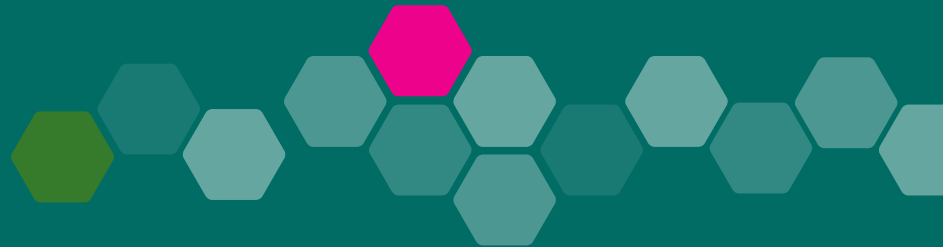




The value of bathing waters and the influence of bathing water quality: Final Research Report: Technical Annex



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The value of bathing waters and the influence of bathing water quality: Final Research Report

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Annex 2: Econometric analysis of onsite survey data – revealed preference method

A-2.1 Introduction

This annex provides selected technical detail and results from the econometric analysis of the survey data to support the findings presented in the main report. This annex is structured as follows:

- Onsite survey sample profile (section A-2.2); and
- Estimation of trip generating function (section A-2.3).

A-2.2 Onsite survey sample profile

The onsite survey was designed to include a representative sample of beach visitors, rather than a nationally representative sample. This is particularly helpful in terms of identifying who visits Scotland’s beaches in terms of gender, age, income and other socio-demographic factors, and estimating how actual visitors value beaches. However, this also means that the results cannot necessarily be assumed to be compatible with national data, or representative of the national population.

This sub-section presents an overview of the onsite survey sample. Figures are rounded to nearest whole number which may cause totals to sum to more than 100%. The onsite survey consists of 516 respondents. Sample sizes are indicated within each of the subsequent tables. Where the indicated sample size differs from the overall survey sample size, this is explained by the routing of the surveys (see accompanying survey documents in Annex 6). Full summary stats for each question of the surveys are provided as accompanying excel documents to the report.

Table A2-1: Onsite survey location

Survey location	N	%
Ayr (South Beach)	105	20%
Gullane	102	20%
Nairn (Central)	102	20%
Portobello (West)	103	20%
Troon (South Beach)	104	20%
Other (Please specify)	0	0%
Total	516	100%

Location (drawing on data from onsite survey question 1)

Table A2-2: Onsite survey visitor type

Visitor type	N	%
Local resident	173	34%
Travelled to the area for work	0	0%
Day tripper	250	48%
On a short break, away from home for 2-6 days	36	7%
On a long break, away from home for 7 or more days	35	7%
Foreign visitor on holiday	20	4%
Other	2	0%
Total	516	100%

Visitor type (drawing on data from onsite survey question 2)

Table A2-3: Onsite survey number of people in group

Number of people in group	Adults		Children	
	n	%	n	%
None	0	0%	0	0%
1	168	33%	329	64%
2	275	53%	75	15%
3	36	7%	61	12%
4	20	4%	29	6%
5	8	2%	11	2%
6	4	1%	3	1%
7	2	0%	3	1%
8	1	0%	1	0%
9	0	0%	0	0%
10	0	0%	0	0%
More than 10	2	0%	4	1%
Total	516	100%	516	100%

Number of people in group (drawing on data from onsite survey question 9)

Table A2-4: Onsite survey gender

Gender	N	%
Male	202	39%
Female	314	61%
Total	516	100%

Gender (drawing on data from onsite survey question 37)

Table A2-5: Onsite survey age range of respondent

Age range of respondent	N	%
16-24	23	4%
25-34	74	14%
35-44	92	18%
45-54	89	17%
55-64	97	19%
65-74	112	22%
75+	27	5%
Prefer not to say	2	0%
Total	516	100%

Age range of respondent (drawing on data from onsite survey question 38)

Table A2-6: Onsite survey annual total household income

Annual total household income	N	%
Less than £10,000	17	3%
£11,000-£20,000	87	17%
£21,000-£30,000	59	11%
£31,000-£40,000	37	7%
£41,000-£50,000	24	5%
£51,000-£60,000	17	3%
£61,000-£70,000	7	1%
£71,000-£80,000	2	0%
£81,000-£90,000	0	0%

Annual total household income	N	%
£91,000 - £100,000	1	0%
Over £101,000	0	0%
Prefer not to say	265	51%
Total	516	100%

Annual total household income (drawing on data from onsite survey question 39)

Table A2-7: Onsite survey ethnic group

Ethnic group	N	%
Scottish/English/Welsh/Norther Irish/British	486	94%
Irish	1	0%
Gypsy or Irish Traveller	0	0%
Any other White background	11	2%
White and Black Caribbean	0	0%
White and Black African	3	1%
White and Asian	2	0%
Any other mixed background	0	0%
Indian	4	1%
Pakistani	0	0%
Bangladeshi	0	0%
Chinese	0	0%
Any other Asian/Asian British background	0	0%
African	1	0%
Caribbean	0	0%
Any other Black/African/Caribbean background	0	0%
Arab	0	0%
Any other background	8	2%
Don't wish to say	0	0%

Ethnic group	N	%
Total	516	100%

Ethnic group (drawing on data from onsite survey question 41)

A-2.3 Estimation of trip generating function

A-2.3.1 Factors influencing the frequency of visits

Figure A2-1 summarises the average distance travelled in miles by visitor type. Stated distance and travel time are found to be highly correlated and consistent with visitor type with day trippers travelling notably further than visitors who are local residents. In considering respondents' mode of transport, Figure A2-2 presents results which show respondents that walked, jogged or travelled by bike travelled shorter distances on average than respondents with another mode of transport.

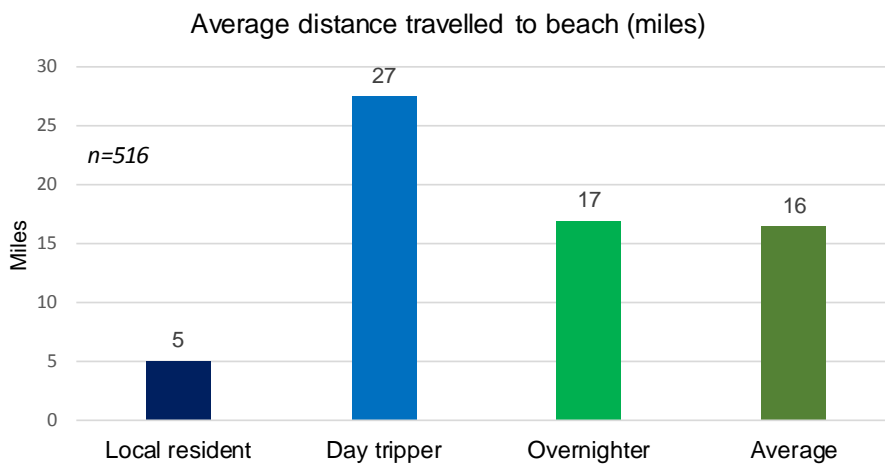


Figure A2-1: Average distance travelled in miles by visitor type (drawing on data from onsite survey questions 26 and 27)

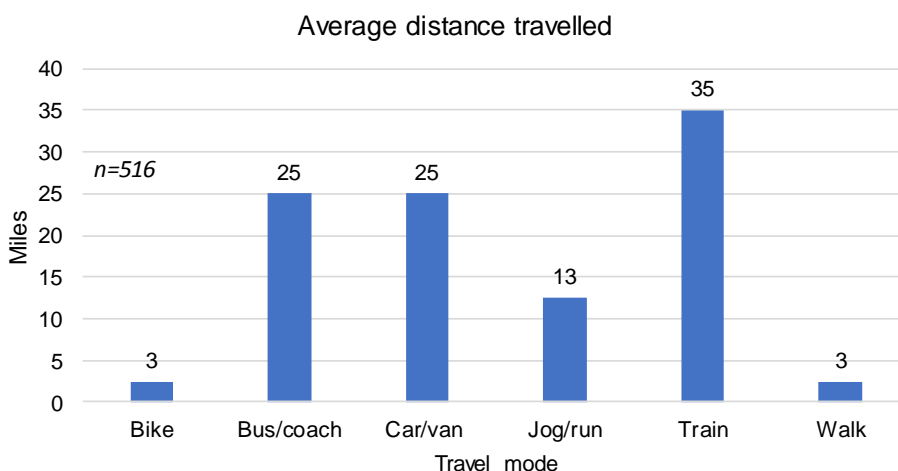


Figure A2-2: Average distance travelled by respondents' mode of transport (drawing on data from onsite survey questions 26 and 27)

Respondents were asked how many trips they made to a beach in a year. Table A2-8 presents a breakdown of the average distance travelled across the range of trips made by respondents. Respondents who make fewer trips to a beach in a given year tend to travel further distances and vice versa.

Table A2-8: Average distance travelled by respondents' visit frequency

Number of visits per year	Average distance (miles)	Sample size
More than 100	3	84
51-100 trips	8	48
31-50 trips	8	23
21-30 trips	8	22
16-20 trips	9	11
11-15 trips	18	24
6-10 trips	13	29
3-5 trips	18	64
Less than 3 trips	25	211

Average distance travelled (miles) and sample size (n) of respondents by number of visits per year (drawing on data from onsite survey questions 27 and 4).

A-2.3.2 Trip generating function

A trip-generating function (TGF) was specified to analyse the factors influencing visits to bathing waters. The TGF predicts the number of visits by an individual to a beach in a given year. It combines data from the onsite survey for the observed number of visits per year and the stated reduction in visits due to an advisory against bathing. This allows the function to be applied to estimate the reduction in visitor numbers to a site as a result of advisory signs being displayed. In particular, the TGF is based on the stated behaviour ('contingent behaviour') questions which elicit the change in visitor behaviour in the event of signs advising against bathing being displayed. This allows for the change in visits to be estimated.

This analysis also considered the categorization of sites by type, whether the site is a rural beach, a coastal village/town beach or a resort beach. The category of each is presented in Table A2-9 below.

Table A2-9: Site type

Site	Site type
Ayr (South Beach)	Coastal resort
Gullane	Coastal village
Nairn (Central)	Coastal town
Portobello (West)	Coastal town
Troon (South Beach)	Coastal town

Table A2-9: Site type of sample locations

The TGF is based on the specification of a ‘best fit’ model presented in Table A2-10. The full model predicts the number of trips per visitor per year to a bathing water as a function of a variety of explanatory variables including distance travelled, site characteristics, visitor characteristics and number of substitute sites (Table A2-10).

Overall the main findings accord with reasonable prior expectations and the analysis shows, that, all else equal:

- The further the distance travelled to the site, the fewer the number of visits made;
- As distance to substitute sites increases, the number of visits to the site increases;
- Income is not a significant determinate of number of trips;
- A site with bathing water status of ‘sufficient’ are visited more often than ‘poor’;
- A site meeting ‘excellent’ status is not significant in impacting trip numbers;
- Day trippers tend to visit a given beach less often than local residents;
- Overnighters tend to visit a given beach less often than local residents;
- Male visitors visit less frequently than female visitors;
- Older respondents visit the beach more frequently;
- Dog walkers tend to visit a given beach more often than those who visit for other activities; and
- Coastal towns are visited more frequently than coastal resorts.

The overall model fit for the results is good (R^2 (adj) = 0.617) and certain findings above are valid given that they are in line with prior expectation. For example, the results are as expected in terms of distance, that dog walkers visit more often than others.

These results also present a variety of interesting findings for which there were no prior expectations. From a social point of view that older respondents visit more frequently is worth highlighting. Some older aged persons are less likely to have alternative opportunities for recreation, and so implications of declining bathing water quality might disproportionately affect this population. Likewise, that income is not a significant factor in determining the number of visits highlights the value of bathing waters across the entire population, with potential implications of improving environmental equality.

In terms of bathing water quality, the results indicate that a site meeting sufficient status (i.e. not failing) impacts the number of trips people make, however, improvements to good or excellent status do not. This implies that individuals care about a site in terms of not being 'poor' however, are less concerned with improvements beyond that. Discussions with focus groups also support this finding.

There are of course limitations within this study and the methods used that should be considered. Although the number of bathing waters considered (five) is a small proportion of the total number of beaches across Scotland (86), there is added confidence in the results due to the survey being based on one that was used by the Environment Agency to assess the perceptions, behaviours, and values of visits and bathing water quality across 43 sites in England (sample size of approx. 10,000) (eftec et al., 2014). This previous work provides a useful reference against which results from this study can be compared/validated. The results from both studies in terms of the factors that are found to impact the number of visits, as well as the implications of bathing water quality on visits align. Because of this, there can be a higher degree of confidence in that we have included the most important factors in determining visits to bathing waters, and in terms of the relative lack of importance of bathing water quality.

However, adequate care should be taken when using the results of this study to explore values associated with other beaches. For safe measure, the results should be interpreted as applying to similar bathing waters and similar types of visitors. For example, there may be certain types of beaches that offer a vastly different array of recreational opportunities, and would not necessarily be comparable to the sites selected within this study. It is therefore recommended that when applying the values produced from this study, Defra's value transfer guidelines be used (eftec, 2009). These guidelines emphasise transparency and the appropriate use of sensitivity analysis to address concerns of accuracy.

Table A2-10: Trip-generating function – factors influencing the number of visits to a bathing water site per year (onsite survey)

Explanatory variable	'Best Fit' model
Distance to beach (m)	-0.05268***
Distance to substitute (km)	0.007484***
Income	-0.00129

Explanatory variable	'Best Fit' model
Water quality 'sufficient' (from 'poor')	0.094004***
Water quality 'excellent' (from 'poor')	0.06653*
Day visitor (local residents as base)	-0.769842***
Overnight visitors (local residents as base)	-3.030816***
Gender (male)	-0.04659**
Age	0.054539***
Dog walker	1.597335***
Water activities	-0.356105***
Site type (Coastal resort as base)	0.287084***
Constant	3.473186***
R – squared (adjusted)	0.617
Base (sample size)	462

*** indicates coefficient estimate is statistically significant at the 1% level, ** indicates coefficient estimate is statistically significant at the 5% level, * indicates coefficient estimate is statistically significant at the 10% level. Distance travelled is coded in terms of miles (as respondents answered in miles in the survey); distance to substitute beaches is measured in kilometers (km) based on geographical information system (GIS) calculations. The sample size has been reduced due to eliminating responses with missing (refused) postcode data.

A-2.3.3 Estimation of travel cost model

The individual travel cost model (ITCM) examines how the number of visits an individual makes to a site changes as travel costs (distance and time) change, whilst controlling for substitute sites, overnight visitors, total expenditure, household size, age, and household income. As discussed previously, this is interpreted as the WTP for access to the sites. Given the relatively small number of observations for each individual site, data are pooled to estimate WTP per visit, which gives a sample of around 500. The ITCM is estimated using a Poisson model. The travel cost elements apply conventional assumptions for distance and distance to substitute sites. Travel time is valued at 75% of the average wage rate and fuel cost at £0.30/m. Table A2-11 presents the regional ITCM parameter estimates.

Table A2-11: Individual travel cost model - factors influencing the number of visits to a bathing water site per year

Explanatory variable	Coefficient
Travel cost per person per visit	-0.112407***
Travel cost per person per visit to substitute sites	0.002239
Day visitor (local residents as base)	-0.950565***

Explanatory variable	Coefficient
Overnight visitors (local residents as base)	-3.058914***
Age	0.055688
Dog walker	1.611831***
Income	-0.020634
Gender	-0.019
Water quality 'sufficient' (from 'poor')	0.089608
Water quality 'excellent' (from 'poor')	0.059104
Site type (Coastal town)	0.323574*
Water activities	-0.285943
Constant	3.559173***
R – squared (adjusted)	0.601
Base (sample size)	462

*** indicates coefficient estimate is statistically significant at the 1% level, ** indicates coefficient estimate is statistically significant at the 5% level, * indicates coefficient estimate is statistically significant at the 10% level. The sample size has been reduced due to eliminating responses with missing (refused) postcode data.

The WTP for access – shown in Table A2-12 below – is determined by the ratio of observed annual visits and the coefficient of travel costs.

Table A2-12: Estimated WTP for recreation visits (£/visit)

'Best fit model'	WTP (£/visit)
Overall	£8.90

Annex 3: Econometric analysis of online survey data – stated preference method

A-3.1 Introduction

This annex provides selected technical detail and results from the econometric analysis of the survey data to support the findings presented in the main report. This annex is structured as follows:

- Online survey sample profile (section A-3.2); and
- Choice experiment analysis (section A-3.3).

A-3.2 Online survey sample profile

Figures are rounded to nearest whole number which may cause totals to sum to more than 100%. The online survey consists of a sample of 1,013. Sample sizes are indicated within each of the subsequent tables. Where the indicated sample size differs from the overall survey sample size, this is explained by the routing of the surveys (see accompanying survey documents in Annex 6). Full summary stats for each question of the surveys are provided as accompanying excel documents to the report. Quotas were used in order to ensure a nationally representative sample. Overall, our data fits the quotas, however our weighting was also applied to our econometric models in order to mitigate any slight discrepancies (i.e. variations within 5% points).

Table A3-1: Respondent gender

Respondent gender	Online n	Online %	Target quota %
Male	444	44%	48%
Female	569	56%	52%
Total	1013	100%	100%

Respondent gender (drawing on data from online survey question 4)

Table A3-2: Respondent age

Respondent age	Online n	Online %	Target quota %
18-24	77	8%	11%
25-34	133	13%	17%
35-44	160	16%	15%
45-54	197	19%	18%

Respondent age	Online		Target quota %
	n	%	
55-64	205	20%	16%
65+	214	24%	23%
Total	1013	48%	100%

Respondent age (drawing on data from online survey question 5)

Table A3-3: Main income earner's socio-economic group

Income earner's socio-economic group	Online		Target quota %
	n	%	
AB	215	21%	19%
C1	340	34%	31%
C2	189	19%	24%
DE	268	26%	26%
Total	1013	100%	100%

Main income earner's socio-economic group (drawing on data from online survey question 7)

Table A3-4: Ethnic group

Ethnic group	Online n	Online %
Scottish/English/Welsh/Northern Irish/British	933	92%
Irish	4	0%
Gypsy or Irish traveller	0	0%
Any other White background	43	4%
Mixed - White and Black Caribbean	0	0%
Mixed - White and Black African	3	0%
Mixed - White and Asian	5	0%
Any other Mixed background	0	0%
Indian	3	0%
Pakistani	7	1%

Ethnic group	Online n	Online %
Bangladeshi	0	0%
Sri Lankan	0	0%
Any other Asian background	3	0%
Caribbean	1	0%
African	3	0%
Any other Black background	0	0%
Arab	0	0%
Any other ethnic group	2	0%
Prefer not say	6	1%
Total	1013	100%

Respondent ethnicity (drawing on data from online survey question 44)

Table A3-5: Number of people in household including both adults and children

Number of people in household	Online n	Online %
1 person	227	22%
2 people	466	46%
3 people	159	16%
4 people	117	12%
5 people	24	2%
6 people	10	1%
more than 6 people	9	1%
Prefer not to say	1	0%
Total	1013	100%

Number of people in household including both adults and children (drawing on data from online survey question 46)

Table A3-6: Age of household members

Age of household members	Online n	Online %
Aged 0 - 12 months	38	9%
Aged under 5 years	67	16%
Aged 5 - 10 years	134	33%
Aged 11 - 15 years	99	24%
Aged 16 - 18 years	63	15%
Prefer not to say	9	2%
Total	410	100%

Age of household members (drawing on data from online survey question 48)

Table A3-7: Household income

Household income	Online n	Online %
Less than £10,000	116	11%
£11,000 - £20,000	245	24%
£21,000 - £30,000	202	20%
£31,000 - £40,000	166	16%
£41,000 - £50,000	89	9%
£51,000 - £60,000	39	4%
£61,000 - £70,000	21	2%
£71,000 - £80,000	10	1%
£81,000 - £90,000	9	1%
£91,000 - £100,000	4	0%
Over £101,000	7	1%
Don't know	34	3%
Prefer not to say	71	7%
Total	1013	100%

Household income (drawing on data from online survey question 49)

A-3.3 Choice experiment analysis

The main feature of the online survey that explored attitudes towards improvements in bathing water quality was a choice experiment which required respondents to select their preferred option from three alternatives that traded-off changes in: (i) the number of bathing waters at the national level failing to meet 'sufficient' status (% bathing waters failing); (ii) the bathing water status of the beach they visit most often ('poor', 'sufficient', 'good' or 'excellent'); (iii) the cleanliness of the beach they visit most often (% litter removed)¹; and (iv) the cost to their household to secure these improvements.

A-3.3.1 Consumer demand theory

The application of choice experiments is based on consumer demand theory. This assumes that the utility (benefit) derived from the provision of a 'complex' good is linked to the characteristics of the good. In this study the 'good' is represented by improvements in bathing water quality. Hence, the utility derived by each respondent is linked to the characteristics of the 'good'.

The cornerstone of any stated preference method is the assumption that individuals know their own preferences and, whatever choice is encountered, they know what is best for them. In formal terms we can say that an individual (i) is assumed to choose alternative j over alternative k if the utility derived from attribute bundle j is greater than the utility derived from attribute bundle k; i.e. if $U_{ij} > U_{ik}$, where U_{ij} is the total utility associated with alternative j and U_{ik} is the total utility associated with alternative k. The utility function for respondent i related to alternative j is specified as:

$$U_{ij} = V_{ij} + \varepsilon_{ij} \quad [1]$$

where V_{ij} is the systematic (non-stochastic) utility function observed by the analyst because it is linkable to the attribute levels of each alternative (e.g. water quality levels) and ε_{ij} is a random component, which is known to the individual, but remains unobserved to the analyst. This random component (ε_{ij}) arises either because of randomness in the preferences of the individual or the fact that the researcher does not have the complete set of information available to the individual.

A-3.3.2 Mixed logit model

For this analysis, it was appropriate to conduct a sophisticated econometric analysis and test less restrictive model specifications that relax some of the assumptions of a multinomial logit (MNL) model. For example, by allowing for:

- Variations in tastes by respondents or decision-makers in relation to the observed characteristics;

¹ Note that testing of the survey material, and results of previous studies, indicated that beach cleanliness was a key issue for respondents in their perception of bathing water quality, hence this was explicitly included as an attribute in the choice experiment task to control for this preference (to avoid it conflating preference with regards to actual bathing water quality).

- Correlation (non-independence) of unobserved factors in repeated choices by respondents; and / or
- Different variances across alternatives (or bundles of characteristics).

These are represented in the analysis by the random parameter logit (RPL) model; the RPL-correlated model; and the Error-Component (EC) model respectively. Collectively all these belong to the family of mixed logit (MXL) models.

The utility structure for the RPL model is designed to allow for randomness in the taste across respondents. It is denoted as:

$$U_{ij} = x_{ij}' \beta + \varepsilon_{ij} \quad [3]$$

where x_{ij} are observed variables that relate to the alternative (the attributes of the alternative and the levels of those attributes), β is a vector of utility coefficients of these variables describing the weight each one carries in determining the utility of the alternative (hence representing the respondent's tastes), and ε_{ij} is a random error term that is independently and identically distributed (iid) extreme value. This specification is the same as the MNL except that β is now random and varies across individuals instead of being fixed at the same level for all respondents. Thus the RPL model allows coefficients to vary over respondents according to some distribution reflecting their tastes.

The basic RPL model assumes that random parameters are uncorrelated. Thus, it treats two responses by the same individual in the same way as it treats two responses from different individuals. The RPL-correlated model relaxes this assumption and allows for correlation among parameters (i.e. allowing for the likelihood that responses from the same individual are likely to be correlated). This therefore acknowledges that the data has a panel structure and that preferences are consistent in all choices made by the same respondent, changing only when another respondent's choice is evaluated. The RPL-panel model thus accounts for any bias arising from correlation in the error term in choices by the same respondent.

The Error-Component model can be used to account for correlations amongst utility for different alternatives. In a choice between alternatives that are in-part hypothetical (e.g. improvements not previously experienced) and in-part experienced (current levels), it can be erroneous to assume that utility has the same variance in both types of alternatives. It can be argued that, since hypothetical alternatives need to be conjectured by all respondents, these are subject to higher variance than those alternatives that are experienced. One device to allow for a larger variance is by means of the introduction of additional error components, which also allow correlations amongst utilities for different alternatives. In these models utility is defined as:

$$U_{ij} = \beta' x_{ij} + \mu' z_{ij} + \varepsilon_{ij} \quad [4]$$

where x_{ij} and z_{ij} are vectors of observable variables relating to alternative j , β is a vector of fixed coefficients, μ is a vector of random terms with zero mean, and ε_{ij} is

an iid extreme value. The terms z_{ij} are error components, and along with ε_{ij} , represent the stochastic portion of utility. The unobserved random portion of utility, $\eta_{ij} = \mu'_i z_{ij} + \varepsilon_{ij}$, can be correlated over the alternatives. Failure to account for correlation and variance in unobserved factors between alternatives leads to coefficient bias in the MNL model.

A-3.3.3 Econometric estimation strategy

The estimation strategy focused on identifying the model specification that provided the best fit to the data; i.e. the model that provides the best account of respondents' preferences for improvements in bathing water quality. The assessment of the comparative performance of alternative models was primarily based on their 'information criteria'. Whilst alternative measures of model fit were also examined (log-likelihood and pseudo R²), the information criteria represent an appropriate basis for comparing model performance since this penalises more complex models for having a large number of parameters. In particular, models are estimated using maximum likelihood methods and, in these circumstances, a model with a greater number of parameters cannot return a goodness of fit that is worse than a model which is specified with a subset of the same parameters (i.e. including more model parameters improves model fit).

A-3.3.4 Expectations of results

Theoretical considerations and prior empirical results give rise to certain expectations for the parameter estimates in choice experiment models. In particular, these relate to the 'sign' of coefficient estimates (positive or negative), which inform on the nature of the relationship between a parameter – i.e. an attribute – and respondents' preferences:

Level coded (linear) models - for variables coded in the levels, expectations for the signs of the coefficient estimates relate to the effect of increasing that variable by one unit of measurement. Since models are consistent with random utility theory of choice, those attributes whose units of measurement increase when an improvement occurs are expected to have a positive coefficient, thus indicating a positive effect on utility. For example, the removal of litter attribute is described in terms of the percentage of litter removed at the beach a respondent visits most often. A one unit increase implies that 1% more beach litter is removed at that beach. Therefore, the expected sign of the coefficient is positive.

Dummy coded (piecewise/non-linear) models - for variables that are dummy coded (sub-groups organised in such a way to be either a '1' or a '0'), the expectations for the signs of the coefficients depend on the direction of the effect relative to the baseline. For effects that improve on the baseline the expected sign is positive, while for effects that detract from the baseline the expected sign is negative. In the context of this study, the baseline is "poor in 5 years". The relative coefficients are expected to be positive.

A summary of expected coefficient sign for each attribute is provided in Table A3-8.

Table A3-8: Expected coefficient signs for attributes

Attributes	Expected sign
Bathing water status – poor	Negative
Bathing water status – good	Positive
Bathing water status – excellent	Positive
Litter - % removed	Positive
National - % bathing water failing sufficient	Negative
Cost - £ increase in water bill	Negative

Expected coefficient signs for attributes (drawing on data from online survey questions)

A-3.3.5 Model results

The results for the choice experiment model are presented in Table A3-9 below. The model used is a mixed logit (MXL) model which is the ‘preferred’ model specification based on comparative assessment of model fit.

- Results from the choice experiment task accord with prior expectations and the analysis shows that, all else equal:
- Respondents prefer options that offer better bathing water quality, i.e. fewer beaches failing to meet bathing water quality standards;
- Respondents prefer options with improved bathing water quality for the beach they visit most;
- Respondents prefer options with removal of more litter for the beach they visit most; and
- Respondents prefer options with a lower cost to their household in terms of an increase in annual water bill.

Table A3-9: Choice experiment model results

Explanatory variable	Coefficient estimate	Standard error
<i>Mean values</i>		
Bathing water status – poor	1.098***	0.008
Bathing water status – sufficient	1.626***	0.399
Bathing water status – good	1.902***	0.353
Bathing water status – excellent	3.500***	0.356
Litter - % removed	0.018***	0.671
National - % bathing water	0.038***	0.002

Explanatory variable	Coefficient estimate	Standard error
failing sufficient		
Status quo	-0.749*	0.008
Cost - £ increase in water bill	-0.041***	0.422
Standard deviation parameters		
s.d Bathing water status – poor	-1.107	0.967
s.d Bathing water status – sufficient	-0.012	0.040
s.d Bathing water status – good	-0.015	0.013
s.d Bathing water status – excellent	3.185***	1.192
s.d Litter - % removed	-0.046***	0.007
s.d National - % bathing water failing sufficient	0.099***	0.021
s.d Status quo	0.050	0.185
Pseudo R ²		0.18
Sample size (observations)		1,013 (18,234)

*** indicates coefficient estimate is statistically significant at the 1% level, ** indicates coefficient estimate is statistically significant at the 5% level, * indicates coefficient estimate is statistically significant at the 10% level.

Based on analysis of the choice experiment responses, values for improvements in bathing water quality and beach characteristics – in terms of WTP per household and in total for national improvements – are presented in the main report and also reproduced in Table A3-10 (following page). WTP for each attribute is determined by the ratio of the marginal utility associated with a one unit increase in the attribute and the marginal utility associated with a one unit increase in cost (i.e. in respondents' water bill).

Table A3-10: Value of improvements in bathing water quality

Willingness to pay (WTP) estimates	£/household/year	Total WTP £ million / year
National - number of Scottish beaches failing to meet water quality standards - 1% reduction (roughly 1 less beach failing of the 86 Scottish bathing waters)	0.93 (0.49 - 1.36)	2 (1 – 3)
Bathing water status – beach From 'poor for 5 years' to 'sufficient'	39.38 (31.89 – 46.87)	-

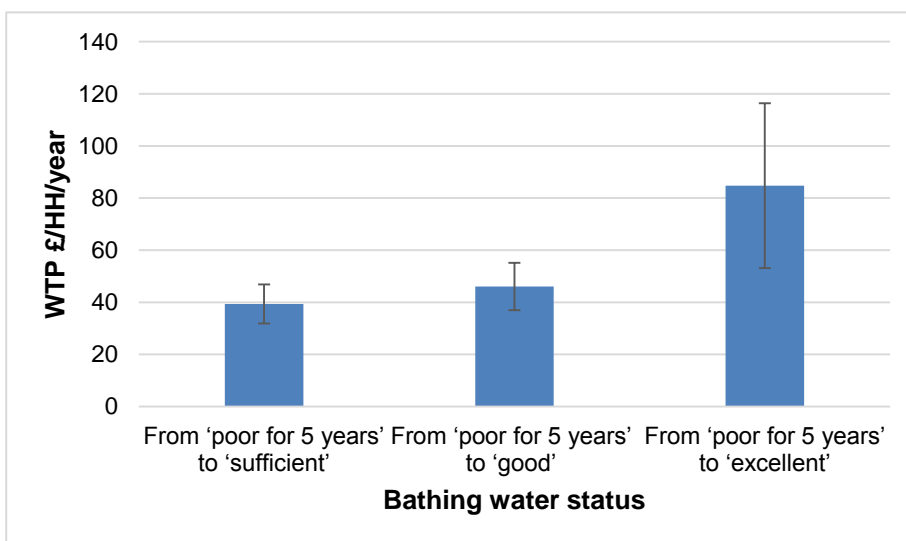
Willingness to pay (WTP) estimates		£/household/year	Total WTP £ million / year
visited most often	From 'poor for 5 years' to 'good'	46.06 (36.96 – 55.16)	-
	From 'poor for 5 years' to 'excellent'	84.76 (53.14 – 116.39)	-
Litter - 1% litter removed at beach visited most often		0.44 (0.25 – 0.62)	-

Base: Choice experiment analysis (1,013). 95% confidence intervals in parenthesis (Delta method).

As shown, the estimated WTP per household for improvements in the bathing water quality at the beach visited most often increases with higher status levels. The greatest value is attached to ensuring a bathing water meets 'excellent' status, with the WTP for the shift from 'poor for 5 years' to 'excellent' of approximately £85. The additional value from achieving other status levels is relatively marginal. In particular, the value for the shift from 'poor for 5 years' to 'sufficient' (approximately £39) is not statistically different from the value for the shift from 'poor for 5 years' to 'good' (approximately £46), as is shown in the overlapping 95% confidence intervals in Figure A3-1. Likewise the value for a shift from 'good' to 'excellent' is not statistically different, however shifting from 'poor' to 'excellent' is.

These results indicate that the subtle differences in quality that are achieved by shifting from 'sufficient' to 'good' may not be of particular value to visitors. It is reasonable to assume that because visitors can swim at both levels, the other water quality improvements achieved from 'sufficient' to 'good' and the benefits from this may be less apparent. The results also show that there is a premium for a site achieving 'excellent' status, and may be due to the additional awards (e.g. blue flag) that can be acquired at this status.

Figure A3-1: Value of improvement in individual bathing water status



WTP for the number of Scottish beaches failing to meet water quality (1% reduction in bathing waters in Scotland failing) and WTP for one unit increase in litter removed (implies that 1% more beach litter is removed) are statistically significant, and are valued at £0.93 and,£0.44 per household per year respectively.

The total WTP per year presented in the final column of Table 6.3 is calculated as the WTP per household multiplied by the number of household in Scotland (NRS, 2016). As shown, reducing the number of Scottish beaches failing by 1% is associated with a value of £2 million per year. This value can be presented as an annualised benefit over a specified time horizon for use in decision-making, for example within policy appraisal and/or for comparison against the costs of achieving the reduction in beaches failing within a cost benefit analysis. The WTP values for bathing water status and litter are 'per beach' values and can be aggregated further based on a user population of a particular beach, but were not aggregated as part of this study.

A-3.3.6 Local economic impact model

The local economic impact modelling undertaken produces an overall estimate of GVA for each of the five surveyed sites. Whilst the GVA estimate is an aggregate figure stemming from all visits to a site, the analysis makes a further distinction between different visitor types. Visitors are broken down into: (i) local residents; (ii) day trippers; (iii) overnight visitors staying in the local area; and (iv) overnight visitors staying outside of the local area. The 'local area' relevant to the classification of overnight visitors is an area within a 5 miles radius of a bathing water. The size of the 'local area' is determined by the distribution of onsite survey data on respondents' distance travelled to the site (i.e. the survey location).

With respect to overnight visitors (also referred to as 'staying visitors'), the modelling attributes their entire stay to the bathing water at which they have been surveyed. Therefore, locally staying visitors have their entire length of stay and subsequent expenditure attributed to the locality and included in the economic impact to the site. This approach potentially over-estimates the economic impact of staying visitors as, typically, a proportion of visitors' length of stay could be spent away from the local area (i.e. leakage). However, in the absence of data, visitors' entire expenditure and length of stay are attributed to the local area. The rationale for this approach is that the coastal location is likely to be the main motivation behind visits. Therefore, in the event of a deterioration of the quality of a coastal location, the whole visit would be lost rather than a reduction in visitors' length of stay. The approach also ensures that all sites are treated consistently by avoiding further site-level ad-hoc assumptions.

Estimated visitors to sites are combined with average spend per visitor per day to derive total visitor spend at sites per year. The breakdown of expenditure is based on data from the survey which have then been applied to the visitor number estimates for residents, day trippers and overnight visitors staying outside of the local area. Expenditure data have been applied to the total stay of overnight visitors staying in the local area in order to capture the whole of their stay in the

area. Accommodation spend has only been applied to overnight visitors staying in the local area. The following points should also be noted:

- The expenditure figures represent the total spending at a site / coastal vicinity;
- Spend breakdowns are constrained to the most robust spend figures for all visitors;
- Original spend figures derived from survey data are only included where the sample size broken down by visitor type is greater than 30; and
- Gaps in the spend data due to small sample sizes (<30) at a site level are supplemented using regional variations of visitors types and periods compared to all expenditure which are then applied to the total spend figure at a site level.

Annex 4: Econometric analysis of online and onsite survey data – key assumptions

Visitor expenditure data is then used to estimate GVA using the Cambridge Model which produces the final economic outputs: (i) business turnover, (ii) associated employment supported by expenditure and (iii) GVA estimates.

The estimation of GVA for surveyed sites is based on a number of key assumptions. These assumptions have been made using a combination of tourism-related information and informed judgement where necessary. The following summarises the key points.

A-4.1 Interpreting ‘visits’ to sites

In general, estimates of visitor numbers and changes in visitor numbers should be interpreted as ‘visits to the coastline’ rather than actual beach users. In particular, the level of supporting data required to distinguish beach visitors from broader definitions is not available for the majority of sites. Each surveyed site has been considered individually with supporting information and survey data to produce a ‘best estimate’ for annual visitor numbers. Estimates are based on car park capacities in the vicinity of the sites to which survey data has been applied. Adjustments have been made using Scottish coastal seasonality data (Great Britain Tourism Survey and Great Britain Day Visits Survey) to account for the potential impacts of the timing of the fieldwork on the annual outputs provided. The outputs have been broadly sense checked using population data, accommodation stocks and when available tourism volume and value estimates.

A-4.2 Attributing overnight visits to sites

A default assumption that is made is to attribute the entire length of an overnight visitor’s stay and their expenditure to the local site. This implicitly assumes that the coastal location is the main motivation for visits, and if the quality of the coastal location were to deteriorate (i.e. de-designation of the bathing water), the whole visit would be lost rather than a reduced length of stay. Whilst this approach potentially over-estimates the economic impact of staying visitors - as typically a proportion of the visit and expenditure could be spent away from the site (so-called ‘leakage’) - no information is available to consistently estimate ‘leakage’ of economic activity across sites. The approach taken therefore, to attribute the entire economic impact of an overnight visitor to the local site, ensures that all sites are treated consistently thereby avoiding further site-level ad-hoc assumptions.

The issue of attribution also ties in with the ‘substitutability’ of visits to bathing waters and recreational sites more generally. The substitution effect between different sites does not feature in the scope of the local level analysis. The focus is on the implications of a reduction in visitor numbers at a given site, which constitutes a decline in economic activity at the local level rather than a potential displacement towards alternative bathing water sites (or alternative recreation sites). This implies that the local level results should not be aggregated at larger

scales (e.g. national or river basin district scales) because they do not account for substitutability between sites whereby changes in expenditure in one location are likely, for the most part, to be offset by a re-distribution of expenditure to other locations. Potential substitution effects are, however, controlled for in the revealed preference analysis.

Annex 5: Survey summary statistics

A-5.1 Onsite survey summary statistics

Onsite survey summary statistics are available in a separate Excel workbook.

A-5.2 Online survey summary statistics

Online survey summary statistics are available in a separate Excel workbook.

Annex 6: Survey instruments

A-6.1 Onsite survey instrument

Scottish Government – The Value of Bathing Waters and the Influence of Bathing Water Quality

DRAFT PILOT ON-SITE SURVEY QUESTIONNAIRE (4th July 2017)

RECORD

Respondent unique ID

Date of interview (dd/mm/yyyy)

Start time (hh:mm)

Finish time (hh:mm)

Length of interview (mm)

Interviewer name

DO NOT ASK RESPONDENT

Q1. Record location

SINGLE CODE

- 1 Ayr (South Beach)
- 2 Gullane
- 3 Nairn (Central)
- 4 Portobello (West)
- 5 Troon (South Beach)
- 6 Other (PLEASE SPECIFY)

INTRODUCTION

Good morning/afternoon/evening. My name is from Feedback Market Research. We are conducting a survey on behalf of the Scottish Government to better understand the profile of beach users and their visits to beaches. Would you be willing to take part? The survey should take around 10 minutes to complete.

I would like to assure you that all the information we collect will be used for research purposes only. Any answers you give will be treated in confidence in accordance with the Code of Conduct of the Market Research Society. It will not be possible to identify any particular individual in the results.

SECTION A – BEACH CHOICE

Q2. Which of the following best describes your visit to the beach today?

SINGLE CODE

- 1 Local resident (living in the local area)
- 2 Travelled to the area for work
- 3 Day tripper (not living in the local area)
- 4 On a short break, away from home for 2-6 days
- 5 On a short break, away from home for 7 or more days
- 6 Foreign visitor on holiday
- 7 Other (PLEASE SPECIFY)

THANK & CLOSE

ASK IF CODE 4 OR 5 AT Q2

Q3. Which of these statements best applies to you?

SINGLE CODE

- 1 The beach is the main reason for my stay
- 2 The beach is a reason for my stay, but not the main reason
- 3 The beach is not a reason for my stay

Q4. How regularly do you visit beaches in Great Britain (Scotland, England and Wales)?

SINGLE CODE

- 1 Daily
- 2 Weekly
- 3 Once a fortnight
- 4 Monthly
- 5 Once every three months
- 6 Once every six months
- 7 Once a year
- 8 Once every 2 years or less frequently
- 9 Don't know

Q5. Including today, how many days have you visited this beach in the last 12 months?

ENTER NUMERICAL VALUE (RANGE 1 - 365)

NOTE TO INTERVIEWER: ENTER NUMBER OF DAYS VISITED IN THE PAST YEAR. IF RESPONDENT VISITS MULTIPLE TIMES A DAY (E.G. DOG WALKER), THIS COUNTS AS 1 DAY.

--	--	--

Q6. Which other beaches in Scotland do you visit, or consider visiting when thinking about going to a beach?

MULTI CODE - MAXIMUM OF 5 OPTIONS

- EXCLUDE SURVEY LOCATION (Q1) FROM LIST
- RECORD UP TO 5 ALTERNATIVES BEACHES USING LIST OF SITES IN SCOTLAND BELOW WITHOUT READING/SHOWING THE FULL LIST TO THE RESPONDENT
- IF RESPONDENT IS UNSURE OF THE SPECIFIC BEACH AT A LOCATION, E.G. ST ANDREWS (EAST SANDS) OR ST ANDREWS (WEST SANDS), CODE BOTH/ALL POSSIBLE OPTIONS
- INCLUDE 'OTHER (PLEASE SPECIFY)' CATEGORY. IF RESPONDENT STATES OTHER BEACH, RECORD BEACH NAME AND NEAREST TOWN/VILLAGE/CITY TO BEACH

A

-
- 1 Aberdeen
 - 2 Aberdour (Silversands)
 - 3 Aberdour Harbour (Black Sands)
 - 4 Achmelvich
 - 5 Anstruther (Billow Ness)
 - 6 Arbroath (West Links)
 - 7 Ayr (South Beach)

B

-
- 8 Balmedie
 - 9 Brighthouse Bay
 - 10 Broad Sands
 - 11 Broughty Ferry
 - 12 Burntisland
 - 13 Carnoustie

C

-
- 14 Carrick
 - 15 Coldingham
 - 16 Collieston
 - 17 Crail (Roome Bay)
 - 18 Cruden Bay
 - 19 Cullen Bay
 - 20 Culzean

D

- 21 Dhoon Bay
- 22 Does
- 23 Dornoch
- 24 Dunbar (Belhaven)
- 25 Dunbar (East)
- 26 Dunnet

E

- 27 Elie (Harbour) and Earlsferry
- 28 Elie (Ruby Bay)
- 29 Ettrick Bay
- 30 Eyemouth

F

- 31 Findhorn
- 32 Fisherrow Sands
- 33 Fraserburgh (Philorth)
- 34 Fraserburgh (Tiger Hill)

G

- 35 Gairloch Beach
- 36 Ganavan
- 37 Girvan
- 38 Gullane

H

- 39 Heads of Ayr

I

- 40 Inverboyndie
- 41 Irvine

J

- 42 Kinghorn (Harbour Beach)
- 43 Kinghorn (Pettycur)
- 44 Kingsbarns
- 45 Kirkcaldy (Seafield)

L

- 46 Largs (Pencil Beach)
- 47 Leven
- 48 Loch Morlich
- 49 Longniddry
- 50 Lossiemouth (East)
- 51 Lunan Bay
- 52 Lunderston Bay
- 53 Luss Bay

M

- 54 Machrihanish
- 55 Maidens
- 56 Millport Bay
- 57 Monifieth
- 58 Montrose
- 59 Mossyard

N

- 60 Nairn (Central)
- 61 Nairn (East)
- 62 North Berwick (Milsey Bay)
- 63 North Berwick (West)

P

- 64 Pease Bay
- 65 Peterhead (Lido)
- 66 Portobello (Central)
- 67 Portobello (West)
- 68 Prestwick

R

- 69 Rockcliffe
- 70 Rosehearty
- 71 Rosemarkie

S

- 72 Saltcoats/Ardrossan
- 73 Sand Beach
- 74 Sandyhills
- 75 Seacliff
- 76 Seamill
- 77 Seton Sands
- 78 Southernness
- 79 St Andrews (East Sands)

- 80 St Andrews (West Sands)
- 81 Stonehaven

T

- 82 Thorntonloch
- 83 Thurso
- 84 Troon (South Beach)

W

- 85 Whitesands

Y

- 86 Yellow Craig

OTHER

- 87 Other (PLEASE SPECIFY BEACH AND NEAREST TOWN/VILLAGE/CITY)

- 999 I do not visit other beaches / do not consider any other beaches
-

Q7. If you had not come to this beach today, which one of these other beaches would you have most likely gone to instead?

SINGLE CODE

DISPLAY BEACHES SELECTED IN Q6 INCLUDING VERBATIM RESPONSE FOR CODE 87 (OTHER)
USE CODES 1 - 87 FROM LIST IN Q6

INCLUDE THE FOLLOWING ADDITIONAL RESPONSE CODES FOR ALL RESPONDENTS INCLUDING THOSE WHO SELECTED CODE 999 IN Q6

- 901 Probably the closest beach to my home / accommodation
 - 902 A different beach outside of Scotland
 - 903 I would not have gone to another beach today
 - 904 Don't know
-

ASK ALL EXCEPT CODE 2 IN Q1 (I.E. ASK IF SURVEY LOCATION IS NOT GULLANE)

Q8. Which of these information sources do you use when deciding which beach to go to?

MULTI CODE

ROTATE OPTIONS

- A Bathing water status signs at beaches
- B Scottish Government webpage
- C Scottish Environment Protection Agency (SEPA) webpage
- D Marine Conservation Society Good Beach Guide
- E Safer Seas Service website/app
- F Blue Flag website
- G Seaside Awards / Keep Scotland Beautiful website
- H Local Authority website
- I Electronic signs at beach with live water quality forecast
- J Tourist information websites (e.g. Visit Scotland)
- K Trip Advisor (e.g. Travellers' Choice Awards)
- L Other mobile phone applications - STATE BELOW
- M National or local newspaper/magazine - STATE BELOW
- N Recommendation from family/friend
- O None
- P Other (PLEASE STATE)

ASK IF CODE 2 IN Q1 (I.E. ASK IF SURVEY LOCATION IS GULLANE)

Q8b. Which of these information sources do you use when deciding which beach to go to?

MULTI CODE

ROTATE OPTIONS

- A Bathing water status signs at beaches
- B Scottish Government webpage
- C Scottish Environment Protection Agency (SEPA) webpage
- D Marine Conservation Society Good Beach Guide
- E Safer Seas Service website/app
- F Blue Flag website
- G Seaside Awards / Keep Scotland Beautiful website
- H Local Authority website
- I Tourist information websites (e.g. Visit Scotland)
- J Trip Advisor (e.g. Travellers' Choice Awards)
- K Other mobile phone applications - STATE BELOW
- L National or local newspaper/magazine - STATE BELOW
- M Recommendation from family/friend
- N None
- O Other (PLEASE STATE)

--

SECTION B – TODAY’S VISIT

I now have some questions about your visit to the beach today.

Q9. How many people, including yourself, are in your group today? If you are in an organised party, please state the number in your immediate group only.

SINGLE CODE FOR EACH COLUMN

	Adults	Children (under 16)
None	<input type="checkbox"/>	<input type="checkbox"/>
1	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input type="checkbox"/>
5	<input type="checkbox"/>	<input type="checkbox"/>
6	<input type="checkbox"/>	<input type="checkbox"/>
7	<input type="checkbox"/>	<input type="checkbox"/>
8	<input type="checkbox"/>	<input type="checkbox"/>
9	<input type="checkbox"/>	<input type="checkbox"/>
10	<input type="checkbox"/>	<input type="checkbox"/>
More than 10	<input type="checkbox"/>	<input type="checkbox"/>

Q10. What is the purpose of your visit (to the beach today)?

MULTI CODE - ROTATE

- A Amusements
- B Dog Walking
- C Eating out (café/restaurant/fish and chips)
- D Fishing
- E Get some fresh air
- F Horse riding
- G Kayaking
- H Kite Surfing
- I Nature and bird watching
- J On holiday in the area
- K Paddling
- L Rock pooling
- M Sailing/Boating
- N Spend time with friends/family
- O Sunbathing
- P Surfing
- Q Swimming
- R Play with the children
- S To Relax
- T Walking
- U Windsurfing
- V Other (PLEASE STATE)

Q11. What are the top 3 reasons why you chose to visit this beach today?

MULTI CODE - MAXIMUM OF 3 OPTIONS

ROTATE OPTIONS

- A Water quality
- B Cleanliness of the beach
- C Beach award (e.g. Blue Flag, Seaside Award)
- D Facilities/amenities at/near the beach (e.g. parking, cafés, changing rooms, shops)
- E The attractions at/near the beach (e.g. Pleasure Beach, pier, promenade, cycle ways, natural walks)
- F Range of activities available
- G Presence of lifeguards
- H Short distance travelled/ local beach
- I Type of beach (sand, shingle, rocks, etc.)
- J Natural beauty/scenery
- K The nature/quality of the waves
- L Other (SPECIFY)

--

Q12. To what extent do you agree with the following statement about visiting this beach today?
Please answer on a scale of 1 to 10 where 1 is 'not at all' and 10 is 'completely'.

This is an environment where I am able to rest, recover my ability and focus.

WRITE IN SCORE BETWEEN 1 AND 10 BELOW. IF RESPONDENT DOES NOT KNOW, WRITE -99.

--	--

Q13. Have you or anyone in your group come into contact with the water at this beach today or do you plan to?

SINGLE CODE

- 1 Yes ASK Q14
- 2 No SKIP TO Q15

ASK IF CODE 1 IN Q13

Q14. When doing activities that involve coming into contact with water, which of the following statements best applies to you?

SINGLE CODE

- 1 My head is constantly in and out of the water
 - 2 Occasionally I will dip my head into the water
 - 3 My head may go under water once or twice by accident
 - 4 I try to avoid putting my head underwater
-

Q15. How would you rate the water quality at this beach? By this, I mean how clean the water is for swimming and other water-related activities?

- 1 Excellent
 - 2 Good
 - 3 Average
 - 4 Poor
 - 5 Don't know
-

Q16. SHOWCARD 1 Have you seen any of these signs during your visit to the beach today?

MULTI CODE

- A RNLI or other lifeguards SHOWCARD 1A
- B Blue Flag SHOWCARD 1B
- C Seaside Award SHOWCARD 1C
- D Bathing water status SHOWCARD 1D
- E Bathing water advisory sign SHOWCARD 1E
- F Abnormal situation SHOWCARD 1F
- G Electronic sign SHOWCARD 1G
- H None of these
- I Other (PLEASE SPECIFY)

SECTION C – BATHING WATER STATUS

Almost 90 beaches in Scotland are designated as ‘bathing waters’. This means their water quality is monitored by the Scottish Environment Protection Agency during the bathing season, from 15 May to 15 September. Based on this, bathing waters are classed each season as ‘poor’, ‘sufficient’, ‘good’ or ‘excellent’.

IF CLARIFICATION IS REQUIRED BY RESPONDENT, EXPLAIN THAT THE QUALITY OF THE WATER IS MONITORED IN TERMS OF BACTERIA IN THE WATER AND THAT THIS IS NOT RELATED TO LITTER ON THE BEACH.

Q17. Did you know that this beach is a designated bathing water?

SINGLE CODE

- | | | |
|---|-----|-------------|
| 1 | Yes | ASK Q18 |
| 2 | No | SKIP TO Q20 |
-

ASK IF CODE 1 IN Q17

Q18. Do you know what the level of water quality is for this beach?

SINGLE CODE

- | | | |
|---|-----|-------------|
| 1 | Yes | ASK Q19 |
| 2 | No | SKIP TO Q20 |
-

ASK IF CODE 1 IN Q18

Q19. Can you tell me what it is?

SINGLE CODE

- | | |
|---|------------|
| 1 | Excellent |
| 2 | Good |
| 3 | Sufficient |
| 4 | Poor |
-

SECTION D – CONTINGENT BEHAVIOUR

Q20.SHOWCARD 2 If you came back to this beach and saw a sign like this, that permanently advises you not to go in the water because of poor water quality, to what extent would you agree or disagree with the following statement?

“I would be upset if I came to this beach and saw this sign advising me not to go in the water”

SINGLE CODE

- 1 STRONGLY AGREE
 - 2 TEND TO AGREE
 - 3 NEITHER AGREE NOR DISAGREE
 - 4 TEND TO DISAGREE
 - 5 STRONGLY DISAGREE
 - 6 DON'T KNOW
-

Q21.SHOWCARD 2 To what extent would you agree with the following statement about visiting this beach if you saw this sign?

Please answer on a scale of 1 to 10 where 1 is 'not at all' and 10 is 'completely'.

This is an environment where I am able to rest, recover my ability and focus.

WRITE IN SCORE BETWEEN 1 AND 10 BELOW. IF RESPONDENT DOES NOT KNOW, WRITE -99.

--	--

Q22.SHOWCARD 2 If you came back to this beach and saw this sign which of the following best describes what you would do?

SINGLE CODE

- 1 I never go in the water anyway
 - 2 I would stay at the beach and would go in the water
 - 3 I would stay at the beach but not go in the water
 - 4 I would leave and go to another beach
 - 5 I would leave and not go to any beach
-

Q23.Would seeing this sign change how often you would visit this beach in the future?

SINGLE CODE

- | | | |
|---|------------|-------------|
| 1 | Yes | ASK Q24 |
| 2 | No | SKIP TO Q26 |
| 3 | Don't know | SKIP TO Q26 |
-

ASK IF CODE 1 IN Q23

Q24.How would it change the visits you make?

SINGLE CODE

- | | | |
|---|--------------------------|-------------|
| 1 | I would not visit at all | SKIP TO Q26 |
| 2 | I would visit less often | ASK Q25 |
-

ASK IF CODE 2 IN Q24

Q25.SHOWCARD 2 Earlier you said that you had visited this beach [DISPLAY Q4 RESPONSE] days in the past 12 months. How many times per year would you visit instead if you saw this sign?

ENTER NUMERICAL VALUE (RANGE 1 - 365)

NOTE TO INTERVIEWER: RESPONSE MUST BE LOWER THAN NUMEBR OF DAYS VISITED IN Q4.

--	--	--

SECTION E – JOURNEY TO BEACH

I now have some questions about your journey to the beach today.

ASK ALL

Q26. What was your main form of transport (to the beach today)?

SINGLE CODE

- 1 Bike
- 2 Bus/coach
- 3 Car/van - 1 vehicle
- 4 Car/van - 2 vehicles
- 5 Car/van - 3 vehicles
- 6 Jog/run
- 7 Motorbike
- 8 Taxi
- 9 Train
- 10 Tram
- 11 Walk
- 12 Other (PLEASE SPECIFY)

Q27. How far did you travel to get to the beach today? By that, I mean the journey from where you stayed last night.

ENSURE RESPONDENT GIVES DISTANCE FROM OUTSET LOCATION WHICH MIGHT NOT BE THEIR HOME.

SINGLE CODE

- 1 Less than 5 miles
- 2 5 - 10 miles
- 3 10.1 - 15 miles
- 4 15.1 - 20 miles
- 5 20.1 - 30 miles
- 6 30.1 - 40 miles
- 7 40.1 - 50 miles
- 8 50.1 - 60 miles
- 9 60.1 - 70 miles
- 10 70.1 - 80 miles
- 11 80.1 - 90 miles
- 12 90.1 - 100 miles
- 13 100.1 - 150 miles
- 14 150.1 - 200 miles
- 15 200.1 - 250 miles
- 16 250.1 - 300 miles
- 17 Over 300 miles
- 18 Don't know

Q28. How long did the journey take you?

SINGLE CODE

- 1 Less than 15 minutes
- 2 15.1 - 30 minutes
- 3 30.1 - 45 minutes
- 4 45.1 min - 1 hour
- 5 1.01 - 2 hours
- 6 2.01 - 3 hours
- 7 Over 3 hours
- 8 Don't know

Q29. What is the postcode of where you started your journey to the beach today?

- ENTER IN FULL
- ENSURE RESPONDENT GIVES POSTCODE FOR THEIR OUTSET LOCATION FOR THEIR JOURNEY TO THE BEACH TODAY WHICH MIGHT NOT BE THEIR HOME
- IF RESPONDENT DOES NOT KNOW THEIR POSTCODE IN FULL OR AT ALL, PROVIDE AS MUCH INFORMATION AS POSSIBLE IN Q30

				-			
--	--	--	--	---	--	--	--

ASK ALL.

Q30. Where is that?

PROVIDE AS MUCH INFORMATION AS POSSIBLE IN ALL BOXES ESPECIALLY IF RESPONDENT DOES NOT KNOW THEIR POSTCODE IN FULL OR AT ALL IN Q29

Building name/number

Street name

City/town/village

County

Q31. What type of accommodation did you stay in last night?

SINGLE CODE

- 1 At home
- 2 Hotel
- 3 B&B/guesthouse
- 4 Pub/inn
- 5 B&B
- 6 Farm
- 7 Rented self-catering accommodation
- 8 Static caravan
- 9 Touring caravan/motor home
- 10 Tent/camping
- 11 Youth hostel
- 12 Narrowboat/boat/yacht
- 13 Holiday centre/village
- 14 With a friend/relative
- 15 Second home
- 16 Timeshare
- 17 University/student accommodation
- 18 Other (PLEASE SPECIFY)

ASK IF CODES 2 - 18 AT Q31 (ALL EXCEPT 'AT HOME')

Q32. How many nights are you spending in the area in total?

--	--

 nights

ASK ALL

Q33. How much do you expect that you and your immediate group will spend in total today in the local area, on each of the following?

IF RESPONDENT DOES NOT STATE OR KNOW HOW MUCH THEY EXPECT TO SPEND, SELECT 'DON'T KNOW'. ONLY ENTER '0' IF RESPONDENT SPENT/EXPECTS TO SPEND NOTHING.

	£	Don't know
A Eating and drinking in cafes, pubs, restaurants and hotels	<input type="text"/>	<input type="checkbox"/>
B Buying food, drinks or snacks from shops	<input type="text"/>	<input type="checkbox"/>
C Shopping such as souvenirs and items for the beach	<input type="text"/>	<input type="checkbox"/>
D Tourist activities such as local attractions or water sports lessons	<input type="text"/>	<input type="checkbox"/>
E Travel and transport, for example fuel or train tickets	<input type="text"/>	<input type="checkbox"/>
F Car parking	<input type="text"/>	<input type="checkbox"/>

ASK IF CODE 2 - 18 IN Q31 (ALL EXCEPT 'AT HOME')

Q34. How much do you expect that you and your immediate group will spend in the local area on accommodation for your entire stay?

IF RESPONDENT DOES NOT STATE OR KNOW HOW MUCH THEY EXPECT TO SPEND, SELECT 'DON'T KNOW'. ONLY ENTER '0' IF RESPONDENT SPENT/EXPECTS TO SPEND NOTHING.

	£	Don't know
Accommodation (for your entire stay)	<input type="text"/>	<input type="checkbox"/>

SECTION F – RESPONDENT PROFILE

Thank you for answering those questions. Please now could you answer some final questions about you and your household? Please be assured these questions are asked in the strictest confidence and will only be used for analysis purposes. Your answers will not be reported as separate results.

Q35. To help us with our analysis, please can I take your home postcode?

- ENTER IN FULL
- THIS MAY OR MAY NOT BE THE SAME AS THE RESPONSE IN Q29
- IF RESPONDENT DOES NOT KNOW THEIR POSTCODE IN FULL OR AT ALL, PROVIDE AS MUCH INFORMATION AS POSSIBLE IN Q36

				-			
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ASK ALL.

Q36. Which town/village/country do you live in?

PROVIDE AS MUCH INFORMATION AS POSSIBLE IN ALL BOXES ESPECIALLY IF RESPONDENT DOES NOT KNOW THEIR POSTCODE IN FULL OR AT ALL IN Q35

Building name/number

Street name

City/Town/Village

County

Country

DO NOT ASK RESPONDENT

Q37. Record gender of respondent

SINGLE CODE

- 1 Male
 - 2 Female
-

Q38. Please can you tell me what age range you are in?

SINGLE CODE

- 1 16-24
 - 2 25-34
 - 3 35-44
 - 4 45-54
 - 5 55-64
 - 6 65-74
 - 7 75+
 - 8 Don't wish to say
-

SHOWCARD 3

Q39. To help us with our analysis, it would be really helpful if you could please tell me what range your annual total household income before tax is in.

Please remember that all of your answers are confidential and that these final questions are used for analysis purposes and are not reported as individual results.

SINGLE CODE

	Per year	Per month
1	Less than £10,000	Up to £833
2	£11,000 - £20,000	£917 - £1,667
3	£21,000 - £30,000	£1,750 - £2,500
4	£31,000 - £40,000	£2,583 - £3,333
5	£41,000 - £50,000	£3,417 - £4,167
6	£51,000 - £60,000	£4,250 - £5,000
7	£61,000 - £70,000	£5,083 - £5,833
8	£71,000 - £80,000	£5,917 - £6,667
9	£81,000 - £90,000	£6,750 - £7,500
10	£91,000 - £100,000	£7,583 - £8,333
11	Over £101,000	Over £8,417

Q40. Are you a member of any of the following organisations?

MULTI CODE

- 1 Royal Society for the Protection of Birds
- 2 Surfers Against Sewage / Marine Protection Society
- 3 Sailing / boating / surfing club
- 4 Angling club
- 5 Friends of the Earth / Green-peace
- 6 National Trust
- 7 A local wildlife trust or environmental organisation
- 8 Other environmental or beach organisation (PLEASE SPECIFY)
- 9 No, none of these

SHOWCARD 4

Q41. What is your ethnic group? Please read out the number that applies to you.

SINGLE CODE

White

- 1 Scottish / English / Welsh / Northern Irish / British
- 2 Irish
- 3 Gypsy or Irish Traveller
- 4 Any other White background (PLEASE SPECIFY)

Mixed / multiple ethnic groups

- 5 White and Black Caribbean
- 6 White and Black African
- 7 White and Asian
- 8 Any other Mixed background (PLEASE SPECIFY)

Asian / Asian British

- 9 Indian
- 10 Pakistani
- 11 Bangladeshi
- 12 Chinese
- 13 Any other Asian/Asian British background (PLEASE SPECIFY)

Black / African / Caribbean

- 14 African
- 15 Caribbean
- 16 Any other Black/ African/ Caribbean background (PLEASE SPECIFY)

Other ethnic group

- 17 Arab
- 18 Any other background (PLEASE SPECIFY)

9999 Don't wish to say

Q42. Have you, a family member or a friend experienced an upset stomach or ear ache in the past that you think was caused by going in the water while at a beach in Scotland?

SINGLE CODE

- 1 Yes ASK Q43
 - 2 No SKIP TO END OF SURVEY
-

ASK IF CODE 1 IN Q42

Q43. How many years ago did you/they have the stomach upset or ear ache that you/they believe was caused by going in the water at the beach Scotland?

IF NOT SURE, GIVE APPROXIMATE NUMBER OF YEARS AGO

ENTER NUMBER OF YEARS AGO BELOW. ENTER -99 IF RESPONDENT DOES NOT KNOW

--	--

ASK IF CODE 1 IN Q42

Q44. At that time, how many cases of stomach upset or ear ache did you/they suffer as a result of going in the water at a beach in Scotland?

ENTER NUMBER OF CASES BELOW. TWO PEOPLE SUFFERING FROM ILLNESS COUNT AS TWO CASES, ETC. ENTER -99 IF RESPONDENT DOES NOT KNOW

--	--

ASK IF CODE 1 IN Q42

Q45. How many days in total did you or your family suffer from this/these stomach upset(s) or ear ache(s)?

WRITE NUMBER OF DAYS BELOW. ENTER -99 IF RESPONDENT DOES NOT KNOW

--	--	--

THE RESPONDENT MAY STATE THE ANSWER AS A TOTAL OR PER PERSON. CHECK THIS WITH THEM AND CIRCLE THE RELEVANT NUMBER BELOW TO EXPLAIN WHAT THEIR RESPONSE REFERS TO.

- 1 Total number of days
 - 2 Number of days per person
-

ASK IF CODE 1 IN Q42

Q46. How many days did you/they have to take off work due to these stomach upset(s) or ear aches (if you/they were working)?

WRITE NUMBER OF DAYS TAKEN OFF WORK BELOW. ENTER -99 IF RESPONDENT DOES NOT KNOW OR IF THEY WERE/DO NOT WORK.

--	--	--

THE RESPONDENT MAY STATE THE ANSWER AS A TOTAL OR PER PERSON. CHECK THIS WITH THEM AND CIRCLE THE RELEVANT NUMBER BELOW TO EXPLAIN WHAT THEIR RESPONSE REFERS TO.

- 1 Total number of days
- 2 Number of days per person

That's the end of the survey. Thank you for your time and help, it is very much appreciated.

SECTION G – POST-INTERVIEW INFORMATION TO BE COMPLETED BY INTERVIEWER

DO NOT ASK RESPONDENT

Q47. Weather at time of interview

SINGLE CODE

- | | | |
|----------|-----|--------------------------|
| Cold | | <input type="checkbox"/> |
| Average | | <input type="checkbox"/> |
| Hot | | <input type="checkbox"/> |
| | AND | |
| Overcast | | <input type="checkbox"/> |
| Sunny | | <input type="checkbox"/> |
| Wet | | <input type="checkbox"/> |

DO NOT ASK RESPONDENT

Q48. Are people in the sea at the time you were conducting the interview?

SINGLE CODE

- | | |
|---|-----|
| 1 | Yes |
| 2 | No |

DO NOT ASK RESPONDENT




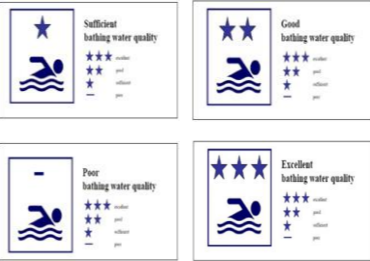




Q49. Are there any of the following signs at the beach?

MULTI CODE

- | | | |
|---|-----------------------------|-------------|
| A | RNLI or other lifeguards | SHOWCARD 1A |
| B | Blue Flag | SHOWCARD 1B |
| C | Seaside Award | SHOWCARD 1C |
| D | Bathing water status | SHOWCARD 1D |
| E | Bathing water advisory sign | SHOWCARD 1E |
| F | Abnormal situation | SHOWCARD 1F |
| G | Electronic sign | SHOWCARD 1G |
| H | None of these | |
| I | Other (PLEASE SPECIFY) | |

--

Onsite survey – showcards

<p>Showcard 1A</p> 	<p>Showcard 1B</p> 	<p>Showcard 1C</p> 	<p>Showcard 1D</p> 	<p>Showcard 1E</p>  <p>Advice against bathing</p>																																																																																		
<p>Showcard 1F</p> <p>Water Pollution Incident Do Not Swim</p> <p>ABNORMAL INCIDENT WARNING</p> <p>Day issued <input type="text"/></p> <p>What has happened <input type="text"/></p> <p>How long will the pollution last <input type="text"/></p> <p>Contact Environment Agency for more information 0800 807060</p> 	<p>Showcard 1G</p> 	<p>Showcard 2</p>  <p>Advice against bathing</p>	<p>Showcard 3</p> <table border="1"> <thead> <tr> <th></th> <th>Per year</th> <th>Per month</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Less than £10,000</td> <td>Up to £833</td> </tr> <tr> <td>2</td> <td>£11,000 - £20,000</td> <td>£917 - £1,667</td> </tr> <tr> <td>3</td> <td>£21,000 - £30,000</td> <td>£1,750 - £2,500</td> </tr> <tr> <td>4</td> <td>£31,000 - £40,000</td> <td>£2,583 - £3,333</td> </tr> <tr> <td>5</td> <td>£41,000 - £50,000</td> <td>£3,417 - £4,167</td> </tr> <tr> <td>6</td> <td>£51,000 - £60,000</td> <td>£4,250 - £5,000</td> </tr> <tr> <td>7</td> <td>£61,000 - £70,000</td> <td>£5,083 - £5,833</td> </tr> <tr> <td>8</td> <td>£71,000 - £80,000</td> <td>£5,917 - £6,667</td> </tr> <tr> <td>9</td> <td>£81,000 - £90,000</td> <td>£6,750 - £7,500</td> </tr> <tr> <td>10</td> <td>£91,000 - £100,000</td> <td>£7,583 - £8,333</td> </tr> <tr> <td>11</td> <td>Over £101,000</td> <td>Over £8,417</td> </tr> </tbody> </table>		Per year	Per month	1	Less than £10,000	Up to £833	2	£11,000 - £20,000	£917 - £1,667	3	£21,000 - £30,000	£1,750 - £2,500	4	£31,000 - £40,000	£2,583 - £3,333	5	£41,000 - £50,000	£3,417 - £4,167	6	£51,000 - £60,000	£4,250 - £5,000	7	£61,000 - £70,000	£5,083 - £5,833	8	£71,000 - £80,000	£5,917 - £6,667	9	£81,000 - £90,000	£6,750 - £7,500	10	£91,000 - £100,000	£7,583 - £8,333	11	Over £101,000	Over £8,417	<p>Showcard 4</p> <table border="1"> <thead> <tr> <th colspan="2">White</th> </tr> </thead> <tbody> <tr><td>1</td><td>Scottish / English / Welsh / Northern Irish / British</td></tr> <tr><td>2</td><td>Irish</td></tr> <tr><td>3</td><td>Gypsy or Irish Traveller</td></tr> <tr><td>4</td><td>Any other White background</td></tr> <tr><th colspan="2">Mixed / multiple ethnic groups</th></tr> <tr><td>5</td><td>White and Black Caribbean</td></tr> <tr><td>6</td><td>White and Black African</td></tr> <tr><td>7</td><td>White and Asian</td></tr> <tr><td>8</td><td>Any other Mixed background</td></tr> <tr><th colspan="2">Asian / Asian British</th></tr> <tr><td>9</td><td>Indian</td></tr> <tr><td>10</td><td>Pakistani</td></tr> <tr><td>11</td><td>Bangladeshi</td></tr> <tr><td>12</td><td>Chinese</td></tr> <tr><td>13</td><td>Any other Asian/Asian British background</td></tr> <tr><th colspan="2">Black / African / Caribbean</th></tr> <tr><td>14</td><td>African</td></tr> <tr><td>15</td><td>Caribbean</td></tr> <tr><td>16</td><td>Any other Black/ African/ Caribbean background</td></tr> <tr><th colspan="2">Other ethnic group</th></tr> <tr><td>17</td><td>Arab</td></tr> <tr><td>18</td><td>Any other background</td></tr> </tbody> </table>	White		1	Scottish / English / Welsh / Northern Irish / British	2	Irish	3	Gypsy or Irish Traveller	4	Any other White background	Mixed / multiple ethnic groups		5	White and Black Caribbean	6	White and Black African	7	White and Asian	8	Any other Mixed background	Asian / Asian British		9	Indian	10	Pakistani	11	Bangladeshi	12	Chinese	13	Any other Asian/Asian British background	Black / African / Caribbean		14	African	15	Caribbean	16	Any other Black/ African/ Caribbean background	Other ethnic group		17	Arab	18	Any other background
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A-6.2 Online survey instrument

Scottish Government – The Value of Bathing Waters and the Influence of Bathing Water Quality

**ONLINE QUESTIONNAIRE - MAIN SURVEY
(16th October 2017)**

RECORD

Respondent unique ID

Date of interview (dd/mm/yyyy)

Start time (hh:mm)

Finish time (hh:mm)

Length of interview (mm)

INTRODUCTION

Thank you for taking the time to complete this survey. We are carrying out research on behalf of the Scottish Government about what is important to people about beaches in Scotland. The survey will last between 20 - 25 minutes.

Any answer you give will be treated in confidence in accordance with the Code of Conduct of the Market Research Society. This means that all the information collected is used by the study sponsor for research purposes and the results will be presented in aggregate only.

As we need to capture the views of a broad mix of people in the research, the first questions are about you.

SECTION A - SCREENING AND QUOTAS

Q50. Are you responsible for paying household bills (such as water, electricity, and gas bills) in your household, or are you jointly responsible with someone else?

SINGLE CODE

1	Person most responsible	ASK Q2
2	Jointly responsible	ASK Q2
3	Not responsible	THANK & CLOSE
4	Don't know	THANK & CLOSE

Q51. And where do you live?

1	England	THANK & CLOSE
2	Northern Ireland	THANK & CLOSE
3	Scotland	ASK Q3
4	Wales	THANK & CLOSE

Q52. Please can you provide your full home postcode or the first part of your home postcode? This information will be treated as confidential and will only be used in aggregate form. Although it is possible to identify individual responses from people's postcodes, this is not the purpose of the research as the results will only be used to see how far you travel to the beach.

1	RECORD FULL POSTCODE	ASK Q4
2	RECORD PARTIAL POSTCODE, NEAREST TOWN/CITY/VILLAGE AND COUNTY	ASK Q4
3	Prefer not say	THANK & CLOSE

RESPONDENT QUOTAS TO MEET NAT REP QUOTAS

Q53. Please indicate your gender

SINGLE CODE

1	Male
2	Female

RESPONDENT QUOTAS TO MEET NAT REP QUOTAS

Q54. Please indicate your age

SINGLE CODE

- | | |
|---|-------|
| 1 | 16-24 |
| 2 | 25-34 |
| 3 | 35-44 |
| 4 | 45-54 |
| 5 | 55-64 |
| 6 | 65-74 |
| 7 | 75+ |

QUOTA CODING

- 16 - 24 (CODE 1)
- 25 - 34 (CODE 2)
- 35 - 44 (CODE 3)
- 45 - 54 (CODE 4)
- 55 - 64 (CODE 5)
- 65+ (CODES 6-7)

Q55. Are you the main income earner in your household?

SINGLE CODE

- | | | |
|---|-------------------|---------------------------------------|
| 1 | No | ASK Q7 |
| 2 | Yes | ASK Q7 |
| 3 | No income earners | AUTOCODE SEG = 6 IN Q7 AND SKIP TO Q8 |

RESPONDENT QUOTAS TO MEET NAT REP QUOTAS

ASK IF CODE 1 OR 2 IN Q6

Q56. What is the main income earner's occupation in your household? If the main income earner is retired, please select their occupation before retirement.

SINGLE CODE

- | | | |
|---|---|----|
| 1 | Higher managerial, administrative or professional | A |
| 2 | Intermediate managerial, administrative or professional | B |
| 3 | Supervisory or clerical and junior managerial, administrative or professional | C1 |
| 4 | Skilled manual worker | C2 |
| 5 | Semi or unskilled manual worker | D |
| 6 | Casual worker, dependent on state pension only, or dependant on state welfare | E |
-

SECTION B - VISITS TO BEACHES IN SCOTLAND

The following questions focus on your experience visiting beaches in Scotland.

Q57. In general, how regularly do you visit beaches in Scotland?

SINGLE CODE

1	Daily	ASK Q9
2	Weekly	ASK Q9
3	Once a fortnight	ASK Q9
4	Monthly	ASK Q9
5	Once every three months	ASK Q9
6	Once every six months	ASK Q9
7	Once a year	ASK Q9
8	Once every 2 years or less frequently	ASK Q9
9	Never	SKIP TO Q32
10	Don't know	ASK Q9

ASK ALL EXCEPT CODE 9 IN Q8

Q58. What are the top 3 factors that you consider when deciding which beach to visit?

MULTI CODE - MAXIMUM OF 3 OPTIONS

ROTATE

- 1 Visiting a beach which is not crowded
 - 2 Enjoying the natural environment
 - 3 Water quality
 - 4 Cleanliness of the beach
 - 5 Being able to see wildlife on the beach
 - 6 Distance you have to travel to the beach from your home/where you are staying
 - 7 Walking opportunities
 - 8 Relaxation
 - 9 Sports you can participate in on the beach
 - 10 Presence of a lifeguard
 - 11 Availability of cafes and restaurants
 - 12 Car parking
 - 13 Safe for swimming
 - 14 Surf conditions
 - 15 Other activities near the beach, such as shops and amusements
-

Q59. What activities do you do when visiting beaches and the sea in Scotland? Please select all that apply.

MULTI CODE - ROTATE

- 1 Playing on amusements
 - 2 Dog Walking
 - 3 Eating out (café/restaurant/fish and chips)
 - 4 Fishing
 - 5 Get some fresh air
 - 6 Horse riding
 - 7 Kayaking/canoeing
 - 8 Kite Surfing
 - 9 Nature and bird watching
 - 10 Paddling
 - 11 Rock pooling
 - 12 Sailing/Boating
 - 13 Spend time with friends/family
 - 14 Sunbathing
 - 15 Surfing
 - 16 Swimming
 - 17 Play with the children
 - 18 Relax
 - 19 Walking
 - 20 Windsurfing
 - 21 Other (PLEASE SPECIFY)
-

SECTION C – MOST VISITED SCOTTISH BEACH

SKIP SECTION C IF CODE 9 IN Q8

ASK IF CODE 1 - 8 IN Q8

Q60. What is the name of the beach that you visit most often in Scotland? Please select the name of that beach from the drop-down list below.

If it does not appear in the list below, please select 'other' and type the name of that beach with its nearest city/town/village and county.

SINGLE CODE

PROVIDE DROP-DOWN LIST OF DESIGNATED BATHING WATERS IN SCOTLAND

INCLUDE 'OTHER (PLEASE SPECIFY)' WHICH WHEN SELECTED DISPLAYS 3 BOXES FOR THE FOLLOWING: (i) BEACH NAME; (ii) NEAREST CITY/TOWN/VILLAGE; (iii) COUNTY. CODE 'OTHER (PLEASE SPECIFY)' AS 999

ASK IF CODE 10 IN Q8

Q11b. You indicated that you don't know how regularly you visit beaches in Scotland. But which beach do you think you visit most often? Please select the name of that beach from the drop-down list below.

If it does not appear in the list below, please select 'other' and type the name of that beach with its nearest city/town/village and county.

SINGLE CODE

PROVIDE DROP-DOWN

LIST OF DESIGNATED BATHING WATERS IN SCOTLAND

INCLUDE 'OTHER (PLEASE SPECIFY)' WHICH WHEN SELECTED DISPLAYS 3 BOXES FOR THE FOLLOWING: (i) BEACH NAME; (ii) NEAREST CITY/TOWN/VILLAGE; (iii) COUNTY. CODE 'OTHER (PLEASE SPECIFY)' AS 999

The following questions are about the beach you visit most often.

Q61. What kind of trip do you generally make when you go to the beach you visit most often?

SINGLE CODE

- 1 Day trip (not staying overnight)
 - 2 Short break (up to 6 nights)
 - 3 Longer holiday (7+ nights)
-

Q62. What is your main form of transport when you go to the beach you visit most often?

SINGLE CODE

- 1 Bike
 - 2 Bus/coach
 - 3 Car/van
 - 4 Jog/run
 - 5 Motorbike
 - 6 Taxi
 - 7 Train
 - 8 Tram
 - 9 Walk
 - 10 Other (PLEASE SPECIFY)
-

Q63. How long does it take you to get there from your home? Please consider all aspects of your journey in your answer.

SINGLE CODE

- 1 Less than 15 minutes
 - 2 15 - 30 minutes
 - 3 30 - 45 minutes
 - 4 45 min - 1 hour
 - 5 1 - 2 hours
 - 6 2 - 3 hours
 - 7 Over 3 hours
 - 8 Don't know
-

Q64. And how far is that from your home? Please consider all aspects of your journey in your answer.

SINGLE CODE

- 1 Less than 5 miles
 - 2 5 - 10 miles
 - 3 10 - 15 miles
 - 4 15 - 20 miles
 - 5 20 - 30 miles
 - 6 30 - 40 miles
 - 7 40 - 50 miles
 - 8 50 - 60 miles
 - 9 60 - 70 miles
 - 10 70 - 80 miles
 - 11 80 - 90 miles
 - 12 90 - 100 miles
 - 13 100 - 150 miles
 - 14 150 - 200 miles
 - 15 200 - 250 miles
 - 16 250 - 300 miles
 - 17 Over 300 miles
 - 18 Don't know
-

Q65. In the last 12 months, how many times have you been to [DISPLAY RESPONSE TO Q11]? If you visit the beach multiple times a day that counts as 1 day. So your response, for a 12-month period, should be between 1 and 365.

Please note that you can only enter a number between 1 and 365 in the box below.

ALLOW NUMERICAL RESPONSES BETWEEN 1 AND 365

--	--	--

Q66. When you visited that beach in the past, did you see any signs about water quality there?

SINGLE CODE

- 1 Yes
 - 2 No, I looked but I couldn't find any signs
 - 3 No, I didn't look and don't remember seeing any signs
 - 4 Don't know
-

Q67. To what extent do you agree with the following statements about your visits to [DISPLAY RESPONSE TO Q11]?

For each statement below, please answer on a scale of 1 to 10 where 1 is 'not at all' and 10 is 'completely' by dragging the slider across the screen.

SHOW SCALE AND SLIDER FOR EACH OPTION BELOW.

1 = NOT AT ALL

10 = COMPLETELY

ROTATE OPTIONS

- 1 This is an environment where I am able to rest, recover my ability and focus
- 2 This is a place which is away from everyday demands and where I am able to relax and think about what interests me
- 3 This place is fascinating; it is large enough for me to discover and be curious about things
- 4 This is a place which is very large, with no restrictions to movements; it is a world of its own
- 5 In this place it is very easy to orient and move around so that I can do what I like

ASK ALL EXCEPT IF CODE 9 IN Q8

Q68. What activities do you mainly do when you visit [DISPLAY RESPONSE TO Q11]? These may be different than the activities you do in general at Scottish beaches, which we asked you about before.

MULTI CODE - ROTATE

- 1 Playing on amusements
- 2 Dog Walking
- 3 Eating out (café/restaurant/fish and chips)
- 4 Fishing
- 5 Get some fresh air
- 6 Horse riding
- 7 Kayaking/canoeing
- 8 Kite Surfing
- 9 Nature and bird watching
- 10 Paddling
- 11 Rock pooling
- 12 Sailing/Boating
- 13 Spend time with friends/family
- 14 Sunbathing
- 15 Surfing
- 16 Swimming
- 17 Play with the children
- 18 Relax
- 19 Walking
- 20 Windsurfing
- 21 Other (PLEASE SPECIFY)

ASK IF ANY OF THE FOLLOWING CODES IN Q19: 4, 7, 8, 10, 11, 12, 15, 16 OR 20. OTHERWISE SKIP TO Q21

Q69. How much contact do you have with the water when doing activities these at [DISPLAY RESPONSE TO Q11]?

SINGLE CODE

- 1 My head is constantly in and out of the water
 - 2 Occasionally I will dip my head into the water
 - 3 My head may go under water once or twice by accident
 - 4 I contact the water (legs, arms, body) but try to avoid putting my head underwater
 - 5 I never come into contact with the water
-

Q70. How would you rate the water quality at [DISPLAY RESPONSE TO Q11]? By this we mean how clean the water is for swimming and other water-related activities.

SINGLE CODE

- 1 Excellent
 - 2 Good
 - 3 Average
 - 4 Poor
 - 5 Don't know
-

Q71. How much litter and debris would you say there is on the beach and the sea at [DISPLAY RESPONSE TO Q11]? Litter and debris can include:

- General litter such as plastics, packaging and cigarette ends;
- Litter related to things people flush down the toilet which don't break down during wastewater treatment such as cotton buds, baby wipes and other sanitary products which have plastics in them;
- Animal waste, mainly dog mess.

SINGLE CODE

- 1 A great deal of litter and debris
 - 2 A fair amount of litter and debris
 - 3 Not very much litter and debris
 - 4 No litter or debris at all
 - 5 Don't know
-

Q72. How much do you and your immediate party spend on the following items on an average day when you go to [DISPLAY RESPONSE TO Q11]?

If you do not know or do not wish to state how much you spend on average, please select 'don't know'. Only enter '0' if you spend or expect to spend nothing.

Please note that you can only enter numbers above 0 in the boxes below.

ALLOW NUMBERS GREATER THAN OR EQUAL TO ZERO

	£	Don't know
A Eating and drinking in cafes, pubs, restaurants and hotels	<input type="text"/>	<input type="checkbox"/>
B Buying food, drinks or snacks from shops	<input type="text"/>	<input type="checkbox"/>
C Shopping for items for the beach, and souvenirs	<input type="text"/>	<input type="checkbox"/>
D Tourist activities such as local attractions or water sports lessons	<input type="text"/>	<input type="checkbox"/>
E Travel and transport, for example fuel or train tickets	<input type="text"/>	<input type="checkbox"/>
F Car parking	<input type="text"/>	<input type="checkbox"/>
G Accommodation per night (put zero if you visit that beach from home)	<input type="text"/>	<input type="checkbox"/>

SECTION D – ATTITUDES AND PERCEPTIONS

SKIP SECTION D IF CODE 9 IN Q8

ASK IF CODE 1 - 8 OR 10 IN Q8

Q73. If you saw a sign like this on your next visit to [DISPLAY RESPONSE TO Q11], advising you not to go into the water because of poor water quality, to what extent would you agree or disagree with the following statement?



“I would be upset if I came to this beach and saw this sign advising me not to go in the water”

SINGLE CODE

- 1 STRONGLY AGREE
- 2 TEND TO AGREE
- 3 NEITHER AGREE NOR DISAGREE
- 4 TEND TO DISAGREE
- 5 STRONGLY DISAGREE

Q74. If you saw a sign like this on your next visit to [DISPLAY RESPONSE TO Q11], advising you not to go into the water because of poor water quality, to what extent would you agree with the following statement?



Please answer on a scale of 1 to 10 where 1 is ‘not at all’ and 10 is ‘completely’ by dragging the slider across the screen.

This is an environment where I am able to rest, recover my ability and focus.

SHOW SCALE AND SLIDER FOR EACH OPTION ABOVE

1 = NOT AT ALL

10 = COMPLETELY

Q75. If you saw a sign like this, on your next visit to [DISPLAY RESPONSE TO Q11], advising you not to go into the water because of poor water quality, which of the following describes what you would do that day?



SINGLE CODE - ROTATE

- 1 I would not be concerned as I never go in the water anyway
 - 2 I would stay at the beach and would go in the water
 - 3 I would stay at the beach but not go in the water
 - 4 I would leave and go to another beach
 - 5 I would leave and not go to any beach
-

Q76. Would seeing this sign change how often you would visit this beach in the future?



SINGLE CODE

- 1 Yes ASK Q28
 - 2 No SKIP TO Q30
 - 3 Don't know SKIP TO Q30
-

ASK IF CODE 1 IN Q27

Q77. How would it change the visits you make in the future?

SINGLE CODE

- 1 I would not visit at all SKIP TO Q30
 - 2 I would visit less often ASK Q29
-

ASK IF CODE 2 IN Q28

Q78. Earlier you said that you had visited this beach [DISPLAY RESPONSE IN Q16] days in the past 12 months. How many times per year would you visit instead if you saw this sign?



Remember that if you visit the beach multiple times a day that counts as 1 day so your response, for a 12-month period, should not be more than 365.

Please note that you can only enter a number between 0 and 365 in the box below.

ALLOW NUMERICAL RESPONSES BETWEEN 0 AND 365. IF RESPONDENT ENTERS A NUMBER WHICH IS GREATER THAN THEIR RESPONSE IN Q16, DISPLAY THE FOLLOWING ERROR MESSAGE: Your response should be less than the total number of days you visited this beach in the last 12 months.

--	--	--

ASK IF CODE 1 OR 2 IN Q28

Q79. You indicated that seeing this sign would make you visit [DISPLAY RESPONSE IN Q11] less often or not at all.



Would you start going to another beach in Scotland to do similar activities and spend a similar length of time?

SINGLE CODE

- | | | |
|---|---|-------------------|
| 1 | Yes, I would visit a different beach | ASK Q31 |
| 2 | No, I would not visit a different beach | SKIP TO SECTION F |

ASK IF CODE 1 IN Q30

Q80. What is the name of the beach that you would start visiting in Scotland? Please select the name of that beach from the drop-down list below.

If the beach that you visit does not appear in the list below, please select 'other' and type the name of that beach with its nearest city/town/village and county.

SINGLE CODE

PROVIDE DROP-DOWN LIST OF DESIGNATED BATHING WATERS IN SCOTLAND. EXCLUDE RESPONSE IN Q11 (NAME OF BEACH THAT RESPONDING VISITS MOST OFTEN)

INCLUDE 'OTHER (PLEASE SPECIFY)' WHICH WHEN SELECTED DISPLAYS 3 BOXES FOR THE FOLLOWING: (i) BEACH NAME; (ii) NEAREST CITY/TOWN/VILLAGE; (iii) COUNTY. CODE 'OTHER (PLEASE SPECIFY)' AS 999

SECTION E – NON-USERS

ASK IF CODE 9 IN Q8. OTHERWISE SKIP THIS SECTION

You indicated that you never visit beaches in Scotland. In this section we would like to ask you about the beach in Scotland that you feel the most association with. You may feel this association because you visited that beach when you were younger, your family or friends visit it or it is the closest beach to your home.

Q81. What is the name of the beach that you feel the most association with in Scotland? Please select the name of that beach from the drop-down list below.

If the beach does not appear in the list below, please select 'other' and type the name of that beach with its nearest city/town/village and county.

SINGLE CODE

PROVIDE DROP-DOWN LIST OF DESIGNATED BATHING WATERS IN SCOTLAND.

INCLUDE 'OTHER (PLEASE SPECIFY)' WHICH WHEN SELECTED DISPLAYS 3 BOXES FOR THE FOLLOWING: (i) BEACH NAME; (ii) NEAREST CITY/TOWN/VILLAGE; (iii) COUNTY. CODE 'OTHER (PLEASE SPECIFY)' AS 999

Q82. Why do you feel an association with [DISPLAY RESPONSE IN Q32] in particular? Please select all that apply.

- 1 It is the closest to my house
 - 2 I used to visit it when I was younger
 - 3 My family uses that beach
 - 4 My friends use that beach
 - 5 Other (PLEASE SPECIFY)
-

SECTION F – STATED PREFERENCE

NEW SCREEN

There are currently 86 beaches in Scotland which are designated as ‘bathing waters’. This means their water quality is monitored by the Scottish Environment Protection Agency during the bathing season, from 15 May to 15 September. Based on this monitoring, bathing waters are classed each year as ‘poor’, ‘sufficient’, ‘good’ or ‘excellent’ and have one of these signs displayed to reflect their water quality:

Poor



Sufficient



Good



Excellent



This is part of implementing the ‘revised Bathing Water Directive’ which requires bathing waters to meet ‘sufficient’ or better status.

Currently 11 (13%) bathing waters in Scotland have ‘poor’ status and therefore are failing to achieve the minimum ‘sufficient’ standard. If a bathing water fails the minimum standard for 5 years in a row, then a sign advising against swimming due to poor water quality will be permanently displayed at that beach, like the one below.

Advice against swimming due to permanently poor water quality



NEW SCREEN

We are now going to ask you to make some choices about beaches in Scotland. You will be asked to choose between different options for:







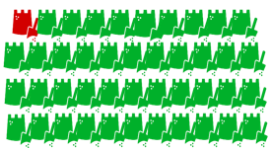
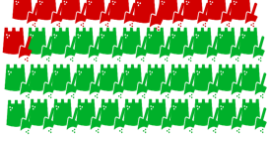
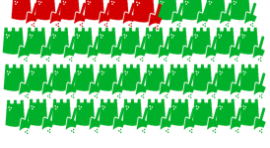
1. The water quality standard at the beach that you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with']
2. The amount of litter and debris at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with']
3. How many Scottish beaches overall fail to meet water quality standards

And:

4. The change (increase) in your household's annual water charges that would pay for the option.

You will be asked to make 6 choices in total. Each time you will be asked to choose your most preferred option from three alternatives. Below is an example of the choice you will be asked to make.

ROTATE FIRST 3 ROWS ON CARD FOR EACH RESPONDENT. CHANGE ORDER OF DESCRIPTIONS ACCORDING TO ROTATION OF ROWS. DO NOT ROTATE ROW FOR BILL ATTRIBUTE WHICH SHOULD ALWAYS BE IN THE FINAL ROW. AFTER THE FIRST ROTATION FOR EACH RESPONDENT, MAINTAIN THE SAME ORDER OF THE (ROTATED) ROWS IN THE REST OF THE SURVEY.

	OPTION A	OPTION B	OPTION C
Sign displayed at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with']	 <p>Good</p>	 <p>Excellent</p>	 <p>Sufficient</p>
Amount of litter at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with']	 <p>90% litter removed 10% litter remaining</p>	 <p>50% litter removed 50% litter remaining</p>	 <p>No litter removed 100% litter remaining</p>
Number of Scottish beaches failing to meet water quality standards (1 sand castle = 2 bathing waters)	 <p>2 of 86 bathing waters fail (3%)</p>	 <p>22 of 86 bathing waters fail (25%)</p>	 <p>11 of 86 bathing waters fail (13%)</p>
Increase in your household's annual water charge	£20 increase	£45 increase	£0 (no increase)

When making your choices, please consider all aspects of the options presented. For example:

- You may prefer Option A as you like the reduction in litter at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with'] or the low number of beaches overall which fail to meet water quality standards.

OR

- You may prefer Option B as you like the 'excellent' water quality at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with'].







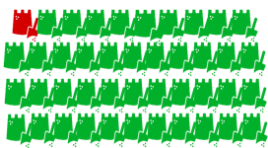

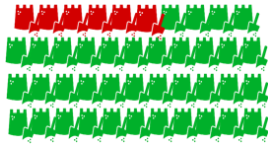
OR

- Finally you may prefer Option C as you do not think the improvements in Option A or B are worth the increase your household's annual water charges.

We will now run through the different elements of each option.

NEW SCREEN

The first aspect of each option to consider is the water quality at the beach that you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with'] in terms of its water quality.

	OPTION A	OPTION B	OPTION C
<p>Sign displayed at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with']</p>	 <p>Good</p>	 <p>Excellent</p>	<p>DISPLAY LEVEL BASED ON CHOICE CARD BLOCK ALLOCATED TO RESPONDENT:</p>  <p>Sufficient</p>
<p>Amount of litter at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with']</p>	 <p>90% litter removed 10% litter remaining</p>	 <p>50% litter removed 50% litter remaining</p>	 <p>No litter removed 100% litter remaining</p>
<p>Number of Scottish beaches failing to meet water quality standards (1 sand castle = 2 bathing waters)</p>	 <p>2 of 86 bathing waters fail (3%)</p>	 <p>22 of 86 bathing waters fail (25%)</p>	 <p>11 of 86 bathing waters fail (13%)</p>
<p>Increase in your household's annual water charge</p>	<p>£20 increase</p>	<p>£45 increase</p>	<p>£0 (no increase)</p>







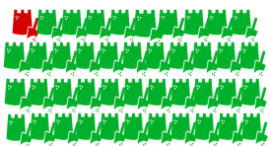
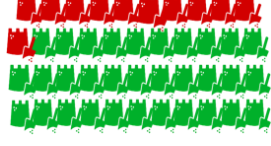

In making your choices, please remember that a beach with 'excellent' water quality is safer to swim in than a beach with 'good' water quality, which in turn is better than a beach with 'sufficient' water quality. A beach with 'poor' water quality is not considered safe to swim in during the bathing season. 'Advice against bathing' means that the water quality is permanently 'poor'.

NEW SCREEN

The next aspect of each to consider is the amount of litter or debris on the beach and in the sea at the beach that you [IF CODES 1-8 OR 10 AT Q8, DISPLAY ‘visit most often’; IF CODE 9 AT Q8, DISPLAY ‘have most association with’].

Please remember that litter and debris can include:

- General litter such as plastics, packaging and cigarette ends;
- Litter related to things people flush down the toilet which don't break down during water treatment such as cotton buds, baby wipes and other sanitary products which have plastics in them;
- Animal waste, mainly dog mess.

	OPTION A	OPTION B	OPTION C
Sign displayed at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY ‘visit most often’; IF CODE 9 AT Q8, DISPLAY ‘have most association with’]	 <p>Good</p>	 <p>Excellent</p>	 <p>Sufficient</p>
Amount of litter at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY ‘visit most often’; IF CODE 9 AT Q8, DISPLAY ‘have most association with’]	 <p>90% litter removed 10% litter remaining</p>	 <p>50% litter removed 50% litter remaining</p>	 <p>No litter removed 100% litter remaining</p>
Number of Scottish beaches failing to meet water quality standards (1 sand castle = 2 bathing waters)	 <p>2 of 86 bathing waters fail (3%)</p>	 <p>22 of 86 bathing waters fail (25%)</p>	 <p>11 of 86 bathing waters fail (13%)</p>
Increase in your household's annual water charge	£20 increase	£45 increase	£0 (no increase)







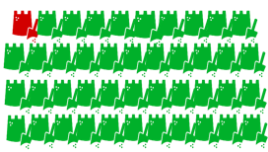


In this example:

- Option A offers a 90% reduction. This means that 9 out of every 10 items of litter and debris currently on the beach would be cleaned up.
- Option B offers a 50% reduction. 5 in every 10 items would be cleaned up.
- Option C offers no reduction in the amount of litter and debris.
- Other options, not presented here, could be a 25% or 75% reduction in litter and debris.

In making your choices, please remember that a 90% reduction in litter means the beach is cleaner than a 75% reduction or 50% reduction, which in turn are cleaner than a 25% reduction in litter. No litter removed means that the cleanliness of the beach will remain as it is now.

NEW SCREEN

The third aspect of each option to consider is the number bathing waters in Scotland overall (out of 86 in total) that fail water quality standards. Each sand castle icon represents 2 bathing waters.

	OPTION A	OPTION B	OPTION C
Sign displayed at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with']	 <p>Good</p>	 <p>Excellent</p>	 <p>Sufficient</p>
Amount of litter at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with']	 <p>90% litter removed 10% litter remaining</p>	 <p>50% litter removed 50% litter remaining</p>	 <p>No litter removed 100% litter remaining</p>
Number of Scottish beaches failing to meet water quality standards (1 sand castle = 2 bathing waters)	 <p>2 of 86 bathing waters fail (3%)</p>	 <p>22 of 86 bathing waters fail (25%)</p>	 <p>11 of 86 bathing waters fail (13%)</p>
Increase in your household's annual water charge	£20 increase	£45 increase	£0 (no increase)

Please note that currently 11 of the 86 bathing waters (13%) in Scotland are failing to meet water quality standards.

In this example:

- In Option A, 2 out of the 86 (3%) bathing waters fail to meet water quality standards.
- In Option B, 22 out of the 86 (25%) bathing waters fail to meet water quality standards.
- In Option C, 11 out of the 86 (13%) bathing waters fail to meet water quality standards. This is the current level in Scotland.
- Other options, not presented here, could be 5 (6%) or 16 (19%) bathing waters failing to meet water quality standards.

In making your choices please remember that less than 11 bathing waters failing is better than the current situation. More than 11 is worse than the current situation.







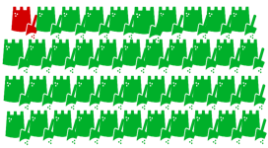
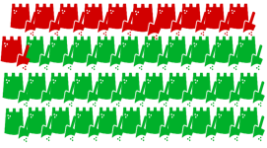
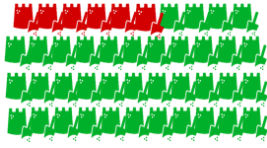
NEW SCREEN

The final aspect to consider is the change (increase) in you annual household water charges to pay for the option. Depending on the option, this could be a £10, £20, £35, £45, £60 or £75 increase, or no increase (£0).

When making your choices, please remember that:







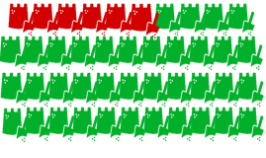
- There are other investments that are funded by water charges and may increase charges
- Any money you pay for bathing water quality improvements will not be available for you to spend elsewhere
- Other household bills may go up or down affecting the amount of money you have to spend in general

Please consider your answers carefully. The results from this survey will be used by the Scottish Government to help plan future bathing water improvements. It is therefore important that your answers reflect your views as accurately as possible.

	OPTION A	OPTION B	OPTION C
Sign displayed at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with']	 <p>Good</p>	 <p>Excellent</p>	 <p>Sufficient</p>
Amount of litter at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with']	 <p>90% litter removed 10% litter remaining</p>	 <p>50% litter removed 50% litter remaining</p>	 <p>No litter removed 100% litter remaining</p>
Number of Scottish beaches failing to meet water quality standards (1 sand castle = 2 bathing waters)	 <p>2 of 86 bathing waters fail (3%)</p>	 <p>22 of 86 bathing waters fail (25%)</p>	 <p>11 of 86 bathing waters fail (13%)</p>
Increase in your household's annual water charge	£20 increase	£45 increase	£0 (no increase)

NEW SCREEN

Finally, please note that Option C will always be the same in each choice. This provides an option that involves no change in your annual water charges and lower levels for the other aspects of option.

	OPTION A	OPTION B	OPTION C
<p>Sign displayed at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with']</p>	 <p>Good</p>	 <p>Excellent</p>	<p>DISPLAY LEVEL BASED ON CHOICE CARD BLOCK ALLOCATED TO RESPONDENT:</p> <p>BLOCKS 1 AND 4 = LEVEL 3 BLOCKS 2 AND 5 = LEVEL 2 BLOCKS 3 AND 6 = LEVEL 1</p>
<p>Amount of litter at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with']</p>	 <p>90% litter removed 10% litter remaining</p>	 <p>50% litter removed 50% litter remaining</p>	 <p>No litter removed 100% litter remaining</p>
<p>Number of Scottish beaches failing to meet water quality standards (1 sand castle = 2 bathing waters)</p>	 <p>2 of 86 bathing waters fail (3%)</p>	 <p>22 of 86 bathing waters fail (25%)</p>	 <p>11 of 86 bathing waters fail (13%)</p>
<p>Increase in your household's annual water charge</p>	<p>£20 increase</p>	<p>£45 increase</p>	<p>£0 (no increase)</p>

This type of study needs to consider all combinations of alternatives. So you may find that some of the options in the choices you are asked to make do not make sense. For example, you may find a card where you do not think anyone would ever choose one of the options. If you think one option does not make sense, just choose between the other two alternatives.

NEW SCREEN

ASK ALL

BEFORE EACH PACKAGE IS SHOWN ASK THE FOLLOWING QUESTION

Q83. For your first choice, please consider these 3 options. Which option do you prefer?

PRESENT 1ST CHOICE CARD

DISPLAY ON SCREEN FOR RESPONDENT CHOICE 1 OF 6; 2 OF 6; ETC.

REPEAT FOR CHOICES 2 - 6

CHOICE	OPTION A	OPTION B	OPTION C
1 ST CARD	1	2	3
2 ND CARD	1	2	3
3 RD CARD	1	2	3
4 TH CARD	1	2	3
5 TH CARD	1	2	3
6 TH CARD	1	2	3

ASK IF OPTION C WAS MENTIONED AT 3, 4, 5, OR 6 TIMES AT Q34, OTHERWISE SKIP TO Q36

Q84. You chose Option C in most of the choice questions - that is to pay no additional amount on your water charges. What was the main reason for generally choosing this option?

SINGLE CODE - ROTATE OPTIONS

- 1 I cannot afford to pay extra money on my water charges
 - 2 I do not visit beaches or have an association with any beaches in Scotland
 - 3 I do not notice litter and debris on the beach
 - 4 I do not go in the water
 - 5 I do not feel individuals should pay (more) for such improvements
 - 6 I believe that people who use beaches most or those living in local areas should pay for the improvements
 - 7 I think money would be better spent on other services/issues (e.g. health care, crime prevention, education, economic growth, job creation, other environment issues, etc.)
 - 8 Some other reason (PLEASE SPECIFY)
-

ASK ALL

Q85. Thinking about the choices you made, how important was each aspect of the alternative options to you?

RESPONSE OPTIONS

Very important

Quite important

Not very important

Not at all important

- 1 The quality of water at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with']
 - 2 The reduction in litter and debris at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with']
 - 3 The number of Scottish beaches overall failing to meet water quality standards
 - 4 The cost to you household in terms of the increase in annual water charge
-

ASK ALL

Please can you tell us your preferred level for each aspect of the options.

Q86. The quality of water at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with']. If cost was not a factor, what would your preferred level be?

SINGLE CODE

- | | | |
|---|---|-------------|
| 1 | Excellent water quality | SKIP TO Q39 |
| 2 | Good water quality | ASK Q38 |
| 3 | Sufficient water quality | ASK Q38 |
| 4 | Poor water quality | ASK Q38 |
| 5 | Permanently poor water quality (advice against bathing) | ASK Q38 |
| 6 | This aspect of the options was not important to me in choices | SKIP TO Q39 |
-

ASK IF CODE 2 - 5 IN Q37

Q87. Why do you prefer the quality of water at the beach to be [INSERT ANSWER FROM Q40], instead of excellent?

MULTI CODE EXCEPT FOR CODE 7 WHICH SHOULD BE EXCLUSIVE

- 1 This aspect of the options was not important to me in choices
 - 2 I do not go into the water
 - 3 The water quality is good enough at the beach I was thinking of
 - 4 I feel that level is of a higher standard
 - 5 I feel that level would cost less
 - 6 I feel that level is good enough to make me happy
 - 7 Don't know/I did not understand the options
 - 8 Other (PLEASE SPECIFY)
-

ASK ALL

Q88. Reduction in litter and debris at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with']. If cost was not a factor, what would your preferred level be?

SINGLE CODE

- | | | |
|---|---|-------------|
| 1 | 90% litter removed | SKIP TO Q41 |
| 2 | 75% litter removed | ASK Q40 |
| 3 | 50% litter removed | ASK Q40 |
| 4 | 25% litter removed | ASK Q40 |
| 5 | No litter removed | ASK Q40 |
| 6 | This aspect of the options was not important to me in choices | SKIP TO Q41 |
-

ASK IF CODE 2 - 5 IN Q39

Q89. Why do you prefer the reduction in litter and debris at the beach to be [INSERT ANSWER FROM Q42], instead of a 90% reduction?

MULTI CODE EXCEPT FOR CODE 6 WHICH SHOULD BE EXCLUSIVE

- 1 This aspect of the options was not important to me in choices
 - 2 There is no litter/debris on the beach I was thinking of
 - 3 I feel that level is of a higher standard
 - 4 I feel that level would cost less
 - 5 I feel that level is good enough to make me happy
 - 6 Don't know/I did not understand the options
 - 7 Other (PLEASE SPECIFY)
-

ASK ALL

Q90. The number of Scottish beaches overall failing water quality standards. If cost was not a factor, what would your preferred level be?

SINGLE CODE

1	3% of bathing waters fail water quality standards (2 out of 86)	SKIP TO Q43
2	6% of bathing waters fail water quality standards (6 out of 86)	ASK Q42
3	13% of bathing waters fail water quality standards (11 out of 86)	ASK Q42
4	19% of bathing waters fail water quality standards (19 out of 86)	ASK Q42
5	25% of bathing waters fail water quality standards (22 out of 86)	ASK Q42
6	This aspect of the options was not important to me in choices	SKIP TO Q43

ASK IF CODE 2 - 5 IN Q41

Q91. Why do you prefer the proportion of Scottish beaches meeting bathing water standards to be [INSERT ANSWER FROM Q44], instead of only 3% failing?

MULTI CODE EXCEPT FOR CODE 5 WHICH SHOULD BE EXCLUSIVE

- 1 This aspect of the options was not important to me in choices
 - 2 I feel that level is of a higher standard
 - 3 I feel that level would cost less
 - 4 I feel that level is good enough to make me happy
 - 5 Don't know/I did not understand the options
 - 6 Other (PLEASE SPECIFY)
-

IF CODE 6 IN Q37 AND Q39 AND Q41, SKIP TO SECTION G

To conclude this section, we would like to ask you one final question concerning how much you would be willing to pay to ensure that the quality of water at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with'] reaches your preferred combination of levels.

Your preferred combination of levels was:

IF CODE ≠ 6 IN ANY OF Q37 OR Q39 OR Q41, DISPLAY OPTIONS SELECTED IN IN Q37, Q39 AND Q41 AS FOLLOWS

The quality of water at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with'] - [DISPLAY RESPONSE IN Q37]

The reduction in litter and debris at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with'] - [DISPLAY RESPONSE IN Q39]

The proportion of Scottish bathing waters meeting water quality standards - [DISPLAY RESPONSE IN Q41]

IF CODE = 6 IN EITHER Q37 OR Q39 OR Q41 BUT NOT ALL THREE QUESTIONS SIMULTANEOUSLY, THEN FOR THE QUESTIONS WHERE CODE = 6, THE CORRESPONDING LEVELS IN Q43 SHOULD BE THE CURRENT LEVELS IN SCOTLAND, AS FOLLOWS

IF CODE = 6 IN Q37, DISPLAY THE FOLLOWING FOR THE FIRST ATTRIBUTE IN Q43

The quality of water at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with'] - **good water quality**

IF CODE = 6 IN Q39, DISPLAY THE FOLLOWING FOR THE SECOND ATTRIBUTE IN Q43

The reduction in litter and debris at the beach [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with'] - no litter removed

IF CODE = 6 IN Q41, DISPLAY THE FOLLOWING FOR THE THIRD ATTRIBUTE IN Q43

The proportion of Scottish bathing waters meeting water quality standards - 13% of bathing waters fail water quality standards

Q92. What, if anything, is the maximum additional amount you would be prepared to pay on your annual water charges to ensure that the quality of water at the beach you [IF CODES 1-8 OR 10 AT Q8, DISPLAY 'visit most often'; IF CODE 9 AT Q8, DISPLAY 'have most association with'] reaches these levels?

Please note that you can only enter a number in the box below.

ALLOW NUMERICAL RESPONSES BETWEEN 0 AND 999

--	--	--

SECTION G - RESPONDENT PROFILE

Finally, we would like to ask you a few questions about you and your household.

Q93. Which the following best describes your ethnic group?

SINGLE CODE

- 1 Scottish/English/Welsh/Northern Irish/British
 - 2 Irish
 - 3 Gypsy or Irish traveller
 - 4 Any other White background (please specify)
 - 5 Mixed - White and Black Caribbean
 - 6 Mixed - White and Black African
 - 7 Mixed - White and Asian
 - 8 Any other Mixed background (please specify)
 - 9 Indian
 - 10 Pakistani
 - 11 Bangladeshi
 - 12 Sri Lankan
 - 13 Any other Asian background (please specify)
 - 14 Caribbean
 - 15 African
 - 16 Any other Black background (please specify)
 - 17 Arab
 - 16 Any other ethnic group (please specify)
 - 17 Prefer not say
-

Q94. How much do you pay for your water and sewerage services per year? Please provide the total amount.

If you do not know the exact amount you pay per year, please select the range that your total water charges fall in below.

--	--	--	--

	Per month	Per year
1	Less than £13 per month	Less than £150 per year
2	£13 - £16 per month	£151 - £200 per year
3	£17 - £20 per month	£201 - £250 per year
4	£21 - £24 per month	£251 - £300 per year
5	£25 - £28 per month	£301 - £350 per year
6	£29 - £32 per month	£351 - £400 per year
7	£33 - £37 per month	£401 - £450 per year
8	£38 - £41 per month	£451 - £500 per year
9	£42 - £45 per month	£501 - £550 per year
10	£46 - £50 per month	£551 - £600 per year
11	Over £50 per month	Over £600 per year
12	Don't know	Don't know

Q95. How many people usually live in your household (including yourself)? Please include both adults and children.

SINGLE CODE

1	1 person	SKIP TO Q49
2	2 people	ASK Q47
3	3 people	ASK Q47
4	4 people	ASK Q47
5	5 people	ASK Q47
6	6 people	ASK Q47
7	More than 6	ASK Q47
8	Prefer not to say	SKIP TO Q49

ASK IF CODE 2 - 7 IN Q46

Q96. Are any of those aged 18 or under?

SINGLE CODE

1	No	SKIP TO Q49
2	Yes	ASK Q48
3	Prefer not to say	SKIP TO Q49

ASK IF CODE 2 IN Q47

Q97. How many of those are:

MULTI CODE

		Aged 0 - 12 months	Aged under 5 years	Aged 5 - 10 years	Aged 11 - 15 years	Aged 16 - 18 years
A	None	0	0	0	0	0
B	1	1	1	1	1	1
C	2	2	2	2	2	2
D	3	3	3	3	3	3
E	4	4	4	4	4	4
F	5	5	5	5	5	5
G	6 or more	6	6	6	6	6
E	Prefer not to say	9999	9999	9999	9999	9999

Q98. Please can you indicate which band best describes your total household income after tax and national insurance deductions? Please include any benefits received or benefits paid directly to your landlord as part of your rent (e.g. housing benefit)

Please remember that all of your answers are confidential. This information will be used to check that we have surveyed a range of people. It will be not be possible to identify any particular individual or address in the results.

SINGLE CODE

	Per year	Per month
1	Less than £10,000	Up to £833
2	£11,000 - £20,000	£917 - £1,667
3	£21,000 - £30,000	£1,750 - £2,500
4	£31,000 - £40,000	£2,583 - £3,333
5	£41,000 - £50,000	£3,417 - £4,167
6	£51,000 - £60,000	£4,250 - £5,000
7	£61,000 - £70,000	£5,083 - £5,833
8	£71,000 - £80,000	£5,917 - £6,667
9	£81,000 - £90,000	£6,750 - £7,500
10	£91,000 - £100,000	£7,583 - £8,333
11	Over £101,000	Over £8,417
12	Don't know	
13	Prefer not to say	

ASK IF CODES 1-7 OR 10 AT Q8

Q99. Have you, a family member or a friend experienced an upset stomach or ear ache in the past that you think was caused by going in the water while at a beach in Scotland?

SINGLE CODE

- 1 Yes
 - 2 No
-

ASK ALL

Q100. Are you a member of any of the following organisations?

MULTI CODE

- 1 Royal Society for the Protection of Birds
 - 2 Surfers Against Sewage / Marine Protection Society
 - 3 Sailing / boating / surfing club
 - 4 Angling club
 - 5 Friends of the Earth / Greenpeace
 - 6 National Trust for Scotland
 - 7 A local wildlife trust or environmental organisation
 - 8 Other environmental or beach organisation (PLEASE SPECIFY)
 - 9 No, none of these
-

Q101. Finally, did you think this survey was... Please select all that apply.

MULTI CODE

ROTATE

- 1 Interesting
 - 2 Too long
 - 3 Difficult to understand
 - 4 Educational
 - 5 Unrealistic / not credible
 - 6 Other - RECORD
 - 7 None of these
-

Annex 7: Focus group schedules

A-7.1 Community focus group schedule

Scottish Government – The Value of Bathing Waters and the Influence of Bathing Water Quality

Gullane, 17 October 2017

8 – 10 participants

Length of focus group: 2 hours

Recording: audio recorder and manual notes.

The interview schedule goes through a sequence of questions. Where we are seeking to get specific information from participants, we have added prompts that can be used if the topic does not emerge spontaneously from the questions.

All materials needed for the session are marked * and listed at the end of the schedule.

SET UP

Put Participants List, name badges, sets of 1 Registration Form + 1 Consent Form and at least 3 pens at entrance. One person to be at entrance to greet arrivals, get them to sign in and give out badges, forms for completion and sweets for ice-breaker.

Put audio recorder in a central place where it can be checked/turned on and off by the Recorder. The Recorder will also keep materials for use during the session in order of use.

REGISTRATION*

On arrival, participants sign the Participants List* and are given a name badge* to write their first names (so that everyone's names are visible to all).

All participants are given a Registration Form* and a Consent Form* to complete before the start of the session.

Ask each participant to take two sweets from the bowl* – and not to eat them for the moment.

I. INTRODUCTION (10-15 mins)

Hello, my name is Paula Orr and this is my colleague Isabel Cotton. We both work for Collingwood Environmental Planning.

Thank you very much for taking the time to participate in this focus group discussion. We are carrying out research on behalf of the Scottish Government

about what is important to people about beaches in Scotland. We are interested in the benefits that beaches provide, both to the visitors and to the local communities around the beaches. We are also interested in where people get information about the beach.

The purpose of today's session is to get your views. There are no right answers and no-one's views are more important so please do say what you think about the topics. We have organised the conversation to make sure that everyone gets plenty of chances to speak.

We will be recording the conversation and will transcribe it after this session so that we have written notes. Both Isabel and I will also take some notes. Our written notes and the audio record will be held at CEP's head office in London and will not be shared with any outside person. Any answer you give will be treated in confidence in accordance with the Code of Conduct of the Market Research Society. This means that anything you say is used for research purposes only and will not be attributed to you personally.

Let's start by getting to know who is in the group. I'd like you to introduce yourselves, using a game called Sweet Confessions. [Show the Icebreaker Key* to what each colour means: Red = Favourite hobby; Green = Favourite place on earth; Yellow = Weirdest food you have eaten; Blue = Wildcard (tell us anything about yourself. Start the game]

Thank you very much. So now that we know some new information about each other, we are going to start the conversation about beaches and bathing water. We are going to have some wider discussions about beaches in general, but we will mainly focus on Gullane.

II. GENERAL IMPRESSIONS OF BEACHES (30 mins)

1) What are the main ways that beaches are part of your life?

Prompts:

- Physical activities: walking/dog walking, water-based activities (swimming, surfing);
- Social relations: being with family, friends, other people;
- Feelings of attachment; and
- Sense of place, spirituality, inspiration.

2) How regularly do you visit Gullane beach in the bathing season, that is, between June and September 15th?

Prompt:

- Daily, weekly, fortnightly, monthly, less (how regularly?), not at all

- Why? / Why not?

3) In general, how regularly do you visit other beaches in Scotland during the bathing season?

Prompt:

- Daily, weekly, fortnightly, monthly, less (how regularly?), not at all
- Why? / Why not?

4) What are the things you consider when choosing a beach to visit during the bathing season?

[Wait for participants to bring up topics and probe for each: why is this important? Check if the following topics have come up and if not, prompt].

- Distance you have to travel to the beach from your home/where you are staying;
- Presence of a lifeguard;
- Other activities near the beach, such as shops and amusements;
- Visiting a beach which is not crowded;
- Enjoying the natural environment;
- Water quality;
- Cleanliness of the beach;
- Being able to see wildlife on the beach;
- Walking opportunities;
- Relaxation;
- Sports you can participate in on the beach;
- Availability of cafes and restaurants;
- Car parking;
- Safe for swimming; and
- Surf conditions.

[If the participants are struggling to think of factors or are very focused on their own beach, pass round the Beach Photos* to encourage them to think of other topics: Here are some photos of beaches which may help you think of the kinds of things you consider when choosing a beach to visit.]

5) Which are the top 3 factors you consider? [Note: here we are not trying to replicate the online survey. The emphasis will be on understanding why people are prioritising the factors.]

- Why those factors?
- Does water quality or beach cleanliness matter to you? Why/why not?
- **Do the factors change if you are thinking about visiting the beach outside the bathing season?**

6) Are these also the factors that influence you when deciding to come to Gullane beach during the swimming season? If not, which factors influence your decision to come to Gullane beach?

[If participants don't spontaneously mention WQ and beach cleanliness, ask]:

- How important is Water Quality as a factor in deciding to come to Gullane Beach?
- How important is the cleanliness of the beach?]

7) Can we just see which of you go right into the water when you are at the beach during the bathing season (i.e. get your head wet) – can we have a show of hands? [*Recorder notes names of people who go into the water*]

III. USES / BENEFITS OF THE BEACH (20 mins)

8) What does Gullane beach mean to you?

Prompts:

- To what extent do you feel attached to this place?
- To what extent do you feel it is “your” beach?
- To what extent do you feel proud / lucky to be living near Gullane beach?

9) For those of you who visit Gullane beach, how does visiting the beach make you feel?

Prompts:

- Is this an environment where you can rest and recover your strength and focus?
- Is it a place where you can relax and think about what interests you without everyday demands?
- Is it somewhere you find things to discover and be curious about?

- Is it somewhere you feel free to move around and do what you like?
- 10) What does the local community get from the beach? [Ask participants to explain / give examples of what the things they mention.]**

Prompts:

- Health?
- Identity / culture?
- **Economic benefits?**

11) To what extent would you say these benefits are affected by the quality of the water?

IV. WATER QUALITY (10 mins)

12) How good would you rate the water quality at Gullane beach?

13) What characteristics of the beach and the sea are important to you when judging water quality? Why?

14) What did you take into account when making your judgement about the water quality at the beach?

Prompts:

- How many people are using the beach? Why?
- Signs / information? Why?
- Presence of litter? Why?
- Water colour? Why?

15) How far does the water quality at Gullane beach matter to you?

Why / why not?

16) Have you, a family member or a friend experienced an upset stomach or ear ache in the past that you think was caused by going in the water at Gullane beach?

V. INFORMATION (15 mins)

17) If you are going to visit a different beach, what information do you look for when deciding when to go to the beach and which beach to go to? Why - what is it important for you to know?

Prompts:

- Safety;
- Water quality; and / or
- Rules (e.g. no dogs).

18) What information have you seen about the water quality at Gullane beach?

19) What do you most remember about that information?

I am going to show you some signs about water quality. [Project or pass round *signs with BW status from “advice against bathing” through to “excellent”]

20) Have you seen signs like this at Gullane beach? If so, how did they make you feel?

21) If you haven't seen signs like these, would you know where to look for information about water quality at Gullane beach?

22) Who do you trust to give you information about water quality and why?

At this point – if it has not come up earlier we will tell the participants what the water quality is at their local beach and how bathing water quality is assessed. You may be interested to know that the bathing water at Gullane beach was rated ‘Excellent’ for the 2016/17 bathing season and the 2015/16 bathing season. Here is some information about water quality and its assessment at Gullane beach*.

VI. SCENARIOS OF CHANGE (30 mins)

Now we are going to look at some imaginary future situations in order to explore changes that might influence your use and experience of the beach.

Classifications of water quality do change, for example at Troon on the west coast, water quality was rated ‘Good’ in 2015/16 and ‘Sufficient’ in 2016/17; Southernness in Dumfries was rated ‘Good’ in 2015/16 and ‘Excellent’ in 2016/17.

First let's imagine it is 20 years in the future and there is real-time information about water quality here and at four other beaches in Scotland (Nairn, Troon, Portobello and Ayr) **[Project or pass round *set of photos of the other beaches in this study and a map of locations.]** At this time in the future, the WQ at Gullane beach is “excellent” and this information is shown on a board at the beach. This compares well with the other beaches **[Pass round *Alternative 1 table with WQ symbols for the 5 beaches].**

23) In what ways, if at all, does this situation change what you do: does it open up new possibilities? Does it create risks or problems?

Prompt:

- Do you come to the beach more or less often?
- Come the same amount but enjoy it less or more?
- Do different activities? Take up swimming or a more water-based activity?

24) How does this scenario make you feel about the beach? In what ways, if at all, does it change how you feel about the beach?

Prompt:

- Does it make you more or less relaxed/happy when you think about or are at the beach?
- Does it make you more or less likely to suggest that others come to the beach?
- Does it change any pride you feel in your local area?

25) In what ways does this situation change your community? Does it open up new possibilities? Does it create risks or problems?

Prompt: What about economic opportunities and risks?

Now we will imagine that we are at the same time in the future and have access to real-time information about water quality here and at the other four beaches.

Water quality at Gullane beach is poor. It compares badly with the other beaches. **[Pass round *Alternative 2 table with WQ symbols for each of the 5 beaches].**

26) How does this scenario make you feel about Gullane beach? In what ways, if at all, does it change how you feel about the beach?

Prompt:

- Does it make you more or less sad/relaxed when visiting or thinking about the beach?
- Does it make you more or less likely to recommend the beach to a friend?
- Does it change any sense of pride in the local area?

27) In what ways, if at all, does this situation change what you do?

Do you:

- Still come and enjoy the beach just as much?

- Come but enjoy less?
- Go somewhere else?
- Do something else altogether, stay at home?
- Get involved in campaigning to clean up the water?

28) In what ways, if at all, is your life negatively affected? Can you see the change having any positive effects?

29) In what ways does this situation change your community? What aspects or activities are most affected? How does it make you feel about your local community?

Prompt: What about economic impacts?

VII. FINISH AND CLOSE (5 mins)

We've reached the end of the session.

Before we end, are there any important topics that you feel we haven't talked about? Anything that you want to add on topics that we did discuss?

We have had a really interesting conversation about beaches, and bathing water and the extent and ways in which they are important to you. If you would like to find out more about bathing water quality and beach classification in Scotland, we recommend you look at the Scottish Environment Protection Agency website: <http://apps.sepa.org.uk/bathingwaters/>

We will now get the audio recording of the conversation transcribed. We will be reporting to the Scottish Government on this research before the end of the year and we are very glad to have had your contributions. Thank you very much for making time to join this discussion.

Please complete this Feedback Form to help us improve the way the session works and collect your 'thank you' payments on your way out.

[Hand out Feedback Forms. Ask participants to hand in Feedback Forms and sign Receipt Form* for payments]

***LIST OF MATERIALS**

- Participants List;
- Stick-on name badges;
- Registration Form (x 10);
- Consent Form (x 10);
- Bowl with wrapped sweets (4 different colours);

- Icebreaker Key;
- Set of photos of Scottish beaches with different features;
- Card with 4 BWQ signs + card with 'Advice against bathing' sign;
- Beach profile (x 10);
- Set of photos of beaches in study;
- Cards with 2 different Alternative Scenarios;
- Feedback Form (x 10); and
- Payment Receipt Form.

A-7.2 Business focus group schedule

Scottish Government – The Value of Bathing Waters and the Influence of Bathing Water Quality

Nairn, 16 October 2017

8 – 10 participants

Length of focus group: 2 hours

Recording: audio recorder and manual notes.

The interview schedule goes through a sequence of questions. Where we are seeking to get particular feedback from participants, we have added prompts that can be used if the topic does not emerge spontaneously from the questions.

All materials needed for the session are marked * and listed at the end of the schedule.

SET UP

Put Participants List, name badges, sets of 1 Registration Form + 1 Consent Form and at least 3 pens at entrance. One person to be at entrance to greet arrivals, get them to sign in and give out badges, forms for completion and sweets for ice-breaker.

Put audio recorder in a central place where it can be checked/turned on and off by the Recorder. The Recorder will also keep materials for use during the session in order of use.

REGISTRATION

On arrival, participants sign the Participants List* and are given a name badge* to write their first names (so that everyone's names are visible to all).

All participants are given a Registration Form* and a Consent Form* to complete before the start of the session.

The Recorder will note names and genders.

Ask each participant to take two sweets from the bowl* – and not to eat them for the moment.

I. INTRODUCTION (10 mins)

Hello, my name is Paula Orr and this is my colleague Isabel Cotton. We both work for Collingwood Environmental Planning.

Thank you very much for taking the time to participate in this focus group discussion. We are carrying out research on behalf of the Scottish Government about what is important to people about beaches in Scotland. We are interested in

the benefits that beaches provide, both to the visitors and to the local communities around the beaches. We are also interested in where people get information about the beach.

The purpose of today's session is to get the views of a range of local businesses on these topics. There are no right answers and no views are more important than others so please do say what you think. We have organised the conversation to make sure that everyone gets plenty of chance to speak. We will be recording the conversation and will transcribe it after this session so that we have written notes. Both Isabel and I will also take some notes. Our written notes and the audio record will be held at CEP's head office in London and will not be shared with any outside person. Any answer you give will be treated in confidence in accordance with the Code of Conduct of the Market Research Society. This means that anything you say is used for research purposes only and will not be attributed to you personally.

Let's start by getting to know who is in the group. I'd like you to introduce yourselves, using a game called Sweet Confessions. [Show the Icebreaker Key* to what each colour means: Red = Favourite hobby; Green = Favourite place on earth; Yellow = Weirdest food you have eaten; Blue = Wildcard (tell us anything about yourself. Start the game)]

Thank you very much. So now that we know some new information about each other, we are going to start the conversation about beaches and bathing water. We will start with your own use of and relationship with beaches and bathing water quality and then move on to the relationship between bathing water quality in Nairn, your own businesses and the local economy.

II. **GENERAL IMPRESSIONS OF BEACHES (20 mins)**

1) What are the main ways that beaches are part of your life?

Prompts:

- Physical activities: walking/dog walking, water-based activities (swimming, surfing);
- Social relations: being with family, friends, other people;
- **Feelings of attachment**; and / or

Sense of place, spirituality, inspiration.

2) How regularly do you visit Nairn beach in the bathing season, that is, between June and September 15th?

Prompt:

- Daily, weekly, fortnightly, monthly, less (how regularly?), not at all
- Why? / Why not?

3) In general, how regularly do you visit other beaches in Scotland during the bathing season?

Prompt:

- Daily, weekly, fortnightly, monthly, less (how regularly?), not at all
- Why? / Why not?

III. USES / BENEFITS OF THE BEACH (30 mins)

4) What does the beach and sea at Nairn beach mean to you personally?

Prompts:

- To what extent do you feel attached to this place?
- To what extent do you feel it is “your” beach?
- To what extent do you feel proud / lucky to be living near Nairn beach?

5) What does the sea and beach at Nairn mean for your business? How, if at all, does being near to Nairn beach and the sea affect the activities, character and ways of working of your business?

Prompts:

- Business focus / activities – what are the characteristics of the beach and sea at Nairn that are required for these business activities (e.g. tourism, leisure, sports);
- Products – using resources from the sea; and / or
- **Image.**

6) To what extent do the beach and sea attract visitors to Nairn?

Prompts:

- Beauty [ask people to say what makes the beach and sea beautiful];
- Opportunities for recreation [ask people say what kinds of recreational activities are most valued by visitors and make a distinction between water based activities and others]; and / or
- Facilities [ask which facilities are most important to visitors].

7) I'd like to explore a little more any benefits that your companies get from people visiting the beach and going into the sea:

Prompts:

- What would you say were the benefits to your company of people from outside the area visiting the beach?
 - Are there any negative impacts on your business of people visiting the beach?
 - How does water quality contribute to these positive and negative impacts of visits to the beach?
- 8) What does the local community get from the beach? [Ask participants to explain / give examples of what the things they mention]**

Prompts:

- Health?
 - Identity / culture?
 - Economic benefits?
- 9) To what extent would you say these benefits are affected by the quality of the water?**

IV. BATHING WATER QUALITY (10 - 15 mins)

- 10) How would you rate the bathing water quality at Nairn beach?**
- 11) What characteristics of the beach and the sea are important to you when judging water quality? Why?**
- 12) Thinking about your judgement of the bathing water quality at Nairn, what did you take into account in this case?**

Prompts:

- How many people use the beach? Why?
 - Signs / information? Why?
 - Presence of litter? Why?
 - Water colour? Why?
- 13) To what extent does the bathing water quality at Nairn beach matter to you personally?**

Why / why not?

- 14) To what extent does the bathing water quality at Nairn matter to your business?**

- 15) Have you, a family member or a friend experienced an upset stomach or ear ache in the past that you think was caused by going in the water at Nairn beach?**

V. INFORMATION (15 mins)

- 16) If you are going to visit a different beach, what information do you look for when deciding when to go to the beach and which beach to go to? Why - what is it important for you to know?**

Prompts:

- Safety;
- Water quality; and / or
- Rules (e.g. no dogs).

- 17) What information have you seen about the water quality at Nairn beach?**

- 18) What do you most remember about that information?**

I am going to show you some signs about water quality. [Project or pass round *signs with BW status from “advice against bathing” through to “excellent”]

- 19) Have you seen signs like this at Nairn beach? How, if at all, do you think these signs at Nairn beach would (or do) impact on your business?**

- 20) If you haven't seen signs like these, would you know where to look for information about bathing water quality at Nairn beach?**

- 21) Who do you trust to give you information about water quality and why?**

At this point – if it has not come up earlier we will tell the participants what the water quality is at their local beach and how bathing water quality is assessed. You may be interested to know that the bathing water at Nairn beach was rated ‘Poor’ for the 2016/17 bathing season and the 2015/16 bathing season. Here is some information about water quality and its assessment at Nairn beach*.

VI. SCENARIOS OF CHANGE (30 mins)

Now we are going to look at some imaginary future situations in order to explore changes that might influence the use and benefits of Nairn beach. Classifications of water quality do change, for example at Troon on the west coast, water quality was rated ‘Good’ in 2015/16 and ‘Sufficient’ in 2016/17; Southernness in Dumfries was rated ‘Good’ in 2015/16 and ‘Excellent’ in 2016/17.

First let's imagine it is 20 years in the future and there is real-time information about water quality here and at four other beaches in Scotland (Gullane, Troon, Portobello and Ayr) [Project or pass round *set of photos of the other beaches in this study and a map of locations]. At this time in the future, the WQ at Nairn beach is rated "excellent" and this information is shown on a board at the beach. This compares well with the other beaches [Pass round *Alternative 1 table with WQ symbols for the 5 beaches].

22) In what ways, if at all, does this situation change conditions for your business: does it open up new possibilities? Does it create risks or problems?

Prompts:

- How does it affect your business activities?
- How does it affect how customers or others see your business?
- How does it affect your own or your staff's wellbeing?

23) In what ways does this situation change your community and the local economy? Does it open up new possibilities? Does it create risks or problems?

Prompt: What about other features of the local community, such as culture, heritage, community relations? Are they affected?

Now we will imagine that we are at the same time 20 years in the future and have access to real-time information about water quality here and at the other four beaches. Bathing water quality at Nairn beach is has been poor for five years and there is advice against bathing. Nairn compares badly with other beaches. [Pass round *Alternative 2 table with WQ symbols for each of the 5 beaches].

24) In what ways, if at all, does this situation change conditions for your business: does it open up new possibilities? Does it create risks or problems?

Prompts:

- How does it affect your business activities?
- How does it affect how customers or others see your business?
- How does it affect your own or your staff's wellbeing?

25) In what ways does this situation change your community and the local economy? Does it open up new possibilities? Does it create risks or problems?

Prompts:

- What about other features of the local community, such as culture, heritage, community relations? Are they affected?
- What might the community do? Stay at home more? Get involved in campaigning to clean up the water?

VII. **FINISH AND CLOSE (5 mins)**

We've reached the end of the session.

Before we end, are there any important topics that you feel we haven't talked about? Anything that you want to add on topics that we did discuss?

We have had a really interesting conversation about beaches, and bathing water and the extent and ways in which they are important to you. If you would like to find out more about bathing water quality and beach classification in Scotland, we recommend you look at the Scottish Environment Protection Agency website: <http://sepa.org.uk/bathingwaters/> The link is in the Beach profile for Nairn.

We will now get the audio recording of the conversation transcribed. We will be reporting to the Scottish Government on this research before the end of the year and we are very glad to have had your contributions. Thank you very much for making time to join this discussion.

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- Feedback Form (x 10); and
- Payment Receipt Form.

Annex 8: Focus group sample profiles

A-8.1 Community focus groups sample profile

Note: data does not include the additional wild swimmers focus group at Portobello.

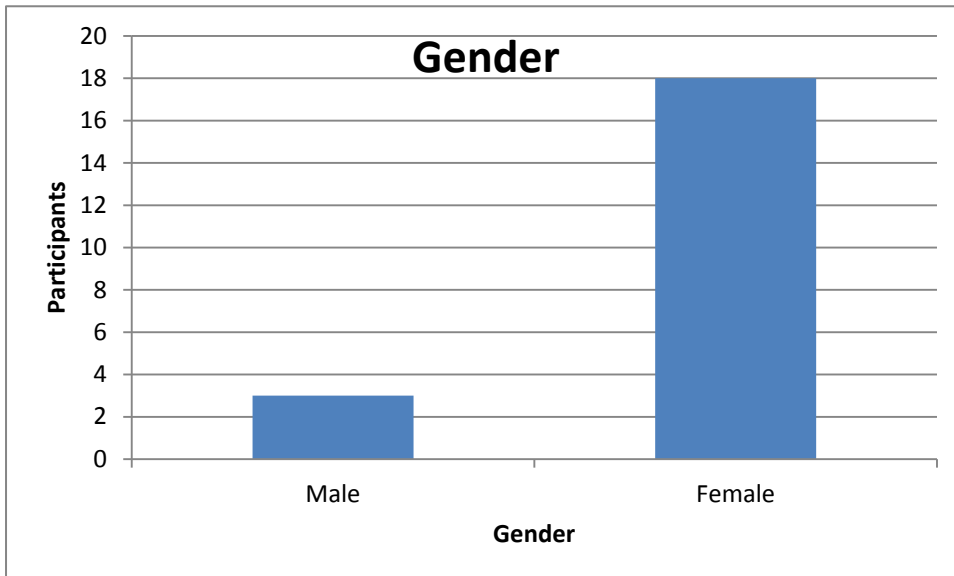


Figure A8-1: Breakdown of focus group participants by gender

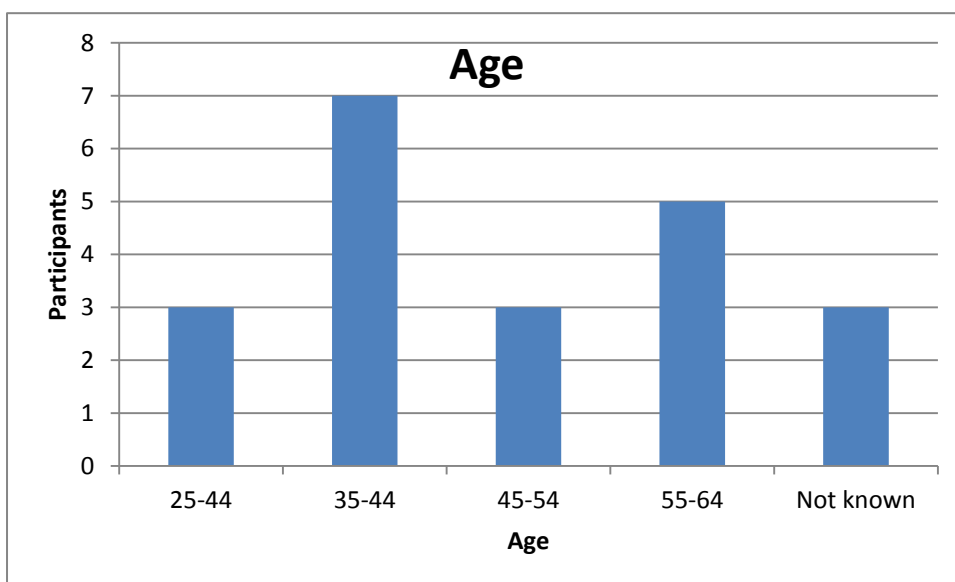


Figure A8-2: Breakdown of focus group participants by age

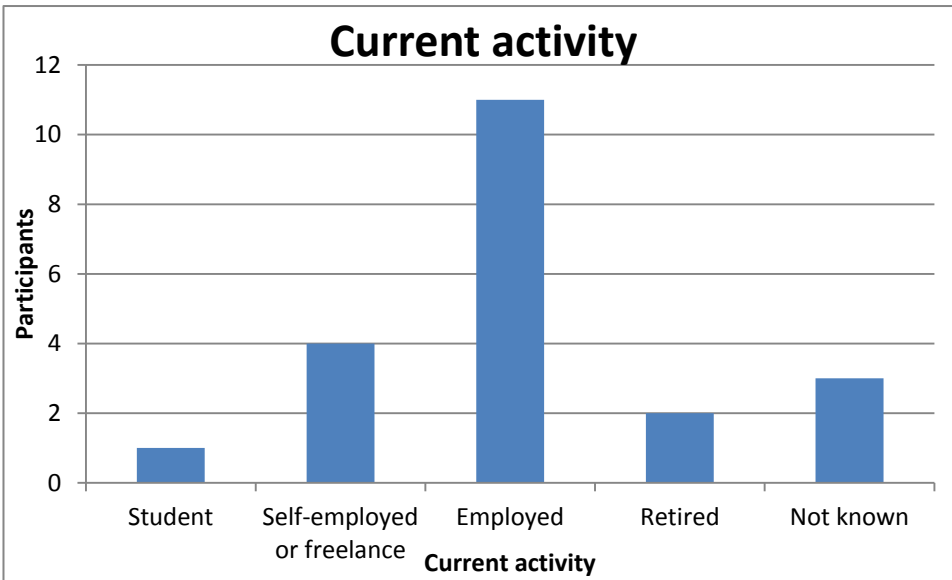


Figure A8-3: Breakdown of focus group participants by current activity

A-8.2 Business focus groups sample profile

(Includes business focus group participants and interviewees)

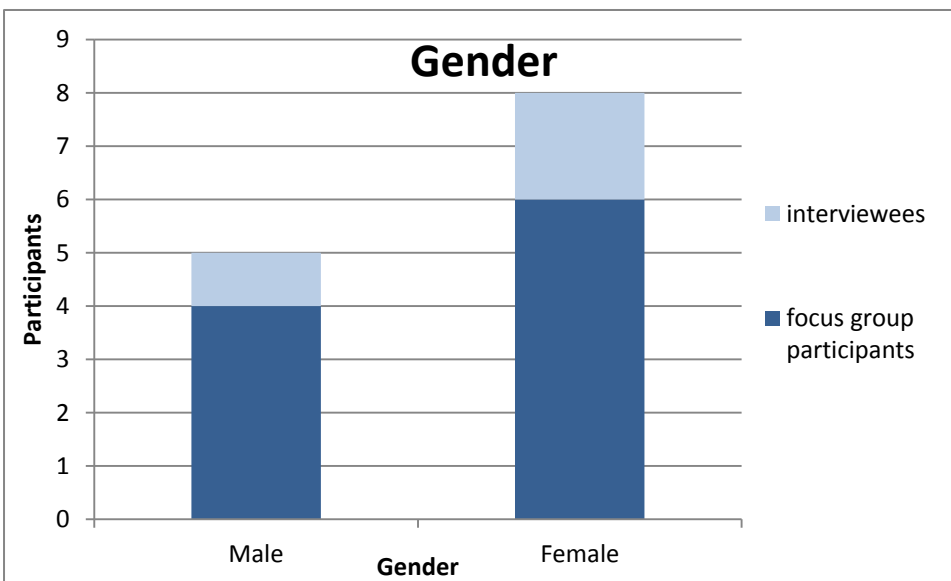


Figure A8-4: Breakdown of focus group participants by gender

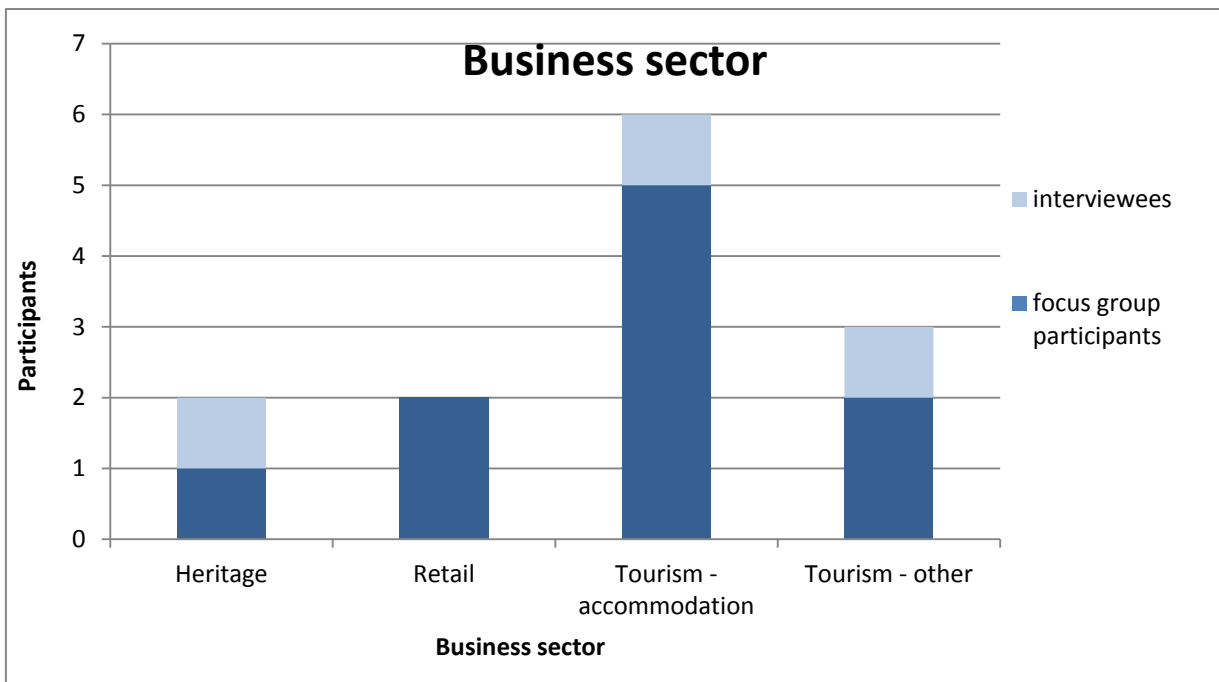


Figure A8-5: Breakdown of focus group participants by business sector



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