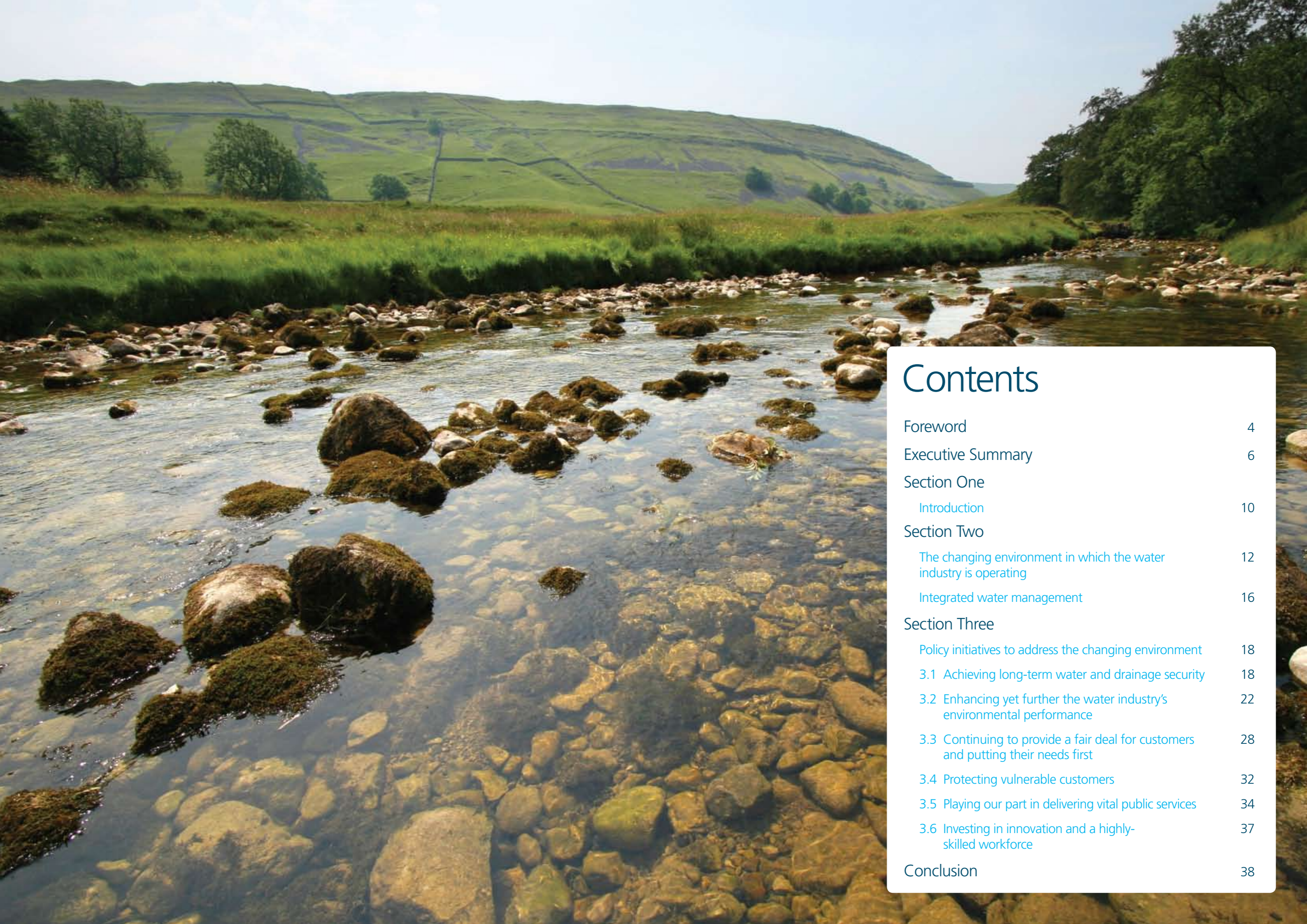


Taking responsibility for the water environment for good

A contribution to the debate on the future of the water industry from Kelda, parent company of Yorkshire Water

KeldaGroup





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Foreword



For us, ensuring that we play our role in protecting this important natural resource, whilst providing our customers with essential water and waste water services, has defined our company. Striving to be “clearly the best” water company has enabled us to achieve the balance between significant improvement in environmental performance and drinking water quality, and delivering these changes at prices which customers can afford. We are proud of our performance and proud of the difference we have made to Yorkshire’s many watercourses and coastal areas.

Challenges continue to emerge and we understand that, whilst we must continue to provide these services to the very highest quality, we must also address new concerns and develop new ways of working which better reflect the increased expectations that society has of us.

We must evolve to adopt new, more sustainable ways of working. Water sustainability must become a defining principle for water companies and this means tackling local as well as global environmental issues. Driving down our dependence on carbon and helping our customers to understand the value of the water we provide are essential elements of this approach, along with better local environmental practice.

We must also ensure that we retain and build upon the support of our customers and the wider community. We have to become more sustainable and play a bigger role in society. We believe that these objectives will only be achieved through greater integration of clean and waste water processes, including catchment management, flood defence and drainage. We are already considering our role in taking responsibility for the water environment.

Through integration we would enhance our environmental performance and make an important contribution to the delivery of services which our community values. In Yorkshire, our communities are concerned about future flood defence investment. We believe we could contribute with effective asset management skills, access to capital markets and a record of successful delivery to the provision of such vital services. We believe the time is right to begin the discussion about the wider role that water and waste water companies could play.

The ideas put forward in this document reflect the views of a range of stakeholders. We do not claim to have all the answers. Our intention is to contribute to the bigger debate about sustainable water and also to tailor solutions to the needs of our local communities. We hope you find these ideas interesting and we look forward to discussing them with you.

Richard Flint
Chief Executive, Kelda Group
and Yorkshire Water



Executive Summary

Our underlying theme is for the water industry to play a bigger role in addressing sustainability whilst achieving even better value

1

Responsible leadership and significant levels of investment have led to the water industry delivering considerably improved services in the 21 years since privatisation. Service to customers and the environment is far better than it was a generation ago.

2

However the industry now stands at a crossroads. The growing demand for water and waste water services, increasing pressure for sustainable solutions, climate change and the ever constant search for even better value for money are all forces pushing for change. It is important that the water industry is empowered to step up to address these challenges.

3

The emphasis for our regulators should be on pragmatic, long-term change. To be able to respond to the challenges that it faces, the water industry needs to be able to continue to attract large scale investment at appropriate rates of return. To achieve this in the new financial climate that the UK faces, it will be necessary to demonstrate a stable and progressive long-term regulatory and market environment and one in which any increases in risk are appropriately reflected in returns to investors.

4

This document is based on Kelda's (parent company of Yorkshire Water) experience of successfully serving 4.5 million customers in a large and geographically diverse region, and our wider experience of providing outsourced capital and operating experience to the public sector across the UK through Kelda Water Services. This paper suggests a number of improvements to the structure and regulation of the water industry. These are encapsulated within the six related headings of:

- (i) achieving long-term water and drainage security
- (ii) enhancing yet further the water industry's environmental performance
- (iii) providing a fairer deal for customers and putting their needs first
- (iv) protecting vulnerable customers
- (v) playing our part in delivering vital public services
- (vi) investing in innovation and a highly-skilled workforce.

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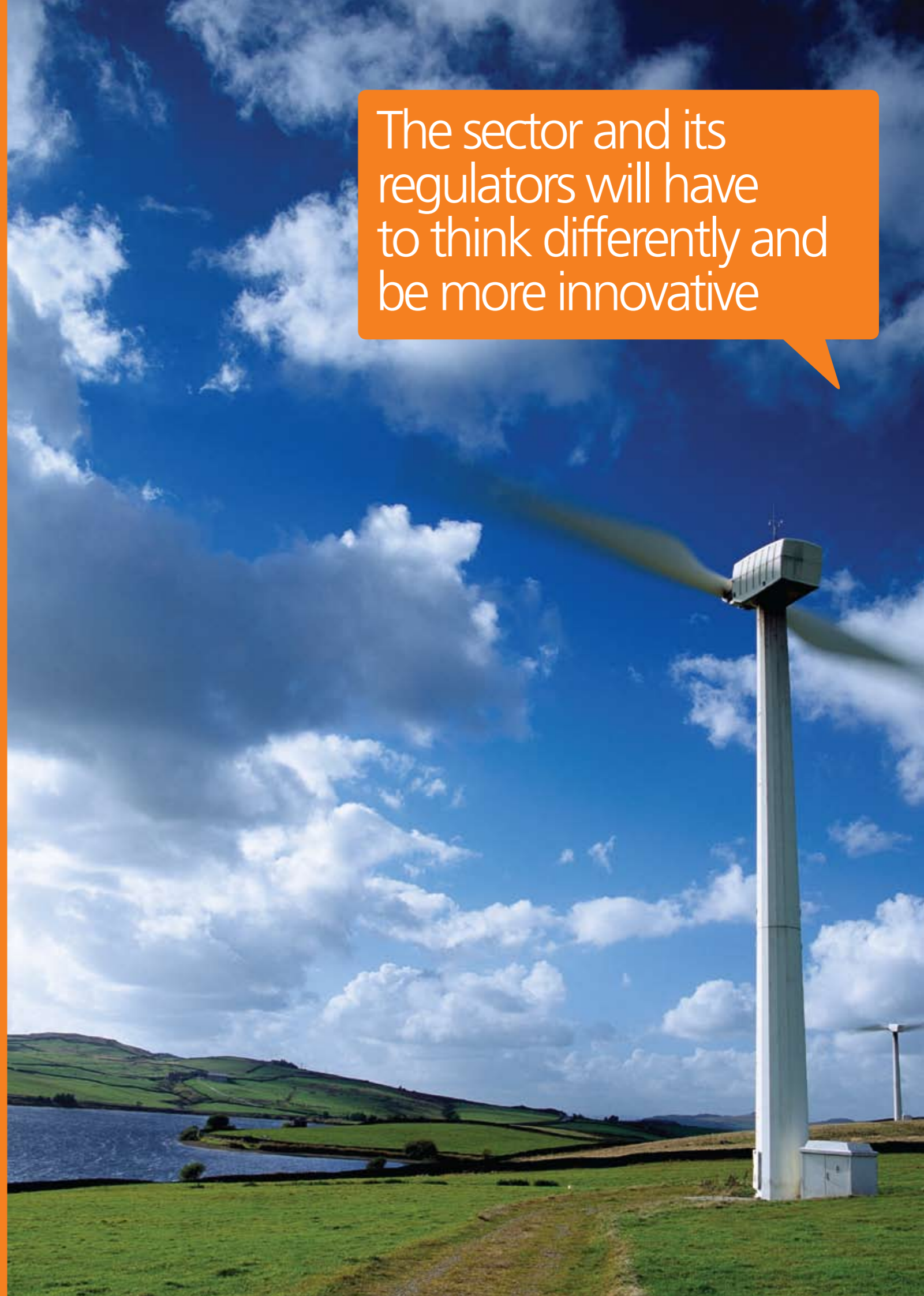
The paper combines strategic and structural recommendations with more direct solutions. Our aim is to present a balanced approach which reflects both global and local concerns, and which looks as much at the individual needs of our customers as it does at the bigger questions such as the remit of our regulators.

6

The underlying theme of these proposals is of the water industry playing a bigger role in addressing the sustainability of water whilst achieving even better value for money for customers. The sector and its regulators will have to think differently and be more innovative to achieve these dual goals. Specific proposals include:

- Increasing integration of water networks. This will enable us to prioritise activities that will deal with the potential impact of climate change on water security, and also on our ability to manage and mitigate rainfall patterns which could lead to the increased likelihood of flood events. There is a tension between this approach and thinking that suggests that sector disaggregation is the route to securing sustainable water.
- Allowing mergers and acquisitions between water companies to prevent poor performing companies from being protected from competitive pressures. The customers and the natural environment of these companies deserve better.
- Review the role of the water sector in relation to the ownership and management of flood assets. This could facilitate more coherent flood management and release public sector resources to be spent in other priority areas and/or to offset the bills of customers in high cost areas, depending on the Government's priorities.
- Urging Government to create a clear policy framework for sustainability and to ensure the regulatory regime evolves in a manner that delivers this framework.
- Moving to a more flexible environmental consenting regime which improves local environment outputs, where there is an impact on the natural environment, whilst also driving down the carbon footprint of water companies.
- Separating surface water from waste water systems so that we can make better use of the rainwater through sustainable drainage systems, rainwater harvesting and eliminate pollution incidents from sewers and combined sewer overflows.
- Going further in protecting vulnerable customers.

The sector and its regulators will have to think differently and be more innovative



Section One Introduction

The purpose of this paper is to provide Kelda's contribution to the debate about the water industry's future

The privatisation of the water industry has proven a tremendous success; stable, yet progressive regulation, facilitating massive investment that has led to greater value for money, improved water quality and higher environmental standards.

But after years of progress, the industry now stands at a crossroads. The environment in which the industry operates is changing and, to continue to provide high quality, high value services in a sustainable manner, the industry itself also needs to evolve.

Given the water industry's success over the last 21 years, it would be unnecessary and unwise to embrace the dangers of radical reform. The system is not broken. But clinging to the status quo is likely to be equally unwise. The focus should instead be on longer term, clearly signposted regulatory change that gives customers, the environment and taxpayers an even better long-term deal.

The purpose of this paper is to provide Kelda's contribution to the debate about the water industry's future.

We are constantly listening to our customers and we have a track record of managing the water network of a large, geographically diverse region and of providing outsourced capital and operating experience to the public sector across the UK.

This paper begins by reviewing the growing changes to the environment in which the water industry operates. Based on an understanding of these changes and the objective of maintaining an industry that sustainably delivers good value and good quality services, the paper goes on to make recommendations on both local water industry issues and broader matters of public policy that affect the industry. These recommendations are ordered under the broad themes of:

1. Achieving long-term water and drainage security
2. Enhancing yet further the water industry's environmental performance
3. Providing a fairer deal for customers and putting their needs first
4. Protecting vulnerable customers
5. Playing our part in delivering vital public services
6. Investing in innovation and a highly-skilled workforce

"Our hope is that this submission will make an informed and constructive contribution to the debate about the future of the water industry."

The water industry does not easily fit into neat boxes. A joined-up and coherent approach between these six recommendations is therefore vital.

Our hope is that this submission will make an informed and constructive contribution to the debate about the future of the water industry. Given the long-term investment decisions that the sector has to make, we then look forward to a clear statement of policy from Government so that focused investment can be made.



Section Two

The changing environment in which the water industry is operating

The environment in which the water industry operates is changing. It is increasingly complex and participants are being challenged to think as much about global water issues as they are about local management issues.

These factors include:

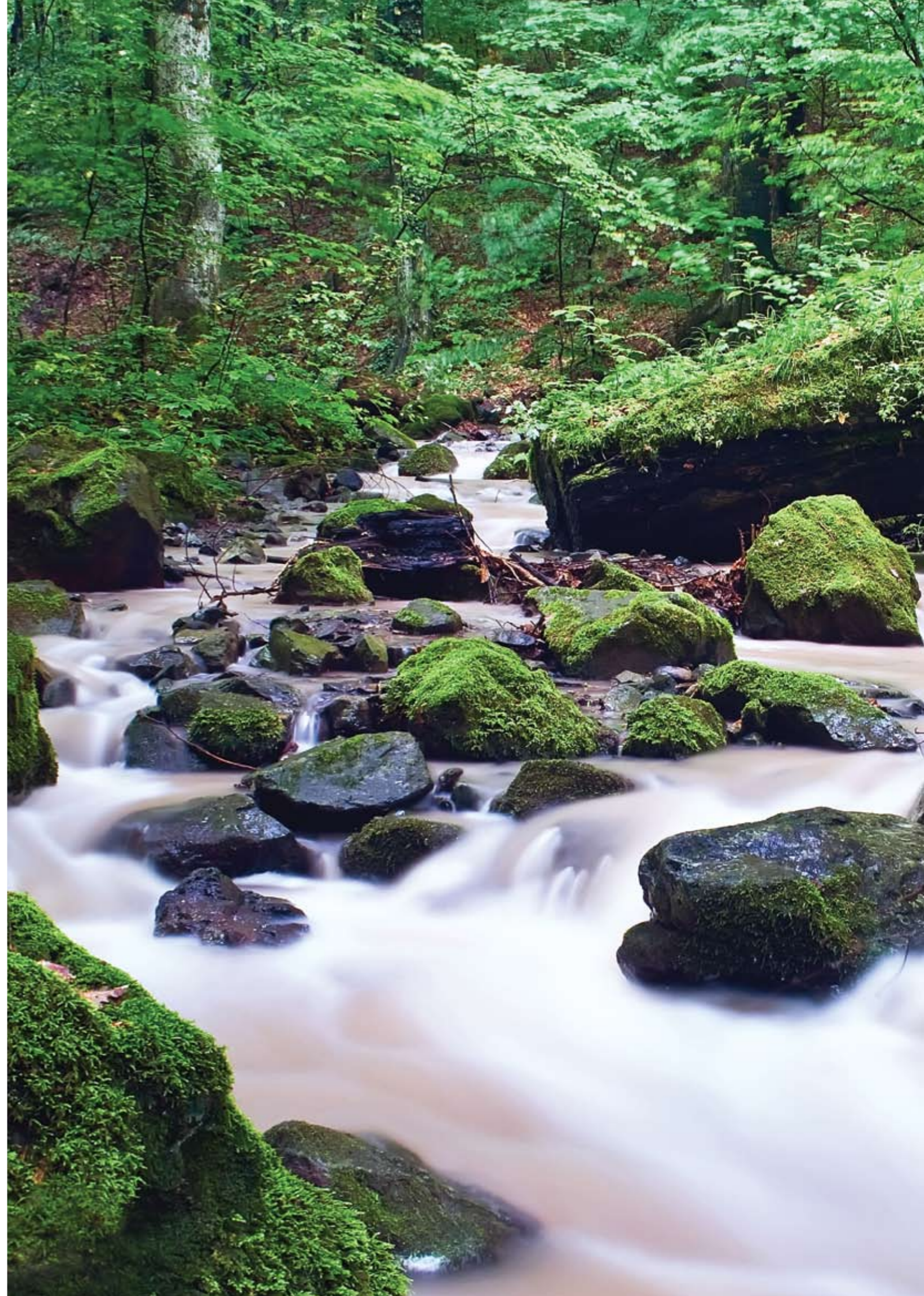
1. A growing demand for water services

The Office of National Statistics predicts that the UK population will reach 70 million by 2029. That's 10.2 million extra people who will expect to turn on the tap and get safe drinking water. They will also want to be able to flush their toilets safe in the knowledge that their waste water is being treated responsibly. The security of our water supply depends on encouraging greater efficiency and a fair distribution of water resources.

2. Increasing pressure for sustainable solutions

Few would argue against the water industry's drive for sustainable solutions. To achieve these solutions, however, difficult balancing acts are often required. For example, it is right that the water industry cleans waste water to a very high standard before it is then discharged into rivers or the sea, but this cleaning process can be very energy intensive (with the associated environmental consequences) – so when developing approaches it is vital that all participants in the water sector always looks at the overall picture.

"...The UK population will reach 70 million by 2029. That's 10.2 million extra people who will expect to turn on the tap and get safe drinking water."





The water industry and policy makers need to look to the future and make the changes that are necessary without throwing away the very real strengths of the current system

3. A growing stress on the system caused by climate change

The UK is projected to experience much more intense bouts of rainfall, testing the ageing sewer network to its limit. Conversely, lower overall precipitation means that year-round hosepipe bans may soon be a reality in some regions. Our infrastructure must be resilient enough to protect against the increasing problem of flooding and droughts – something recognised by the 2010 Floods and Water Management Act.

4. A growing need to give customers better value for money

Customers rightly demand a high quality service at a fair price. This principle must remain at the forefront of the industry's mind as it makes the investments necessary to ensure the UK's long-term water security.

5. A growing strain on the public purse and increasing competition for private sector finance

The think tank Policy Exchange reported in 2009 that, by a cautious estimate, the UK will need to invest £434 billion in infrastructure by 2020. The question is, where will this money come from?

The urgent need to reduce the strain on the public purse means that little of this money is likely to be forthcoming from the taxpayer. Private sector investment is perhaps a more hopeful route, but it is one that cannot be taken for granted. There is increasing competition for private sector funds and the recent banking crisis has made investors increasingly cautious about the risks associated with major infrastructure schemes. Private investors need to be engaged constructively.

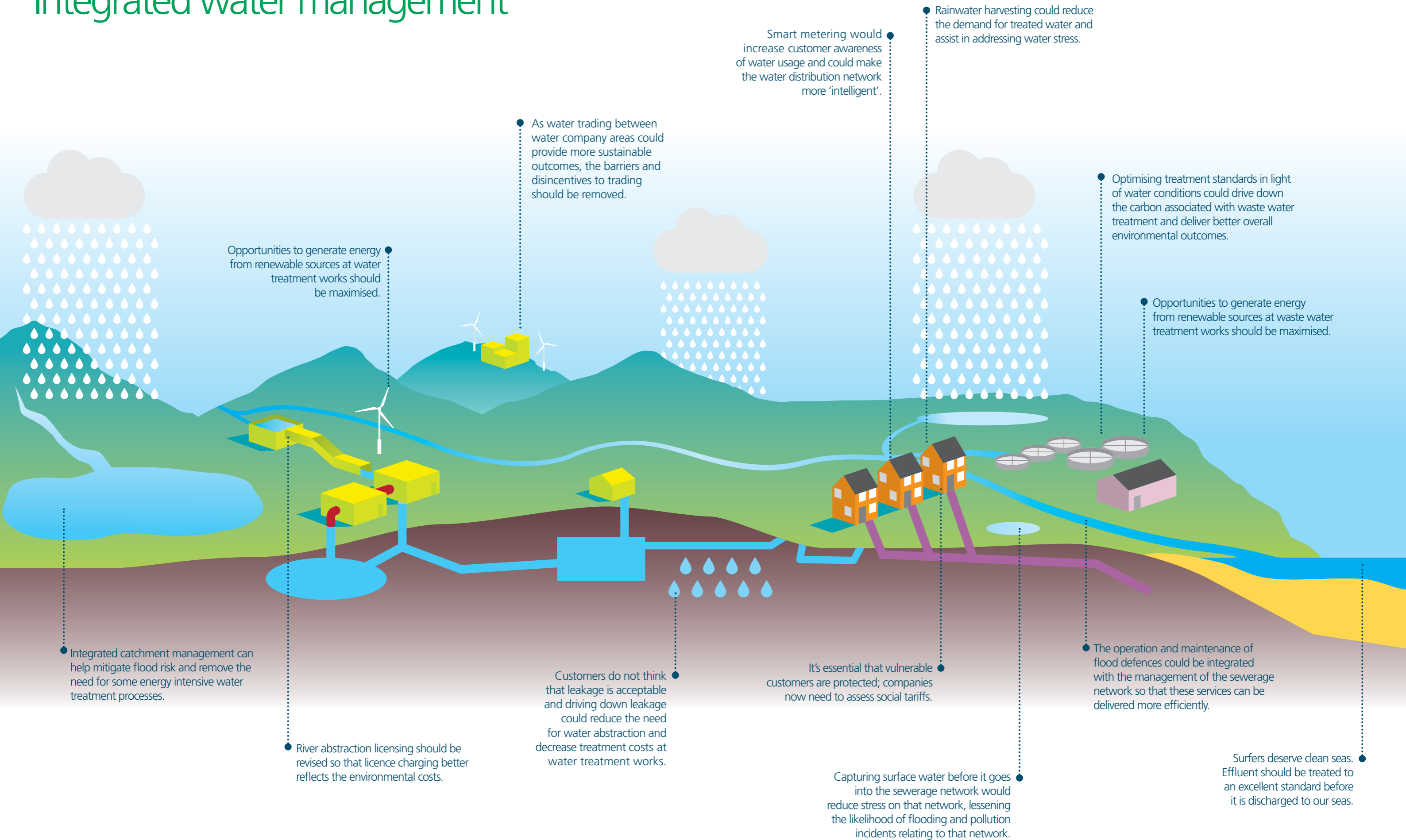
6. An increased focus on protecting vulnerable customers

In 2011 average water bills in England and Wales are £356 a year. For the vast majority of customers water bills remain affordable. But this is not the case for some customers who live in areas where water bills are often considerably higher than the national average and/or who have particularly low incomes.

7. Continuing high levels of EU regulation

The EU is an increasingly important source of regulation for the water industry. Ofwat estimates that delivery of the Water Framework Directive will require anything from £30 billion to £100 billion over the next 20 years. This regulation has many local environmental stewardship benefits, but it also ultimately has an impact on the bills of customers, as well as on requirements for more energy intensive processes and their associated carbon impacts.

Integrated water management



Section Three

Policy initiatives to address the changing environment

There are few easy solutions to balancing the complex and sometimes contradictory demands on our water industry. But, by clearly identifying the drawbacks of the current system, it is possible to point to some potential ways forward.

3.1

Achieving long-term water and drainage security

Without a clear programme of action, the UK's long-term water and drainage security is at risk. The challenges are complex. A growing demand for water has to be balanced against the potential impact of climate change, water scarcity and the increased likelihood of flooding. Yorkshire Water's aspiration is to have no water restrictions. Consumption needs to be managed, and there needs to be a clear programme of investment to enhance the supply and distribution of this most precious of resources. Integration is the key and economic regulation will have to be reviewed to ensure that actions which support these longer outcomes are appropriately incentivised. Specific suggested action points are:

a. Maintain and enhance the UK's water infrastructure by securing adequate private investment

Significant further investment will be vital if the UK's water infrastructure is to be maintained and enhanced for future generations. Water companies have a good track record in making the necessary investments over the last 21 years, but the broad stability of the current market and regulatory structure needs to be maintained if this investment is to continue.

Given the financial events of the last few years, the capital markets are in many ways operating in a new era. If the water industry is to be able to compete successfully for investment, it needs to be able to provide stable long-term returns.

Critical to the water industry's attractiveness to long-term investors is the existing Regulatory Capital Value mechanism. This mechanism should be maintained if the industry is to be able to continue to secure the capital needed to make long-term investments.

b. Adapting to the impacts of climate change

The assets built by water companies today will still be serving customers well into this century. It is therefore essential that we continually adapt to the impacts of the changing climate, for example to flooding caused by more extreme rainfall. Adapting to climate change requires the water industry to think beyond the current conventional approach to water; to consider the whole water cycle as one.

We have the opportunity to adapt our assets effectively whilst delivering a more sustainable society, for example, there needs to be a fundamental review of the ownership, management and access to flood defences.



c. Improving the resilience of both the water and waste water networks

Recent weather events, including the dry start to the year in 2010 and the very cold weather experienced over Christmas in the same year, have put tremendous stress on the water and waste water treatment networks operated by water companies. Policy makers, regulators, customers and companies must develop a shared understanding of issues relating to the resilience of these networks and agree what levels of resilience must be built into such networks.

Water security

d. Enhance the ability to share water between regions

A nationwide 'super grid' connecting areas with ample water to those with lower availability is likely to be prohibitively expensive. However, where there is excess water, trading between companies must be incentivised. This already takes place on a modest scale within the industry and where trading will deliver a more sustainable route for meeting water demand, it should be encouraged. To allow this to happen, regulatory barriers and disincentives to trading will have to be removed.

e. Reviewing water leakage rates to drive water company behaviour and innovation

Although the level has been much reduced in recent years, some water still leaks from the mains network. A de facto 'economic rate' of leakage has been established and, in its strategic direction statement, Yorkshire Water set the target of halving leakage over twenty five years.

Customers do not accept that leakage is inevitable, especially at a time when in some areas they are being asked to accept measures to deal with water stress. Addressing leakage would also drive down the sector's operational carbon footprint. New incentives must be developed to ensure that companies are more ambitious in addressing leakage and to redefine the appropriate balance between environmental and economic factors and customer acceptability.



f. Investigate the potential of smart water meters

The new generation of smart water meters have immense potential to help customers control their consumption of water in a way that works for them. They also have the potential to help water companies introduce new tariff options to incentivise off-peak use and to more efficiently manage the water network. They provide an opportunity for long-term environmental and financial savings for customers and water companies alike. Their use should be investigated in the water sector with a view to begin implementing such meters from 2016 onwards.

g. Provide mechanisms to support customers to better understand domestic water efficiency

Water companies already have a regulatory duty to promote water efficiency. This must be strengthened to further develop customer engagement campaigns relating to water efficiencies. It may also be useful to help customers make the link between domestic water usage and their own carbon footprint.

h. Explore the potential for surface water and rain water to be used to meet domestic water needs

Pressure on the clean water and sewerage networks could be reduced if a proportion of domestic water needs could be met from other sources, for example some customers already use rainwater for toilet flushing and grey water is often used to water gardens. Over time and aided by a supportive regulatory framework such innovations could significantly enhance the sustainability of the water sector. It is essential that water companies, working collaboratively with partners, should begin to explore these ideas.

i. Protecting raw water sources

We are passionate to protect all forms of natural water resources to ensure future generations have the quality and quantity of water required. This involves the protection of water catchments serving upland impounding reservoirs through catchment management initiatives and programmes. By engaging with landowners, tenants and key stakeholders we aim to manage land in a sustainable way. Yorkshire Water also seeks to prevent the pollution of ground water sources such as natural aquifers and boreholes.

Drainage security – managing and mitigating flood risk

j. Take an integrated approach to flood risk management

This section is covered in more detail in “Playing our part in delivering vital public services” on page 34.

Case study – A partnership approach to surface water management

Following the unprecedented flooding of June 2007, Yorkshire Water has been working in partnership with the local authorities which also serve our region to develop a multi-agency approach to surface water management. The company now has strategic partnerships in place to address these issues with cities including Leeds, Bradford and Sheffield.

Yorkshire Water has also developed an integrated strategic partnership with Hull City Council; the Environment Agency and the East Riding of Yorkshire Council are also important members of this group. Yorkshire Water’s sewerage and pumping facilities play a key role in the city’s approach to surface water management and the company has just completed a significant investment programme to enhance this network. To further enhance the partnership’s understanding of the interdependencies between different networks and how this contributes to better flood risk management, the company has also embarked on a major modelling exercise of its sewerage network.

We expect to bring forward investment plans, based on the multi-agency working we are undertaking in the region, as part of the next price review process.

k. Urgently instigate an informed debate about the appropriate levels of protection required by our towns and cities – and invest accordingly

Engineering solutions exist to meet most water supply, distribution and flooding scenarios. The debate centres on the balancing of the costs and the benefits of such solutions. Yorkshire Water is participating in such debates, in partnership with our other agencies, across our region. Having done so, we will bring forward investment proposals, supported by our customers and communities, to invest in infrastructure to support these aspirations.

l. Mandate the adoption of sustainable drainage systems by water and sewerage companies

The current intention of the Flood and Water Management Act is to make local authorities responsible for adoption and ownership of new Sustainable Urban Drainage Systems (SUDS). We believe this responsibility more appropriately lies with water and waste water companies (“the sewerage undertaker”) because it is consistent with our statutory duty to “effectively drain”. The SUDS will, in many cases, connect to the public sewer and ownership and operation will enable us to manage the whole network more effectively and efficiently. We can also be innovative in understanding how such water can be used to meet domestic water needs. We have the skills and resources to carry out this work and, provided we have customer support, we will also be funded, through our price control mechanism, to deliver this service efficiency.

It is counter-productive to look at environmental questions in isolation

3.2

Enhancing yet further the water industry's environmental performance

The guiding principle must be that the water industry's environmental improvement programmes are looked at as a whole. The industry is currently facing a dilemma: balancing the need to reduce our carbon footprint whilst maintaining the quality of treated water flowing into our rivers and seas, using the treatment processes which are energy intensive. It is counter-productive to look at environmental questions in isolation – joined up policies and joined up regulation are vital, particularly if new

requirements, like those demanded by the Water Framework Directive, are to be delivered at an acceptable environmental and social cost.

In our strategic direction statement, we committed to meet greenhouse gas emission targets set by Government and we remain committed to this goal. The specific measures that we propose to both protect the natural environment and drive down our carbon footprint are:

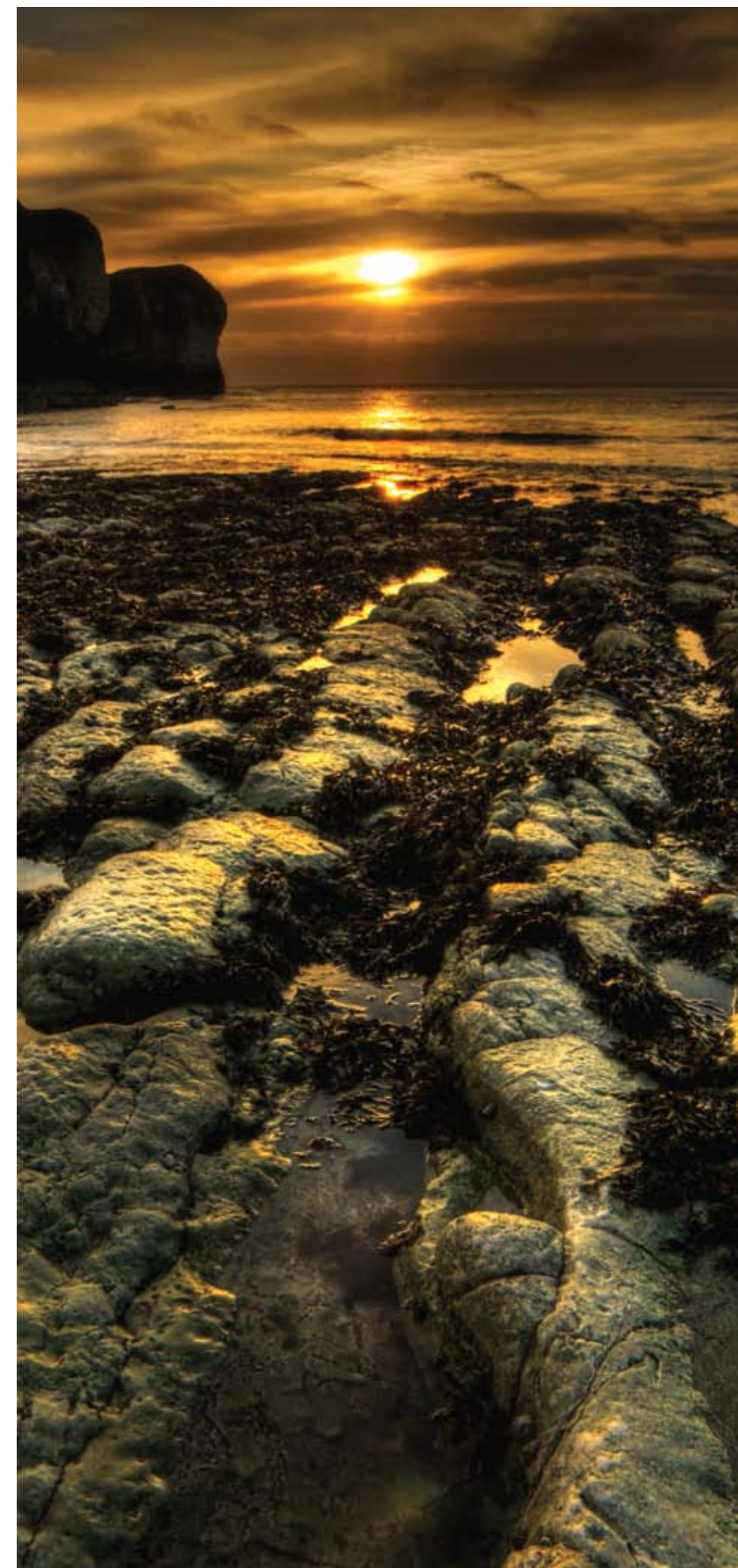
a. The creation of a clear policy framework for sustainability from Government and the development of incentives within the regulatory regime to deliver this framework.

There has been some debate within the sector about where responsibility lies for policy development. We agree that this should be the domain of Government and it is essential that Government provides the water sector with clear goals regarding sustainability. Ofwat must then ensure that appropriate incentives are put in place to encourage and support the delivery of these policy objectives.

b. Mandating a programme of investigation regarding the separation of surface water from the combined sewerage network.

Much of the UK sewerage system combines surface water and waste water flows. Dealing with these large and unpredictable flows of water can lead to pollution incidents at times of high rainfall. Our aspiration is to eliminate all pollution incidents and all flooding of customers' homes. This resonates with customers and there has been a particular emphasis recently on discharges of untreated water into rivers or the sea, through combined sewer overflows at times of exceptionally heavy rainfall when the water treatment system is unable to cope.

Keeping surface water out of sewers will require investment and innovative solutions. It is a challenge which water companies such as Yorkshire Water are eager to take on and new incentives from the economic regulator are an essential first step.





c. Requiring an environmental impact assessment of all existing and proposed environmental regulations to assess their overall 'green footprint'.

The purpose of this proposal is to encourage the considered balancing of different environmental considerations. Both local and global environmental considerations also must be balanced. Key questions will include: What impact could this requirement have on other environmental areas? What alternatives have been considered? If the regulation would increase the use of energy, what can be done in parallel to remove the practical and regulatory barriers water companies face to making more uses of low carbon sources of energy?

d. Encouraging greater use of low carbon energy for energy intensive processes.

The water industry is the steward of many promising sources of renewable energy, including on-shore wind energy (for example, reservoirs tend to be good locations for wind farms) and energy capture at waste water treatment works through, for example, innovative anaerobic digestion techniques. Indeed the potential of anaerobic digestion as both a waste solution and an energy source is currently underestimated.

To make the most of these sources of renewable energy, however, the current regulatory system and the policy framework needs to be revised so that full account is taken of the potential long-term environmental benefits of investing in these sources of energy. The payback period in which the current regulatory environment allows water companies to recoup the benefits of their investments is too short and greater incentives may prompt investment. For this to be most effective there has to be greater certainty within the incentive regime and the planning system needs to be streamlined.

The water industry is the steward of many promising sources of renewable energy



e. Introduce more flexibility into the regulatory environment to facilitate a move to more appropriate standards – freeing up resources for environmental schemes that would deliver greater benefits elsewhere in the region

It is right that tough standards be in place to ensure, amongst other things, the cleanliness of water discharges. But these standards can sometimes have perverse consequences. For example, they can force water companies to use a lot of energy (with the associated environmental costs) to clean water to a standard that is actually higher than the rivers into which it is discharged.

Innovations like our rtRIVERi scheme (see right) will provide engineers with accurate, up-to-date information about rivers, creating the opportunity for water discharges to be optimised to reflect the prevailing conditions. Something that would enhance the water resource and reduce the use of energy considerably.

Before innovations like this can take place, however, the environmental regulatory framework needs to be modernised to reflect this balanced environmentalism.

Case study – rtRIVERi

The rtRIVERi project is an innovative concept based around real time management of river catchments. This seeks to integrate both the water taken from rivers for drinking water and the waste water discharged into a dynamic and optimally controlled system. The intention is to deliver increased water supply security, river quality and environmental improvements as well as significant reductions in energy consumption.

Over the coming years two pilot projects will be undertaken with the intention to roll them out across the region. The Environment Agency has agreed to pilot a seasonal variation trial in ammonia levels at Knostrop Waste Water Treatment Works (Leeds). In winter it is possible to increase the levels of ammonia discharged due to higher river flows and greater capacity for dilution. Treating to this different standard will deliver energy savings. The study will evaluate the impacts of seasonally varying the amount of ammonia discharged into the River Aire.

The second pilot project takes place at Blackburn Meadows Waste Water Treatment Works (Sheffield). The objective is to try and provide a constant flow of sewage into Blackburn Meadows and enable more efficient energy usage.

Case study – Anaerobic digestion

Kelda, through both Yorkshire Water and Kelda Water Services, is leading the way in the treatment of waste water through using micro organisms to break down biodegradable material. Compared to conventional approaches, anaerobic digestion reduces emissions into the atmosphere and enables waste products to be recycled.

Instead of being energy intensive, anaerobic digestion produces a rich gas suitable for energy production. This will be a major contributor to Kelda's planned increase in self generation of electricity over coming years. The process also reduces the emission of landfill gas into the atmosphere used by more conventional waste treatment approaches.

Yorkshire Water is also ensuring that we use the material left over from the process. We have gained product status for a topsoil substitute product from this material, which provides soils with moisture retention and organic content.

Yorkshire Water will be investing £33 million in anaerobic digestion and energy production over the next five years. This will increase our anaerobic digestion capacity over the next 5 years by 50%, and we have already recruited 30 Energy and Process Technicians who are trained in anaerobic digestion.



Water companies must be obliged to mitigate their carbon impact and should set challenging targets

Case study – Ecosystem approach to valuing the environment

The developing ecosystem services approach aims to put people and sustainability at the heart of environmental management and decision making by ensuring that we value all the services that the natural environment provides, known as ecosystem services.

These ecosystem services include things like water provision, agricultural produce, biodiversity, flood protection, recreational opportunities and climate regulation, all of which can provide significant economic and social benefits. Such benefits have not been accurately measured in the past or have been considered in isolation. They are linked and so it is becoming increasingly important to measure all of the ecosystem services to assist in decision making, due to greater pressure on natural resources, population growth and climate change.

We are one of Yorkshire's largest landowners, with approximately 32,000 hectares of water catchment, much of it within environmentally sensitive areas or designated as Sites of Special Scientific Interest (SSSIs). We aim to manage our land in a socially and environmentally responsible way. Understanding the relationship between how we manage our land and the impact this has on the complete range of services will enable us to value the benefits of different solution options using various economic methods. This will inform better decision making as it highlights the potential to deliver multiple benefits as well as identify any trade-offs.

Building a robust evidence base is a crucial part of this process. Over the next five years we are delivering a pilot study investigating the links between land management on upland peat catchments and water colour.

Raw water quality has shown demonstrable deterioration in upland catchments mainly due to the increased concentrations of colour. The colour is generated by the microbial breakdown of peat within the upland catchments and this breakdown is affected by land management practises which change peat hydrology. Without intervention in the catchment, significant increases in raw water colour concentrations are projected to continue and will result in additional high cost and energy intensive treatment to ensure that customers receive high quality drinking water. Catchment management to restore peat hydrology and reduce colour production could offer a more sustainable alternative to traditional treatment processes. It is highly compatible with biodiversity enhancements and has the potential to deliver multiple benefits in a cost effective way.

Through our colour pilot work, we are also supporting the Natural England Ecosystems Services Pilot in the South Pennines which aims to demonstrate how this approach can be applied in practise by valuing all the services derived from that area, one of which is water quality.

f. Mitigating climate change - water companies must measure the carbon footprint of all of their activities (operation and construction) and set stretching targets for its reduction

In line with other sectors within the economy, water companies must be obliged to measure their carbon impact in line with national greenhouse reductions targets in the 2008 Climate Change Act.

g. Review of existing policy instruments to ensure that they are fit for purpose and are delivering the policy change that was intended

There is now a range of policy instruments in place, designed to deliver positive environmental outcomes. Such measures include the European Emissions Trading Scheme, the Carbon Reduction Commitment Energy Efficiency Scheme, the Renewable Obligation Scheme and the Renewable Heat Initiative. A recent change to the structure of the Carbon Reduction Commitment has led to some concerns about the approach adopted. These instruments have an important role to play and we suggest that this range of measures is reviewed to ensure that they are delivering the intended outcomes, in a sustainable manner.

"In line with other sectors within the economy, water companies must be obliged to mitigate their carbon impact and should be set challenging targets"

The water sector needs to ensure that local voices are heard

3.3

Continuing to provide a fair deal for customers and putting their needs first

Customers' long-term interests must be put at the very heart of the water industry. Our customers tell us they want a high quality, secure service and the promotion of good environmental standards at a fair price. We have achieved much for our customers, but we believe that relatively modest reforms to the system could enable us to achieve even more:



a. Encourage greater innovation and efficiency savings

Innovation requires investment and the confidence to take measured risks. But the current system does not encourage long-term decision making because the regulatory framework means water companies lose the financial benefits of any successful innovation over and above the programmes agreed with the regulator within just five years. To encourage greater innovation a longer term approach should be taken to sharing the benefits of innovation between customers and companies – the current limits in which water companies must recoup their investments are just too short-term to encourage innovation.

“The current ‘regional provider’ model for the water industry is a proven success story – it has delivered high quality services at a fair price for customers.”

b. Focused regulation

The current regulatory system entails a lot of expensive micro-management and the overlapping of responsibilities. Regulators should instead be streamlined and encouraged to focus on outcomes and the management of risks.

A practical way forward would be for regulators to concentrate their efforts on water companies whose performance falls within the lower half of the cohort. Such an approach would help regulators focus on areas in which their attention would be most worthwhile. Such a system of ‘earned autonomy’ would also have the added benefit of providing a further incentive for all water companies to enhance their performance.

c. Use competitive approaches to drive efficiency and better outcomes for customers

The current ‘regional provider’ model for the water industry is a proven success story – it has delivered high quality services at a fair price for customers.

Competitive tendering within the supply chain, subjecting poor performing companies to the competitive pressures of potential takeover and incentivising water trading are all useful competitive developments which should be developed by Ofwat.

The Cave Review suggested a measured approach to the introduction of retail competition, focussing on business users first. We believe that the benefits of retail competition must be demonstrated before it is rolled out to larger groups of customers. Such structural change would have to be clearly signposted and this change in the risk profile of companies would have to be appropriately reflected in the rate of return for investors.



Case study – Revised Bathing Water Directive

Yorkshire boasts some of the best beaches and bathing water in the UK and Yorkshire Water are ensuring it stays that way. We are the only water company to invest with the intention of achieving the ‘excellent’ standard in bathing waters.

Bathing water standards are getting tighter due to new European Union legislation, the Revised Bathing Water Directive. From 2015, bathing waters will be classified as either poor, sufficient, good or excellent. Only bathing waters classified as ‘excellent’ will qualify for a coveted European Blue Flag, a recognised quality marque that has major benefits for local communities and the tourism industry. Bathing water quality is vital for tourist resorts such as Scarborough and Bridlington, both to maintain and enhance its position as one of the UK’s most popular visitor destinations. All beaches will need to be ‘sufficient’ to avoid failure with the revised Directive.

By engaging customers and stakeholders, Yorkshire Water made the case to Ofwat for increased investment. Over the next five years, we will be investing over £100 million to help ensure that Yorkshire’s beaches don’t just meet the new standards but exceed them where possible to attain the coveted ‘excellent’ standard.

d. Allow industry consolidation, as the current restrictions are letting customers down

Water companies are currently subject to a particularly restrictive merger regime – a regime that Yorkshire Water believes no longer operates in the public interest. The current regime protects poor performing companies and consolidation would benefit customers by generating efficiencies, spreading best practice and delivering even better environmental outcomes.

Yorkshire Water propose that in future all proposed mergers should be subject to the normal Office of Fair Trading approval process, not an overly restrictive regime particular to the water industry.

e. Ensuring that local voices are heard and that their priorities are reflected in the price review process

Customers are at the heart of the business planning process and their willingness to pay for services is built into the proposals made by water companies. However, the Cave Review suggests that it may be time to go further and put forward the idea of negotiated settlements between water companies and their customers. Customer affordability research has served us well in identifying customer priorities and needs and must continue to be at the heart of the business planning process.

The emerging localism agenda also suggests that all service providers need to be more accountable to the communities they serve. The water sector needs to ensure that these local voices are heard and that their priorities shape water company business plans. We should work with Ofwat to develop this approach.

f. Measures to ensure that customer needs, reflected in business plans, are met

There should be a more measured and proportionate route to resolving differences between companies and Ofwat regarding the companies’ business plan proposals. The Government should review the current approach and establish a mechanism by which water companies unable to ‘agree’ a settlement with Ofwat can take their case to the Office of Fair Trading or a similar body. This will avoid the significant expense and difficulty of going directly to the Competition Commission.

“Customers are at the heart of the business planning process and their willingness to pay for services is built into the proposals made by water companies. However, the Cave Review suggests that it may be time to go further and put forward the idea of negotiated settlements between water companies and their customers.”

In Yorkshire Water's experience the fundamental challenge is being able to identify those customers at greatest risk before they get into difficulties

3.4

Protecting vulnerable customers

Managing a high quality, secure water supply and distribution is not cheap. It requires good leadership and billions of pounds of long-term investment. Not only must the focus be on ensuring all customers receive good value for money, but that financially vulnerable customers are appropriately protected.

There is a difficult balancing act to be struck. If some customers pay less, others (or the taxpayer) must pay more. The value judgements that this policy area requires are best made by democratically elected Governments, not water companies. That said, below this high level policy, there are a number of practical measures that Yorkshire Water would suggest:

a. There should be better sharing of information between Government agencies and water companies about customers at risk so that early support can be provided, as recommended by the Walker Review

In Yorkshire Water's experience the fundamental challenge is being able to identify those customers at greatest risk before they get into difficulties. Early intervention and support is crucial – and this requires better information sharing.

b. There should be a review to see if there is a gap in support for those customers who are in work but genuinely struggle with their water (and other utility) bill

Water Direct and Water Sure are both good schemes for those on benefits, but there seems to be a gap in provision for the 'working poor'. Two possible solutions include:

Introducing discounted tariffs or rising block tariffs for those able to pay, or who have an unavoidably high level of consumption. Clear Government guidance would, however, be essential as it would be inappropriate for water companies to overstep their remit by determining social policy by proxy.

Another complementary option could be for customers to better share the rewards of growth with the water industry. In 1995, Yorkshire Water founded a community trust to help domestic customers who are experiencing genuine hardship and this approach could be built upon.

c. Water companies should develop social tariffs to support vulnerable customers

There has been significant debate within the water sector, including the regulators and customer representatives, about how best to protect the vulnerable and, if this is through social tariffs, how such tariffs should be funded.

The 2010 Floods and Water Management Act has shifted the legislative basis for such discussions and cross-subsidies in tariffs are now permitted. Water companies should act upon this change and bring forward social tariffs to support vulnerable customers.



Case study – Customers payment

Yorkshire Water is passionate about helping customers in need and ensuring that everybody has access to safe, clean drinking water and removing waste water from people's homes. Through the company's Resolve scheme and the independent Yorkshire Water Community Trust, vulnerable customers are assisted in meeting their water bills.

Resolve

The Resolve scheme offers customers an opportunity to clear their debt by maintaining a payment arrangement which will result in Yorkshire Water making a corresponding write-off of the remaining arrears. To qualify, customers must have arrears of at least £500 and have a low income. An example of the support provided was Mr H, whose arrears were £1060.94, and was in receipt of Incapacity Benefit and Disability Living Allowance.

The Resolve arrangement started in July 2009 with weekly payments of £7 by Mr H. Over the year Mr H made total payments of £364 and received total rewards of £825.69 from Yorkshire Water. Mr H finished on the scheme in July 2010 and has continued to make regular payments to meet current bills.

Community Trust

The Yorkshire Water Community Trust was set up primarily to help those individuals and families in real need, and who are unable to pay their water charges to Yorkshire Water. The Trust was launched by Yorkshire Water in August 1995 and is totally independent of Yorkshire Water.

An example of the assistance provided by the Trust is the support to Mr A. Mr A lived with his four children, aged between 7 and 14, and his only income was £192 per week. Mr A's annual bill from Yorkshire Water was almost £350, but he still owed a similar amount from the previous year and had further debts of £2,600 for rent, Council Tax and utilities. The Trustees made an award of £439.17 to Mr A, which was paid direct to Yorkshire Water and credited to his water bill.

3.5

Playing our part in delivering vital public services

The public sector still plays a big role in delivering water-related services, not just the strategic management and regulation of these services. Examples of services still delivered directly by taxpayer funded organisations range from flood defence to municipal drainage.

A number of questions arise:

- In light of the very tight squeeze on public sector finances, will the public sector still be able to afford to make the delivery of these services a priority? If not, what are the consequences?
- Could the capital receipts and efficiency savings the public sector would receive from selling its assets to water companies be put to better use elsewhere – perhaps partly helping reduce the bills of customers in high cost areas and perhaps partly protecting other public services?
- Is there also a powerful argument for joining up the delivery of these services under the banner of a unified provider in each geographical area? Would this encourage a more integrated approach to the management of water?
- Would it help local customers to better hold their provider to account if there were no longer split responsibilities (or at least fewer split responsibilities)?
- Is there a case that the cost of delivering these services – or parts of these services – should be switched from the ordinary taxpayer to specific users?

In light of these questions, we would like to participate in a debate with other relevant agencies to develop a shared understanding of the opportunities that greater integration of operations and assets could bring. The purpose of the debate is to investigate whether this approach will deliver better overall social, environmental and economic outcomes.

Participants would consider the benefits of options ranging from partnership agreements, operating contracts, real time integration of activities through to changes in the ownership and operation of assets. Over time, this approach would allow for the integration of these closely connected networks to remove bottlenecks and thereby reduce flood risk. This more joined up approach to flood risk and drainage management would be regulated by the Environment Agency or other appropriate body. We recognise that the Environment Agency has an excellent track record in managing current flood defences.

Policy makers also need to ensure that local authorities have the skills and resources to coordinate agencies who contribute to the development and creation of local surface water management plans.

Finding sustainable financing routes for the subsequent investment burden is essential. It may not be appropriate for this to fall wholly to central Government or to local authorities. Working together with stakeholders, including customers, we must find acceptable and affordable funding routes for this investment.



Case study – Zero Supply Interruptions (ZSI)

The objective of the Zero Supply Interruptions Project (ZSI) is to work towards zero interruptions, zero excavations and zero traffic congestion. It was instrumental in reducing the water supply interruptions experienced by Yorkshire Water customers from 700,000 in 2005, to approximately 160,000 in 2008.

A key driver of this project is to reduce the properties which experience an interruption, either planned or unplanned, each year. In the past it had been necessary for customers to experience interruptions in supply when maintenance took place on the water network. With 66,000km of pipe work under the ground this was no mean feat. During the project it was discovered that our excavations would stretch from Bradford to Birmingham. This is a distance of 210km.

The project involved bringing new innovative techniques to the water industry, working better across the company and with our service partners and seeking out new innovation.

One innovation was the Whirlwind system. A problem for Yorkshire Water is the deposits that build up in pipes thereby reducing their efficiency and capacity. By looking to the food industry we found a system that could be scaled up to create a vortex in an underground pipe. Whirlwind blows air into metal pipes at speeds of more than 300mph and then introduces flint to clear deposits which may be lining them. It is now utilised by Yorkshire Water.



Innovation should be a central element of all water company strategies

3.6

Investing in innovation and a highly-skilled workforce

In order to continue to deliver water and waste water services to the very highest standards and to meet the new challenges outlined in this paper, water companies will only succeed by building dynamic and competitive companies promoting innovation, enterprise and science; and giving everyone the skills and opportunities to succeed. Given their importance to the regional well-being of the areas they serve, they may also wish to work with local communities to support the skills and therefore employability of others within the region. Specific suggested action points are:

a. Development of apprenticeship programmes

Skills are vital to the economic success of companies; they help business succeed and enable individuals to fully meet their potential. Focused, structured apprenticeship programmes have a strong role to play in such skills development and the Government should continue and enhance the support given to companies in the delivery of these schemes.

b. Increase research and development budgets and work in partnership with regional centres of academic and research excellence

For the next five years we have increased our research and development investment fivefold. This essential investment will ensure that we are well placed to meet the challenges outlined in this paper. Innovation should be a central element of all water company strategies. We have existing research and development partnerships with universities in our region, including Leeds and Sheffield, and we will build on these collaborations through the AMP.

c. Create centres of excellence for research into matters relating to sustainable water

The water sector has considerable expertise in water and waste management, including expertise in matters relating to eco-system management, sustainability and carbon management. By working together with other agencies, other companies and with the academic community, the sector should establish centres of excellence for research and development into matters relating to all elements of the water cycle. Importantly water and waste water companies should initiate research to fully understand the value of the ecosystems with which they are intimately connected.

“By working together with other agencies, other companies and with the academic community, the sector should establish centres of excellence for research and development into matters relating to all elements of the water cycle.”

Section Four Conclusion

We look forward to continuing to play an active role in discussions about the future of the water industry in the coming months and years

The water industry in England and Wales is a success story. It delivers good value services to millions of people throughout the country.

The question is... will it still be able to provide the best value water services as its operating environment becomes even more challenging?

We believe... the answer is yes, but only if pragmatic steps are taken now.

This will mean achieving long-term water and drainage security and enhancing yet further the water industry's environmental performance, while at the same time placing the needs of customers at the heart of the way companies operate. We also wish to play our part in delivering vital public services, continue to invest in innovation and provide a highly-skilled workforce.

This paper is our contribution to the debate about which steps need to be taken. It is based on our experience of successfully serving customers in the large and diverse Yorkshire region. We look forward to continuing to play an active role in discussions about the future of the water industry in the coming months and years.

To discuss this paper in more
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