



**A sustainable  
water industry – To PR09  
and beyond**

October 2006

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## Foreword

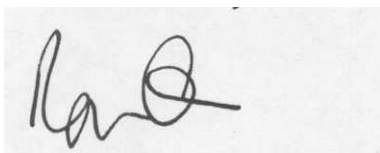
This year, Ofwat has consulted on some big themes. In three consultation papers we asked how should we develop our contribution to sustainable development, what period should the next price review cover, and how should we assess capital maintenance and long-term asset management?

In working through the issues and reviewing the responses, we identified a number of cross-cutting themes, particularly the need to develop long-term planning. Given the shared importance of the issues for all stakeholders, we decided these issues merited a single, joined-up response. So this paper contains our response to all three consultations.

In many ways, we are beginning to outline the context for our work on the 2009 price review, and this paper is an important staging post as we look ahead to that work. Of course, this is just the start of a longer-term process, given the size of the potential challenges, and the need for a long-term perspective.

We will develop more detailed plans for the 2009 price review in particular, and provide ample opportunities for our stakeholders to contribute throughout this process. Our forward programme will also contain details of a draft sustainable development action plan. In the meantime, in this document we set out details of the next steps we have identified so far.

Finally, I would like to thank all those who contributed to these three consultations, either in writing or at one of the workshop events. The quality of responses and debate has been high, and has helped us to clarify the key issues and where further action is needed. I look forward to working with all our stakeholders to take these issues forward and to help shape a sustainable water industry now and in the future.

A handwritten signature in black ink, appearing to read 'Regina Finn', on a light-colored background.

**Regina Finn**  
**Chief Executive**

# 1. Introduction

## Setting price limits

1. In January this year we issued 'Setting water and sewerage price limits: Is five years right?' We sought views on:
  - the length of time between price reviews;
  - developing mechanisms that would increase certainty beyond the end of the next price review period;
  - encouraging long-term planning; and
  - getting an appropriate balance of risk between consumers and investors in the tools to deal with uncertainty between price reviews.

## Sustainable development

2. Later, in February, we published 'Contributing to sustainable development – A consultation on Ofwat's approach'. This set out how:
  - we anticipate interpreting our sustainable development duty and sought views on our proposed approach;
  - the issues we need to develop ahead of the next review;
  - the way in which our processes and governance should contribute to sustainable development; and
  - how we measure the progress we, and the industry, make to sustainable development.

## Common framework

3. In March we published RD04/06 'Developing our process for assessing capital maintenance requirements consultation'. This asked how we can best promote and assess integrated approaches to asset management.

## Common themes

4. We found considerable overlap in the issues raised in the responses to all of these consultations. An undercurrent from the responses is a perception that we are driven by the five-year periods covered by price reviews, but that price limits and our approach need to reflect the long term.
5. The need for a long-term approach to planning and regulation is a recurrent theme emerging from all three consultations. Companies' networks and plant must be able to provide services for current and future generations. Many responses raised issues around the mechanisms to facilitate the investment needed to deliver benefits and value over the long term.
6. We recognise the need to take an integrated and long-term approach to the way we regulate and expect companies to do the same in their planning for the future.

Given the common themes in the responses, and our desire to develop a sound long-term approach, we have decided to issue a combined response.

7. We were pleased by the level of responses to our consultations. These dwelt mainly on strategic issues, but as we develop our approach to the next price review we expect our stakeholders to provide us with more developed thoughts to help us articulate our approach.
8. This paper focuses on the main themes raised and how we intend taking them forward. Appendices 1 to 3 summarise the detailed points raised in response to each of these consultations. We are not offering immediate solutions at this stage but indicate how our thinking is developing both for our methodology for the next price review and our overall approach to regulating the industry. At the end of this response we have listed the areas where we plan to or are already taking actions forward.
9. As well as the paper consultations, we held several workshops with stakeholders. On the length of the 2009 price review (PR09), representatives of Severn Trent Water made a presentation at each workshop, which were helpful in drawing out issues. In addition, we met representatives of the supply chain to explain our approach and to explore their views. We received 35 written responses.
10. On sustainable development, we held a well-attended stakeholder workshop in late 2005. This informed our consultation paper, which was issued in February 2006. The consultation stimulated widespread interest and we received 47 written responses.
11. On capital maintenance and asset management, the March consultation paper (RD04/06) was followed up by a well-attended workshop in May, with presentations from independent experts and other regulators. We received 26 written responses, many of which ranged widely across all aspects of asset management.

## 2. What sustainable development means for us

### Our role

12. In our consultation paper we set out how we interpret sustainable development and what this means for our role. Our duty is to exercise and perform our duties in the manner best calculated to contribute to the achievement of sustainable development. Our consultation paper set out our commitment to the five guiding principles of sustainable development, as articulated by Government.

- Living within environmental limits.
- Ensuring a strong, healthy and just society.
- Achieving a sustainable economy.
- Promoting good governance.
- Using sound science responsibly.

13. We see delivering against our primary duties to consumers and the financial viability of the industry as central to our contribution to sustainable development. Sustainable development principles will guide all of our work, and is not an 'add-on'. In this paper, we set out how we will develop our approach further.

14. Overall, the responses to the sustainable development consultation tended to be weighted towards the environmental aspects of sustainable development. Some respondents disagreed with our position on environmental limits. We explore this further in paragraphs 34 and 35. However, there was a remarkable degree of consensus supporting better long-term planning, and a consistent view that this should mean less reliance on resource-intensive 'end of pipe' solutions.

15. Most respondents saw us making a central contribution to sustainable development in the water sector, and many clearly expect us to actively lead on a wide range of issues. Some respondents felt that we had not clarified sufficiently what difference our new duty made in practice. In this paper, we aim to demonstrate how we are developing our approach to meet the longer-term challenges facing the water industry, and how we will work with other stakeholders.

16. In our next forward programme, we will set out a sustainable development action plan. This will set out how we intend to reflect sustainable development principles in how we carry out our business, and run our affairs. It will also aim to show how our planned work in regulating the industry in the coming years links to sustainable development, and what we see as our policy contribution.

17. We will also aim to be transparent about how we have considered sustainable development in making our decisions. We aim to develop a structured approach to impact assessments that incorporates the principles of sustainable development, building on the initial thinking set out in our consultation document. This is explored in more detail in paragraphs 30 to 32. We will use this to make sure that sustainable development principles are explicitly considered as we

assess our policy developments, and will be used to inform our methodology for PR09.

18. Some respondents also suggested that we should take a more active role in both considering and influencing strategic long-term issues. We will contribute to policy development where appropriate, such as the Water Framework Directive work and through our membership of the Water Saving Group. We will also work with other regulators and policy makers through a high-level group, and appropriate subgroups, that we are setting up to prepare for PR09. We discuss this further in paragraphs 53 to 55.

## **Value**

19. Our sustainable development consultation paper emphasised that we saw securing value as being at the heart of our contribution to sustainable development. We were clear in our paper that this means 'not just in the narrow sense of customer bills, but also in the wider sense of value to society, encompassing the environment and the economy'.
20. Most respondents strongly supported this statement of our approach, although some emphasised that we should place due weight on environmental and social benefits that are more difficult to value.
21. In taking this forward, we will place priority on developing our understanding of value. We believe that we have a clear and specific contribution to make in the developing debate about how to deliver best value for consumers and the environment.

## **Cost-benefit analysis**

22. We have long emphasised the role of cost-benefit analysis in understanding and delivering value. Our new duty to contribute to sustainable development reinforces this, and is reflected in our commitment to securing value in the broadest sense.
23. We will work with all stakeholders to contribute to developing a more rounded and complete understanding of how best to deliver value for society in the management of the water sector. We will challenge water companies, and their regulators, to demonstrate sound analysis of the benefits from investment in raising environmental or service standards.
24. We will also seek to align our understanding of consumers' attitudes to water services and the developing agenda on cost-benefit analysis. We will continue to play a full role in the Defra-led collaborative research programme on the Water Framework Directive.
25. Some respondents appeared to view 'cost-benefit analysis' as a technical accounting exercise that ignores wider social and environmental issues. But we stress that the aim is consumer-focused, to understand what it is that people really value. Cost-benefit analysis should provide a holistic – and not simply a

financial – evaluation of available options. In the past, analysis has tended to concentrate on costs of supply, rather than the value of the improvements delivered by the water industry. If we take decisions without seeking to value benefits, we make opaque and untested assumptions about benefits. Cost-benefit analysis exposes decision-makers' assumptions to analysis and challenge in pursuit of value. We consider, too, that our emphasis on cost-benefit analysis promotes good governance and using sound science responsibly.

26. Our work on leakage economics and target setting provides a good example of the breadth of cost-benefit analysis. In considering the case for additional leakage control, the value of the water savings must be set against not only the financial cost of further repairs, but also other costs such as the inconvenience of roadworks, and the environmental cost of extracting and processing the materials to get the repairs done. But in terms of benefits, water savings may be most valuable during a drought or in a water-stressed area.
27. We think that cost-benefit analysis can improve the quality of long-term decision-making. It is not just a narrow economic specialism. In developing our approach for PR09 we expect to see a significant step forward in the quality of analysis that companies and others prepare. We expect companies to take account of social and environmental costs and benefits associated with their business, across their strategic business planning. In particular, we will encourage the development of methodologies for both costs and benefits, which facilitate the comparison of actions taken by all sectors on the aquatic environment. This will assist in identifying appropriate programmes of measures, which are fair, proportionate and even-handed, in line with the 'polluter pays' principle.
28. We commit to working with the industry and other stakeholders to develop practicable approaches for improving the quality of analysis and developing best practice, both at PR09 and in the longer term. This also aligns well with the common framework for capital maintenance, which has a more general application for asset management as a whole. We recognise the helpful work that is being carried out through the Defra-led Collaborative Research Programme, and also through UK Water Industry Research (UKWIR) on cost-benefit analysis.
29. We will review our business planning guidance, and consult the industry and other stakeholders on the practicalities of delivering soundly-based cost-benefit analysis at both strategic and programme level. Detailed valuation studies of all projects or service attributes would be expensive and time-consuming and we will consider how to focus analytical resources effectively.

## **Regulatory policy assessment**

30. In our sustainable development consultation we set out a tentative proposal for a series of criteria or questions that we might use to assess policies against sustainable development principles. Respondents generally supported this proposal, although a number felt that we would need to guard against this becoming a 'tick box' exercise. We agree, and in taking this work forward we are also considering how we might assess our work against the achievement of the consumer objective. This includes looking at the approach adopted by Ofcom in



developing a 'consumer objective toolkit'. We will also consider the outcome of the Cabinet Office's consultation on revised guidance for preparing regulatory impact assessments.

31. We believe it is important for us to assess the impact of our policies, and to expose our reasoning. Using clear policy assessment tools can help us to set out our thinking clearly for stakeholders, exposing the choices we have considered. It will also impose a discipline upon us to consider carefully the impact of our decisions.
32. We will work towards developing a framework for impact assessments that will encompass our contribution to meeting the consumer objective and achieving sustainable development. This will build on the economic impact assessment approach required for our general regulatory impact assessment work. We will publish our thinking on our policy impact assessment early in 2007. We also plan to consult on our approach in 2007-08.

### **Environmental limits and the precautionary principle**

33. In our consultation document we emphasised the need for sound evidence to support our understanding of causal relationships when considering actions to protect or improve the environment. For example, in the 2004 price review (PR04) we allowed financing for investigations of endocrine disrupters and in relation to the Habitats Directive. We also stated that the environment is heavily modified by man, and will be further modified as our social and economic needs develop. Some respondents felt that we had misinterpreted the concepts of environmental limits and the precautionary principle.
34. We do not underestimate the environmental challenges we face. Our use of water must respect environmental limits, and this may require difficult adjustments. The need to respect the constraints imposed by natural water resources in the south-east of England provides a clear example of this. Collectively, all stakeholders must make important decisions about our long-term stewardship of the water environment against a background of significant uncertainties including the impact of climate change. We will work with all stakeholders to maximise the evidence base to support sound decision-making. For example, we are collaborating with Defra and others to develop understanding of the most appropriate measures to deliver the Water Framework Directive. We will also develop understanding of the carbon impact of the industry, and how this should inform choices about future investments.
35. Where uncertainties remain we advocate appropriate assessment of risks. In some cases it may make sense to develop the evidence base before taking action, to avoid expensive and damaging investment. There may also be cases where early investment is justified to guard against unacceptable risks, either to the environment or to consumers. In these cases, we will make sure that price limits provide financing for appropriate interventions or investigations.

## **Polluter pays principle**

36. The Government recognises that the polluter pays principle is key to achieving sustainable development. Our consultation document discussed our views, in particular ‘that a sustainable outcome may require more emphasis on addressing diffuse pollution, with those responsible bearing a fair share of clean up costs’. Our stance received broad support from the water industry. Some other respondents emphasised the practical difficulties of applying polluter pays principles in the water sector.
37. We believe that sensible application of the polluter pays principle must form a key element of long-term policy to deliver sustainable outcomes in the water sector. For water customers, they may need to accept new ways of paying for water, with more metering in areas where water resources are under pressure and it makes economic sense. Equally, we will press for proper application of the polluter pays principle for others that influence the water environment.
38. We will publish further details of our thinking on the polluter pays principle in the context of the Water Framework Directive, as it is implemented. In particular, we will set out possibilities for the water industry to carry out any improvements needed alongside those by other polluters, including land users. All sectors will need to work concurrently to deliver the Water Framework Directive objectives within the overarching context of sustainable development. We recognise the need for a long-term approach to avoid options which either have an unacceptable impact on the non-aquatic environment or which offer perverse incentives to continue with current polluting activities. These options will need to explore the full range of possible outcomes including the Government initiative on catchment sensitive farming. We are contributing to the Defra-led project to try and ascertain the most cost-effective measures to deliver the environmental objectives across all sectors. This project will also help identify if further legislative or regulatory measures are needed, and whether innovative approaches to cost recovery are justified.

## **Sustainable development action plan**

39. The Government’s sustainable development strategy committed central government departments to publishing sustainable development action plans, covering both operations and policy, by December 2005. We have also noted the Environmental Audit Committee report (Seventh Report of Session 2005-06, HC 1322) on sustainable development reporting by government departments.
40. We commit to publishing our action plan on delivering against sustainable development principles every year, and to reporting against this in our annual report. This year, we will include this within our draft forward programme for consultation. We will also report annually on our performance over time.

## **Protecting and engaging with consumers**

41. Making sure that the water industry meets the needs of consumers is central to our role, and to our contribution to a strong, healthy and just society. We

emphasised our work on understanding consumers' needs in our consultation paper, and this will be an important focus in the lead up to the next price review. We will need to understand consumers' views on the improvements they wish to see in water and sewerage services, and the water environment, as well as their views about what is affordable.

42. The Consumer Council for Water (CCWater) is now established as the fully independent voice of consumers. We will build on the strong relationship we have already developed with CCWater, in ensuring that our regulatory approach reflects consumers' views. In their response to our sustainable development consultation CCWater emphasised that we must communicate clearly with consumers. We need to explain how we have taken account of all sectors of society, and how we arrive at the decisions we make. While we are developing our communications with consumers, we will also challenge the industry to build trust with its customers, and improve the quality of its engagement with the public on difficult issues. This year's drought has highlighted the importance of this.
43. Given the long-term nature of the industry, and many of the issues we collectively face, we will make sure that we will consider the interests of future generations of consumers. For example, we will challenge companies to demonstrate that they are developing sound, forward-looking asset management practices. Safeguarding the interests of today's consumers must not be at the expense of added risk or expense for tomorrow.

### 3. Planning for the long term

#### Setting price limits

44. In January we consulted our stakeholders in 'Setting water and sewerage price limits: Is five years right?' In this consultation paper we asked if we should change the period of time between price reviews to a longer or shorter period.
45. The overwhelming response was that we should set price limits for five years in 2009. The five-year cycle represents an appropriate balance between stability and incentives, and the need to be flexible to changing circumstances. The five-year cycle also has the advantage of being well understood and established. Major change could potentially add to perceptions of regulatory risk or uncertainty. Most respondents could see little advantage in making changes to an approach that is well understood and has worked. Very few respondents suggested that we should set price limits in 2009 for six years to tie-in with the timing of the Water Framework Directive.
46. In its 'Water management' report, the House of Lords Science and Technology Committee suggested we should extend the price review cycle to six years, set indicative price limits for the six years after that and prospective price limits for the twelve years beyond that. A number of respondents to our consultation also suggested that we should set indicative price limits for the period beyond the next price review.
47. The underlying point in most respondents' comments is that we should do more planning for the long term and should set price limits within that context. We agree. As set out in our consultation on sustainable development, 'we would like to see more emphasis on the price review as just a five-year review of companies' longer term plans'. We will set price limits at PR09 for five years, but within the longer-term context.
48. In our response to the House of Lords' inquiry we set out our intention to seek 25-year business plans at the next price review, in line with the period covered by water resource plans. This will enable companies to set out their own clear, strategic vision in their long-term plans.
49. We did not publish indicative price limits at PR04. Although the companies provided long-term views of water resources and capital maintenance, we did not have the information needed to calculate price limits beyond 2010. Since the last review we have published further analysis – 'Water industry forward look 2010-30: Some possible views of the future' (WIFL) – that has looked at potential price limits that could arise from a number of different scenarios. We plan to continue to build on and develop this work to inform long-term judgements.
50. At PR09 we could develop companies' capital programmes beyond 2015, but the quality of this work will only be as good as the information it is based on. This presupposes that the companies will be able to produce robust long-term business plans based on reasonable assumptions about what quality and

environmental outputs they will need to deliver, and when, for longer than a five-year period. Potentially producing indicative price limits that are based on information that is insufficiently robust could lead to regulatory uncertainty. Because of the impact upon customers' bills we would not want to pursue an approach that affected confidence in the industry or had a negative impact on the companies' ability to borrow at competitive rates.

51. We are therefore not convinced of the benefits of indicative price limits, but we do see value in setting price limits within the context of a long-term planning framework. We will consider this issue alongside our thinking for 25-year business plans as we develop our methodology. Our focus will also be on developing the ways in which we look at projects that span more than one price review and projects that will not deliver benefits in the five-year period for which we make determinations in 2009.

### **Staggering price reviews**

52. A few respondents expressed an interest in staggering price reviews, but CCWater warned against this as it would make comparisons very difficult to make and mean that we were almost constantly engaged in price reviews. We will set price limits for all companies in 2009 and will not stagger price reviews.

### **Working with the stakeholders on long-term issues**

53. Many respondents to our consultations felt that we should be active in promoting a more strategic long-term approach, not only by the water industry, but also among regulators and policy makers. Clearly, the overall framework for water policy is a matter for Government. Our role is primarily consumer focused and we must advise government from this perspective. To this end we will continue to engage with consumers, including building upon our relationship with CCWater, to take account of their views and ensure that we communicate both our decisions and how we have arrived at them in a timely and effective manner.

54. We have an important role within the industry and in taking forward issues of long-term planning we will need to work with stakeholders in approaching the price review in particular, and regulation in general, in a co-ordinated and effective manner. We plan to form a high-level group from the key organisations involved in regulating the industry, chaired by Regina Finn, to oversee work streams where collaboration can contribute to the price review. This group should make sure that the focus is maintained on delivering the right outcome for consumers of this long-term industry. The high-level group and any sub-groups supporting it will need to have clear terms of reference, which recognise the particular roles of each organisation. So, while setting the price limits is ultimately our responsibility we look to:

- companies to provide realistic and comprehensive draft and final business plans which take account of the needs of their customers and the environment;
- CCWater for advice on consumer priorities;

- Government (in England and in Wales) to provide social and environmental guidance; and
- the quality regulators – the Drinking Water Inspectorate (DWI) and the Environment Agency with input from Natural England and the Countryside Council for Wales – to provide well-justified programmes of improvements to drinking water and the environment.

55. We expect the companies to be involved in the sub-groups that we set up to support the high-level group. We also plan to set up a series of regular meetings throughout PR09 involving the companies to discuss strategic issues arising from the price review. These meetings will provide an opportunity to discuss sustainable approaches and best practice, as well as offering an opportunity for the companies to feed into our methodology and offer guidance based on their experience.

## **Long-term investment issues**

56. In responding to the consultation companies considered there should be greater certainty for capital projects that extend beyond a single price review period. Some companies suggested that we should make an allowance in each company's regulatory capital value for work that spans several periods. Others questioned how efficiency targets can be applied to such projects. In its response, the Environment Agency drew attention to the need for long-term planning for the sewerage system.

57. We will need to consider how we take this forward. At the last price review we allowed expenditure for a number of investigative projects that would deliver outcomes beyond the period covered by the price limits. Where companies prepare robust cases, that support their long-term plans, we will reflect these in their regulatory capital value. We are currently working with the Environment Agency on long-term planning issues. We are also working with UKWIR to develop approaches to 25-year sewerage plans in line with the requirement on companies to prepare 25-year water resource plans.

58. Our desire for a long-term outlook (around 25-30 years) is being echoed by companies and fellow regulators. The intention is that this should represent an overview of the risks and uncertainties, and the range of outcomes and the potential investment pressures that the industry faces. A long-term perspective may also open up more sustainable options for tackling key challenges.

59. In March 2006, we published a research paper by Keith Mason on our website, 'Water industry forward look 2010-30: Some possible views of the future' (WIFL). This examined the possible implications for financing and household customers' bills of four scenarios on the basis of certain assumptions that were considered plausible following discussion with stakeholders. We have issued the WIFL model, which is available to companies and others to explore the impact of other parameters and approaches. The results of the modelling are available on our website and provide an indication of the possible outcome of each of the scenarios on the industry. The results of this work will help long-term planning and be a guide to the implications of pursuing different approaches.

## **Water Framework Directive**

60. Many respondents drew attention to the need to consider how we deal with the requirements of the Water Framework Directive (WFD) at the next price review. They argued that mechanisms need to be in place to define WFD outputs and assumed costs at PR09. The companies express concern about relying on the use of interim determinations (IDoK) if outputs change as a result of new WFD requirements that could require high levels of capital investment and lead to financeability issues. A few respondents considered that we should tie the period of the review into that of the WFD timetable.
61. We will work with the Environment Agency, Defra and others to ensure that we can take proper account of the requirements of the WFD that are known at the next price review. Appropriate mechanisms are in place to take account of new obligations that arise in the period. At PR04 we issued an updated change protocol and committed to reviewing this ahead of PR09. We will consult on any proposed changes to the approach in 'MD197: AMP4 Change protocol'.

## **Innovation and incentives**

62. A number of respondents to our consultations raised issues relating to the effects of our incentive framework on the water industry's ability to deliver best value over the long term. Respondents reflected a range of specific concerns. For example, a number of water companies argued that our approach inhibited companies from making investments that may be best from a whole-life cost perspective, but could not generate a commercial return within a single price review cycle. Other respondents were concerned that regulation may inhibit research and development activity, or that the emphasis on output delivery may push companies towards low risk, but perhaps less sustainable 'end of pipe' solutions. Our discussions with investors have also highlighted the importance of regulatory commitment to the overall incentive framework, providing investors with comfort that efficiently incurred investment will be remunerated. We are also aware of concerns about the particular methods we use to assess comparative efficiency, which forms an important element of our approach to incentives.
63. We are clear that we want companies to deliver best value over the long term. We will assess their approach to this as part of our analysis of business plans at PR09. We will look to companies to prepare 'total asset management plans' that are demonstrably long term in outlook and integrated across all aspects of their business. Where appropriate, we will strengthen our guidance so that companies are stimulated to present the right kind of evidence. We believe that our rolling incentive mechanisms encourage companies to deliver innovative approaches with long-term benefits, by offering consistent financial rewards to companies that deliver outputs more efficiently than expected. We are currently collaborating with the industry, through UKWIR, on a project to review the approach to efficiency assessment. The outcome of this project will inform the development of our methodology for PR09, and more detailed work on our efficiency assessment tools (econometrics and cost base). We have also taken part in work with UKWIR and the Department of Trade and Industry (DTI) on barriers to innovation in the water industry. We will work with other stakeholders to develop

collaboration to promote innovation where appropriate. We would need to be persuaded by strong evidence to support any approaches to supporting research and development or innovation that depended upon increases in customers' bills. In addition to the workstreams looking at more detailed aspects of price review methodology, we commit to a strategic exploration of the implications for value over the long term of our incentive mechanisms with the industry as part of the preparation for our PR09 methodology.

64. We will ask companies to prepare five-year business plans as part of their long-term strategies. Companies should not aim, merely, to minimise financial costs over a five-year timeframe. We will look, instead, to companies to prepare far-sighted strategies based on maximising value over the long term. We will explore how we can best offer incentives to companies to prepare credible and fully considered long-term business plans. Ongoing work in developing our approach following RD04/06 will form part of this. We are clear that companies should not prepare 'bid documents'. We expect companies to build up good plans. We will seek to reward companies who offer credible risk-based strategies focused on delivering best value. We will substantially modify company plans in setting price limits, where the strategy is poorly evidenced, or where costings are not credible. These incentive issues go beyond the details of the framework of rolling five-year retention periods.

## **Prioritising long-term asset management**

65. Our consultations on sustainable development and RD04/06 both explored themes around promoting value to consumers and the environment over the long term. We aim to develop our approach to regulating asset management with this in mind.
66. We will build on the work that has been done in the past, in areas such as long-term water resource planning, or the capital maintenance planning common framework. In capital maintenance, for example, we have consistently challenged companies to develop forward-looking, economic approaches. We confirmed this in MD212.
67. The RD04/06 consultation explored this further, and exposed questions about extending forward-looking, economic principles to all aspects of asset management. The further development of cost-benefit approaches will also enhance the focus on consumers and what they really value.
68. While we recognise that there are some different considerations for quality enhancement schemes, we believe that forward-looking asset management principles should underlie companies' planning across the board. We will explore how to assess companies' approaches to asset management planning, through a project with UKWIR. We intend to develop this as a tool to guide our assessment of companies' strategic investment planning at PR09. We will seek to develop robust assessment tools, and to publish our assessments at an early stage in the PR09 process.



## **Demand management**

69. Many respondents to our consultation on sustainable development identified security of supply, and in particular, demand management as a key area of focus. We agree, and we are already working with Defra and other stakeholders through the Water Saving Group. We are also reviewing our approach to leakage target setting, including the economic level of leakage. We note that the industry has also recognised the need to improve the evidence base for demand side initiatives, for example through its support for Waterwise.
70. We will work with the Environment Agency to consider how demand management, and in particular interventions to extend metering, should be reflected in guidance for long-term water resource planning. The options chosen to manage demand should be cost effective and part of companies' long-term water resources plans, taking full account of social and environmental costs.

## **Climate change**

71. Our sustainable development consultation touched on climate change as one of the key longer-term challenges facing the water industry. This was widely recognised in the consultation responses we received. We will work with the industry and the wider academic community to improve our understanding of climate change and its implications for the water industry, and liaise with the UK Climate Impacts Programme to facilitate timely provision of climate change scenario data to inform PR09 planning. We will challenge the industry to develop its understanding of the implications of the latest climate change scenarios for its long-term asset planning. This is not a straightforward exercise and we will expect the industry to develop relevant tools and analytical approaches to guide its asset management plans for PR09.
72. We will also engage with quality regulators and the industry to understand how water environmental objectives can be delivered without exacerbating energy use and the industry's contribution to greenhouse gas emissions. We will accept robustly justified actions as part of long-term plans at PR09.

## **Planning for the future**

73. The price limits that we set in 2009 need to be consistent with and support effective long-term planning. As we suggested in our response to the House of Lords inquiry into water management, we think that twenty-five-year business strategies should be prepared at the next price review. This builds on the approach we are already taking to company's investment programmes for capital maintenance and water resource planning.

## **Early start programme**

74. The early start programme we introduced at PR04 was welcomed, but many respondents felt that it needed to be developed for the next review. Experience

has shown that the early start programme we set in 2004 has not been as well utilised as we anticipated and we have been disappointed by this.

75. We are committed to fully exploring the issues raised by the roller-coaster pattern of capital investment around the five-year cycle. But companies also need to play their part in planning their investment. We will participate in UKWIR research on this, and consider in the light of experience whether a further early start programme will add value. The majority of capital investment needs are reasonably predictable for most companies, and we think there is likely to be considerable scope for companies to avoid cyclical disruptions to their capital delivery arrangements. For our part, we will seek to minimise inefficient disruptions to the industry's supply chain arising from the way we regulate. We may also place greater emphasis on challenging companies to demonstrate a credible and balanced approach to procurement and delivery systems. We will also re-profile expenditure where we are not convinced that processes are in place for it to be delivered as planned.

## **Financing networks**

76. In February, with Ofgem, we published a discussion document, 'Financing networks'. This was supported by a seminar in April. The general message from this consultation was one of general support for the regulatory framework and the need for more consistency of approach over the long term. Most respondents agreed that companies should make their own decisions about how to finance their businesses.

77. Respondents see regulatory commitment as key to reducing regulatory risk. Regulatory commitment and the associated risk is also seen as an important factor in attracting equity investment in regulated businesses. Many respondents believe that it is possible to strengthen regulatory commitment and reduce risk without the need for radical change. The existing regulators' inability to fetter future regulatory outcomes and regimes is seen as an issue that increases regulatory risk. With regard to the current price control period, a key comment was that the incentive-based regulation in the UK has proved a lower risk and less susceptible to ratings shocks than prior periods. It was also noted that a balance needs to be struck between regulatory commitment and getting the best deal for customers.

78. Respondents recognised that obligatory, significant capital programmes can create financeability problems and that these could not be left solely for the markets to decide. We will use the responses that we received to inform our approach as we develop our methodology for PR09.

## **Accounting for risk**

79. This links back to developing a long-term policy framework as this would lead to benefits in investor confidence, more sustainable investment and greater supply-chain efficiency. Water UK suggests in its response to the length of PR09 consultation that companies need to work with customers to build up

understanding and acceptance of the allocation of risk in setting price limits. It accepts that if projects fail the companies should bear the cost, but if they succeed there should be a reward for the risk taken. As part of the UKWIR work we are considering incentives placed on the industry. For the next price review, we will examine our approach to efficiency and consider how we recognise long-term projects in our approach.

## 4. Sustainable regulation

80. In line with our duty to contribute to sustainable development we recognise that we need to take a sustainable approach to everything we do. We have sought to consider all our activities in the context of this duty and going forward we will use our policy impact assessment to test developments to our approach. Some respondents felt that we should have named Board members to 'champion' sustainable development. We have considered this but feel that this might compartmentalise thinking. Contributing to sustainable development should underlie all our decision making and not be an add on.
81. Some responses considered that we should take an influencing role and promote the spread of best practice. We are currently involved in a number of UKWIR initiatives on customer issues, such as dealing with those in debt or sewer flooding mitigation. With our 'Security of supply, leakage and water efficiency' report in November we will publish a good practice register for promoting the efficient use of water. We will also look to the industry to develop its understanding of best practice in this area, in terms of the demonstrated impact on demand. Some respondents suggested that we should develop examples of best practice and act to make sure that the industry adopts such approaches. Although we can see a value to us identifying best practice where we come across it, best practice will largely be based on what companies are actually doing or have done. We expect companies to pursue innovative approaches and to share with others their experience of what has worked.
82. Where we identify best practice we will take the opportunity to identify it in our annual reports, in line with our role to challenge not manage the industry. But, we consider our main role is to promote an environment of good governance, which ensures that companies meet their statutory requirements in a sustainable way. This is a well-developed multi-million pound industry operated by professionals and we should not seek to manage it.

### Measuring progress

83. Our consultation on sustainable development asked how we should measure progress in contributing to sustainable development. We will publish a sustainable development action plan, as part of our forward programme. We will also report against this each year in our annual report.
84. One or two respondents to our consultation suggested we should allow for an independent review of our work from a sustainable development perspective. We think there is merit in considering this further, as part of our overall planning for PR09 and its governance. This could, for example, form part of the review of the PR09 process.
85. We were doubtful in our consultation document about the merit of requiring additional data from companies to monitor the industry's progress in delivering sustainable development. We already monitor and report on many aspects of the

industry's performance that contribute to sustainable development, and we support Water UK's initiative on sustainability indicators. We will work with Water UK to strengthen and support its voluntary initiative. In particular, we will encourage the industry to develop voluntary reporting of relevant and comparable indicators at company level.

## **Our website**

86. We plan to develop a sustainable development area on our website. This will be a pathway to the areas of our work that support our duty to contribute to sustainable development.

## **5. Next steps – action plan**

We have identified a number of areas where further action is required. While there is undoubtedly a role for all stakeholders to play a part in taking work forward, the following actions, grouped by topic, represent those we have identified that can be led by us.

Action	Timing
<b>Sustainable development action plan</b>	
We will publish a sustainable development action plan as part of our forward programme, and report on this annually.	Draft – Dec 2006 Final – March 2007
We will support Water UK’s voluntary initiative on sustainability reporting.	2007 onwards
We will develop a sustainable development area on our website.	Early 2007
<b>Policy tools</b>	
<b>Cost-benefit analysis</b> – We will carry out an early review of our business planning guidance, and consult the industry and other stakeholders on the practicalities of delivering soundly-based cost-benefit analysis at both strategic and programme level.	Quarter 2 2007-08
<b>Impact assessment toolkit</b> – We will consult on our approach to impact assessments, encompassing sustainable development and consumer objectives.	2007-08
<b>Polluter pays principle</b> – We will publish further details of our thinking on the polluter pays principle in the context of the application of the Water Framework Directive (WFD) as it is implemented.	2007-08 and thereafter during WFD implementation
<b>Asset management</b> – We will develop a tool to guide our assessment of companies’ strategic investment planning at PR09 (building on the outcome of UKWIR work in this area).	Quarter 3 2007-08
<b>Consumers</b>	
<b>Customer research</b> – We will seek to understand consumers’ views and build on our strong relationship with CCWater.	Ongoing (and as part of PR09)
<b>Price review 2009</b>	
<ul style="list-style-type: none"> <li>• We will set price limits at the price review in 2009 for five years.</li> <li>• We will form a high-level group to oversee price review work streams and policy.</li> <li>• We will review the change protocol and consult on any proposed changes.</li> <li>• We will review business plan guidance, in particular on cost-benefit analysis, at an early stage.</li> <li>• We will place price limits within a longer-term framework.</li> <li>• Following the price review we will seek an independent review. We expect this to consider our approach from a sustainable development perspective.</li> </ul>	2009-10
We will consult with our stakeholders fully as we take this work forward.	

Action	Timing
<b>Longer-term planning</b>	
<b>Long-term capital programmes</b> – We will consider developing companies’ capital programmes beyond 2015 alongside our thinking for 25-year business plans as we develop our methodology for PR09.	2007-08
We will facilitate timely release of climate change scenarios for PR09 planning, and seek to promote improved understanding of implications for the water industry.	For PR09
We will consider the carbon impact of the industry in guiding PR09 choices.	2009
We will develop our approach to long-term sewerage plans in preparation for PR09.	2007-08
We plan to continue to build on and develop the work on WIFL where appropriate.	
<b>PR09 and incentives</b>	
We will consult on long-term incentives as part of the preparation for our PR09 methodology.	2007-08
We will develop our approach to efficiency and consider the treatment of long-term projects in our approach.	2007-09
We will consider the outcome of UKWIR research on the regulatory cycle and patterns of capital investment in developing our PR09 framework.	2007-08
<b>Leakage and demand management</b>	
We are reviewing our approach to leakage target setting, including the economic level of leakage.	July 2006 (ongoing)
We will work with the Environment Agency to consider how demand management, and in particular any interventions to extend metering, should be reflected in guidance for long-term water resource planning.	2007-08, to inform water resource plan guidance



# Appendix 1: Contributing to sustainable development – A consultation on Ofwat’s approach

## Summary of responses to consultation

1. This appendix sets out, for each question in our consultation, a summary of respondents’ views.
2. There were 49 responses, representing a wide range of interests. Sixteen were from appointed water companies, including Scottish Water, and Water UK also responded. There was a good response from organisations with environmental, business and regional interests and from consultants. Defra, the Environment Agency and CCWater also responded.

### Question 1

#### Do you agree with our interpretation, as an economic regulator, of the guiding principles of sustainable development?

- What are your views on our interpretation of securing value in the broadest sense?
- How should we contribute to achieving an appropriate balance between price or costs and the benefits of improving standards?
- Where you do not agree with our interpretation, what needs to change?

3. Many respondents agreed that using the Government’s five guiding principles was a good basis for our sustainable development policy. Many also felt that our interpretation of securing value in the broadest sense was sound. Respondents with environmental interests had some concerns about clarity and some more forthright criticism in some areas.
4. The following areas received the most commentary in this section.

### Cost and benefits

5. Ten of the sixteen water companies specifically commented that we should apply cost-benefit analysis rigorously.
6. However, some felt that a much better common understanding of the environmental and social benefits needed to be developed. One company felt that we should facilitate this, and involve Government, the Environment Agency and CCWater.<sup>1</sup> Another company thought that as well as economic, social and environmental costs and benefits, the time dimension should also be considered.<sup>2</sup> Similarly, several other respondents felt that value is a contentious subjective measure. One

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<sup>1</sup> Mid Kent Water, page 2.

<sup>2</sup> Three Valleys Water, page 4.

respondent noted that getting agreement would be difficult,<sup>3</sup> while another thought there was a need for clear and considered guidance.<sup>4</sup>

7. Whilst there was general agreement on the idea of securing value, some of the other respondents were concerned about the value we will place on the environment and the tools that we will use to assess value. They pointed out that environmental benefits are difficult to measure while the costs of the work are relatively easy to quantify. One emphasised that we should make sure we value the social benefits of a good natural environment.<sup>5</sup> Another respondent noted that value should not be seen as purely economic, and environmental and countryside issues should be given due weighting.<sup>6</sup>
8. Some respondents believed we might have to go beyond economics, possibly using techniques such as sustainability appraisal,<sup>7</sup> or use alternative methodologies to complement cost-benefit analysis.<sup>8</sup>
9. Some environmental groups were also concerned that a reliance on cost-benefit analysis would marginalise environmental benefits. In the context of environmental limits, alternative methodologies such as cost-effectiveness analysis might also be useful.<sup>9</sup>

### **Environmental limits and degradation**

10. A number of respondents were concerned that we did not adequately recognise environmental limits, and certain levels of damage should not be acceptable.<sup>10</sup>
11. One respondent felt that our acceptance of reversible degradation in some instances conflicts with the Water Framework Directive's requirement of no deterioration in environmental quality.<sup>11</sup>

### **Precautionary principle**

12. Many respondents with environmental interests and a few others thought that by citing a lack of evidence as justification for not proceeding with some costly schemes we might be out of step with the precautionary principle.
13. Climate change and the uncertainties around it meant that we would have to face taking action in the face of uncertain evidence much more regularly in the future.<sup>12</sup>

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<sup>3</sup> House Builders Federation.

<sup>4</sup> Atkins, page 2.

<sup>5</sup> Natural England, 10.2.

<sup>6</sup> Water for Wildlife, page 1.

<sup>7</sup> MWH, page 4.

<sup>8</sup> Consumer Council for Water, paragraph 5.

<sup>9</sup> WWF RSPB Green Alliance, page 4.

<sup>10</sup> WWF RSPB Green Alliance, page 3.

<sup>11</sup> Environment Agency, page 2.

<sup>12</sup> Sustainable Development Commission, page 2.

14. While consultants were broadly supportive of our stance, some sounded cautionary notes. One noted that the precautionary principle was essential for irreversible risks.<sup>13</sup> Another thought that the occasional white elephant might not be so bad, and might be better than paralysis because of indecision.<sup>14</sup>

### **Polluter pays principle**

15. Many of the water companies advocated the vigorous application of the 'polluter pays' principle, particularly in relation to the improvements required under the Water Framework Directive.<sup>15 16</sup>

16. However, several other respondents pointed out that whilst 'polluter pays' is fine in principle, it might be difficult in practice, and water customers might end up bearing the costs. 'Polluter pays' should be respected as far as possible.<sup>17</sup> We should either lobby much harder on farming and diffuse pollution or accept water customers paying.<sup>18</sup>

17. One respondent suggested that the increased weight on sustainable development would mean that the water industry must play its role. He felt that there was no right answer to whether water customers should be required to pay only for core services, or were a wider revenue base for the water environment.<sup>19</sup>

### **Willingness to pay**

18. A number of water companies felt that understanding customers' diverse needs and their willingness to pay were important factors.

### **Need for stakeholder co-operation/liaison**

19. Several water companies pointed to the need for joined-up action by stakeholders if sustainable development is going to be tackled efficiently and sensibly. One company felt that we should influence other regulators and decision-makers.<sup>20</sup> Another thought it was essential that all parties understand each other's perspectives and regulatory requirements and timeframes.<sup>21</sup>

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<sup>13</sup> MWH, page 4.

<sup>14</sup> Atkins.

<sup>15</sup> South East Water, page 3.

<sup>16</sup> Bournemouth & West Hampshire Water, page 1.

<sup>17</sup> Environment Agency.

<sup>18</sup> WWF RSPB Green Alliance.

<sup>19</sup> Dieter Helm.

<sup>20</sup> Northumbrian Water, page 1.

<sup>21</sup> Scottish Water, page 2.

## Question 2

### What are the main sustainable development issues that we most need to address before the 2009 price review?

- What should our priorities be?
- Please tell us if you think our list in chapter 5 leaves out any of the key challenges that we most need to address in the period leading up to the 2009 price review.
- How can we improve incentives for long-term planning?
- What are the main issues for water companies to address? Are there any areas where current activities are unsustainable?
- If there are any areas where you think our approach has created barriers to sustainable development, please identify these.

## Priorities

20. The general consensus was that we had picked up the main sustainable development issues. Respondents' main priorities are reflected below.

## Long-term planning

21. Several water companies considered the incorporation of a longer-term planning horizon within the regulatory framework essential for the delivery of sustainability. One respondent noted that longer planning horizons were also required to enable investment planning to shift from 'end of pipe' to source control solutions.<sup>22</sup> Another respondent thought that an integrated catchment-based long-term plan across water and wastewater would best serve the industry, and ensure an holistic approach to planning.<sup>23</sup>

22. A number of water companies thought the five-year payback cycle did not give the right incentives for sustainable development. One company noted that the five-year cycle was seen as a constraint to innovation and long-term planning, due to uncertainty around future investment commitments in prices.<sup>24</sup> Incompatible time-scales between the pricing review and the measures that water companies are required to take in order to move towards a more sustainable industry were constantly cited as a key barrier to sustainable development.<sup>25</sup>

23. Two companies noted specifically that the current incentives did not support investment in renewable energy generation, which has a payback period of greater than five years.<sup>26 27</sup>

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<sup>22</sup> Scottish Water, page 1.

<sup>23</sup> Yorkshire Water, page 2.

<sup>24</sup> South East Water, page 2.

<sup>25</sup> Sustainable Development Commission, page 2.

<sup>26</sup> Bristol Water, page 2.

<sup>27</sup> Northumbrian Water, page 3.

24. Similarly, some environmental respondents felt that the current price setting process was too short term. One respondent noted that longer payback periods were needed to allow investment in properly sustainable solutions.<sup>28</sup> Another thought that a sustainable and long-term approach to investment was needed. Suggested solutions included moving water quality, sewage management and the AMP system towards the 25-year water resource plan model, and changing the way we view investment and payback for sustainable schemes.<sup>29</sup>

25. Several other respondents raised long-term planning as a key issue and suggested various ways to tackle it. These included:

- an independent body to provide strategic, sustainable vision for industry;
- alignment with the three six-year cycles of the Water Framework Directive;
- extending the water resource plan approach to whole business, or various bits of business, and increasing flexibility;
- the price review as a review of a longer-term plan; and.
- altering the efficiency assessments or profit retention periods.<sup>30</sup>

### **Encouraging/incentivising sustainable/innovative solutions**

26. Some water companies felt that we needed to develop our regulatory processes to encourage the use of innovative solutions. One company thought that our current approach promoted cost-efficient investment solutions, which were not necessarily the most sustainable.<sup>31</sup> Another thought there was little incentive or scope within the price review system to invest in options that might have a lighter footprint or multiple benefits, such as water and wastewater management on a catchment scale.<sup>32</sup> Two respondents emphasised the benefits of Sustainable Urban Drainage Solutions (SUDS)<sup>33</sup> and recycled materials in construction.<sup>34</sup>

27. Several respondents raised the sharing and dissemination of good/best practice, while one respondent felt that comparative competition did not encourage sharing.<sup>35</sup> Another respondent felt that communications could be improved, and that we might have a role in identifying and disseminating best practice.<sup>36</sup> Various solutions were proposed, including:

- a group that tried various options and pilots between them, thus sharing the risks;

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<sup>28</sup> Water for Wildlife.

<sup>29</sup> Yorkshire Water Environmental Advisory Panel.

<sup>30</sup> Yorkshire Water Environmental Advisory Panel.

<sup>31</sup> Northumbrian Water, page 2.

<sup>32</sup> Scottish Water, page 2.

<sup>33</sup> WSP Group.

<sup>34</sup> Waste and Resources Action Programme.

<sup>35</sup> Atkins, page 2.

<sup>36</sup> Entec, page 5.

- ring fencing certain areas and removing them from comparative competition; and
- holding more informal meetings with groups of companies to talk about best practice and other issues.

### **Cost-benefit analysis**

28. Comments on this are reported under question 1.

### **Climate change/carbon footprint**

28. Several environmental respondents welcomed our concern about the carbon footprint of the industry.<sup>37 38 39</sup>

29. Almost all the water companies commented on the impact of climate change, now and in the future, and the need for the regulatory process to recognise this. One respondent thought that a measured approach should be taken, in line with available knowledge; for example, long-lived sewerage facilities constructed in AMP5 (2010-15) should be built to design standards that take into account likely storm loadings over the asset's expected life.<sup>40</sup>

30. Many respondents felt there was not only a need to adapt to the climate change that is already happening, but also a need to mitigate the industry's contribution to future changes. What we do today (for example, tightening consents to meet ever increasing environmental and public health objectives) has serious consequences for emissions by the water industry and therefore climate change.

### **Demand management**

31. Some respondents thought the impacts and potential of water efficiency, water re-use and metering should be investigated further. One respondent proposed a dedicated Ofwat water efficiency team.<sup>41</sup>

32. For those respondents with environmental interests more demand management activity was a recurrent theme<sup>42 43 44</sup> – most also linking it the planned development in the south-east.

33. Various stakeholders suggested ways to encourage demand management, including incentives for water efficient equipment, a labelling scheme for appliances, building regulations, increased metering and

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<sup>37</sup> WWF RSPB Green Alliance, page 5.

<sup>38</sup> Yorkshire Water Environmental Advisory Committee.

<sup>39</sup> Sustainable Development Commission, page 3.

<sup>40</sup> Northumbrian Water, page 3.

<sup>41</sup> Waterwise, page 5.

<sup>42</sup> Environment Agency, page 4.

<sup>43</sup> Sustainable Development Commission, page 2.

<sup>44</sup> LSx.

innovative tariffs and the use of non-potable systems (rainwater harvesting and grey water).

34. One or two respondents thought it would be a good idea to follow the energy industry and make a water efficiency commitment.

### **Miscellaneous**

35. Some of the more atypical priorities included the following.

- We should develop the IDoK, logging up/down processes to cope with the Water Framework Directive.<sup>45</sup>
- Infrastructure issues on brownfield sites.<sup>46</sup>
- The economic levels of leakage and low-income protection.<sup>47</sup>

36. Other notable issues that one or two respondents mentioned included the following:

- What if we go nuclear and suddenly get lots of cheap, clean energy?
- Where is the boundary of responsibility for the industry and customers – narrow core service or wider water environment?
- The problems associated with increased rainfall variability – variously sewer capacity and flooding and water supply planning.
- Increasing the evidence base to reduce reliance on the precautionary principle.
- More flexible environmental standards.

### **Question 3**

#### **How can we contribute to sustainable development in our processes and governance?**

- How do you think our sustainable development duty should be reflected in our governance arrangements?
- Do we encourage good governance in water companies?
- We seek your views on whether a set of criteria or questions for assessing our policies would add value to our decision-making process.
- Could we make improvements to our approach to consultation? If you think we could, what do we need to do?
- We seek to advise and use our influence in areas where we have expertise and can add value to the debate. What should our priorities be?
- How can we improve our communication with the companies we regulate? Should we do more to promote the spread of good practice?

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<sup>45</sup> Atkins.

<sup>46</sup> House Builders Federation.

<sup>47</sup> The Consumer Council for Water.

## Consultation

37. The general consensus amongst water companies was that our consultation was a good approach to addressing the subject.
38. Some other respondents noted the difficulty created by the breadth and depth of our work. One suggested a summary document for the layman.
39. One respondent felt that a hierarchy of lobby groups would lead to a more democratic response – not just a ‘free for all’, and would ensure that main/common issues for each sector addressed.<sup>48</sup>

## Good/best practice

40. Several respondents felt that we should do more to promote the spread of good/best practice.

## Influencing policy

41. A similar number thought we should play more of a role in influencing policy at a national and international (EU) level.<sup>49 50 51</sup> One respondent wanted us to represent the industry on legislative matters.<sup>52</sup>
42. Environmental respondents variously suggested we should use our influence to help overcome sustainable urban drainage systems (SUDS) adoption policies, take a lead in the water efficiency campaign and try to lobby on planning/development issues.
43. The regional organisations and a consultant thought we should give more consideration to local and regional needs and interests,<sup>53</sup> recognise the role of regional governance institutions<sup>54</sup> and track and inform regional policy developments.<sup>55</sup>

## Assessing our policies

44. Most of those who responded agreed that criteria or a framework for assessing our policies against sustainable development criteria would add value. But, we would need to make sure it did not become box-ticking exercise – it should embed sustainable development into decisions.<sup>56 57 58</sup>  
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<sup>48</sup> Atkins, page 3.

<sup>49</sup> Scottish Water, page 2.

<sup>50</sup> Waterwise, page 4.

<sup>51</sup> Wessex Water, page 6.

<sup>52</sup> Atkins, page 3.

<sup>53</sup> MWH, page 7.

<sup>54</sup> North West Regional Assembly.

<sup>55</sup> Mersey Basin Campaign, page 3.

<sup>56</sup> Entec, page 4.

<sup>57</sup> MWH, page 8.

<sup>58</sup> House Builders Federation.

<sup>59</sup> Consumer Council for Water, paragraph 35.



## Our governance arrangements

45. Two respondents suggested a ‘sustainable development champion’ on our board.
46. CCWater felt that we had got the balance between arms length regulation and good governance wrong, for example with Severn Trent Water and Southern Water.<sup>60</sup>

### Question 4

#### How should we measure progress in contributing to sustainable development?

- We propose that companies continue to measure their own progress via the Water UK sustainability indicators, and we will contribute to the development of these indicators as required. Do you agree?
- We are considering options for reporting our progress in contributing to sustainable development. How can we best achieve this?

## Industry monitoring

47. The majority of the water companies felt that there was no need for the additional regulatory burden of another series of Ofwat indicators, and that the Water UK sustainability indicators should suffice. Nevertheless, several companies (Mid Kent Water, Three Valleys Water and Wessex Water) felt that our input into the further development of the Water UK indicators would be useful.
48. However, the view was not quite universal, with three companies (United Utilities, Severn Trent Water and Dŵr Cymru) saying that use of the Water UK indicators was not mandatory and that it was not possible to make reliable comparisons within the industry. Therefore, the June returns and the overall performance assessment (OPA) should be used to create a level playing field.
49. Most respondents with environmental interests thought the Water UK indicators were not sufficient. The Environment Agency wanted us to improve the extent and rigour of sustainability reporting by water companies.<sup>61</sup> Opinion ranged from us just monitoring these indicators and making sure certain targets are met<sup>62</sup> to ensuring effective indicators<sup>63</sup> and introducing financial incentives around sustainability indicators, as the best

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<sup>60</sup> Consumer Council for Water, paragraph 33.

<sup>61</sup> Environment Agency, page 7.

<sup>62</sup> Sustainable Development Commission, page 4.

<sup>63</sup> Waste and Resources Action Plan, page 6.

approaches are likely to be developed where water companies are given the opportunity and incentives to innovate.<sup>64</sup>

50. Suggested amendments from other respondents included:

- developing our indicators based on figure 2 to run alongside;
- using commentaries to report sustainable development progress;
- adapting the indicators to match the Defra suite more closely;
- increasing 'deliverables' and incorporating some into PR09; and
- a consumer-friendly version.

### **Ofwat reporting**

51. Of those who responded, the majority of water companies and several others thought we should report progress in meeting our regulatory duty on sustainable development in a stand-alone annual report. There was more limited support for occasional papers and for including a section in our annual report.

52. Other suggestions not on our list included:

- a five-year sustainability review, perhaps by the Sustainable Development Commission;
- the appointment of a board sustainable development champion;
- developing and reporting against a sustainable development action plan;
- separate consultation on or review of sustainable development for price reviews; and
- the Environmental Audit Committee regularly reviewing the interpretation of our duty.

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<sup>64</sup> WWF RSPB Green Alliance, page 4.

## Sustainable development consultation responses

	<b>Organisation</b>	<b>Representative</b>
1	AMCL	Russell Smith
2	Anglian Water	Jean Spencer
3	Atkins	Jonathan Archer
4	Badhair	Ian
5	Bournemouth & West Hampshire	Bill Dovey
6	Bristol Water	Andy Nield
7	BW Consulting	Brian Wilkinson
8	CCWater	Teresa Evans/Liz Foord
9	Defra	Anna Beaumont
10	Derbyshire Wildlife Trust	Chris Rostron
11	Dieter Helm	Dieter Helm
12	Dŵr Cymru	Richard Curtis
13	Entec	Sabrina Dann
14	Environment Agency	Bob Treacher
15	George Wood (Ex Severn Trent Water)	George Wood
16	House Builders Federation (HBF)	Ray Farrow
17	Inland Waterways Association (IWA)	Vicky Clark
18	LSx	Samantha Heath
19	Mersey Basin Campaign	Walter Menzies
20	Mid Kent Water	Jo Stimpson
21	MWH Global	Ken A Farrer
22	National Flood Forum	Tom Crossett
23	Natural England	Dr Andy Clements
24	North West Regional Assembly	Catherine Monaghan
25	Northumbrian Water	Ken Oswald
26	Phone Coop	Chris Lowe
27	Prototype Communications	Simon Chapman
28	Scottish Water	Belinda Oldfield
29	Severn Trent	Dr Tony Ballance
30	Somerset Wildlife Trust	Christopher Hancock
31	South East Water	Noel Burns
32	South East Water Resources Forum (SEWRF)	Tom Crossett
33	South Staffordshire Water	Liz Swarbrick
34	Southern Water	Barrie Delacour
35	Sustainable Development Commission	(not stated)
36	Thames Water	Brian Crathorne
37	UK Rain Harvesting Association (UKRHA)	Jane Laurie
38	United Utilities	Graeme Simms
39	Veolia Water	Howard Hawkins
40	Water for Wildlife	Chris Rostron
41	Water UK	Janet Wright
42	Waterwise	Nicci Russell
43	Wessex Water	Keith Harris
44	Waste and Resources Action Plan (WRAP)	David Moon
45	WRC Plc	Simon Gordon-Walker
46	WSP Group	Chris Tyler
47	WWF RSPB Green Alliance	Tom Le Quesne
48	Yorkshire Water	Richard Ackroyd
49	Yorkshire Water Environmental Advisory Panel	David Bird

## Appendix 2: Setting water and sewerage price limits: Is five years right?

### Summary of responses to consultation

1. This appendix sets out a summary of respondents' views to our consultation.
2. We received over 30 responses to this consultation. A list of those who provided responses is included at the end of this appendix.
3. We received responses from most companies. Most of these raise broadly similar issues, with a few company-specific issues thrown in.
4. Our consultation paper asked our stakeholders for their comments in relation to four questions.
  - For how long do you consider the price limits should be set for the companies at PR09 and why?
  - Do you favour establishing at PR09 mechanisms which will increase certainty beyond the end of AMP5? If so, how should these be achieved, for what period and why?
  - Whether or not we change the period of price limits, can we do more to encourage companies to plan for the longer term? Can this be done without increasing risk for customers?
  - How can we achieve an appropriate balance of risk between consumers and investors in the measures to deal with uncertainties arising between price reviews?
5. We also noted that, although we felt the retail price index (RPI) remained the most appropriate index of inflation on which to base price limits, respondents should feel free to comment.
6. This paper summarises the issues raised in respect of these questions in the responses we received.

### Setting price limits at PR09

#### Length of PR09

7. The overwhelming response was that we should stick with five-yearly reviews. The five-year cycle is familiar and to adopt any other approach could potentially lead to uncertainty. Companies and the Environment Agency could see little advantage to making changes.
8. Water UK and a couple of companies suggested that a further review of the time between price reviews should be undertaken for the review in 2014. However,

Veolia disagreed, suggesting that any possibility of a future review would create regulatory uncertainty at subsequent reviews.

9. Deloitte raised tax issues that impact on the companies. Broadly, its response suggested that in general the shorter the time between each price review the better the ability to take account of the effect of tax changes. The longer the period the greater the risk of a material tax change. Deloitte recognised that tax is only one of the factors that need to be taken into account.
10. Only the Wildlife Trust thought price limits should be set for six years in 2009 to tie-in with the Water Framework Directive.
11. Dieter Helm suggested that we should move away from the five-yearly review and replace it with a more economically efficient system that allows us to set a lower cost of capital. He suggested that price reviews should be set in a broader political policy framework and that within this capital expenditure should be determined on a rolling basis, subject to adjustment mechanisms based on ex ante agreement on the treatment of uncertainty. Within the cost of capital, he suggested that the cost of debt should be indexed to the market rate, and that we should possibly take a similar approach for equity as well. He considered this approach would lead to a more economically efficient (lower cost of capital) regime. Five-yearly reviews would then be limited to reviews of operating efficiencies.
12. Dieter Helm has developed his thinking over a period of time. (Chapter 5 of our 'Financing networks' paper summarises his thinking in more detail.) Fundamentally, he is seeking a split cost of capital that would allow regulatory asset values (RAVs) to be financed by very low cost debt and returns subject to an appropriate guarantee (by indexing them somehow to market outcomes) and then moving the cost of debt finance towards the levels of returns available on Government gilts. He accepts the consequence of this approach would be 'relatively highly geared companies'.

## **RPI**

13. Those companies that raised it support the continued use of RPI as the most appropriate index of inflation to use in setting price limits. We will continue to do this.

## **Mechanisms to improve certainty beyond AMP5**

### **Indicative price limits**

14. In order to avoid supply chain issues SBWWI, amongst others, suggested that we should set indicative price limits for years five to ten. Rather more unrealistically, SBWWI also suggested the companies should produce a rolling business plan that is submitted with their June returns each year, arguing this would provide a degree of certainty about the acceptability of future expenditure plans.

15. One company and Dieter Helm both raised the recent Civil Aviation Authority (CAA) judgement that set price limits for five years and indicative price limits for the following five years.

### **Staggering price reviews**

16. SBWWI also suggested staggering the period between price reviews for different companies. CCWater warned against this approach, as it would make it very difficult for it to make comparisons across companies. Companies were also against this as it could lead to us being involved in price reviews for longer periods and could potentially introduce uncertainty.

### **Early start programme**

17. The early start programme was identified as needing development. Its introduction at the last price review was welcomed, but many felt it needed development.
18. Many companies considered that a greater proportion of investment should be included in the early start programme at PR09. They would also like the incentives for companies to participate in the early start programme to be improved.
19. The UKWIR project on the early start programme was identified as an important tool for achieving a greater efficiency. There should be greater continuity between price reviews. Water UK considered that the introduction of a Board would create a greater presumption of continuity between price reviews, by increasing the level of 'regulatory codification' and reducing regulatory discretion.
20. One company suggested that as an alternative to further developing the early start programme, at each price review the determination should also set the first year's investment programme for the next price review period.
21. John Wild considered the early start programme to be too complex for small water only companies to participate.

### **Projects that span more than one price review period**

22. Most of the companies suggested that at the next review there should be greater certainty for capital projects that extend beyond a single price review period.
23. One company suggested that we should also give a commitment to allowing an agreed amount for work spanning more than one price review in a company's regulatory capital value. Northumbrian raised the issue of how efficiency targets are applied to projects that span more than two price reviews.
24. In doing more to commit investment to projects that span two or more price review periods one company warned against us taking opportunistic advantage with the benefit of hindsight in the future. A consequence of the fixed price control period model is that it encourages a tendency to focus on the finite five-year

'package', and potentially this could lead to sub-optimal outcomes. We should be able to address this risk in specific and significant circumstances and in effect commit customers as 'partners' to the particular risks that long-term capital projects can bring.

25. The companies suggested that the advantages of including projects in price limits where the benefits relate to later periods is a downward effect on customers' bills and a reduction to less efficient investment choices.
26. The Environment Agency also identified this as an issue, particularly planning for the sewerage system, and recognised that it needs to work closely with us to establish the actions required to deliver a long-term sustainable approach.

### **Accounting for risk**

27. In pulling together its views one company took account of the views of the rating agencies and produced a table setting out the level of risk it considers apply to different aspects of expenditure.

	Degree of certainty over future levels		
	High	Medium	Low
<b>OPEX<sup>65</sup></b>	Personnel ✓		Operational consumables Other ✓ e.g. volatility on power costs ✓
<b>CAPEX<sup>66</sup></b>	Quality Supply/demand Maintenance ✓ ✓		✓ Could decline with WFD
<b>Cost of capital</b>		✓ Varies with type of financing	
<b>Revenue</b>	Unmeasured Measured Large users ✓		✓ Caused by competition ✓
<b>Appropriate price review mechanism</b>	<b>Long term price setting</b>	<b>Five-year price setting, with longer term framework for more certain elements</b>	<b>Price setting less than every Five years, or intermediate reviews</b>

28. In its matrix the company identified where it considered the risks and uncertainties arise for future investment. It considered there should be a long-term central policy framework over 25-30 years (as is happening for capital maintenance and water resource plans). Extending this to other areas such as quality and environmental improvements would lead to benefits in investor confidence, more sustainable investment and greater supply-chain efficiency. This presupposes that Government will develop its long-term planning.

29. Water UK considered that companies need to work with customers to build on understanding and acceptance of the allocation of risk in setting price limits. It accepts that if projects fail the companies should bear the cost, but if they succeed there should be a reward for the risk taken.

<sup>65</sup> Operating expenditure – appointed water companies’ day-to-day spending on running the services (for example, staff costs and power).

<sup>66</sup> Capital expenditure – appointed water companies’ spending on new capital assets ( for example, construction and purchase of machinery).



30. Water UK wanted an open and transparent review and assessment of risk allocation and incentives with stakeholders. This was an action identified as coming out of its future regulation work.

### **Water Framework Directive (WFD)**

31. A number of companies emphasised the need to consider how we deal with the requirements of the WFD. Severn Trent Water was amongst them in suggesting that mechanisms do need to be in place to define WFD outputs and assumed costs at PR09. Although the use of existing IDoKs had worked well, the companies made the point that they are not mini-price reviews and do not take account of any financeability issues. The WFD potentially could require high levels of capital investment and give rise to financeability issues.

32. CCWater suggested that although matching up the period between price reviews to the WFD timetable was attractive, in practice only 20% of current capital investment is driven by environmental schemes. Linking the timing of price reviews to the WFD would suggest 'wholly unjustifiably' that the industry bears the heaviest responsibility for delivering its objectives. The key question for CCWater was whether the final determinations are made before or after the production of river basin management plans.

33. One company suggested that the five years could be extended to six without giving rise to significant difficulties in terms of forecasting costs and revenues. This could lead to a reduction in the cost of regulation for both us and the companies.

34. One company saw the value in moving to six years between price reviews, but recognised that the WFD is not something that is within our control.

### **Roller-coaster price limits**

35. One company and others, including Water UK, suggested smoothing the investment profile to avoid the investment dip between price reviews.

36. This is linked to the views set out about the early start programme. A number of companies mentioned and welcomed the UKWIR project that we are involved in along with others including the SBWWI and British Water. This project has just got under way and its objective is to improve understanding of the implications of the investment cycle on the efficiency of the delivery of outputs. This project will seek to identify solutions, which could encompass things like reviewing the early start programme and companies' procurement activities.

### **Mechanisms to increase certainty**

37. One company emphasised the need for consistency to our approach favouring evolution over the introduction of further mechanisms.

38. Another company suggested that it would be difficult to increase certainty at PR09 given the investment issues that will be around for AMP5. The company suggested a move to establishing a longer-term position on capital maintenance, looking ahead at the next 20 years or so.

## Encouraging long-term planning

### Long-term outlook

39. Water UK reiterated its view that there should be a move to a very long-term outlook (around 25-30 years). The intention is that this should represent an overview of the risks and uncertainties, the range of outcomes and the development of investment processes.
40. A medium-term outlook on the maintenance of measures needs to be developed, for around 15 years. Water UK also thought that the regulators should take a ten-year view that looks at the outputs they expect the companies to deliver within that period.

### Scenario modelling

41. The WIFL paper was welcomed and the companies considered that it needs developing to arrive at an agreed basis for projecting investment levels and bills. Water UK is seeking a more consistent and comprehensive definition of regulatory objectives over the long term. Water UK contended that if long-term plans became living, evolving plans then the precise date of price reviews becomes irrelevant.

### Long-term planning

42. The Environment Agency considered that it would be helpful to have a longer-term investment profile embedded into the process, to help handle issues posed by the Water Framework Directive. The Environment Agency also suggested that we will need to consider how to use the information coming out of the draft programmes of measures to inform draft business plans by August 2008 and final business plans in April 2009. It suggested that we would need to agree to provide an appropriate level of certainty using our five criteria, for inclusion of schemes in price limits, as a starting point. It also pointed to existing Directives, which will also drive expenditure at PR09.
43. It suggested we will need to explore the options in this area. For example, one of the options that it suggested was to include an indicative amount at the price review to cover non-firmed up requirements. The Environment Agency agreed that there needs to be more long-term planning for capital investment.
44. The development of long-term planning would apply to the Environment Agency and the DWI, as well as us. Developing long-term planning avoids the risk of

stranded assets. Anglian Water believed that with climate change it is essential that more emphasis is placed on long-term water resource planning.

45. CCWater welcomed more long-term planning. It considered that we should build on the sewer flooding work at PR04 and develop a long-term strategy for dealing with properties that are liable to sewer flooding and suggests this should be built into the early start programme.
46. One company considered the approach that we took to ammonia under the Freshwater Fish Directive as an example that could be extended elsewhere.
47. The same company also made its familiar point about sustainable development projects where the payback is likely to be over a longer period than five years. Without addressing the way in which incentives work, companies will not invest in projects with longer payback periods. Another company considered that the period for which companies retain outperformance should be re-examined to determine if there is a case for companies in some circumstances to retain the benefits for a longer period.
48. In its response, the Wildlife Trust pointed to an example in New York where investment has been made to achieve long-term benefits. Without extended payback times, it considered that the focus will be on unsustainable 'end of pipe' solutions.

### **Water resource planning**

49. Water UK considered that the companies will develop long-term plans if they have greater confidence that we will respond positively to it, for example some projects can be high cost in the short term but least cost in the long term. It also sought more investment in research and development for innovative solutions. It wanted the regulators to move away from scheme-specific micro-management.
50. One company did not consider there to be any incompatibility between five-year plans and long-term planning. However, it wanted to see us undertake work to:
  - agree the structure and scope of long-term plans with companies;
  - identify best practice; and
  - reward companies that demonstrate their business plans are set in the context of their long-term approach, similar to the way in which capital maintenance was dealt with at PR04.

It considered it should be possible to encourage long-term planning without increasing risks to customers, provided plans can be achieved in the light of new information. It also considered that we should take a more positive approach to spend to save schemes.

51. For some schemes, such as renewable energy projects, there are larger payback periods and we should be prepared to take account of this.

52. One company suggested that we should be more positive in our approach to projects that allow companies to innovate and optimise between capital and operating cost investment.
53. Another company suggested that at PR09 for asset maintenance there should be more clarity in business plans about whether investment is allocated in relation to regional spatial and local development plans. At PR09 there should be more focus on where investment is going to be made on infrastructure.
54. The South East England Regional Assembly wanted sustainable new water resources and wastewater treatment infrastructure to be planned and take account of future development in the region. Its concern was that the industry adopts a sufficiently long-term view of investment and that more account is taken of projects that span more than one funding period.

## Dealing with uncertainties

### Dealing with uncertainties between price reviews

55. One company believed there is no case for fundamental change, although there is scope to 'temper' the current rules with common sense. It pointed to its request to 'log up' additional cost imposed by planning restrictions for its Holyhead wastewater treatment works, which was rejected because it technically did not tick all the boxes. It suggested that if it had the negative, the consequences for everybody, especially customers and the local community would have been significant. It considered that it was penalised in this instance for doing the 'right thing' from an overall public interest point of view.
56. A number of companies made the point that if they overspend on investment a service cap exists that means they will not be recompensed. The assumption within the system is that this represents inefficiency even if the expenditure is in customers' interests.
57. One company suggested that the standard IDoK process needs to be understood by stakeholders. The arguments for pursuing and costing notified items are complex. The process for PR09 would benefit from earlier exposure in the consultation process of how IDoKs are intended to operate. The company suggested that an early review of the IDoK process would be beneficial.
58. Water UK suggested that the WFD could lead to companies bearing more than reasonable risks associated with new regulatory requirements. It, like many others, also suggested that any review of financeability we undertake should be adopted for any IDoKs following PR09.
59. It reiterated the point that any overspend on a service cap is not recompensed, even where this is legitimate due to extreme weather. This provides companies with little incentive to overspend even when it is in the customers' interest.

60. Water UK made the familiar point that at PR04 the range of notified items were insufficient.
61. Water UK suggested that there should be a review of the mechanisms for allowing risks between companies and customers. The review should focus on the size of risks, the degree of symmetry, and controllability by management. It also suggested that we consider alternative methods of allowing risk, such as error correction mechanisms or provision for contingencies. As part of this work, consideration should be given to how risks might have changed for PR09.
62. One company accepted that where risks are really symmetrical it is appropriate for companies to bear them. But for items like adoption of private sewers and where risk is more difficult to assess this may not be appropriate. Customers would get the risk.
63. The same company considered that the current materiality threshold gives too much weight to operating costs late in the period.

#### **Other issues raised**

##### **Information**

64. SBWWI wanted more emphasis at the next price review on keeping suppliers informed, so that they are part of the process.

##### **Simplifying our methodology**

65. One company supported the proposal in the independent Steering Group review that we should consider if customers can be protected by price limits that are derived on a simpler basis as it suggests.

##### **Cost of capital**

66. Water UK suggested that alternative means of setting the cost of capital should be explored. For example, for some one-off projects a ring-fenced approach could be adopted with a different cost of capital. (This has happened for the Moyle Interconnector<sup>67</sup>).

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<sup>67</sup> The Interconnector is a 500MW high-voltage DC electricity transmission link between the electricity grids of Northern Ireland and Scotland.

## List of responses to the length of PR09 consultation

	<b>Organisation</b>	<b>Representative</b>
1	Anglian Water	Jean Spencer
2	Bournemouth & Hampshire Water	Roger Harrington
3	Bristol Water plc	Andy Nield
4	CCWater	Deryck Hall
5	Customer	Mr John Furniss
6	Deloitte	Anthony Stobart
7	Dieter Helm	
8	Dŵr Cymru	Peter Jones
9	English Nature	Andy Clement
10	Folkestone & Dover Water	David Walton
11	Home Builders Federation (HBF)	Ray Farrow
12	Independent consultant hydrologist	Duncan Reed
13	Inexus	Russell Ward
14	John Wild (Black & Veatch Ltd)	
15	Mid Kent Water	Nicola Simpson
16	Northumbrian Water	Ken Oswald
17	Portsmouth Water	Neville Smith
18	Scottish and Southern Energy	Rob McDonald
19	Severn Trent Water	Tony Ballance
20	Society of British Water & Wastewater Industries (SBWWI) and British Water (BW)	
21	South East England Regional Assembly (SEFRA)	David Payne
22	South East Water	Chris Pleass
23	South Staffordshire Water	Liz Swarbrick
24	South West Water	Keith Richards
25	Southern Water	Les Dawson
26	Thames Water	Jerry Cresswell
27	The Environment Agency	Paul Leinster
28	The Environmental Industries Commission	Merlin Hyman
29	The Royal Bank of Scotland (RBS)	Peter Dooley
30	The Water Management Society (WMS)	
31	The Wildlife Trusts	Christopher Hancock
32	Three Valleys Water	Peter Darby
33	United Utilities	Graeme Sims
34	Veolia Water UK	David Alexander
35	Water UK	Janet Wright
36	Wessex Water	Andy Pymer
37	Yorkshire Water	Richard Ackroyd

# Appendix 3: Developing our process for assessing capital maintenance requirements

## Summary of responses to consultation

### 1. Introduction

1. This appendix sets out, for each question in our consultation, a summary of respondents' views and our conclusions at this stage.
2. There were 26 responses, 18 from appointed water companies, 5 from consultants, as well as responses from CCWater, the Environment Agency and Water UK. A list of those that responded is included at the end of this appendix.

### 2. Historic assessment of expenditure required to maintain serviceability

#### 2.1 Price setting and stable serviceability

**Do you agree with our proposal to discontinue standard adjustments to historic expenditure for less than stable serviceability or below average asset performance? Does this approach provide an appropriate balance of incentives to secure efficient delivery of stable serviceability?**

#### Widespread agreement with our proposal

3. All respondents except Mid Kent Water agreed with our proposal. Many respondents thought we should consider recovery plans in stage B of our process and South East Water said individual serviceability action plans should determine the appropriate uplift.

#### Conclusions

We do not intend to apply standard adjustments to historical expenditure at PR09. We have always been clear that, where serviceability is less than stable, customers should not have to pay for the recovery to stable serviceability. At PR04 the standard adjustments represented a 'course correction', acknowledging in the light of experience that the historic level of expenditure might not be sufficient to maintain stable serviceability. But we agree with the Mott MacDonald and UKWIR reviews that there is a risk of introducing perverse incentives against efficient targeting of work. Therefore, companies should justify any increase in expenditure through a forward-looking risk-based plan.

#### Regulatory capital value adjustments for regulatory outputs not delivered

4. In MD212, 'Asset management planning to maintain serviceability', we said we that when companies failed to delivery serviceability outputs, our starting position would be to apply the shortfall process. Although the consultation did not refer to this, many companies took the opportunity to comment.

5. They accepted that the regulatory capital value should be adjusted downwards for neglect or incompetence, but not if serviceability is deteriorating because assumed expenditure is inadequate and the company has spent up to this level. Ewan Group and Bristol Water believed allowance should be made when deteriorating serviceability is caused by future events outside the company's control, such as weather conditions. Several companies also wanted more clarity on our approach to serviceability assessment and when regulatory capital value adjustments would apply.
6. Bristol Water wanted a transparent and agreed approach to valuing the outputs not delivered, particularly for enhancements.
7. CCWater supported the use the shortfall procedure for non-delivery of outputs, and asked how we would intervene if a company with deteriorating serviceability had no adequate recovery plan.

### **Conclusions**

- (i) In annex 1 of RD15/06, 'Assessing serviceability', we explain our approach to assessing serviceability. We take into account temporary influences on serviceability indicators and we recognise that some of these, such as the weather, are beyond companies' control.
- (ii) As explained in MD212 and in RD15/06, we expect all companies to achieve stable serviceability regardless of the relationship between actual expenditure and that assumed in setting price limits. The company, in accepting a determination, also accepts the requirement to maintain (or achieve and maintain) stable serviceability. This may cost more or less than we assumed.
- (iii) As set out in MD212, where companies have not delivered serviceability outputs, our presumption will be a shortfall in service delivery. The value of the shortfall adjustment will be based on a case-specific assessment. We will seek to ensure that companies do not gain financial advantage from failing to deliver required outputs.
- (iv) Annex 2 of RD15/06 sets out our staged approach to regulatory action to secure corrective action by the company. Failing this, we will consider formal enforcement action.

## **2.2 Challenging historic levels of expenditure**

**We are considering applying a more searching challenge in 2009 to the historic assessment of expenditure required to maintain serviceability. Our paper presents a range of tools and approaches, and we want your views on these, and how they can be developed collaboratively before 2008.**

8. The consultation paper presented six possible approaches.



1. Improving understanding of reported expenditure.
2. Benchmarking techniques.
3. Assessing a proportion of historic expenditure in the forward-looking analysis.
4. Assessing historic expenditure against the common framework principles.
5. Analysing the asset stocks and condition and age profiles.
6. Using historical expenditure as top-down check of a common framework assessment.

### **Opposition to using econometrics in the stage A historical analysis**

9. Most companies strongly opposed the application of benchmarking techniques to the assessment of historical expenditure, with many criticising the explanatory power of econometric models, and citing differing asset bases and performance/service levels as reasons. Two consultants doubted that econometric modelling would produce sufficiently robust figures to rely upon for assessing investment needs. However, CCWater and Severn Trent Water were more supportive, the latter suggesting a simple method of normalising expenditure as percentage of turnover or expenditure per capita.

### **Strong preference for using historical expenditure as top-down check of a common framework assessment)**

10. Many respondents preferred this approach and believed it is the best way forward. They felt it would encourage full adoption of the CMPCF (Capital Maintenance Planning Common Framework) while continuing to derive value from analysis of historic expenditure. To obtain full value from this analysis, historic expenditure should be correlated against the performance level achieved. Using historical expenditure only as a check would mean that the rules for the challenge would not have to be defined in advance, and we would only need to seek further explanations when required (thus providing a balance between robust challenge and avoiding the unnecessary acquisition of additional data).

### **Alternative suggestions**

11. Two respondents suggested combining the results of several different assessment methods. This would recognise that all methods have their shortcomings, and would seek to reconcile the results of different analyses. Their only reservation was whether sufficient resources are available for multiple analyses.

### **Conclusions**

- (i) We note the opposition from many companies to using econometrics, but we continue to believe it is a useful tool for comparing companies. It is objective, exposes differences between companies and provides incentives. We plan to review and develop our models. The way we use it will take account of the uncertainties. Using econometrics in stage A to benchmark/challenge historical expenditure would still give companies the opportunity to justify further expenditure through a robust forward-looking plan. Annex 2 of our PR04 methodology document, 'Setting water and sewerage price limits for 2005-10: Framework and approach' gives a more detailed response to the challenges that have been made to our econometric analysis over the years.

- (ii) We agree that it is attractive to align our processes with those of companies, but further consideration is needed of how to proceed when the historical and forward-looking views are out of line. As well as assessing the planning process, we will have to make a judgement on the arguments companies advance as to why the future is different.
- (iii) We want to retain a variety of top-down methods, as we believe each gives a useful view of required expenditure. These methods include analysis of historical expenditure trends, assessing the planning process and benchmarking against other companies. Although companies should not be using age or condition to plan capital maintenance interventions, our asset inventory combined with assumptions about replacement based on age or condition could provide a useful additional check. We will need to do further work on the method for reconciliation, and the relative weight placed on alternative methods.

### 3. Incorporating efficiency challenges

**How best can companies objectively demonstrate their approach to future efficiency? Could we improve the incentives for companies to identify future efficiency in their forward-looking plans, as an alternative to a bottom line adjustment?**

- 12. Most respondents discussed general principles, rather than giving their preference between the four options provided.
- 13. Many respondents saw a continued role for the cost base in principle, but not for econometrics. One respondent noted there are two aspects of efficiency.<sup>68</sup>
  - Delivery efficiency: Essentially “doing the thing better” and poses the question, how can capital programmes be delivered for lower overall cost? The respondent felt that there is a role for a cost-base type exercise to assess the potential for efficiency in capital delivery processes.
  - Strategic efficiency: Basically “doing the better thing”. The respondent noted that the robust application of the CMPCF would identify the appropriate interventions, resulting in the right investment programme.
- 14. They believed that proper application of the CMPCF should replace the role played by econometrics, and if both are used there is a risk of double counting.
- 15. Severn Trent Water suggested tailoring the efficiency challenge to the standard of the business plan.
- 16. Northumbrian Water criticised the explanatory power of our econometric models, saying they fail to take account of differing expectations on performance and opex/capex interactions.

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<sup>68</sup> Anglian Water, Appendix 1.

17. Two consultants suggested there might be greater benefit in improving targeting (strategic) efficiency rather than delivery efficiency. More generally, some companies said that the scope for future efficiencies is reducing, and the stage C efficiency adjustment may be reaching the end of its usefulness. They argued that inefficiencies at the time of privatisation have largely been driven out, and the scope for future efficiencies is limited because of the relatively slow rate of technological change in the water industry. They noted that the retail price index includes economy-wide productivity improvements and concluded that continuing to assume frontier-shift efficiency improvements would not be appropriate.
18. Mid Kent Water believed our approach to efficiency may encourage short-termism, referring back to its response to our sustainable development consultation.

### **Conclusions**

- (i) There is a broad understanding of the use of the cost base to evaluate delivery efficiency. We will continue to develop this tool in collaboration with the industry. We want to see better alignment between the standard costs in the cost base, and the costing of actual schemes.
- (ii) We need a means of comparing the sizes of companies' capital maintenance programmes, in order to challenge companies with relatively high historical expenditure that might otherwise remain in a 'comfort zone'. This could be econometrics or some other benchmarking technique.
- (iii) The argument that a good planning process will target investment correctly (and therefore econometrics is not needed) is appealing but incomplete. We believe that, following the regulatory submission, companies should continue to refine their plans, and this will result in further improvements.
- (iv) We note the technical criticisms of econometrics. We plan to review and develop our models, exploring the scope for new explanatory variables, by summer 2007.

## **4. Promoting sound asset management**

<b>How can we improve our assessment of companies' capital maintenance planning processes?</b>
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19. Most respondents concentrated on the subsidiary questions below.
20. Dŵr Cymru advocated integrated, sustainable catchment planning covering both potable and wastewater, encompassing capital maintenance and enhancement, and involving all regulators. Other companies are starting to adopt similar approaches.

### **Conclusions**

- (i) We support integrated asset planning across base service and enhancement and we will challenge companies to demonstrate how

they have taken account of linkages and synergies across all categories of investment.

- (ii) In chapter 3 of the main document we describe our approach to planning for the long term. This is very relevant to asset management, given the typically long lives of assets, especially infrastructure. At PR04 we asked for capital maintenance plans covering AMP4, AMP5 and AMP6, recognising the importance of long-term planning to capital maintenance as well as the financial issue of forecasting the infrastructure renewals charge.

#### **4.1 Cost-benefit analysis to support business planning**

**How can we encourage wider adoption of the common framework cost benefit planning objective and give incentives for an integrated cost benefit approach, in line with our vision and duties?**

##### **Attitudes to cost-benefit analysis**

- 21. Most respondents supported, explicitly or implicitly, greater use of the CMPCF cost-benefit planning objective. Anglian Water and South West Water linked the application of cost-benefit principles to sustainable development and long-term planning. Bristol Water, Cambridge Water and AMCL noted the need to include environmental and/or social costs. CCWater linked cost-benefit to consumers and their willingness to pay, and mentioned the use of cost-benefit in the WFD.
- 22. There was a range of views about how widely customer research such as willingness-to-pay studies should be used. Some favoured focussing on particular aspects of service where customers were unhappy or their views were uncertain. Others saw cost benefit analysis as an integral part of company decision-making, and preferred a more comprehensive approach.

##### **Inconsistency with the OPA**

- 23. Several respondents saw a possible inconsistency between cost-benefit analysis (best value solution) and the OPA (highest possible outputs). Companies should not be penalised by the OPA if cost-benefit analysis supports different levels of service. Customer surveys might not support the fixed value the OPA puts on service.

##### **Our role**

- 24. Some companies had concerns about how to implement a cost-benefit approach in practice. Several respondents saw a lack of agreed principles, and thought we should provide guidance. A consultant said we should look to other industries for ideas on how to value normal loss of service and extreme risks (for example, loss of life). Some thought we should initiate or take part in industry cost-benefit and willingness-to-pay research.

##### **Conclusions**

- (i) We believe cost-benefit analysis is essential to make sure that companies deliver best value to consumers and the environment. Cost-benefit analysis needs to focus on customers' willingness to pay. In

section 2 of the main document we explain how cost-benefit analysis contributes to sustainable development.

- (ii) In the absence of convincing cost-benefit analysis, we require companies to maintain existing levels of service. Thus, we accept stable serviceability as the default output for base service, while challenging the cost-benefit of enhancement schemes and changes to the level of service.
- (iii) We believe companies should engage with quality regulators to identify more cost-beneficial ways of delivering outputs, and not merely accept a list of schemes.
- (iv) For many OPA measures, the ranges used reflect historic industry performance; hence, the incentive is for the poorer performers to catch up with the better performers. Other OPA measures score performance against company specific targets. One example is the economic level of leakage, which is set using cost-benefit analysis.

We also periodically check the OPA against customer priorities. For example past surveys confirm that drinking water quality and consistency of supply are more important to customers than customer service and thus make up a higher proportion of the total OPA. We also reflect this in the customer contact measure where the highest possible score is 200, yet any company scoring more than 180 gets full marks towards the total OPA. Initially, this capped range reflected company performance, but recently we have not changed it (for example, to 200) because customer research tells us customers are broadly happy with current levels of customer service and they are not willing to pay more for further improvements. In this respect, the OPA incentivises only the level of service customers want and are willing to pay for.

We have set out the OPA measures that will apply until 2008-09. We will be consulting on the OPA for 2009-10 onwards. This work will include consideration of how the OPA incentives fit alongside other incentives including the approach of cost benefit analysis to identify an economic level of service.

- (v) We acknowledge the difficulties and the need for practical approaches. We are collaborating with UKWIR on cost-benefit assessment guidance. We will review our business plan guidance, clarifying our stance on social and environmental costs and benefits.

#### **4.2 Assessing the application of common framework principles**

**We intend to collaborate with the industry through a further joint project sponsored by UKWIR to review our assessment process. What should the scope of the proposed collaborative project be?**

25. Most respondents support the project and some offered helpful suggestions. Many used this question to give their views on how our process should develop:

## **Transparency**

26. Three Valleys Water wanted the assessment process to be open and transparent, and was keen to understand in detail at an early stage how the assessment process will work and the implications for prices. Bristol Water wanted early publication of the criteria. Northumbrian Water and Mid Kent Water thought the project should cover both assessment of bandings and how these will affect outcomes. Dŵr Cymru wanted to understand the criteria and weightings as soon as possible. South West Water also wanted to know about aspects of the PR09 process, such as what feedback will be given in the draft determinations, and what factors might persuade us to change our mind on an initial CMPCF assessment. Yorkshire Water wanted to understand what we think a good plan should contain, and similarly Mid Kent Water wanted to establish the preferred format of PR09 submissions.

## **Objective and consistent assessment**

27. Several respondents wanted more objective assessment, perhaps through more detailed scoring rules. United Utilities wanted the 18 criteria developed from qualitative to quantitative measures, and greater clarity of these tests. AMCL was looking for a more consistent assessment process. Northumbrian Water wanted the project to cover responsibilities for scoring to ensure accurate assessment. South West Water thought the project should include how to ensure differences in companies' approaches can be objectively compared (as the CMPCF is not prescriptive).

## **Assessment: When and by whom?**

28. Anglian Water suggested companies should be able to assess their asset management capability independently, and mentioned recent work on this in Australia. They noted that the scoring mechanism should be capable of validation by reporters, and could be used by us. This could be on a regular basis, and also at price reviews.

## **Capital maintenance or asset management?**

29. Two companies asked whether the assessment process is for capital maintenance or asset management generally, and Ewan Group raised the issue of how the process fits in with the more general assessment of asset management. Anglian Water mentioned asset management. AMCL said the assessment should reflect underlying asset management processes. United Utilities suggested developing the methodology to allow CMPCF principles to be applied to other purpose categories, perhaps for the 2014 price review (PR14).

## **Conclusions**

- (i) We want to be as transparent as possible, but we need to retain scope to exercise judgement. Our expenditure assessment methodology will provide a structured framework, but leave space for judgement.
- (ii) We agree that the assessment process for companies' plans should be consistent, and, as far as possible, quantified. The UKWIR project will consider how reporters might be used so that assessments are accurate. The assessment will consider the planning process, leaving space for different technical approaches.

- (iii) We hope to be able to use the assessment process at PR09, but we must await the outcome of the project to see whether it is suitable. We may also consider whether it makes sense to use it more frequently than just at price reviews.
- (iv) We see the assessment as being for asset management planning and specifically investment planning. This is because we believe companies should be producing integrated asset management plans. However at PR09 we would expect to use it in our work on capital maintenance expenditure. We will also consider how it might inform our judgements for quality enhancement, supply demand balance and enhanced service levels.

**How can we strengthen the contribution of reporters in assessing business plans taking account of the application of common framework principles?**

- 30. Northumbrian Water thought reporters should assist in scoring, as they have a more detailed understanding of companies' data and processes. Three Valleys Water suggested that CMPCF assessment could be a joint exercise between reporters and us.
- 31. A number of companies feel it is helpful if reporters are more involved with their development of CMPCF approaches over a longer time.
- 32. Many respondents thought reporters need better training and guidance on the CMPCF, offering a variety of ideas on how this might be done.
- 33. Several respondents suggested that companies carry out and reporters review some kind of annual audit of the company's planning approach.
- 34. Making sure that there is consistency between companies was seen as an important issue, and respondents suggested using a specialist to carry out or review assessments across companies, and/or more communication between reporters.

**Conclusions**

- (i) We are interested in the possible use of reporters to assess the application of common framework principles.
- (ii) The UKWIR project, and guidance from us, will help ensure consistency.
- (iii) We already employ consultants to help ensure consistency across companies, for example on the cost base, and will consider opportunities for extending this type of approach.
- (iv) We acknowledge the need for appropriate training for reporters, and we will include this in the regular reporters' workshops and/or arrange special events as appropriate.

**What are your views on Ofwat assessing company plans at the asset type level?**

35. Views on this question were mixed. It is useful to take account of differences in methodology and data between asset types, as we had to some extent at PR04 using 'exceptional items'. However, assessment by asset type would not be appropriate where companies had fully integrated plans and might re-create 'investment silos'. There were also concerns about the resources we would require to do asset type assessment.
36. CCWater saw greater benefit in dis-aggregating data on a sub-area basis, to understand how assets work together, and facilitate inter-area comparisons.

**Conclusions**

- (i) We expect to adopt a flexible approach, separating out asset types where there is a good reason and otherwise carrying out an integrated assessment. The UKWIR review (section 6.7) came to a similar conclusion. Although different asset types may require different technical approaches to modelling, we believe there should generally be a consistent overall process, which can be assessed on an integrated basis.
- (ii) We do not need inter-area comparisons within companies for our purposes, but companies may well find them useful.

**4.3 Incentives and the use of common framework scoring in setting price limits**

**How can we provide incentives for companies to innovate, and disincentives to seeking undue uplifts in expenditure? Possibilities include:**

- the option presented in section 6.8 of the UKWIR common framework review; and
- the idea of introducing a link between the challenge to historic expenditure and the size of uplift requested.

37. Of the options offered, Severn Trent Water preferred the approach proposed in section 6.8 of the common framework review – capping the uplifts that can be included in price limits for assessments less than 'band A'. Northumbrian Water proposed a scheme for sharing efficiency savings between the company and customers; small efficiency gains would go to the company but the larger the gain, the greater would be the proportion going to customers.

**Conclusions**

If the PR04 process, with the detailed understanding companies now have, was adopted for PR09 without modification, it could create strong incentives for companies to put in high 'bids'. We are considering a range of ideas to remove these undesirable incentives. These include the ideas discussed above and Ofgem's 'sliding scale' method. As already discussed in section 2.2 conclusion (iii), we want to retain a variety of assessment tools; the key



issue is how to balance the insights offered by the more qualitative assessment of the planning process, and more objective methods such as benchmarking and use of the asset inventory.

**How should assessment on common framework principles inform our decisions on quality and service enhancements?**

38. Ewan Group strongly supported application of CMPCF principles to asset management as a whole. Many of the larger companies were in favour in principle of integrated planning using a CMPCF approach, but most had some reservations. United Utilities believed efficiency targets should be lower. Mid Kent Water thought we should consider what capital maintenance could learn from enhancement approaches, as well as vice versa.
39. However, Northumbrian Water and some water only companies saw little use for CMPCF principles in other policy areas.
40. Many companies said quality enhancements are driven by legislative requirements and the policy decisions of Government and other regulators. Some said or implied these are site-specific solutions.

**Conclusions**

- (i) Companies should be managing their assets on an integrated basis, addressing maintenance and enhancement together.
- (ii) We think CMPCF principles are relevant to enhancement areas. But it may not be practical to apply them in the same way. The UKWIR project will be looking at assessing asset management as a whole. As discussed in section 4.2, such a generalised assessment could influence our judgements on enhancements, as well as being used for capital maintenance.

**4.4 Publication of common framework scores or bandings**

**Are there good reasons not to publish our assessment, at PR09, of each company's plan against the common framework principles? If we do publish them, should we use the banding approach as used at PR04?**

41. Most respondents had no objection to publication. Severn Trent Water considered that publication would give companies an added incentive. CCWater strongly supported publication and saw the audience as "consumers and the City".
42. Respondents were interested in the level of detail, most being content with publication of bandings, but several saying that the 'spider diagrams' are too detailed and likely to confuse.

43. Several companies were interested in private feedback from us, and circulation limited to the 22 companies. Mid Kent Water wanted circulation of spider diagrams restricted to companies, adding that we should “consider adding value by including information on industry best practice”. Cambridge Water also promoted the sharing of detailed assessments (subject to commercial confidentiality).

### **Conclusions**

- (i) We expect to publish a high-level assessment, probably bandings, at an early stage in PR09.
- (ii) Companies have told us they find feedback on our assessment useful, and we will provide early feedback on PR09 plans (for example, draft business plans or the equivalent). This will depend on the assessment methodology we adopt, for example if another party carries out the assessment, they should provide the feedback.
- (iii) In identifying best practice, we are happy to give our views, but industry bodies such as WaterUK and UKWIR also have a role. We expect to adopt criteria that reflect best practice.

## **4.5 Balancing capital and operating costs**

**How can we improve our processes, or business plan guidance, to ensure a balanced appraisal of the interplay between capital and operating expenditure for meeting service and serviceability objectives?**

**How can we improve the incentives for rigorous whole-life cost assessment and for minimising net present costs?**

44. Many respondents saw whole life costing (the appropriate balancing of capital and operating costs) as a key aspect of the CMPCF and best practice. But there are other considerations:

- Cambridge Water said changes in expenditure might have to be phased because of the impact on prices; and
- South West Water added considerations of short-term financial constraint and long-term uncertainty leading to investment deferral.

45. Several respondents thought our approach to efficiency treated high opex solutions unfairly, and South West Water wanted more clarity about our process. Mid Kent Water felt there was more regulatory certainty for capex solutions, and this might be a disincentive to adopting opex solutions. However, Mid Kent Water also thought the cost base penalises high capex/low opex solutions. Ewan Group was concerned that efficiency incentives may have led to short-term decision making, and thought more emphasis should be placed on long-term planning and on whole-life costing covering both operational and capital maintenance of assets. United Utilities believed there was a risk that the stage A process might encourage ‘use it or lose it’ behaviours on capex, as once capex had been reduced, it would be difficult subsequently to obtain an increase. United Utilities also thought the cap on the regulatory capital value might be a disincentive for adopting whole-life cost solutions. Three Valleys Water complained that our

PR04 approach unpicked its integrated plan, by accepting some aspects and not others, saying we therefore need a more integrated approach.

46. The solutions offered include assessing capex and (maintenance) opex together, and asking companies to explain their capex/opex balance or put forward alternative scenarios.

47. CCWater and Ewan Group saw links to the sustainability of service to customers. CCWater said we should give companies some comfort regarding projects spanning more than one asset management period.

### **Conclusions**

- (i) We agree that whole-life costing is a key aspect of CMPCF best practice. Our intention is to provide a level playing field between operating and capital expenditure.
- (ii) Companies should present clear business cases based on whole-life costing where they believe the balance between capital and operating expenditure should be changed.
- (iii) As noted in chapter 2 of the main document and discussed at above at the start of section 4, we intend to put more emphasis on long-term planning. This may help with balancing capital and operating expenditures.

## **5. Proportional allocation and the impact of enhancement programmes**

**Is there a better way of dealing with adjustments needed because of the impact of enhancement programmes?**

48. Many respondents thought companies should produce integrated plans covering all drivers, enhancement as well as capital maintenance, and then determine overlaps and synergies. CCWater wanted us to encourage companies to explore synergies, perhaps through lower efficiency targets for “synergistic schemes”. The Environment Agency wanted integrated long-term planning of the sewer network, together with the management of urban drainage as set out in the government consultation ‘Making space for water’, and believes this will allow overlaps and synergies to be identified. A long-term integrated approach would prevent assets deteriorating, allow for development and growth, and take climate change into account.

49. United utilities noted that reliance on analysis of historical capital maintenance expenditure has created an incentive for ‘use it or lose it’ behaviours and may have encouraged companies to change their proportional allocations.

50. Several respondents queried the scale of the problem, as adding new quality enhancement-driven treatment stages does not affect capital maintenance expenditure much in the short to medium term. Wessex Water said the size of the overlap in its £80 million PR04 flooding programme was negligible. But others

disagreed; for example, Bristol Water thought integrated and whole-life planning would increase overlaps. South West Water seemed content with using stage D to deal with overlaps.

51. Anglian Water said that late confirmation of the quality enhancement programme made detailed planning and assessing overlaps difficult. Severn Trent Water wanted quality regulators to produce long-term plans. Yorkshire Water applied any overlap adjustment to enhancement (for example, sewerage quality), not capital maintenance so that enhancement schemes could easily be removed if no longer required.

### **Conclusions**

- (i) In chapter 2 of the main document we discuss how we want to work with the industry and other regulators on long-term issues.
- (ii) At PR09 we expect to make continued use of analyses of historical capital maintenance expenditure, and hence proportional allocation will remain an issue. However, as discussed in MD212 and section 2.2 of the consultation paper, we do intend to apply a more robust challenge to typical levels of past expenditure.
- (iii) The varying views about the significance of proportional allocation may reflect the type of work: while section 19 work on water mains may generate significant synergies with capital maintenance, additional treatment stages at works may be allocated entirely to the quality driver.
- (iv) We asked companies to include a statement of their proportional allocation methods in their 2006 June returns, and we will be analysing these to evaluate the likely effects on our PR09 assessment.

<b>Are our requirements on accounting for synergies between capital maintenance and enhancement unit costs clear and appropriate?</b>
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52. Anglian Water and South East Water thought the existing reporting requirements and guidance were clear, while Three Valleys Water found the existing process adequate.

53. Yorkshire Water said that the PR04 requirements were confusing as we wanted both capital maintenance overlap with enhancement and enhancement overlap with capital maintenance, and wanted clarity on whether enhancement is marginal to capital maintenance or vice versa.

54. United Utilities believed there should be clarity of companies' proportional allocation assumptions, which could be achieved through reconciliation of changes in proportional allocations historically and in the business plan.

55. CCWater thought we should require further information when a company does not include a stage D (overlap) adjustment.

**Conclusions**

- (i) We are looking at how to improve our guidance and monitoring in this area.
- (ii) As noted above, we are likely to focus more on companies' allocation methods. Where methods change, a reconciliation may be required to establish consistency.

**List of responses to RD 04/06 ‘Developing our process for assessing capital maintenance requirements’**

	<b>Organisation</b>	<b>Representative</b>
1	Anglian Water	Jean Spencer
2	Dŵr Cymru	Peter Jones
3	Northumbrian Water	Ken Oswald
4	Severn Trent Water	Dr Tony Ballance
5	South West Water	Keith Richards
6	Southern Water	Barrie Delacour
7	Thames Water	Jerry Cresswell
8	United Utilities	Richard Adams
9	Wessex Water	Keith Harris
10	Yorkshire Water	Richard Ackroyd
11	Bristol Water	Graham Firth
12	Cambridge Water Co.	Tim Stephens
13	Folkestone & Dover Water Services	Ian McAthy
14	Mid Kent Water	Nicola Fomes
15	Portsmouth Water	N. Smith
16	South East Water	Richard Tidswell
17	South Staffordshire Water	Dr E.A. Swarbrick
18	Three Valleys Water	Steve Robinson
19	AMCL	Andrew Sharp
20	CCWater	Deryck Hall
21	Environment Agency	John Fraser
22	Ewan Group	Martin Hall
23	Lloyds Register	Rhys Davies
24	MCL	Mike Levery
25	Mott MacDonald	Paul Chadwick
26	Water UK	Janet Wright