Foreword

The Water Industry Commission for Scotland is an independent body set up by the Scottish Parliament, with statutory responsibility for setting caps (price limits) on the charges that Scottish Water can recover from its customers. These charge caps are set on the basis of the ‘lowest reasonable overall cost’ of discharging Scottish Water’s obligations to its customers and to the environment.

In setting charge caps for the years 2010 to 2015, we have worked closely with the Scottish Government, with customer representatives, in particular Waterwatch Scotland, with the quality regulators – the Drinking Water Quality Regulator and the Scottish Environment Protection Agency – and with other key stakeholders, in a transparent way, over an extended period. I thank them all for their help.

We have been fortunate to have the support of a high-quality Office working under our Chief Executive, who is himself a member of the Commission. I also take this opportunity to thank all those in the Office for all the work that they have done by way of consultation, analysis and explanation, and for their presentation of results in ways that have facilitated our decision making.

Water supply and the disposal of waste water is a long-term business, with a time horizon running beyond a five-year charging period. Our price determinations reflect this. Provided that it can continue to borrow at the levels we have indicated, Scottish Water should be well poised financially to meet the challenges of the future while charging sustainable prices to its customers.

Sir Ian Byatt
Chairman
26 November 2009
Key messages

Ensuring value for money for customers

- This Final Determination of charge caps ensures that customers will receive value for money. It challenges Scottish Water to improve its efficiency further and deliver all of the charging and revised investment objectives of the Scottish Government.

- Over the five-year period 2010-15 charges will rise by 5% below the rate of inflation.
  - Households will enjoy a price freeze in the first year and, subject to inflation, the prospect of a further price freeze in 2011-12. Household charges will increase by less than inflation between 2012 and 2015.
  - Charges for businesses and public sector organisations (except for some users of trade effluent services) will also be frozen in 2010-11 and will thereafter follow the same profile as for households.
  - Many businesses and public sector organisations may be able to negotiate an even better deal under the retail competition framework or reduce their bills by helping Scottish Water to lower its costs.

- Customer service should improve so that it matches or betters the service currently provided by the top performing companies in England and Wales.

- Scottish Water should remain in a strong financial position over the next five years – this bodes well for future charges. Charges would not be affected by any changes in Scottish Water’s financing arrangements.

- There will be household metering trials, including the use of different types of tariffs, which may allow households to control the size of their bills and to influence the extent of their carbon emissions.
Creating a greener water industry

- Scottish Water is financed to deliver more than £2.5 billion in maintaining its assets and improving its environmental and public health performance. We will monitor the delivery of all the agreed outcomes carefully.
  - In particular, we require Scottish Water to reduce its leakage by at least a third by 2014.
  - We expect Scottish Water to investigate the volume of rainwater and groundwater unnecessarily entering its sewerage system. This should help to reduce the impact of extreme rainfall and reduce flooding.

- Scottish Water is also now resourced to:
  - improve Glasgow’s drainage (based on evidence from studies that are currently underway);
  - invest in renewable energy;
  - work with landowners to manage water catchments more sustainably; and
  - support property developers in introducing more sustainable practices.

- There are greater incentives for Scottish Water, and the licensed retailers and their customers, to develop more sustainable solutions. For example:
  - to ease peak demands on drinking water supplies by storing it at a customer’s premises; and
  - to reclaim and recycle waste water rather than let it drain to sewer.

- Competition has brought environmental benefits. Non-household customers can now reduce their carbon footprint and environmental impact by demanding a more tailored service and benefitting from the link between carbon emissions and the use of water.
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Introduction

This Final Determination\(^1\) represents the culmination of a transparent and open consultative process, undertaken over more than three years.

We published our Draft Determination in June and received 22 representations from a wide range of stakeholders. We carefully reviewed these representations, along with new information that became available after we published our proposals. All but one of the representations is published in full, along with our responses to the issues raised, on our website (www.watercommission.co.uk).

Copies of this Final Determination are available on CD and on our website, as are copies of the financial and tariff basket model. Gaelic language and standard size print versions of the Final Determination are also available from our Office.

Our Draft Determination explained the benefits of extending the 2010-14 regulatory control period by an additional year. There was widespread support for this proposal and in August the Scottish Government announced its intention to extend the regulatory control period to five years. The Final Determination therefore considers the period 2010-15.

\(^1\) The Final Determination represents the Water Industry Commission for Scotland’s response to the Scottish Government’s request for a Strategic Review of Charges 2010-15.
Overview

This Final Determination ensures that customers will receive value for money. It challenges Scottish Water to improve its efficiency further and deliver all of the charging and revised investment objectives of the Scottish Government. It is important to note that the Scottish Government has confirmed that customers will never have to pay twice for the promised level of service.

The Final Determination is published at a time of significant economic uncertainty. The next several years are likely to see increasing pressure on public expenditure (in particular on the capital budget). In our charge caps we have taken steps to protect customers from these uncertainties.

Over the five-year period 2010-15, charges will rise by 5% below the rate of inflation. Households will enjoy a price freeze in the first year and, subject to inflation, the prospect of a further price freeze in 2011-12. Household charges will thereafter increase by less than the rate of inflation between 2012 and 2015.

Charges for businesses and public sector organisations (except for some users of trade effluent services) will also be frozen in 2010-11 and will thereafter follow the same profile as for households. Many businesses and public sector organisations may be able to negotiate an even better deal under the retail competition framework or reduce their bills by helping Scottish Water to lower its costs2.

Our conclusions in the Final Determination also take account of the following material new factors:

• the need to finance substantial new objectives required by the Scottish Government since the Draft Determination;

2 Under Section 29E of the Water Services etc. (Scotland) Act 2005.
• our new duties under the Climate Change (Scotland) Act 2009; and
• additional costs that Scottish Water must bear as a result of the Edinburgh Tram project.

Appendix 1 outlines the main differences between the Draft and Final Determinations.

In the course of preparing the Final Determination, we agreed with Scottish Water that there would be merit in setting out the main points of this Determination in a regulatory and monitoring contract. Both parties agreed that performance monitoring could be improved if the Commission and the Board of Scottish Water were to use the same information to review performance in delivering the outputs. Appendix 2 sets out the principal performance indicators that we will monitor and the processes by which initial interim milestones will be agreed and, if necessary, revised.

The charge caps in this Determination will enable Scottish Water to: improve our environment, contribute to sustainable development, reduce its carbon emissions, achieve its economic level of leakage, increase compliance with public health standards, and provide higher levels of service to customers. They allow Scottish Water to cover its lowest reasonable overall cost of delivering all of the revised objectives of the Scottish Government and take full account of the Scottish Government’s Principles of Charging³.

Looking further ahead, our initial assessment indicates that during the next regulatory control period (ie 2015-20) charges could again increase by less than the rate of inflation, (assuming that the level

³ This is available on the Scottish Government’s website, www.scotland.gov.uk.
of investment remains broadly stable in real terms and that Scottish Water can access the debt finance it requires).

**Incentives, governance and developing regulation**

The Final Determination clarifies the incentive and governance arrangements that we see as crucial to the effective operation of Scottish Water in the public sector. It is important that initiatives such as the gilts reserve account (introduced in our last Determination in 2005 and now endorsed by the Scottish Government) are operated in line with this Final Determination.

We wish to make regulation more transparent and to increase opportunities for customers and other stakeholders to engage in the charge setting process. To this end, we allow for the costs to Scottish Water of introducing revisions to the current regulatory reporting requirements. Our initial focus will be on pursuing an accounting separation of Scottish Water’s network and treatment activities for both potable and waste water.

**Ownership and financing of Scottish Water**

Scottish Water’s ownership requires that the Scottish Government should continue to commit substantial public expenditure to the water and sewerage industry in Scotland. This is because the Scottish Government is, at present, the only provider of capital, and Scottish Water is likely to need to borrow fresh capital each year in order to continue to invest in improving its assets. It is, of course, customers who cover the interest costs of any borrowing in their charges. For planning purposes we assume that Scottish Water will need to use £140 million of public expenditure in each year of the regulatory control period.

If Government were unable to make this public expenditure available, (and unwilling to allow Scottish Water to borrow
commercially), prices to customers would have to increase; otherwise delivery of the Scottish Government’s objectives would have to be delayed or reduced in scope. Scottish Water may also have to pay higher corporation tax, which could further increase customers’ bills. The level of capital investment that the Government says it wants to maintain, (around £500 million a year in real terms), would require an increase in the level of borrowing available to Scottish Water at the start of the next regulatory control period.

Our charge caps assume that Scottish Water borrows the same amount for each year of the 2010-15 period and that any unused resources are allocated to the gilts reserve, in line with the process established for the 2006-10 Strategic Review of Charges. We very much welcome that the Scottish Government has confirmed the gilts reserve arrangements in its response to the Draft Determination. This will strengthen Scottish Water’s ability to operate as a business to the benefit of its customers.

Continuing to invest in Scotland’s water industry
The Final Determination also considers carefully both the scope and timing of the delivery of capital expenditure. We believe that Scottish Water should improve its understanding of asset performance, and its management of the investment programme, to ensure that it can deliver the outcomes desired by stakeholders as efficiently as possible.

Scottish Water is financed to deliver an investment programme of just over £2.5 billion over the next five years. This substantial level of investment is good both for our environment and for our economy. However, this is another very large capital expenditure

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4 This is available on the Scottish Government’s website, www.scotland.gov.uk and on our website, www.watercommission.co.uk.
programme. Delivering it efficiently and timeously will represent a substantial challenge. We will monitor Scottish Water’s delivery of the capital programme carefully, paying particular attention to outcomes that were financed in the 2002-06 and 2006-10 periods but which are still not complete.

Cave and Walker reviews
We are following the Cave\(^5\) and Walker\(^6\) reviews of the water industry in England and Wales closely. In light of the Cave review we believe it is important that Scottish Water can demonstrate clearly its compliance with both UK and European competition law. Our approach to developing regulation and pursuing robust accounting separation is consistent with this objective.

The Walker review is considering some of the environmental and customer benefits that may result from more extensive metering of households. We believe that similar benefits may apply in Scotland.

In our view, it may be possible to design household meter tariffs that create a financial incentive to save water and still protect vulnerable households. As such, there could be real environmental benefits from more extensive metering of households in Scotland. The Final Determination allows for the costs of household metering trials [estimated at £7 million]\(^7\) and further work in this area to establish the benefits that may be available. We will discuss with the Scottish Government, Scottish Water and Waterwatch Scotland how best to proceed. This is one of a number of initiatives in this Final Determination that we are taking to improve the industry’s environmental performance.

\(^5\) Professor Martin Cave was commissioned by HM Treasury and Defra to complete a review on competition and innovation in the water industry in England & Wales.

\(^6\) Anna Walker was commissioned by Defra to review charging for household water in England & Wales.

\(^7\) This includes both the capital and operating costs of the trials.
The charge caps

Since we last determined charges in 2005 the Scottish water industry has undergone a radical change, with the introduction of retail competition for all non-household customers across Scotland. In line with this important change, the Final Determination includes:

- limits on the amount Scottish Water can charge households; and
- limits on the amount Scottish Water can charge licensed retail suppliers in return for wholesale services.

We also set out the maximum increase in the default tariffs\(^8\) that retail suppliers must offer non-household customers under their licence conditions in the competitive market. We set these charge caps relative to the Retail Prices Index (RPI). As such, we limit the real change in customers’ bills.

It is important to emphasise that the charge caps we have set have not been achieved at the expense of future customers. We ensured that Scottish Water should end the regulatory control period in a strong financial position – if it meets the terms of its regulatory contract.

Recent figures for RPI have been negative, and it is possible that inflation could remain low during the early part of the regulatory control period. Our approach is to set a specific charge cap for the first year and an overall cap for the full five-year period. This allows Scottish Water to freeze the nominal level of charges in its scheme of charges for 2010-11, (and potentially also in 2011-12 – subject to

\(^8\) The default tariffs are the maximum tariffs that any licensed provider of water or waste water services to businesses and public sector organisations can charge in any part of Scotland. There is also a default level of service which they must provide for this charge.
the level of retail price inflation at that time). Over the five years, customers’ charges will increase at 5% less than the rate of retail price inflation. Our approach ensures that charges stay as stable as possible over this regulatory control period.

### Table 1: Charge caps for household customers

<table>
<thead>
<tr>
<th></th>
<th>2010-11</th>
<th>2010-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household unmeasured water</td>
<td>RPI plus 0.1%</td>
<td>RPI minus 8.1%</td>
</tr>
<tr>
<td>Household unmeasured waste water</td>
<td>RPI plus 1.4%</td>
<td>RPI minus 2.1%</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>RPI plus 0.8%</strong></td>
<td><strong>RPI minus 5.0%</strong></td>
</tr>
</tbody>
</table>

### Table 2: Maximum increases to default tariffs levied by licensed retail suppliers

<table>
<thead>
<tr>
<th></th>
<th>2010-11</th>
<th>2010-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>RPI plus 0.1%</td>
<td>RPI minus 8.1%</td>
</tr>
<tr>
<td>Waste water</td>
<td>RPI plus 1.4%</td>
<td>RPI minus 2.1%</td>
</tr>
<tr>
<td>Trade effluent</td>
<td>RPI plus 1.0%</td>
<td>RPI plus 5.1%</td>
</tr>
</tbody>
</table>
Governance and incentives

Scottish Water must have flexibility to deliver the outcomes required in the next regulatory control period. Such flexibility is likely to be important to the improvement in efficiency that is in the interests of customers and the Scottish Government. We understand that the Scottish Government may now no longer be able to offer Scottish Water full flexibility in the timing of its borrowing. Our charge caps take account of this.

The Scottish Government’s Principles of Charging allowed Scottish Water to borrow up to £150 million in each year of the five-year review period. The charge caps assume that Scottish Water borrows £140 million each year. We further assume that Scottish Water transfers any unused resources available to it during the financial year to its gilts reserve account. Large engineering schemes, such as the new Edinburgh water treatment works, inevitably require Scottish Water to adopt a multi-year planning horizon. The gilts reserve account should act as a ‘shock absorber’ between this planning horizon and the shorter term public expenditure framework.

Consequently, it is particularly important that the gilts reserve account be managed as originally agreed for the current regulatory control period. Any surplus in this account should not be regarded as outperformance and transferred to the gilts buffer until we complete our assessment of Scottish Water’s performance over a regulatory control period. This can happen no earlier than the late summer of the year in which the 2010-15 regulatory control period ends (ie late summer 2015).

The resources in the gilts reserve account should only be used by Scottish Water to meet the costs of differences in timing, whether these are variances in the outcome delivery profile included in the
review of charges or in the profile of efficiencies achieved. Stakeholders should look at the total resources available to Scottish Water in borrowing from the Scottish Government and customers’ charges over the entire regulatory control period. A significant surplus in any one year does not mean that these resources will not be needed, nor does a small or nil balance in the gilts reserve account necessarily mean that Scottish Water is performing poorly.

The Final Determination allows for charges that include the likely commercial cost of debt to a company with the current and projected future strength of Scottish Water. The difference between this allowance and the cost of public sector debt made available to Scottish Water should be added to the gilts reserve account. Our expectation is that there would be £80 million in the gilts reserve account at the end of the regulatory control period if Scottish Water were to perform exactly in line with this Final Determination.

We recognise that the Scottish Government may face increasing pressures on its available budget. If it is unable to make the required level of borrowing available in this regulatory control period, it could consider using the Scottish Futures Trust as a vehicle for providing finance to Scottish Water or, if possible, allowing Scottish Water to borrow commercially along the lines agreed for Network Rail. By allowing for the commercial cost of debt in setting prices, we have ensured that customers’ charges would not increase in the event that Scottish Water is required by the Scottish Parliament to access commercial debt markets.
How we set charge caps

We allow Scottish Water a level of revenue that covers all of its operating, capital and financing costs, taking account of the level of borrowing that is made available by the Scottish Government.

Allowed for rate of return
Scottish Water should enjoy a robust financial position at the end of the current regulatory control period if, of course, it meets the challenges set out in this Final Determination. Its financial strength should be on a par with that of the stronger companies south of the border.

Looking further forward, we plan to allow Scottish Water to maintain financial strength within the ranges set out in Table 3 in future regulatory control periods. The principal credit rating agencies have indicated that these ranges are consistent with a solid investment grade rating. Our plan would be to allow Scottish Water broadly to maintain this level of financial strength irrespective of whether it borrows from the Scottish Government or from commercial sources.

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9 Equivalent to at least a single A rating.
10 This undertaking would be subject to any disbursement by Scottish Water to its owner or provider of finance being reasonable.
Table 3: Assumed range of financial ratios during the regulatory control period

<table>
<thead>
<tr>
<th>Financial ratio</th>
<th>Average assumed value in this Final Determination</th>
<th>Norm for investment grade</th>
<th>Our intention to maintain</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFO/debt(^{13})</td>
<td>12.5%</td>
<td>Around 13.0%</td>
<td>11% to 13%</td>
</tr>
<tr>
<td>RCF/debt(^{14})</td>
<td>12.5%</td>
<td>Around 8.0%</td>
<td>11% to 13%</td>
</tr>
<tr>
<td>Cash interest cover(^{15})</td>
<td>3.4</td>
<td>Around 3.0</td>
<td>Greater than 3</td>
</tr>
<tr>
<td>Cash interest cover I (capital charges: adjusted)(^{16}, {17})</td>
<td>1.6</td>
<td>Around 1.6</td>
<td>1.5 to 2.0</td>
</tr>
<tr>
<td>Cash interest cover II (actual capital maintenance expenditure)(^{18})</td>
<td>2.1</td>
<td>Around 2.0</td>
<td>2.0 to 2.5</td>
</tr>
</tbody>
</table>

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\(^{11}\) As set out by Ofwat.
\(^{12}\) To build confidence in the regulatory framework for any future refinancing.
\(^{13}\) FFO/debt is defined as net cash flow from operating activities less tax paid less net interest paid, all divided by net debt.
\(^{14}\) RCF/debt is defined as net cash flow from operating activities less tax paid less net interest paid less dividends, all divided by net debt.
\(^{15}\) Cash interest cover is defined as net cash flow from operating activities less tax paid plus interest received, all divided by interest paid.
\(^{16}\) Cash interest cover I is defined as net cash flow from operating activities less tax paid less capital charges (infrastructure renewal charge and current cost depreciation) plus interest received, all divided by interest paid.
\(^{17}\) This uses the same depreciation adjustment as is applied to the weighted average cost of capital (WACC).
\(^{18}\) Cash interest cover II is defined as net cash flow from operating activities less tax paid less capital maintenance expenditure (non-infrastructure maintenance expenditure and infrastructure renewal expenditure) plus interest received, all divided by interest paid.
We allowed for an average post-tax real rate of return on Scottish Water’s regulatory capital value of 2.8%. This rate of return is consistent with maintaining the level of financial strength set out in Table 3. At present Scottish Water’s level of depreciation is higher than that which Ofwat would finance in companies’ price limits. If we adjust for the level of Scottish Water’s depreciation to this lower level and add this reduction to the allowed for cost of capital, then the effective actual rate of return that we have allowed Scottish Water increases to 4.2%. This is the rate of return that we believe Scottish Water should use in calculating its contributions to developers. This return would be slightly higher (4.3%) if we adjust for the effect of the separated non-household retail business.

Key assumptions in this Final Determination

The chargeable customer base
There is evidence that not all non-household customers who receive a water and sewerage service are being billed. It is therefore possible that Scottish Water should be receiving more revenue (at the current level of tariffs) from its existing customers. We confirm our intention to introduce an incentive for retailers to identify such customers. This will be based on an approach similar to that used to calculate the reasonable contribution towards initial infrastructure costs incurred by developers of new properties that is already made by Scottish Water.

We also confirm our intention to establish a small incentive for retailers to identify properties currently registered as ‘void’ (and hence not chargeable) but where an occupant is now receiving a

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19 In line with Scottish Water’s representations, we will examine jointly the appropriate level of depreciation charges for Scottish Water, in relation to those elsewhere in the British water industry.
service. We will conduct a short consultation on how these incentives might work in practice after our Final Determination, and will implement the plans by 1 April 2010.

**Growth**

In determining the charge caps we make assumptions about the customer base that we expect Scottish Water to serve for both household and non-household customers. Our projections take account of historical trend changes in the customer base and Scottish Water’s projections of growth in its investment plans. They remain unchanged from our draft proposals.

**Allowed for operating costs**

We base our expectation of the level of operating costs that Scottish Water should require on the history of operating expenditure in the water industry. Performance of the companies south of the border strongly suggests that they are consistently able, over a series of successive price reviews, to deliver broadly constant real operating expenditure. Operating costs do fluctuate but within a relatively tight range of around plus/minus 7%. This is illustrated in Figure 1.
In our view, Scottish Water should similarly be able to operate its business and meet any new obligations with operating expenditure that rises broadly in line with inflation each year. We accept that there are likely to be fluctuations around a broadly flat profile for operating costs.

Scottish Water’s representations show that it intends to take determined steps to achieve upper quartile operating efficiency and levels of service by 2013-14, based on the performance of the companies in England and Wales in 2007-08. Scottish Water considers that it will initially have to incur additional operating expenditure in doing so. Consequently, we now allow for a higher initial level of operating costs but also a reduced level of future expenditure.

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20 We use a five-year rolling average in order to illustrate the extent of likely short-term fluctuations in operating expenditure.
operating costs as a result of Scottish Water’s investment in renewable energy (a new Government obligation).

This change in the operating cost profile is consistent with the observed pattern of broadly flat operating costs for the water industry over the long term. Our expectation is that Scottish Water should be able to maintain operating costs in future regulatory control periods at between around £275 million and £280 million in 2007-08 prices. Any exceptional shocks, such as an increase in Scottish Water’s rates bill, could be taken account of either in the next determination or through an interim determination – in line with normal regulatory practice.
Our revised operating costs comprise the following allowances.

**Table 4: Allowed for operating costs 2010-15 (2007-08 prices)**

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating expenditure baseline</td>
<td>£270.0m</td>
<td>£270.0m</td>
<td>£270.0m</td>
<td>£270.0m</td>
<td>£270.0m</td>
</tr>
<tr>
<td>Improve regulatory reporting</td>
<td>£2.5m</td>
<td>£2.5m</td>
<td>£2.5m</td>
<td>£2.5m</td>
<td>£2.5m</td>
</tr>
<tr>
<td>Work with stakeholders in five water constrained catchments</td>
<td>£3.0m</td>
<td>£3.0m</td>
<td>£3.0m</td>
<td>£3.0m</td>
<td>£3.0m</td>
</tr>
<tr>
<td>Section 29E departures and improving Scottish Water’s strategic asset capacity development plan</td>
<td>£1.0m</td>
<td>£1.0m</td>
<td>£1.0m</td>
<td>£1.0m</td>
<td>£1.0m</td>
</tr>
<tr>
<td>Odour control</td>
<td>£1.0m</td>
<td>£1.0m</td>
<td>£1.0m</td>
<td>£1.0m</td>
<td>£1.0m</td>
</tr>
<tr>
<td>Contribution to the Central Market Agency’s costs</td>
<td>£1.0m</td>
<td>£1.0m</td>
<td>£1.0m</td>
<td>£1.0m</td>
<td>£1.0m</td>
</tr>
<tr>
<td>Facilitating competition</td>
<td>£0.5m</td>
<td>£0.5m</td>
<td>£0.5m</td>
<td>£0.5m</td>
<td>£0.5m</td>
</tr>
<tr>
<td>Household metering trials</td>
<td>£1.0m</td>
<td>£1.0m</td>
<td>£1.0m</td>
<td>£1.0m</td>
<td>£1.0m</td>
</tr>
<tr>
<td>Savings resulting from investment in renewable energy</td>
<td>£0.0m</td>
<td>£0.0m</td>
<td>£0.0m</td>
<td>£0.0m</td>
<td>-£2.0m</td>
</tr>
<tr>
<td>Transition/leakage costs</td>
<td>£14.0m</td>
<td>£11.0m</td>
<td>£4.0m</td>
<td>£0.0m</td>
<td>£0.0m</td>
</tr>
<tr>
<td><strong>Total operating costs</strong></td>
<td><strong>£294.0m</strong></td>
<td><strong>£291.0m</strong></td>
<td><strong>£284.0m</strong></td>
<td><strong>£280.0m</strong></td>
<td><strong>£278.0m</strong></td>
</tr>
</tbody>
</table>
We removed the allowance for additional costs to reduce the risk of cryptosporidium in five low risk catchments because, in his representations, the Drinking Water Quality Regulator (DWQR) stated that he did not believe that such an initiative would be likely to bring any real benefit.

To check our decisions about the level of operating costs to allow for, we compared Scottish Water’s operating expenditure with that incurred by the companies in England and Wales. We employed the econometric models that Ofwat uses to compare the performance of the companies in England and Wales, adapting these to include information from Scottish Water. This analysis suggests that, given determined management, Scottish Water could outperform our allowance for operating expenditure.

Levels of service performance
Our proposal to require Scottish Water to reach upper quartile performance by 2013-14 was widely accepted by stakeholders in their responses to our methodology consultation and indeed by Scottish Water in its business plan. Following Scottish Water’s representations on the Draft Determination we expect it to achieve an Overall Performance Assessment (OPA) score in the range of 380-400 by 2013-14. We expect performance to be maintained above 380 in 2014-15 and in subsequent years.

PPP
In this Final Determination we assume that PPP charges will be £130 million a year. In the Draft Determination we allowed for £2 million additional annual PPP operating expenditure to cover the costs of maintaining compliance at Dalmuir waste water treatment works. While we are pleased that Scottish Water has now accepted that performance at Dalmuir will be included within its OPA score, we note that compliance appears to be costing around £4 million a
year. As such, we have decided to allow for a one-off allowance of capital/operating expenditure of £30 million in order to achieve a permanent solution at Dalmuir for the remaining operational life of the current works. We will require Scottish Water to demonstrate that it has adopted the lowest cost solution\(^{21}\) on a net present value basis. We expect Scottish Water to receive the support of the Reporter for the technical options it examines and to forward the Board copy of its financial appraisal to us.

### Wholesale charge caps

### Unwinding cross subsidies

The Final Determination begins to unwind the substantial cross subsidy in wholesale charges that has benefited some trade effluent customers to the detriment of all other non-household customers. We will consult further with stakeholders on how these cross subsidies should be unwound at the retail level. We will adopt the same principles that we set out in the Draft Determination.

### Transferring activities to licensed providers

In this Final Determination we allow for some activities to be transferred from Scottish Water to licensed providers. These cover:

- metering services;
- trade effluent sampling and consent monitoring; and
- new connections.

\(^{21}\) The discount rate to be employed is the WACC of 4.2% real. In the Final Determination we propose the use of three different discount rates to reflect the circumstances with which Scottish Water could have to deal. These are 2.1% real for the movement of revenue between years; 4.2% for the analysis of agreed and already financed projects; and 6.2% (the assumed cost of equity) for the analysis of projects that are not explicitly financed. This reflects the limit on debt finance that is available to Scottish Water.
Our estimate of Scottish Water’s cost of providing these services remains at around £8 million a year. We propose to reduce Scottish Water’s wholesale charges to reflect this. In the light of some representations on our Draft Determination, we are delaying implementation of these changes and now expect that they will take effect no later than April 2012. Our plan is to consult further on how these changes are best implemented. We will organise small groups of stakeholders to discuss their implementation, and welcome expressions of interest from those who wish to take part.

**Resulting wholesale charge caps**

The wholesale charge caps are set out in Table 5. Transferring responsibility for the new activities to licensed providers by 31 March 2012 would require a bigger adjustment to wholesale charge caps in 2012-13.

**Table 5: Wholesale charge caps**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>RPI minus 1.8%</td>
<td>RPI minus 6.9%</td>
<td>RPI minus 7.1%</td>
<td>RPI minus 3.1%</td>
<td>RPI minus 3.1%</td>
</tr>
<tr>
<td>Foul sewerage and surface drainage</td>
<td>RPI minus 5.0%</td>
<td>RPI minus 10.1%</td>
<td>RPI minus 8.1%</td>
<td>RPI minus 6.3%</td>
<td>RPI minus 6.3%</td>
</tr>
<tr>
<td>Trade effluent</td>
<td>RPI plus 1.0%</td>
<td>RPI plus 1.0%</td>
<td>RPI minus 6.8%</td>
<td>RPI plus 1.0%</td>
<td>RPI plus 1.0%</td>
</tr>
</tbody>
</table>
Impact of charge caps on the competitive retail market

Since April 2008, water and sewerage bills for non-household customers in Scotland have been influenced by two main factors:

- the wholesale price that Scottish Water charges licensed providers; and
- any deals that customers have been able to negotiate with licensed providers for services they receive.

Licensed providers are already offering improved services relating to water efficiency and waste management advice to non-household customers.

At the current time, in order to protect non-household customers, we set default tariffs that limit the prices licensed providers can charge where they do not offer any additional services. In this Final Determination we set default tariffs that will change in line with charges to household customers\(^{22}\).

We conclude that licensed providers should be able to offer more tailored levels of service to their customers and more value added services such as advice on water efficiency and on reducing a customer’s impact on the environment. In proposing default tariffs that change in line with household charges, we expect to see initiatives from the licensed providers in these areas. We would also expect to see customers who would not benefit from such value added services to be offered supply arrangements at prices lower than the default level.

\(^{22}\) Except for trade effluent, which will be the subject of a separate consultation.
Incidence of the industry’s costs

We are encouraged that no stakeholder challenged our provisional analysis of the industry’s cost structure. We are continuing work in this area and will publish regular updates on our thinking on our website.

The investment programme

Scottish Water’s representations asked for an additional £82 million on the £2,396 million allowed for in the Draft Determination.

The extra investment that Scottish Water requested is set out in Table 6.

Table 6: Scottish Water’s request for additional allowances in price limits (2007-08 prices)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking water quality</td>
<td>£41.8m</td>
</tr>
<tr>
<td>Environmental improvement</td>
<td>-£0.3m</td>
</tr>
<tr>
<td>Capital maintenance</td>
<td>£0.0m</td>
</tr>
<tr>
<td>Growth</td>
<td>£28.0m</td>
</tr>
<tr>
<td>Reduced efficiency challenge</td>
<td>£12.4m</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>£81.9m</strong></td>
</tr>
</tbody>
</table>
We reviewed these representations carefully and concluded that we could, in the main, respond positively. Our conclusions are set out in Table 7. We set out our reasoning below.

### Table 7: Commission’s response to Scottish Water’s representations on capital expenditure allowed for in the Draft Determination (2007-08 prices)

<table>
<thead>
<tr>
<th></th>
<th>Scottish Water’s representations</th>
<th>Our adjustment to Scottish Water’s representations</th>
<th>Adjustment to the capital expenditure allowed for</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking water quality</td>
<td>£41.8m</td>
<td>-£21.3m</td>
<td>£20.5m</td>
</tr>
<tr>
<td>Environmental improvement</td>
<td>-£0.3m</td>
<td>-£2.1m</td>
<td>-£2.4m</td>
</tr>
<tr>
<td>Capital maintenance</td>
<td>£0.0m</td>
<td>£19.4m</td>
<td>£19.4m</td>
</tr>
<tr>
<td>Growth</td>
<td>£28.0m</td>
<td>-£15.2m</td>
<td>£12.8m</td>
</tr>
<tr>
<td>Efficiency challenge</td>
<td>£12.4m</td>
<td>£6.3m</td>
<td>£18.7m</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>£81.9m</strong></td>
<td><strong>-£12.9m</strong></td>
<td><strong>£69.0m</strong></td>
</tr>
</tbody>
</table>

In this Final Determination, we allow for additional capital expenditure to respond to new information that was not available when we published the Draft Determination. Most significant in this regard is the inclusion of several new outputs in the final version of the Scottish Government’s objectives that were not in the earlier version. These include the Government’s objectives for growth in 2014-15. We also allowed for capital expenditure in recognition of our duties under the Climate Change (Scotland) Act 2009. Finally, we recognised that Scottish Water will incur substantial additional expenditure because the Edinburgh Trams project does not have to meet the full cost of diverting the water and sewer mains necessary for its completion.

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23 These are available on the Scottish Government’s website, www.scotland.gov.uk
This additional allowed for capital expenditure is set out in Table 8.

Table 8: Allowed for capital expenditure not included in the Draft Determination (2007-08 prices)

<table>
<thead>
<tr>
<th></th>
<th>Scottish Water’s claim</th>
<th>Commission’s adjustment</th>
<th>Final capital expenditure allowed for</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scottish Government’s new objectives</td>
<td>£46.9m</td>
<td>-£5.4m</td>
<td>£41.5m</td>
</tr>
<tr>
<td>Background growth and growth in year five</td>
<td>£34.1m</td>
<td>£21.2m</td>
<td>£55.3m</td>
</tr>
<tr>
<td>Costs associated with Edinburgh Trams project</td>
<td>£8.0m</td>
<td>£0.0m</td>
<td>£8.0m</td>
</tr>
<tr>
<td>Commission’s response to the Climate Change (Scotland) Act 2009</td>
<td>£0.0m</td>
<td>£15.0m</td>
<td>£15.0m</td>
</tr>
<tr>
<td>Solution at Dalmuir Waste Water Treatment Plant(^\text{24})</td>
<td>£0.0m</td>
<td>£30.0m</td>
<td>£30.0m</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>£89.0m</strong></td>
<td><strong>£60.8m</strong></td>
<td><strong>£149.8m</strong></td>
</tr>
</tbody>
</table>

\(^{24}\) Included here for completeness – this should not imply that the Commission favours any particular solution to achieving compliance at Dalmuir.
The Commission’s view on Scottish Water’s representations

In the sections that follow we describe our response to Scottish Water’s representations. The numbers used here have not been adjusted to include the challenge to Scottish Water to improve the efficiency with which it delivers its capital expenditure programme. After we outline our view of the scope of work required, we explain our thinking on the scope that Scottish Water has to improve its efficiency.

Drinking water quality

In its representations, Scottish Water proposed additional investment of £41.8 million on drinking water quality improvements. We discussed Scottish Water’s proposals in detail with the DWQR as part of our assessment of the scope of Scottish Water’s proposed works.

Further work by Scottish Water on its proposals for tackling cryptosporidium had revealed that lower cost solutions were available at 12 sites. Scottish Water therefore reduced its initial cost forecasts by £16.8 million.

We also took account of representations from the DWQR with regard to the importance of ensuring that cryptosporidium requirements are met in full. In particular the DWQR was keen to see investment in standby power supplies at vulnerable sites. We therefore accepted Scottish Water’s representations in this area.

We allowed for mains swabbing\(^{25}\) and network investigations in our revised allowance for capital maintenance and consequently removed these items (£21 million) from Scottish Water’s representation on water quality investment.

\(^{25}\) ‘Swabbing’ involves carrying out activities to clean and restore service to existing underground water pipes.
Scottish Water also requested that the Draft Determination allowance for addressing new legislation concerning raw water supplies be increased to allow the minimum legislative requirements to be met. We concluded that an additional £2.2 million should be allowed on the basis that this should be sufficient to cover all of the legislative requirements in this area26.

Overall, we concluded that we should allow an additional £20.5 million to take account of Scottish Water’s representations on the lowest reasonable cost of meeting the Scottish Government’s objectives for improving drinking water quality.

**Environmental improvement**

Scottish Water requested £0.3 million less investment in order to deliver the Scottish Government’s objectives for improving the environment. This results from a reduction in the number of outputs required to meet the Controlled Activities Regulations. Our analysis indicated that a higher reduction was justified simply by considering the proportion of outcomes still required. We therefore reduced the allowed for investment in this area by £2.4 million.

In our Draft Determination we challenged Scottish Water’s proposals for Loch Ryan. We were not convinced that there was sufficient evidence either that this project would deliver the required environmental benefits or that it is consistent with Scottish Water’s duty to have regard to sustainable development. We did recognise that there is a legal obligation on Government to meet the shellfish water standard at Loch Ryan and we allowed for the likely cost of the proposed improvement. Our allowance was however subject to it being shown that the proposed solution was consistent with Scottish Water’s duties with regard to sustainable development.

26 For the avoidance of doubt, this allowance includes the requirements of both ‘Type A’ properties (ie those which provide a water supply to the general public) and ‘Type B’ properties (ie private homes).
We received a number of representations with regard to the importance of work proceeding at Loch Ryan. Others supported our alternative approach.

The Scottish Government has now notified us that it has directed Scottish Water to proceed with work at Loch Ryan. In the light of the Scottish Government’s Directions, we concluded that work has to progress but we do so on the clear understanding that customers will not pay twice for the required improvements should the current proposals prove ineffective. Notwithstanding the legal obligation on the Scottish Government, we regard the investment at Loch Ryan as disproportionate and an unfortunate example of the lack of an holistic approach to improving our environment including the adaptation to and mitigation of the effects of climate change.

Scottish Water indicated that it has now defined the solutions required to meet the outputs for the 2010-15 period arising from the Flood Risk Management Bill. These outputs will now be included in the projects to be monitored by the Outputs Monitoring Group (OMG)27.

Overall, we concluded that, having carefully considered Scottish Water’s representations, we should reduce the investment allowance by £2.4 million to take account of the reduced outputs required in this area.

**Capital maintenance**

In its representations, Scottish Water agreed that the £220 million a year proposed in the Draft Determination was adequate, provided the allowance did not include investment related to addressing

internal property flooding, mains swabbing and network investigations. Scottish Water proposed instead that these activities should be classified (and financed) as ‘capital enhancement’, consistent with practice in England and Wales.

We accepted this argument in part. We concluded that a component (40%) of the internal sewer flooding investment and all of the network investigation costs should remain classified as capital maintenance, as proposed in the Draft Determination. These costs are included in our capital maintenance allowance.

With regard to mains swabbing, we remain of the view that this is already included in capital maintenance. However, in the light of Scottish Water’s representations we have made a further allowance for the mains swabbing programme (£19.4 million) by including an exceptional addition to our capital maintenance allowance. We would expect these costs to form part of the baseline capital maintenance costs in future periods. Scottish Water is required to report on completion of this programme of work to the DWQR.

Our total capital maintenance allowance for 2010-15 is now therefore £1,119.4 million.

**Growth**

Scottish Water requested additional investment of £28 million on meeting the need for new connections to the water and sewerage network. This related to the allowance for maintaining the internal sewer flooding register at the March 2010 level. We increased our allowance by £12.8 million. This reflects our view that an element of these costs is already included in the capital maintenance allowance.
The scope for efficiency
We received representations from Scottish Water on the level of capital efficiency applied in the Draft Determination. These included both some technical challenges and some questioning of the extent of improvement that we had required. Our updated analysis, taking account of new information and the points raised by Scottish Water, results in an overall efficiency challenge in our Final Determination of 14.5%. This amounts to a reduction of £18.7 million in the challenge that we applied in the Draft Determination.

Revised Scottish Government’s objectives for 2010-15
The Scottish Government’s finalised objectives\(^{28}\) include some new requirements. These include:

- a number of items previously classed as ‘Priority 2’\(^{29}\) at the time of the draft objectives, including measures on climate change mitigation and adaptation;
- growth in the number of connected customers in the fifth year of the regulatory control period; and
- further drinking water quality priorities identified in the period after the Draft Determination.

Scottish Water requested a total of £81 million (pre-efficiency) to meet these new objectives and provide for Year 5 growth. This splits approximately £47 million on new objectives and £34 million on growth.

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\(^{28}\) The costs in this section are also stated before, where appropriate, the Commission’s efficiency challenge.

\(^{29}\) In the draft objectives ‘Priority 2’ items were classed by the Scottish Government as being needed but could, in the view of stakeholders, be deferred into a subsequent investment period. The Scottish Government’s final objectives have established which of these Priority 2 items should be delivered in the 2010-15 period.
Scottish Water’s proposed investment to meet the new objectives includes a project at Loch Eck which we have excluded until such time as any investment is shown to be justified.

Our view is that an allowance of £30.3 million should be sufficient to allow Scottish Water to deliver the additional investment in growth required by the Scottish Government’s revised objectives.

In reviewing our Draft Determination, we noted that the income received by Scottish Water through ‘infrastructure charges’ from new developments has not been properly taken into account. This income is used to fund ‘background growth’ where network reinforcement that cannot be attributed to any particular development is required. We expect the annual income received from infrastructure charges to remain around £10 million. We allow for an additional £25 million of investment on background growth projects in 2010-15.

Our total additional allowance for the revised Scottish Government’s objectives and planning for growth is now just under £97 million (pre-efficiency).

**The Climate Change Act (Scotland) 2009**

Our response to the duties to contribute to climate change mitigation are set out in the section ‘Creating a greener water industry in Scotland’, below.

**Edinburgh Trams**

Scottish Water’s representations highlighted that it was incurring substantial costs as a result of the water and sewer mains diversions that are required by the Edinburgh Trams Project. We included the requested allowance of an additional £8 million. However, we note that this is an additional cost of the project that
has to be borne by water customers in Scotland under the current legal arrangements.

**Improvements at Dalmuir works**
Our proposed additional investment allowance for Dalmuir is set out in the PPP section above.

**Completion of investment commenced prior to April 2010**
Our allowed for charge caps finance the completion of the investment that Scottish Water will have begun before April 2010. We make no further allowance for capital expenditure inflation in order that customers’ interests are protected. We will monitor delivery of this investment carefully.

**Summary of our allowed for investment**
Table 9 sets out the components of our overall assessment of the allowed for investment for the five-year regulatory control period. In coming to these conclusions, we have not sought to estimate the scope for Scottish Water to improve the strategic management or planning of the delivery of the capital expenditure programme.
Table 9: Summary of allowed for investment (2007-08 prices)

<table>
<thead>
<tr>
<th>Investment Area</th>
<th>Draft Determination allowed for investment 2010-15</th>
<th>Scottish Water’s requested adjustments</th>
<th>Our allowed for adjustments from Draft Determination</th>
<th>Allowance for Final Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drinking water quality</td>
<td>£361.0m</td>
<td>£41.8m</td>
<td>£20.5m</td>
<td>£381.5m</td>
</tr>
<tr>
<td>Environmental improvements</td>
<td>£406.7m</td>
<td>-£0.3m</td>
<td>-£2.4m</td>
<td>£404.3m</td>
</tr>
<tr>
<td>Growth</td>
<td>£176.6m</td>
<td>£28.0m</td>
<td>£12.8m</td>
<td>£189.4m</td>
</tr>
<tr>
<td>Other investment priorities</td>
<td>£53.9m</td>
<td>£0.0m</td>
<td>£0.0m</td>
<td>£53.9m</td>
</tr>
<tr>
<td>Total pre-efficiency investment</td>
<td>£998.2m</td>
<td>£69.5m</td>
<td>£30.9m</td>
<td>£1,029.1m</td>
</tr>
<tr>
<td>Efficiency challenge</td>
<td>-£154.5m</td>
<td>£12.4m</td>
<td>£18.7m</td>
<td>-£135.8m</td>
</tr>
<tr>
<td><strong>Total post-efficiency enhancement investment</strong></td>
<td><strong>£843.7m</strong></td>
<td><strong>£81.9m</strong></td>
<td><strong>£49.6m</strong></td>
<td><strong>£893.3m</strong></td>
</tr>
<tr>
<td>Capital maintenance</td>
<td>£1,100.0m</td>
<td>£0.0m</td>
<td>£19.4m</td>
<td>£1,119.4m</td>
</tr>
<tr>
<td><strong>Total post-efficiency investment</strong></td>
<td><strong>£1,943.7m</strong></td>
<td><strong>£81.9m</strong></td>
<td><strong>£69.0m</strong></td>
<td><strong>£2,012.7m</strong></td>
</tr>
<tr>
<td>Completion of investment programmes(^30)</td>
<td>£169.0m</td>
<td>£0.0m</td>
<td>£0.0m</td>
<td>£169.0m</td>
</tr>
<tr>
<td>´Early Start´ investment for the next regulatory control period(^31)</td>
<td>£38.6m</td>
<td>£0.0m</td>
<td>£0.7m</td>
<td>£39.3m</td>
</tr>
</tbody>
</table>

\(^30\) This is the ‘overhang’ in investment from previous regulatory control periods.

\(^31\) Early Start: This is investment on the early stages of projects which will be completed in the next regulatory control period. It allows for a smoother profile of capital investment delivery and should assist Scottish Water in improving its efficiency.
### Table 9: Summary of allowed for investment (2007-08 prices) (continued)

<table>
<thead>
<tr>
<th>Description</th>
<th>Draft Determination allowed for investment 2010-15</th>
<th>Scottish Water’s requested adjustments</th>
<th>Our allowed for adjustments from Draft Determination</th>
<th>Allowance for Final Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional outputs to be specified by OMG</td>
<td>£245.0m</td>
<td>-£73.4m</td>
<td>-£65.0m</td>
<td>£180.0m</td>
</tr>
<tr>
<td>Allowance in Draft Determination</td>
<td>£2,396.3m</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scottish Government’s revised objectives (post-efficiency) including Year 5 and background growth</td>
<td>£0.0m</td>
<td>£73.4m</td>
<td>£88.8m</td>
<td>£88.8m</td>
</tr>
<tr>
<td>Commission’s response to the Climate Change (Scotland) Act 2009</td>
<td>£0.0m</td>
<td>£0.0m</td>
<td>£15.0m</td>
<td>£15.0m</td>
</tr>
<tr>
<td>Costs associated with Edinburgh Trams project</td>
<td>£0.0m</td>
<td>£8.0m</td>
<td>£8.0m</td>
<td>£8.0m</td>
</tr>
<tr>
<td>Solution at Dalmuir</td>
<td>£0.0m</td>
<td>£0.0m</td>
<td>£30.0m</td>
<td>£30.0m</td>
</tr>
<tr>
<td><strong>Total new investment</strong></td>
<td><strong>£2,396.3m</strong></td>
<td><strong>£89.9m</strong></td>
<td><strong>£146.5m</strong></td>
<td><strong>£2,542.7m</strong></td>
</tr>
</tbody>
</table>
Creating a greener water industry in Scotland

We are keen to promote environmental improvement and actions to mitigate climate change that are in the interests of customers. We are also mindful of our future obligations under the Climate Change (Scotland) Act 2009.

As such, this Final Determination includes a range of measures that will allow Scottish Water to achieve a more sustainable water industry going forward and to reduce the impact of its operations on climate change. A number of respondents to the Draft Determination welcomed our approach to supporting sustainable development and encouraged us to go further. Our Final Determination now includes:

- £20 million for climate change mitigation measures through increased renewable energy generation and for a range of studies to establish more sustainable solutions going forward;
- £2 million to identify sustainable and cost-effective solutions to tackling cryptosporidium;
- £3 million per year to identify and operate sustainable land management in five water catchments;
- £2 million of investment and £1 million per year of operating costs to pilot metering trials across Scotland, including establishing the potential impact on water use;
- £5 million to incentivise developers to adopt water efficiency measures in new and refurbished housing;
- £8 million of investment and £1 million per year of operating costs to encourage the development of ‘Section 29E’ opportunities that will bring more sustainable solutions as well as reducing costs; and

Section 29E of the Water Services etc. (Scotland) Act 2005 made specific provision for lower prices to be made available to end customers who do something to reduce the costs incurred by the wholesaler.
• a range of studies including:
  – a feasibility study into combined heat and power opportunities at Scottish Water’s assets;
  – identifying opportunities for matching treatment to environmental conditions;
  – investigating sustainable treatment options, including wetlands and reed beds; and
  – carbon management.

Reducing leakage
We recognise that Scottish Water has made a good start in incorporating leakage into its organisational strategy and addressing the unacceptable level of leakage that existed in 2006. As we noted in our recent Investment report\textsuperscript{33}, Scottish Water exceeded its target for leakage reduction in 2008-09.

In our view reducing leakage is not only economically justifiable – reducing operating costs and capital expenditure – but will also contribute to Scottish Water delivering its obligations with regard to sustainable development and the mitigation of climate change.

We are keen to see Scottish Water improve its understanding of leakage and its costs so that it can take action at a local level where appropriate. Scottish Water should also ensure that its leakage strategy is fully aligned with its asset maintenance and enhancement planning. We are concerned that leakage performance is not yet fully integrated into the strategy of the organisation.

More work is required, but our current view is that it could be reasonable for Scottish Water to reduce its 2008 level of leakage

(802 ML/day) to something well under 500 ML/day by the end of the regulatory control period.

Our work in understanding the incidence of costs in the industry may result in a further lowering of the levels of leakage.34 Progress in this area will be included in our updates on our thinking referred to above.

Reducing infiltration
We would like to see Scottish Water consider the impacts that infiltration has on the wastewater network, particularly as part of the studies of Glasgow’s strategic drainage. We would expect to see the level of infiltration reducing going forward.

Overall, we see the financing of a significant range of study work in the 2010-15 period as an important contribution to ensuring a more sustainable water industry in Scotland.

Increasing metering
Given the clear link between the quantities of water used at both household and non-household sites and their carbon footprint, we believe there could be a compelling case for the introduction of cost-effective metering. This explains our financing of extensive household metering trials. We are keen that the Scottish water industry takes account of the work done by the energy utilities in their forthcoming smart metering initiative. This may help to reduce the unit costs of metering and make it more attractive both to customers and as a tool in promoting sustainability.

34 Such further improvements are not financed in this determination except where there is a clear economic rationale for further progress.
Promoting choice
It has become increasingly evident that the introduction of competition to the Scottish water industry has brought substantial environmental benefits. Non-household customers no longer have to accept the ‘one size fits all’ service that was previously on offer. Many customers are keen to reduce their carbon and environmental footprint, and a more tailored water and sewerage service can potentially play an important role in this. There is a clear link between carbon emissions and the use of potable water. Opportunities exist to:

• adopt more sustainable practices in drainage;
• use recycled/reclaimed water; and
• reduce the pressure on peak use by increasing on-site storage.

Not only is there now a choice of suppliers who are keen to work with customers to achieve these benefits but there are also clear financial incentives for both suppliers and customers.

There is increasing evidence from surveys\(^{35}\) that customers are likely to be more willing to pay for on-going environmental improvement if they have a choice of supplier and these suppliers adopt a genuinely customer-centric approach.

Innovation in regulation
We are committed to improving our regulation of the Scottish water industry and increasing its focus on outcomes that matter for customers and the environment. In this Final Determination we financed substantial unallocated investment, (£180 million of the total investment in enhancing the industry’s performance). This initiative allows timely responses to be made when there is an

\(^{35}\) For example references in some of the Strategic Direction Statements of the water and sewerage companies south of the border and from the Consumer Council for Water.
urgent need to invest and to meet important needs identified through robust studies into the causes of environmental and public health risks. This approach reduces the pressure to allocate resources too early and to priorities that are potentially less important and, in the long run, less urgent. For example, we have been able to delay a decision on the financing of improvements at Loch Eck, referred to earlier. It also allows a timely and effective response to the results of the studies of Glasgow’s drainage that are already underway.

We expect the OMG, with the agreement of the Scottish Government, to establish the process by which priorities for this unallocated investment can be identified, appraised and agreed. In the event that it is not specified fully or is not required, we will seek to implement an interim determination of charge caps. In the absence of any additional relevant factors, this would further reduce the level of bills faced by customers. It could also reduce the industry’s need for public expenditure.

Our work in reviewing carefully the incidence of costs in the industry also appears to suggest that there may be more the industry can do, within its current resources, to improve its environmental performance and to mitigate the risks of climate change. We plan to work with Scottish Water to implement a robust accounting separation of its activities.

**Working with property developers**

We intend to establish a working group with property developers to explore the opportunities that exist as a result of the Water Services etc. Act 2005 and the allowances we have included to adopt more sustainable approaches to water management at new property development.
Conclusion and next steps

We believe that our Final Determination is good for customers; good for our environment in Scotland; and good for the Scottish economy in this time of great uncertainty. It also allows Scottish Water to build on what it has achieved over the past seven years. Scottish Water’s effective response to the challenges it has been set by its regulators is a credit to its Board, its management and all its employees. It is, without any doubt, a public sector success story.

But that performance, no matter how excellent, is now a matter for history. We expect Scottish Water to build on its success and demonstrate that it can maintain and improve further the service it provides to customers. Scottish Water should use the next five years to ensure that its capital expenditure delivery matches the performance it has achieved in delivering improved levels of service and in reducing its operating costs.

A key part of continuing to improve the performance of the Scottish water industry is the conclusion of the regulatory and monitoring contract set out in Appendix 2. The Appendix sets out the principal performance indicators that we will monitor and the process by which initial interim milestones will be agreed and, if necessary, revised. We regard it as essential that both the Board of Scottish Water and the Commission are using the same information in their assessments of performance. The latest version of the contract will be published on our website as soon as it has been signed off by the Board of Scottish Water and by the Commission.
Next steps
Scottish Water has the right to appeal against the charge caps that are set out in this Final Determination. It can require us to refer this Determination to the Competition Commission within 60 days of its publication.

The Competition Commission would then have to decide whether the lowest reasonable overall cost of delivering the Scottish Government’s objectives is equal to, higher or lower than we have set in this Final Determination. The Competition Commission would take into account the same issues that we have taken into account.

The Competition Commission’s conclusions would be binding, subject to judicial review by the Courts. Until the Competition Commission makes its decision, the charge caps set out in this Final Determination would stand. In practice, this means that a referral to the Competition Commission could not impact on customer charges in 2010-11.

If Scottish Water decides to accept this Final Determination, it will prepare a Delivery Plan for the Scottish Government. We will look to that Delivery Plan to set the interim milestones in performance that Scottish Water should be expected to achieve. Our monitoring will be against those milestones and against the final outcomes required of Scottish Water in this Final Determination.
Appendix 1: Overview of changes from the Draft Determination and their impacts on customers

This Appendix sets out the principal changes between the Final Determination and the Draft Determination, which we published in June. These changes reflect the representations that we received from stakeholders; new information that has become available; and the revised objectives of the Scottish Government.

Tables A1 and A2 summarise the main changes between the Draft and Final Determinations. Table A1 outlines the changes that impact on customers’ bills. Table A2 summarises other changes, which, while in our view material, do not have a direct impact on the level of bills.
### Table A1: Summary of the principal financial changes between the Draft and Final Determinations (2007-08 prices)

<table>
<thead>
<tr>
<th>Change from the Draft Determination</th>
<th>Financial impact over five years</th>
<th>Cumulative financial impact over five years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our view on Scottish Water’s representations on operating costs</td>
<td>£20m</td>
<td>£20m</td>
</tr>
<tr>
<td>Our view on Scottish Water’s representations on allowed for capital expenditure</td>
<td>£100m</td>
<td>£120m</td>
</tr>
<tr>
<td>Reduction in expected gilts reserve in March 2015</td>
<td>-£49m</td>
<td>£70m</td>
</tr>
<tr>
<td>Reduction in allowed for interest cost, based on new information</td>
<td>-£11m</td>
<td>£59m</td>
</tr>
<tr>
<td>Reduction in level of as yet unspecified investment</td>
<td>-£65m</td>
<td>-£6m</td>
</tr>
<tr>
<td>Use of infrastructure charge income</td>
<td>-£50m</td>
<td>-£56m</td>
</tr>
<tr>
<td>Scottish Government’s new objectives</td>
<td>£89m</td>
<td>£33m</td>
</tr>
<tr>
<td>Additional costs borne by Scottish Water as a result of the Edinburgh Trams project</td>
<td>£8m</td>
<td>£41m</td>
</tr>
<tr>
<td>Initiatives associated with our duties under the Climate Change (Scotland) Act 2009</td>
<td>£22m</td>
<td>£63m</td>
</tr>
<tr>
<td>Other minor changes</td>
<td>-£5m</td>
<td>£58m</td>
</tr>
<tr>
<td>Change in revenue from customers</td>
<td>£58m</td>
<td>£0m</td>
</tr>
</tbody>
</table>

36 This summary sets out the financial impact of changes in allowed for costs, but excludes the impact of our revised assumptions for inflation in 2009-10.
37 Numbers may not add due to rounding.
38 Examples include corporation tax, tariff rebalancing and working capital.
Table A2: Summary of the principal non-financial changes between the Draft and Final Determinations

<table>
<thead>
<tr>
<th>Change from the Draft Determination</th>
<th>Draft Determination</th>
<th>Final Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our view on Scottish Water’s representations on customer service</td>
<td>Expectation of an OPA score of 389 by 2013-14, increasing to 400 by 2014-15</td>
<td>Expectation of an OPA score within the range of 380-400 for 2013-14, 2014-15 and subsequent years</td>
</tr>
<tr>
<td>Transfer of wholesale activities to retail: meter ownership, new connections and trade effluent management</td>
<td>Planned for April 2010</td>
<td>To be transferred by April 2012; working groups to be established</td>
</tr>
<tr>
<td>Regulatory contract and monitoring improvement</td>
<td>Not in Draft Determination</td>
<td>Included in the Final Determination</td>
</tr>
<tr>
<td>Future financial strength</td>
<td>Not in Draft Determination</td>
<td>Included in the Final Determination</td>
</tr>
</tbody>
</table>
Appendix 2: The regulatory and monitoring contract

The purpose of this contract is to set out the principal factors that the Water Industry Commission for Scotland will monitor over the forthcoming regulatory control period. The aim is to ensure that Scottish Water and the Commission use the same key information in reporting and analysing the performance of Scottish Water to their respective Boards. It is agreed that this information should be consistent, transparent, proportionate, targeted and allow for auditable reporting of performance against the Strategic Review of Charges 2010-15.

Preamble

By accepting the Commission’s Strategic Review of Charges, Scottish Water agrees to deliver, in the timescales outlined in its 2010 Delivery Plan, or as subsequently modified by agreement with the Commission, all of the outputs that are contained in the Strategic Review of Charges.

It is recognised that the Board of Scottish Water may want to set the organisation more challenging targets than those set out in this contract. The Commission will, however, only monitor Scottish Water’s performance against the Strategic Review of Charges and Scottish Water’s Delivery Plan(s).

Scottish Water and the Commission will agree technical and methodological matters that impact on the regulatory information that is reported. This agreement does not impact on the Commission’s annual monitoring through Regulatory Accounts and the Annual Return, or on the monitoring regime that is operated by
the Outputs Monitoring Group (OMG). However, it is recognised that, in due course, the OMG may wish to review its regime in the light of this contract.

**Scottish Water and the Water Industry Commission for Scotland agree that:**

1. They will use the same simple, reliable and unambiguous information and agree its interpretation before the start of the regulatory control period.

2. A common focus on critical aspects of the Strategic Review of Charges will enhance:
   - understanding and dialogue about Scottish Water’s progress;
   - informed scrutiny of progress by Scottish Water’s Board; and
   - informed comment by the Commission on progress.

   The items listed in Table 1 constitute the most critical aspects of this agreement. Table 2 lists other key regulatory outputs and Table 3 lists key cost inputs.

3. They will work together to develop simple ‘dashboard’ formats for presenting this information to their respective Boards by the end of June 2010. Scottish Water agrees to provide complete information in Tables 1, 2 and 3 within 22 working days of each quarter’s end, and to generate ‘dashboard’ presentations using formats to be agreed with the Commission.

4. Scottish Water’s agreed 2010 Delivery Plan will be the principal document against which progress towards full delivery of the Strategic Review of Charges (including sign-off by the relevant quality regulator) is monitored. Scottish Water therefore agrees to set out its annual projections of delivery of the Strategic Review of Charges over the entire regulatory control period 2010-15 in its 2010 Delivery Plan. It further agrees to submit its
proposed projections by the end of January 2010 for agreement by the Commission. Scottish Water will update these profiles in each subsequent annual Delivery Plan update.

5. Either party may change the specification, definition, basis of measurement or monitoring base of items in Tables 1-3, subject to acceptance by the other party. Where such a change takes place, reporting will take place on both the former and new revised basis, so that the impact of the agreed change is readily auditable.
<table>
<thead>
<tr>
<th>Area of performance</th>
<th>Aspect being monitored</th>
<th>Measure to be reported</th>
<th>Strategic Review of Charges</th>
<th>Basis of reporting</th>
<th>Small print</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment</td>
<td>Delivery of overhang</td>
<td>Number of Q&amp;S2 and 3a projects not yet signed off</td>
<td>Table 9</td>
<td>Quarter end against Delivery Plan</td>
<td>1</td>
</tr>
<tr>
<td>Outputs</td>
<td>Commission’s OMD index</td>
<td></td>
<td>Table 9</td>
<td>Quarter end against Delivery Plan</td>
<td>2</td>
</tr>
<tr>
<td>Levels of service</td>
<td>Overall service</td>
<td>Commission’s OPA index</td>
<td>Page 22</td>
<td>Rolling 4 quarters against Delivery Plan</td>
<td>3, 4</td>
</tr>
<tr>
<td>Area of performance</td>
<td>Measure to be reported</td>
<td>Strategic Review of Charges</td>
<td>Basis of reporting</td>
<td></td>
<td></td>
</tr>
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<td>----------------------------</td>
<td>-------------------</td>
<td></td>
<td></td>
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<tr>
<td>Leakage</td>
<td>Total leakage and water into supply</td>
<td>Pages 39 and 40</td>
<td>Rolling 4 quarters against Delivery Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial strength</td>
<td>Suite of key ratios</td>
<td>Table 3</td>
<td>Year end against Delivery Plan</td>
<td></td>
<td></td>
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<tr>
<td>Accounting separation</td>
<td>To be set out in Scottish Water’s Reserve account</td>
<td>Page 42</td>
<td>Year end against Delivery Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alignment of depreciation charge</td>
<td>Depreciation charge</td>
<td>Page 17</td>
<td>To be set out in Scottish Water’s Delivery Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household metering trials</td>
<td>To be set out in Scottish Water’s Delivery Plan</td>
<td>Page 10</td>
<td>To be set out in Scottish Water’s Delivery Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incentives for developers</td>
<td>To be set out in Scottish Water’s Delivery Plan</td>
<td>Page 38</td>
<td>To be set out in Scottish Water’s Delivery Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catchment management</td>
<td>To be set out in Scottish Water’s Delivery Plan</td>
<td>Page 38</td>
<td>To be set out in Scottish Water’s Delivery Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sustainability and climate change</td>
<td>To be set out in Scottish Water’s Delivery Plan</td>
<td>Page 38</td>
<td>To be set out in Scottish Water’s Delivery Plan</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Other key regulatory outputs
<table>
<thead>
<tr>
<th>Area of performance</th>
<th>Aspect being monitored</th>
<th>Measure to be reported</th>
<th>Strategic Review of Charges</th>
<th>Basis of reporting</th>
<th>Small print</th>
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<tbody>
<tr>
<td>Investment</td>
<td>Cost performance</td>
<td>Total capital spend</td>
<td>Table 9</td>
<td>Year to date against Delivery Plan</td>
<td>12</td>
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<tr>
<td>Operating costs</td>
<td>Cost performance</td>
<td>Total operating costs and PPP cost</td>
<td>Table 4 and page 22</td>
<td>Year to date against Delivery Plan</td>
<td>13</td>
</tr>
<tr>
<td>Finance</td>
<td>Borrowing</td>
<td>Net new borrowing</td>
<td>Page 8</td>
<td>Year end against Delivery Plan</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Impact of external factors</td>
<td>Net ‘logging’ position</td>
<td>-</td>
<td>Quarter end</td>
<td>15</td>
</tr>
</tbody>
</table>
The small print

1. ‘Signed off’ means achieving ‘Milestone 5’ in the OMG progress monitoring system, as reported in the Capital Investment Return.

2. The Commission will apply the agreed OMD calculation.

3. OPA is Ofwat’s 2009 OPA measure less billing enquiries and meter readings.

4. As agreed by both parties and with the Reporter on 30.07.09, OPA will include leakage performance assessed over:
   - 2010-11: one year only
   - 2011-12: two year rolling average
   - 2012-13 onwards: three year rolling average.

5. ‘Rolling 4 quarters’ means as measured over the 4 quarters ending with the quarter being reported.

6. Leakage and water into supply will be monitored side by side. Water into supply is Distribution input as defined in the 2009 Annual Return, Table A2, Line 11. For 2010-11, Scottish Water will report its leakage using both the maximum likelihood and component methods. Thereafter, leakage reporting may use only the maximum likelihood method.

7. Leakage profiles will be based on achieving an economic level of leakage, agreed by the Commission, no later than 2013-14. Further work will progress to establish a sustainable level of leakage post 2014.

8. Financial ratios and the reserve account will be monitored annually.

9. Joint plans, to be agreed.
10. In line with Scottish Water’s representations of September 2009, the parties will examine jointly the appropriate level of depreciation charges for Scottish Water, in relation to those elsewhere in the water industry.

11. Joint plans, to be agreed.

12. Total capital spend excludes discretionary investment that falls outside the scope of outputs allowed for in the Strategic Review of Charges, as amended by OMG, and should be reported gross, indicating the amount of contributions.

13. Year to date operating costs will be monitored pro-rata against annual Delivery Plan projections.

14. Year end net new borrowing will be monitored against annual Delivery Plan projections.

15. The net logging position will be an estimated range taking account of differential inflation rates between RPI and COPI; new obligations placed on Scottish Water by the Scottish Government; additional outputs and outputs that are no longer required, (where agreed by OMG); and any other material financial variance (favourable and unfavourable) outside the influence of Scottish Water’s management.

Richard Ackroyd
Chief Executive
Scottish Water

Alan Sutherland
Chief Executive
Water Industry Commission for Scotland

[Date]