



Thematic analysis of customer consultation research

Part 2: Draft report prepared for:

NI Water

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Section 2:

Thematic analysis of findings

2.1. Introduction

Following the key findings from each phase of research, in this section we present a thematic analysis of the central findings. This section is structured to explore the issues in relation to each of the key aspects of water and sewerage services¹ as follows:

- Water services
 - Taste, smell and appearance;
 - Supply interruptions;
 - Low water pressure;
- Sewerage services;
 - Internal flooding;
 - External flooding;
 - Pollution incidents;
 - Sewer blockages;
- Environment and pollution;
 - Quality of coastal waters;
 - Quality of river waters;
 - Odour and noise;
 - Water abstraction;
- Customer service; and
- Consumer education.

Under each theme we review the following:

- Current service provision, based on data gathered from the Annual Information Return (2012) and incidence statistics provided by NI Water ;
- The incidence of having a service issue, based on the survey findings;
- Customers views on current levels of service provision from the qualitative research;
- The priority given by customers to improving this service; and
- Customers' willingness to contribute (WTC) to improving the service – it should be noted that figures related to WTC are based on evidence gathered during the choice experiment conducted with domestic customers. Due to constraints of the methodology WTC has not been assessed in relation to consumer education or customer service attributes. While the non-domestic customers did not participate in the choice experiment, they were asked if they would **be willing to pay extra** to improve some aspects of service provision.

¹ The aspects of service were identified through consultation with the CEOG group and the qualitative research. It was decided that safety of tap water would not be included as an aspect of service as it is already well documented that this is ranked highly among consumers and DWI regulation will secure compliance. Including this in the research would have risked 'crowding out' other service areas, which consumer preference might influence.

Each sub-section will commence with:

- A summary table collating data gathered in relation to current service provision; incidence of having a service issue; customers views on current levels of provision from the qualitative data; the priority given by customers to improving this service; and customers' WTC;
- The findings from an 'investment trade-off' game conducted during the focus groups. This explored the areas of service provision important to customers for future investment, through the placement of chips on the areas participants felt required the greatest levels of investment;
- The 'importance' rating of each service attribute, using a 10-point scale, for non-domestic customers who participated in in-depth interviews at the qualitative stage of research.

It should be noted that during the research, respondents made decisions on the requirement for service improvement based on: the current situation; their experience of the service delivery; the impact that service improvement would also have on improving provision in other areas²; and the contribution they would have to make as an 'average household' towards the improvement. As the majority of consumers interviewed have not directly experienced problems with their services in recent times, most people did not identify areas which require marked improvement. While a wide range of issues were highlighted, no one aspect of service stood out strongly as requiring attention. In the absence of one overriding area for attention, environmental issues were highlighted as in need of most improvement.

While consumers highlighted a wide range of service areas for improvement, when they were asked about WTC to enhance the current level of service, they prioritised local issues such as water supply and flooding, which have a direct impact on daily life. Consumers were less inclined to contribute towards improving environmental aspects of service, as these were deemed to have less of an immediate impact on business and lifestyle.

Throughout this document we make reference to respondents' overall prioritisations for improvement, taking into account water, sewerage, environment/pollution and customer service issues³. The following tables summarise the prioritisation made by consumers in relation to each of the aspects of service.

It is important to note at this stage that 13% of non-domestic customers spontaneously stated that they were happy with the service provided and do not require any improvements. A further 5% of non-domestic customers spontaneously requested that NI Water reduce water and sewerage charges.

² During the qualitative stage of research, participants tended to reflect upon the potential impacts that service improvements would also have on improving provision in other areas. For example, they commented that reducing the number of sewer blockages will have a 'knock on' effect on the frequency of flooding incidents. Participants made such rationalisations spontaneously, and without the provision of statistical information to shape their thinking.

³ Customer service issues were assessed in terms of priority by non-domestic customers only

Overall priorities (domestic customers)

Table 2.1.1 Areas requiring most improvement by age, SEG and location

	Age				SEG		Location	
	Overall	Under 45	45-65	65+	ABC1	C2DE	Urban	Rural
<i>Base:</i>	1031	388	374	266	454	571	694	329
Encouraging consumers to be more water efficient in their home	32%	32%	33%	30%	33%	31%	30%	36%
Putting in place plans to assist those who are affected by sewer flooding	30%	30%	32%	27%	33%	28%	33%	23%
Improving the quality of coastal bathing waters	26%	27%	25%	25%	31%	22%	25%	28%
Improving the quality of river waters	25%	23%	26%	26%	24%	27%	23%	31%
Improving the appearance, smell and taste of tap water	24%	25%	22%	23%	19%	28%	20%	30%
Informing consumers about what they should or should not flush down the toilet or put down the drains	21%	23%	21%	20%	18%	24%	21%	22%
Reducing the number of sewer blockages	20%	17%	21%	21%	18%	21%	22%	14%
Limiting the occurrence of flooding from sewers, inside properties	16%	18%	17%	14%	19%	15%	20%	9%
Limiting the occurrence of flooding from sewers, that affects external areas and which lots of people can see	16%	12%	18%	19%	18%	14%	19%	10%
Preventing pollution from NI Waters operations and processes	15%	13%	17%	14%	16%	14%	15%	16%
Ensuring that there is sufficient water pressure	15%	14%	17%	12%	18%	12%	15%	14%
Improving NI Water's water and energy efficiency	13%	19%	12%	9%	17%	11%	13%	15%
Limiting the number of interruptions to the water supply at your home	10%	13%	10%	8%	11%	10%	11%	9%
Reducing the smells and nuisance from NI Waters operations and processes	7%	6%	7%	8%	7%	6%	6%	8%
Other	1%	1%	-	1%	0%	1%	1%	0%
Not sure	8%	7%	6%	11%	5%	10%	7%	9%

Overall priorities (non-domestic customers)

Table 2.1.2: Areas requiring most improvement by sector, site, location

In your opinion, which three areas require most improvement?	Sector						Site		Location	
	Overall	Agriculture	Manufacturing, Construction, Motor trade	Wholesale, retail, acc, food services	Transport, storage services	Public admin, and other services	One site	More than 1 site	Urban	Rural
	<i>Base unweighted</i> 512/ <i>weighted</i> 511	100/ 132	100/ 87	100/ 96	112/ 109	100/ 88	413/ 440	99/ 71	275/ 246	237/ 265
Improving the quality of river waters	20%	4%	20%	50%	19%	11%	20%	20%	26%	13%
Improving the appearance, smell and taste of tap water	18%	15%	26%	21%	20%	10%	18%	17%	11%	24%
Improving the quality of coastal bathing waters	17%	4%	19%	31%	19%	14%	17%	13%	24%	10%
Putting in place plans to assist those who are affected by sewer flooding	15%	12%	8%	8%	11%	36%	16%	7%	18%	11%
Limiting the occurrence of flooding from sewers, that affect external areas and which lots of people can see	14%	12%	2%	11%	16%	27%	15%	7%	17%	10%
No improvements required	13%	3%	32%	14%	10%	9%	15%	1%	17%	8%
Ensuring that there is sufficient water pressure	12%	13%	13%	11%	17%	7%	12%	14%	10%	15%
Improving the billing / invoicing processes	12%	13%	6%	22%	9%	9%	10%	22%	15%	9%
Encouraging consumers to be more water efficient in their organisations	11%	9%	9%	10%	22%	2%	11%	9%	13%	9%
Improving the customer service experience	9%	8%	12%	11%	8%	5%	9%	9%	10%	8%
Limiting the occurrence of flooding from sewers, inside properties	9%	8%	1%	3%	12%	21%	10%	4%	12%	6%
Limiting the number of interruptions to the water supply at your organisation	8%	6%	10%	6%	10%	10%	8%	11%	7%	9%
Informing consumers about what they should or should not flush down the toilet or put down the drains	8%	4%	6%	6%	17%	7%	8%	6%	10%	6%
Improving NI Water's water and energy efficiency	7%	5%	5%	12%	10%	5%	7%	8%	10%	5%
Reducing the number of sewer blockages	7%	1%	3%	9%	8%	18%	8%	4%	10%	5%
Reduce costs	5%	7%	4%	7%	6%	2%	5%	9%	3%	8%
Reducing the smells and nuisance from NI Water's operations and processes	4%	4%	5%	4%	2%	5%	3%	7%	3%	5%
Preventing pollution from NI Water's operations and processes	3%	1%	3%	3%	5%	2%	3%	4%	4%	2%
Reduce number of leakages	2%	6%	-	-	-	-	1%	7%	-	3%
Response time	1%	1%	-	0%	1%	-	0%	3%	0%	1%
Other	2%	3%	0%	2%	1%	2%	2%	3%	1%	3%
Not sure	10%	25%	6%	1%	7%	7%	10%	13%	6%	14%

2.2. Water services

The following table summarises feedback gathered from domestic and non-domestic customers in terms of key aspects of water service.

Table 2.2.1: Summary of water services research findings

	Taste, smell and appearance	Supply interruptions ⁴	Low water pressure
Current situation	<ul style="list-style-type: none"> 3,857 households complained (Information provided by NI Water) 	<ul style="list-style-type: none"> 54,303 properties affected by unplanned interruptions lasting more than 3 hours, 7,023 > 6 hours, 765 >12 hours, 18 > 24 hours 58,162 properties affected by planned interruptions lasting more than 3 hours, 31,808 > 6 hours, 1,250 >12 hours, 0 > 24 hours (Annual Information Return 2012) 	<ul style="list-style-type: none"> 1,748 properties below reference level (Annual Information Return 2012) 4,251 households complain about low pressure (Information provided by NI Water)
Incidence of having a service issue	<ul style="list-style-type: none"> 5% of domestic customers reported ongoing issues with the colour or smell of their tap water 6% of non-domestic customers reported issues 	<ul style="list-style-type: none"> Most commonly reported service issue by both types of respondents Reported by 11% of domestic respondents 9% of non-domestic respondents 	<ul style="list-style-type: none"> 4% domestic customers and 3% non-domestic customers reported low water pressure in the last 12 months
Views on current level of provision	<ul style="list-style-type: none"> Qualitative findings revealed general satisfaction with current provision Taste, smell and appearance is regarded as a core function of NI Water 	<ul style="list-style-type: none"> Continuous water supply is crucial When interruptions occur consumers stated that they wish to be kept updated of the cause of the problem and extent of interruption 	<ul style="list-style-type: none"> 'Annoyance' but liveable issue Recognised that continual low pressure can have a negative impact on both lifestyle and business operation
Priority given to improving this aspect of service	<ul style="list-style-type: none"> 50% of domestic request improvement and 24% prioritise in top 3 32% of non-domestic request improvement and 18% prioritise in top 3 	<ul style="list-style-type: none"> 36% of domestic request improvement and 10% prioritise in top 3 14% of non-domestic request improvement and 8% prioritise in top 3 	<ul style="list-style-type: none"> 45% of domestic request improvement and 15% prioritise in top 3 26% of non-domestic request improvement and 12% prioritise in top 3
Willingness to contribute to improving this aspect of service	<p>£0.75 (+1 service improvement) £1.36 (+2 service improvement)</p>	<p>£0.99 (+1 service improvement) £2.16 (+2 service improvement)</p>	<p>£1.19 (+1 service improvement) £1.81(+2 service improvement)</p>

⁴ It should be noted that supply interruptions, as highlighted in incidence statistics, also include those caused by 3rd parties and over runs of planned interruptions

Summary of investment ‘trade-offs’ made by domestic customers during focus groups

During the focus groups, participants were asked which area of the water service provision was important to them for future investment. They were provided with 20 ‘chips’ as an indication of the budget that is available to invest in improving the water service provision and asked to distribute the budget to the areas that they felt required the greatest levels of investment.

The following table illustrates the investments made by each group and the total number of ‘chips’ attributed to each area of water service.

In contrast to the quantitative findings, groups were more inclined to prioritise investment in supply interruptions. Across groups, participants attributed a similar number of chips to ‘taste and odour’ and ‘discolouration’, while four groups (Belfast apartment dwellers, Belfast flood risk group, Craigavon and Enniskillen) shared the investment across both these areas. Such findings highlight how taste/odour and water discolouration are deemed to be indicators of water quality for some participants, and consequently they feel that any investment should be made on these areas collectively.

Table 2.2.2: Investment on water services by group

Group	Taste and odour	Discolouration	Supply interruptions	Low water pressure
Ballymena	4	4	8	2+2 education
Belfast apartment dweller	5		10	5
Belfast flood risk area	10		4	6
Bangor	7	5	5	3
Ballycastle	4	1	10	5
Rathfriland	2	2	14	2
Omagh	6	6	7	1
Craigavon	7		10	3
Enniskillen	10		5	5
L'Derry	7	4	6	3
Knowledgeable	3	3	9	5
Customer care	6	6	4	4
Total	55	47	92	44 +2 education

Rating of service attributes by non-domestic customers during in-depth interviews

Non-domestic customers who took part in the qualitative research were asked to assess the importance of various water service attributes on a 10-point scale⁵. Table 2.2.3 illustrates that respondents rated each aspect of water services as highly important; on average all water services received an importance rating of 8 or more. However, it was supply interruptions that were rated most highly in terms of importance to the business operation.

Table 2.2.3: Respondents' rating of water services

	Depth	Drinking water (taste and smell)	Discolouration	Supply interruptions	Low pressure
1	Large manufacturing	8	8	10	8
2	Medium manufacturing	10	10	10	10
3	Small manufacturing	8	8	8	8
4	Large agriculture	10	8	10	10
5	Small agriculture	8	8	10	10
6	Large telecoms/electronics	10	10	10	8
7	Small healthcare	9	9	10	8
8	Small educational establishment	10	8	10	6
9	Large commercial/retail	8	10	10	7
10	Large hospitality	10	10	10	8
11	Small hospitality	5	7	9	7
12	Small personal service	10	10	10	10
13	Medium business service/financial	7	7	7	7
14	Small voluntary/charity	8	8	10	5
15	Small sports club	10	10	10	10
16	Large healthcare	9	9	10	10
17	Large council leisure	10	10	7	7
	Average	8.82	8.82	9.47	8.18

The following sections explore each water service attribute in more detail and explore:

- The current situation (as highlighted by NI Water information and statistics);
- Incidence of having a service issue (based on survey findings);
- Customers views on current levels of service provision (based on qualitative feedback gathered via focus group and in-depth interviews);
- The priority given by customers to improving this aspect of service;
- Customers' willingness to contribute to improving this aspect of service.

⁵ Please note a score of 10 is deemed to be 'very important'

2.2.1 Taste, smell and appearance

Current service provision

Analysis of data provided by NI Water reveals that 3,857⁶ of households complained about the taste, smell and appearance of their tap water in 2012.

Incidence of having a service issue based on survey findings

Within the current study, 5% of domestic customers indicated that they had ongoing problems with the colour or smell of their tap water, with 2% being advised not to drink tap water.

A similar percentage of non-domestic customers (6%) reported ongoing problems with the colour or smell of the tap water. Those operating in wholesale, retail, accommodation and food services are most likely to have experienced on-going problems with the colour, smell or particle content of tap water (16%).

Customers views on current levels of service provision from the qualitative research⁷

Qualitative feedback from domestic customers provides elaboration on the type of issues experienced in relation to taste, smell and appearance of tap water. Participants in almost all groups indicated that they had encountered cloudy water. Others revealed that they have occasionally experience a chlorinated or sulphuric smell from their tap water:

I know the water up where I was working you wouldn't have filled a kettle with it to make tea. It had the smell of sulphur off it.
Enniskillen

It is very chlorinated; I would boil it before I would drink it. Metallic, stale taste.
Belfast apartment dwellers

For a while there was a chemical, bleach like smell.
Ballymena

However, on the whole respondents appeared satisfied with the quality of their drinking water in terms of taste, smell and appearance. Those who had experienced discolouration recognised that it was generally sporadic and resolved by leaving the tap running. A small number stated that they do not drink tap water, however recognised that this was based on their personal choice.

In-depth interviews with non-domestic customers revealed very few problems with the quality of the drinking water supplied to their premises. Overall, the majority of interviewees indicated that they are satisfied with the current service provision in this area.

⁶ There are 703,275 households in Northern Ireland according to Census 2011

⁷ Throughout this section, qualitative research refers to feedback gathered during the focus group discussions with domestic consumers and in-depth interviews with business customers.

The priority given by customers to improving this service

Domestic customers

Although relatively few survey respondents reported service issues in relation to the taste, smell and appearance of tap water, half of domestic customers (50%) requested improvements in this area. In terms of overall priorities across all service areas, findings revealed that appearance, smell and taste of tap water was ranked 5th highly, with almost one quarter (24%) placing it in their top three areas to focus on.

Qualitative feedback sheds some light on domestic customers' desire for improvements in this area. Participants stated that they deemed water quality to be important for the following reasons:

- It is necessary for health and wellbeing;
- Refuse to drink discoloured / poor tasting water;
- Discolouration would impact on hygiene / household cleaning.

The following quotes substantiate the above points:

There is a health and safety aspect to the taste and odour and quality of drinking water.
Ballymena

I think discolouration would be more off-putting than poor taste – if it looks dirty you can't wash your dishes but if it tastes funny it wouldn't impact on cleaning.
L'Derry

You can't live with water that's discoloured.
Customer care group

Non-domestic customers

Around one third (32%) of business customers requested improvements to the taste, smell and appearance of tap water. Furthermore, this area was ranked second most highly in terms of areas requiring most improvement.

Qualitative feedback gathered during the in-depth interviews suggests that respondents prioritised this area as they recognise the necessity of high water quality for customer and staff welfare. This was deemed to be particularly important in hospitality and healthcare establishments:

As a public service the quality of the water is very important. Public confidence in the service is critically important.
Large healthcare, high usage

Water quality is important as customers often drink tap water however we are generally satisfied with the quality.
Large hospitality

Customers' willingness to contribute to improving the service

Upon reviewing respondents' WTC to improving the taste, smell and appearance of tap water, respondents indicated that they would be willing to contribute £0.75 for service improvements (+1) and £1.36 for service improvements (+2).

Conclusion - water taste, appearance and smell

The taste, smell and appearance of tap water is a very important aspect of service provision to consumers, and, as identified in the qualitative research, is regarded as a core function of NI Water.

The survey findings indicate that 5% of consumers have experienced on-going difficulties with the taste, smell and appearance of their drinking water. Approximately one in ten report that they do not drink their household tap water, however it was evident from the focus group discussions that this was mainly due to personal choice. 10% rated this aspect of service as requiring a lot of improvement.

Consumers were less willing to contribute to improving this service attribute than other local issues such as flooding and interruptions to supply.

This leads us to conclude that although most accept the taste, smell and appearance of tap water supplied, there may be pockets of provision that do not currently meet customer expectations. The challenge for NI Water is to identify these areas to bring provision to a more uniform level across Northern Ireland.

2.2.2 Supply interruptions

Current service provision

In order to contextualise the findings from the current research, the incidence of planned and unplanned interruptions reported in Northern Ireland, as cited within the Annual Information Return (2012), are as follows:

- 54,303 properties were affected by unplanned interruptions lasting more than 3 hours, 7,023 > 6 hours, 765 >12 hours, 18 > 24 hours;
- 58,162 properties were affected by planned interruptions lasting more than 3 hours, 31,808 > 6 hours, 1,250 >12 hours, 0 > 24 hours (also interruptions caused by 3rd parties and over runs of planned interruptions).

Incidence of having a service issue based on survey findings

Quantitative findings from domestic customers reveals that the most common service issue reported was an interruption to the water supply - 11% had been affected by this in the previous 12 months; with 6% reporting that they had experienced a supply interruption on more than one occasion.

Of the 109 who had experienced a supply interruption, 22% said they were without water for over six hours. Over 54% reported that there was an occasion when they did not receive notice of an interruption to their supply.

Similarly, supply interruptions were the most commonly reported service issue by non-domestic customers; 9% had been affected by this in the previous 12 months, with 3% indicating that they have experienced more than one supply interruption.

Of the 45 businesses who reported a supply interruption, 58% experienced an incidence of supply interruption for which they were given no advance notification. Over two fifths (41%) indicated that the interruption to supply had a significant impact on their business operation.

Customers views on current levels of service provision from the qualitative research

Focus group findings revealed that few had experienced an interruption to their supply in the previous 12 months. Overall, respondents were somewhat accepting of supply interruptions at the current level and expressed the view that they are unavoidable if the infrastructure is to be maintained:

Only have contact when water supply is turned off due to essential maintenance. This happens very rarely and we have been given advance notice any such time.

Ballymena

Qualitative feedback from non-domestic customers revealed that businesses are generally satisfied with the current service provision in terms of water supply. All those interviewed stated that continuous water supply is vital to business operation, however very few have experienced interruptions which have had an adverse impact on business operation. Those that did were satisfied that the interruptions were required due to maintenance and felt that NI Water accommodated business needs by scheduling the interruption outside work hours and by providing adequate notification:

We have experienced planned interruptions in the past due to essential maintenance. Overall we were satisfied with how these were dealt with as the interruptions were scheduled on a Sunday morning when the centre was not open for business.

Large retail establishment

We recently had a planned interruption. NI Water were very accommodating. They scheduled the interruption for a Saturday morning and supply was back on in a couple of hours.

Medium manufacturing

Qualitative findings highlight that the key issue for both domestic and non-domestic participants in the instance of an unplanned supply interruption is to be kept informed and able to make contact with NI Water in relation to the expected duration of the problem.

The priority given by customers to improving this service

Domestic customers

Within the quantitative survey, just over one third (36%) indicated that they would like to see improvements to limit supply interruptions. In terms of water services, this was the least highly prioritised area for improvement and amongst the lowest rated areas for improvement across all service attributes.

Such findings appear to validate qualitative information gathered during the focus groups; few participants have experienced interruptions to supply and are therefore satisfied with service provision in this area.

However, while respondents did not cite the need for improvements to water supply, participants placed most investment on continuous water supply within the 'trade off' activity conducted during focus groups. They recognised that taste/odour and adequate pressure are only considerations when the supply is available in the first place:

This is the biggest issue as it has the most impact – discolouration and low pressure are not an issue if you don't have any water in the first place.

Belfast apartment dwellers

Many reflected that interruptions to supply will have wide-reaching implications, and felt that it will have more impact on customers' lives than other aspects of the water service, such as pressure or taste and appearance.

Non-domestic customers

Only 14% of businesses surveyed felt there is a need to improve the number of water interruptions. Similarly to domestic findings, this area was prioritised relatively lowly in terms of recommendations for improvement across all service attributes.

Customers' willingness to contribute to improving the service

In terms of WTC, interruptions to supply were valued relatively highly, with the optimum (+2) improvement level receiving an implied value of £2.16.

Conclusion - supply interruptions

Research findings suggest that continuous water supply is deemed to be crucial to both domestic and non-domestic consumers alike. However, consumers showed a degree of tolerance to accommodate maintenance tasks, provided the supply interruption was being addressed expediently.

While the percentage of consumers who requested improvements to this aspect of service was low in comparison to other service attributes, this may be based on perceptions that interruptions are generally infrequent and short-term. However, WTC towards improvement was high, suggesting that NI Water should continue to identify and address areas where there is a risk of repeat interruptions to supply.

When interruptions occur consumers stated that they wish to be kept informed of the cause of the problem, the extent of the interruption (localised or on a wider scale), when it will be rectified and whether any support/back-up will be provided in the interim (e.g. bottled water). Therefore, NI Water should focus on improving the way in which supply interruptions are managed and communicated, particularly when it becomes aware of an unplanned interruption.

2.2.3 Low water pressure

Current service provision

Statistics gathered from the Annual Information return reveal that 1,748 properties were identified as below the water pressure reference level. Furthermore, data provided by NI Water highlights that 4,251 households complained about low pressure in 2012.

Incidence of having a service issue based on survey findings

Quantitative findings reveal 4% of domestic customers have an on-going issue with low water pressure. A similarly low proportion (3%) of non-domestic customers reported an on-going issue with low water pressure⁸.

Customers views on current levels of service provision from the qualitative research

Overall, qualitative information revealed that respondents (domestic and non-domestic) are generally satisfied with current levels of service provision in terms of water pressure. A small number of domestic customers reported occasional low water pressure, however this was generally deemed to be an 'annoyance', rather than an area requiring marked improvement:

People complain less about low pressure - they tend to live with it.
Ballymena

Qualitative feedback from businesses identified that six out of 17 interviewees have experienced an issue with low water pressure, and was particularly problematic for those operating in agriculture / manufacturing trades. Some said that they lacked sufficient pressure to fill storage tanks or boost processes. In three incidents respondents were informed by NI Water that the water pressure was at a sufficient level; however interviewees felt the pressure was inadequate⁹:

We have experienced low water pressure, however we were informed by NI Water that it was fine. I didn't bother calling again as I knew I would be told it was fine when it was not.
Small voluntary establishment

The priority given by customers to improving this service

Domestic customers

Whilst few focus group participants reported issues with water pressure levels, 45% of survey respondents cited the importance of ensuring sufficient water pressure in the household. However, this service attribute was ranked relatively lowly by householders in terms of overall priorities to service; 15% placed it in their top 3 areas to focus on.

⁸ It should be noted that it was not clear from the survey findings whether experiences of low water pressure were caused by a transient loss of pressure (such as interruption to supply) or whether respondents were of the general sentiment that water pressure is not adequate.

⁹ This is likely to be due to customer's perceptions of what constitutes low water pressure being different to the definition that NI Water uses to determine low water pressure.

Qualitative feedback gathered during focus groups reiterates that low water pressure is generally deemed to be less of a priority in terms of investment. Many stated that having good quality water and a continuous supply is more important than adequate water pressure:

So long as you still have water, pressure doesn't matter.
L'Derry

However consumers also recognised the extent to which continual low water pressure can negatively impact on householders and businesses.

Discussions around water pressure corroborated the finding that participants are willing to make strategic long-term investments rather than short-term fixes. For example, many participants suggested that investment could be made in improving the infrastructure, thus increasing water pressure levels. They were of the opinion that replacing pipe work would reduce the number of leakages and therefore adequate pressure would be maintained:

If pipes are updated then this will help to fix pressure issues.
Ballycastle

Non-domestic customers

One quarter of businesses surveyed (26%) requested improvements to ensure sufficient water pressure. 12% placed this service attribute in their top three areas for improvement (placing it seventh in terms of areas deemed to require most improvement).

Customers' willingness to contribute to improving the service

Within the choice experiment low water pressure (+2 service improvements) was amongst the higher valued factor services, with an implied value of £1.81.

Conclusion - low water pressure

Low water pressure is relatively uncommon, as reflected in the survey of domestic consumers, where a small proportion indicated that they have experienced on-going issues with low water pressure.

Although it is one of the lower prioritised areas for improvement, consumers recognise the impact that continual low pressure can have on both lifestyle and business operation, and are therefore willing to contribute moderately towards ensuring sufficient levels of pressure.

2.3. Sewerage services

The following table summarises feedback gathered from domestic and non-domestic customers in terms of key aspects of sewerage services.

Table 2.3.1: Summary of sewerage services research findings

	Internal flooding	External flooding	Pollution incidents	Sewer blockages
Current situation	<ul style="list-style-type: none"> 79 properties affected by internal flooding (Annual Information Return 2012) 0.15 in every 1,000 affected (information provided by NI Water) 	<ul style="list-style-type: none"> 3,710 incidents of external flooding (Annual Information Return 2012) 	<ul style="list-style-type: none"> 97.5% of waste water discharge treated meets EU standards (information provided by NI Water) 22% of current river water quality classed as good or very good (information provided by NI Environment Agency, 2013) 	<ul style="list-style-type: none"> 2,693 flooding incidents caused by sewer blockages (Annual Information Return 2012) 18,000 complaints per year (information provided by NI Water)
Incidence of having a service issue	<ul style="list-style-type: none"> <1% of households and 2% of businesses affected by internal flooding 	<ul style="list-style-type: none"> 2% of households 3% of businesses affected by external flooding 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> 4% of customers (domestic and non-domestic) have been affected by sewer blockages
Views on current level of provision	<ul style="list-style-type: none"> Improvements could be made to provide better 'aftercare' and assisting those affected by internal flooding NIW should ensure active communication /immediate response for those affected 	<ul style="list-style-type: none"> Concerns about capacity in the sewerage network Which agency is responsible? Unclear who to contact in the instance of external flooding 	<ul style="list-style-type: none"> 100% of waste water discharge should meet EU standards; 97.5% is not good enough 	<ul style="list-style-type: none"> Largely perceived to be caused by human negligence and lack of awareness of what can/cannot be disposed of in the sewerage system

	Internal flooding	External flooding	Pollution incidents	Sewer blockages
Priority given to improving this aspect of service	<ul style="list-style-type: none"> • 51% of domestic requested improvement to limit the occurrence of internal flooding and 16% prioritise in top 3; • 70% of domestic request improvement to assist affected customers and 30% prioritise this in top 3; • 22% of non-domestic request improvement to limit the occurrence of internal flooding and 9% prioritise in top 3; • 31% of non-domestic request improvement to assist affected customers and 15% prioritise this in top 3 	<ul style="list-style-type: none"> • 56% of domestic request improvement and 16% prioritise in top 3 • 26% of non-domestic request improvement and 14% prioritise in top 3 	<ul style="list-style-type: none"> • 60% of domestic request improvement and 15% prioritise in top 3 • 42% of non-domestic request improvement and 3% prioritise in top 3 	<ul style="list-style-type: none"> • 51% of domestic request improvement and 20% prioritise in top 3 • 24% of non-domestic request improvement and 7% prioritise in top 3
Willingness to contribute to improving this aspect of service	£1.85 (+1 service improvements) £3.09 (+2 service improvements)	£1.47 (+1 service improvements) £1.84 (+2 service improvements)	£1.12 (+1 service improvements) £0.91 (+2 service improvements)	£0.73 (+1 service improvements) £1.34 (+2 service improvements)

Summary of investment ‘trade-offs’ made by domestic customers during focus groups

During the focus group discussions, participants were asked which area of the sewerage service provision was most important to them for future investment. The following table illustrates the investments made by each group and the total number of ‘chips’ attributed to each area of sewerage service.

Table 2.3.2 illustrates that groups were more inclined to invest in sewer blockages (total: 71 chips), followed by external flooding. Opinions appeared to be shaped by the rationalisation that investment to reduce sewer blockages may result in improved services across other sewerage attributes (ie reduced flooding incidents). Across groups, pollution incidents were less highly prioritised than other sewerage services; however the knowledgeable consumers and those from the customer care group were more inclined to place a greater proportion of investment in these areas than other groups.

Table 2.3.2 Investment on sewerage services by group

Group	Internal flooding	External flooding	Pollution incidents	Sewer blockages
Ballymena	4	8	2	5 plus 1 education
Belfast apartment dweller	10	3	5	2
Belfast flood risk area	6	6	1	7
Bangor	4	7	3	6
Ballycastle	5	3	3	9
Rathfriland	4	10	2	4
Omagh	2	6	3	9
Craigavon	4	4	4	8
Enniskillen	5	5	5	5
L'Derry	8	3	3	6
Knowledgeable	3	7	7	3
Customer care	3	3	7	7
Total	58	65	45	71 plus 1 education

Rating of service attributes by non-domestic customers during in-depth interviews

Non-domestic participants were also asked to rate each area in terms of importance. Table 2.3.3 illustrates that respondents generally deem most aspects of sewerage service to be important to business operation. Sewage removal and disposal, internal flooding and sewer blockages were rated most highly.

Table 2.3.3: Respondents' rating of sewerage services

Depth	Sewage removal /disposal	Internal flooding	External flooding	Pollution incidents	Sewer blockages
Large manufacturing	7	6	6	6	9
Medium manufacturing	9	10	9	10	9
Small manufacturing	7	5	5	1	6
Large agriculture	10	10	10	10	10
Small agriculture	-	-	-	-	-
Large telecoms/electronics	10	10	9	10	10
Small healthcare	10	10	7	8	9
Small educational establishment	9	10	10	9	10
Large commercial / retail	10	10	9	10	10
Large hospitality	10	10	9	10	10
Small hospitality	10	10	10	10	10
Small personal service	10	10	10	10	10
Medium business service/financial	10	10	10	10	10
Small voluntary / charity	-	-	-	-	-
Small sports club	10	10	10	10	10
Large healthcare	10	10	10	10	10
Large council leisure	10	10	10	10	9
Average	8.35	8.29	7.88	7.88	8.35

2.3.1 Internal flooding

Current service provision

Analysis of data gathered within the Annual Information Return reveals that 79 properties were affected by internal flooding in 2012.

Incidence of having a service issue based on survey findings

A small proportion of domestic customers within the current study (<1% which equates to 6 respondents) indicated that they have been affected by internal flooding in the last 12 months.

A similarly low percentage of non-domestic customers (2%) indicated that they have experienced sewage flooding inside business premises.

Customers views on current levels of service provision from the qualitative research

During the qualitative stage of research only those recruited as part of the 'flood risk' and customer care groups had been affected by internal flooding. Therefore, views on current levels of service provision are primarily based on such participants' experiences.

In the main, participants were dissatisfied with the way in which NI Water has dealt with internal flooding incidents. For example, members of the customer care groups reported difficulties obtaining sandbags, or indicated that they receive sandbags 'too late':

During a period of bad flooding I tried to obtain sandbags. I was advised to go out with a shovel and make some...it wasn't particularly helpful.

Customer care group

My mother has a problem getting sandbags in the first place. Then what does she do when the flooding has passed? They [NI Water] aren't interested in collecting sandbags; no one should be handling them as they are contaminated with effluents.

Customer care group

Overall, participants recommended that NI Water is more proactive in contacting the customer in times of flooding. They felt that the onus is currently on the customer to contact NI Water rather than the other way around. They also requested better guidance on which agency is responsible for internal flooding, and thus, clarification on who the householder should contact:

There is a lack of knowledge of which service has responsibility for flooding incidents.

Customer care group

The priority given by customers to improving this service

Domestic customers

Just over half (51%) wish to see a **reduction in the occurrence** of internal sewer flooding incidents. A further 70% felt there was a need to focus on **improving services** for those affected by sewer flooding. Such findings suggest that customers recognise that there are a relatively low number of internal flooding incidents, however, due to the perceived ruinous impact of sewer flooding inside homes, as highlighted in the focus groups, they believe there is a need to place investment in the 'aftercare' of those affected. Indeed this aspect of service was prioritised secondly in terms of improvement across all service attributes, with 30% placing it in their top 3 areas for improvement.

Non-domestic customers

Similarly, around one third (31%) of non-domestic customers felt there was a need to focus on improving services for those affected by sewer flooding, while fewer respondents (22%) requested improvements to limit the occurrence of sewer flooding inside properties. When reviewing all service attributes as a whole, businesses tended to prioritise the aftercare of those affected by sewer flooding, ranking this 4th in terms of overall priorities.

Customers' willingness to contribute to improving the service

Internal flooding received the highest WTC in the choice experiment. At the +2 improvement level, this factor service received an implied value of £3.09, and at the +1 improvement level was valued at £1.85.

Conclusion - internal flooding

There are two areas to consider in relation to internal flooding from sewers; the incidence, and the assistance in place to help those affected.

Consumers acknowledged that there are a relatively low number of internal flooding incidents, and that when events occur they are largely localised. However they were of the sentiment that internal flooding is abhorrent for the householder. This sentiment was evidenced during the qualitative stage of research, whenever participants used highly emotive language and referred to internal flooding as a 'catastrophe' or 'emergency'. Analysis of service priorities and the choice experiment highlights a keen willingness from consumers to place investment in this service area. This is reinforced by the fact that consumers were willing to contribute most highly to ensure a reduction in the number of internal flooding incidents, with this aspect of service receiving the highest WTC.

While half of domestic consumers requested a reduction in the number of internal flooding incidents, 70% requested improvement to assist those who are affected. The main focus in this instance is in relation to improving the systems in place to minimise the impact and deal with the aftermath of internal flooding incidents. There is an expectation that NI Water will be proactive when liaising with affected consumers.

2.3.2 External flooding

Current service provision

The Annual information Return highlighted 3,710 external flooding incidents in 2012.

Incidence of having a service issue based on survey findings

2% of domestic customers indicated that they have been affected by external flooding in the last 12 months. This figure rises to 18% for those who live in a flood risk area.

3% of businesses reported flooding of sewage onsite but outside business premises.

Customers views on current levels of service provision from the qualitative research

With the exception of the customer care and 'flood risk' groups, few participants indicated that they have been affected by external flooding. Nevertheless, participants generally felt that action could be taken to reduce the number of external flooding incidents. Some were of the opinion that there are both capacity issues with the sewerage system and the rivers in their area. Such participants were dissatisfied that external flooding still occurs at times of heavy rainfall.

During focus groups and depth interviews, some consumers noted that various bodies share the responsibility to prevent and mitigate against the damage caused by external flooding. However some expressed the opinion that these agencies are reluctant to take responsibility for the issue – with each saying that the other agency is liable.

*Nobody takes responsibility for flooding.
Belfast flooding*

One business indicated that they had experienced external surface flooding on business grounds. However this was felt to be a 'nuisance' rather than being particularly disruptive to business operation.

The priority given by customers to improving this service

Domestic customers

Whilst few survey respondents reported that they have experienced external flooding, 56% thought improvement was required to improve this area of service. In terms of overall priorities, this service attribute was ranked in moderate position; 16% felt that priority should be placed on limiting the occurrence of external flooding from sewers.

During the focus group discussions, participants rationalised the need to place investment to reduce external flooding incidents. The main comments are summarised below:

- External surface flooding is unhygienic and unsightly, particularly if in close proximity to personal property;
- Has the potential to cause road damage;
- Potentially costly in the long-term due to maintenance and repair costs, therefore early investment will result in long-term savings.

Non-domestic customers

26% felt improvement was required in relation to limiting the occurrence of flooding in visible external areas. In terms of overall priorities, businesses tended to rank this area relatively highly (ranked in fifth place across all service attributes).

In-depth interviews highlighted that customers have concerns about the impact of external flooding; some commented that it could be 'hazardous', potentially affecting access to business premises and proving detrimental to staff and customer welfare

Believe internal and external flooding are highly important as they have detrimental impacts to pupil and staff health, also interrupt day to day running of the school.
Educational establishment

As a public service we have to provide safe access, therefore any flooding is a risk.
Large healthcare, high usage

Customers' willingness to contribute to improving the service

In terms of WTC; external flooding (+2 improvements) was amongst the most highly valued service improvements, with an implied WTC value of £1.84.

Conclusion - external flooding

Consumers tended to highly prioritise external flooding incidents (i.e. flooding from sewers that gets into highways and public areas), both through their implied WTC and in terms of recommendations for improvement (with over half of domestic consumers requesting improvements to limit the occurrence of external flooding).

Whilst recognised as 'unsightly' and potentially hazardous to the public, respondents also reflected upon potential long-term costs in terms of road repairs and clean-up. Focus groups made the link between external flooding and the underlying risk of internal flooding and highlighted this as a benefit of reducing external flooding.

At the qualitative stage of research, some consumers noted that a number of bodies share the responsibility to prevent and rectify damage caused by flooding. They expect those bodies to work together when flooding occurs. NI Water should continue to work in conjunction with other agencies to improve flood management procedures and minimise potential risks to consumers.

2.3.3 Pollution incidents¹⁰

Current service provision

Statistics provided by NI Water highlights that 97.5% of wastewater discharge treated meets EU standards. In terms of river water quality, 22% is currently classed as good or very good.

¹⁰ No respondents (domestic or non-domestic) indicated that they have experienced an incident in relation to pollution

Customers views on current levels of service provision from the qualitative research

Throughout discussions and depth interviews, many were of the sentiment that river water quality needs to be significantly improved, as they believe that 22% being classed as 'good' or 'very good' is not acceptable. Although there was general appreciation across groups that the quality of river water is not wholly the responsibility of NI Water and that pollution is also caused by other sources (e.g. agriculture), many were of the viewpoint that NI Water should strive to ensure that 100% of the treatment works discharge meets EU standards:

I don't think 2.5% [of discharge not meeting EU standards] is good enough. If you only built a room to 97.2% standards it wouldn't be standing here.

Knowledgeable consumers

2.5% not meeting EU standards is not acceptable.

Belfast flooding group

But how much is the responsibility of NI Water. Is it due to farmers or other sources?

L'Derry

The priority given by customers to improving this service

Domestic customers

60% of domestic customers requested improvements to reduce pollution from NI Water's operations and processes. However, this attribute was ranked relatively lowly in terms of overall priorities (placed in 10th position).

Non-domestic customers

42% of businesses want to see an improvement to reduce pollution from NIW operations and processes. Similarly to domestic customers, this aspect of service was rated lowly in terms of overall priorities for improvement (placed in 18th position).

Despite relatively low prioritisation, during the in-depth interviews some businesses highlighted the importance of reducing pollution incidents in order to improve river water quality:

In terms of pollution incidents I feel this should be improved. I am currently not impressed with the quality of the river water.

Educational establishment

However, participants recognised that pollution of rivers can stem from many sources, and that it is not wholly the responsibility of NI Water.

Customers' willingness to contribute to improving the service

Within the choice experiment, pollution incidents received implied values of £0.91 (+ 2 service improvements) and £1.12 (+1 service improvement).

Conclusion - pollution incidents

Both domestic and business consumers expect NI Water to reduce pollution from operations and processes. However, respondents were more willing to contribute towards service

issues which have a direct local impact (such as interruption to supply) than reducing pollution incidents.

2.3.4 Sewer blockages

Current service provision

Information gathered from NI Water and the Annual Information Return (2012) reveals that NI Water received 18,000 complaints in relation to sewer blockages. Furthermore, 2,693 flooding incidents in 2012 were caused by sewer blockages.

Incidence of having a service issue based on survey findings

4% of domestic respondents had reported an issue with a blocked sewer, while 2% had experienced a nuisance smell. 11% of those in a flood risk area said they had experienced a sewer blockage.

4% of businesses stated that they had experienced a sewer blockage in the past 12 months while 4% have experienced ongoing problems with smell or nuisance from the sewerage network.

Customers views on current levels of service provision from the qualitative research

Relatively few incidents of sewer blockages were reported during focus groups. The Derry/Londonderry group and three other participants (one in Belfast, one in Ballymena and one in Craigavon) mentioned having issues with sewer blockages. Participants tended to attribute blockages to the following causal factors:

- Builders' rubble in the sewer system;
- Food outlets disposing of grease/oil in the sewerage system which consequently solidified, resulting in a blockage;
- Home owners disposing of nappies/sanitary products;
- New building developments placing pressure on the sewerage system;

A small number of participants stated that they had contacted NI Water to resolve the issue. Whilst some were satisfied that the blockage had been cleared, others have experienced recurrent blockages.

Several participants (domestic and non-domestic alike) commented that blockages were caused by human negligence and ignorance of what cannot be disposed of in the sewerage network:

Too many homes are being built - the system does not have the capacity to cope with it. My sister's piping was blocked because a local girl was putting nappies in.
Customer care group

The priority given by customers to improving this service

Domestic customers

Just over one half (51%) indicated that they would like to see improvements to reduce the number of sewer blockages. This aspect of service was prioritised moderately in terms of all service attributes (placed in seventh position, with 20% placing it in their top 3 areas for improvement).

Participants were more likely to prioritise investment in sewer blockages during the qualitative phase of research. Many felt that reducing the number of sewer blockages would have a 'knock on' effect in reducing the number of flooding and pollution incidents. Therefore they recognised the benefits of prioritising investment in this area in order to improve other sewerage services:

Well if your sewers are not blocking you're going to have less internal/external flooding which then leads to having less pollution incidents.

Craigavon

Non-domestic customers

One quarter (24%) believe more could be done to reduce the number of sewer blockages. Contrastingly to domestic findings, this area was prioritised relatively lowly in terms of recommendations for improvement across all service attributes (amongst the bottom six attributes).

Customers' willingness to contribute to improving the service

Sewer blockages received a comparatively low WTC rating, with implied values of £1.34 (+ 2 service improvements) and £0.73 (+1 service improvement).

Conclusion - sewer blockages

A relatively small number of consumers indicated that they have been affected by sewer blockages. Although half of domestic consumers requested improvements to reduce the number of sewer blockages, they generally expressed a relatively low level of WTC for service improvements in this area. Some consumers saw a link between reducing sewer blockage and reducing flooding and pollution.

Qualitative findings highlighted significant concerns in relation to the extent to which consumers are sufficiently educated about what they can/cannot dispose off in the sewerage system. This aspect of service is further explored in the 'consumer education' section.

2.4. Environment and pollution

This section summarises feedback gathered from domestic and non-domestic customers in terms of key aspects of environmental attributes. Throughout the quantitative survey domestic and non-domestic customers tended to prioritise environmental aspects of service. However, in terms of WTC to improving this aspect of service, it is noteworthy that the lowest valued factor services were within the environmental block of attributes.

Table 2.4.1: Summary of environment and pollution research findings

	Quality of coastal waters	Quality of river waters	Odour and noise	Water abstraction ¹¹
Current situation	<ul style="list-style-type: none"> 16/23 bathing waters were rated as excellent, 6 as good and 1 as poor (information provided by NI Water) 	<ul style="list-style-type: none"> 22% of river water quality is currently classed as good or very good (information provided by NI Environment Agency, 2013) 	<ul style="list-style-type: none"> 793 complaints about odour per year (information provided by NI Water) 246 complaints about noise per year (information provided by NI Water) 	<ul style="list-style-type: none"> 2,286 household supply pipes repaired (Annual Information Return 2012)
Incidence of having a service issue	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
Views on current level of provision	<ul style="list-style-type: none"> Perception that quality of beaches is satisfactory, however could be improved All beaches should be rated as excellent Some concerns about sewerage on beaches Important for tourism and income 	<ul style="list-style-type: none"> Dissatisfied with current quality; 22% is not good enough and the quality of river water should be significantly improved 	<ul style="list-style-type: none"> Little / no experience of odour and noise from NI Water processes Recognised as 'unavoidable' 	<ul style="list-style-type: none"> Believe more could be done to ensure better water efficiency and reduce abstraction levels May be tackled via consumer education, innovation (e.g. creation of dams/utilising natural sources etc).

¹¹ Abstraction is defined as the process of extracting water from natural sources. Abstraction 'levels' refers to the quantity of water extracted.

	Quality of coastal waters	Quality of river waters	Odour and noise	Water abstraction
Priority given to improving this aspect of service	<ul style="list-style-type: none"> • 78% of domestic request improvement and 26% prioritise in top 3 • 48% of non-domestic request improvement and 17% prioritise in top 3 	<ul style="list-style-type: none"> • 78% of domestic request improvement and 25% prioritise in top 3 • 49% of non-domestic request improvement and 20% prioritise in top 3 	<ul style="list-style-type: none"> • 58% of domestic request improvement and 7% prioritise in top 3 • 44% of non-domestic request improvement and 4% prioritise in top 3 	<ul style="list-style-type: none"> • 71% of domestic request improvement and 13% prioritise improving NIW efficiency in top 3 • 49% of non-domestic request improvement and 7% prioritise improving NIW efficiency in top 3, while 2% prioritised reducing leakages
Willingness to contribute to improving this aspect of service	£0.39 (+1 service improvements) £0.54 (+2 service improvements)	£0.99(+1 service improvements) £0.83 (+2 service improvements)	£1.02 (+1 service improvements) £1.74 (+2 service improvements)	n.a. (+1 service improvements) £0.81 (+2 service improvements)

Summary of investment ‘trade-offs’ made by domestic customers during focus groups

Participants were again provided with 20 priority points and asked to allocate them among various aspects of environmental services, including abstraction, odour/noise, quality of river water, and quality of coastal bathing waters.

Table 2.4.2 illustrates that groups were more inclined to invest in river water quality, however this is closely followed by water abstraction. Odour and noise was prioritised least highly in terms of investment.

Table 2.4.2 Investment of environmental services by group

Group	Coastal waters	River waters	Odour/noise	Water abstraction
Ballymena	8	8	-	4
Belfast apartment dweller	4	4	2	10
Belfast flood risk area	9	4	4	3
Bangor	7	5	6	2
Ballycastle	6	6	3	5
Rathfriland	2	8	2	8
Omagh	1	6	8	5
Craigavon	3	5	2	10
Enniskillen	2	10	5	3
L'Derry	1	8	4	7
Knowledgeable	4	6	1	3 + 6 green energy
Customer care	3	7	6	4
Total	50	77	43	70

Rating of service attributes by non-domestic customers during in-depth interviews

Non-domestic participants were mainly of the opinion that environmental considerations are highly important in terms of animal welfare and tourism, however they were not deemed to be a key driver for business performance. Therefore feedback on environmental attributes appeared to be mainly shaped by personal viewpoint. This finding is largely inconsistent with prioritisations made by non-domestic respondents in the quantitative survey.

Table 2.4.3 illustrates that quality of coastal bathing waters was rated most highly in terms of importance, while odour was deemed to be less important.

Table 2.4.3: Respondents' rating of environmental issues

	Depth	Coastal bathing waters	River water	Abstraction	Odour
1	Large manufacturing	9	8	6	1
2	Medium manufacturing	9	9	7	7
3	Small manufacturing	5	5	6	1
4	Large agriculture	10	10	10	8
5	Small agriculture	9	10	10	10
6	Large telecoms/electronics	7	7	7	7
7	Small healthcare	9	9	8	6
8	Small educational establishment	9	10	8	5
9	Large commercial / retail	5	5	2	1
10	Large hospitality	5	5	5	1
11	Small hospitality	9	5	9	9
12	Small personal service	10	10	10	10
13	Medium business service/financial	8	8	8	1
14	Small voluntary / charity	9	9	8	2
15	Small sports club	2	3	2	2
16	Large healthcare	7	8	4	8
17	Large council leisure	9	9	10	2
	Average	7.71	7.65	7.06	4.76

2.4.1 Quality of coastal waters

Current service provision

Annual statistics provided by NI Water highlights that 16 out of 23 bathing waters were rated as excellent in 2012, 6 as good and 1 as poor .

Customers views on current levels of service provision from the qualitative research

Across focus groups and in-depth interviews, customers commented that investment should be made to improve the coastal bathing waters in Northern Ireland. Some participants expressed concerns about 'unclean' beaches and recalled having encountered sewage. This was deemed to be unacceptable, from both a health and safety point of view and also from an environmental perspective.

While most accepted that the beach ratings were generally high (with 22 out of 23 beaches rated as 'excellent' or 'good' in 2012) some were of the sentiment that we should strive to ensure that all beaches are awarded excellence. It was felt that this would benefit tourism and generate income to Northern Ireland.

The priority given by customers to improving this service

Domestic customers

Over three quarters (78%) requested improvements to enhance the quality of coastal bathing waters. This area was ranked highly in terms of overall prioritisations, placed in third position amongst all aspects of service.

Non-domestic customers

48% of business customers requested improvements to enhance the quality of coastal bathing waters. Furthermore, this area was ranked third highly in terms of all service attributes requiring most improvement.

Customers' willingness to contribute to improving the service

Improvements to coastal water quality (+2 and +1) were valued at less than £1 per year and were amongst the lowest valued factor services.

Conclusion - quality of coastal waters

Across the quantitative and qualitative stages of research, the majority of respondents requested improvements to coastal waters. However, consumers are much more willing to contribute towards aspects of service which have an immediate impact on the householder.

2.4.2 Quality of river waters

Current service provision

Information provided by Northern Ireland Environmental Agency (2013) highlights that 22% of river water quality is currently classed as 'good' or 'very good'.

Customers views on current levels of service provision from the qualitative research

Throughout discussions participants in most groups emphasised their dissatisfaction with river water quality. Sentiments appeared to be shaped by personal experiences of rivers in specific areas and by the statistics provided during discussions on river water quality. Consistent with previous feedback, participants were highly dissatisfied to learn about the current status of river water quality (22% of which is rated as good or very good).

The quality of rivers around here is not good at all.
Enniskillen

22% rated as 'good' is pretty poor, not good enough.
Knowledgeable consumers

Businesses also stated that quality of river water should be improved, particularly for recreation purposes and the welfare of wildlife.

However, many acknowledged that the quality of river water is not wholly the responsibility of NI Water; while some agricultural businesses also recognised their own accountability.

The priority given by customers to improving this service

Domestic customers

Similarly to feedback in relation to coastal bathing waters, 78% sought improvements to enhance the quality of river waters. One quarter ranked this in their top 3 areas requiring most improvement.

Non-domestic customers

Almost one half (49%) of businesses surveyed felt there is a need to improve the quality of Northern Ireland's rivers. Indeed, this area of service provision was prioritised most highly by non-domestic customers, across all service attributes

Customers' willingness to contribute to improving the service

Within the choice experiment, river water quality was highlighted as amongst the lowest valued factor services. The minimum improvements to river water quality were valued at £0.99.

Conclusion - quality of river waters

Respondents tended to highly prioritise improvements to the quality of rivers, however were much less likely to invest in this aspect of service.

Conflicting responses may be explained by the rationalisations made during focus groups. Participants were highly dissatisfied to learn about the current status of river water quality (22% of which is rated as good or very good).¹² They also recognised that pollution of rivers can stem from many sources, and therefore queried the extent to which investment by NI Water would have any marked improvement on river water quality.

¹² Source: Northern Ireland Environment Agency, 2013

Again, when considering WTC, householders appear to be swayed by more practical considerations and how service improvements impact them directly. However, they also recognise a corporate responsibility by NI Water to ensure the company is doing all they can to reduce pollution and improve natural water sources.

2.4.3 Odour and noise

Current service provision

Statistics provided by NI Water reveal that there were 793 odour complaints and 246 noise complaints made in relation to NI Water's operations and processes (2012).

Customers views on current levels of service provision from the qualitative research

The qualitative phase of research revealed that very few customers had experienced any problems with odour and noise. Indeed only a very small number had any awareness of the whereabouts of treatment plants:

I have very little understanding of treatment plants in general. Not sure where the nearest one is...
L'Derry

Therefore respondents were satisfied with this aspect of service, however they recognised that persistent noise and odour may be unpleasant for those living in close proximity to treatment plants.

The priority given by customers to improving this service

Domestic customers

Domestic customers placed low priority on odour/noise; this area was ranked lowest in terms of overall priorities to service. During focus groups, many were of the opinion that odour and noise is largely unavoidable.

I have never experienced odour or noise but I could imagine you are going to get a certain amount of odour.
Knowledgeable consumers

Non-domestic customers

Survey findings revealed that 44% of businesses would like to see steps taken to reduce smells and nuisance. However, this attribute was ranked relatively lowly in terms of overall priorities.

Customers' willingness to contribute to improving the service

In contrast to the low priority given to this service attribute, odour avoidance was the only service factor in the environmental block which received an implied value higher than £1.00 (£1.02 at the +1 service improvement level and £1.74 at the +2 service improvement level).

Conclusion - odour and noise

Odour and noise is somewhat recognised as 'unavoidable', and amongst the environmental services least likely to be highlighted for improvement. However, this service attribute received relatively high value in terms of households' WTC.

Odour and noise tend to be localised, affecting those living close to some works. Therefore the challenge for NI Water is to identify and work towards addressing 'hot-spot' areas.

2.4.4 Water abstraction

Current service provision

The Annual information Return provides insight on the steps taken to reduce leakages and lower water abstraction levels; e.g. 2,286 household had supply pipes repaired in 2012.

Customers views on current levels of service provision from the qualitative research

Overall, qualitative information revealed that respondents (domestic and non-domestic) are not particularly knowledgeable about the steps taken by NI Water to ensure better water efficiency.

However, it was evident that many had concerns about the level of water wastage and provided some recommendations for improvement:

- Reduce water wastage through encouraging better water efficiency amongst customers;
- Consider development of two separate systems; one for water and one for sewerage;
- Invest in water storage tanks and ensure better utilisation of natural water sources;
- Invest in the development of more dams.

The following quotes substantiate the above points:

If there was some way of catching the rain water and putting that into the system. Large storage tanks to collect water.
Customer care group

There could be better use of natural sources, the collection of rain water.
L'Derry

Invest to upgrade the antiquated system.
Rathfriland

The priority given by customers to improving this service

Domestic customers

The survey addressed two aspects in relation to water abstraction; (1) improving NI Water's water and energy efficiency and (2) encouraging customers to be more water efficient in their homes. The latter was most highly ranked in terms of overall areas for improvement; this area is addressed further in section 2.6 consumer education.

Over two thirds (71%) wanted to see improvement to NI Water's water and energy efficiency. Contrastingly, in terms of overall priorities, this area was ranked relatively lowly (placed in 12th position).

During focus group discussions, the majority of participants indicated that they believe investment is required to reduce the level of water abstraction in Northern Ireland. There were some concerns about the cost and environmental implications associated with water abstraction. Some participants, primarily from younger groups, stated that NI Water should tackle and reduce the incidence of water abstraction now, rather than in the future when abstraction levels may have risen.

Longer term investment...would be cost effective in the long run and would be cheaper than tackling the quality of river water.

Ballymena

Abstraction is a longer term water saving exercise as it enables people to think about the water they use.

Belfast apartment dwellers

Other suggestions for long-term investment included the encouragement of using storm water in homes; in addition to water storage tanks and better utilisation of natural water sources. While participants recognised such investments will take time, they felt this long-term approach will benefit NI Water and their customers in the future.

Non-domestic customers

49% of businesses requested improvements to enhance NI Water's water and energy efficiency. Only 7% placed this service attribute in their top three areas for improvement (placing it relatively lowly in terms of areas deemed to require most improvement); while 2% of businesses prioritised reducing the number of leakages.

Customers' willingness to contribute to improving the service

Within the choice experiment, abstraction (+2 service improvements) received an implied value of £0.81.

Conclusion - water abstraction

A relatively high proportion of respondents (particularly domestic consumers) prioritised recommendations for improvement to this service area. During focus group discussions, they tended to highlight the importance of ensuring better water efficiency and thus reducing levels of abstraction. However, this aspect was identified as amongst the lowest valued factor services in the choice experiment.

Participants suggested a variety of ways in which they believe abstraction could be tackled; including investing in the infrastructure, maintaining the network to reduce leakages, promoting better water efficiency and utilisation of natural resources.

2.5. Customer service

The following table summarises feedback gathered from domestic and non-domestic customers in terms of customer service. It should be noted that the choice experiment did not evaluate WTC towards customer service attributes. However, within the non-domestic survey respondents were asked whether they would **be willing to pay extra** to improve the customer service experience. Therefore, summary feedback focuses on responses from non-domestic customers in relation to their willingness to pay extra to ensure enhancements to the customer service experience.

Table 2.5.1: Summary of customer service research findings

<p>Current situation</p>	<ul style="list-style-type: none"> • 92,832 billing contacts of which 99.97% are dealt with within 5 working days (Annual Information Return 2012) • 2,340 written complaints of which 99.27% are dealt with within 10 working days (Annual Information Return 2012) <ul style="list-style-type: none"> ○ 1,081 about charges and bills ○ 408 about water services ○ 329 about sewerage services ○ 86 about metering ○ 436 about other activities • 36,728 calls to switchboard of which 1,975 were abandoned (99.15%) • NI Water received a customer satisfaction rating of 4.57 out of 5 • 1,990 customers on the special assistance register
<p>Incidence of having a service issue</p>	<ul style="list-style-type: none"> • 6% of domestic respondents had telephone contact with NI Water in the previous 12 months. 3% reported that NI Water had made a pre-arranged visit to their home • 5% of businesses reported a billing issue. • 17% of non-domestic respondents have contacted NI Water by telephone with a query, while 10% have received a pre-arranged visit by NI Water • 3% of businesses have made a formal complaint
<p>Views on current level of provision</p>	<ul style="list-style-type: none"> • 80% of domestic customers are satisfied with the services provided by NI Water and 7% are dissatisfied • 58% of non-domestic customers are satisfied and 13% are dissatisfied • Focus groups revealed little interaction with NI Water, suggesting customers are generally satisfied as they have not been required to contact NI Water with a problem or difficulty • In-depth interviews revealed some concerns amongst businesses about billing/invoicing, specifically in relation to accuracy and frequency of billing
<p>Priority given to improving this aspect of service</p>	<ul style="list-style-type: none"> • 9% of non-domestic prioritise in top 3 • 30% of non-domestic believe improvements are required to customer service. • In terms of non-domestic billing, 29% requested improvements to billing/invoicing processes. 12% place this in their top 3 priorities
<p>Willingness to pay extra to improve this aspect of service</p>	<ul style="list-style-type: none"> • 10% of businesses indicated they would be willing to pay extra to improve the customer service experience

2.5.1 Customer service

Current service provision

The Annual Information Return (2012) provides some insight into customer contact and complaints data. The following points summarise the number of contacts and complaints made in 2012, the reason for each communication and the time taken by NI Water to deal with the complaints:

- NI Water received 92,832 billing contacts, of which 99.97% were dealt with within 5 working days
- NI Water received 2,340 written complaints, of which 99.27% were dealt with within 10 working days. The nature of complaints is summarised below:
 - 1,081 about charges and bills
 - 408 about water services
 - 329 about sewerage services
 - 86 about metering
 - 436 about other activities
- NI Water received 36,728 calls to switchboard of which 1,975 were abandoned (99.15%)
- Customers provided a satisfaction rating of 4.57 out of 5.
- They have 1,990 customers on the special assistance register

Incidence of having a service issue based on survey findings

Domestic customers

Respondents were asked if they had any contact with NI Water in the previous 12 months. Six per cent said they had telephone contact and 3% reported that NI Water had made a prearranged visit to their home.

- Those in a rural location were more likely to have been in contact, both by telephone (10%) and at their home (5%), as were those who have someone in their household who is dependent on water for their healthcare (10% by telephone and 5% at home).
- In addition to this, those who had service issues were much more likely to have been in contact (18% by telephone and 9% at home).

Two per cent said that they had made a formal complaint to NI Water (20 respondents). Of those who had made a complaint, seven had experience of a water supply interruption, nine had an 'other' water related issue and seven a sewer related issue (respondents may have had more than one issue).

Overall four in five respondents (80%) are satisfied with the services provided by NI Water, and 7% indicate that they are dissatisfied.

Non-domestic customers

17% said they contacted NI Water via telephone with a query, while 10% indicated that NI Water had made a pre-arranged visit to their site or premises.

One in twenty (5%) businesses surveyed indicated that they reported an issue with their invoice or water/sewerage bill. 3% had made a formal complaint to NI Water.

58% indicated that they are satisfied with the services provided by NI Water and 13% are not satisfied. A relatively high proportion of respondents indicated that they would be neither critical nor complimentary of the services provided by NI Water in relation to each aspect of service. This finding suggests that customers tend not to think about their water or sewerage services unless they encounter a problem or experience a service issue.

Customers views on current levels of service provision from the qualitative research

Domestic customers

The research revealed that the majority of consumers have not had reason to make contact with NI Water and therefore have not had the opportunity or need to assess the customer service received on contact.

Participants in the flood risk and customer care groups were more likely to have had interaction with NI Water, primarily due to problems experienced with internal/external flooding. As previously stated, these groups indicated that they would have benefited from more proactive contact from NI Water at times of flooding, particularly to provide sandbags and ensure follow up e.g. making arrangements to remove used sandbags.

Some participants in the customer care group were not aware that they or their family members were on the care register. They expressed lack of awareness of why they were placed on the list, and felt it may be beneficial to promote the service more widely. Overall, participants felt the register was worthwhile, however they reiterated the benefit in ensuring more wide spread awareness of the service. Such findings raise questions about whether NI Water should increase engagement with those on the customer care group, and specifically, with the carers of those on the register:

Is the list only for NI Water? First I've heard of it.
Customer care group

My mother received water as a precaution last winter, however we were not sure where it came from or why.
Customer care group

Non-domestic customers

A small number of interviewees have never had any engagement with NI Water. Typically, these respondents are satisfied with their water and sewerage services, therefore have had no necessity to make contact with NI Water. Other respondents indicated that they found NI Water to be helpful and accommodating if they have had any reason to make contact.

No major issues. Whatever they are doing, keep doing it.
Medium manufacturing

However, several respondents expressed concerns about the customer service provided. Many reported difficulty making contact with the relevant personnel in NI Water. Others

found that they were passed from one customer representative to another, and requested better consistency in approach:

I rarely, if ever, have contact with the same person. Therefore it is difficult to resolve issues.
Educational establishment

Some believed that customer representatives do not have the 'empowerment' to make decisions or provide assistance in relation to a particular query or complaint. Others suggested that NI Water become more engaged with their customers. Such respondents commented that NI Water is not particularly proactive in contacting businesses, especially to follow up complaints.

There is no personal contact and long follow up between incidents.
Small agriculture, high usage

I don't feel we get much support from the NI Water management side and it should be a joint effort.
Large healthcare, high usage

At the qualitative stage, many participants expressed dissatisfaction with the current billing arrangements. They requested improvements to the following:

- The frequency of billing;
- The clarity of billing
- Accuracy of billing;
- The number of separate bills received;
- Occasionally 'double-billed'.
- The timing of invoices.

Such points are evidenced by the following quotes:

They lag behind other utilities companies who send a bill out a week after consumption.
Large manufacturing, high usage

I receive bills in 'drips and drabs'. I would like them all in one.
Large manufacturing, high usage

We tend to receive duplicate bills and are occasionally double billed. We work to a budget and water charges are twice what they previously were.
Educational establishment

I can't understand bills and do not understand how they are calculated. They require a clearer explanation.
Small hospitality

We once received an estimate for £271. When we queried this and I checked the meter it was £91.
Small agriculture, high usage

The priority given by customers to improving this service

Domestic customers

The quantitative survey of domestic consumers did not specifically assess recommendations to improve the customer service experience. However, it did explore preferred mediums for communication. Domestic customers cited personal telephone call as their preferred communication medium across a variety of scenarios:

- To report a critical service issue e.g. flooding or interruption (94%);
- To report a critical service issue affecting lots of people (93%);
- To help NI Water e.g. report a burst main (91%);
- To report a less critical issue (85%).

Non-domestic customers

Similarly to domestic customers, businesses cited personal telephone call as their preferred communication medium for a variety of customer service scenarios.

Non-domestic customers were asked the extent to which they would like to see improvements to customer service attributes. Around one third (30%) believe that improvements are required to the customer service experience. In relation to non-domestic billing, 29% requested improvements to billing and invoicing processes.

Similarly, qualitative feedback revealed that respondents' key actions in terms of investment were primarily in relation to billing. This included reviewing the frequency of bills to ensure better regularity, providing further guidance on how businesses can monitor their own consumption to reduce bills and providing more information on allowances available to businesses.

Customers' willingness to pay extra for customer service improvements

Despite such recommendations, non-domestic customers are not particularly willing to pay any extra to improve the customer service experience. 10% of businesses indicated that they would be willing to pay extra, while 4% were not sure and 86% were not willing to pay any extra to fund customer service improvements.

Conclusion - customer satisfaction

On the whole, feedback suggests that customers are generally satisfied with the current service provision¹³, which is evidenced by the fact that many have not had reason to make contact with NI Water. Qualitative research revealed that business consumers are less satisfied with the customer service provision than domestic consumers. This may stem from the fact that non-domestic consumers face billing charges and are also likely to sustain financial losses in the instance of service failure. Therefore business consumers tend to have higher expectations of service delivery.

¹³ As stated throughout this section, it is possible that responses are shaped by the time during which the research was conducted. Should domestic consumers be eventually required to pay for their water and sewerage services, it is possible that their expectations of NI Water's customer service may be higher, and therefore feedback would be different from the current findings.

There may also be merit in conducting further research to examine the extent of satisfaction (or otherwise) compared to experiences with other service providers.

2.6. Consumer education

The following table summarises feedback gathered from domestic and non-domestic customers in terms of consumer education. Feedback specifically relates to (1) customer awareness on what can / cannot be disposed of in the sewerage system and (2) how customers can be more water efficient.

The quantitative surveys did not focus on WTC to consumer education. Therefore this section primarily analyses the priority given to improving this aspect of service by consumers.

Table 2.6.1: Summary of consumer education research findings

	How to save water	What can be put into the sewerage system
Current situation	<ul style="list-style-type: none"> • 2,946 cistern devices distributed to households • 4,489 water audit packs distributed to households • A variety of water efficiency information leaflets and materials produced including shower timers/magnets etc 	<ul style="list-style-type: none"> • Advertising and promotional materials developed for the 'Bag it And Bin it campaign'.
Level of knowledge	<ul style="list-style-type: none"> • 54% of householders and 45% of businesses felt they lack knowledge of how to use water efficiently 	<ul style="list-style-type: none"> • 48% of households and 45% of businesses believe they are 'not at all' or 'a little' informed about what to dispose of in the sewerage system
Views on current level of provision	<ul style="list-style-type: none"> • No awareness of water efficiency leaflets; educational materials available to enable better efficiency • Perception that increased knowledge of water efficiency procedures may impact positively on abstraction levels 	<ul style="list-style-type: none"> • Limited awareness during focus groups of the 'Bag It and Bin It' campaign • There would be merit in further promotion and ensuring greater exposure to the campaign
Priority given to improving this aspect of service	<ul style="list-style-type: none"> • 76% of domestic request improvement and 32% prioritise in top 3 • 53% of non-domestic request better efficiency in the workplace and 11% of non-domestic prioritise in top 3 	<ul style="list-style-type: none"> • 79% of domestic request improvement and 21% prioritise in top 3 • 34% of non-domestic request improvement and 8% prioritise in top 3

2.6.1 Water efficiency

Current service provision

Statistical evidence reveals that a wide range of information/materials have been produced and distributed in order to encourage better water efficiency and encourage consumers to save water. Example materials are as follows:

- 2,946 cistern devices distributed to households
- 4,489 water audit packs distributed to households
- A variety of information materials produced to promote water efficiency, including information leaflets, magnets and shower timers.

Additionally, work was carried out on NI Water's website; and an area was developed to deal with promoting water efficiency within the commercial customer sector. The areas included within this website are:

- Why Save Water?
- What is Normal Water Use?
- What is a Water Balance?
- Water Efficient Plumbing Appliances?

Level of knowledge

Over half (54%) of domestic customers said they were only a little or not at all informed of how to use water more efficiently. Analysis by demographics shows that those least likely to feel informed are younger people and those in urban areas.

Over two thirds (68%) of non-domestic customers indicated that they lack awareness of allowances available to some businesses. 45% indicated that they lack knowledge of how to use water more efficiently on their premises and the responsibility of businesses to check meters for leakages.

Customers views on current levels of service provision from the qualitative research

Discussions highlighted that customers have no awareness of promotional materials available to encourage water efficiency and reduce water wastage. Many indicated that they would benefit from further interaction between NI Water and customers, suggesting a 'two-way' dialogue to raise customer awareness.

In relation to water wastage, several reiterated the importance of educating consumers on how much water they use and the environmental and cost implications associated with abstracting and treating such high volumes of water. Participants stated that education on water usage and the costs of treating and supplying water to households may ultimately help to reduce this wastage:

NI Water could try and raise awareness of how much water we use. My young boy would definitely listen. Maybe educate young ones, such as turning taps off when brushing teeth.
L'Derry

There needs to be a really strong message about water usage and reducing water wastage.
Belfast apartment dwellers

Some businesses reported that they currently take active measures to ensure water efficiency, which was largely influenced by a desire to reduce bills. This included assessing meters for leakages and encouraging staff to reduce water wastage. However several requested guidance and further information from NI Water on how businesses can ensure they are more water efficient.

The priority given by customers to improving this service

Domestic customers

Domestic customers allocated a significant proportion of attention on highlighting the importance of education to encourage consumers to be more water efficient in their home. Over three quarters (76%) identified that improvements are required to encourage consumers to be more water efficient in their homes. This area was prioritised most highly across all areas for improvement.

As previously recognised, this area was identified spontaneously throughout discussions. Participants frequently reiterated the importance of educating consumers about the culture of water wastage and recycling in the home

Non-domestic customers

Over half of businesses requested improvements to ensure better efficiency within the workplace (53%). This area was ranked moderately highly in terms of overall priorities, with 11% placing this in their top 3 areas for improvement.

Conclusion - water efficiency

Respondents tended to place high priority on educating consumers to be more water efficient, with 76% identifying that improvement is required to encourage consumers to be more water efficient in their home. It was evident that consumers recognised the potential impact that this service improvement would have on improving provision in other areas, such as reducing abstraction levels.

Feedback revealed that domestic and non-domestic consumers tend to lack knowledge of the information and support materials available from NI Water to encourage water efficiency. Therefore, there may be merit in reviewing communication mediums and considering ways in which campaigns may reach a wider audience. This may require assessing the strengths and weaknesses of previous campaigns.

2.6.2 What can / cannot be put in the sewerage system

Current service provision

The 'Bag It And Bin It campaign' was developed by NI Water to raise awareness of items which cannot be flushed and should therefore be 'bagged and binned'. This campaign listed items which cannot be disposed of in the sewerage system and identified negative repercussions of doing so i.e. potentially blocking public sewers and damaging screens which are used to filter out the waste.

Level of knowledge

When asked about their knowledge of what can be flushed down the toilet or put down the drains, just over half of domestic customers (52%) indicated that they felt quite or very well informed. However, 48% said they were either not at all or only a little informed. Analysis by demographics showed little variation in response to this question.

45% of businesses indicated that they lack knowledge of items which they can / cannot dispose of in the sewerage system.

Customers views on current levels of service provision from the qualitative research

During the focus groups a small number expressed awareness of the 'Bag It And Bin It' campaign, however, overall they felt a wider campaign was required:

An NI Water van went down the street recently with a large sign 'the only thing that goes down the toilet is toilet roll.'....however, I have caught my neighbour putting fat from a deep fryer down ...people don't pay heed to an education campaign....however a TV ad could be beneficial.

L'Derry

Across groups, participants were likely to believe that they are aware of what should not be disposed off in the sewerage system, however they queried the extent to which the general population are knowledgeable. Similarly, some businesses perceived customers to be misinformed or disinclined to dispose off products in the correct fashion. Therefore many recognised the merits of educating customers and subsequently reducing the incidence of sewer blockages.

*It's a reasonably cheap resolution to inform and make people aware.
Knowledgeable consumers*

The priority given by customers to improving this service

Domestic customers

When considering sewerage services, over three quarters (79%) felt there was a need to inform consumers about what should or should not be flushed down the toilet or put down the drains. In terms of overall priorities this area was ranked sixth highest, with 21% placing it in their top 3 areas for improvement.

Non-domestic customers

Around one third (34%) requested improvements to ensure customers are aware of what to dispose of in the sewerage system. However, in terms of overall priorities, this area was ranked relatively lowly, with 8% citing this in their top 3 areas for improvement.

Conclusion - educating consumers about accurate waste disposal

The prioritisation given to educating consumers on waste disposal was highlighted spontaneously throughout the qualitative research and evidenced in the quantitative surveys, with 79% of domestic consumers rating this aspect of consumer education as requiring improvement.

Many respondents recognised that investment in this area could help to reduce sewer blockages and thus reduce flooding incidents. Whilst a small number of participants expressed awareness of the 'Bag It And Bin It' campaign, it was evident that the majority either 'missed' this campaign or believe that more could be done to raise awareness. It may be beneficial to probe why people have missed previous campaigns and review communication mediums to ensure that they are meeting the target audience.

2.7. Views of NI Water and current service provision

Throughout the research it was apparent that respondents do not have a strong opinion of NI Water. This was evidenced at the quantitative stage of research by domestic and non-domestic respondents, with the majority stating that they would be neutral towards NI Water's services.

However, survey findings suggest that customers are more likely to speak highly of NI Water than be critical of their services:

- 32% of **domestic respondents** reported that they would speak highly of the service compared to 9% who would be critical;
- 27% of **non-domestic respondents** stated that they would speak highly, while 16% indicated that they would be critical.

On the whole, respondents appear confident that NI Water is efficiently and effectively monitored, as evidenced in the following points gathered from the survey of domestic customers:

- 65% agree that they trust NI Water is being effectively monitored and 10% disagree.
- 80% agree that they are satisfied with the service provided and 7% disagree.
- 63% say they have a favourable opinion of NI Water and 7% disagree.

The quantitative survey of non-domestic customers showed that:

- 58% agree that they are satisfied with the service provided and 13% disagree;
- 51% said they have a favourable opinion of NI Water and 12% indicated that they do not;
- 45% believe that NI Water is striving to be more efficient and one in ten disagree (10%).
- 45% trust that NI Water will be effectively monitored and 7% disagree.
- 46% agree that NI Water understands the needs of their organisation and 10% disagree.
- 46% consider NI Water to be fair in its dealing and 11% disagree.
- 59% agree that it is easy to get in contact with the people they need to in NI Water and 6% disagree.

The viewpoint of non-domestic customers appears to be shaped by their interaction with NI Water and experience of service issues. Those who have had issues with their water and sewerage bill/invoice in the last year are most likely to be critical of the service provided without being asked, while those who have no contact with NI Water were more likely to speak highly.

Both quantitative and qualitative stages of research showed that respondents had generally little interaction with NI Water, which may explain this apparent level of apathy. However, the fact that most respondents have not contacted NI Water with a query or complaint suggests

that they may not have encountered any service issues. Analysis of customers' experience of service issues corroborates this finding, as the majority of domestic (75%) and non-domestic (69%) respondents have not encountered any service issues in the past 12 months.

2.8. Overall summary of prioritisations

The following table provides an overview of the prioritisations and willingness to contribute to service improvements.

Table 2.8.1: Summary of research findings

	Priority given to service improvement	Willingness to contribute +1 service improvement	Willingness to contribute +2 service improvement	Comments
Water Services				
Taste, smell and appearance	- 50% of domestic request improvement and 24% prioritise in top 3 - 32% of non-domestic request improvement and 18% prioritise in top 3	£0.75	£1.36 (+ £0.61)	<ul style="list-style-type: none"> Largely meeting customer needs, however there may be pockets of provision that do not currently meet customer expectations.
Supply interruptions	-36% of domestic request improvement and 10% prioritise in top 3 -14% of non-domestic request improvement and 8% prioritise in top 3	£0.99	£2.16 (+£1.17)	<ul style="list-style-type: none"> Crucial aspect of service, which customers are willing to pay to improve Focus required on improving the way interruptions are communicated/managed
Low water pressure	- 45% of domestic request improvement and 15% prioritise in top 3 - 26% of non-domestic request improvement and 12% prioritise in top 3	£1.19	£1.81 (+£0.62)	<ul style="list-style-type: none"> Customers appear relatively satisfied with current service However perceived to be an important aspect of provision
Sewerage Services				
Internal flooding	- 51% of domestic request improvement to limit the occurrence and 16% prioritise in top 3; - 70% of domestic request improvement to assist those affected customers and 30% prioritise this in top 3; - 22% of non-domestic request improvement to limit the occurrence and 9% prioritise in top 3; - 31% of non-domestic request improvement to assist affected customers and 15% prioritise this in top 3	£1.85	£3.09 (+£1.24)	<ul style="list-style-type: none"> Keen willingness to place investment in this area

External flooding	- 56% of domestic request improvement and 16% prioritise in top 3 - 26% of non-domestic request improvement and 14% prioritise in top 3	£1.47	£1.84 (+£0.37)	<ul style="list-style-type: none"> Customers prioritise highly Strategically they believe that if this aspect of service is addressed then it will also reduce internal flooding
Pollution incidents	- 60% of domestic request improvement and 15% prioritise in top 3 - 42% of non-domestic request improvement and 3% prioritise in top 3	£1.12	£0.91(-)	<ul style="list-style-type: none"> While emotionally respondents want to improve the number of pollution incidents this is not something that they are particularly willing to invest in
Sewer blockages	- 51% of domestic request improvement and 20% prioritise in top 3 - 24% of non-domestic request improvement and 7% prioritise in top 3	£0.73	£1.34 (+£0.61)	<ul style="list-style-type: none"> Few have been affected by sewer blockages and therefore place a relatively moderate level of investment in this area
Environmental				
Coastal waters	- 78% of domestic request improvement and 26% prioritise in top 3 - 48% of non-domestic request improvement and 17% prioritise in top 3	£0.39	£0.54 (+£0.15)	<ul style="list-style-type: none"> This displays an emotional desire for improvement but a lack of willingness to contribute to the improvement Customers are aware of the wider impact on business and tourism
River waters	- 78% of domestic request improvement and 25% prioritise in top 3 - 49% of non-domestic request improvement and 20% prioritise in top 3	£0.99	£0.83(-)	
Odour /noise	- 58% of domestic request improvement and 7% prioritise in top 3 - 44% of non-domestic request improvement and 4% prioritise in top 3	£1.02	£1.74 (+£0.72)	<ul style="list-style-type: none"> Odour and noise are recognised as somewhat unavoidable. Although the survey indicated low priority, willingness to contribute to improving the current service is higher than expected
Water abstraction	- 71% of domestic request improvement and 13% prioritise improving NIW efficiency in top 3 - 49% of non-domestic request improvement and 7% prioritise improving NIW efficiency in top 3, while 2% prioritised reducing leakages	n.a.	£0.81	<ul style="list-style-type: none"> While customers prioritise water efficiency they are less likely to equate water abstraction with levels of leakage. Therefore this aspect of service may be under represented within the willingness to contribute data

Customer service				
Customer service	<ul style="list-style-type: none"> - 9% of non-domestic prioritise in top 3 - 30% of non-domestic believe improvements are required to customer service . In terms of non-domestic billing, 29% request improvements to billing/invoicing processes. 12% place this in their top 3 priorities 	10% of businesses indicated they would be willing to pay extra		<ul style="list-style-type: none"> • Few have reason to contact NIW • Both domestic and non-domestic preferred personal telephone interaction
Customer education				
How to save water	<ul style="list-style-type: none"> - 76% of domestic request improvement and 32% prioritise in top 3 - 53% of non-domestic request better efficiency in the workplace and 11% of non-domestic prioritise in top 3 	<ul style="list-style-type: none"> • na 		There is a desire among customers to become better informed about the importance of, and how to be more water efficient, and proper use of the sewerage system
What can be put in the sewerage system	<ul style="list-style-type: none"> - 79% of domestic request improvement and 21% prioritise in top 3 - 34% of non-domestic request improvement and 8% prioritise in top 3 	<ul style="list-style-type: none"> • na 		