Nearly two-thirds of the money we expect the companies to spend over the period 2010-15 is for work that United Utilities, South West Water and Yorkshire Water will carry

What can sustainable management of water catchments achieve?

It is possible for the companies to reduce pollution levels in the water they take from the environment. One way they can do this is by working with other stakeholders in a particular catchment to reduce the amount of diffuse pollution entering a body of water.

As a result, the water requires less treatment to make it fit to drink. This lowers costs to customers and avoids generating greenhouse gas emissions from treatment processes.

In adopting such approaches, the companies can also reduce the amount of extra treatment they need to carry out before returning water to the environment.

These techniques can also deliver other benefits. For example, if a company carried out work to restore an area of upland moorland, this could:

- boost the environment's natural capacity to store carbon and help mitigate climate change;
- improve the variety of animal and plant life that the environment can support; and
- slow down the rate at which rainwater runs off land to reduce the risk of flooding.

out to restore upland water catchments. This involves working with farmers and in partnerships with other organisations, including:

- Natural England;
- the National Trust;
- the RSPB;
- Wildlife Trusts; and
- Rivers Trusts.

One example of such a scheme is United Utilities' Sustainable Catchment Management Programme (SCaMP1). Since 2004, this project has involved the company working with farmers on about 30,000 hectares of company-owned land, to introduce practices that reduce their environmental impact.

This has included reducing livestock grazing to protect vegetation and minimise their waste products. Artificial drainage channels have also been blocked to retain water, and extensive areas of bare peat on moorland have been replanted to prevent erosion. This has reduced the amount of soil run-off entering the company's water sources. It has also lessened the impact peat residues have on water quality in terms of discolouration.

At the 2009 price review, we agreed that it would be in customers' interests to support the second phase of this project. This will widen the work to another 30,000 hectares of land in United Utilities' area during the period 2010-15.

Another example is South West Water's 'Upstream Thinking' project. This aims to improve water quality in river catchments in the company's area as a way of reducing treatment costs. It also aims to help it manage water volumes during droughts and control run-off during floods. Through the project, the company is restoring damaged peat on moorland and improving environmental performance at 800 farms.

It is also considering the range of issues that can influence water quality and volume. For example, it thinks that improving river flows can make abstraction at treatment works easier to manage. This could

save customers' money by reducing treatment and energy costs.

This catchment-wide approach involves several partners, including the Westcountry Rivers Trust, which has had some success in persuading farmers and landowners to protect water resources.

Investigations

More than 90 of the catchment management schemes we supported at the 2009 price review are in the form of investigations. Because they are on a relatively small scale, they enable the companies to find the most appropriate and cost-effective ways of addressing diffuse pollution.

For example, some companies are using catchment advisers to carry out farmland site visits to identify possible causes of such pollution. Others offer education workshops and distribute leaflets to encourage voluntary action from the agricultural sector.

Several companies are also targeting their water quality

Before: United Utilities' SCaMP in 2007

After: United Utilities' SCaMP in 2008

monitoring to pinpoint the exact source of problems. They are using this data to help predict and plan where they need to focus their efforts.

Demonstrating benefits

Early results from several of the companies suggest that some of their catchment management schemes are beginning to deliver benefits for customers.

For example, Wessex Water has estimated that as a result of implementing catchment management schemes, it is spending – on average – one-sixth of the cost that would be required for more traditional, expensive engineering solutions.

For United Utilities, the results so far suggest that SCaMP is starting to deliver improvements in the quality of untreated water. By restoring areas of moorland and establishing more sustainable land management practices in its own catchments, it is also improving the quality of a number of Sites of Special Scientific Interest (SSSIs). As part of the second phase of the project, the company is working to identify potential long-term cost savings to customers.

But across England and Wales there is not yet enough evidence overall to show that catchment management schemes deliver better water quality and lower treatment costs – that is, benefits that will hold down the bills that customers would otherwise have to pay. More work is needed to ensure that the benefits of this approach are demonstrated clearly.

3. From catchment to customer: the issues

Catchment management is an innovative approach. It has the potential to deliver many benefits, both to customers – in the form of lower bills – and the environment. But there are several issues to be addressed so that customers are not paying for schemes that do not work.

This chapter outlines some of these issues. And chapter 4 sets out some of the things that could be done to address them.

Establishing the evidence

While some evidence of the benefits is starting to emerge, catchment management approaches remain largely unproven. It may take many years for some schemes to deliver benefits. Others may not deliver them at all. We have seen only limited evidence so far of tangible benefits to customers.

For example, while the land management measures outlined in the previous chapter can help to tackle diffuse pollution at a local level, their effect on the catchment as a whole remains – as yet – unproven.

This means there is a risk that customers could end up having to meet the costs of any treatment process that might eventually be needed to meet a legal quality standard.

So, because catchment management is an evolving approach, the companies will need to establish an evidence base as quickly as possible. This is so that customers can have confidence in what will work and what will not.

But to find out what will work, the companies must be allowed to experiment with a range of approaches – some of which will inevitably fail. We and the other regulators in the sectors should not penalise the companies for trying innovative approaches – if they are well-planned, supported by good evidence and delivered well – especially where they monitor the work to identify and stop the failing schemes quickly.

Adopting new ways of working

Catchment management represents a new way of working. In the past, the companies have relied on predictable and visible treatment or engineering solutions. This is because delivering these is in their control.

But catchment management schemes are more uncertain. They often rely on working in partnership with others and using new skills. They also rely on changing the behaviour of individuals and organisations within water catchments, as well as new ways of predicting and monitoring success.

The companies will need to convince their customers that catchment management approaches represent the best use of their money – particularly if the benefits take a number of years to realise

Polluter pays versus beneficiary pays – who benefits?

As a general rule, we support the polluter pays principle. This means that those who cause pollution should pay for its removal. So, polluters have a financial incentive to reduce their impact on the environment. This principle is incorporated in the WFD.

But there is also considerable interest from some stakeholders in the beneficiary pays principle, or the payments for ecosystem services approach. Essentially, this means paying land managers and others to take action to improve the natural environment and provide services that benefit society as a whole. For the companies and their customers, the most clear-cut benefit comes in the form of clean water.

Defra's recent Natural Environment White Paper, 'The natural choice: securing the value of nature', proposes an action plan to develop markets for ecosystem services. This would bring together beneficiaries and providers. The White Paper cites the example of a water company paying a farmer for "protecting the ability of uplands to naturally clean and filter water". The Welsh Government's 'Strategic Policy Position Statement on Water', which it published earlier this year, also explored adopting an ecosystem services approach to water management.

We support this in principle. If adopting catchment management approaches enables a company to meet legal water quality standards at a reduced cost, then customers will benefit from lower bills.

But for this approach to work, it must be clear what costs land managers will bear and what activities customers should pay for.

It must also be clear what the beneficiaries of an ecosystem services approach actually have to do to earn any payments, and how this will be sustained. And where benefits are spread across a number of parties – including water customers – then they must all be encouraged to participate. This is so that customers do not pay for results that are not of direct benefit to them, unless there is evidence that they wish to do so.

Securing customer support

It is essential that the companies demonstrate support from their customers for the catchment management schemes they pay for. This will be particularly important for schemes that demonstrate a number of benefits, including:

- improving water and environmental quality;

- protecting against flooding; or
- storing carbon.

The companies will need to convince their customers that such approaches represent the best use of their money.

This is especially true for those benefits that may take a number of years to realise. One way they could do this is to learn from successful schemes elsewhere. It may be the case that if certain groups of stakeholders accumulate particular benefits, then they should make matching contributions.

Action by others

The Environment Agency has estimated that one-third of failures against the water quality standards set by the WFD are the result of diffuse pollution. It also estimates that agriculture is the source of about two-thirds of the diffuse pollution in watercourses in England and Wales – contributing about 60% of nitrates, 25% of phosphates and 75% of sediments. The next biggest contributor is run-off from urban areas, including roads.

Point source pollution from the companies (for example, from sewage treatment works) is responsible for about 20% of all WFD failures. Yet they – and their customers – are expected to meet about 82% of the costs of measures of the first phase of plans (2010-15) to meet the Directive's requirements. This compares with contributions of less than 0.1% from agriculture and transport, and less than 0.2% from industry in general and local government.

We accept that the companies must take responsibility for providing safe and reliable drinking water, and managing the impact of their actions on the environment. But if diffuse pollution is to be tackled effectively and fairly, then all sectors – including agriculture, industry and central and local government – need to play their part in tackling the problem at source. All polluters need to understand their responsibilities and take appropriate action.

A river is fenced off to allow cattle to drink without polluting the river

4. Next steps

Measures and solutions that contribute to achieving sustainable water are at the heart of our strategy. We want a sustainable water cycle in which we are able to meet our needs for water and sewerage services while enabling future generations to meet their own needs.

We support the development of innovative approaches to:

- meet drinking water quality and environmental standards; and
- respond to climate change.

But they must have clear benefits for customers. Catchment management schemes can meet these criteria.

At the 2009 price review, we were pleased to support the inclusion of catchment management initiatives during 2010-15 in the companies' business plans. We expect them to propose more schemes – with clear customer benefits – when we next set price limits. A number of the companies have embraced enthusiastically the principles of seeking low-cost, sustainable alternatives to dealing with diffuse pollution and enhancing the environmental features of water catchments in their operational area.

We support the development of innovative and sustainable approaches to meeting drinking water quality and environmental standards – if they benefit customers

But there is still a lot of work for the companies and other stakeholders to do before we reach the 'watershed' moment in 2014, when decisions need to be taken on which new schemes customers will fund – and which existing schemes they will continue to pay for. They need to build the evidence base to show the effectiveness and benefits of particular techniques.

Different thinking

We look to the companies and their industry representative body (Water UK) to show leadership on the issue of catchment management. In particular, we expect them to gather evidence on what works and take decisions quickly on behalf of their customers on what to continue. They should stop the schemes that do not work (rather than waiting until the next time we set price limits).

They also have a role in:

- sharing best practice;
- encouraging actions from other stakeholders; and
- ensuring that this becomes part of the approach that all the companies consider.

We are playing our part by reviewing our regulatory framework so that we can encourage the companies to consider more innovative and sustainable solutions, including catchment management. Our approach to

date has involved setting an extensive range of detailed outputs that the companies must deliver and monitoring their progress closely. The companies have told us that this approach can prevent them from choosing different solutions.

So, we are considering focusing more on making sure the companies deliver the broader outcomes that customers and wider society value, rather than prescribing the detailed means to do so. We want to put in place a framework that will enable the companies to explore a range of options for delivering results – without us having to agree to every scheme.

We explored how we might adopt a more outcome-focused approach in 'Inputs, outputs and outcomes – what should price limits deliver?', which we published in March 2011.

We are also reviewing the way we regulate the different kinds of company expenditure. This is so that we can be sure that this is not only incentivising capital-intensive approaches, such as building water treatment works. We considered this issue in more detail in 'Capex bias in the water and sewerage sectors in England and Wales – substance, perception or myth?', which we published in May 2011.

A helicopter delivers heather cuttings to damaged moorland

Outcome- and evidence-based decisions

When we set price limits in 2014, we will expect the companies to bring forward new or continued catchment management schemes.

An outcome-based approach should encourage more innovative, flexible, sustainable and long-term solutions. We will also expect the companies to be clear on what works and what does not. They should consider:

- our general principles on carrying out catchment management schemes (see page 21);
- evidence from current company investigations;
- the advice of relevant expert groups being established, including the Water UK

Catchment Management Forum, the Catchment Management Regulators Group (which we have set up with the Environment Agency, the Drinking Water Inspectorate, Natural England and Defra), and stakeholder groups such as the Rivers Trusts;
- the conclusions of the current UK Water Industry Research (UKWIR) project on evaluating the benefits of catchment management; and
- evidence from non-water company schemes, such as Defra's demonstration catchments project, and its pilots on land and flood risk management.

We will consider the companies' evidence as part of the price review process. To help them, we will work closely with the Environment Agency and the Drinking Water Inspectorate to develop guidance on what the evidence should include, such as:

- cost-benefit analysis (including carbon);
- evidence of customer support; and
- approaches for dealing with risk and uncertainty in decision-making.

The evidence we request will be consistent with the targeted and proportionate approach we are developing as part of our regulatory compliance project.

We will also consider how we can best incentivise effective schemes. This includes allowing the companies flexibility to change their approach quickly when there is early evidence of failure.

We plan to share our thinking on how we go forward in 2012. We will ask others to give evidence, in order to influence thinking on the next round of schemes. We will confirm our policy – for the next price review – as part of the methodology on which we will also consult in 2012.

We are changing our regulatory approach to focus more on ensuring the companies deliver the broader outcomes that customers and society value

Contributions from others

As we highlighted in chapter 3, tackling diffuse pollution cannot and should not be an issue for the companies alone, with their customers meeting all the costs. Nor should customers necessarily bear the costs for those parts of schemes – such as biodiversity – that are not of direct benefit to water and sewerage services.

At the 2009 price review, we based our decisions partly on the expectation that our support for the companies' catchment management schemes would act as a catalyst for action by other sectors in tackling diffuse pollution.

This is why we were pleased that Defra has announced in the Natural Environment White Paper that it will, among other things:

- develop a strategy for tackling non-agricultural diffuse pollution, such as plumbing misconnections and run-off from roads and urban areas;
- spend £92 million over the next

four years to restore water catchments; and
- commit to increase the focus of the £400 million a year available to farmers and landowners under the Common Agricultural Policy (CAP) on measures to tackle diffuse pollution.

We also welcome the Welsh Government's request to the Environment Agency to produce a strategic plan to tackle diffuse pollution in time for the second cycle of river basin planning in 2015.

But there is still more to do.

For example, in response to the European Commission's public debate on the future of the CAP, we said that from our perspective of protecting water customers, we think there may be a case for making receipt of all payments to farmers under the scheme conditional on good environmental stewardship. This should be demonstrated against clear criteria, including compliance with the WFD.

As well as incentives for good environmental management, there

Our principles to underpin the companies' catchment management schemes

In our view, the following principles should guide the companies in considering whether to carry out a catchment management scheme.

- Where pollution derives from particular agricultural or other practices, the sector concerned should be primarily responsible for preventing or removing it, under the polluter pays principle.
- Policy-makers and regulators should use advice, incentives, regulation and enforcement to encourage the sectors that cause pollution to meet their responsibilities.
- Water customers could legitimately expect to pay for those elements of catchment management that bring direct and measurable benefits to them, under the principle of paying for ecosystem services.
- Where schemes for good land management reasons contain measures that produce other benefits, alternative funding sources and contributions should be sought, taking into account customer support for the wider benefits.
- The companies must be allowed to try out a range of approaches. We and the other regulators should not penalise them for trying well thought out, innovative schemes, particularly if they identify failing schemes quickly and stop spending on them. But customers should not bear all the risks in the event that catchment management schemes fail, resulting in further investment to meet required standards.

may be a need for effective regulatory sanctions in areas where land management is poor or where illegal practices have been identified. This is something that the National Audit Office highlighted. While a voluntary approach to adopting good practice appears sensible, we note there are general binding rules in Scotland that help promote and reinforce such an approach.

Further consideration could also be given to the potential role of producer responsibility in tackling diffuse pollution. For example, the agrochemical sector could build on its role in improving stewardship on metaldehyde and contribute to the funding of the catchment sensitive farming initiative and other schemes.

Only if all sectors meet their own responsibilities and work together to help others meet theirs will we get the best for the environment at a price we are willing and able to afford.

You can help

We are now entering a crucial period – before the next price review in 2014 – to ensure we incentivise sound, sustainable and legitimate catchment management practices and policies that benefit customers and the environment.

We would welcome your views on the issues that we have raised in this document. In particular, we would welcome your thoughts in response to the following questions.

- How can the water companies best identify what works and encourage the sharing of good practice at a national, regional and local level, and improve evidence gathering and identify emerging benefits quickly?
- What should water customers pay for and what should they expect to be delivered through other approaches?
- How can we best incentivise the companies to adopt appropriate catchment management solutions – for example, through the way we set price limits?

Please contact Noel Wheatley, our Director of Environmental Policy (noel.wheatley@ofwat.gsi.gov.uk) if you would like to contribute to the debate.

5. Further information

Ofwat publications

'Ofwat's response to the European Commission's public debate on the future of the Common Agricultural Policy', Ofwat, June 2010.

'Ofwat's response to "An Invitation to Shape the Nature of England"', Ofwat, November 2010.

'Ofwat's response to "A living Wales – a new framework for our environment, our countryside and our seas"', Ofwat, December 2010.

Other information

'Tackling diffuse water pollution in England', National Audit Office, July 2010.

'Managing Water, Managing Land', Wessex Water, April 2011.

'The natural choice: securing the value of nature', UK Government White Paper, Defra, June 2011.

'Strategic Policy Position Statement on Water', Welsh Government, 2011.

United Utilities has a section on its website devoted to its SCaMP project at www.unitedutilities.com/scamp.aspx

More information on the Water Framework Directive is available at www.euwfd.com/html/what_is_the_wfd-.html

The Environment Agency's list of catchments is available at www.environment-agency.gov.uk/research/planning/131506.aspx

Statistics on water supply use are available on the Defra website at archive.defra.gov.uk/evidence/statistics/environment/inlwater/iwsupplyuse.htm

Ofwat (The Water Services Regulation Authority) is a non-ministerial government department. We are responsible for making sure that the water and sewerage sectors in England and Wales provide consumers with a good quality and efficient service at a fair price.

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Printed on 75% minimum de-inked post-consumer waste paper
September 2011

ISBN 978-1-908116-12-3

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Sustainable water.