



Participatory water tariff review: the market research perspective

First European Forum

On regulation of water services (EFRWS)

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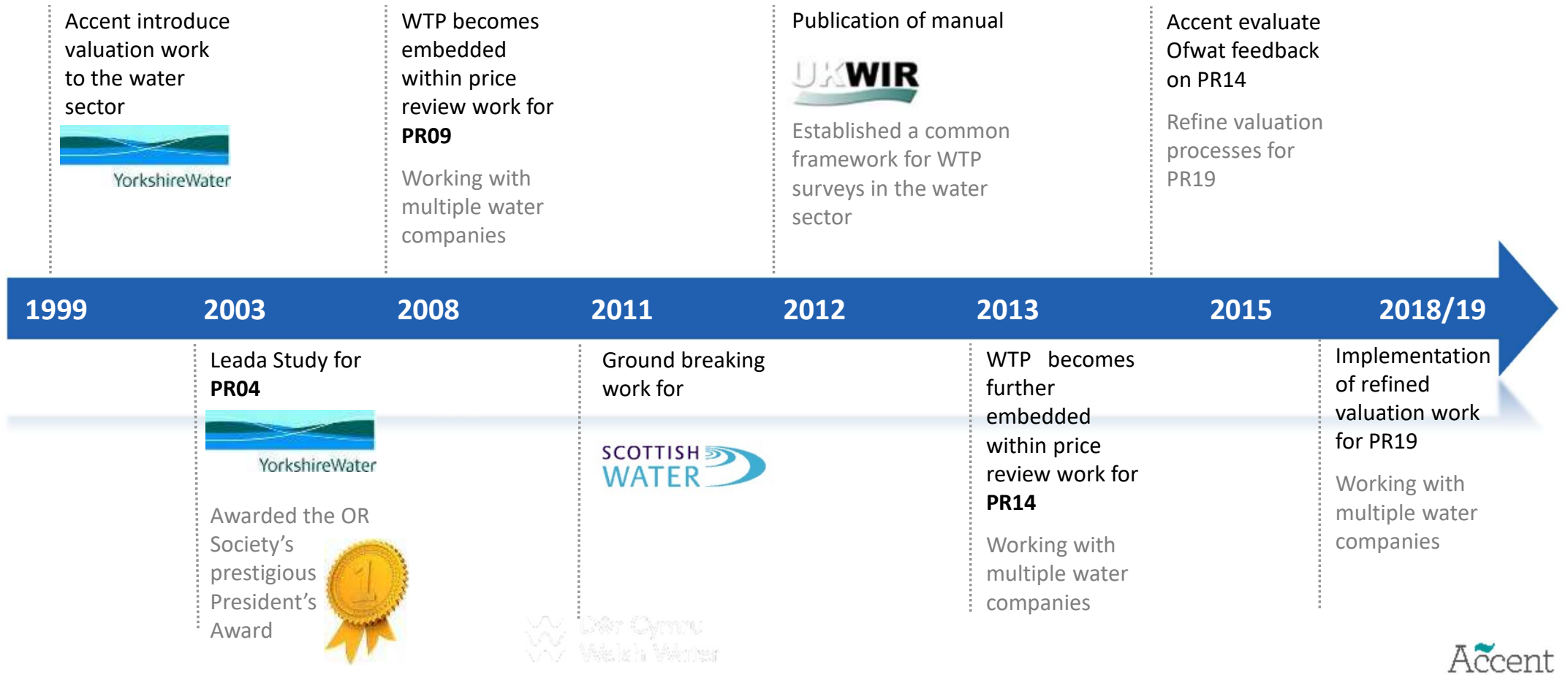
Accent: Experts in researching the water sector since 1988

In last 10 years:

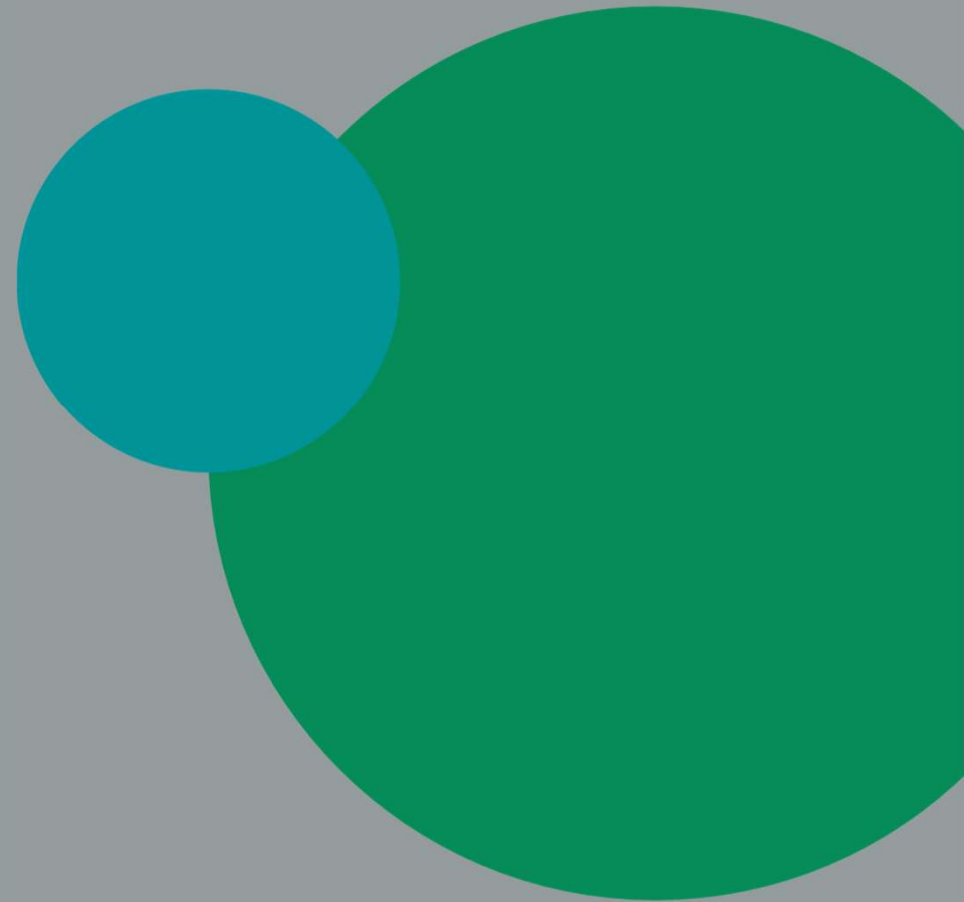
- 207 projects
- Including extensive work in:



Accent: Instrumental in the development of valuation work/customer engagement

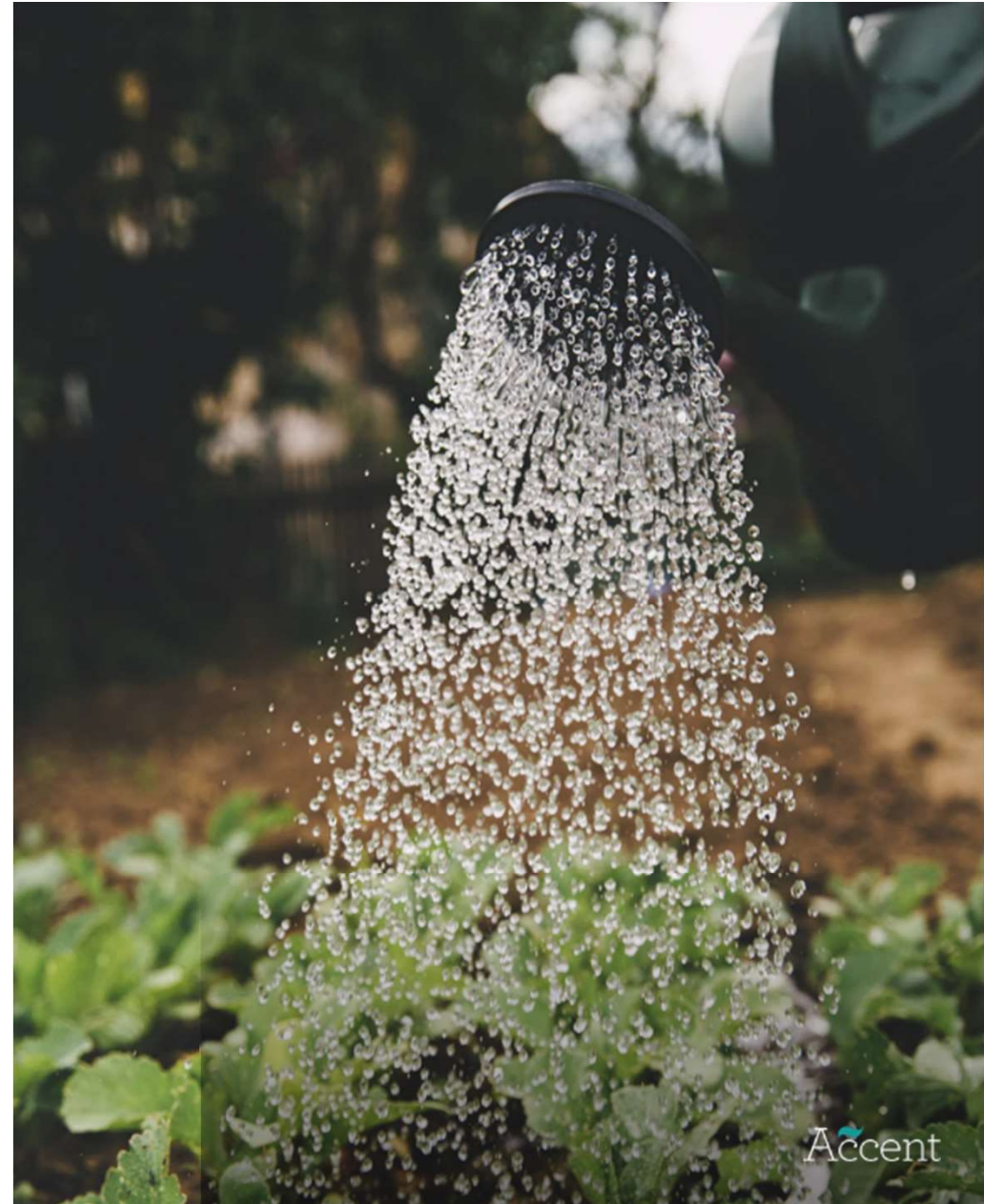


What does good engagement look like?



The challenges

- **Context:** binary, distant relationship with water company
- **Subject:** challenging for customers:
 - Water!
 - Performance of the sector
 - Assessing & responding to risk
- **Regulator:** customer comprehension, engagement (gamification), moving on from PR14
- **Customer Challenge Groups:** robust, engaging, meaningful



It should be based on two pillars

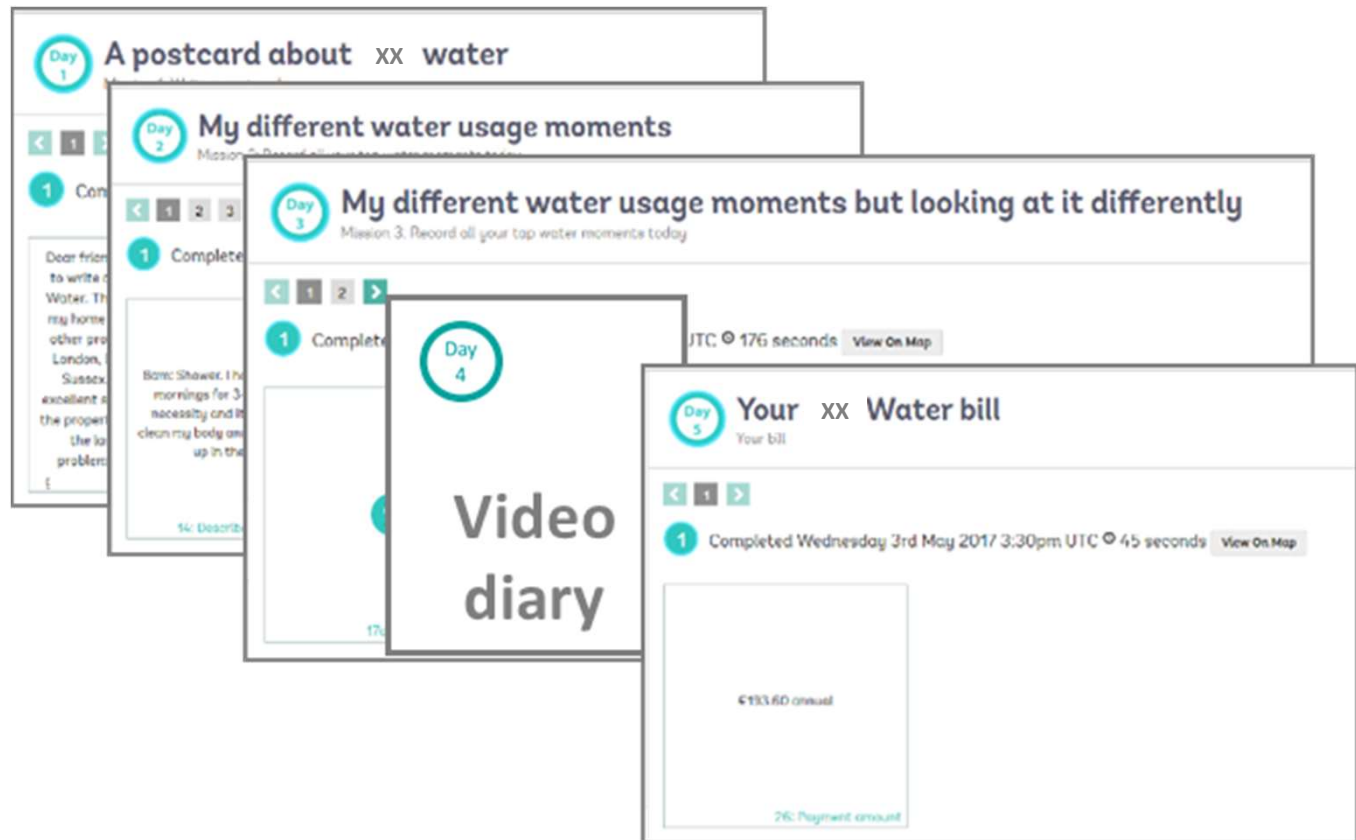
- Opportunity for customers to contribute fresh ideas from the start
- Robust and engaging prioritisation, willingness to pay and acceptability testing of business plans



Pillar one: to enable fresh ideas requires extensive pre-tasking

Example – online pre-task app:

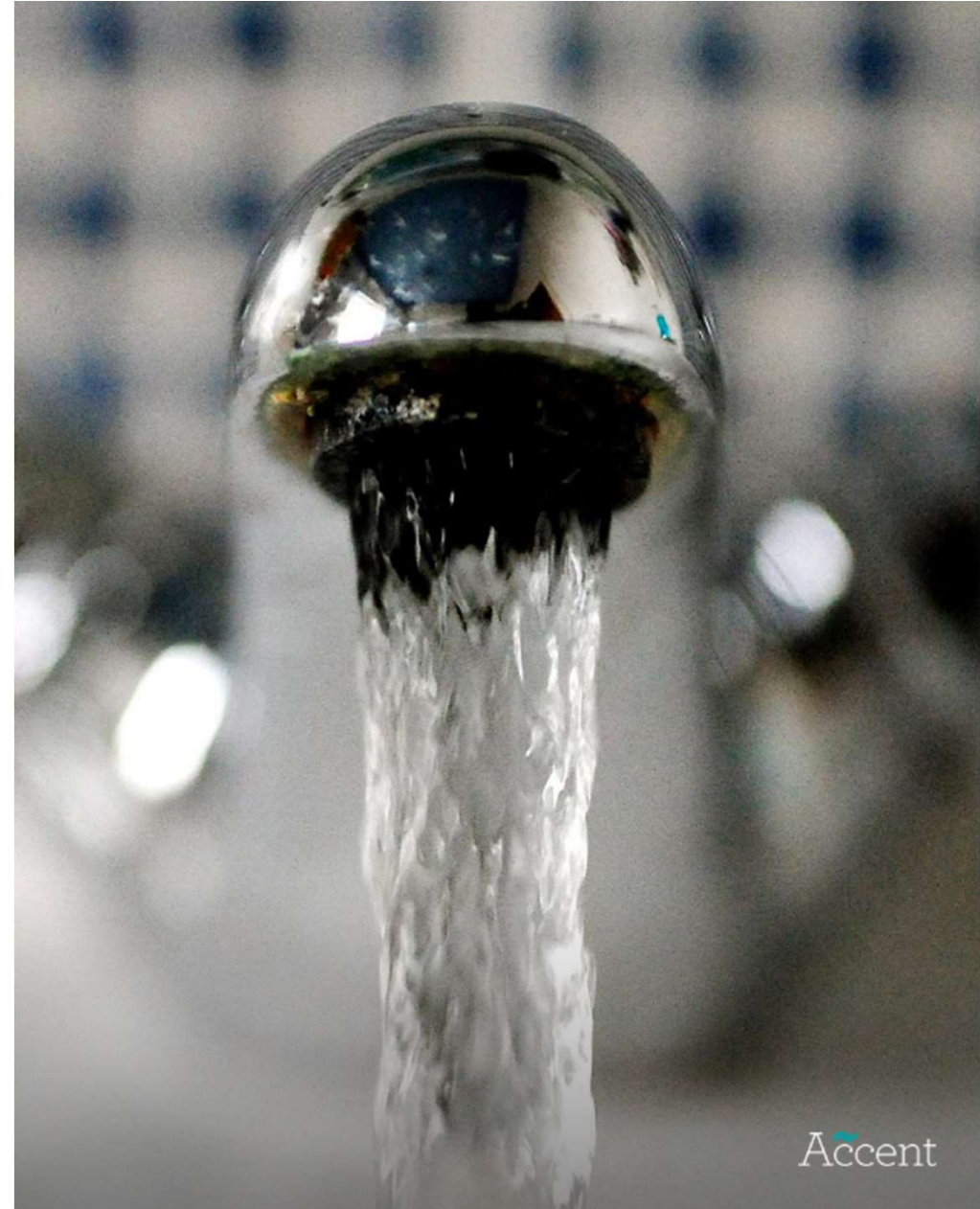
- Providing a mechanism to allow participants to engage in a low interest sector
- Helping them to re-evaluate the subject area



Pillar two

To obtain estimates of customers' WTP and acceptability levels for service level changes for:

- Deriving cost-benefit appraisals
- Setting performance commitment levels
- Defining outcome delivery incentive rates
- Exploring acceptability







Earlier versions of WTP design struggled to engage

- In the stated preference design
- How presented to customers

Which of the following strategies would you prefer Northumbrian Water to pursue?

| | Alternative 1 | Alternative 2 |
|--|--|--|
| Discoloured Water | 5,000 complaints each year | 3,000 complaints each year |
| Taste and Odour of Drinking Water | 2,000 complaints each year | 1,500 complaints each year |
| Low Pressure | 270 out of 1.2 million properties | 135 out of 1.2 million properties |
| Loss of Supply | 1,600 out of 1.2 million properties | 1,200 out of 1.2 million properties |
| Internal Sewer Flooding | 250 out of 1.2 million properties | 380 out of 1.2 million properties |
| External Sewer Flooding | 1,800 out of 1.2 million properties | 2,400 out of 1.2 million properties |
| Leakage (per property) | 130 litres/day | 150 litres/day |
| Climate Change (reduction in emissions) | 20% reduction | 0% reduction |
| Reducing Sewage Litter | 800 out of 1,500 outflows screened | 800 out of 1,500 outflows screened |
| Bathing Water Quality (passing highest standard) | 29 out of 33 bathing waters | 29 out of 33 bathing waters |
| River Water Quality (not capable of supporting wildlife) | 17% of water returned | 17% of water returned |
| Cost (change to annual water bill before inflation) | Increase by £26 per year | Increase by £16 per year |
| Choice (tick preferred option) | <input type="checkbox"/> | <input type="checkbox"/> |

CHOICE CARD W1 Which option would you prefer?

| | OPTION A |
|--|--|
| DISCOLOURED WATER lasting for a week at a time. The chance that this happens at your property in any one year. |  1 in 500 |
| SHORT-TERM INTERRUPTIONS lasting 3 to 6 hours on average. The chance that this happens at your property in any one year. |  1 in 25 |
| LONG-TERM INTERRUPTIONS lasting more than 24 hours The chance that this happens at your property in any one year. |  1 in 3000 |
| HOSEPIPE BANS from May to September. The chance that this happens at your property in any one year. |  1 in 20 |
| Which option do you prefer? | <input type="checkbox"/> |

Lessons over time

- Needed to be more engaging
- Care with risk presentation
- Triangulation
- Need for increased segmentation



Modern era - MaxDiff

DISCOLOURED WATER at your property for a week

SHORT-TERM INTERRUPTION to your water supply lasting 6 to 12 hours on average.

SEWER FLOODING IN A NEARBY PUBLIC AREA

PERSISTENT LOW WATER PRESSURE at your property

None of these would have an impact on me

Most impact

Least impact

The grey shading indicates the worst level

| | Option B | Option C |
|--|--|--|
| Service incidents at customers' properties (number affected per year) | | |
| • SEWER FLOODING INSIDE CUSTOMERS' PROPERTIES. The number of properties where this happens in any given year in the area is 223 million. | 223 properties | 223 properties |
| • ODOUR FROM SEWAGE WORKS. The number of properties where this happens in any given year in the area is 2,150 million. | 2,150 properties | 2,150 properties |
| Other service measures | | |
| • SEWER FLOODING OUTSIDE PROPERTIES & IN PUBLIC AREAS. The number of properties where this happens in any given year in the area is 6,523 million. | 6,523 properties | 6,523 properties |
| Environmental measures | | |
| • SIGNIFICANT POLLUTION Number of significant pollution incidents in Welsh Water's service area each year. | 2 incidents | 2 incidents |
| • MINOR POLLUTION Number of minor pollution incidents in Welsh Water's service area each year. | 110 incidents | 110 incidents |
| • RIVER WATER QUALITY. The percentage of river miles that are at "Good" quality. | 36% | 40% |
| • COASTAL BATHING WATER QUALITY. Percentage of designated beaches in Welsh Water in each water quality category. | | |
| THE CHANGE IN YOUR ANNUAL WATER AND SEWERAGE BILL To provide the service quality above | Decrease of £0.30 each year, from £52.00 in 2019 to £50.50 in 2024 | Decrease of £0.20 each year, from £52.00 in 2019 to £51.00 in 2024 |

The change in your annual bill between 2019 and 2024

Choose the option you prefer

Modern era - menu based

| | Option A (same as now) | Option B | Option C | Cost |
|--|---------------------------|----------|----------|--|
| Discoloured Water Affected customers = | 3,000 | 2,000 | 1,500 | No change to your bill |
| Water taste/smell not ideal Affected customers = | 2,000 | 1,500 | 1,000 | +\$2.50 every year for 5 years |
| Unexpected interruptions Affected customers = | 100,000 | 80,000 | 60,000 | +\$10.00 every year for 5 years |
| Persistent low pressure Affected customers = | 200,000 | 150,000 | 100,000 | -\$2.50 every year for 5 years |

Your choices result in:
Total change = +£10.00
 every year for 5 years from
£214 in 2019 to £264 in 2024

| | Option A | Option B | Option C | Cost |
|---|---|---|---|------------------------|
| Drinking water acceptability (Complaints per 1,000 population) | <input checked="" type="checkbox"/> 2.8 | <input type="checkbox"/> 2 | <input type="checkbox"/> 1.8 | No change to your bill |
| Drinking water availability (Average minutes lost) | <input type="checkbox"/> 12.2 | <input checked="" type="checkbox"/> 10 | <input type="checkbox"/> 7 | -\$5.00 |
| Leakage (Lines/property/yr) | <input checked="" type="checkbox"/> 121 | <input type="checkbox"/> 117 | <input type="checkbox"/> 114 | No change to your bill |
| Preventing pollution (Number of cat 3 incidents) | <input type="checkbox"/> 108 | <input checked="" type="checkbox"/> 90 | <input type="checkbox"/> 70 | +\$7.50 |
| River water improvements (km improved) | <input checked="" type="checkbox"/> 0 | <input type="checkbox"/> 150 | <input type="checkbox"/> 225 | No change to your bill |
| Sewage in the home (Properties) | <input type="checkbox"/> 275 | <input checked="" type="checkbox"/> 200 | <input type="checkbox"/> 180 | +\$0.25 |
| Sewage in the street (Properties) | <input checked="" type="checkbox"/> 8,800 | <input type="checkbox"/> 6,200 | <input type="checkbox"/> 4,100 | No change to your bill |
| Worst served customers - low pressure (Properties) | <input type="checkbox"/> 25 | <input type="checkbox"/> 10 | <input checked="" type="checkbox"/> 0 | -\$0.35 |
| Worst served customers - interruptions to supply (Properties) | <input type="checkbox"/> 1,400 | <input type="checkbox"/> 1,000 | <input checked="" type="checkbox"/> 800 | -\$6.00 |
| Worst served customers - sewer flooding (Properties) | <input checked="" type="checkbox"/> 1,649 | <input type="checkbox"/> 1,281 | <input type="checkbox"/> 1,000 | No change to your bill |
| Help for customers experiencing financial hardship (No. of customers on social tariffs) | <input type="checkbox"/> 100,000 | <input checked="" type="checkbox"/> 150,000 | <input type="checkbox"/> 200,000 | -\$8.00 |
| Longer term protection of wastewater networks to storms (Roof equivalents) | <input type="checkbox"/> 25,000 | <input checked="" type="checkbox"/> 40,000 | <input type="checkbox"/> 60,000 | -\$3.00 |
| Reducing fossil fuel dependency (% of total energy use) | <input checked="" type="checkbox"/> 30% | <input type="checkbox"/> 25% | <input type="checkbox"/> 40% | No change to your bill |
| Protecting your service in extreme events (% Resilience) | <input checked="" type="checkbox"/> 64% | <input type="checkbox"/> 87% | <input type="checkbox"/> 90% | No change to your bill |

Your choices result in total bill change of **+\$25.13**
 (This would take your bill from £500 to £525.13)

Modern era – acceptability testing



Need to accommodate different segments

For example,
vulnerable customers



Source: Customer Response to Competition in the Domestic Water Market, Accent June 2016

What have we learnt?

Some of the themes that emerged

- Need for social tariff for lower income customers
- More emphasis on environmental issues
- Little/no appetite for a reduction in prices
- Longer term resilience concerns



What next?

Future challenges

- Increasingly more engaging
- More segmentation
- Dealing more effectively with risk
- Mixed methodology surveys
- Time poor participants



Thank you



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