

The impact of new improvements on water and sewerage bills: a ready-reckoner

£0.20
£0.40
£0.80
£1.20
£1.60
£2.00
£2.40
£2.80
£3.20
£3.60
£4.00
£8.00
£12.00
£16.00
£20.00



This leaflet explains how to use our bill impact ready-reckoner. We have developed the ready-reckoner so that customers and other stakeholders can work out the impacts on future bills of spending on new improvements.

The leaflet also provides information about current water and sewerage bills in Scotland and the services they pay for.

An [interactive version](#) of this ready-reckoner is also available.

Ensuring value for money

Keeping bills down is a key part of our work. Every five years we set limits on the prices customers pay for their water and sewerage services (this process is called a price review). As a result of our regulation, average household bills are around £105 a year lower today than they would otherwise have been.

The cost of providing – and improving – water and sewerage services puts an upward pressure on bills. So when we set price limits we make sure that the Scottish Government’s objectives for the water industry are delivered at the lowest reasonable overall cost.

When looking ahead at forthcoming investment programmes, decisions are made about individual proposals for improvements. Although many elements of future investment programmes are required by national or international law, there are some discretionary elements, and some flexibility in the timing of this investment.

To involve customers and other stakeholders properly in discussions about investment proposals at the next price review we are seeking to provide a ‘common currency’ for discussions. This is why we developed the ready-reckoner.



About the ready-reckoner

The ready-reckoner is a table that allows a simple, quick conversion from new costs in millions of pounds to the effect on bills. It is based on the more complicated calculations that we carry out when we set prices.

We have designed it to show the effects of incremental increases in expenditure above and beyond that which has already been agreed for the current investment period (2010-15). Such increases might be proposed to improve customer service, drinking water quality and environmental performance. More information about the current spending position is provided on page 7.

We have worked out the impact on bills of new investment in the next period, which is 2015-20. To keep the ready-reckoner simple, it only works out the bill impacts by the end of the period, ie 2020. In practice the impact would build up gradually from 2015.

Change in total investment over 2015-20	Impact by 2020 on average household bill
£5m	£0.20
£10m	£0.40
£20m	£0.80
£30m	£1.20
£40m	£1.60
£50m	£2.00
£60m	£2.40
£70m	£2.80
£80m	£3.20
£90m	£3.60
£100m	£4.00
£200m	£8.00
£300m	£12.00
£400m	£16.00
£500m	£20.00

How to use the ready-reckoner

Simply take the cost of the proposed improvement and use the table on page 2 to read off the impact in pounds on an average household bill.

There are four points to note:

- First, a timing factor. Some investment proposals may take longer to complete than one standard five-year period. It will take longer for the full impact of such investment to affect bills. So an investment proposal that takes two periods (so is complete by 2025) will have only half its full impact by 2020 (and one that takes three periods would have only a third of its full impact by 2020). In such cases the ready-reckoner works out the full impact on bills by the time the investment is complete.
- Second, running costs. The impact on bills could be a little higher in situations where there are also significant new running costs. This will usually occur if new, complex treatment processes are needed. In such cases, you should add an extra 25% on to the answer as a rule of thumb.
- Third, there are instances where what is proposed is not new investment, but rather an increase in running costs. In such cases, you should not use the table but can assume instead that the impact on bills will be around 33 pence for every £1 million per year of new cost.
- Fourth, the amount of government borrowing that is available. Our ready-reckoner assumes that borrowing will continue to be available at levels assumed when we last set prices. However, as explained on page 5, potential changes in the level of borrowing that is available in future could affect the results. Less borrowing would mean a bigger impact than the ready-reckoner shows.

Please note that the ready-reckoner represents an approximate guide only. This is because the true effect of new costs on bills depends on factors such as interest rates, target financial ratios, inflation, corporate tax allowances, the number of new customers receiving a service, and levels of non-payment. We have used a detailed financial model to generate the numbers.



Worked example 1

Scottish Water proposes to reduce the impact of treated sewage effluent on a particular river. It has identified the most cost-effective solution and proposes to invest in additional treatment facilities at a cost of £25 million. It will also need to run new treatment processes.

Ready-reckoner conversion:

For a £25 million cost, we use the £20 million and £5 million lines and add up the results, giving an estimated impact of £1. As Scottish Water will be running extra treatment processes, we add an extra 25% to the answer, giving a total impact of about £1.25.

Worked example 2

Scottish Water proposes a major extension of its water mains to improve reliability of the water supply for a number of communities. The company plans to spread the investment over 10 years. Some new pumping plant will be required. The most economic options identified by Scottish Water involve spending £185 million of investment. Running costs will be minor (covering occasional use of the pumps).

For a £185 million cost, we use the £100 million, £80 million and £5 million lines and add up the results, giving an estimated impact of £7.40. As extra running costs are minor, there is no need to add anything.

Here we have worked out the full impact of the proposal at the end of the 10 years (2015 to 2025). Assuming that the cost is spread evenly over that period, we estimate the impact on bills by 2020 to be only one half of this, that is around £3.70 on average household bills. If we knew the spread of costs then we could use the expected costs for 2015-20 to work out the impact by 2020 more precisely.

The impacts of borrowing

The amount of borrowing that is available to Scottish Water from Government will have an impact on bills. As explained above, our ready-reckoner is based on assumptions that we made when we last set prices about the level of borrowing that would be available.

Scottish Water is currently borrowing on average £140 million a year. The amount of borrowing that will be available for the next investment period is not known at this time. If the amount of borrowing available were to fall, more of the cost of new investment would have to be met by customers. This would increase the bill impacts shown in our ready-reckoner table.

Scottish Water would also have to pay more tax if it took revenue from customers instead of borrowing, adding further to bills. This is because of the way in which tax on businesses is worked out. In fact, Scottish Water would have to raise around £12-13 million from customers for every £10 million of borrowing that is not made available.

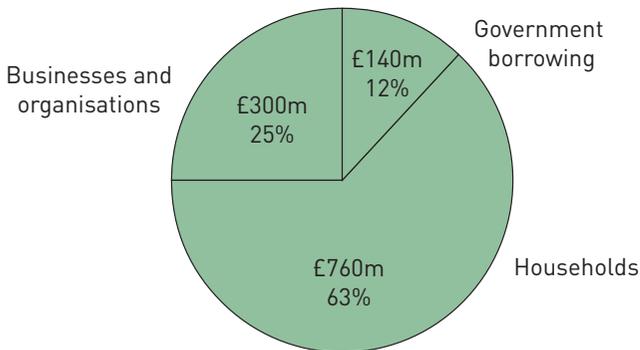
How is Scottish Water funded?

The following sections explain how we pay for the water and sewerage services we receive.

The money Scottish Water requires to provide water and sewerage services comes from:

- the bills household customers pay;
- the bills businesses and public sector, charitable and not-for-profit organisations pay; and
- borrowing from the Scottish Government.

Where the money comes from

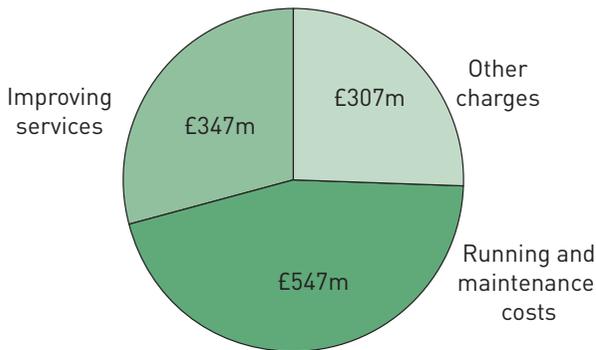


How is this money spent?

Most of the money Scottish Water receives is spent on the day to day running of water and sewerage services and on maintaining equipment and pipes. Scottish Water also spends money on improving services to customers.

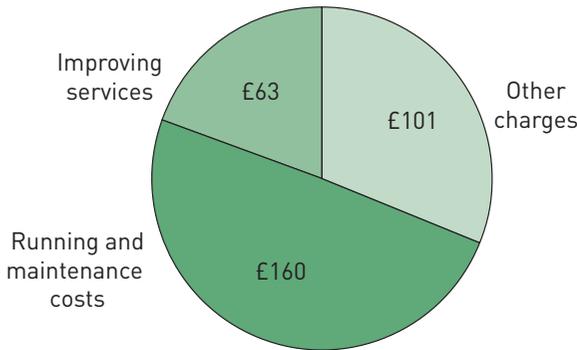
The rest is spent on:

- payments to private sector partners that have built and now operate some of Scotland's sewage treatment facilities;
- interest payments on money borrowed from Government; and
- tax (which Scottish Water must pay, like any other business).



Water and sewerage bills in Scotland

For several years now bills in Scotland have been rising at less than the rate of inflation. The average household bill in 2010-11 is £324 a year. This is lower than those of most of the companies in England and Wales.



Businesses and charitable, not-for-profit and public sector organisations are able to benefit from a choice of supplier through the competitive retail market, which was set up in 2008. This gives all 130,000 non-household customers access to better services and lower charges.

Some 47,000 customers are already enjoying the direct benefits of the competitive market. The bills and service packages that these individual businesses and public bodies receive now depend on the terms offered by licensed retailers in the competitive market.



Your suggestions

We would like the ready-reckoner to be easy to use and understand. We would welcome any suggestions that could help us to improve it. Please use the address below. We will update this ready-reckoner from time to time in light of your suggestions and of any changes that affect its calculations.

Find out more

If you want to find out more about the next price review, or other aspects of the Commission's work, go to: www.watercommission.co.uk

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