Appendix 1.1.F - Willingness to pay research 3 - Populus

Wessex Water

September 2018

Wessex Water
YTL GROUP

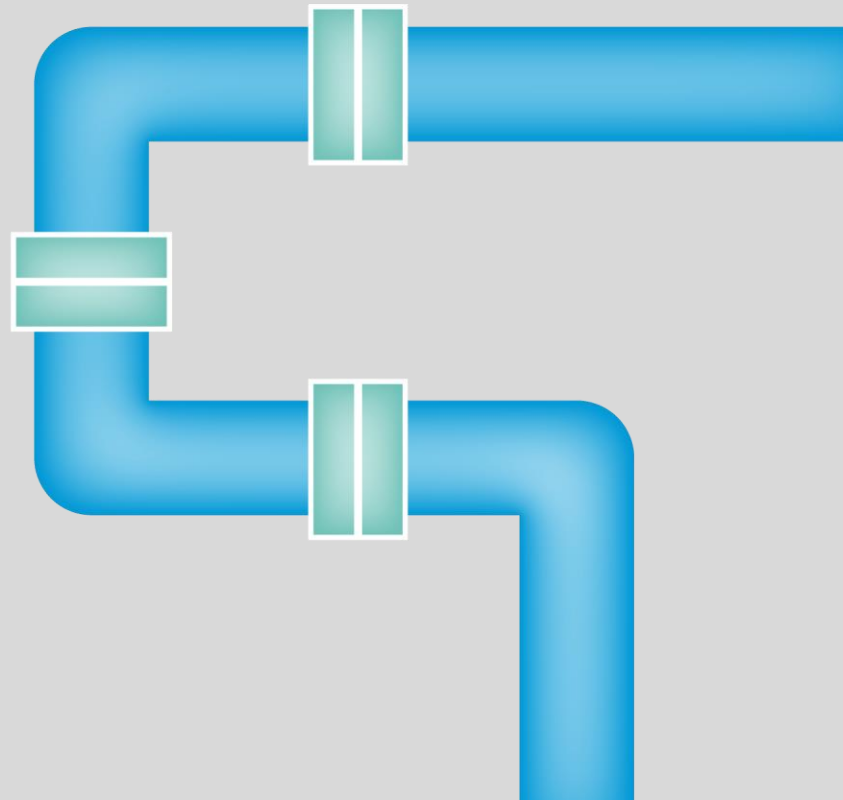
Business plan section		Supporting document	
	Board vision and executive summary		
1	Engaging customers	**1.1**	**Summary of research findings**
		1.2	Communications strategy
		1.3	Customer participation and behavioural engagement strategy
2	Addressing affordability and vulnerability		
3	Delivering outcomes for customers		
4	Securing long term resilience		
5	Markets & innovation: wholesale		
6	Markets & innovation: open systems & DPC		
7	Markets & innovation: retail		
8	Securing cost efficiency		
9	Aligning risk and return		
10	Financeability		
11	Accounting for past delivery		
12	Securing trust, confidence and assurance		
13	Data tables and supporting commentaries		

Contents

Wessex Water

Willingness to Pay Report

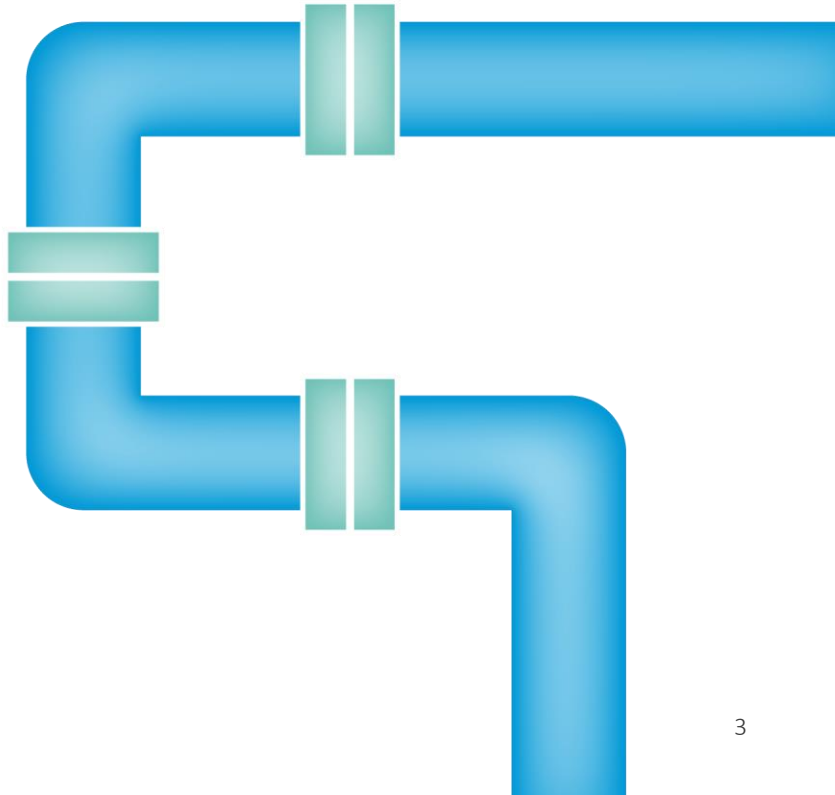
DECEMBER 2017



Populus

Agenda

Objectives and Approach



Objectives, Methodology and Survey design

Objectives

1. Understand customer priorities for investment areas
2. Explore customer willingness to pay for improvements
3. Identify any differences in priorities by customer type

Methodology

1. Populus conducted 405 online interviews with Wessex Water customers
2. All respondents were sourced via Populus' proprietary panel
3. The dataset was weighted to be representative of the Wessex Water customer profile

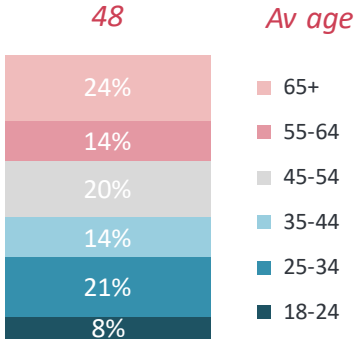
Survey design

1. Respondents were presented with 12 separate investment areas and asked to select their preferred level of investment in each area
2. Once priorities had been selected, participants were shown the final impact on their bill and asked if they would like to change their selections
3. Full details on the survey design are shown overleaf

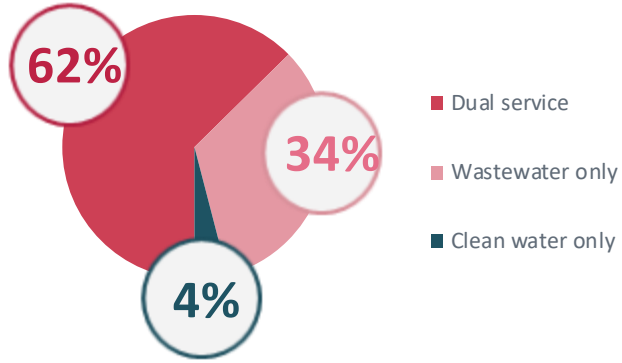
Respondent profile

Gender

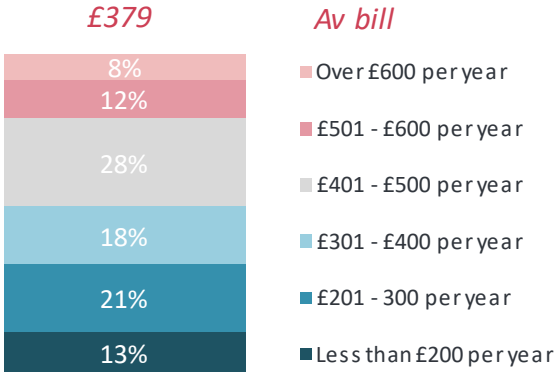
Age



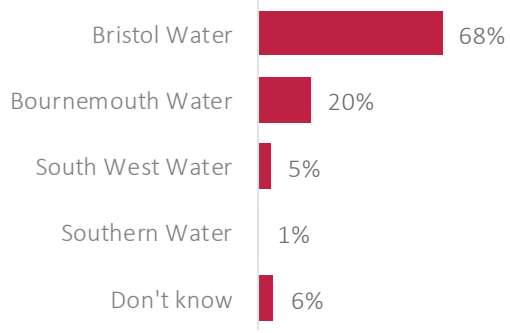
Customer type



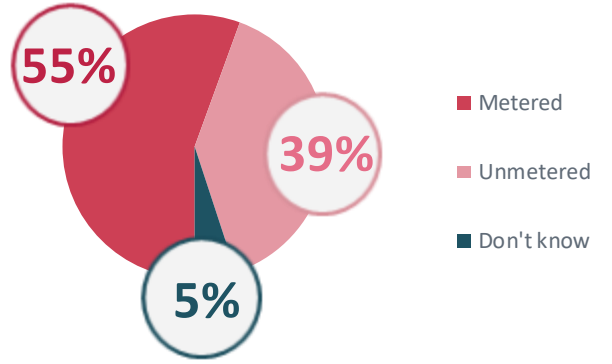
Bill size



Water provider (wastewater only customers)



Meter



Q1. Gender, Q2. Age, Q6a. Customer type, Q7. Water meter, Q8. Bill size
Base: All respondents (n=405)
Q6b. Water provider. Base: Wastewater only customers (n=132)

Survey design (1)

Respondents were first introduced to the purpose of the exercise:

We'd like to understand how you think Wessex Water should be investing in the services it provides. For each area of service we'll ask you to select your preferred option and we'll show you the impact this would have on your bill.

The investment areas covered will be:

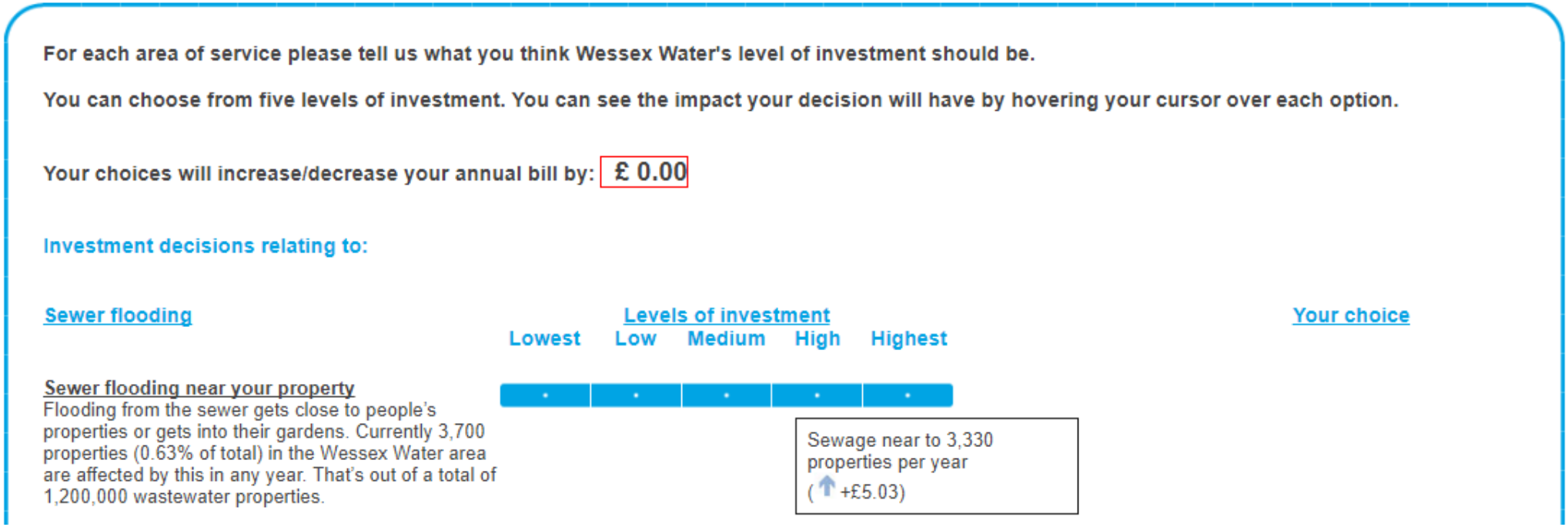
- Reliability of your water supply
- Saving water
- Environmental impact
- Sewer flooding

When you have made your choices we'll show you the impact on your annual bill from 2020.

Please select >> to continue

Survey design (2)

Customers were presented with each of the attributes and given information about the levels of investment associated with 'Lowest', 'Low', 'Medium', 'High' and 'Highest'. For example:

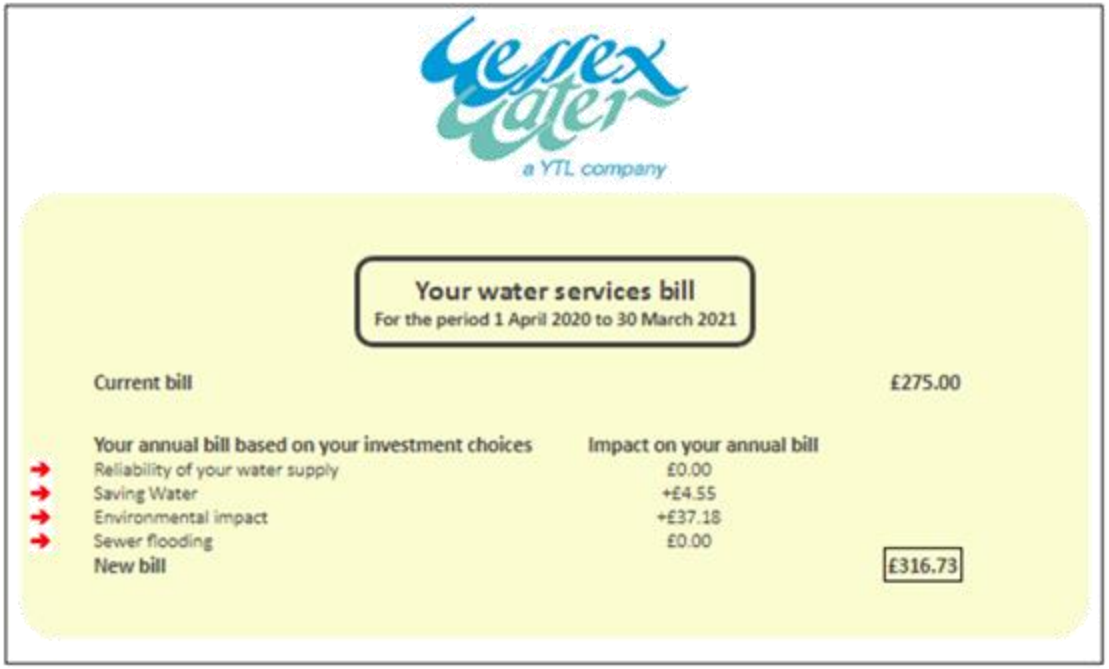


Survey design (3)

After rating all attributes, customers were shown the impact of their choices on their water bill and told that they could adjust their choices if preferred:

Having seen the impact of your choices on your bill, if there are any areas that you would now like to change, please click on the 'Edit' arrow ➔ next to them and make any adjustments by moving the sliders which appear.
You may edit as many categories as you like.

Once you are happy with your entire bill, please click on the '>>' button at the bottom of your screen.



Attribute wording (1)

The full wording of each attribute is set out below:

Environmental impact	
Improved biodiversity	Wessex Water works with land owners to improve both the quality of the water in rivers (e.g. reducing levels of fertilizer running off land into rivers when it rains) and variety of plants and animals. Currently, 70% of Wessex Water land is identified for improved biodiversity.
Bathing waters of 'less than good' quality	The cleanliness and quality of coastal bathing water and beaches in your area is classified according to the European Bathing Water Directive. Currently, 4% of bathing waters in the Wessex Water region are classified as 'less than good'.
Pollution incidents impacting on river water quality	Occasionally dilute sewage can discharge into rivers and beaches which may impact water quality. These spills can occur when the sewerage system is blocked or there are pipe bursts. Also spills from overflows can happen when the system is overloaded due to heavy rainfall. There are currently 70 such spills per year.
Miles of river of 'less than good' quality	Some stretches of rivers are classified as 'less than good quality', this means that animal and plant life is affected (e.g. some species may be missing) and there may be some pollution or murky water. Currently, around 600 miles of river out of a total of 2,429 miles in the Wessex Water area (25% of total) is classified as 'less than good'.
Miles of river with less than ideal flow	The flow rates of rivers within in the Wessex Water area depend on the amount of water taken from the environment to supply customers. A river with 'low flow' may have had some water taken from it to supply customers – it may be less suitable for activities such as fishing, and there may be some damage to habitats for plants and wildlife. Currently, there are 17 miles of river with less than ideal flow, out of a total of 2429 miles of river in the Wessex Water area.

Attribute wording (2)

The full wording of each attribute is set out below:

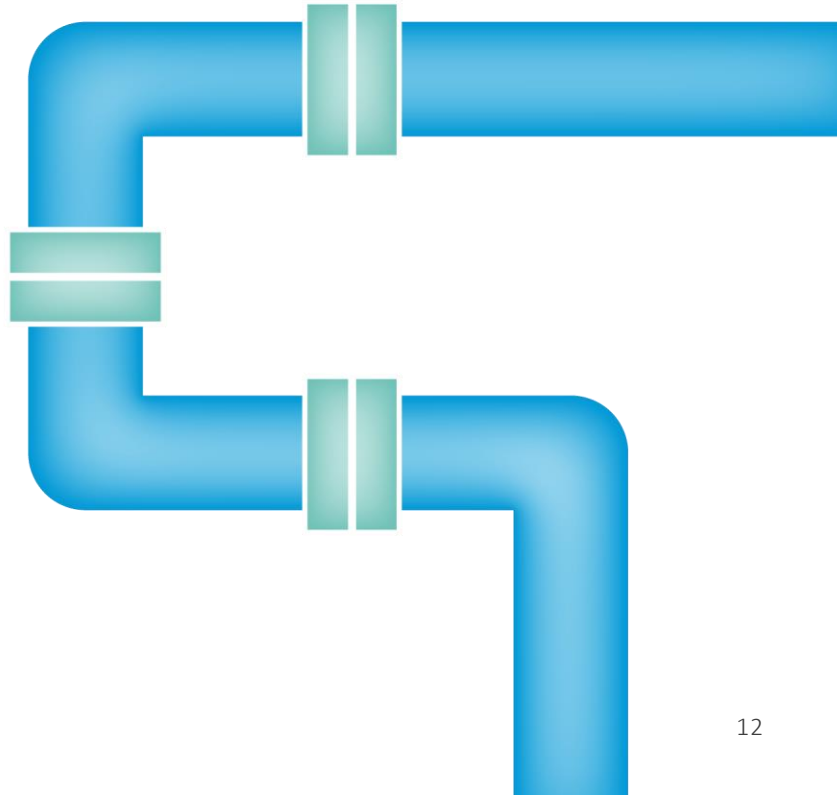
Reliability of your water supply	
Unexpected interruptions to your water supply	Sometimes your water supply can be interrupted unexpectedly. This means that you may have no water for a period of time or your supply may be intermittent. This could be due to burst pipes which can happen at any time. 90% interruptions last less than 12 hours. Currently, the number of properties affected by unexpected interruptions of three hours or more in any year is around 9,000 out of a total 590,000 water supply properties in the Wessex Water area (1.5%)
Planned interruptions to your water supply	The water supply at your property can be interrupted due to planned maintenance, in which case you would be given at least 48 hours' notice. All of these interruptions last less than 12 hours. Currently the number of properties affected by this in any year is around 15,000 out of a total 590,000 water supply properties in the Wessex Water area (2.5%).
Sewer flooding	
Sewer flooding inside property	Flooding from the sewer gets inside properties, causing damage to property. When this happens, substantial clean up and repair of flooring and walls may be needed. Currently the number of properties affected by this in any year is 180 out of a total 1,200,000 properties (0.03%) for which Wessex Water provides a sewerage service
Sewer flooding near your property	Flooding from the sewer gets close to people's properties or gets into their gardens. Currently 3,700 properties (0.63% of total) in the Wessex Water area are affected by this in any year. That's out of a total of 1,200,000 wastewater properties

Attribute wording (3)

The full wording of each attribute is set out below:

Saving water	
Leaks from mains pipes	Occasionally water mains burst causing a visible leak. Where these are reported to them by customers, Wessex Water aims to get them fixed promptly. Wessex Water measures its performance by showing the percentage of mains leaks that they respond to by fixing them within a day of their happening. Currently, 90% of reported mains leaks are fixed within a day.
Water leakage	Water can leak from Wessex Water's extensive network of pipes. Wessex Water can proactively detect and repair leaks, and replace or refurbish sections of pipework to reduce the extent of leakage. Currently 21% of the water that is treated by Wessex Water gets lost due to leakage.
Average water usage per person	Wessex Water can reduce the amount of water used per person each day by investing in fitting more meters and providing water efficiency devices and advice. Reducing the average water usage will help safeguard our water resources in the future and leave more water in the environment. Currently, the average person in the Wessex Water supply area uses 131 litres per day.

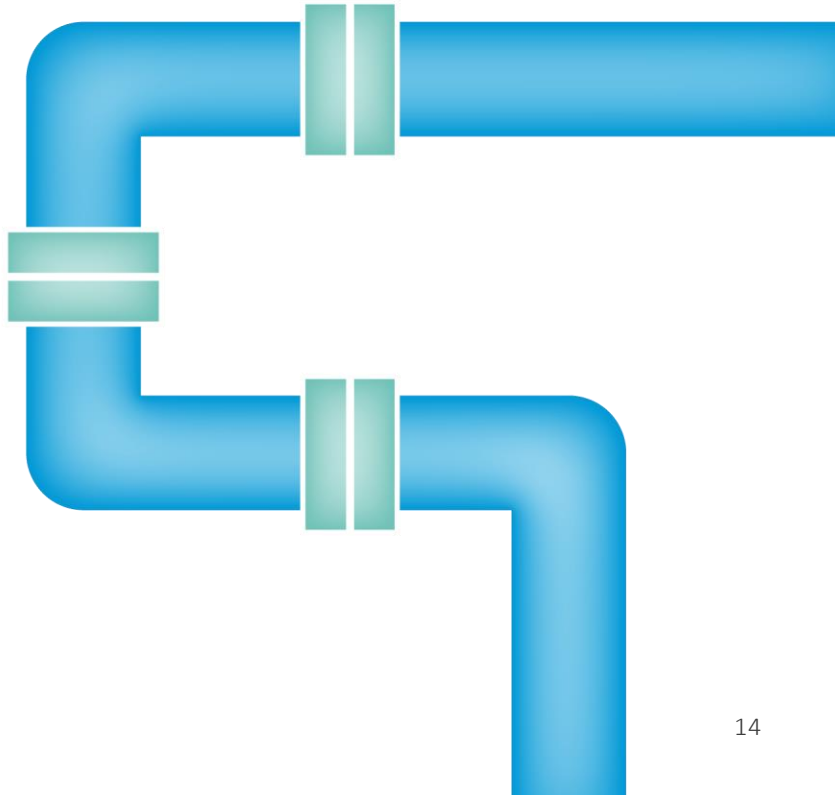
Key insights



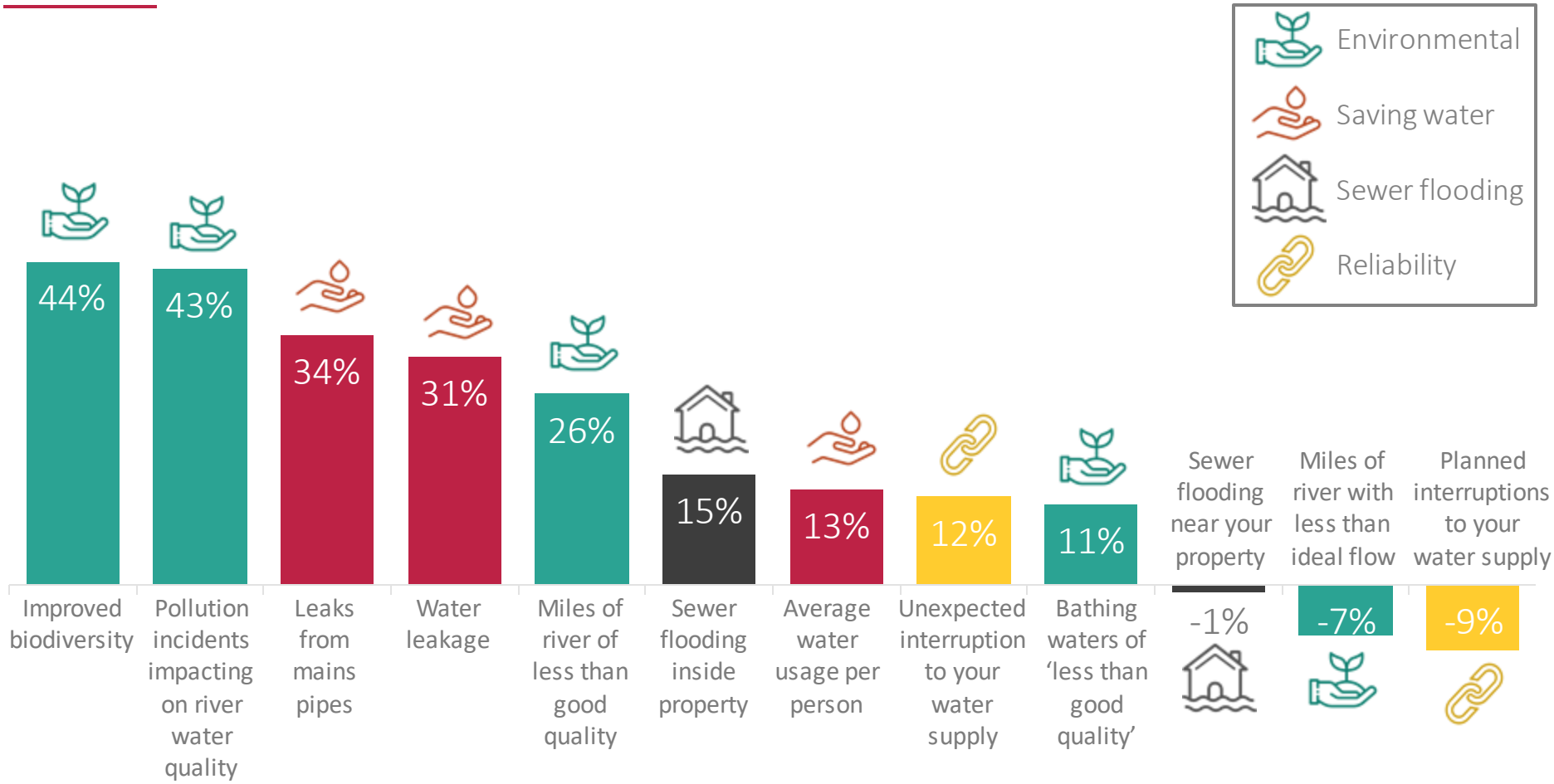
Key insights

1. Customers are initially willing to make investments worth, on average, a **£28** increase to their average yearly bill. Once this increase is seen, customers make adjustments to bring this down to **£24 a year**
2. The attributes attracting the most customers to make some additional investment are **improved biodiversity** and **reducing pollution incidents**. This is partly due to those attributes requiring the lowest level of additional investment (both asked less than a pound a year from customers to make at least some positive change)
3. However, when we look at the average level of investment attracted for each attribute, **Fixing water leakage** and **Miles of river with less than good quality** appear as the highest priority
4. Once the impact on billing is seen, the importance of **most attributes remains relatively stable**. Scores for the most **costly elements to implement reduce the most** (water leakage and good quality rivers). Nonetheless, final spend on these two attributes remains the highest

Overview



Customers are more likely to prioritise improving environmental impacts and reducing leakage Reliability attributes are of lesser priority to customers

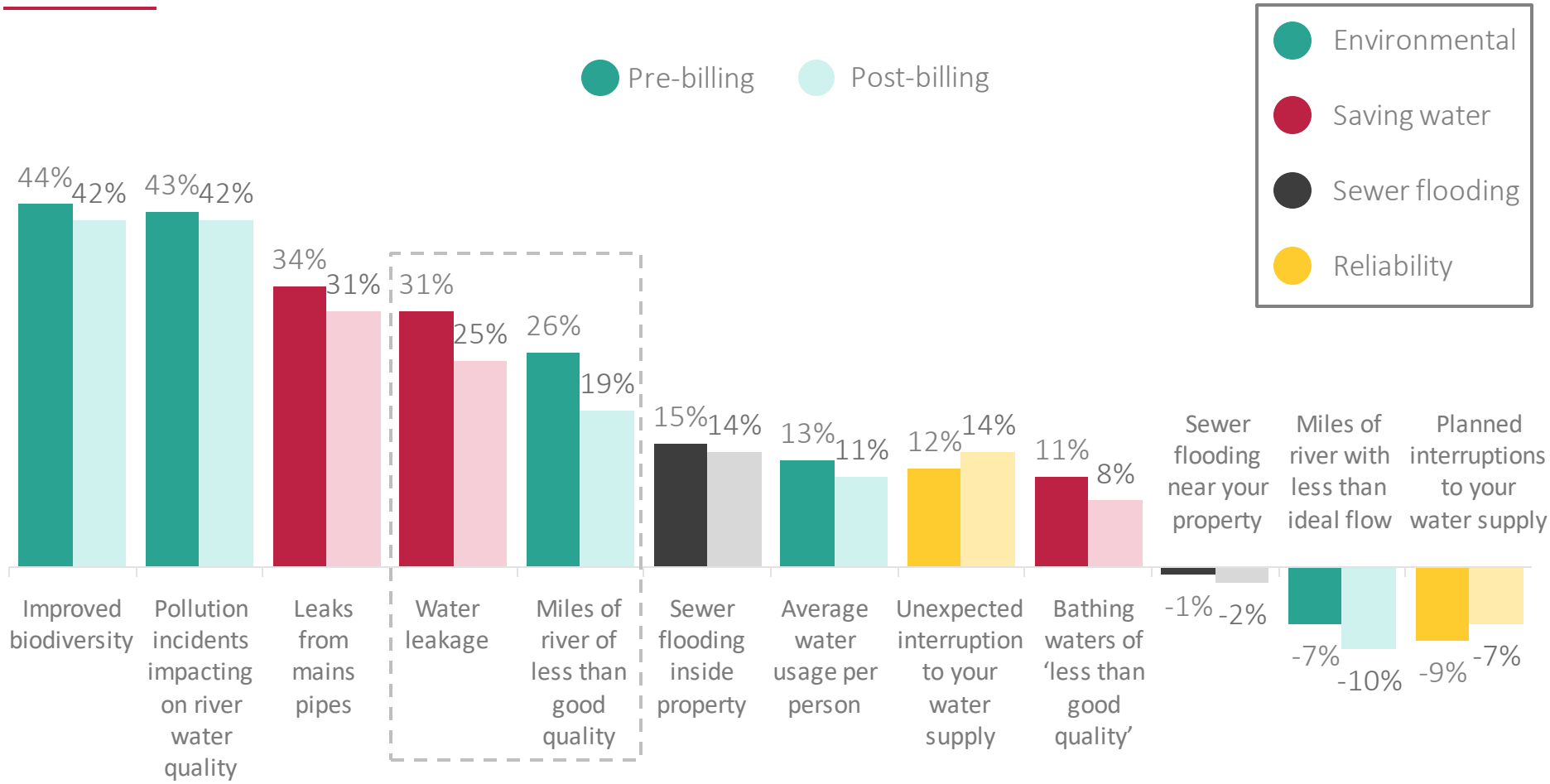


NET: scores

Those who rate as highest/ high minus those who rate as lowest/ low

Q. Trade off exercise – pre billing
Base: All respondents (n=405)

The importance of water leakage and good quality rivers reduces once billing impact is taken into account

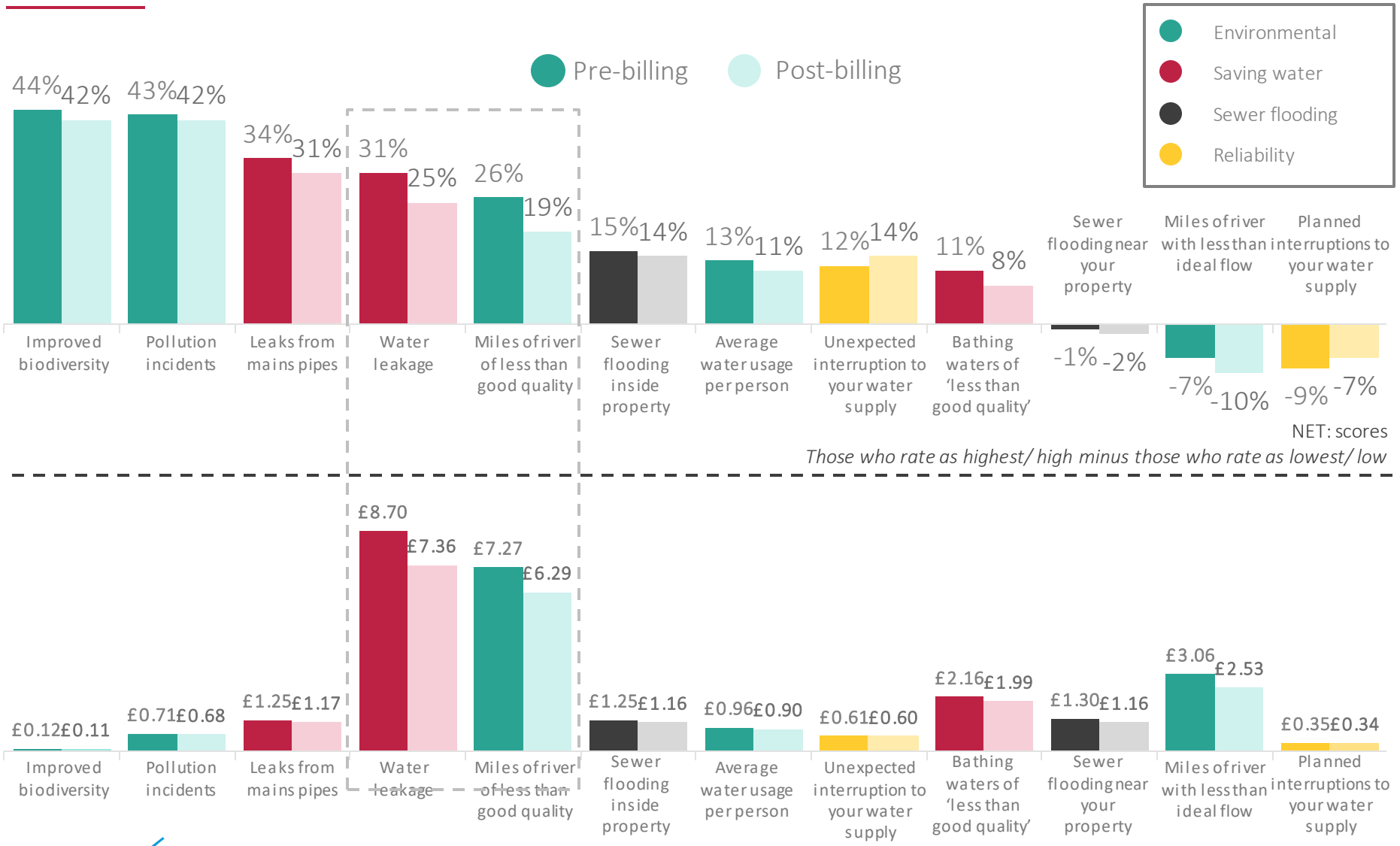


NET: scores

Those who rate as highest/ high minus those who rate as lowest/ low

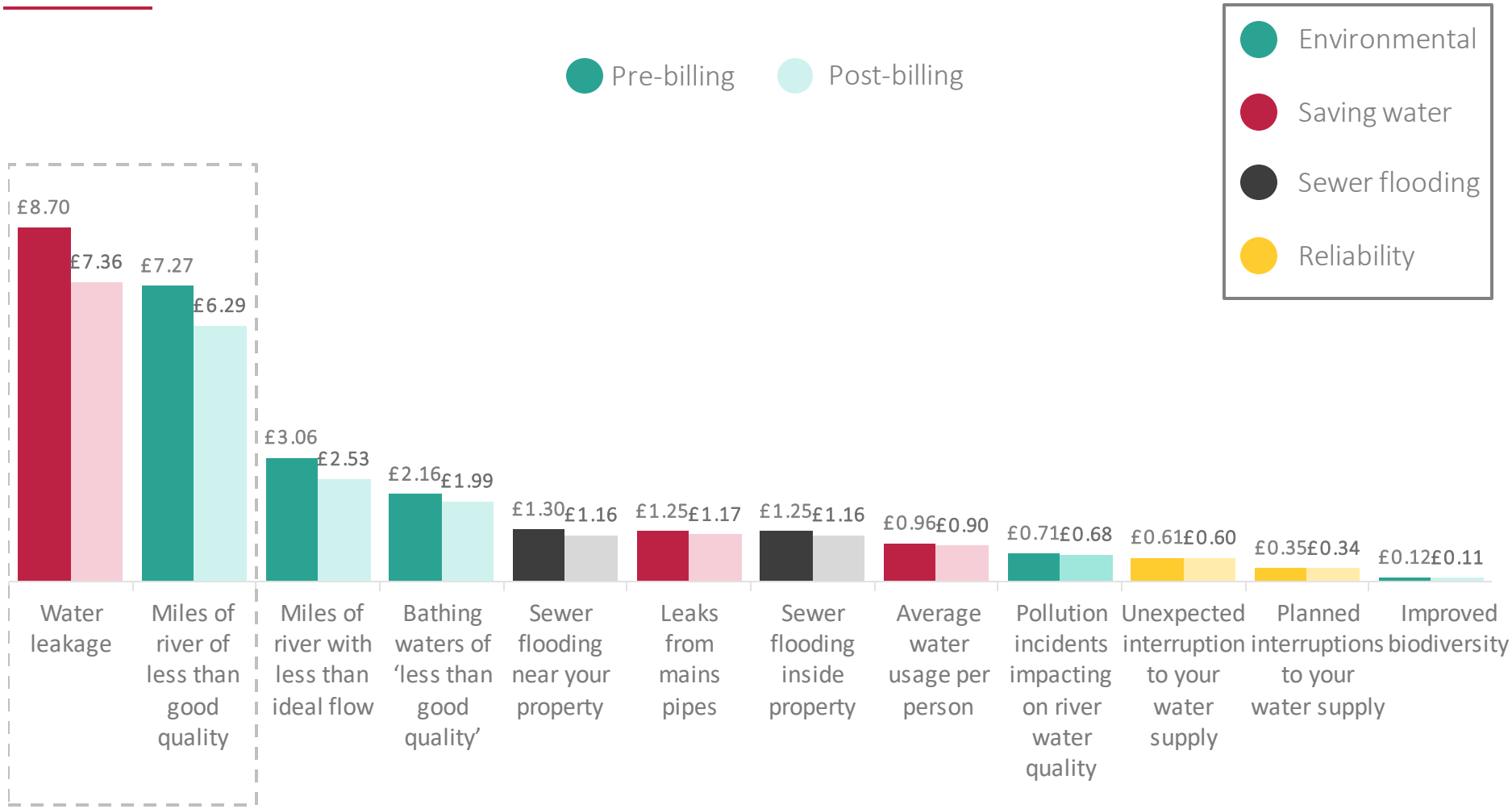
Q. Trade off exercise
Base: All respondents (n=405)

Investment in water leakage and river quality – the most expensive to implement – decreases considerably once billing impact is taken into account



Q. Trade off exercise
Base: All respondents (n=405)

Despite decreases after the total bill has been shown, water leakage and river quality attract higher levels of investment than other attributes

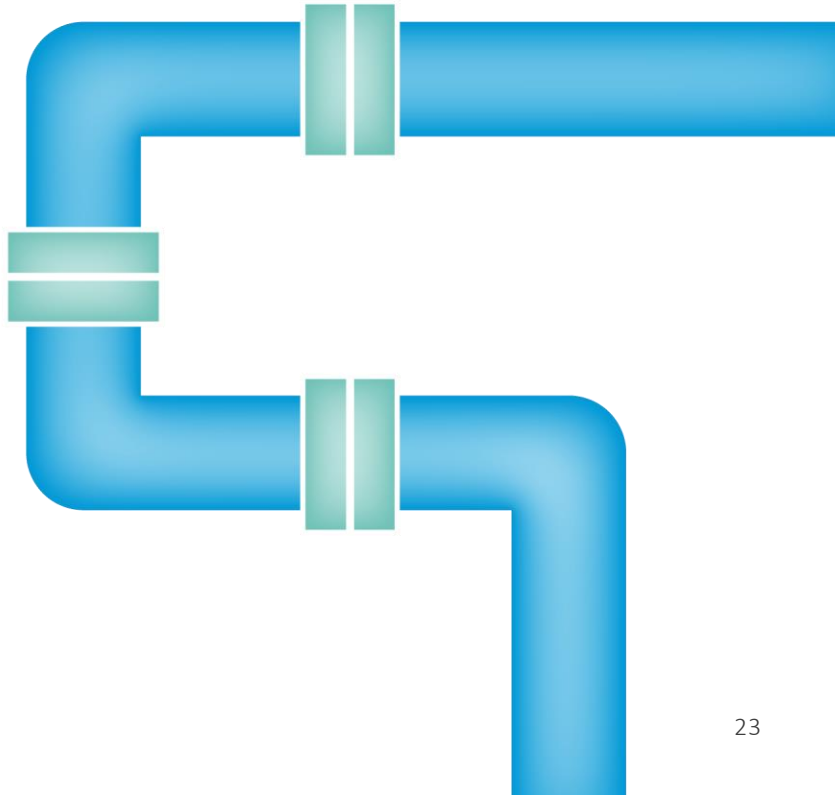


Q. Trade off exercise
Base: All respondents (n=405)

After seeing the impact of improvements on their bill, customers are willing to pay £24 extra per year to cover the cost

Q. Trade off exercise
Base: All respondents (n=405)

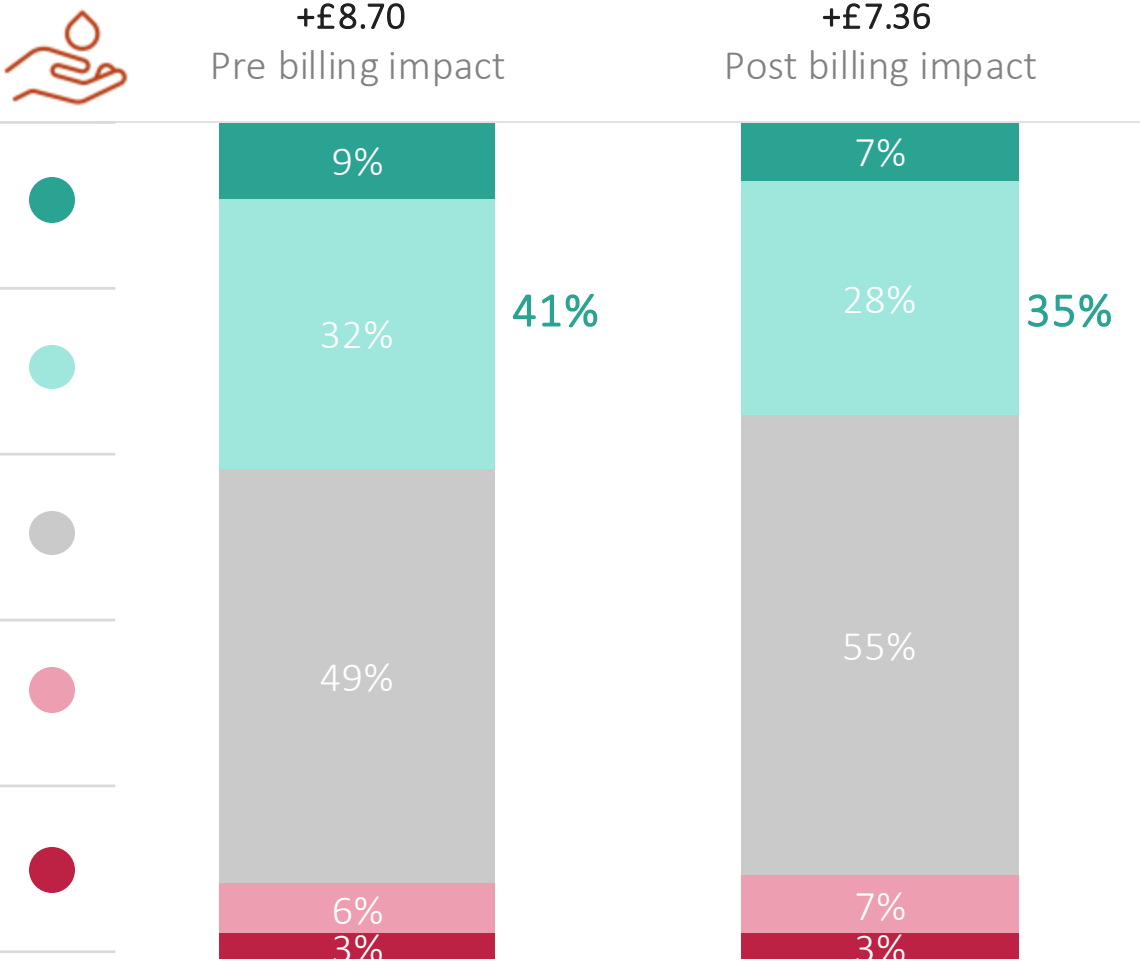
Individual priority analysis – pre and post



Investment in water leakage decreases once impact on billing has been seen. This is the most costly attribute to implement. Most customers default back to the status quo having seen the bill, rather than investing less

Water leakage

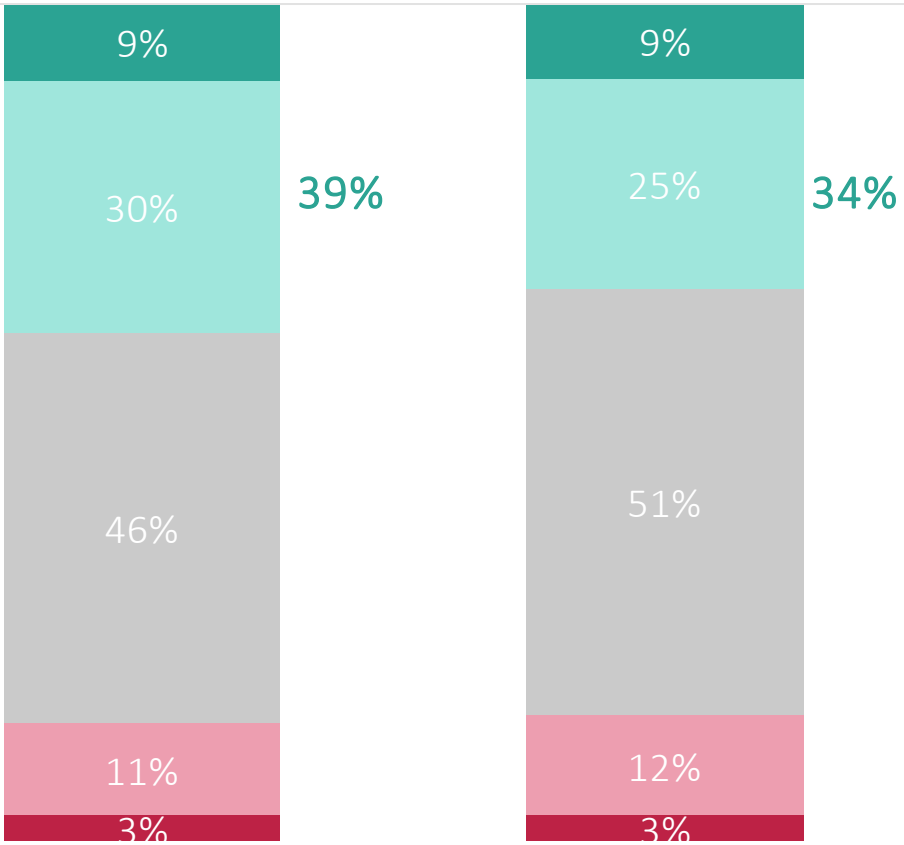
19% of water lost due to leakage	+£42.84	Highest
20% of water lost due to leakage	+£15.18	High
21% of water lost due to leakage	£0	Medium
21.5% of water lost due to leakage	-£0.50	Low
22% of water lost due to leakage	-£0.99	Lowest



Q. Trade off exercise
Base: All respondents (n=405)

Investment in ensuring good quality rivers also decreases. This is also among the most costly to implement

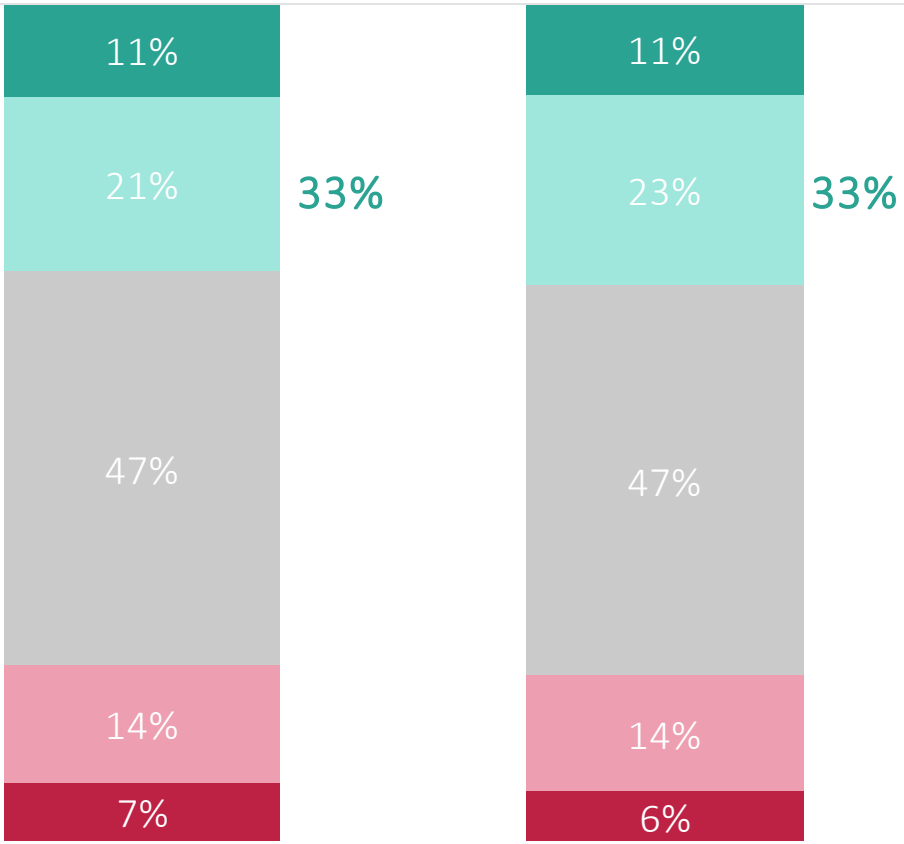
Miles of river of 'less than good' quality		
0 river miles classified as less than good	+£30.48	Highest
369 river miles classified as less than good	+£15.22	High
600 river miles classified as less than good	£0	Medium
795 river miles classified as less than good	-£0.95	Low
990 river miles classified as less than good	-£1.89	Lowest



Q. Trade off exercise
Base: All respondents (n=405)

Amount willing to invest in reducing unexpected interruptions remains consistent

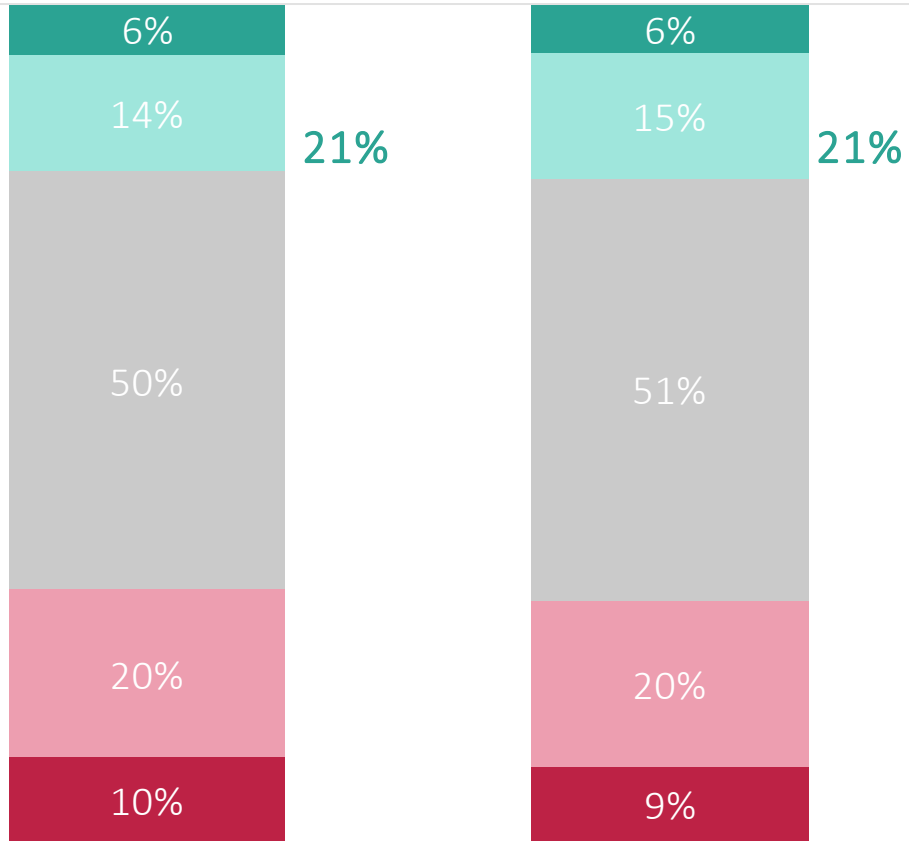
Unexpected interruptions to your water supply		
7,000 properties affected for 3 hours or more (1.2%)	+£3.66	Highest
8,000 properties affected for 3 hours or more (1.4%)	+£1	High
9,000 properties affected for 3 hours or more (1.5%)	£0	Medium
10,250 properties affected for 3 hours or more (1.7%)	-£0.05	Low
11,500 properties affected for 3 hours or more (1.9%)	-£0.10	Lowest



Q. Trade off exercise
Base: All respondents (n=405)

The extent to which reducing planned interruptions is prioritised remains stable after seeing its impact on billing

Planned interruptions to your water supply		
3,000 properties affected by planned interruptions (0.5%)	+£3.26	Highest
9,000 properties affected by planned interruptions (1.5%)	+£1.10	High
15,000 properties affected by planned interruptions (2.5%)	£0	Medium
17,000 properties affected by planned interruptions (2.9%)	-£0.05	Low
19,000 properties affected by planned interruptions (3.2%)	-£0.10	Lowest

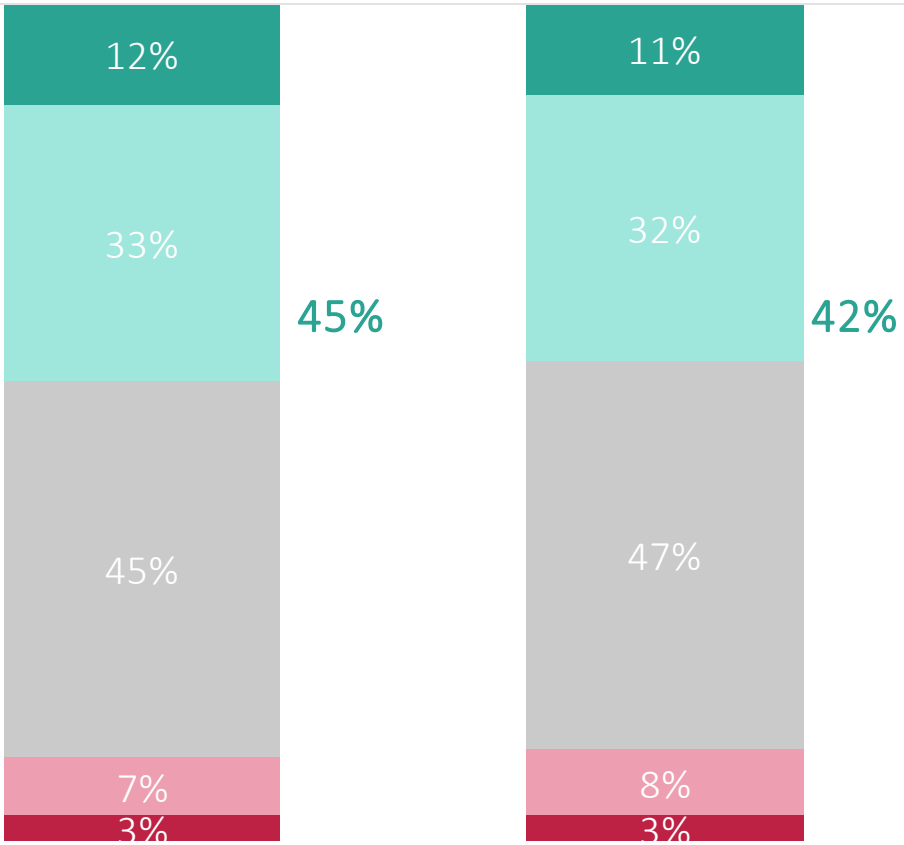


Q. Trade off exercise
Base: All respondents (n=405)

Spend on leaks from mains pipes remains just over £1 pre- and post- seeing impact on bill

Leaks from mains pipes

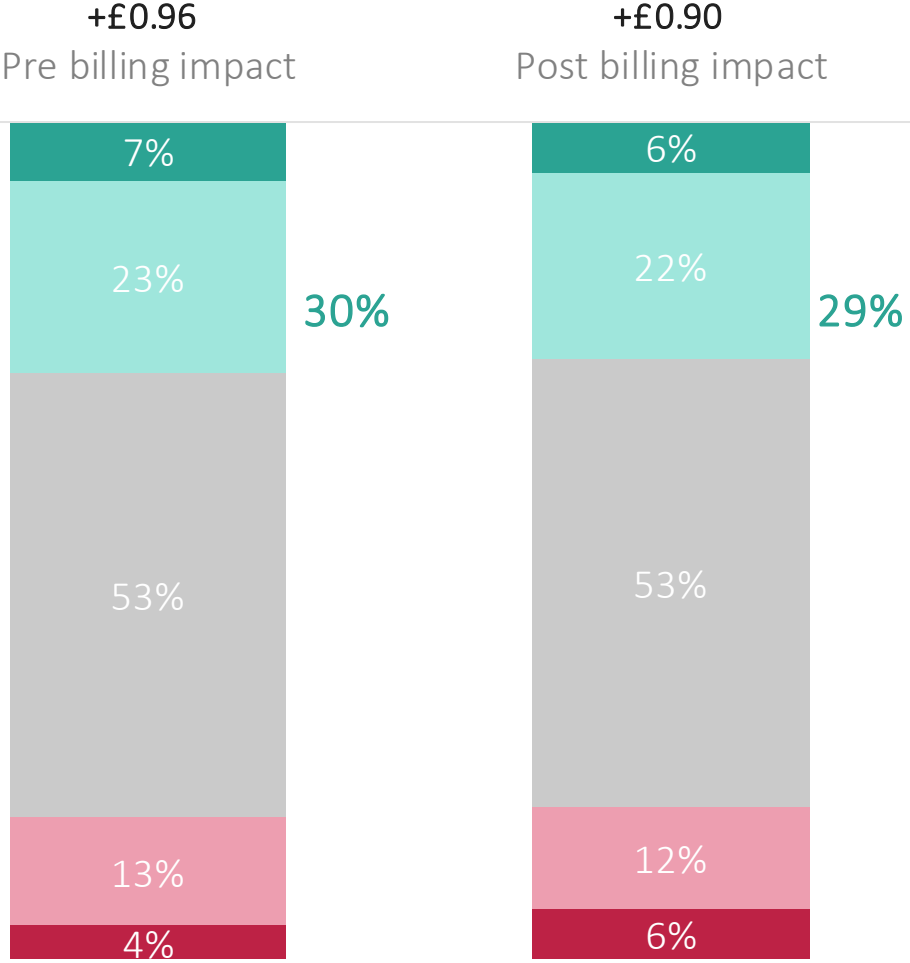
99% of mains leaks fixed within a day	+£5.11	Highest
95% of mains leaks fixed within a day	+£2.01	High
90% of mains leaks fixed within a day	£0	Medium
78% of mains leaks fixed within a day	-£0.05	Low
66% of mains leaks fixed within a day	-£0.10	Lowest



Q. Trade off exercise
Base: All respondents (n=405)

Investment in reducing water usage remains stable at just under £1

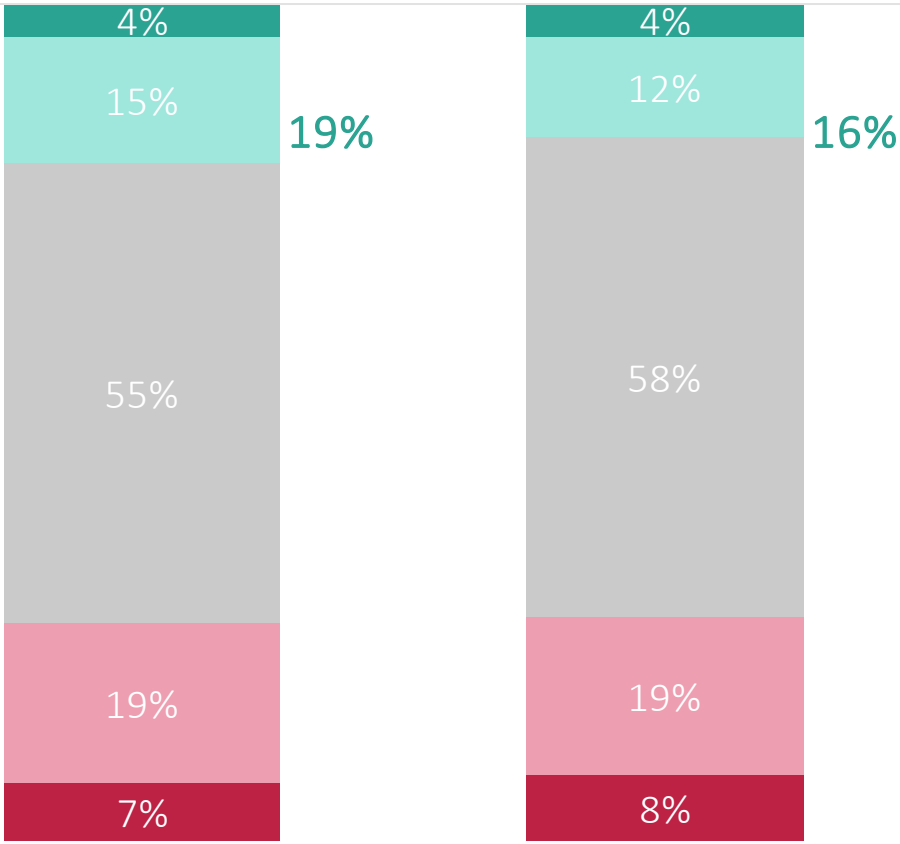
Average water usage per person		
124 litres per person per day	+£6.11	Highest
128 litres per person per day	+£2.54	High
131 litres per person per day	£0	Medium
132.5 litres per person per day	-£0.28	Low
134 litres per person per day	-£0.55	Lowest



Q. Trade off exercise
Base: All respondents (n=405)

The amount customers are willing to spend on river flow reduces once its impact on bill is seen

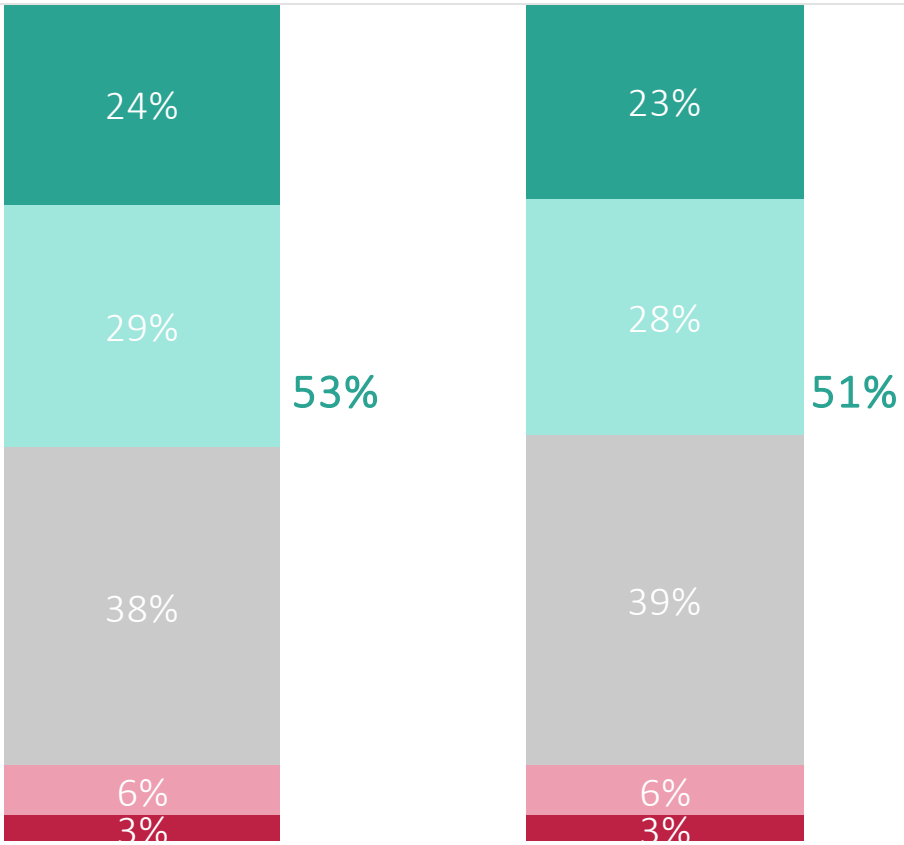
Miles of river with less than ideal flow		
0 miles of river with less than ideal flow	+£18.83	Highest
1 mile of river with less than ideal flow	+£15.81	High
17 miles of river with less than ideal flow	£0	Medium
24 miles of river with less than ideal flow	-£0.25	Low
31 miles of river with less than ideal flow	-£0.50	Lowest



Q. Trade off exercise
Base: All respondents (n=405)

Investment in biodiversity remains consistent before and after seeing the water bill impact

Improved biodiversity		
95% of land identified for improved biodiversity	+£0.31	Highest
80% of land identified for improved biodiversity	+£0.15	High
70% of land identified for improved biodiversity	£0	Medium
65% of land identified for improved biodiversity	-£0.01	Low
60% of land identified for improved biodiversity	-£0.02	Lowest

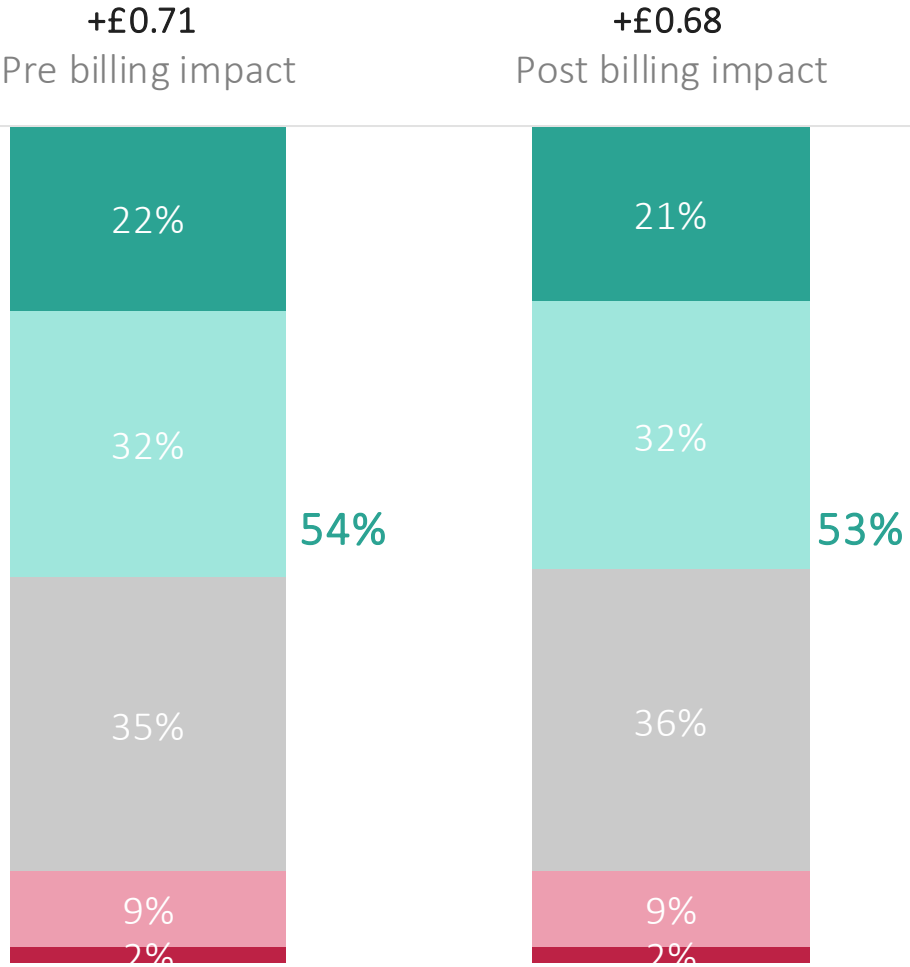


Q. Trade off exercise
Base: All respondents (n=405)

The importance of prioritising pollution impacts is stable pre- and post-seeing impact on bill

Pollution incidents impacting on river quality

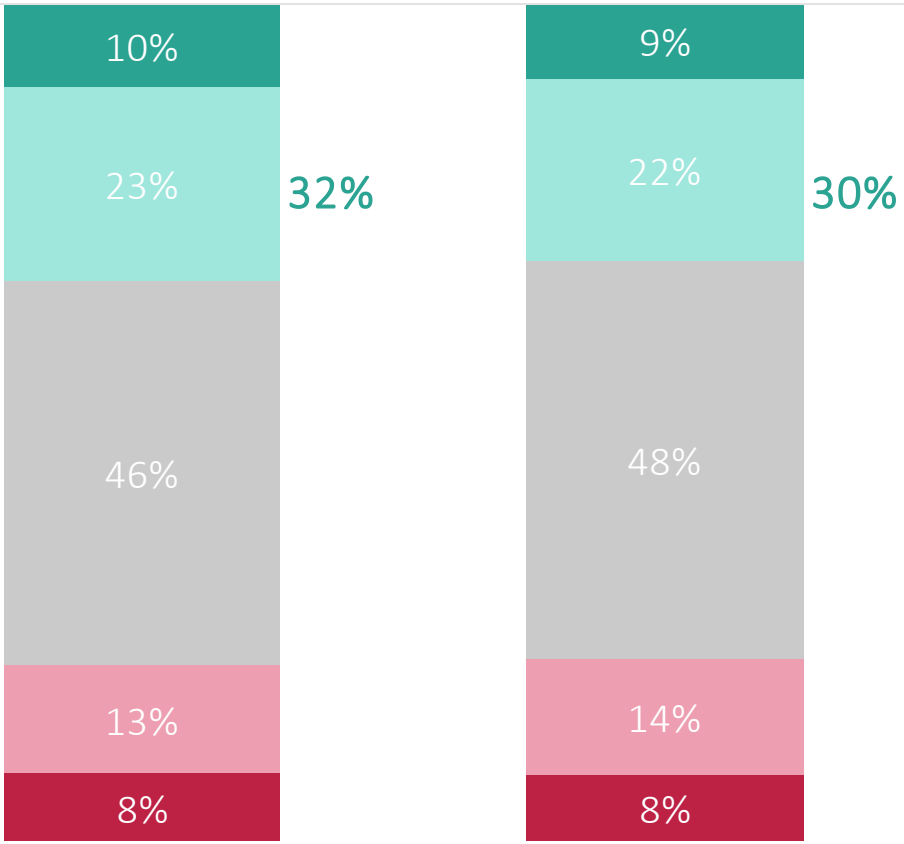
53 spills per year	+£2.35	Highest
63 spills per year	+£0.59	High
70 spills per year	£0	Medium
79 spills per year	-£0.05	Low
88 spills per year	-£0.09	Lowest



Q. Trade off exercise
Base: All respondents (n=405)

Investment in ensuring good quality bathing waters remains relatively consistent

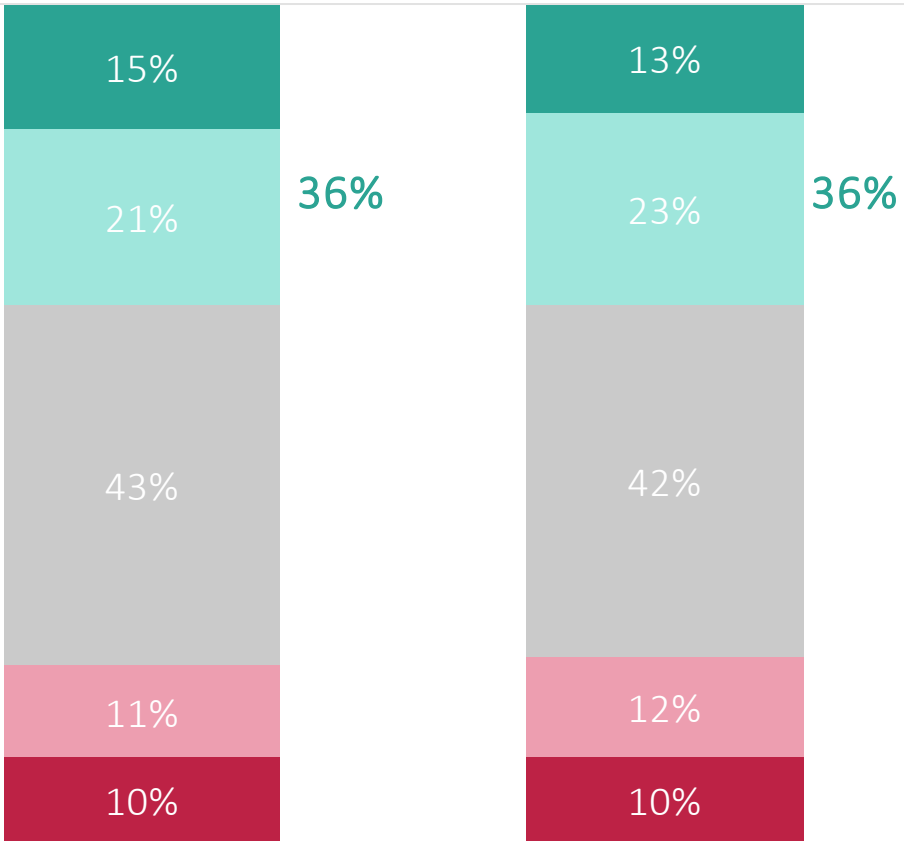
Bathing waters of 'less than good' quality		
0% of bathing waters classified as 'less than good'	+£13.95	Highest
3% of bathing waters classified as 'less than good'	+£3.80	High
4% of bathing waters classified as 'less than good'	£0	Medium
5% of bathing waters classified as 'less than good'	-£0.13	Low
6% of bathing waters classified as 'less than good'	-£0.25	Lowest



Q. Trade off exercise
Base: All respondents (n=405)

Importance of improving sewer flooding inside properties remains fairly consistent pre- and post- seeing impact on bill, albeit there is some change from 'highest' to 'high' levels of investment

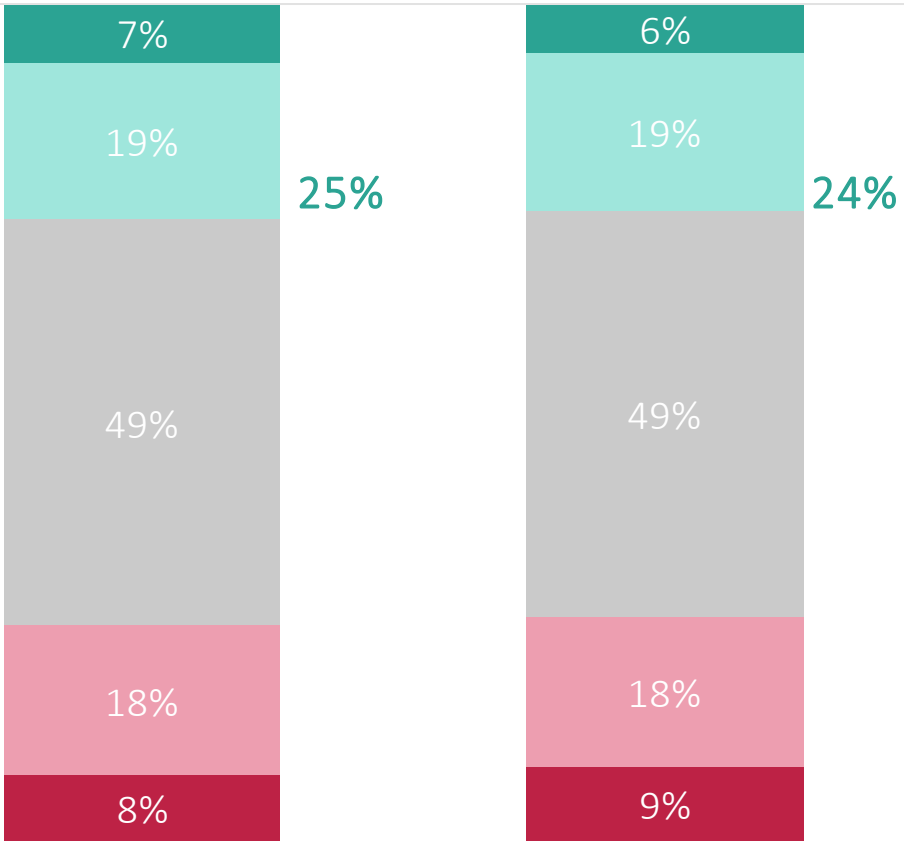
Sewer flooding inside property			
135 properties per year affected by sewer flooding	+£6.15	Highest	
162 properties per year affected by sewer flooding	+£2.45	High	
180 properties per year affected by sewer flooding	£0	Medium	
189 properties per year affected by sewer flooding	-£0.66	Low	
198 properties per year affected by sewer flooding	-£1.32	Lowest	



Q. Trade off exercise
Base: All respondents (n=405)

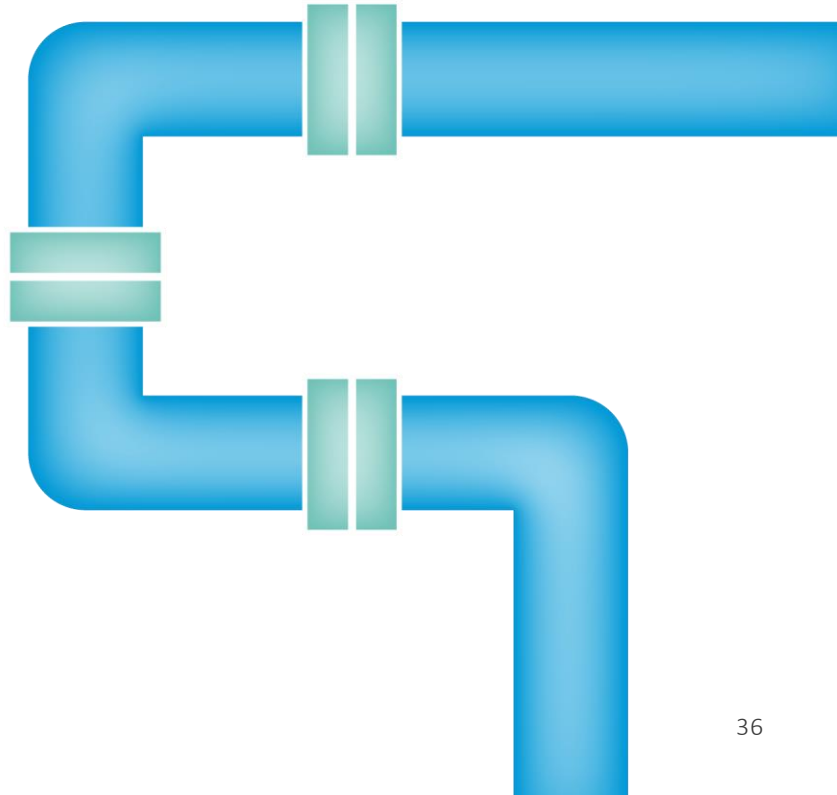
The amount willing to spend on reducing sewer flooding remains relatively consistent after seeing impact on bill

Sewer flooding near your property		
Sewage near to 2,780 properties per year	+£12.62	Highest
Sewage near to 3,330 properties per year	+£5.03	High
Sewage near to 3,700 properties per year	£0	Medium
Sewage near to 3,885 properties per year	-£1.36	Low
Sewage near to 4,070 properties per year	-£2.72	Lowest



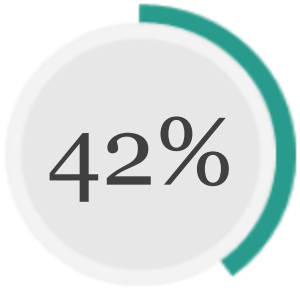
Q. Trade off exercise
Base: All respondents (n=405)

Sub-group analysis

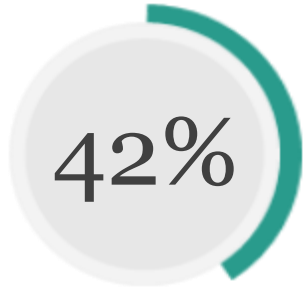


Unmetered customers generally place more importance on environmental attributes than metered customers

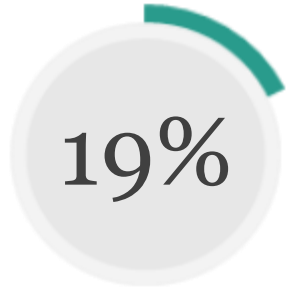
Environmental impact by subgroup – post billing impact – NET scores



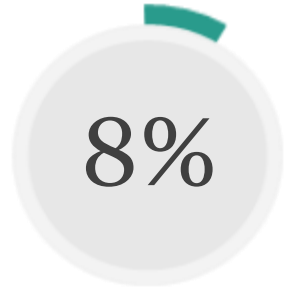
Pollution incidents impacting on river water quality



Improved biodiversity

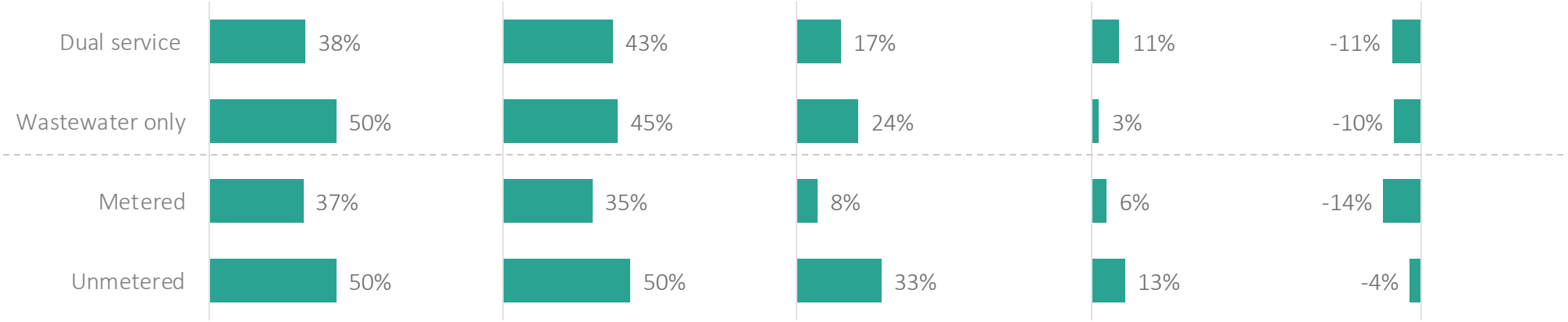


Miles of river of less than good quality



Bathing water of less than good quality

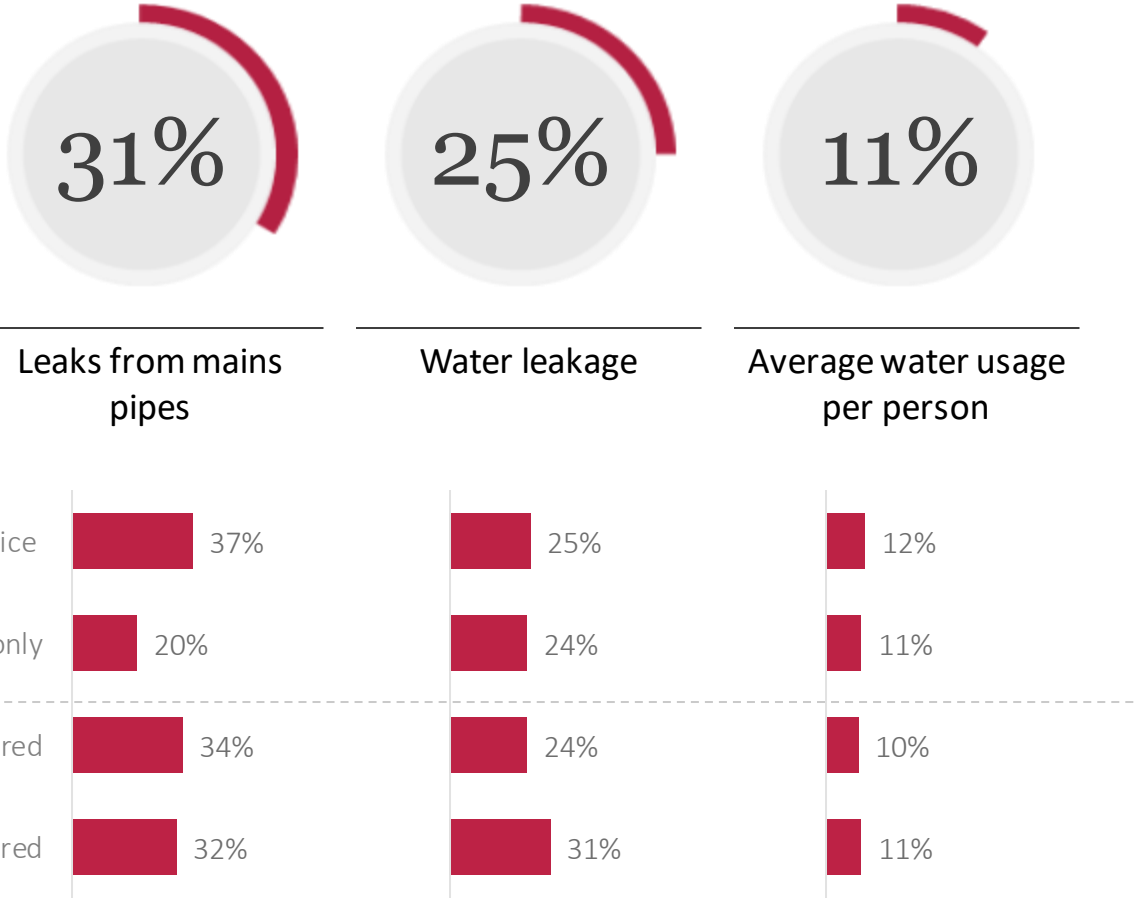
Miles of river with less than ideal flow



Q. Trade off exercise
Base: All respondents (n=405), dual service (n=257), wastewater only (n=132), metered (n=251), unmetered (n=140)

Wastewater only customers are less likely to prioritise fixing leaks from mains pipes

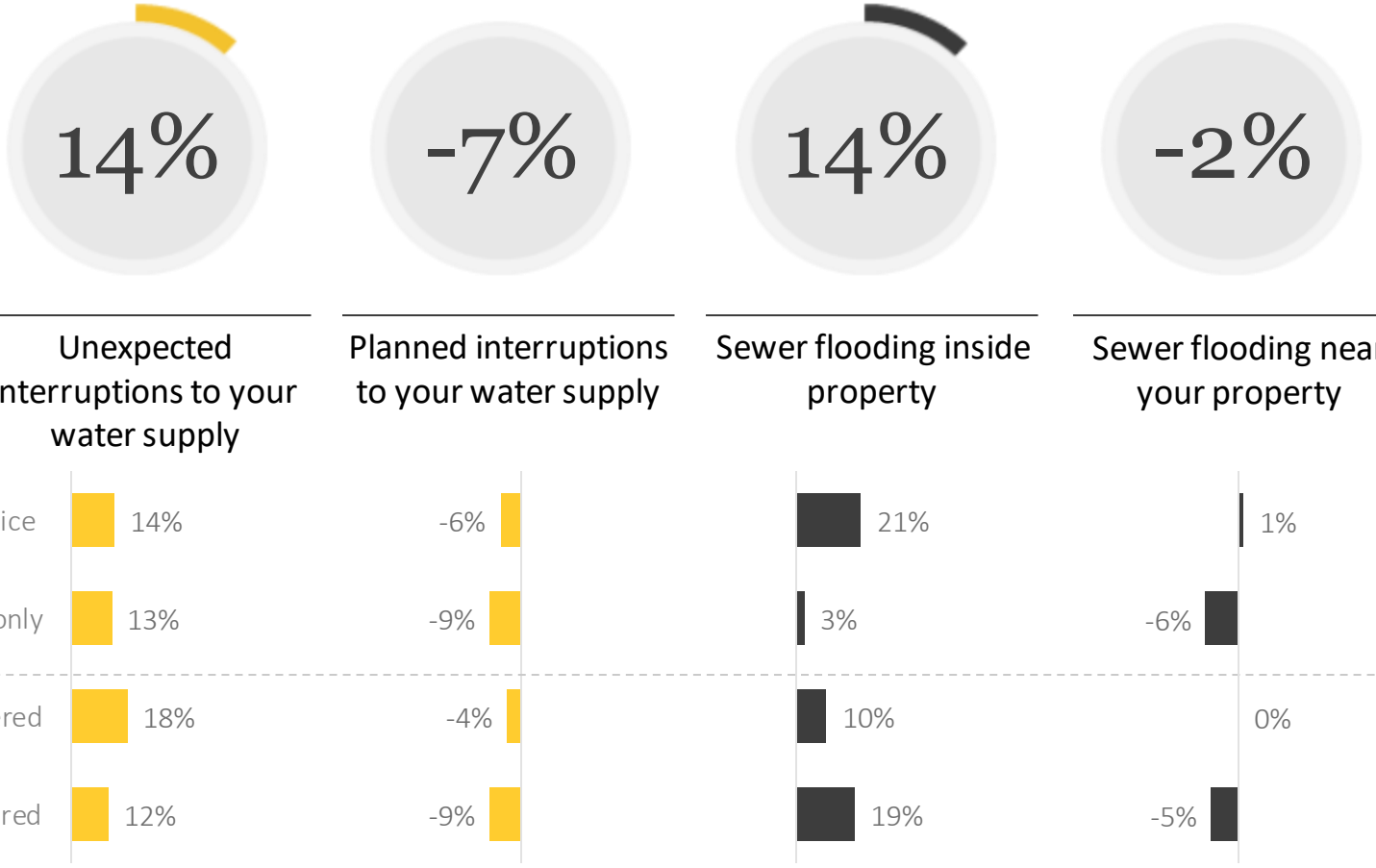
Saving water by subgroup – post billing impact – NET scores



Q. Trade off exercise
Base: All respondents (n=405), dual service (n=257), wastewater only (n=132), metered (n=251), unmetered (n=140)

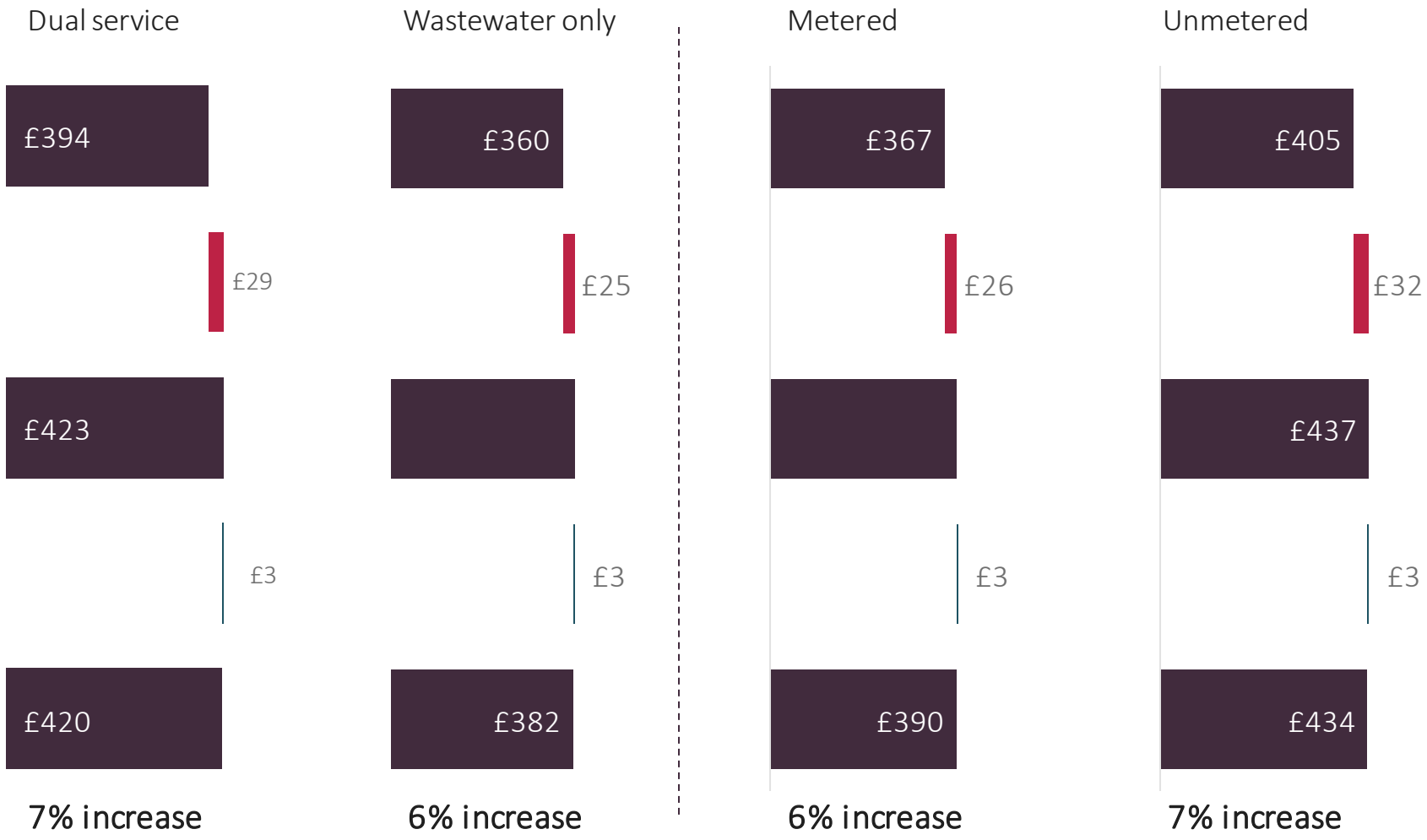
Wastewater only customers are less likely to prioritise reducing sewer flooding inside or near properties

Sewer flooding and **reliability** by subgroup – post billing impact – NET scores



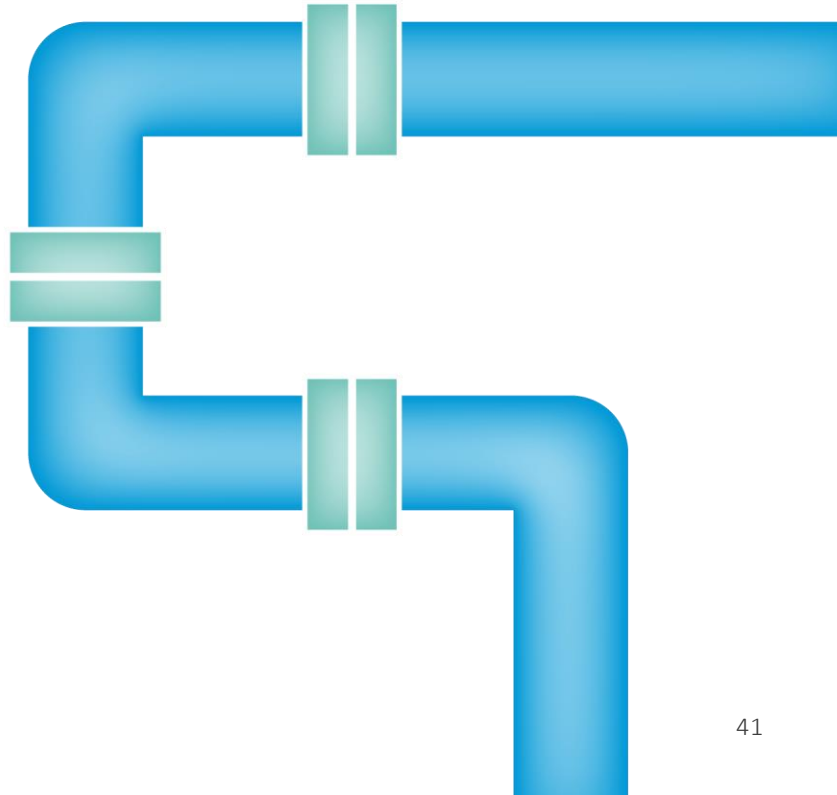
Q. Trade off exercise
Base: All respondents (n=405), dual service (n=257), wastewater only (n=132), metered (n=251), unmetered (n=140)

All customer types would be willing to pay a similar average increase to cover the outlined changes



Q. Trade off exercise
Base: All respondents (n=405), dual service (n=257), wastewater only (n=132), metered (n=251), unmetered (n=140)

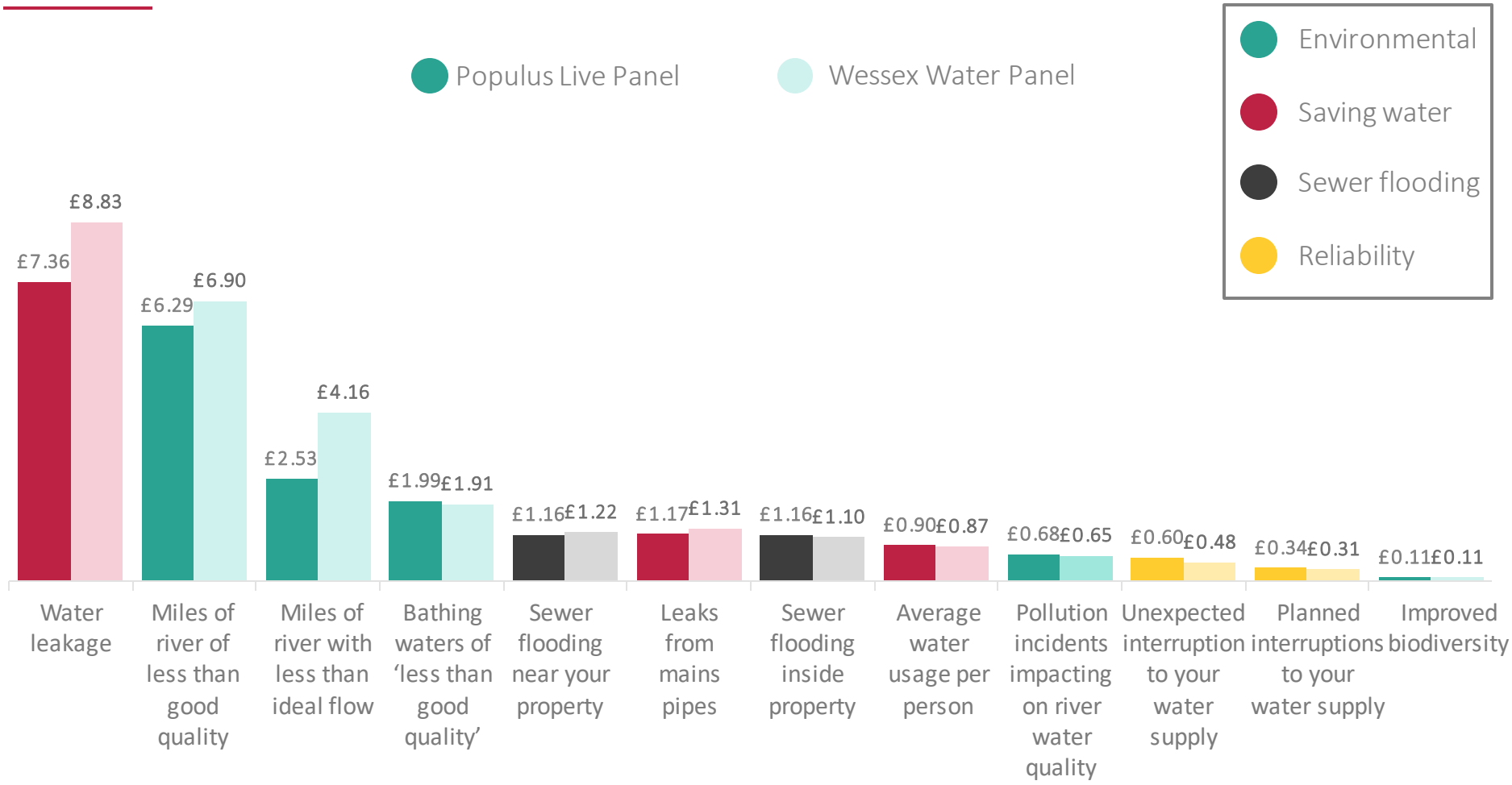
Appendix



Attribute scorecard (post-bill edit)

	Lowest	Low	Medium	High	Highest	NET
Improved biodiversity	3%	6%	39%	28%	23%	42%
Pollution incidents impacting on river water quality	2%	9%	36%	32%	21%	42%
Leaks from mains pipes	3%	8%	47%	32%	11%	31%
Water leakage	3%	7%	55%	28%	7%	25%
Miles of river of 'less than good' quality	3%	12%	51%	25%	9%	19%
Unexpected interruptions to your water supply	6%	14%	47%	23%	11%	14%
Sewer flooding inside property	10%	12%	42%	23%	13%	14%
Average water usage per person	6%	12%	53%	22%	6%	11%
Bathing waters of 'less than good' quality	8%	14%	48%	22%	9%	8%
Sewer flooding near your property	9%	18%	49%	19%	6%	-2%
Planned interruptions to your water supply	9%	20%	51%	15%	6%	-7%
Miles of river with less than ideal flow	8%	19%	58%	12%	4%	-10%

Respondents from the Wessex Water Panel were no different in terms of the ranked order of importance for each attribute. However, they did tend to invest more in the attributes that attracted the highest investment



Q. Trade off exercise
Base: All respondents Populus Live Panel / Wessex Water Panel (n=405/389)

Attribute scoring (1)

Environmental impact	Lowest	Low	Medium	High	Highest
Improved biodiversity	60% of land identified for improved biodiversity -£0.02	65% of land identified for improved biodiversity -£0.01	70% of land identified for improved biodiversity £0	80% of land identified for improved biodiversity +£0.15	95% of land identified for improved biodiversity +£0.31
Bathing waters of 'less than good' quality	6% of bathing waters classified as less than good -£0.25	5% of bathing waters classified as less than good -£0.13	4% of bathing waters classified as less than good £0	3% of bathing waters classified as less than good +£3.80	0% of bathing waters classified as less than good +£13.95
Pollution incidents impacting on river water quality	88 spills per year -£0.09	79 spills per year -£0.05	70 spills per year £0	63 spills per year +£0.59	53 spills per year +£2.35
Miles of river of 'less than good' quality	990 river miles classified as less than good (41%) -£1.89	795 river miles classified as less than good (33%) -£0.95	600 river miles classified as less than good (25%) £0	369 river miles classified as less than good (15%) +£15.22	0 river miles classified as less than good +£30.48
Miles of river with less than ideal flow	31 miles of river with less than ideal flow -£0.50	24 miles of river classified as less than good -£0.25	17 miles of river classified as less than good £0	1 mile of river classified as less than good +£15.81	0 miles of river classified as less than good +£18.83

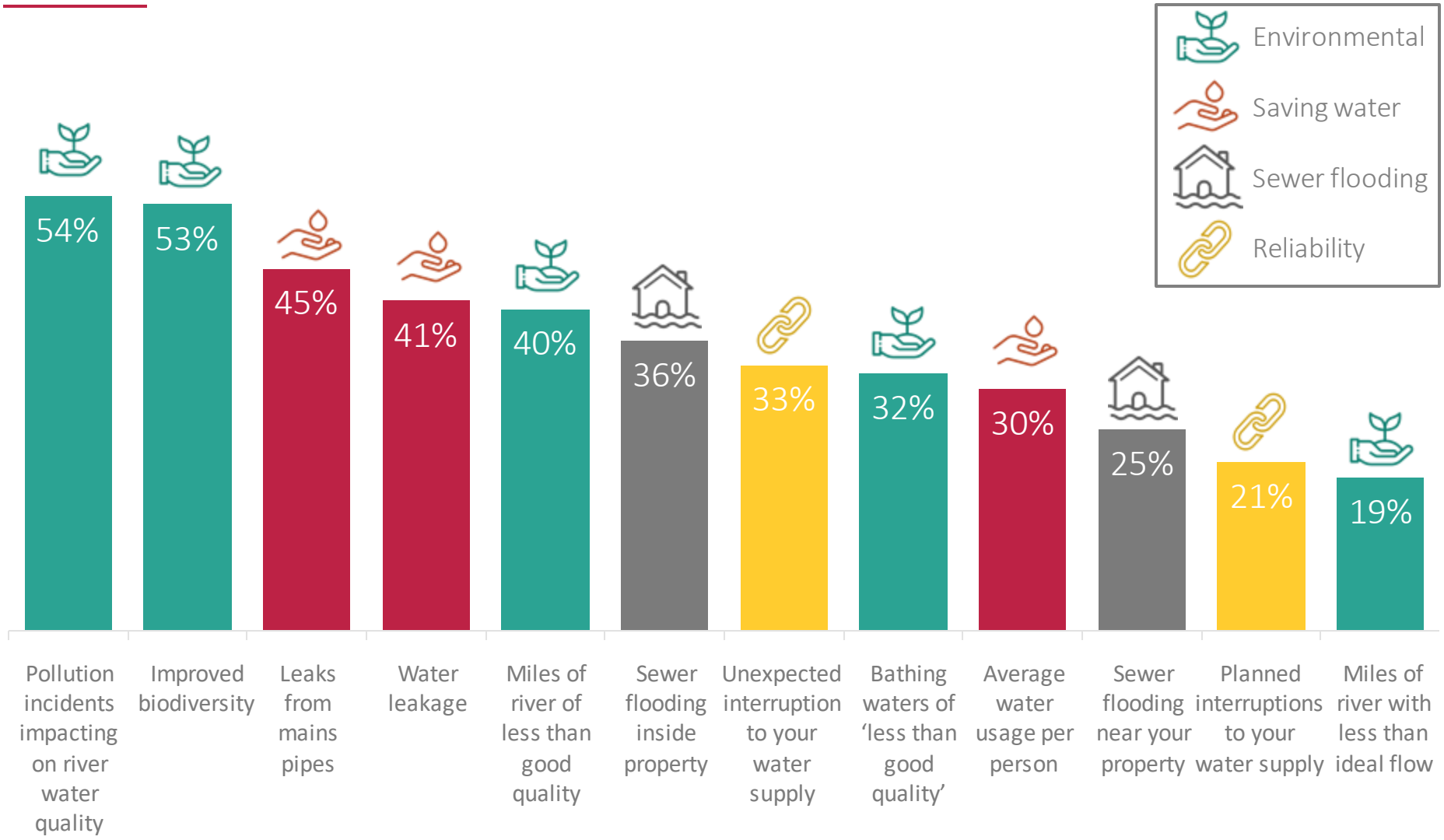
Attribute scoring (2)

Reliability of your water supply	Lowest	Low	Medium	High	Highest
Unexpected interruptions to your water supply	11,500 properties affected for 3 hours or more (1.9%) -£0.10	10,250 properties affected for 3 hours or more (1.7%) -£0.05	9,000 properties affected for 3 hours or more (1.5%) £0	8,000 properties affected for 3 hours or more (1.4%) +£1	7,000 properties affected for 3 hours or more (1.2%) +£3.66
Planned interruptions to your water supply	19,000 properties affected by planned interruptions (3.2%) -£0.10	17,000 properties affected by planned interruptions (2.9%) -£0.05	15,000 properties affected by planned interruptions (2.5%) £0	9,000 properties affected by planned interruptions (1.5%) +£1.10	3,000 properties affected by planned interruptions (0.5%) +£3.26
Sewer flooding	**Lowest**	**Low**	**Medium**	**High**	**Highest**
Sewer flooding inside property	198 properties per year affected by sewer flooding -£1.32	189 properties per year affected by sewer flooding -£0.66	180 properties per year affected by sewer flooding £0	162 properties per year affected by sewer flooding +£2.45	135 properties per year affected by sewer flooding +£6.15
Sewer flooding near your property	Sewage near to 4,070 properties per year -£2.72	Sewage near to 3,885 properties per year -£1.36	Sewage near to 3,700 properties per year £0	Sewage near to 3,330 properties per year +£5.03	Sewage near to 2,780 properties per year +£12.62

Attribute scoring (3)

Saving water	Lowest	Low	Medium	High	Highest
Leaks from mains pipes	66% of mains leaks fixed within a day -£0.10	78% of mains leaks fixed within a day -£0.05	90% of mains leaks fixed within a day £0	95% of mains leaks fixed within a day +£2.01	99% of mains leaks fixed within a day +£5.11
Water leakage	22% of water lost due to leakage -£0.99	21.5% of water lost due to leakage -£0.50	21% of water lost due to leakage £0	20% of water lost due to leakage +£15.18	19% of water lost due to leakage +£42.84
Average water usage per person	134 litres per person per day -£0.55	132.5 litres per person per day -£0.28	131 litres per person per day £0	128 litres per person per day +£2.54	124 litres per person per day +£6.11

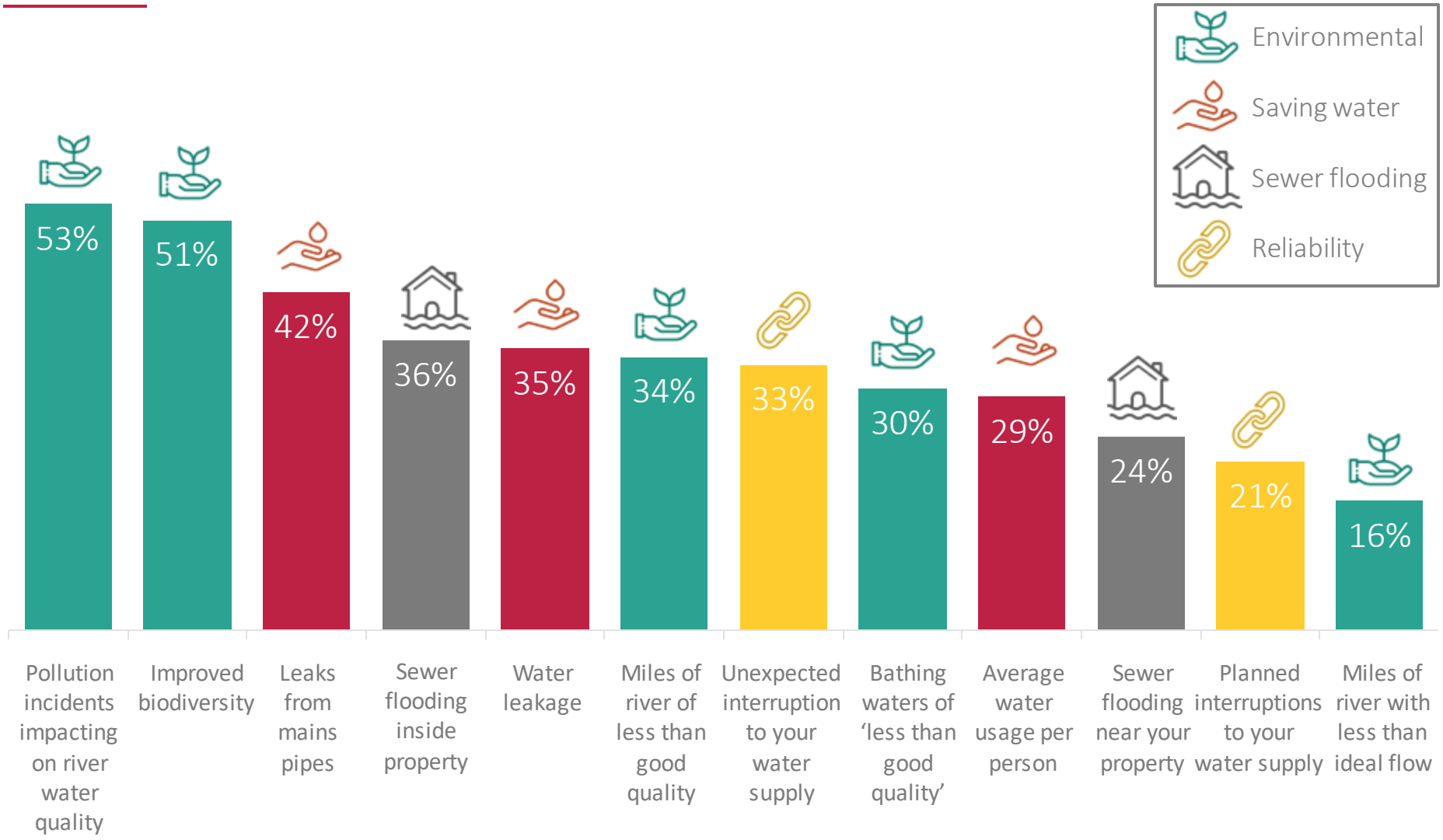
Reliability attributes - both unexpected and planned interruptions - are of lesser priority to customers



Q. Trade off exercise – pre billing
Base: All respondents (n=405)

% score each 'highest' or 'high'

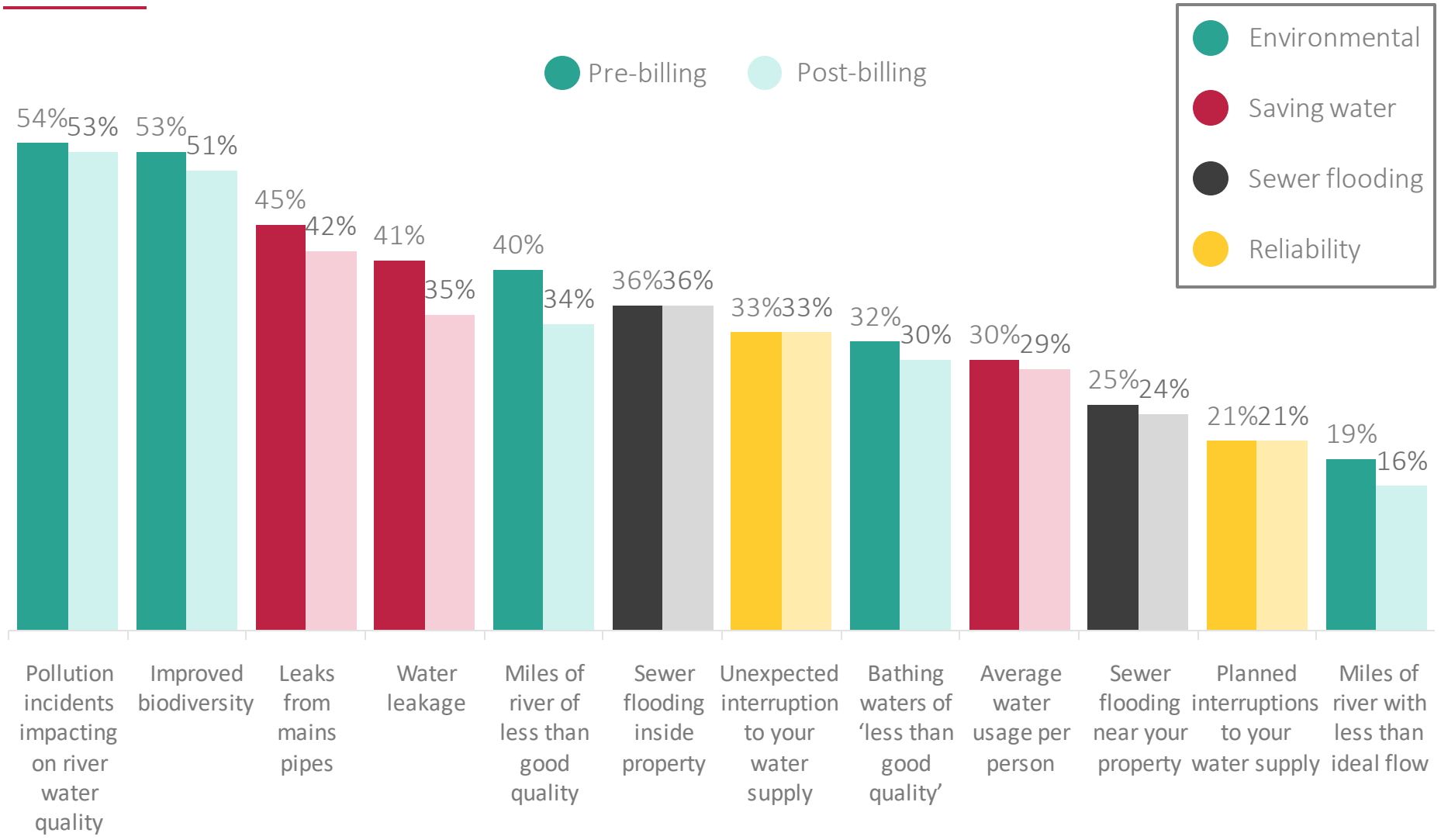
Scores remain relatively stable once impact on billing is seen



Q. Trade off exercise – post billing
Base: All respondents (n=405)

% score each 'highest' or 'high'

Scores for water leakage and good quality rivers decrease most noticeably post billing impact



Q. Trade off exercise
Base: All respondents (n=405)

% score each 'highest' or 'high'

Unmetered customers generally place more importance on environmental attributes than metered customers

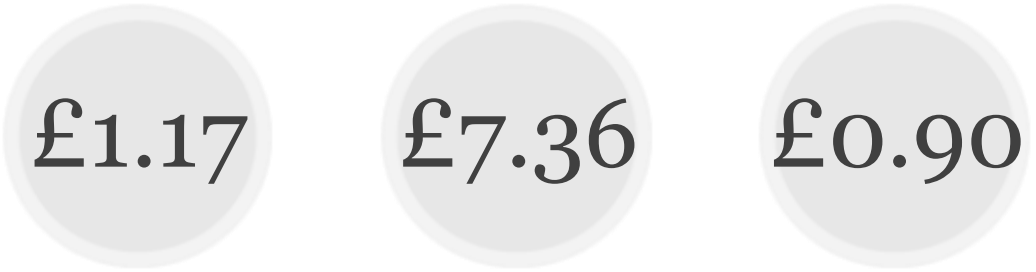
Environmental impact by subgroup – post billing impact – average spend

	Pollution incidents impacting on river water quality	Improved biodiversity	Miles of river of less than good quality	Bathing water of less than good quality	Miles of river with less than ideal flow
	£0.68	£0.11	£6.29	£1.99	£2.53
Dual service	£0.58	£0.11	£5.95	£2.15	£2.60
Wastewater only	£0.83	£0.12	£7.09	£1.70	£2.55
Metered	£0.56	£0.10	£4.72	£2.03	£2.21
Unmetered	£0.88	£0.14	£8.69	£2.05	£3.19

Q. Trade off exercise – post billing
Base: All respondents (n=405), dual service (n=257), wastewater only (n=132), metered (n=251), unmetered (n=140)

Wastewater only customers are less likely to spend on fixing leaks from main pipes and water leakage

Saving water by subgroup – post billing impact – average spend



Q. Trade off exercise – post billing
Base: All respondents (n=405), dual service (n=257), wastewater only (n=132), metered (n=251), unmetered (n=140)

Spend on sewer flooding and reliability investment areas remains relatively consistent by customer type. Wastewater only customers are less willing to spend on reducing internal sewer flooding

Sewer flooding and **reliability** by subgroup – post billing impact – average spend

	Unexpected interruptions to your water supply	Planned interruptions to your water supply	Sewer flooding inside property	Sewer flooding near your property
	£0.60	£0.34	£1.16	£1.16
Dual service	£0.62	£0.35	£1.38	£1.26
Wastewater only	£0.56	£0.31	£0.74	£1.00
Metered	£0.63	£0.38	£1.04	£1.30
Unmetered	£0.63	£0.32	£1.37	£1.08

Q. Trade off exercise – post billing
Base: All respondents (n=405), dual service (n=257), wastewater only (n=132), metered (n=251), unmetered (n=140)

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Populus

Questionnaire

Willingness to pay

November 2017

Wessex Water

Willingness to pay
400 respondents sourced by Populus. Additional sample from Wessex Water's own panel
Online
10 minutes

Demographics

Sub-heading

SINGLE CODE

1. Are you…?
   a. Male
   b. Female

SINGLE CODE

2. Please enter your age in the text box below

[NUMERIC BOX]

SINGLE CODE

3. Please enter your full postcode in the text box below

[OPEN TEXT BOX] - CLOSE IF NOT WESSEX WATER POST CODE

SINGLE CODE

4. Are you the person responsible for paying your water and sewerage bill (this may be included in your rent)?

   Please select the most relevant option.

   a. Yes, solely responsible
   b. Yes, jointly responsible
   c. Not responsible [CLOSE]

5. What is the occupation of the Chief Income Earner? USE GRADER [Or if retired on a Private Pension] What was the PREVIOUS occupation of the Chief Income Earner? USE GRADER

SINGLE CODE – SHOW MAP BELOW

6A Does Wessex Water provide either your water supply or sewage services?

Please refer this map to help you if you are unsure SHOW MAP

a. Yes, Wessex Water supplies both my water supply and sewerage services
b. Yes, Wessex Water supplies only my sewerage services (but not my water supply)
c. Yes, Wessex Water supplies my water only (but not my sewerage services)
d. No - CLOSE
e. Don't know – CLOSE

SINGLE CODE – ASK ALL CODING B ABOVE

6B who provides your water supply?

a. Bournemouth Water
b. Bristol Water
c. Cholderton and District Water
d. Portsmouth Water
e. Severn Trent Water
f. South West Water
g. Southern Water
h. Sutton and East Surrey Water
i. Thames Water
j. Veolia Water Projects
k. Wessex Water
l. Other (Please specify)
m. Don't know

SINGLE CODE – ASK ALL CODING B ABOVE

6C Who provides your sewage services?

a. Bournemouth Water
b. Bristol Water
c. Cholderton and District Water
d. Portsmouth Water
e. Severn Trent Water
f. South West Water
g. Southern Water
h. Sutton and East Surrey Water
i. Thames Water
j. Veolia Water Projects
k. Wessex Water
l. Other (Please specify)
m. Don't know

CLOSE IF WESSEX WATER NOT CODED AT Q6/7

ASK ALL

6. Approximately how much do you pay for your water and sewerage bill? Please do not include any arrears or debt repayments you may be making to your water and sewerage company.

Enter either the exact amount you pay per year, or choose from one of the options below.

Exact amount per year (£) [NUMERIC BOX]

OR

Questionnaire

a. Less than £12.99 per month
b. £13 - £16.99 per month
c. £17 - £20.99 per month
d. £21 - £24.99 per month
e. £25 - £28.99 per month
f. £29 - £32.99 per month
g. £33 - £37.99 per month
h. £38 - £41.99 per month
i. £42 - £45.99 per month
j. £46 - £49.99 per month
k. Over £50 per month
l. Don't know

Less than £150 per year
£151 - £200 per year
£201 - £250 per year
£251 - £300 per year
£301 - £350 per year
£351 - £400 per year
£401 - £450 per year
£451 - £500 per year
£501 - £550 per year
£551 - £600 per year
Over £600 per year
Don't know

SINGLE CODE

7. Are you charged for your water on a metered basis where you pay for what you use?

a. Metered (pay for what I use)
b. Not metered (pay a fixed amount)
c. Don't know

Sliders

Intro screen

We'd like to understand how you think Wessex Water should be investing in the services it provides. For each area of service we'll give you some information about our current service levels and some options for change. We'll then ask you to select your preferred option and we'll show you the impact this would have on your bill.

The investment areas covered will be:

- Reliability of your water supply
- Saving water
- Environmental impact

Questionnaire

- Sewer flooding

When you have made your choices we'll show you the impact on your bill from 2020. At this point you will be able to review and change your views on how Wessex Water should invest.

AREAS DIVIDED INTO FOUR TOPICS (1 SCREEN PER TOPIC) – TOPIC SCREENS TO BE RANDOMISED

7 -

Slider screens

For each area of service please tell us what you think our Wessex Water's level of investment should be.

You can choose from five levels of investment. You can see the impact your decision will have by hovering your cursor over each option.

Reliability of your water supply

1. **Unexpected interruptions to your water supply**
   Sometimes your water supply can be interrupted unexpectedly. This means that you may have no water for a period of time or your supply may be intermittent. This could be due to burst pipes which can happen at any time. 90% interruptions last are less than 12 hours. Currently, the number of properties affected by unexpected interruptions of three hours or more in any year is around 9,000 out of a total 590,000 water supply properties in the Wessex Water area (1.5%).

Investment level	Lowest	Low	Medium	High	Highest
Text	11,500 properties affected for 3 hours or more (1.9%)	10,250 properties affected for 3 hours or more (1.7%)	9,000 properties affected for 3 hours or more (1.5%)	8,000 properties affected for 3 hours or more (1.4%)	7,000 properties affected for 3 hours or more (1.2%)
Billing impact (£)	-0.10	-0.05	No change to bill	+1	+3.66

Questionnaire

2. **Planned interruptions to your water supply**
   The water supply at your property can be interrupted due to planned maintenance, in which case you would be given at least 48 hours' notice. All of these interruptions last less than 12 hours. Currently the number of properties affected by this in any year is around 15,000 out of a total 590,000 water supply properties in the Wessex Water area (2.5%).

Investment level	Lowest	Low	Medium	High	Highest
Text	19,000 properties affected by planned interruptions (3.2%)	17,000 properties affected by planned interruptions (2.9%)	15,000 properties affected by planned interruptions (2.5%)	9,000 properties affected by planned interruptions (1.5%)	3,000 properties affected by planned interruptions (0.5%)
Billing impact (£)	-0.10	-0.05	No change to bill	+1.10	+3.26

Saving Water

3. **Leaks from mains pipes**
   Occasionally water mains burst causing a visible leak. Where these are reported to them by customers, Wessex Water aims to get them fixed promptly. Wessex Water measures its performance by showing the percentage of mains leaks that they respond to by fixing them within a day of their happening. Currently, 90% of reported mains leaks are fixed within a day.

Investment level	Lowest	Low	Medium	High	Highest
Text	66% of mains leaks fixed within a day	78% of mains leaks fixed within a day	90% of mains leaks fixed within a day	95% of mains leaks fixed within a day	99% of mains leaks fixed within a day
Billing impact (£)	-0.10	-0.05	No change to bill	+2.01	+5.11

4. **Water leakage**
   Water can leak from Wessex Water's extensive network of pipes. Wessex Water can proactively detect and repair leaks, and replace or refurbish sections of pipework to reduce the extent of leakage. Currently 21% of the water that is treated by Wessex Water gets lost due to leakage.

Investment level	Lowest	Low	Medium	High	Highest
Text	22% of water lost due to leakage	21.5% of water lost due to leakage	21% of water lost due to leakage	20% of water lost due to leakage	19% of water lost due to leakage
Billing impact (£)	-0.99	-0.50	No change to bill	+15.18	+42.84

5. Average water usage per person

Wessex Water can reduce the amount of water used per person each day by investing in fitting more meters and providing water efficiency devices and advice. Reducing the average water usage will help safeguard our water resources in the future and leave more water in the environment. Currently, the average person in the Wessex Water supply area uses 131 litres per day.

Investment level	Lowest	Low	Medium	High	Highest
Text	134 litres per person per day	132.5 litres per person per day	131 litres per person per day	128 litres per person per day	124 litres per person per day
Billing impact (£)	-0.55	-0.28	No change to bill	+2.54	+6.11

Environmental impact

6. Miles of river with less than ideal flow

The flow rates of rivers within in the Wessex Water Area depend on the amount of water taken from the environment to supply customers. A river with 'low flow' may have had some water taken from it to supply customers – it may be less suitable for activities such as fishing, and there may be some damage to habitats for plants and wildlife. Currently, there are 17 miles of river with less than ideal flow, out of a total of 2429 miles of river in the Wessex Water area

Investment level	Lowest	Low	Medium	High	Highest
Text	31 miles of river with less than ideal flow	24 miles of river classified as less than good	17 miles of river classified as less than good	1 mile of river classified as less than good	0 miles of river classified as less than good
Billing impact (£)	-0.50	-0.25	No change to bill	+15.81	+18.83

7. Improved biodiversity

Wessex Water works with land owners to improve the quality of the water in rivers (e.g. reducing levels of fertilizer running off land into rivers when it rains), and also help the variety of plants and animals. Currently, 70% of Wessex Water land is identified for improved biodiversity.

Investment level	Lowest	Low	Medium	High	Highest
Text	60% of land identified for improved biodiversity	65% of land identified for improved biodiversity	70% of land identified for improved biodiversity	80% of land identified for improved biodiversity	95% of land identified for improved biodiversity

Billing impact (£)	-0.02	-0.01	No change to bill	+0.15	+0.31

8. Pollution incidents impacting on river water quality

Occasionally dilute sewage can discharge into rivers and beaches which may impact water quality. These spills can occur when the sewerage system is blocked or there are pipe bursts. Also spills from overflows can happen when the system is overloaded due to heavy rainfall. There are currently 70 such spills per year.

Investment level	Lowest	Low	Medium	High	Highest
Text	88 spills per year	79 spills per year	70 spills per year	63 spills per year	53 spills per year
Billing impact (£)	-0.09	-0.05	0	+0.59	+2.35

9. Bathing waters of 'less than good quality'

The cleanliness and quality of coastal bathing water and beaches in your area is classified according to the chances of getting an infection such as an upset stomach, an ear infection or a sore throat after bathing in the sea. Currently, 4% of bathing waters in the Wessex Water wastewater area are classified as 'less than good'. This means that 8 or more people out of 100 have a chance of getting an infection after bathing in waters classified as 'less than good' in them.

Investment level	Lowest	Low	Medium	High	Highest
Text	6% of bathing waters classified as less than good	5% of bathing waters classified as less than good	4% of bathing waters classified as less than good	3% of bathing waters classified as less than good	0% of bathing waters classified as less than good
Billing impact (£)	-0.25	-0.13	No change to bill	+3.80	+13.95

10. Miles of river of 'less than good' quality

Some stretches of rivers are classified as 'less than good quality', this means that animal and plant life is affected (e.g. some species may be missing) and there may be some pollution or murky water. Currently, around 600 miles of river out of a total of 2,429 miles in the Wessex Water area (25% of total) is classified as 'less than good'.

Investment level	Lowest	Low	Medium	High	Highest

Questionnaire

Text	990 river miles classified as less than good (41%)	795 river miles classified as less than good (33%)	600 river miles classified as less than good (25%)	369 river miles classified as less than good (15%)	0 river miles classified as less than good
Billing impact (£)	-1.89	-0.95	No change to bill	+15.22	+30.48

Sewer flooding

11. Sewer flooding inside property

Flooding from the sewer gets inside properties, causing damage to property. When this happens, substantial clean up and repair of flooring and walls may be needed
Currently the number properties affected by this in any year is 180 out of a total 1,200,000 properties (0.03%) for which Wessex Water provides a sewage service.

Investment level	Lowest	Low	Medium	High	Highest
Text	198 properties per year affected by sewer flooding	189 properties per year affected by sewer flooding	180 properties per year affected by sewer flooding	162 properties per year affected by sewer flooding	135 properties per year affected by sewer flooding
Billing impact (£)	-1.32	-0.66	No change to bill	+2.45	+6.15

12. Sewer flooding near your property

Flooding from the sewer gets close to people's properties or gets into their gardens. Currently 3,700 properties (0.63% of total) in the Wessex Water area are affected by this in any year. That's out of a total of 1,200,000 wastewater properties.

Investment level	Lowest	Low	Medium	High	Highest
Text	Sewage near to 4,070 properties per year	Sewage near to 3,885 properties per year	Sewage near to 3,700 properties per year	Sewage near to 3,330 properties per year	Sewage near to 2,780 properties per year
Billing impact (£)	-2.72	-1.36	No change to bill	+5.03	+12.62

First billing screen

This is an illustration of your bill based on all of the choices that you have made in the different areas of service. After you have read your bill, please click on the '>>' button on the bottom of your screen.

SHOW BILL – INITIAL BILL VALUE PIPED IN FROM Q8 (IF CODED ANSWER, TAKE MID-POINT IF DK, INSERT £470)

Questionnaire

IF DK AT Q8 SHOW: This is an illustration of your bill based on all of the choices that you have made in the different areas of service. After you have read your bill, please click on the '>>' button on the bottom of your screen.

(You said before that you didn't know how much your bill was so we have set it to the average annual bill which is £470)

Second billing screen

Having seen the impact of your choices on your bill, if there are any areas that you would now like to change, please click on the 'Edit' arrow next to them and make any adjustments by moving the sliders which appear.
You may edit as many categories as you like.
Once you are happy with your entire bill, please click on the '>>' button at the bottom of your screen.

SHOW BILL

FINAL SCREEN – THANK YOU FOR TAKING PART

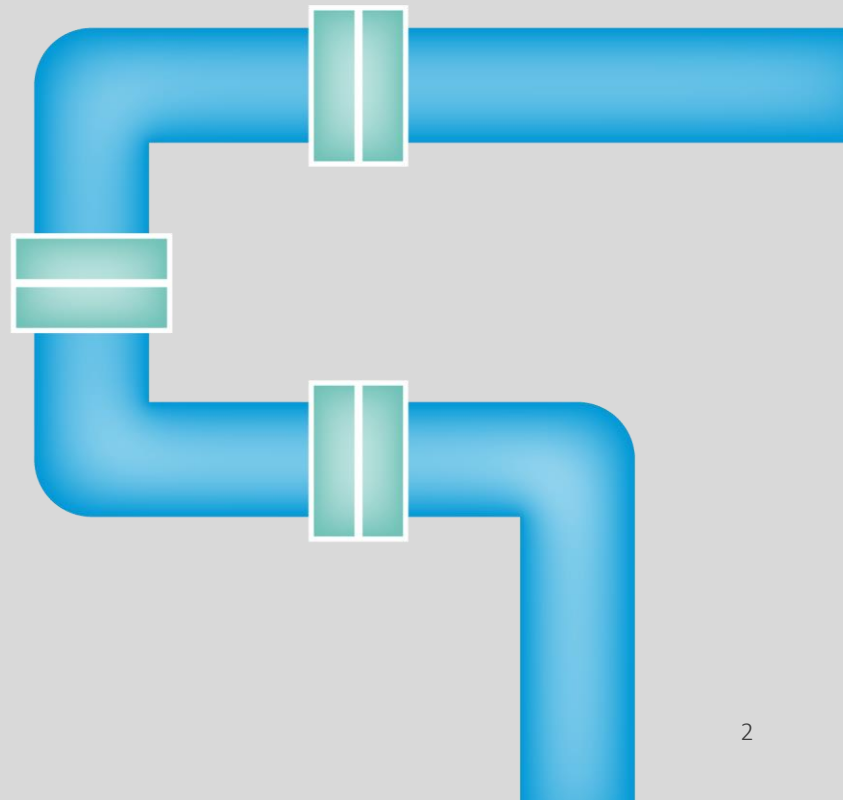
Wessex Water

Populus Proposal – Billing Trade-off Analysis

OCTOBER 2017

Populus

Approach



Populus

Overview of Approach

Online survey amongst 400 Wessex Water household customers. We will also survey customers from Wessex Water's own customer panel to boost the sample size

Questionnaire will be 10 minutes in duration and will incorporate a real-time trade-off analysis as well as some basic demographic questions

Populus will quantify the potential decline in 'willingness to pay' for different elements of service once customers understand the overall impact on their bills

Trade-off Analysis

We propose an interactive model which allows respondents to select service elements with various costs associated with them and then modify these based on their reaction to the overall bill (bottom right).

This analysis would allow us to determine which factors are valued and prioritised when real world price-tags are associated with them.

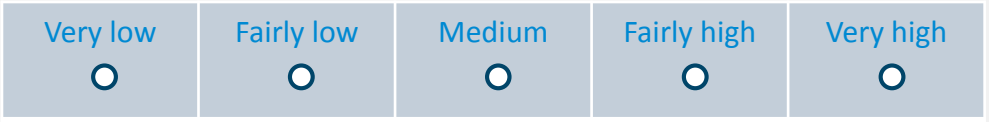
- For each service feature, we would be able to identify the proportion that wished to have it included and wished to pay for it.
- We would also be able to identify the most common combination of service attributes desired.
- We could also examine the most common combinations of service attributes selected for given total price levels, allowing Wessex Water to be able to determine what are the attributes that respondents actually want and what they're willing to pay for.

In order to achieve this, we would need to work with Wessex Water to transform each of the services into something specific which could have a specific price tag associated with it. This would allow us to test the various propositions when their associated cost was explicit and when that contribution to the overall bill was immediately realised.

We would develop five options for each service element: Two options with a reduction in service (with reduced bill), two options with an enhanced service (with increased bill) and no change to current service (no effect on bill)

Example scale:

We can invest money to reduce the volume of water leaked when leakages occur. What should our approach be?



Consumer Engagement

Consumers find this real time approach to trade-off analysis engaging. It makes complicated, long term investment decision about difficult-to-understand regulated businesses relevant and accessible to consumers.

Typical comments from people who have participated in our approach are detailed below:

'Interesting and informative and has made me more aware of difficult decisions which may have to be made for the general benefit of all.'

'Interesting and thought provoking.'

'Excellent, quite an eye opener.'

'It made me think about the service we take for granted.'

'This survey was of great interest and provides a better insight into the industry.'

'I found the survey very interesting. Decisions that need to be made about present and future investment should be put to the consumer as per this survey.'

'The questionnaire format made understanding the questions easier.'

'Very interesting survey ... completely different.'

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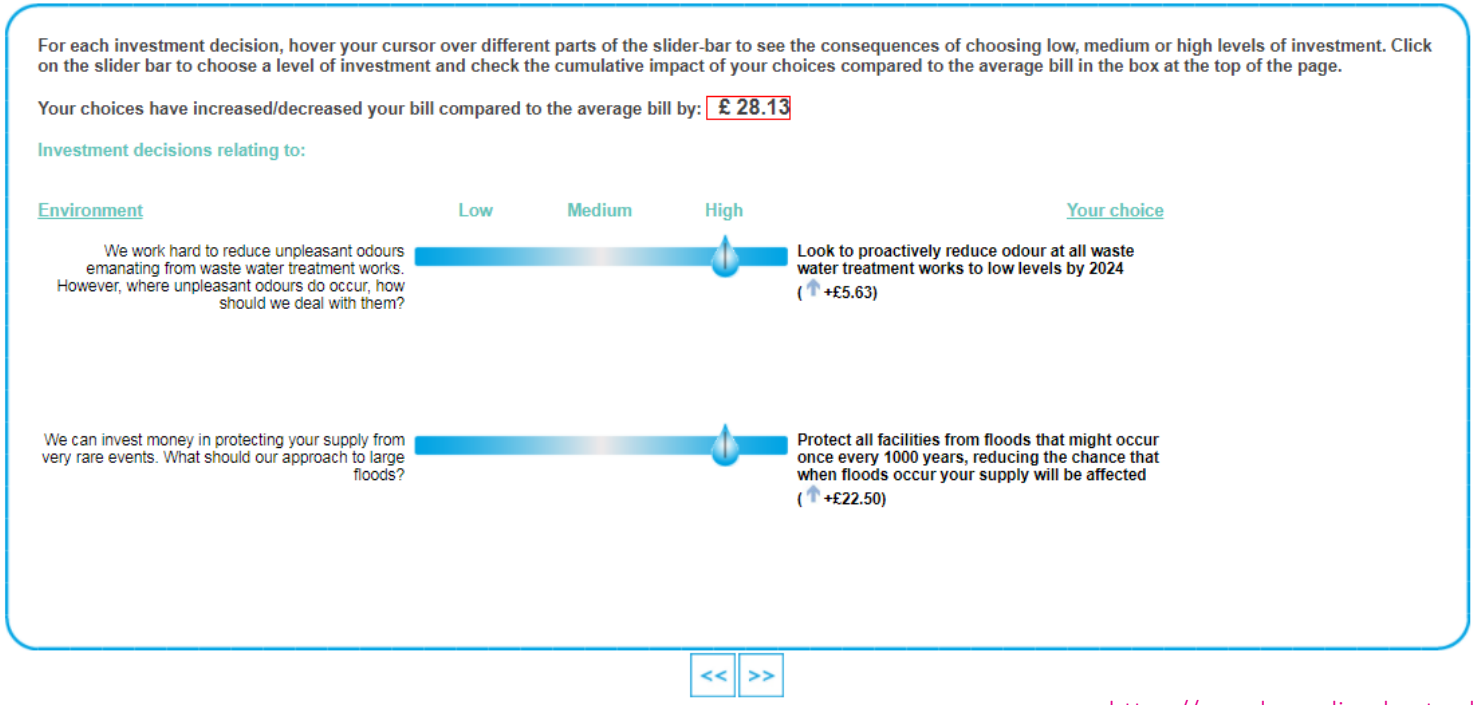
Example of the survey tool

The tool will be tailored to a Wessex Water theme. Below is an example of how the tool might appear to customers.
Please note, question wording and attributes measured will be adapted to suit the objectives of the research.
The tool can be further tailored for Wessex Water on commission.



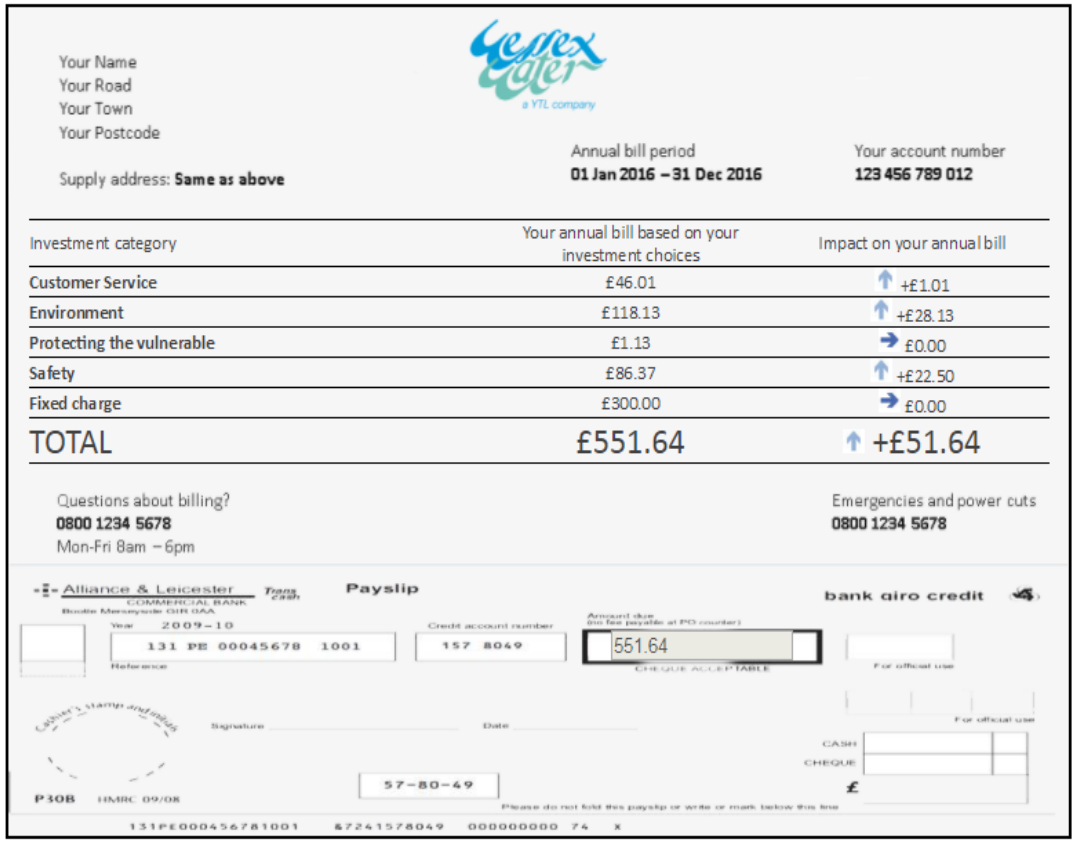
In this made up example, customers say they are willing to pay more for reduce odours and water treatment works and to reduce the likelihood of supply being affected by floods

Please click on this link for a live demonstration of this tool:

https://populus.online-host.solutions/mrIweb/mrIweb.dll?I.Project=Wessex

Example of the tool's billing page

The tool will be tailored to a Wessex Water theme. Below is an example of how the tool might appear to customers.



Your Name
Your Road
Your Town
Your Postcode

Supply address: **Same as above**

Annual bill period
01 Jan 2016 – 31 Dec 2016

Your account number
123 456 789 012

Investment category	Your annual bill based on your investment choices	Impact on your annual bill
Customer Service	£46.01	↑ +£1.01
Environment	£118.13	↑ +£28.13
Protecting the vulnerable	£1.13	→ £0.00
Safety	£86.37	↑ +£22.50
Fixed charge	£300.00	→ £0.00
TOTAL	£551.64	↑ +£51.64

Questions about billing?
0800 1234 5678
Mon-Fri 8am – 6pm

Emergencies and power cuts
0800 1234 5678

Alliance & Leicester COMMERCIAL BANK — Payslip — bank giro credit

Year 2009–10 | 131 PE 00045678 1001 (Reference) | 157 8049 (Credit account number) | 551.64 (Amount due) | CHEQUE ACCEPTABLE | For official use

Cashier's stamp and initials | Signature | Date | For official use | CASH | CHEQUE | £

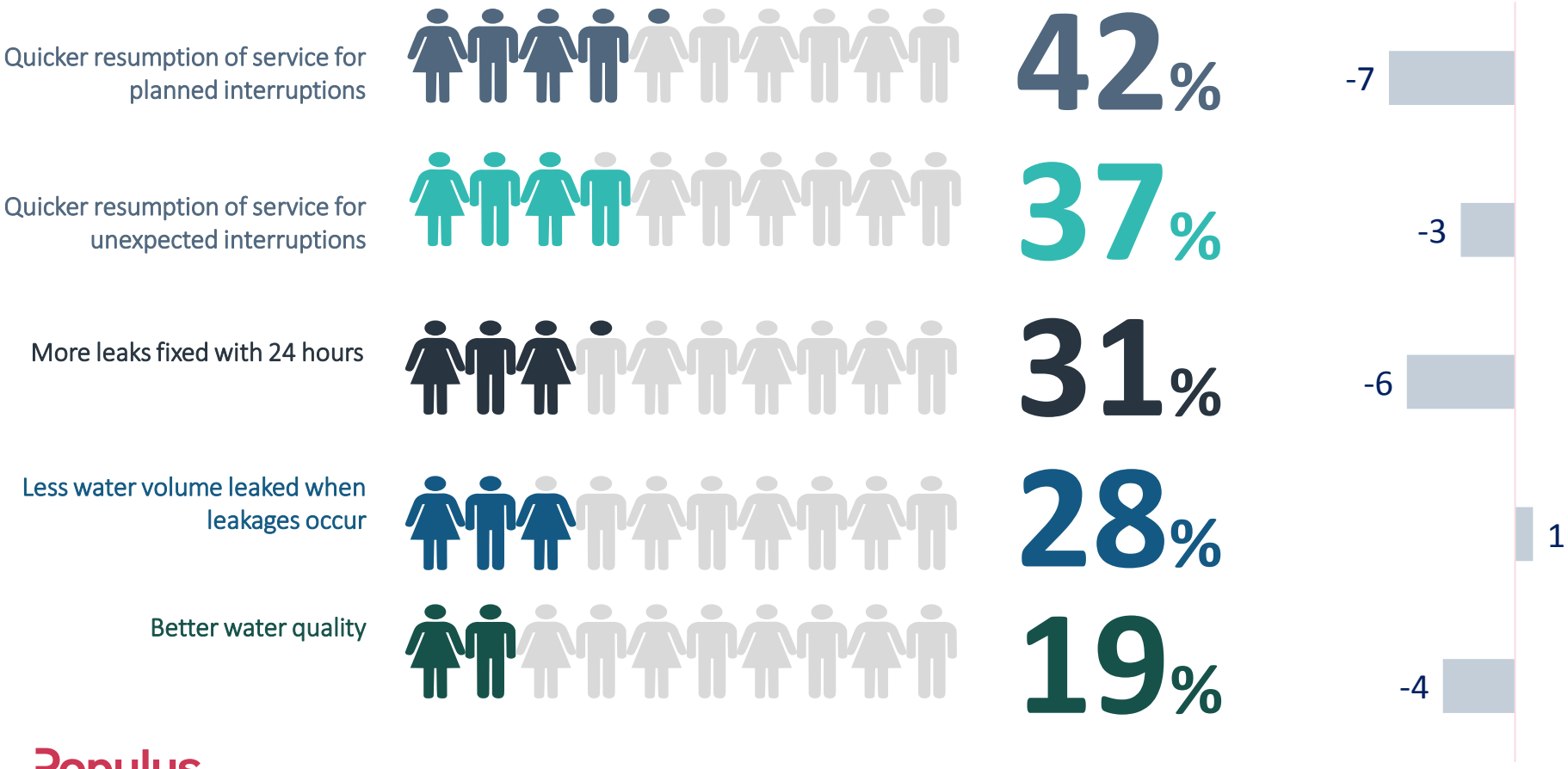
P30B HMRC 09/08 | 57-80-49

131PE00045678 1001 &7241578049 000000000 74 x

When the customer comes to see the final bill, they there are then able to revisit attributes of the service and adjust the billing impact once more having seen the impact at an overall level

Example output

% of respondents who are willing to pay for increased service levels <u>after they have seen the impact on their bill</u>



Percentage point difference compared to before they saw the impact on their bill

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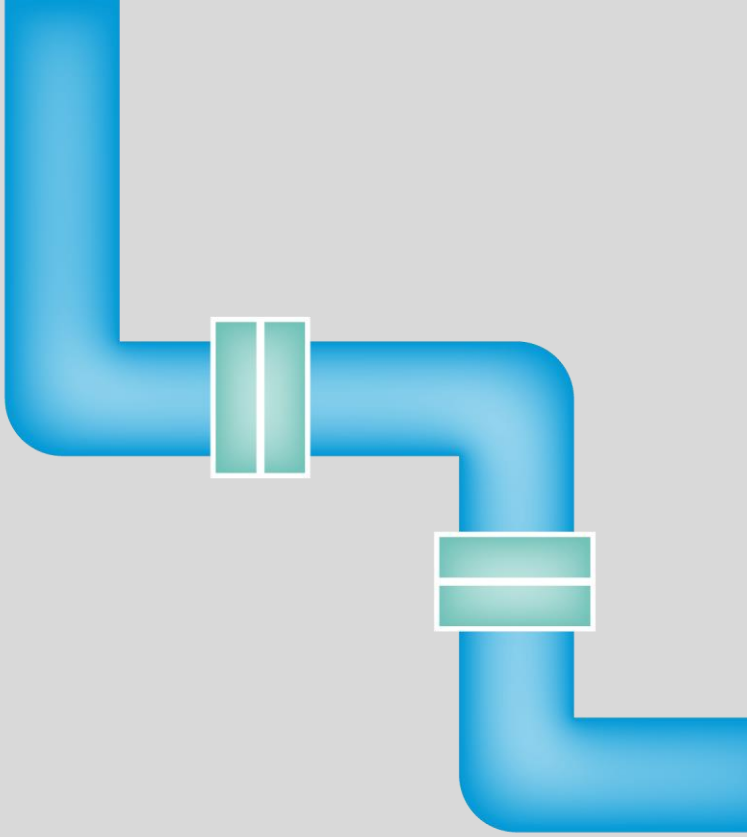
Timings and Investment



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Timelines

Below are our proposed timings for the qualitative components of this project. We understand the need for timely delivery of analysis before December – we will work with Wessex Water to ensure that we deliver topline analysis ahead of a full report to help with this.

Month	November					December			
w/c	30	6	13	20	27	4	11	18	25
Potential kick-off call/meeting									
Questionnaire design									
Scripting									
Fieldwork									
Data processing									
Topline analysis delivered (end of w/c 20th)									
Reporting									
Report delivered									
Follow-ups									
Populus office closed									

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