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**Customer Consultation Research  
Executive Summary**

Draft report prepared for:

**CEOG**

**Northern Ireland Water**

2 September 2013

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## Section 1:

## Executive summary

# 1.1 Introduction

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This Executive Summary provides an overview of the research findings from a programme of research conducted on behalf of Northern Ireland Water, the Consumer Council, The Utility Regulator and the Department for Regional Development. Detailed research findings are provided in separate annexes for the consultation conducted with domestic customers and non-domestic customers. The detailed research methodology and literature review are provided as appendices.

## 1.1.2 Terms of reference

The Customer Engagement Oversight Group (CEOG), comprising of representatives from NI Water, the Consumer Council, the Utility Regulator and the Department for Regional Development (DRD), commissioned Perceptive Insight, in partnership with Queen's University, to undertake a comprehensive study to establish which service areas customers want NI Water to prioritise and improve in the near future.

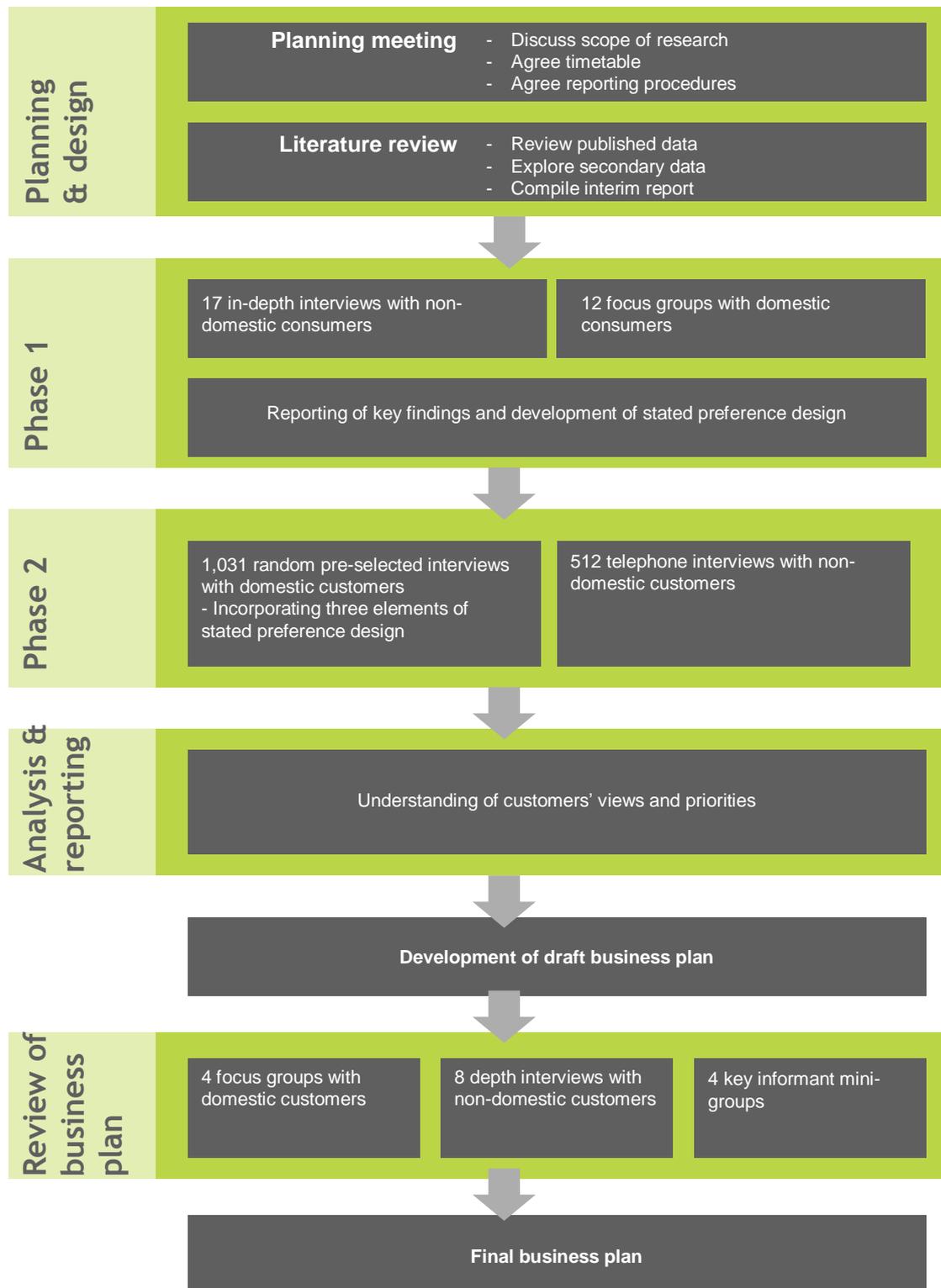
### Terms of reference

The aim of the project was to plan, implement, analyse and report on a programme of research designed to ascertain the views of NI Water's consumers. The objectives were:

- To assess levels of satisfaction with and opinion of NI Water;
- To investigate consumer views of water, sewerage and customer services and the areas they want NI Water to prioritise and improve;
- To provide qualitative, quantitative and actionable data that can be used to inform and prioritise NI Water's investment planning by;
  - Examining consumer views across segments, contact channels and service events;
  - Providing customer ratings of individual service levels;
  - Establishing investment trade-offs;
- To provide views and actionable data to inform NI Water's strategic direction for Customer Services including;
  - Assessing current and preferred customer services, potential gaps in service, service levels and promises and Customer Care Register provision;
  - Establishing reasonable levels of service on the above;
  - Assessing current and future preferred contact channels, use of technology, and provision of information;
  - Consumer education.
- To continue to engage with consumers during the planning period of PC15 to the final Business Plan.

# Methodology

The following diagram outlines the key steps that were undertaken in the implementation of this project and the paragraphs that follow provide further insight into the steps taken to deliver the research. Further details on the methodological approach can be found at Appendix A.



## Phase 1

The aim of phase 1 was to establish the context for the research and explore qualitatively the issues that impact customers and their priorities for investment. It involved undertaking a literature review (see Appendix B), a series of focus group discussions with domestic consumers, and a programme of in-depth interviews with non-domestic customers.

This phase enabled the collection of qualitative<sup>1</sup> feedback and allowed the opportunity to explore respondents' views of NI Water, to provide an understanding of current experiences and assess relative priorities in relation to water and sewerage services. It should be noted that throughout the reports, feedback gathered from focus groups and interviews is referred to as '**qualitative findings**'.

**Qualitative feedback** was gathered utilising the following mediums<sup>2</sup> and within the timescales outlined below:

- Twelve focus groups took place between 19<sup>th</sup> March and 4<sup>th</sup> April 2013. Each discussion took approximately 90 minutes and, in total, 97 domestic consumers took part (an average of 8 domestic customers per group). The approach to the focus groups and discussions were as follows:
  - Groups commenced with a discussion to assess participants' views on NI Water and their experience of water and sewerage related issues in the last 12 months;
  - Participants took part in an investment trade-off' game to explore their priorities for future investment in water, sewerage and environmental services. They were provided with 20 'chips' as an indication of the budget that is available to invest in improving the service provision and asked to distribute the budget to the areas that they felt required the greatest levels of investment. Discussions provided insight into the rationale for investing in certain areas and the trade offs that were made between the various areas;
  - A further enabling task was used to explore customers preferred methods for communication in a variety of scenarios.
  
- A total of 17 in-depth interviews were conducted with non-domestic customers between 28 March and 16<sup>th</sup> April 2013. The approach to the in-depth discussions was as follows:
  - Experience of water and sewerage related issues;
  - Assessment of the service attributes most important to business operation (scored on a 10-point scale, where 10 is most important);
  - Preferred methods of communication;
  - Overall service preferences;
  - Water and sewerage charges, including views on billing;
  - Water efficiency procedures.

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<sup>1</sup> Qualitative research is not meant to be representative but rather is designed to explore the full range of views that exist among customers.

<sup>2</sup> Copies of the topic guides are included at Appendix A: Methodology

## Phase 2

The findings from Phase 2, which included surveys of domestic and non-domestic customers, were used to facilitate the measurement of attitudes towards NI Water and to allow NI Water to determine from its customers the priorities for future programmes and developments. **Quantitative data** was collected via the following mediums<sup>3</sup> and within the timescales outlined below:

- A randomly selected sample of 1,031 adults (domestic customers) were interviewed between 3<sup>rd</sup> May 2013 and 6<sup>th</sup> June 2013. The questionnaire was structured as follows:
  - Customer views of NI Water;
  - Experience of water and sewerage related issues in the last 12 months;
  - Preferred modes of communication with NI Water;
  - Recommendations for improvement to NI Water's services (water, sewerage, environmental). Each service attribute was scored on a scale of 1 – 5, where 1 was no improvement required and 5 was a lot of improvement required;
  - Identification of the three service attributes which require most improvement;
  - Consumer education;
  - A choice experiment survey<sup>4</sup> was conducted and administered as part of the survey of domestic customers in 3 separate blocks (Water, Sewerage and Environment) to investigate the benefits of two levels of achievable service improvement for water, sewerage and environmental service attributes and willingness to contribute (WTC) to service improvements<sup>5</sup>.
  
- A total of 512 telephone interviews were conducted with non-domestic customers between 30<sup>th</sup> April and 15<sup>th</sup> May 2013. The questionnaire was structured as follows:
  - Customer views of NI Water;
  - Experience of water and sewerage related issues in the last 12 months;
  - Preferred modes of communication with NI Water;
  - Recommendations for improvement to NI Water's services (water, sewerage, environmental, customer service): Each service attribute was scored on a scale of 1 – 5, where 1 was no improvement required and 5 was a lot of improvement required;
  - Identification of the three service attributes which require most improvement;
  - Willingness to pay extra to improve services;
  - Consumer education.

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<sup>3</sup> Copies of the questionnaires are included at Appendix A: Methodology

<sup>4</sup> This was undertaken by Professor Riccardo Scarpa at Queen's University. A technical report is enclosed at Appendix C

<sup>5</sup> It should be noted that throughout this summary figures related to WTC are solely based on evidence gathered during the choice experiment conducted with domestic customers. While the quantitative survey assessed the extent to which non-domestic consumers would be willing to pay extra to improve some service improvements, e.g. the way the system handles severe weather events, it did not assess WTC to specific service attributes.

# 1.2 Key findings from domestic customers

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This section provides an overview of the key quantitative findings from the survey with 1,031 domestic customers<sup>6</sup>. Qualitative information, which was gathered during the focus groups, is integrated within the summary to provide insight to the range of views held by customers.

Commencing with an overview of consumers' experience of water and sewerage service delivery, this section consequently follows with an overview of customers' views of NI Water; their prioritisations for service improvement; views on the necessity for consumer education; and opinions of customer service.

## 1.2.1 Experience of service delivery

At the quantitative and qualitative stage, domestic customers were asked whether they have experienced any service issues in the past 12 months. The following paragraphs summarise the key findings in relation to the service issues experienced:

### Water service issues

- 11% have experienced a supply interruption in the past 12 months, with the occurrence more common in rural areas:
  - Qualitative findings revealed that participants view service interruptions as unavoidable if the infrastructure is to be maintained;
  - They believe that 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.
- Qualitative findings revealed some intermittent issues with water quality and low water pressure, which customers expect to some extent. For example, some experience cloudy water which clears when the water is allowed to settle or when the tap is allowed to run, and low water pressure when a lot of appliances are being used. The survey results showed the following:
  - 5% have on-going issues with appearance, taste or smell of tap water;
  - 4% have an on-going issue with low water pressure<sup>7</sup>:
    - Focus group findings highlighted the perception that low water pressure is an 'annoyance', however generally viewed as a 'liveable' issue.

### Sewerage service issues

- 4% have had issues with a blocked sewer:

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<sup>6</sup> Percentages are based on interviews conducted with a random sample of 1,031 respondents. This baseline is consistent throughout the summaries.

<sup>7</sup> It was unclear whether reports of low water pressure were driven by transient loss of pressure or whether respondents deemed the general pressure provided to be inadequate. The incidence of low water pressure recorded in the survey is higher than that reported by NI Water. 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.

- This is viewed as being caused by range of issues including builders' rubble, food outlets disposing of grease and oil, neighbours flushing nappies, and the development of new homes causing capacity issues;
- 2% have had external flooding and <1% internal flooding (6 respondents):
  - This is viewed as due to capacity issues in the network because of the building of new homes and caused by builders' rubble in the system;
  - There is frustration when no agency appears to takes responsibility for the flooding;
  - There is difficulty obtaining sandbags to help minimise the impact and when disposing of contaminated sandbags;
  - Those affected want a more proactive approach from NI Water at times of flooding to manage the situation and minimise the impact.

## Customer service issues<sup>8</sup>

- 6% have had telephone contact with NI Water in the previous 12 months;
- 3% have been visited at their home; and
- 2% have made a formal complaint to NI Water.

### 1.2.2 Views of NI Water

- 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.
- This is illustrated in the quantitative findings with the majority (55%) saying they would be neutral towards the services. However, 32% reported that they would speak highly of the service and 9% would be critical:
  - Respondents who have had telephone contact with NI Water were more likely to be critical of NI Water than those who have not had any contact with the company (40% vs 7%).<sup>9</sup>
- 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:
  - These findings are similar or slightly more positive than the results for the PC10 study.

### 1.2.3 Prioritisation of services for improvements

Domestic customers were asked to rate which aspects of service they consider require improvement. The findings from this part of the research establish the prioritisation of customers, which is shaped to some extent on their prior experience of service delivery and their 'emotional' reaction to the impact of non-service delivery. To further explore and inform the future investment strategy, customers were asked to make trade-offs in service improvements through a choice experiment. The research was based on the assumption that the current level of water and sewerage services will be maintained. Therefore

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<sup>8</sup> An overview of NI Water incident and report data in relation to customer contacts and complaints can be found in the thematic analysis report (Part 2)

<sup>9</sup> Please note low base (61) representing the number of domestic customers who have had contact with NI Water.

consumers were asked for their views on the aspects of service that they consider require improvement.

Firstly we consider the initial prioritisation highlighted by the quantitative survey and during the focus group ‘trade off game’. We then consider the findings from the choice experiment. These are presented under the headings of water services, sewerage services and environment and pollution issues. It should be noted that the decision was taken not to include customer service within the choice experiment; rather a series of questions were included within the quantitative survey to ascertain respondents’ views on NI Water’s customer service provision and to evaluate preferred methods of communication in a variety of customer service scenarios. It should be noted that in order to incorporate each of the service factors into the choice experiment, pollution incidents were administered in the environmental block, while abstraction was administered in the water block.

## Initial prioritisations

### Water services

- Throughout the qualitative research participants spontaneously highlighted the importance of education and encouraging customers to be more water efficient in their home. It was possible that this was driven, to some extent, by being informed during the discussion of the average daily amount of water that is used by each person and the culture of waste reduction and recycling in the home.
- The quantitative survey validated the qualitative findings with over three quarters (76%) identifying that improvement is required to encourage consumers to be more water efficient in their home. When probed on this issue, over half (54%) said they were ‘not at all’, or ‘a little informed’ about how to use water more efficiently.
- In terms of other water service improvements, the survey found that:
  - 50% requested improvements to the taste, smell and appearance of tap water;
  - 45% cited the importance of ensuring sufficient pressure;
  - 36% wanted improvements to limit interruptions.
- Discussion of water service issues within the focus groups led to debate as to whether reducing the interruptions to supply should be prioritised for investment over the appearance, taste and smell of water. While some rationalised that they experience few interruptions to supply and that this is acceptable, others contested that water supply is a main function of NI Water, any interruption has major impact on the consumer and therefore efforts should be made to minimise its occurrence further. A further feature of this discussion focused on the appearance, taste and smell of water and the extent to which this aspect of service is not relevant if the customer has no supply. Low water pressure was viewed as being less of a priority over the other aspects of water service because it had less impact on the household.

### Sewerage services

- Consumer education was also a focus when considering sewerage services. Within the discussions numerous examples were recounted of neighbours, tradesmen and food outlets disposing of inappropriate content into the sewer network. Whilst a small number expressed awareness of the ‘Bag It And Bin It’ campaign, it was evident that many had either ‘missed’ the campaign, or believe that more could be done to raise awareness.

The benefit from raising awareness was considered to be a reduction in sewer blockages and flooding incidents.

- The survey findings show that over three quarters (79%) rated this aspect of consumer education as requiring improvement. Indeed almost half (48%) rated themselves as having no or limited awareness of what can or cannot be flushed down the toilet or put down drains.
- When considering other aspects of the sewerage service:
  - 70% felt there was a need to focus on improving services for those affected by sewer flooding;
  - Just over half felt improvement was required in relation to the flooding of visible external areas (56%);
  - 51% wanted improvement to limit the occurrence of sewer flooding inside properties;
  - 51% sought improvement to reduce the number of sewer blockages.
- Within the group discussions participants expressed their abhorrence of internal flooding and recognised the impact that this has on the householder. However they also acknowledged that there are few occurrences annually, and that when events occur they are largely localised. The main concern expressed by focus group participants was in relation to the aftercare for those affected by internal flooding. Those who have been directly affected by internal flooding emphasised in the strongest terms the need for improvements to address the risk of regular flooding.
- Group participants suggested most improvement was required to lessen the number of sewer blockages through upgrading the network. They believed that there are integrated benefits of investing in the network, such as reducing sewer blockages and reducing flooding and pollution.

## Environmental and pollution issues

- In terms of environmental issues, the survey findings show that:
  - 78% sought improvements to enhance the quality of river waters;
  - 78% want improvements to enhance the quality of coastal bathing waters;
  - 71% believe there is a need to improve NI Water's water and energy efficiency;
  - 60% want a reduction in pollution from NI Water's operations and processes;
  - 58% consider there is a requirement to reduce smells and nuisance.
- Qualitative findings identified similar themes to the quantitative survey; focus group participants prioritised quality of river water more highly than other environmental considerations.
- Participants were highly dissatisfied to learn about the current status of river water quality (22% of which is rated as good or very good).<sup>10</sup> While they recognised that NI Water is not solely responsible for river pollution they felt that more could be done to improve the river water quality.
- The discussions on water abstraction highlighted again the need for consumers to be efficient in their water usage, as discussed previously. Some felt that investing in the water network would help to minimise leakage, which in turn would help with low water pressure and reduce the amount of water that is required to be abstracted and treated.

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<sup>10</sup> Source: Northern Ireland Environment Agency, 2013

They reasoned that any money saved by reducing abstraction could be invested to improve other parts of the service.

## Overall prioritisation

- When asked to identify the three aspects of service that require most improvement, the quantitative survey shows a wide spread of opinion with consumer education most likely to be highlighted (32%). This was followed by:
  - Focusing on plans to assist those who are affected by sewer flooding (30%);
  - Improving the quality of coastal bathing waters (26%);
  - Improving the quality of river waters (25%);
  - Improving the appearance, smell and taste of tap water (24%);
  - Informing consumers what they can flush down toilets or put down drains (21%);
  - Reducing the number of sewer blockages (20%).

### 1.2.4 Key findings from the choice experiment

A choice experiment was conducted as part of the domestic survey. This explored the 'trade-offs' that customers make between different levels of service improvement and their willingness to contribute to the improved levels of services, compared against the current service provision. A technical report on the approach is included at Appendix C.

Specifically, the choice experiment survey was administered in 3 separate blocks (Water, Sewerage and Environment) to investigate the benefits of two levels of achievable service improvement (+1 and +2) as shown below:

**Table 1.2.1: Service attributes and levels of improvement**

The measure of service	Unit of measurement	Level 0	Level +1	Level +2
<b>Water</b>				
The <b>taste, smell and appearance</b> of tap water	The number of complaints about tap water issues that are received per year, shown per 1,000 properties	5 Customer contacts per 1,000 properties	4 Customer contacts per 1,000 properties	3 Customer contacts per 1,000 properties
How often the water supply is <b>interrupted</b> due to <b>unplanned</b> events	The number of properties experiencing supply interruptions without warning each year	7,700 Customer contacts per year	5,775 Customer contacts per year	3,850 Customer contacts per year
How often tap water is affected by <b>low pressure</b> from the mains	Number of properties on the NI Water Low Pressure Register (DG2)	1760 properties	880 properties	440 properties
<b>Water abstraction</b> - the volume of water that is treated and distributed to meet demand	Water into Distribution Mega/litres per day with leakage level	620 mega/litre/day treated and distributed. leakage 165MI/d	610 mega/litre/day treated and distributed. leakage 155MI/d	600 mega/litre/day treated and distributed. leakage 145MI/d

The measure of service	Unit of measurement	Level 0	Level +1	Level +2
<b>Sewerage</b>				
How often <b>flooding</b> from the mains sewers gets <b>into homes or properties</b>	The number of properties experiencing sewage flooding inside their property boundary	on average 120 properties	on average 60 properties	on average 30 properties
How often <b>flooding</b> from the mains sewers affect <b>external areas</b> which lots of people see (highways and public areas)	The number of incidents of sewer flooding in highway and public areas	4,400 incidents	3,300 incidents	2,200 incidents
How often there are <b>sewer suffering blockages</b>	The number of sewer blockage complaints (by location) received relating to the public sewer system	11,600 locations	9,600 locations	7,600 locations
The measure of service	Unit of measurement	Level 0	Level +1	Level +2
<b>Environment</b>				
How often <b>odour</b> from waste water treatment works and public sewers causes nuisance to customers	The number of customer complaints about odour issues received each year.	800 complaints received	600 complaints received	400 complaints received
How good the <b>quality</b> of water is in the <b>rivers</b>	The length of rivers meeting the Environment Agency 'good' or 'very good' monitored river water quality standard shown as a percentage.	22% of monitored river length	27% of monitored river length	32% of monitored river length
How good the <b>quality</b> of the water is in <b>coastal bathing waters</b>	How many coastal bathing waters, meet the Environment Agency standards for water quality	16 rated as 'excellent', 6 as 'good', 1 as 'poor' and failing	18 rated as 'excellent', 5 as 'good', 0 of 23 rated as 'poor' and failing	20 rated as 'excellent', 3 as 'good', 0 as 'poor' and failing
How often there is a pollution incident (visible and localised) rated as high or medium severity by NIEA	The number of pollution incidents identified by NIEA as of high or medium severity	48 incidents	36 incidents	30 incidents

Respondents were presented with a series of choice cards and asked to say which options they preferred most and least. The following is an example of one of the 24 cards developed relating to sewerage services. 30 cards were also developed for water and 30 for

environmental service improvements. (Respondents were randomly shown 6 cards for each service block -18 cards in total).

<b>Sewerage Card 14</b>			
	<b>Current situation</b>	<b>Option B</b>	<b>Option C</b>
The number of properties experiencing sewage flooding inside their property boundary	on average 120 properties	on average 60 properties	on average 120 properties
The number of incidents of sewer flooding in highway and public areas	4,400 incidents	3,300 incidents	2,200 incidents
The number of sewer blockage complaints (by location) received relating to the public sewer system	11,600 locations	11,600 locations	9,600 locations
Average cost per household per annum	Increase by Pounds 0	Increase by Pounds 12	Increase by Pounds 3
<b>Ranking</b>			

At the end of the choice exercise respondents were asked if they would be willing to contribute (WTC) either £10, £20, £30 or £40 for the 'best' level of service improvement (all service attributes improved to +2 level). This is known as a discrete-choice contingent valuation question.

Statistical models of choice based on random utility<sup>11</sup> were estimated from the choice data collected and statistically significant marginal willingness to contribute measures were obtained for 21 levels of improvement out of 22, with the only insignificant estimate being the first level of improvement for water quality abstracted.

Individual responses to the discrete-choice contingent valuation question were used to derive two estimates of the average willingness to contribute for the delivery of a policy that would achieve all level 2 improvements.

- A first estimate was obtained using a conventional probit model and gives a value of **£24.55** (95% confidence interval £22.08 to £28.47).
- A second estimate obtained using bare minimum (very conservative) assumptions, gives a value of **£16.44** (95% confidence interval £15.46 to £17.43).

<sup>11</sup> Random utility models are based on a number of assumptions: 1- that choice is a discrete event; 2 - that the attraction or utility towards brand/service varies across individuals as a random variable; and 3 – the consumer chooses the brand/service with the highest utility.

Average value estimates for WTC are useful to determine total benefits for economic appraisal, which are obtained by multiplying the estimated average WTC by the number of beneficiaries. However, sometimes it is of interest to have an appreciation of majority support or the political acceptance for a proposed program of public spending. In this case the median WTC is more of interest because it defines the value of WTC above which fewer than 50 percent of the population would provide support. Such value was also estimated as being within £10 and £20, with an interpolated point estimate of **£15.92**.

The recalibrated marginal WTC estimates find that 9 of the 21 service factors having a value estimate lower than the £1 threshold, 10 service factor improvements have an estimated marginal value within the £1-£2 range; 1 service factor improvement, supply interruptions, has an estimated value within the £2-£3 range; with the highest improvement to internal flooding with a value estimate higher than £3, specifically £3.09.

**Table 1.2.2: Willingness to contribute to service improvements<sup>12</sup>**

Block	Attribute	Willingness to contribute	
		+1 service improvement	+2 service improvement
<b>Water</b>			
	Taste, smell and appearance	£0.75	£1.36 (+ £0.61)
	Supply interruptions	£0.99	£2.16 (+£1.17)
	Low water pressure	£1.19	£1.81 (+£0.62)
<b>Sewerage Services</b>			
	Internal flooding	£1.85	£3.09 (+£1.24)
	External flooding	£1.47	£1.84 (+£0.37)
	Sewerage blockages	£0.73	£1.34 (+£0.61)
	Pollution incidents	£1.12	£0.91 (-)
<b>Environmental services</b>			
	Coastal waters	£0.39	£0.54 (+£0.15)
	River waters	£0.99	£0.83 (-)
	Odour/noise	£1.02	£1.74 (+£0.72)
	Water abstraction	n.a.	£0.81

There are a number of points to note, when interpreting the WTC data:

- The point estimates of higher level improvements (+2) were for the most part higher than those of lower level improvements (+1). When this was not the case, the estimates were statistically indistinguishable, which means they have a large probability of being of

<sup>12</sup>As previously stated, it should be noted that in order to incorporate each of the service factors into the choice experiment, pollution incidents were administered in the environmental block, while abstraction was administered in the water block.

similar worth to respondents. This indicates that the respondents appreciated the relative scope of the improvements and valued them accordingly.

- The estimation of the WTC for best service scenarios gives a conservative value of £11,561,841/year according to the KMT estimate and of £17,265,401/year according to the probit estimate when the average WTC estimates are aggregated over the 703,275 households (as from 2011 census). (This does not include contribution from non-domestic customers).
- If the proposal to reach the highest level of proposed improvements was made available at little less than a contribution of £15.92 per household/year, it is estimated that it would be supported by at least 50 percent of NI households (351,638).

## Customer service

The final section of the survey reviewed customers' experiences of NI Water and perceptions of their customer service, alongside preferred methods for communication in a variety of scenarios (e.g. to report a critical service issue). It should be noted that this service attribute was not included in the choice experiment, therefore the following points relate to the findings gathered from the domestic survey and focus group discussions only.

Consumers were asked to consider what comprises good customer service and which communication channels they prefer for interaction with NI Water.

- The qualities of good customer service, as identified in the group discussions, included the following:
  - Confidence in the service that is being provided;
  - Easy identification or sign posting to the most appropriate person to deal with a query or issue;
  - Good communication; including two-way dialogue and listening to the customer;
  - Local knowledge, taking into account potential language barriers;
  - Personal service, with empathetic and interested staff;
  - Effective logging of the issue and follow-up calls;
  - Managing expectations; keeping the customer informed of the cause of the issue and likely time estimate as to when it will be resolved.
- Personal telephone communication is preferred for all types of interaction scenarios, and in particular, to report critical services issues. To ensure optimum customer service at times of critical issues, participants within the focus group discussions suggested that NI Water adopts the following:
  - Provide continual updates on the source of the issue, how it will be resolved and an indicative timeframe for resolution;
  - Prioritise the elderly and infirm;
  - Provide bottled water/sandbags etc as required;
  - Provide a dedicated contact service for internal flooding cases and ensure personnel are on hand immediately to call to affected households;
  - In the event of flooding advise householders on whether they can take any actions to minimise the extent of the problem.
- Respondents are prepared to be more flexible about the communication channel used for non-critical interaction. In these cases, email (22%), automated telephone (15%), text message (10%) and website (10%) are the most popular alternatives to the personal

telephone call. However, survey findings suggest that personal telephone remains the most popular method of communication for non-critical scenarios (with 85% indicating that they would prefer to use personal telephone in this instance).

- Younger respondents are more willing to use innovative methods such as social media or online applications. However there is reticence among older consumers to use any method other than telephone. This feedback was specifically highlighted by participants in the focus group discussions.

Further details of the research conducted with domestic customers is included in the Part 3 report.

# 1.3 Key findings from non-domestic customers

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This section provides an overview of the key quantitative findings from the survey with 512 non-domestic customers<sup>13</sup>. Qualitative information, as gathered during the focus groups, is integrated within each summary.

This section commences with an overview of organisations' experience of water and sewerage service delivery. The section consequently follows with a review of non-domestic customers' education needs, an overview of customers' views of NI Water; their prioritisations for service improvement; and opinions of customer service.

## 1.3.1 Experience of service delivery<sup>14</sup>

- Over two thirds of non-domestic customers (69%) have had no contact with NI Water nor experienced any issue with their water and sewerage services in the last year;
  - Those most likely to have had interaction are customers operating in the wholesale, retail, accommodation and food services sector (52% indicated that they have had contact or experienced an issue in the past 12 months).

### Water service issues

- 9% have experienced an interruption to their water supply in the previous 12 months, with 3% saying this has happened on more than one occasion;
  - Non-domestic customers in the production/manufacturing, construction and motor trade sector (13%) and public administration and other services sector (13%) are most likely to have experienced an interruption to their water supply, as are organisations located in flood-risk areas (17%) and those with high water usage (25%);
  - Non-domestic customers operating in the production/manufacturing, construction and motor trade industry (4%) were most likely to report that they have experienced interruptions to their water supply more than three times in the last twelve months.
  - Over half (58%) of those who experienced an interruption reported they had not received notice of the interruption.
- 6% have had issues with the colour, taste or smell of their tap water.

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<sup>13</sup> Percentages are based on interviews conducted with 512 respondents. This baseline is consistent throughout the summaries

<sup>14</sup> Please note, experience of service delivery refers to the previous 12 months.

## Sewerage service issues

- 4% have experienced a sewer blockage in the past 12 months, while a further 4% have had an ongoing issue with the smell or nuisance from sewerage network.
- 3% have had external flooding and 2% flooding of sewage inside buildings.

## Customer service issues

- One in twenty (5%) have had a billing or invoice issue, with this being more prevalent among larger organisations (16%) and those who operate more than one site (14%).

### 1.3.2 Consumer education

Non-domestic customers were asked the extent to which they feel informed in relation to a number of aspects of water and sewerage provision.

- Feedback from the survey identified some gaps in the knowledge of businesses:
  - Over two thirds (68%) indicated that they lack awareness of the allowances that are available to some businesses;
  - 45% said they have limited knowledge of how to use water more efficiently on their premises;
  - 45% are unsure of which items can and cannot be disposed of in the sewerage system; and
  - 45% lack awareness of their responsibility to check meters and assess for leakages.
- Large-sized businesses and those who receive high water bills were most likely to express awareness of water efficiency measures and of their responsibility to check for leakages;
- The qualitative findings revealed that some respondents are currently taking active measures to ensure water efficiency. These include assessing for leakages, reviewing meters, and monitoring consumption.
- There was an expressed desire among other non-domestic customers to be more water efficient, driven to some extent by a desire to reduce costs. They requested information from NI Water to inform them on how to be more efficient.

### 1.3.3 Views of NI Water

- Similarly to the domestic consumers, businesses tend not to think about their water and sewerage service unless they encounter a problem or have a query. While the quantitative survey revealed that non-domestic customers tend to have a neutral stance towards service, those who participated in the qualitative interviews stressed that water and sewerage services are vital to business operation.
- The quantitative survey findings highlight that the majority (55%) have no strong opinion of the services, while 27% stated that they would speak highly and 16% would be critical;
- Those most likely to be critical of the service are:
  - Organisations in the agricultural sector;
  - Those with more than one site;
  - Those located in rural areas; and
  - Those with high water usage (as indicated by a large water bill);
- 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.

- 58% agree that they are satisfied with the service provided and 13% disagree;
  - This study reveals a higher incidence of uncertainty, resulting in a lower satisfaction rating than in the survey conducted for the Consumer Council to inform the Long Term Water Strategy (78%).
- 51% said they have a favourable opinion of NI Water and 12% indicated that they do not;
  - This finding is similar to the results for the Long Term Water Strategy survey.
- Those in the agricultural sector, those with more than one site and those located in rural areas are most likely to be dissatisfied or have an unfavourable opinion of NI Water.
- 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 dealings 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.

### 1.3.4 Rating and prioritisation of service attributes

Non-domestic customers were asked to rate which aspects of service they consider require improvement. These are presented under the headings of water services, sewerage service and environment and pollution issues.

#### Water services

- Similarly to the domestic survey, businesses highlighted the importance of education and encouraging customers to be more water efficient. Over half (53%) requested improvements to ensure better water efficiency in the workplace;
- In terms of other water service improvements, the survey found that:
  - 32% requested improvements to the taste, smell and appearance of tap water;
  - 26% cited the importance of ensuring sufficient pressure; and
  - 14% thought there is a need to improve the number of water interruptions.
- The survey findings are somewhat contradictory to the in-depth interviews. In this instance, participants prioritised interruptions to supply. However, this can be explained to some extent by the impact that service interruptions have on the operation of an organisation. The qualitative feedback reveals that businesses would have to cease operation if they were without water. However, as the quantitative survey reveals, few businesses have experienced interruptions in the last year, and this is likely to have impacted on perceptions that improvements are required in this area of water service<sup>15</sup>.

#### Sewerage services

- The importance of consumer education was also reiterated when analysing perceived requirements for improvement in relation to sewerage service issues. Around one third

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<sup>15</sup> It should be noted that the survey results should be treated within the context of the time that they were undertaken. For example, if the survey had been conducted closer to the freeze/thaw incident, respondents may have prioritised interruption to supply higher than within the current study.

(34%) requested improvements to ensure customers are more aware of what to dispose of in the sewerage system. Indeed, similarly to domestic customers, 45% of businesses indicated that they have little or no awareness of what can or cannot be disposed of in the sewerage network.

- When considering other aspects of the sewerage service:
  - 31% felt there was a need to focus on improving services for those affected by sewer flooding;
  - Over one quarter felt improvement was required in relation to limiting the occurrence of flooding in visible external areas (26%);
  - A further quarter believed more could be done to reduce the number of sewer blockages (24%); and
  - One in five wanted improvement to limit the occurrence of sewer flooding inside properties (22%).
- The in-depth interviews revealed that respondents generally deem most aspects of sewerage service to be important to business operation. While very few have experienced any issues, interviewees recognised that any interruption to sewerage services would impact the running of their business and staff/customer welfare. Almost all indicated that they would have to cease business operation in the instance of a long-term disruption to sewage removal and disposal. Similarly, interviewees believe that internal flooding would be 'catastrophic' to business operation.
- Some interviewees have experienced sewer blockages on-site. Consistent with the feedback in relation to consumer education, interviewees largely attributed blockages to human negligence. They commented on the potential benefits of raising awareness and educating the public of what they can dispose of in the sewerage system.

## Environmental and pollution issues

- On the whole, survey findings show that businesses wish to see more improvements to the environment, compared to water and sewerage service aspects. In terms of environmental issues, survey respondents were most likely to say that improvement was required to enhance the quality of Northern Ireland's rivers (49%) and to improve NI Water's water and energy efficiency (49%).
  - A similar proportion (48%) requested improvements to enhance the quality of coastal bathing waters.
  - 42% want to see an improvement to reduce pollution from NI Water's operations and processes.
  - 44% would like steps taken to reduce smells and nuisance.
- Interestingly, within the in-depth interviews, businesses had less consideration for environmental aspects. While they recognised the importance of reducing pollution and improving the quality of coastal and river waters, these were deemed to be less important in terms of business trade.
- However, interviewees felt some investment should be made to tackle abstraction. It was believed that this could be improved through consumer education and encouragement to become more water efficient. Respondents also felt improvements to the infrastructure would result in less water wastage in the long-term.

## 1.3.5 Customer service

Consumers were asked to evaluate NI Water's customer service and billing arrangements. They were also asked to reflect on which communication channels they prefer for interaction with NI Water.

### Preferred methods of communication

- Similarly to the findings from domestic customers, businesses identified a clear preference for personal telephone contact in all interaction scenarios, regardless of criticality. In-depth interviews highlight the importance of speaking to a customer service representative and ensuring further communication, where necessary.
- Respondents are more willing to use alternative modes of communication to receive follow-up information or at times of high call demand. In such instances, email is felt to be sufficient.
- Businesses are much less willing to consider innovative forms of communication, such as social media or online applications.

### Rating of NI Water's customer service

- The quantitative survey revealed that around one third of non-domestic customers believe that improvements are required to the customer service experience provided by NI Water.
  - In-depth interviews provide some insight into businesses' concerns with NI Water's customer service, particularly in relation to making contact with the relevant personnel, when required, and ensuring consistency and follow up to complaints and queries;
  - Others felt that NI Water does not engage sufficiently frequently with businesses, nor do customer representatives have the authority to make decisions or respond to complaints. Many said that they would benefit from the appointment of an account manager.

### Rating of NI Water's billing arrangements

- 29% of survey respondents requested some improvement to billing and invoicing.
- In-depth interviews highlight perceived issues with NI Water's billing. They include the infrequency of billing; inaccuracy of charges; and difficulty understanding bills<sup>16</sup>.

## 1.3.6 Views on future service improvements

Having outlined their views of various services provided by NI Water, consumers were asked to evaluate the importance of each area as a whole. This section summarises the overall prioritisations of non-domestic consumers and reviews their willingness to pay extra for any service improvements.

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<sup>16</sup> It should be noted that the Consumer Council and NI Water have worked in conjunction in recent months to improve the billing format. They have used extensive research with non-domestic customers to trial proposed changes.

## Overall prioritisation of service areas

- Upon reviewing all aspects of service as a whole, respondents to the business survey tended to prioritise environmental aspects.
- Quantitative findings revealed that respondents prioritised the need to improve the quality of river water (20%). This was followed by:
  - Improving the appearance, smell and taste of tap water (18%);
  - Enhancing the quality of coastal bathing waters (17%);
  - Putting in place plans to assist those affected by sewer flooding (15%).
- Feedback is somewhat contradictory from the qualitative findings.
  - In-depth interviews highlighted the necessity of a continuous water supply for business operation; hence businesses tended to rank water services most highly in terms of priority. Within the in-depth interviews respondents also stated that an unplanned interruption would be especially detrimental to business operation. There was more tolerance for planned interruptions, yet participants reiterated the necessity of receiving adequate notification. All businesses interviewed at the qualitative stage stated that sufficient notification (on average 2 weeks) must be provided in the instance of a planned interruption to supply.
  - Although environmental considerations were deemed to be important, both for the welfare of wildlife and in terms of generating tourism trade, respondents were much less likely to deem environmental attributes to be critical to the running of their business.
- Therefore, similarly to the domestic findings, it is possible that some business respondents reacted on an 'emotional level' when prioritising environmental service attributes for improvement. This suggestion is somewhat corroborated upon reviewing interviewees' key actions for the investment strategy, where practical considerations came to the fore.

## Investment strategy

- In-depth interviews revealed that respondents' key actions in terms of investment were primarily in relation to billing. Suggestions included:
  - NI Water review the frequency of their bills to ensure better regularity;
  - Consider providing further guidance on how businesses can monitor their own water consumption;
  - Provide more information on allowances available to businesses.

## Willingness to pay extra

- On the whole non-domestic customers reported they would not be prepared to pay any extra to make improvements to NI Water's systems and services.
  - The vast majority (86%) said they would not be willing to pay any extra to improve the customer service experience.
  - 79% of non-domestic customers said they would not be willing to pay any extra to fund service improvements, such as drinking water quality, water pressure, interruptions to supply, sewer flooding etc.

- 78% indicated unwillingness to pay any extra to improve the way the system handles severe weather events.
- Urban businesses and those with more than one site were more inclined to express willingness to pay extra to fund all types of service improvements.

Further details of the research conducted with non-domestic customers is included in the Part 4 report.

## 1.4 Thematic analysis of research findings

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This section draws together and summarises the key findings, from both the qualitative and quantitative research, and across domestic and non-domestic customers. It is presented under the key themes of water services, sewerage services, environment and pollution, customer service and customer education.

The following tables summarises feedback gathered from domestic and non-domestic customers under each of these themes.

**Table 1.4.1: Summary of water services research findings**

	Taste, smell and appearance	Supply interruptions <sup>17</sup>	Low water pressure
<b>Current situation</b>	<ul style="list-style-type: none"> <li>3,857 households complained (Information provided by NI Water)</li> </ul>	<ul style="list-style-type: none"> <li>54,303 properties affected by unplanned interruptions lasting more than 3 hours, 7,023 &gt; 6 hours, 765 &gt;12 hours, 18 &gt; 24 hours</li> <li>58,162 properties affected by planned interruptions lasting more than 3 hours, 31,808 &gt; 6 hours, 1,250 &gt;12 hours, 0 &gt; 24 hours (Annual Information Return 2012)</li> </ul>	<ul style="list-style-type: none"> <li>1,748 properties below reference level (Annual Information Return 2012)</li> <li>4,251 households complain about low pressure (Information provided by NI Water)</li> </ul>
<b>Incidence of having a service issue</b>	<ul style="list-style-type: none"> <li>5% of domestic customers reported ongoing issues with the colour or smell of their tap water</li> <li>6% of non-domestic customers reported issues</li> </ul>	<ul style="list-style-type: none"> <li>Most commonly reported service issue by both types of respondents</li> <li>Reported by 11% of domestic respondents</li> <li>9% of non-domestic respondents</li> </ul>	<ul style="list-style-type: none"> <li>4% domestic customers and 3% non-domestic customers reported low water pressure in the last 12 months</li> </ul>
<b>Views on current level of provision</b>	<ul style="list-style-type: none"> <li>Qualitative findings revealed general satisfaction with current provision</li> <li>Taste, smell and appearance is a very important aspect of service provision to consumers and is regarded as a core function of NI Water</li> </ul>	<ul style="list-style-type: none"> <li>Continuous water supply is crucial</li> <li>Recognised as unavoidable in some instances</li> <li>When interruptions occur consumers stated that they wish to be kept updated of the cause of the problem and extent of interruption</li> </ul>	<ul style="list-style-type: none"> <li>'Annoyance' but liveable issue</li> <li>Recognised that continual low pressure can have a negative impact on both lifestyle and business operation</li> <li>More problematic for non-domestic customers and businesses operating in agriculture / manufacturing</li> </ul>
<b>Priority given to improving this aspect of service</b>	<ul style="list-style-type: none"> <li>50% of domestic request improvement and 24% prioritise in top 3</li> <li>32% of non-domestic request improvement and 18% prioritise in top 3</li> </ul>	<ul style="list-style-type: none"> <li>36% of domestic request improvement and 10% prioritise in top 3</li> <li>14% of non-domestic request improvement and 8% prioritise in top 3</li> </ul>	<ul style="list-style-type: none"> <li>45% of domestic request improvement and 15% prioritise in top 3</li> <li>26% of non-domestic request improvement and 12% prioritise in top 3</li> </ul>
<b>Willingness to contribute to improving this aspect of service</b>	<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>
<b>Comments / observations</b>	<ul style="list-style-type: none"> <li>Largely meeting customer needs, however there may be pockets of provision that do not currently meet customer expectations.</li> </ul>	<ul style="list-style-type: none"> <li>Crucial aspect of service, which customers are willing to pay to improve</li> <li>Focus required on improving the way interruptions are communicated/managed</li> </ul>	<ul style="list-style-type: none"> <li>Customers appear relatively satisfied with current service</li> <li>However an important aspect of provision</li> </ul>

<sup>17</sup> It should be noted that supply interruptions, as highlighted in incidence statistics, also include those caused by 3<sup>rd</sup> parties and over runs of planned interruptions

**Table 1.4.2: Summary of sewerage services research findings**

	Internal flooding	External flooding	Pollution incidents	Sewer blockages
<b>Current situation</b>	<ul style="list-style-type: none"> <li>79 properties affected by internal flooding (Annual Information Return 2012)</li> <li>0.15 in every 1,000 affected (information provided by NI Water)</li> </ul>	<ul style="list-style-type: none"> <li>3,710 incidents of external flooding (Annual Information Return 2012)</li> </ul>	<ul style="list-style-type: none"> <li>97.5% of waste water discharge treated meets EU standards (information provided by NI Water)</li> <li>22% of current river water quality classed as good or very good (information provided by NI Environment Agency, 2013)</li> </ul>	<ul style="list-style-type: none"> <li>2,693 flooding incidents caused by sewer blockages (Annual Information Return 2012)</li> <li>18,000 complaints per year (information provided by NI Water)</li> </ul>
<b>Incidence of having a service issue</b>	<ul style="list-style-type: none"> <li>&lt;1% of households and 2% of businesses affected by internal flooding</li> </ul>	<ul style="list-style-type: none"> <li>2% of households</li> <li>3% of businesses affected by external flooding</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>4% of customers (domestic and non-domestic) have been affected by sewer blockages</li> </ul>
<b>Views on current level of provision</b>	<ul style="list-style-type: none"> <li>Improvements could be made to provide better 'aftercare' and assisting those affected by internal flooding</li> <li>NIW should ensure active communication/immediate response for those affected</li> </ul>	<ul style="list-style-type: none"> <li>Concerns about capacity in the sewerage network</li> <li>Which agency is responsible? Unclear who to contact in the instance of external flooding</li> </ul>	<ul style="list-style-type: none"> <li>100% of waste water discharge should meet EU standards; 97.5% is not good enough</li> </ul>	<ul style="list-style-type: none"> <li>Largely perceived to be caused by human negligence and lack of awareness of what can/cannot be disposed of in the sewerage system</li> </ul>
<b>Priority given to improving this aspect of service</b>	<ul style="list-style-type: none"> <li>51% of domestic request improvement to limit the occurrence of internal flooding and 16% prioritise in top 3;</li> <li>70% of domestic request improvement to assist affected customers and 30% prioritise this in top 3;</li> <li>22% of non-domestic request improvement to limit the occurrence and 9% prioritise in top 3;</li> <li>31% of non-domestic request improvement to assist affected customers and 15% prioritise this in top 3</li> </ul>	<ul style="list-style-type: none"> <li>56% of domestic request improvement and 16% prioritise in top 3</li> <li>26% of non-domestic request improvement and 14% prioritise in top 3</li> </ul>	<ul style="list-style-type: none"> <li>60% of domestic request improvement and 15% prioritise in top 3</li> <li>42% of non-domestic request improvement and 3% prioritise in top 3</li> </ul>	<ul style="list-style-type: none"> <li>51% of domestic request improvement and 20% prioritise in top 3</li> <li>24% of non-domestic request improvement and 7% prioritise in top 3</li> </ul>
<b>Willingness to contribute to improving this aspect of service</b>	<p>£1.85 (+1 service improvements) £3.09 (+2 service improvements)</p>	<p>£1.47 (+1 service improvements) £1.84 (+2 service improvements)</p>	<p>£1.12 (+1 service improvements) £0.91 (+2 service improvements)</p>	<p>£0.73 (+1 service improvements) £1.34 (+2 service improvements)</p>
<b>Comments/ observations</b>	<ul style="list-style-type: none"> <li>Keen willingness to place investment in this area</li> </ul>	<ul style="list-style-type: none"> <li>Customers prioritise highly. Strategically they believe that if this aspect of service is addressed then it will also reduce internal flooding</li> </ul>	<ul style="list-style-type: none"> <li>While emotionally respondents want to improve the number of pollution incidents, this is not something that they are particularly willing to invest in</li> </ul>	<ul style="list-style-type: none"> <li>Few have been affected by sewer blockages and therefore place a relatively moderate level of investment in this area</li> </ul>

**Table 1.4.3: Summary of environment and pollution research findings**

	Quality of coastal waters	Quality of river waters	Odour and noise	Water abstraction
<b>Current situation</b>	<ul style="list-style-type: none"> <li>16/23 bathing waters were rated as excellent, 6 as good and 1 as poor (information provided by NI Water)</li> </ul>	<ul style="list-style-type: none"> <li>22% of river water quality is currently classed as good or very good (information provided by NI Environment Agency, 2013)</li> </ul>	<ul style="list-style-type: none"> <li>793 complaints about odour per year (information provided by NI Water)</li> <li>246 complaints about noise per year (information provided by NI Water)</li> </ul>	<ul style="list-style-type: none"> <li>2,286 household supply pipes repaired (Annual Information Return 2012)</li> </ul>
<b>Incidence of having a service issue</b>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
<b>Views on current level of provision</b>	<ul style="list-style-type: none"> <li>Perception that quality of beaches is satisfactory, however could be improved</li> <li>All beaches should be rated as excellent</li> <li>Some concerns about sewerage on beaches</li> <li>Important for tourism and income</li> </ul>	<ul style="list-style-type: none"> <li>Dissatisfied with current quality; 22% is not good enough and the quality of river water should be significantly improved</li> </ul>	<ul style="list-style-type: none"> <li>Little / no experience of odour and noise from NI Water processes</li> <li>Recognised as 'unavoidable'</li> </ul>	<ul style="list-style-type: none"> <li>Believe more could be done to ensure better water efficiency and reduce abstraction levels</li> <li>May be tackled via consumer education, innovation (e.g. creation of dams/utilising natural sources etc).</li> </ul>
<b>Priority given to improving this aspect of service</b>	<ul style="list-style-type: none"> <li>78% of domestic request improvement and 26% prioritise in top 3</li> <li>48% of non-domestic request improvement and 17% prioritise in top 3</li> </ul>	<ul style="list-style-type: none"> <li>78% of domestic request improvement and 25% prioritise in top 3</li> <li>49% of non-domestic request improvement and 20% prioritise in top 3</li> </ul>	<ul style="list-style-type: none"> <li>58% of domestic request improvement and 7% prioritise in top 3</li> <li>44% of non-domestic request improvement and 4% prioritise in top 3</li> </ul>	<ul style="list-style-type: none"> <li>71% of domestic request improvement and 13% prioritise improving NIW efficiency in top 3</li> <li>49% of non-domestic request improvement and 7% prioritise improving NIW efficiency in top 3, while 2% prioritised reducing leakages</li> </ul>
<b>Willingness to contribute to improving this aspect of service</b>	<p>£0.39 (+1 service improvements) £0.54 (+2 service improvements)</p>	<p>£0.99 (+1 service improvements) £0.83 (+2 service improvements)</p>	<p>£1.02 (+1 service improvements) £1.74 (+2 service improvements)</p>	<p>n.a. (+1 service improvements) £0.81 (+2 service improvements)</p>
<b>Comments / observations</b>	<ul style="list-style-type: none"> <li>Current statistics viewed as good, but personal experience for some is viewed as poor</li> <li>The results display an emotional desire for improvement but a lack of willingness to contribute to the improvement</li> <li>Customers are aware of the wider impact on business and tourism</li> </ul>	<ul style="list-style-type: none"> <li>Current statistics viewed as poor</li> <li>The results display an emotional desire for improvement but a lack of willingness to contribute to the improvement</li> <li>Customers believe that if river quality is improved then this will have a knock on effect on coastal waters</li> </ul>	<ul style="list-style-type: none"> <li>Odour and noise are recognised as somewhat unavoidable.</li> <li>Although the survey indicated low priority, willingness to contribute to improving the current service is higher than expected</li> </ul>	<ul style="list-style-type: none"> <li>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</li> </ul>

The following table summarises feedback gathered from domestic and non-domestic customers in relation to customer service. As previously stated, WTC for customer service attributes was not assessed in the choice experiment.

**Table 1.4.4: Summary of customer service research findings**

<b>Current situation</b>	<ul style="list-style-type: none"> <li>• 92,832 billing contacts of which 99.97% are dealt with within 5 working days (Annual Information Return 2012)</li> <li>• 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"> <li>○ 1,081 about charges and bills</li> <li>○ 408 about water services</li> <li>○ 329 about sewerage services</li> <li>○ 86 about metering</li> <li>○ 436 about other activities</li> </ul> </li> <li>• 36,728 calls to switchboard of which 1,975 were abandoned (99.15%)</li> <li>• NI Water received a customer satisfaction rating of 4.57 out of 5</li> <li>• 1,990 customers on the special assistance register</li> </ul>
<b>Incidence of having a service issue</b>	<ul style="list-style-type: none"> <li>• 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</li> <li>• 5% of businesses reported a billing issue.</li> <li>• 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</li> <li>• 3% of businesses have made a formal complaint</li> </ul>
<b>Views on current level of provision</b>	<ul style="list-style-type: none"> <li>• 80% of domestic customers are satisfied with the services provided by NI Water and 7% are dissatisfied</li> <li>• 58% of non-domestic customers are satisfied and 13% are dissatisfied</li> <li>• 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</li> <li>• In-depth interviews revealed some concerns amongst businesses about billing/invoicing, specifically in relation to accuracy and frequency of billing</li> </ul>
<b>Priority given to improving this aspect of service</b>	<ul style="list-style-type: none"> <li>• 9% of non-domestic prioritise 'improving the customer service experience' in top 3</li> <li>• 30% of non-domestic believe improvements are required to customer service. In relation to billing, 29% requested improvements to billing/invoicing, while 12% place this in their top 3 priorities</li> </ul>
<b>Willingness to pay extra to improve this aspect of service</b>	<ul style="list-style-type: none"> <li>• 10% of businesses indicated they would be willing to pay extra</li> </ul>
<b>Comments / observations</b>	<ul style="list-style-type: none"> <li>• Few have reason to contact NIW</li> <li>• Both domestic and non-domestic preferred personal telephone interaction</li> </ul>

The following table summarises feedback gathered from domestic and non-domestic customers in relation to consumer education.

**Table 1.4.5: Summary of consumer education research findings**

	How to save water	What can be put into the sewerage system
<b>Current situation</b>	<ul style="list-style-type: none"> <li>• 2,946 cistern devices distributed to households</li> <li>• 4,489 water audit packs distributed to households</li> <li>• A variety of water efficiency information leaflets and materials produced including shower timers/magnets etc</li> </ul>	<ul style="list-style-type: none"> <li>• Advertising and promotional materials developed for the 'Bag it And Bin it campaign'.</li> </ul>
<b>Level of knowledge</b>	<ul style="list-style-type: none"> <li>• 54% of householders and 45% of businesses felt they lack knowledge of how to use water efficiently</li> </ul>	<ul style="list-style-type: none"> <li>• 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</li> </ul>
<b>Views on current level of provision</b>	<ul style="list-style-type: none"> <li>• No awareness of water efficiency leaflets; educational materials available to enable better efficiency</li> <li>• Perception that increased knowledge of water efficiency procedures may impact positively on abstraction levels</li> </ul>	<ul style="list-style-type: none"> <li>• Limited awareness during focus groups of the 'Bag It and Bin It' campaign</li> <li>• There would be merit in further promotion and ensuring greater exposure to the campaign</li> </ul>
<b>Priority given to improving this aspect of service</b>	<ul style="list-style-type: none"> <li>• 76% of domestic request improvement and 32% prioritise in top 3</li> <li>• 53% of non-domestic request better efficiency in the workplace and 11% of non-domestic prioritise in top 3</li> </ul>	<ul style="list-style-type: none"> <li>• 79% of domestic request improvement and 21% prioritise in top 3</li> <li>• 34% of non-domestic request improvement and 8% prioritise in top 3</li> </ul>
<b>Comments / observations</b>	<ul style="list-style-type: none"> <li>• There is a positive 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.</li> </ul>	

## 1.5 Discussion and conclusions

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In this section we draw on the main findings from the customer consultation, to highlight the key strategic messages that were highlighted in the research. We do not make recommendations for service investment, rather we emphasise the principles that customers would like acknowledged when decisions are being made on service improvements.

Information is structured around the key messages identified throughout the research. These include: customer satisfaction; understanding of NI Water; prioritisations to service improvement; and consumer education.

### 1.5.1 Customer service and satisfaction

During the focus group discussions it was apparent that most domestic consumers have few issues with the current service. They simply expect the service to work. Provided it does, consumers rarely think about water and sewerage services or how they are provided. Consumers expect their water and sewerage service to be resilient.

When customers contact NI Water it is typically because they have an issue with service delivery. This means that the interaction starts from a negative position. The challenge for NI Water is to deal effectively and efficiently with the situation to return the customer to a neutral or positive outlook.

The aspects of customer service that are valued include:

- Understanding the issue and managing expectations. Customers want to know:
  - The cause of the issue,
  - An estimate of how long it will take to be resolved, and
  - If anything changes, effective communication about those changes.
- Customers want two-way communication. They want to feel that:
  - They are being listened to; and
  - That those they speak with have the authority to make decisions and follow-up on queries or issues.

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 on the instance of service failure. Therefore business consumers tend to have higher expectations of service delivery.

However, for non-domestic customers, the incidence of experiencing an issue with the delivery of water and sewerage services is low. And yet, the emotive language used by interviewees demonstrates how vital these services are to the continuity of their operations. Respondents commented at the qualitative stage of research that on the occasion of non-delivery, they desire empathy, understanding, and collaboration to ensure the effective and speedy resolution of the issue that is negatively impacting their business. Non-domestic customers view collaboration as having pro-active contact from NI Water so that they can

put in place proportional contingency arrangements for their business during the service issue.

In the main, customers have a degree of tolerance for the maintenance operations of NI Water. They understand that there may be occasions when there are interruptions to supply to allow the network to be upgraded and are tolerant of these interruptions, provided they are addressed expediently. 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). Feedback suggests that 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.

## Contact channels

Without exception, consumers cited a clear preference for personal telephone contact in a variety of scenarios, and in particular as a means to make first contact with NI Water. At the qualitative stage of research, consumers stated that they wish to engage with a representative who is:

- Informed;
- Empathetic;
- Has local knowledge;
- Can make decisions or direct the customer to someone who is in a position to do so;
- Ensures that the customer's information is logged to enable tracking and follow up;
- Acts as a consistent point of contact, in the instance of repeat communications.

There was some willingness to use innovative technologies to make contact with NI Water, however this sentiment was only expressed amongst domestic customers, and primarily those within the younger age bracket. Businesses expressed little or no desire to use social media or online applications to communicate with NI Water; rather they prefer traditional methods, including personal telephone contact or email at times of high demand or for follow up in less critical instances.

## 1.5.2 Rating and prioritisation of service attributes

The research revealed that most consumers are satisfied with the service provided most of the time. The majority of consumers interviewed have not directly experienced problems with their services in recent times. 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 issue, the environment was the area most consumers identified as in need of improvement. It is possible that this reflected surprise over the current status of river water quality (22% of which is currently rated as good or very good)<sup>18</sup>.

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<sup>18</sup> Source: Northern Ireland Environment Agency, 2013

The qualitative research, in conjunction with incidence statistics, shows that when issues occur, they tend to be localised and restricted to defined areas. The findings revealed that consumers expect local ‘hot-spots’ to be addressed.

Although 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. The qualitative research identified the need to focus on issues which have a direct service impact on the consumer, particularly for those within ‘hot-spot’ areas. A clear focus on hot-spot resolution may enable NI Water to address residual issues to improve consumer experience to a more uniform level of service provision.

Findings reveal that consumers would prefer long-term solutions over short-term ‘fixes’. In focus group discussions consumers recognised the integrated benefits of investing in water, sewerage and environmental services. Consumers perceived that improved network would result in reduced leakages and increased water pressure, as well as a smaller number of sewer blockages and reduced risk of flooding.

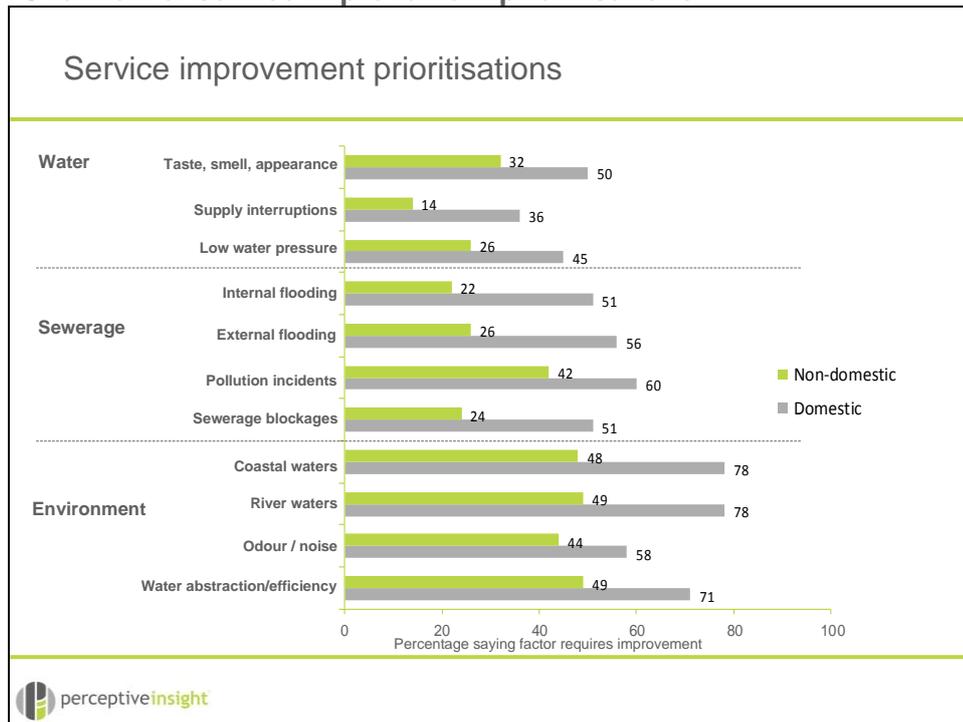
While environmental attributes were prioritised most highly in terms of need for improvement, enhancements in these areas received the lowest WTC scores. Consumers believe NI Water has a corporate responsibility to improve environmental aspects of service. However, consumers lack the inclination to contribute directly towards improving environmental issues as these service areas have less of an immediate impact on the household.

In the following paragraphs we report the prioritisations given to the enhancement of service delivery and consumers’ WTC for this service improvement.

## Service improvement prioritisations

Figure 1.5.1 illustrates the percentage of consumers, both domestic and non-domestic, who requested improvements in each aspect of service. Domestic consumers were more likely to request improvement in all areas of service, with the highest percentages focused in the environmental area, followed by sewerage and then water.

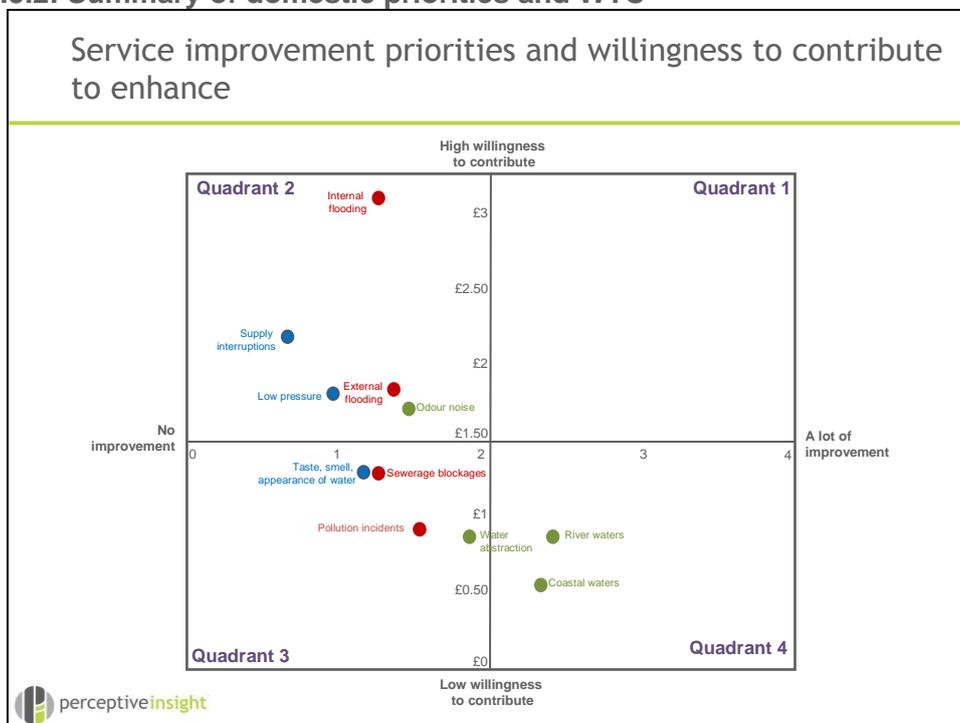
Figure 1.5.1: Overview of service improvement prioritisations



### Willingness to contribute towards service improvements

Figure 1.5.1 does not take into account the willingness of consumers to contribute extra to improve service delivery. This is addressed in Figure 1.5.2, which displays improvement priorities against the consumers' WTC extra to improve the service.

Figure 1.5.2: Summary of domestic priorities and WTC



## Quadrant 1

The first quadrant depicts service factors deemed to require a lot of improvement and which were also valued highly in the choice experiment. Typically, aspects of service that fall within this quadrant are believed to require prioritised attention.

As reflected in the introductory section, there are no attributes in the first quadrant, and thus no areas deemed to be falling well short of customer expectations and requiring widespread remedial attention. This corroborates the viewpoint provided during focus group discussions that domestic consumers have experienced few water and sewerage issues in the last 12 months and are therefore broadly satisfied with the current level of service.

## Quadrant 2

This segment of the chart depicts the areas of service which were amongst the highest valued attributes in the choice experiment, yet received relatively low scores in terms of need for improvement.

Within the current study, internal/external sewer flooding, supply interruptions, low pressure, and odour/noise fall within this quadrant. The qualitative research revealed that consumers deem these aspects of service to be vital to lifestyle and business operation and therefore are willing to contribute financially to ensure optimum service. However as consumers are typically satisfied with the current level of service, they did not request vast improvements in these areas. Targeted investment should be made to improve these areas further.

## Quadrant 3

This segment of the chart displays service attributes that received a low improvement score and a low WTC rating.

Service attributes that fall within this quadrant include sewer blockages; taste/smell/appearance; and pollution incidents. These are areas which should be investigated to identify improvements which can be delivered at low cost and attempt to combat 'hot-spot' areas, to ensure uniformity in service provision across Northern Ireland.

## Quadrant 4

The fourth quadrant represents service attributes which are deemed to require high levels of improvement, however received the lowest WTC scores in the choice experiment (with implied values less than £1).

Environmental attributes are predominately situated in this quadrant; while they were prioritised most highly in terms of need for improvement, enhancements in these areas received the lowest WTC scores. Consumers believe NI Water has a corporate responsibility to improve environmental aspects of service. However, consumers lack the inclination to contribute directly towards improving environmental issues as these service areas have less of an immediate impact on the household.

## 1.5.3 Customer education

### Water wastage and efficiency

Throughout the research, feedback revealed a general lack of awareness of the services provided by NI Water, particularly in terms of the 'scale' of water and sewerage delivery in Northern Ireland, e.g. individual water usage on a daily basis. Few consumers have given any consideration to where their water comes from, and therefore they generally have not thought about the impacts of water wastage. This was much more evident within the domestic setting, where consumers do not have monetary concerns about water usage. Some domestic consumers noted that if they were billed directly for their water and sewerage service they might have different priorities and expectations.

The findings illustrate a high level of willingness to reduce water wastage and ensure better efficiency, both in the home and workplace. Quantitative findings revealed that both groups of consumers would like to see vast improvements in terms of encouraging better water efficiency. However, it is evident that customers perceive water efficiency to be a two-way process, both in terms of communication and benefits. Qualitative feedback highlighted a desire amongst consumers to learn how they can help NI Water by using less water and therefore reducing the extent to which NI Water has to source and abstract water. Customers view improved water efficiency as a means of reducing costs for NI Water and consumers alike, as well as a cost effective way of helping the environment. While it is apparent that NI Water has produced a range of information materials to educate consumers on how they can be more water efficient, it seems that many consumers are unaware of these materials or have 'missed them'. Therefore, there may be merit in reviewing marketing lines and assessing the best way to reach the target audience.

### Educating consumers about accurate sewerage disposal

Findings reveal a general lack of knowledge among consumers on what can and cannot be disposed of in the sewer system. Qualitative feedback identified the assumption among participants that most people are knowledgeable about waste disposal and that they merely lack inclination to dispose of waste appropriately. However quantitative findings show that around two fifths of all respondents feel uninformed about what should and should not be disposed of in the sewer system.

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. Many respondents were of the perception that investment in this area could reduce sewer blockages and thus reduce flooding incidents.

### Reducing costs for non-domestic customers

Perhaps not surprisingly in the current economic climate, overhead costs are a large issue for many businesses. In terms of knowledge and understanding, the research reveals that non-domestic customers (as well as domestic customers) believe that they are generally uninformed about the ways in which they can reduce water usage and therefore lower water bills. This is evidenced to some extent by the many businesses that are unaware of their responsibility to read meters and assess for leakages. There is also a lack of knowledge

and a desire among businesses to be informed about water and sewerage allowances, and how these can be claimed.

In order to improve businesses' knowledge and interaction with NI Water, and ultimately opinion of the organisation, non-domestic customers may benefit from improved account management activities. Qualitative research highlighted a keen desire amongst businesses to have an appointed account manager to ensure better resolution of billing concerns and to respond to general queries. We recognise that NI Water has account managers in place for some clients; a review of their activities as part of a wider review of company interactions with customer may help to highlight a more effective/tailored approach that addresses the issues that businesses have identified.

## 1.5.4 Conclusion

Consumers expect their water and sewerage services to work reliably and be resilient. Most consumers are satisfied with the service received most of the time and there is no one area identified as needing significant improvement. When things go wrong, consumers expect the problem to be fixed quickly and to be kept informed of progress. Consumers are willing to contribute to service improvement and a key priority is that local service issues and hot spots should be identified and targeted improvements made. Consumers expect strategic improvements rather than short term fixes. Consumers want to know more about how to use water more efficiently and dispose of waste responsibly and look to NI Water to provide this information. It is highly probable that this would encourage consumers to be more responsible.