



SCOTTISH EXECUTIVE

Valuing the Water Environment: A Survey of Scottish Public Attitudes

Environment Group



**VALUING THE WATER ENVIRONMENT:
A SURVEY OF SCOTTISH PUBLIC ATTITUDES**

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EXECUTIVE SUMMARY

Background and objectives

1. The Environment and Rural Affairs Department of the Scottish Executive commissioned a module of questions in the April/May 2006 wave of Ipsos MORI's Scottish Social Policy Monitor. It should be noted that the interviewing period was in the spring before the relatively dry summer, and prior to much of the media attention regarding various aspects of the water environment in England and in continental Europe.

2. The overall aim of the research was to inform policy in relation to the Water Environment and Water Services (Scotland) Act 2003. This Act implemented the EC Water Framework Directive (WFD), and establishes for the first time a source-to-sea planning framework for river basin management. The WFD is one of the first European regulations to explicitly demand a high degree of involvement from the public in its implementation.

3. The main objectives of the research were to gather information about how people in Scotland perceive, understand and value the water environment in terms of:

- the personal, social and economic importance of the water environment
- the use of the water environment for leisure and recreation
- perceptions of the quality of the water environment and priorities for improvements
- understanding of the threats to the quality of the water environment
- the future of the water environment.

4. The Scottish Social Policy Monitor is a multi-client, face-to-face survey carried out among a random sample of adults across Scotland. Interviews are conducted using Computer Assisted Personal Interviewing (CAPI). The April/May 2006 wave involved interviews with 1,011 adults.

Key findings

The importance of the water environment compared to other environmental issues

5. People appear to be less concerned about, or aware of the impacts of, their own behaviour in relation to the water environment than their actions in relation to other environmental issues.

6. Reducing our contribution to climate change/global warming, addressing how to meet our energy needs, and increasing the levels of recycling were considered the three most important environmental issues facing Scotland. In comparison, ensuring that the water in our rivers and lochs is of a high quality was ranked fourth equal in terms of importance with reducing the amount of waste going to landfill, while reducing the risk of flooding was considered the least important of the eight issues asked about.

7. The public are significantly less concerned about saving water than they are about recycling or using less energy.

Importance of the water environment to Scottish life

8. The water environment is, however, considered important to people's quality of life. Around half of respondents said that it was very important, and around a third said that it was quite important. Only 7% said that it was not important.

9. Drinking water and health were the two most commonly given reasons as to why the water environment is important. These were mentioned by around half of all respondents. Nature/wildlife was the third most commonly given reason (26%). Other than tourism and fishing, few cited economic issues.

Perceptions of water quality

10. People's perception of the quality of the water environment in Scotland is generally very positive. Three-quarters of respondents said that the water environment in Scotland *overall* is either very good or quite good. Only 6% said that it was poor.

11. Similarly, around seven in ten considered the water environment *in their local area* to be either very good or quite good. Around one in seven said that it was poor.

12. The highest priority for improvement among respondents was the quality of coastal waters near urban areas, followed by avoiding the risk of flooding to properties and avoiding damage to wildlife habitats caused by engineering works like altering river banks or loch beds.

13. The lowest priorities for improvement among the public were ensuring a reliable water supply for homes; the quality of water in lochs, rivers and streams in rural areas (which was generally regarded as being good); and ensuring a reliable water supply for industry all year round.

Threats to the water environment

14. Pollution and sewage are seen as the biggest threats to the water environment in Scotland. Eighty-one per cent said that pollution by the general public was either a large problem or something of a problem, 73% said likewise about industrial pollution, and 65% said likewise about pollution from farming. Sewage was also considered a large problem or something of a problem by the majority of respondents (63%).

15. Fewer people offered an opinion as to the potential threat to the water environment by engineering works than other potential threats to the water environment, but this may suggest, as might be expected, that they are less confident in their knowledge of the threat posed by engineering works.

16. The majority of people in Scotland (58%) do not consider serious water shortages likely in the next few years. Less than a third (28%) said that shortages were likely. The most commonly given reason as to why water shortages were likely was climate change/global warming.

17. Most people (72%) said that in the next five years or so, they expect the water environment in their area to stay much the same. Slightly more people said that they expect the water environment to get better (16%) than said it would get worse (9%).

Challenges

18. In summary, the public think that the water environment is important but that it is generally of good quality and is likely to stay that way. Indeed, it appears that people are less concerned or aware of about issues relating to the water environment than they are about other environmental topics. The findings of this survey suggest that there are certain challenges to engaging the general public in the management of the water environment; to persuade them of the need for stricter controls and investment to improve its quality, and that it may be difficult to implement strategies aimed at reducing the demand for water.

INTRODUCTION

Background and objectives

1.1 The EC Water Framework Directive 2000 (WFD), implemented through the Water Environment and Water Services (Scotland) Act 2003, establishes for the first time a source-to-sea planning framework for river basin management. This legislation created a strategic framework to protect the water environment in Scotland, aiming to meet the objectives of the WFD to prevent deterioration of water status and to try to restore all waters to 'good' ecological status by 2015 where possible. The Act was designed to help reduce levels of pollution and to protect habitats in support of Scotland's biodiversity.

1.2 A central component of the WFD process is the assessment of water quality. Previously, water quality has been assessed using chemical parameters, whereas the WFD has broader environmental objectives, and considers the overall health of the ecosystem. In order to develop a robust framework for the assessment of water quality, it is important to consider first the science-base, independently of any potential cost implications. However, it is equally important that the social and economic impacts of the new standards and conditions are assessed rigorously.

1.3 The WFD is one of the first European regulations to explicitly demand a high degree of public and stakeholder involvement in its implementation and the Scottish Executive are required to make informed decisions about the costs of the implementation of the directive. In addition to science-based evidence, such decisions will be informed by the values and priorities expressed by the Scottish public.

1.4 It is within this context that the Environment and Rural Affairs Department of the Scottish Executive commissioned a module of questions in the April/May 2006 wave of Ipsos MORI's Scottish Social Policy Monitor.

1.5 The main objectives of the research were to assess views on:

- the personal, social and economic importance of the water environment
- the use of the water environment for leisure and recreation
- perceptions of the quality of the water environment and priorities for improvements
- understanding of the threats to the quality of the water environment
- the future of the water environment.

Methodology

1.6 The Scottish Social Policy Monitor is a multi-client, face-to-face survey carried out among a random sample of adults across Scotland. Interviews are conducted using Computer Assisted Personal Interviewing (CAPI). The April/May 2006 wave involved interviews with 1,011 adults. It should be noted that the interviewing period was in the spring before the

relatively dry summer, and prior to much of the media attention regarding various aspects of the water environment in England and in continental Europe.

1.7 The data were weighted to reflect the age and sex profile of the Scottish population and the geographical distribution across local authorities.

1.8 Where percentages do not sum to 100%, this may be due to computer rounding, the exclusion of 'don't know' categories or multiple answers. Throughout the report, an asterisk (*) denotes any value of less than half of one per cent. Analysis was undertaken by a number of factors, for example, age, sex and location. Only statistically significant differences have been commented on in the main text.¹

¹ The appropriate two tailed t-test was used to test for significance, using the 95% level of confidence.

FINDINGS

The importance of the water environment

2.1 Public opinion on the importance of the water environment should be set in the context of their views towards environmental issues in general. In order to do this, respondents were asked to rate the relative importance of eight environmental issues facing Scotland. The results are shown in Table 1 below.

Table 1: Relative importance of environmental issues

Q Looking at the issues on this card, which three do you think are the most important environmental issues facing Scotland today?

	Most important	2nd most important	3rd most important	Any mention
Reducing our contribution to climate change/global warming	23	19	14	55
Addressing how to meet our energy needs	16	16	15	46
Increasing the levels of recycling	13	13	21	46
Reducing the amount of waste sent to landfill	9	15	15	38
Ensuring that the water in our rivers and lochs is of a high quality	11	15	12	38
Management of radioactive waste	15	9	11	35
Improving air quality	7	9	7	23
Reducing the risk of flooding	4	3	4	11

Base: Most important: all (1,012), 2nd most important: all mentioning a 'most important' issue (995), 3rd most important - all mentioning a '2nd most important' issue (987)

2.2 Out of these eight issues, reducing our contribution to climate change/global warming, addressing how to meet our energy needs, and increasing the levels of recycling were considered the three most important issues. Ensuring that the water in our rivers and lochs is of a high quality was ranked fourth equal in terms of importance, while reducing the risk of flooding was considered the least important of the issues mentioned.

2.3 Overall, 11% of respondents said that ensuring that the water in our rivers and lochs is of a high quality was the most important of these issues while 38% said it was among the top three in terms of importance. Reducing the risk of flooding was considered the most important issue by only 4% of people, while 11% of respondents listed this issue in their top three.

2.4 Older people placed a higher priority on ensuring the quality of water in rivers and lochs: while only 24% of 16 to 24 year olds rated this issue among their top three in terms of importance, 54% of those aged 65 and over did so. Views on the importance of reducing the risk of flooding did not differ by age.

2.5 As a further measure of concern about the water environment, respondents were asked about what action they took to help protect the environment (see Table 2 below). The most common action undertaken by respondents was recycling household waste. Around two-thirds of respondents said that they did this ‘a lot’ (63%) and 24% said that they recycle household waste ‘a little’. Around 4 in 10 said that they walk, cycle or use public transport rather than a car ‘a lot’ (39%) and around 3 in 10 said that do this ‘a little’. Around 3 in 10 said that they use less electricity or gas in their home ‘a lot’ (29%) and around half said that they do this a little (48%).

Table 2: Actions taken to help protect the environment

Q There are a number of things we can do to help protect the environment but some are easier than others. Which statement on the card best describes how much you are able to do the following?

	I'm not able to do this	I haven't really thought much about this	I do this a little	I do this a lot
Recycle household waste	7	6	24	63
Walk, cycle or use public transport rather than a car	24	8	28	39
Use less electricity or gas in your home	7	15	48	29
Use less water in your home	7	25	46	21

Base: All (1,012)

2.6 Of the actions asked about, the least common was using less water in their home. Around 1 in 5 said that they did this ‘a lot’ (21%) and under half (46%) said that they do this a little. A quarter of respondents said that they had not ‘really thought about’ using less water in their home – a notably higher proportion than for the other actions asked about.

2.7 These reported behaviours indicate that the public are significantly less concerned about saving water than they are about recycling or using less energy.

2.8 Overall, the results relating to relative importance of various environmental issues and actions taken to help protect the environment suggest that people may be less concerned about their own behaviour in relation to the water environment than about other environmental issues. This may be because they do not view water quality or water supply as being problematic. It may also be because they are not aware of the energy costs (and other resource costs) entailed in providing domestic water supply. Additionally, the other behaviours which were asked about may be more common due to other compounding

reasons. For example, the increasing costs of gas and electricity may result in greater interest and action towards energy efficiency measures; and increased services and facilities for recycling have made people more aware of the need and ease of recycling much household waste.

Importance of the water environment to quality of life

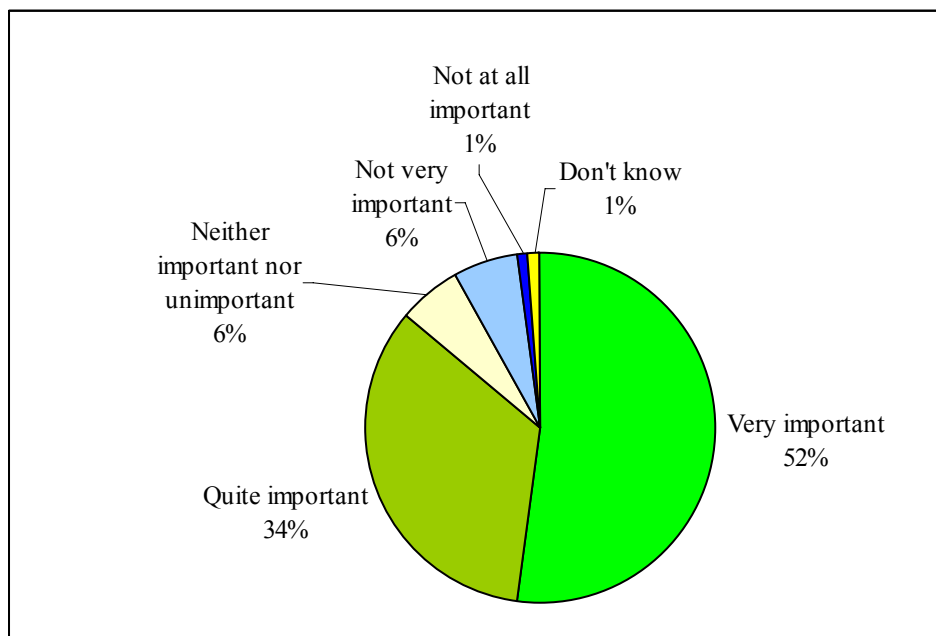
2.9 Although people are less concerned about the water environment than some other environmental issues, most said that their local water environment (excluding drinking water and household water supply) is important to their personal quality of life (see Figure 1 below). Around half (52%) of respondents said that it was very important, and around a third (34%) said that it was quite important. Only 6% said that it was not very important and just 1% said that it was not at all important.

2.10 Views on the importance of the local water environment differed by age. People aged 16-24 were the least likely to say that their local water environment was important to their quality of life (77%) while those aged 55 and over were the most likely age group to say that it was important (92%).

2.11 People living in small towns were more likely to say that the local water environment was important to their quality of life than those living in large urban areas, other urban areas, or rural areas (92% compared with 86%, 83% and 86% respectively).

Figure 1: Importance of the water environment to quality of life

Q Apart from drinking water and your household water supply, how important would you say the water environment in your local area is for your personal quality of life?



Base: All (1,012)

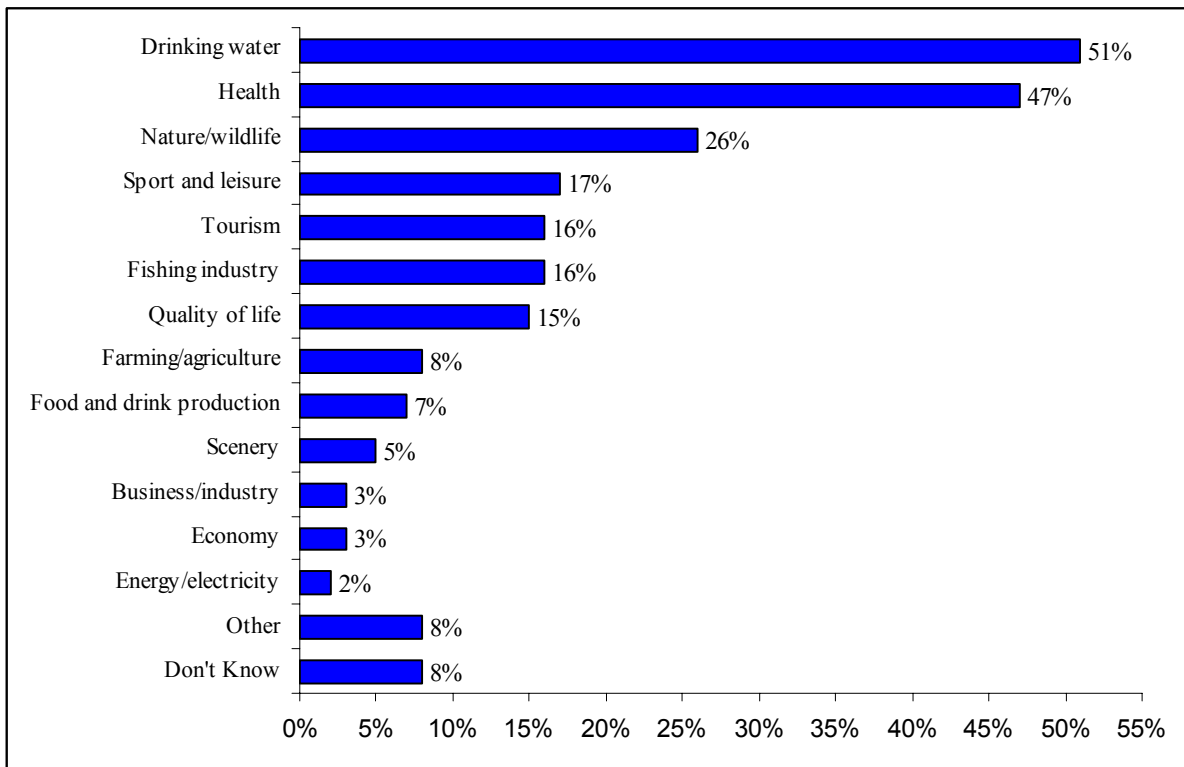
2.12 When asked which aspects of Scottish life a good quality water environment is important for, drinking water and health were by far the two most commonly given responses, with around half of all respondents mentioning these aspects (51% and 47%

respectively, see Figure 2). Nature/wildlife was the third most common aspect cited (26%), followed by sport and leisure (17%), tourism (16%), the fishing industry (16%) and quality of life (15%). Few respondents mentioned farming and agriculture (8%), food and drink production (7%), scenery (5%), business and industry (3%), the economy (3%) and energy/electricity (2%). Overall, apart from tourism and fishing, few mentioned economic issues.

2.13 People in large urban areas were less likely than those in other urban areas, small towns and rural areas to mention drinking water as a reason why a good quality water environment is important (44% compared with 54%, 61% and 56%). Tourism, the fishing industry, farming and agriculture, food and drink production, business and industry, the economy and energy/electricity were all more commonly mentioned by those living in rural areas than other parts of Scotland.

Figure 2: Aspects of Scottish life for which a good quality water environment is important

Q ... which aspects of Scottish life is a good quality water environment important for?



Base: All (1,012)

Water environment and leisure and recreation

2.14 In order to assess how important the water environment is to people's leisure and recreation, respondents were asked about the frequency that they use it for certain purposes (see Table 3).

2.15 Visiting the water environment to 'walk beside it', and to 'sit and look out at a body of water' were the two most common activities. Over three quarters of people (78%) walked by the water environment at least once a year, while 40% did this at least once a month. Almost

three quarters of people (74%) visited the water environment to sit and look out at a body of water at least once a year, with 31% saying they did this at least once a month.

2.16 Those aged between 35 and 64 were the most likely to participate in these activities, while those aged 65 and over were the least likely. Not surprisingly, those in rural areas were more likely to participate in these forms of recreation than those in large urban areas, other urban areas and small towns. There was no significant difference by sex.

2.17 The other forms of leisure and recreation asked about were undertaken considerably less often. Swimming and/or sports where one is in the water were undertaken by 37% of people at least once a year, and by 17% at least once a month². Fishing was undertaken by 9% of people at least once a year, and by 5% at least once a month, while 10% participated in boating, sailing or canoeing at least once a year, and 3% at least once a month.

2.18 People living in rural areas more frequently fish and go boating, sailing and canoeing than those living in the other area types.

Table 3: Usage of the water environment for leisure and recreation

Q I'm going to read out a list of ways in which people might use Scotland's water environment for leisure and recreation. For each one, please tell me how often you use it these days.

	Once a week or more	1 to 3 times a month	Once or twice every quarter	1 to 3 times a year	Less than once a year/ never	Mean usage per annum
Visit to walk beside	19	21	17	21	22	16.4
Visit to sit and look out at a body of water	14	17	18	25	25	13.1
Swimming/sports where you are in the water	7	9	6	14	62	6.7
Fishing	2	3	2	3	88	1.8
Boating/sailing/ canoeing etc.	1	2	1	6	87	1.2

Base: All (1,012)

Perceptions of the quality of the water environment, priorities for improvement, and potential threats

2.19 People's perception of the quality of the water environment in Scotland is generally very positive (see Table 4). Three-quarters of respondents said that the water environment in

² These figures seem high and it may be that people were including swimming in indoor pools.

Scotland *overall* is either very good (19%) or quite good (56%). Only 5% said that it was quite poor and less than 1% said that it was very poor.

2.20 Similarly, when asked about the water environment *in their local area*, around 7 in 10 said that it was either very good (23%) or quite good (48%). Around 1 in 7 (14%) said that it was quite poor or very poor.

2.21 Fewer people in large urban areas than in other urban areas, small town and rural areas, considered the quality of their local water environment good (64% compared with 77%, 76% and 78% respectively). However, there was little difference by area in the proportion who said that their local water environment was poor (15% in large urban areas, compared with 14% for all other area types). Instead, those in large urban areas were more likely to be neutral in their views, saying either that they did not know how good the quality of their local water environment was (7%, compared with 3%, 2% and 4% respectively), or that it was neither good nor poor (13% compared with 6%, 8% and 4% respectively).

Table 4: Rating of the quality of various aspects of the water environment

Q In general, how would you rate the following aspects of Scotland's water environment?

	Very good	Quite good	Neither good nor poor	Quite poor	Very poor	Don't Know
The water environment in Scotland overall	19	56	10	5	*	10
The water environment in your local area, within about 10 miles of here	23	48	9	11	3	5
Lochs, rivers and streams in rural areas	20	51	10	7	*	12
Coastal waters near rural areas	10	41	15	15	2	18
Loch, rivers and streams in urban areas	5	34	19	22	3	17
Coastal waters near urban areas	4	27	20	26	5	19

Base: All (1,012)

2.22 The quality of the water environment was commonly considered better in rural areas than in urban areas, and the quality of water in lochs, rivers and streams was viewed more positively than the quality of coastal waters. Overall, around 7 in 10 respondents said that the quality of the water environment in lochs, rivers and streams in rural areas was either very good (20%) or quite good (51%). When asked about the quality of coastal waters near rural areas, the majority (51%) said that it was very good (10%) or quite good (41%).

2.23 Fewer respondents said that the quality of the water environment in lochs, rivers and streams in urban areas was very good (5%) or quite good (34%). Respondents were least likely to consider coastal water near urban areas to be of good quality, with less than a third of respondents saying that they were either very good (4%) or quite good (27%). A similar proportion said that the quality of coastal water near urban areas was either quite poor (26%) or very poor (5%).

2.24 There were no significant differences in views by where people lived. In other words, while views differed as to the quality of the water environment in rural and urban areas, the views of those living in urban and rural areas were similar.

Priorities for improvements

2.25 In order to examine people’s priorities for improvements, respondents were asked about nine aspects of provision in relation to the water environment and whether they should be improved or maintained at their current level (see Table 5). The majority of people said that there should be at least some level of improvement in six of the nine aspects asked about – but they generally wanted ‘some improvement’ rather than ‘a lot of improvement’. Given the high level of satisfaction with the quality of the water environment overall, these results are perhaps most informative when the aspects are considered relative to each other, rather than in absolute terms. Comparing the proportion of people who said that standards should be maintained at their current level to the proportion who said that standards need to be improved *a lot* gives a useful way to rank the nine aspects in terms of priority.

Table 5: Priorities for improvements

Q For each of the following, do you think standards should be maintained at their current level or do you think there is a need for improvements?

	Maintain standards at their current level	Need some improvement	Needs a lot of improvement	Don't Know
The quality of coastal waters near urban areas	18	48	20	14
Avoiding the risk of flooding to property	26	44	21	9
Avoiding damage to wildlife habitats caused by engineering works like altering river banks or loch beds	23	45	18	14
Avoiding damage to wildlife habitats caused by taking too much water out of rivers and lochs	27	46	15	12
The quality of water in lochs, rivers and streams in urban areas	27	46	15	13
The quality of coastal waters near rural areas	37	41	9	12
Ensuring a reliable water supply for homes all year round	51	36	9	3
The quality of water in lochs, rivers and streams in rural areas	47	38	5	10
Ensuring a reliable water supply for industry all year round	44	34	6	16

Base: All (1,012)

2.26 On this basis, the highest priority for improvement was the quality of coastal waters near urban areas. This is the only aspect that more respondents said required *a lot of* improvement (20%) than said the current standard should be maintained (18%). This is consistent with the earlier finding that coastal waters near urban areas are perceived as the having the poorest quality water.

2.27 The next highest priorities were avoiding the risk of flooding to properties and avoiding damage to wildlife habitats caused by engineering works like altering river banks or loch beds. For each of these aspects, although around one in five (21% and 18% respectively) said that they needed a lot of improvement, around one in four (26% and 23%) said that they should be maintained at their current level of service provision.

2.28 More people said that a lot of improvement was required to avoid damage to wildlife habitats by engineering works than by extracting water (18% and 15%). Similarly, fewer people were happy with current standards relating to engineering works than to water extraction in relation to their effect on wildlife habitats (23% and 27%). This may be because people are more aware of the damage caused by engineering works than damage caused by extraction. On the basis of the survey results alone, however, it is impossible to reject alternative conjectures: that people are equally aware of the damage caused by engineering works and water extraction but think that engineering works cause more severe damage; or that people are relatively ill-informed about the effects of both engineering works and extraction but that think engineering works sounds more drastic.

2.29 The lowest priorities for improvement among the public were ensuring a reliable water supply for homes, the quality of water in lochs, rivers and streams in rural areas, and ensuring a reliable water supply for industry all year round. For each of these three aspects, less than half of the respondents said that either some improvement or a lot of improvement was required (45%, 43% and 40% respectively). With regard to home water supply, more than half (51%) of the respondents said that current standards should be maintained – this was the only aspect of the nine where the majority of respondents said that standards should be maintained at their current level.

Potential threats to the quality of the water environment

2.30 As shown in table 6, pollution and sewage are seen as the biggest threat to the water environment in Scotland. Overall, 81% said that pollution by the general public was either a large problem or something of a problem, 73% said the same about industrial pollution, and 65% said that pollution from farming was a large problem or something of a problem. Less than one in ten respondents considered pollution by the general public, by industry, and by farming not to be a problem at all (5%, 6% and 9% respectively). Sewage was also considered a large problem (33%) or something of problem (30%) by the majority of respondents, while only 14% said that sewage was not a problem at all.

2.31 Fewer than four in ten people said that the other seven potential threats to the quality of the water environment were a large problem or something of a problem. These can be split into two broad groupings: water extraction for industry, domestic water supply, and agriculture; and engineering works such as constructing flood defences, strengthening river banks, constructing dams and river straightening.

2.32 With regard to water extraction, taking water out for industry was considered a large problem or something of a problem by 38% of people. In comparison, water extraction for domestic supply was seen as a large problem or something of a problem by 26%. The corresponding figure for water extraction for agriculture/irrigation was 24%. More people said that taking water out for the domestic water supply was not a problem at all (39%) than did so for the other ten potential threats. Indeed, around half either thought this was not a problem at all or did not know if this was a problem (49%). Given the findings above on the environmental actions that people take, it does appear that a sizeable number are unaware of the potential environmental impacts of maintaining the supply of water for domestic consumption.

Table 6: Perceptions of threats to the water environment

Q Thinking about how often these things happen, as well as how much damage they cause when they do happen, how much of a problem do you think the following things are for the water environment in Scotland?

	A large problem	Something of a problem	A small problem	Not a problem at all	Don't Know
Pollution by the general public (i.e. litter and household chemicals)	52	29	11	5	4
Pollution by industry (i.e. chemicals)	41	32	14	6	7
Pollution by farming (i.e. pesticides, fertilisers, and manure)	29	36	19	9	8
Sewage	33	30	14	14	10
Taking water out for industry	13	25	25	22	16
Constructing flood defences	13	25	22	23	18
Strengthening river banks	9	22	24	24	21
Taking water out for the domestic water supply	6	20	24	39	10
Constructing dams	8	17	20	30	25
Taking water out for agriculture/irrigation	5	19	28	31	16
River straightening	6	15	20	28	31

Base: All (1,012)

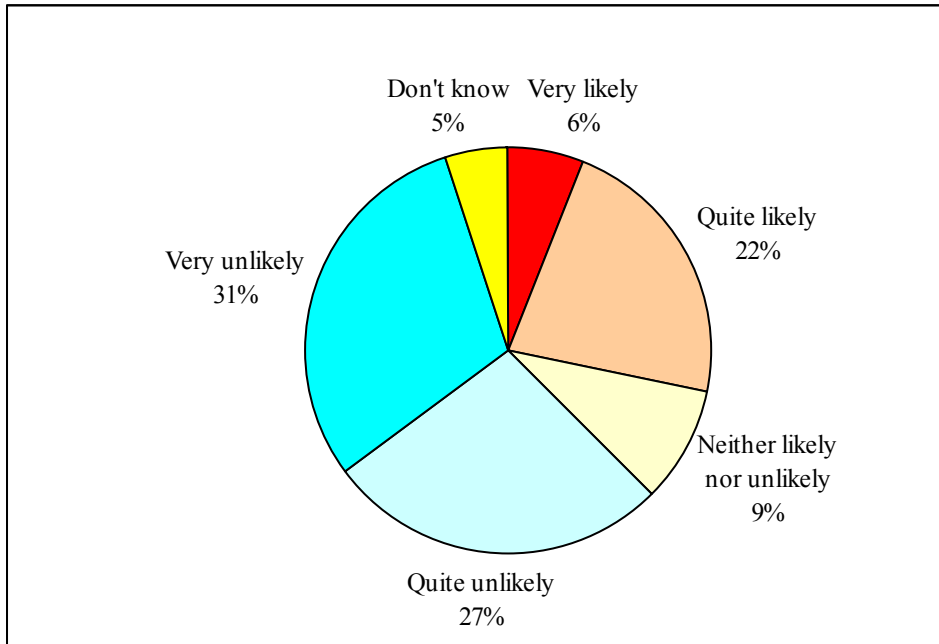
2.33 Constructing flooding defences was considered a large problem or something of a problem by 38% of people. In comparison, strengthening river banks was seen as a large problem or something of a problem by 31%. The corresponding figures for constructing dams and river straightening were 25% and 21% respectively. More people did not know how much of a problem river straightening, constructing dams, strengthening river banks, and constructing flood defences was to the water environment in Scotland than the other potential threats (31%, 25%, 21% and 18% respectively). This suggests that there is less knowledge of the impact of these actions than other potential threats to the water environment.

2.34 There has been a considerable amount of publicity in the past year about water shortages south of the border, with hosepipe bans currently implemented in several areas of England. The majority of people in Scotland do not consider serious water shortages likely in Scotland in the next few years (see figure 3). Overall, 31% said that this was very unlikely

and 27% said it was quite unlikely. However, almost 3 in 10 people said that serious water shortages were either quite likely or very likely (22% and 6% respectively). Given Scotland's image as a 'water-rich' country, that has never before suffered from serious water shortages, it could be considered surprising that 28% of people think that these are likely in the future.

Figure 3: Perceived likelihood of serious water shortages

Q How likely do you think it is that there will be serious water shortages in Scotland in the next few years?



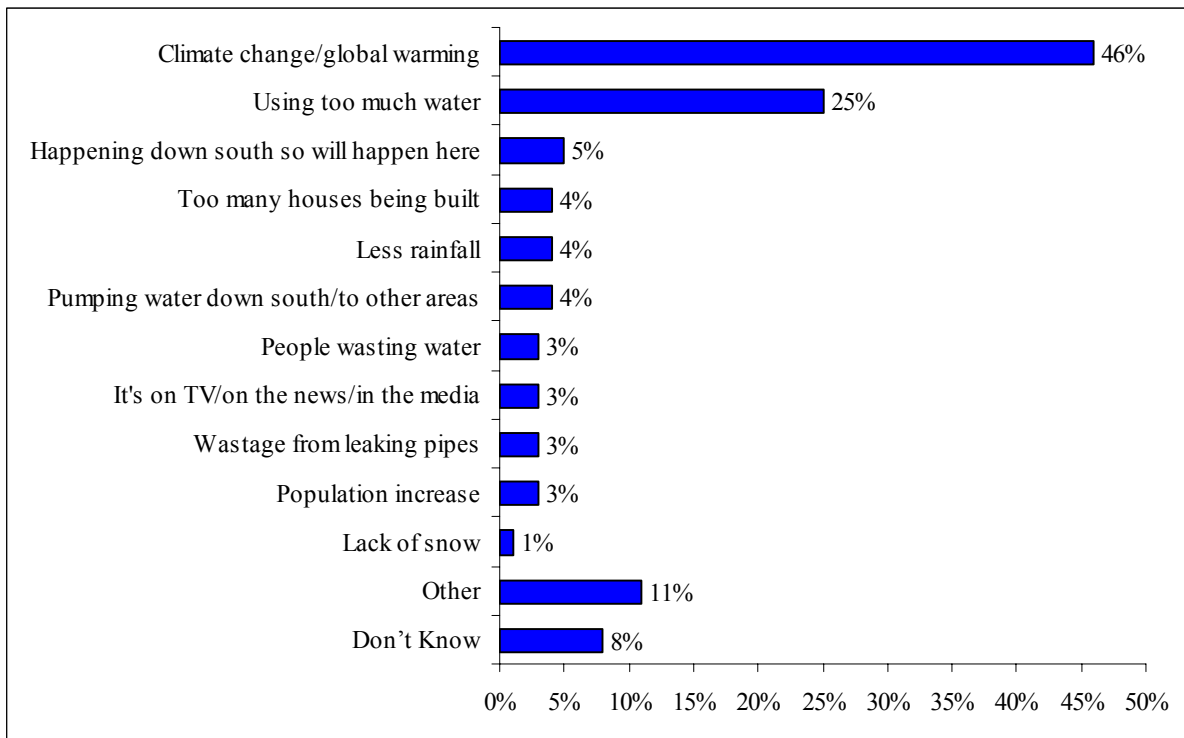
Base: All (1,012)

2.35 More women than men said that serious water shortages were likely in the next few years (37% compared with 19%). Views on the likelihood of serious water shortages did not differ by age or by area type.

2.36 Those who said that water shortages were likely were asked why they thought this (see Figure 4). The most commonly given answer was climate change/global warming. Just under half (46%) of people who thought that water shortages were likely gave this reason. A quarter (25%) said that the amount of water people use would lead to water shortages. No other reason was mentioned by more than 1 in 20 people. These reasons included: water shortages are happening down south so will happen in Scotland too (5%), too many houses being built (4%), less rainfall (4%), pumping water down south or to other areas (4%), people wasting water (3%), wastage from leaking pipes (3%), population increase (3%) and lack of snow (1%).

Figure 4: Reasons why serious water shortages are likely.

Q Why do you say that?



Base: All who think serious water shortages are likely (293)

2.37 Among those who thought that water shortages were unlikely, the most commonly given reason for this viewpoint was the amount of rain, mentioned by 83%. Additionally, a third (33%) said that Scotland has plenty of water. No other single reason as to why water shortages were unlikely was given by more than a handful of respondents, and these included low population growth, lots of lochs, rivers and reservoirs, and positive views of the water supply infrastructure.

Expectations for the future quality of the water environment

2.38 As figure 5 illustrates, most people (72%) said that in the next five years or so, they expect the water environment in their area to stay much the same. More people said that they expect the water environment to get better (16%) than said that it would get worse (9%), with 3% not expressing an opinion.

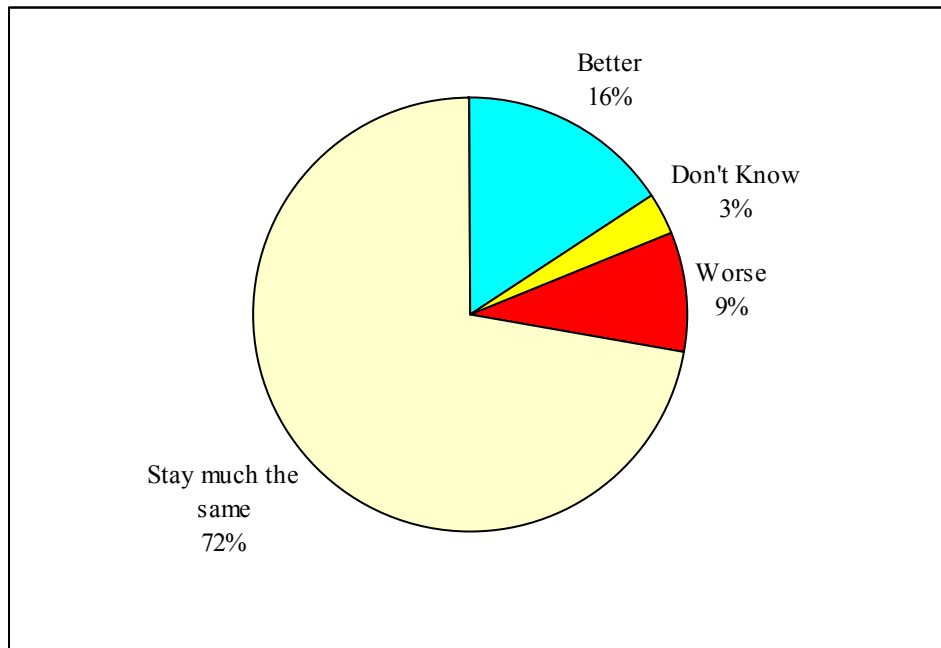
2.39 Views on the future of the water environment differed by sex. Men were more optimistic than women. Among men, 16% expected it to get better compared to 5% who said it would get worse, a difference of 11%. Among women, 15% expected it to get better, and 12% said it would get worse, a difference of 4%.³

³ As mentioned in the introduction, all figures have been rounded to the nearest percentage point. However, when calculating differences between percentages, the non-rounded figures are used, with the resulting difference rounded.

2.40 Views on the future of the water environment also differed by age, with older people more likely to express positive views than young people. Slightly more people aged 16-24 said that it would worsen (18%) than said it would get better (17%). Among all other age groups, more were optimistic than pessimistic about the future of the water environment. Among those aged 55 to 64, 22% said it would get better compared to 7% who said it would get worse, a difference of 15%.

2.41 There was no significant difference with regard to the likelihood of improvement or deterioration in the water environment by type of area.

Figure 5: Perceived likelihood of improvement/deterioration in the water environment
Q Overall, in the next five years or so, do you expect the water environment in your area to get worse, better or stay much the same?

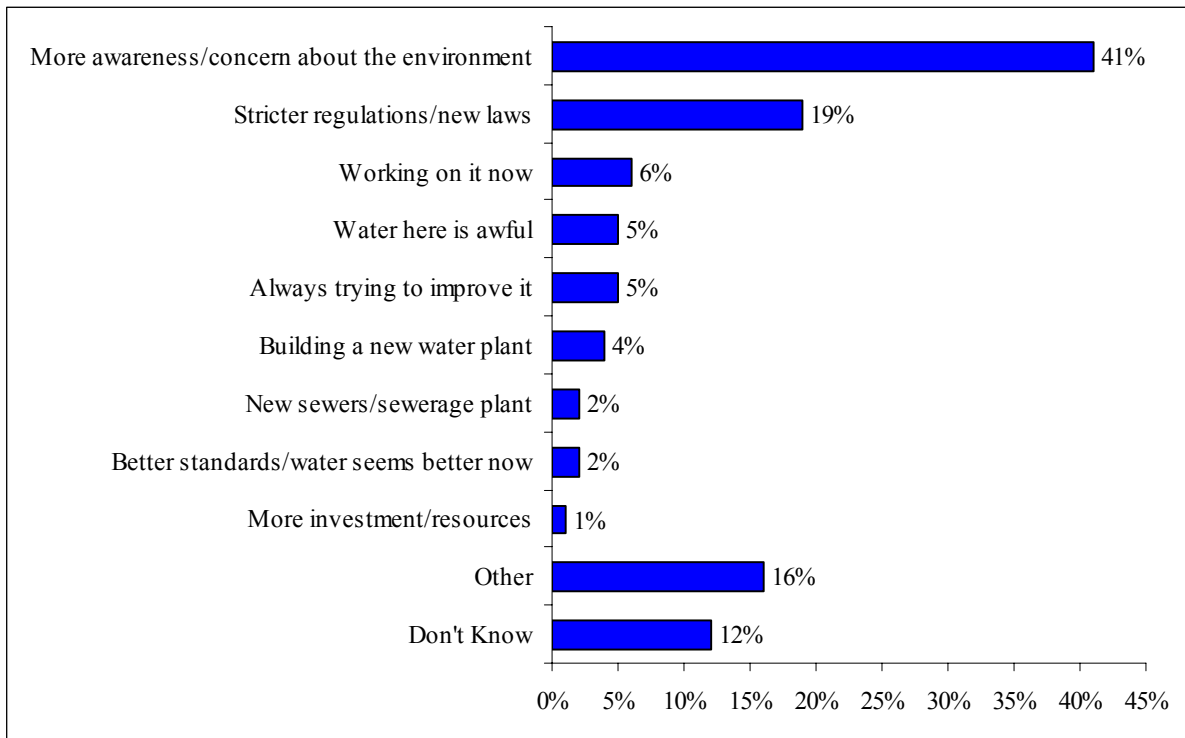


Base: All (1,012)

2.42 When asked why improvement in the water environment in their location is likely, two answers were given by a sizeable proportion of people (see Figure 6). Around 4 in 10 people (41%) said that this was because of increasing awareness/concern about the environment and around 2 in 10 people (19%) said stricter enforcement/new laws. 'Working on it now' (6%), 'water here is awful' (presumably these people think it *must* therefore improve) (5%), always trying to improve it (5%), building a new water plant (4%), new sewers (2%), better standards/water seems better now (2%) and more investment (1%) were also mentioned.

Figure 6: Reasons why improvement in the water environment is likely

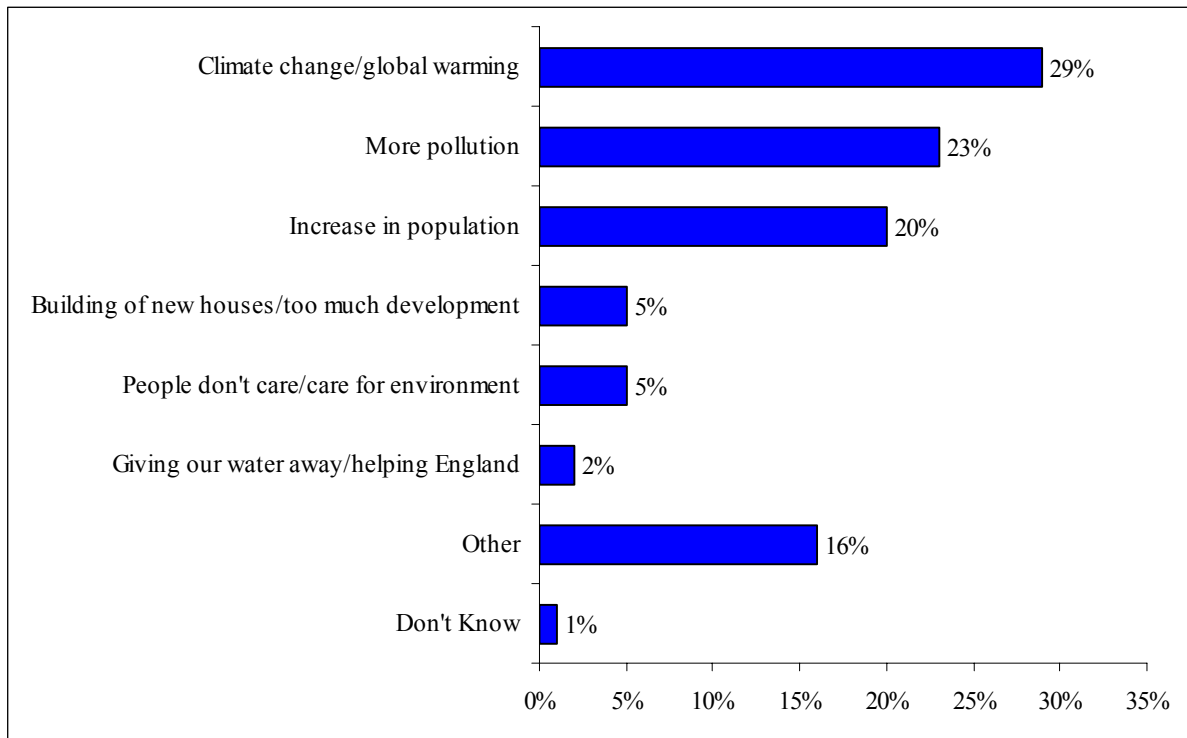
Q Why do you say that?



Base: All who think the water environment will get better (148)

2.43 As shown in figure 7, climate change/global warming (29%), more pollution (23%) and increase in population (20%) were the three most commonly given reasons by those who said that deterioration in the water environment was likely. Building new houses/too much development (5%), people don't care/care for environment (5%) and giving water away/helping England (2%) were also mentioned.

Figure 7: Reasons why deterioration in the water environment is likely
Q Why do you say that?



Base: All who think the water environment will get worse (93)

SUMMARY AND CONCLUSIONS

3.1 People think the water environment is important. This is primarily due to our need for drinking water and for health reasons, but is also in terms of its significance for nature and wildlife. However, compared to other environmental behaviours, reducing domestic water consumption does not appear to rank highly, with fewer people taking action to conserve water than energy. This may be due to a number of reasons: general lack of concern about water supply, limited knowledge of the environmental impact of the processes involved in the supply of water for domestic use, or a lack of other motivating factors (such as financial cost to the individual) to change people's actions.

3.2 In general, most people think that the quality of Scotland's water environment is good, although there is a perception that coastal waters around Scotland are of a lesser quality than lochs, rivers and streams, and that the quality of the water environment is poorer in urban areas than in rural areas.

3.3 It is, therefore, not surprising that views on priorities for improvement relate more strongly to areas where current provision is perceived to be weakest (rather than where it might be most important). The quality of coastal waters around urban areas, ensuring against the risk of flooding, and preventing damage to wildlife habitats were considered priorities for better service provision by more people in comparison to ensuring a reliable water supply for homes and industry.

3.4 Pollution and sewage are seen as the biggest threats to Scotland's water environment. Water extraction and various hydrological engineering works are considered less of a threat, although it should be borne in mind that probably fewer people would feel able to assess the threat of hydrological engineering works.

3.5 With regard to the future, most people think that the water environment will neither improve nor deteriorate in the next five years, but that it is likely to stay much the same. More people expected improvements than expected deterioration, with men being more optimistic than women and older people more optimistic than younger people.

3.6 It is perhaps surprising that 28% of people think that it is likely that Scotland will suffer from serious water shortages in the future, with women more likely than men to express this view.

3.7 In summary, the public think that the water environment is important, of good quality and likely to stay that way. While people have, undoubtedly, become more aware of environmental issues over the last decade, a lack of awareness and knowledge of key issues for the water environment, and, indeed, an apparent complacency suggest the challenge that may exist to engage the general public in its management. Responding to this challenge may include how to persuade them of the need for stricter controls or of investment in quality-improvement, and how to convince them of the need to conserve water and their potential role in this. The issues facing the water environment are more complex than simply ensuring that supply meets demand, but it may be that people are less sensitive to issues of quantity than those of quality.

3.8 Furthermore, the indirect environmental impacts of ensuring water supplies – for example, the energy involved in processing – may not be commonly understood or appreciated. Actions to raise the awareness of the various wider environmental implications of meeting the demand for water should be considered if we are to encourage sustainable use of our water resources in the spirit of the principles of the Water Framework Directive.

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