DRAFT DETERMINATION RESEARCH 2024

Summary report – Hafren Dyfrdwy

Prepared for **Consumer Council for Water** and **Ofwat**
Prepared by **Impact Research**

October 2024

FROM INSIGHT TO INFLUENCE

Hafren Dyfrdwy: key points…

Household finances

16% of billpayers struggled to pay at least one household bill in the past year, either most of the time or all the time.

1 in 5 billpayers currently find it quite or very difficult to manage their finances.

Looking to 2030, 45% of billpayers think their household finances will get worse by then and 25% better.

Water bill affordability

36% find their current water bill easy to afford; this falls to 19% for the proposed bill from 2025-2030.

22% find their current water bill difficult to afford; this increases to 48% for the proposed bill.

Hafren Dyfrdwy billpayers who would not find the proposed bills easy to afford were asked what they would do to help pay for the increase in their water bills. Most would spend less on non-essentials (49%) or spend less on food shopping and essentials (41%).

Acceptability of investments

70% find the investments acceptable, with the most commonly cited reasons being that the proposals focus on the right services (44%) and support for the longer term (36%).

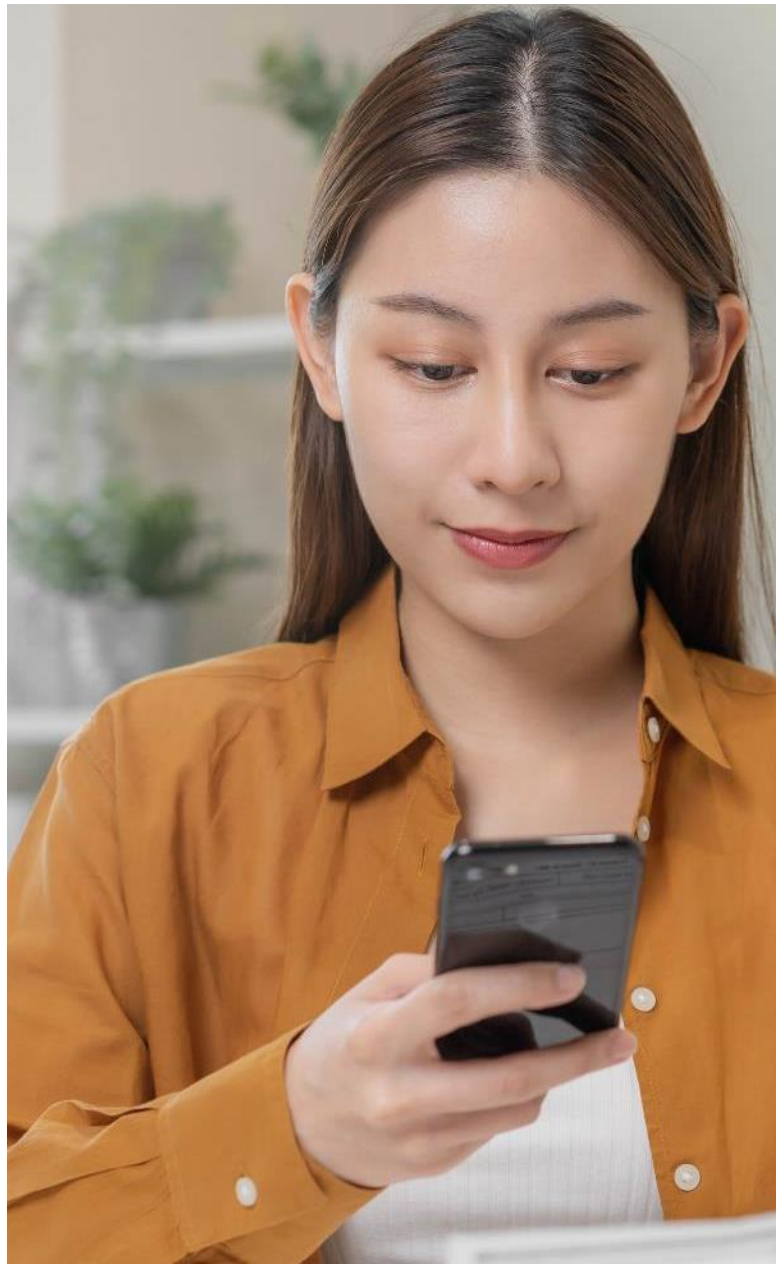
However, when billpayers consider the proposed bill changes, acceptability goes down from 70% to 53%.

*Respondents were shown a proposed bill from 2025-2030, which was based on Hafren Dyfrdwy's water charge with Dŵr Cymru Welsh Water or Hafren Dyfrdwy's sewerage charge added, so they saw the proposed total combined charge including inflation.

The primary purpose of the research was to gauge the opinions of water companies' customers about Ofwat's Draft Determinations, published in July 2024.

THE RESEARCH AIMS TO DETERMINE:

- Affordability of current household water bills and proposed 2025 – 2030 bills.
- Acceptability of proposed service levels and investments and determine which investment areas are more important to customers.
- Where views in the nations of England and Wales are different to the total combined view across England and Wales.
- Identification of water companies which are outliers from the total combined view across England and Wales.
- Additionally, this research aims to compare these Draft Determination results to the Business Plan research conducted by each water company as set out in the Affordability and Accessibility research guidance.



518 Hafren Dyfrdwy customers were interviewed

Of these, 175 received their sewerage services from Hafren Dyfrdwy and 343 from Dŵr Cymru Welsh Water.

RESEARCH TYPE:	**An online quantitative survey with an option to participate through a paper questionnaire.**
TARGET:	A **representative sample of Hafren Dyfrdwy billpayers** (who are at least jointly responsible) **aged 18+**. Participants must have been customers of Hafren Dyfrdwy and be aware of who their supplier is. Industry exclusion was applied. Data were weighted to reflect the population of the Hafren Dyfrdwy customer base.
SAMPLE SOURCE SPLIT:	The sample was drawn from **two** sources: **online panels** managed by Prodege and **customer databases** from Hafren Dyfrdwy.
SAMPLING METHOD:	Online panel participants were invited via email invite. The customer database was contacted through '**push-to-web**' approach – either emails or postal letters with a survey 'push-to-web' link.
SAMPLE MODE SPLIT:	69 through the online panel, 413 push-to-the web through an email invite, 30 push-to-the web through postal letter invite, 6 postal.
QUESTIONNAIRE:	**15 minutes long on average**, available in English. The questionnaire was tested before the main launch through cognitive interviews and a pilot survey to ensure clarity, relevance, and effectiveness in capturing accurate responses from participants.
FIELDWORK:	Data was collected from 1st August 2024 to 26th September 2024.

Billpayers were initially asked about their **financial situation** and the **affordability of the current bill.**

Then, they were presented with the **proposed bill**, including water & sewerage charges and inflation and asked about affordability based on these changes.

Billpayers were then informed about Hafren Dyfrdwy's **performance and investment plans**, alongside the performance and investment plans of the relevant sewerage service provider (either Dŵr Cymru Welsh Water or Hafren Dyfrdwy), before being asked about the **acceptability of the proposals**.

Acceptability was then sought again, with a reminder of the proposed bill changes linked to the investment plans.

A quantitative approach was adopted, the majority of interviews conducted via an online survey.

Online panelists or water company customers were invited to participate through an email invite or letter with a link to the online survey. Customers of water companies were given the option to ask for a paper postal questionnaire to include those digitally disadvantaged. Customers of Hafren Dyfrdwy and Dŵr Cymru Welsh Water could choose to take the survey in English or Welsh**. Data were weighted to match the customer profile of Hafren Dyfrdwy to match the 2021 census profile for gender, age and socio-economic group (SEG).

Additional analysis found that there was a difference in responses from the online panel sample and the push-to-web sample around the affordability of bills, over and above variations in demographics. **The general effect of push-to-web vs. panel was to lower the proportion of customers saying that paying their bill was 'easy'.* We therefore applied a further level of weighting to adjust the proportion of survey mode** (panel vs. push-to-web) within each company, to approximate as closely as possible the mix of these two modes over the whole sample.

- All reported **base sizes are unweighted**; all **% reported are weighted.**
- **Significance testing** (on a 95% confidence level) has been applied **to compare vs. the total figure for England and Wales (i.e. all water companies) combined.**
- **The margin of error** e.g., 50%: England +/-1.1%, Wales +/- 3.1%, water company +/- 4.4% (assuming base of 500).
- Key **scale questions,** e.g., affordability, have been **netted** for simplicity. E.g., very easy & quite easy have been combined into **NET easy.**
- When referring **'water bills'**, it includes sewerage charges as well.
- When referring to **Total**, this means England and Wales combined.

* This effect could be due to the mode of contact or the presentation of a personalised bill profile in the push-to-web sample vs an average bill profile in the online panel sample. 3 Hafren Dyfrwdy participants opted to take the survey in the Welsh language.

Before asking about their current and then proposed bills' affordability, respondents were asked how they felt about their household finances and how well these were going.

16% of Hafren Dyfrdwy billpayers struggled to pay at least one household bill in the past year, either most of the time or all the time.

1 in 5 billpayers currently find it 'quite or very difficult' to manage their finances. Looking to 2030, 45% of billpayers think their household finances will get worse by then and 25% better.

COST OF LIVING	TOP 2 / BOTTOM 2 NET %	PROPORTION FOR HAFREN DYFRDWY	RANGE FOR ALL WATER COMPANIES (ENGLAND AND WALES)	AVERAGE PERCENTAGE FOR ALL WATER COMPANIES (ENGLAND AND WALES)	AVERAGE PERCENTAGE FOR WALES
STRUGGLE TO PAY AT LEAST ONE HOUSEHOLD BILL	Rarely or Never	51%	51% - 66%	57%	53%
	All or most of the time	16%	11% - 20%	16%	20%
CURRENT FINANCIAL SITUATION	Living comfortably or doing alright	43%	43% - 61%	47%	44%
	Finding it quite difficult or very difficult	20%	12% - 22%	18%	18%
CHANGE IN BILLPAYER FINANCIAL SITUATION BY 2030	A bit or a lot better	25%	25% - 35%	29%	25%
	A lot or a bit worse	45% ↑	32% - 45%	36%	40%

Arrows next to the numbers mark significant differences from the Total for England and Wales, ↑ = significantly more ↓ = significantly less on a 95% confidence level.

Q1: Thinking about your household's finances over the last year, how often, if at all, have you struggled to pay at least one of your household bills? BASE: ALL (518)
Q2: Overall, how well would you say you are managing financially now? BASE: ALL (518)
Q3: Thinking about your household's financial situation over the next few years up to 2030, do you expect it to get: BASE: ALL (518)

After the introductory questions, participants were asked how easy or difficult it is to afford their current water bill.

Each billpayer was then presented with a bill profile chart including the current 2024/2025 bill and proposed annual bill changes up to 2029/2030, and the impact of inflation.

Respondents in the 'push to web' sample saw a bill profile based on their current bill; respondents in the online panel sample saw a bill profile based on the current household average bill for Hafren Dyfrdwy customers*. The bill profiles included forecast inflation.

Just over a third of Hafren Dyfrdwy households find their current water bill easy to afford, while just over a fifth say it's difficult to afford. **The affordability of the proposed water bill drops to 19% from the current 36%.**

AFFORDABILITY	TOP 2 / BOTTOM 2 NET %	PROPORTION FOR HAFREN DYFRDWY	RANGE FOR ALL WATER COMPANIES (ENGLAND AND WALES)	AVERAGE PERCENTAGE FOR ALL WATER COMPANIES (TOTAL)	AVERAGE PERCENTAGE FOR WALES
CURRENT WATER BILL	Easy	36% ↓	36% - 52%	45%	43%
	Difficult	22%	13% - 22%	18%	20%
PROPOSED WATER BILL	Easy	19% ↓	19% - 36%	26%	23%
	Difficult	48% ↑	29% - 49%	40%	48%

Arrows next to the numbers mark significant differences from the Total for England and Wales, ↑ = significantly more ↓ = significantly less on a 95% confidence level.

* Including water & sewerage charges

Q4: How easy or difficult is it for you to afford to pay your current water and sewerage bill? BASE: ALL (518)
Q5: How easy or difficult do you think it would be for you to afford these water and sewerage bills <based on the bill profile chart presented>? BASE: ALL (518)

The groups that find the proposed water bill more difficult to afford are among 35-44 years old, DE social grade, non-white and non-British ethnic groups, and/or lowest household income bands.

AFFORDABILITY BY SUBGROUPS		CURRENT AFFORDABILITY	CURRENT AFFORDABILITY	PROPOSED AFFORDABILITY	PROPOSED AFFORDABILITY	BASE SIZE
ROW%		NET EASY	NET DIFFICULT	NET EASY	NET DIFFICULT	ROW N
	Total	36%	22%	19%	48%	518
Age groups	18-24	34%	31%	18%	57%	11 !
	25-34	31%	21%	14%	51%	92
	35-44	29%	35%	12%	60%	88
	45-54	36%	33%	24%	52%	87
	55-64	40%	12%	22%	42%	92
	65-75	48%	8%	21%	33%	97
	75+	33%	28%	23%	41%	51
Gender	Female	35%	20%	15%	51%	279
	Male	37%	25%	22%	44%	237
	Non-binary / prefer not to say	50%	0%	50%	0%	2 !
Social Grade	AB	54%	17%	33%	33%	125
	C1	38%	18%	20%	47%	158
	C2	20%	25%	12%	47%	91
	DE	29%	30%	9%	63%	144
Household income	Up to £15,599 a year	16%	32%	5%	64%	103
	From £15,600 to £25,999 a year	20%	35%	11%	60%	95
	From £26,000 to £36,399 a year	40%	22%	20%	48%	101
	From £36,400 to £51,999 a year	41%	14%	18%	39%	60
	From £52,000 to £72,799 a year	61%	7%	29%	25%	40 !
	From £72,800 and above a year	62%	12%	45%	28%	45 !
	Don't know or Prefer not to say	40%	13%	15%	44%	74
Ethnic group	NET: British	38%	21%	19%	46%	481
	NET: Other British	13%	51%	16%	62%	27 !
	NET: White	37%	22%	19%	47%	498
	NET: Other than White	21%	36%	12%	78%	9 !

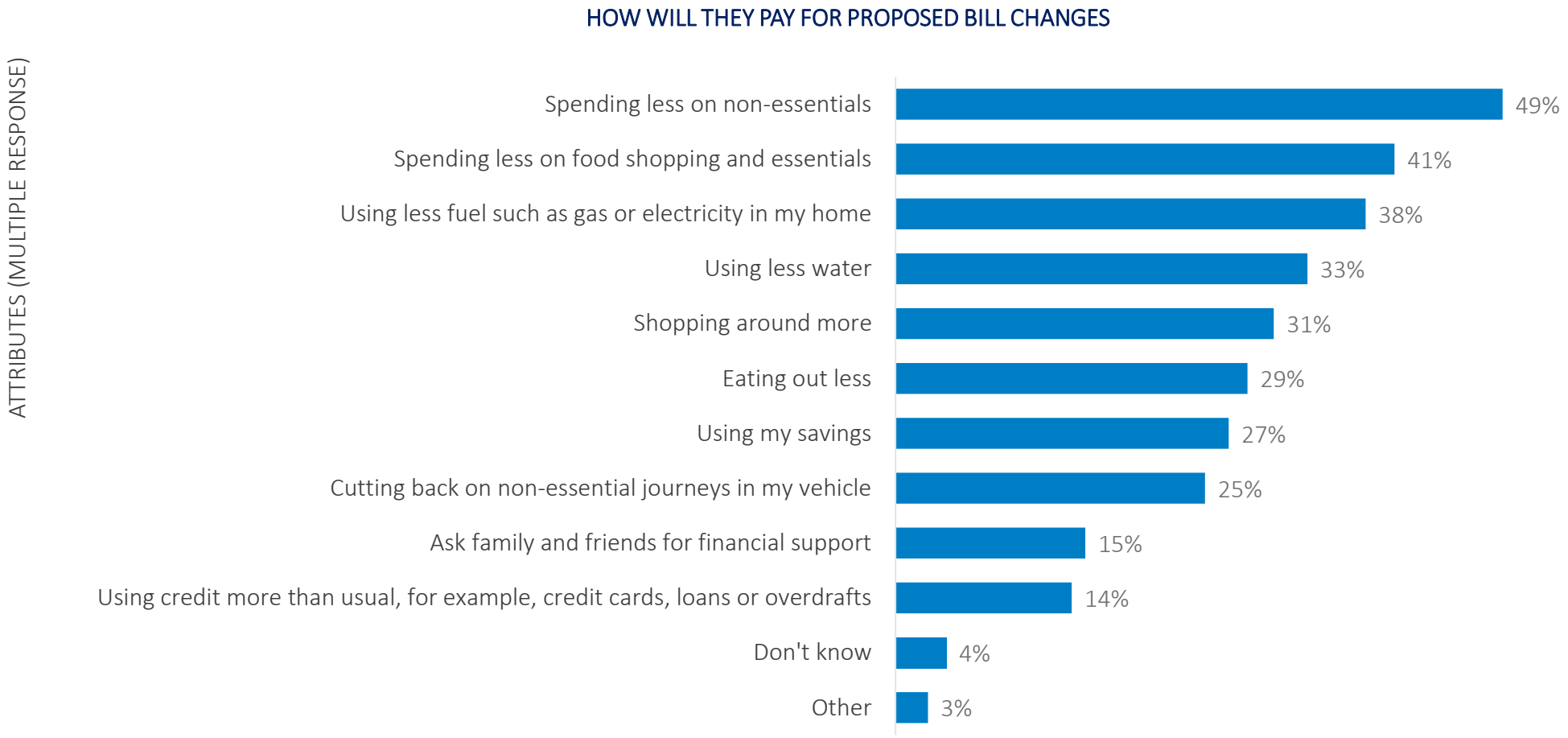
! Small base size warning <50

The groups that find the proposed water bill more difficult are billpayers who are finding the current financial situation difficult and/or have struggled to pay at least one household bill over the last year all or most of the time and/or feel their financial situation will worsen heading towards 2030 and/or those with medical vulnerability.

AFFORDABILITY BY SUBGROUPS		CURRENT AFFORDABILITY	CURRENT AFFORDABILITY	PROPOSED AFFORDABILITY	PROPOSED AFFORDABILITY	BASE SIZE
ROW%		NET EASY	NET DIFFICULT	NET EASY	NET DIFFICULT	ROW N
	Total	36%	22%	19%	48%	518
Vulnerability	None	41%	19%	18%	44%	274
	Medical	28%	31%	15%	61%	118
	Communication	24%	30%	20%	50%	91
	Life Stage	42%	22%	29%	43%	86
	Other	33%	26%	20%	50%	215
	Prefer not to say	18%	26%	14%	54%	29 !
Struggled to pay at least one household bill over the last year	Rarely or Never	60%	3%	32%	23%	275
	All of the time or most of the time	7%	60%	2%	79%	79
Current financial situation	Living comfortably or doing alright	66%	3%	35%	18%	225
	Finding it quite difficult or very difficult	10%	63%	3%	82%	81
2030 financial situation outlook	A bit better or A lot better	44%	23%	25%	35%	107
	A lot worse or A bit worse	28%	30%	12%	60%	226
Water meter	Yes	43%	19%	21%	44%	340
	No	25%	27%	15%	55%	176
	Don't know	100%	0%	0%	0%	2 !
IMD Quintile	1	31%	34%	14%	47%	44 !
	2	30%	25%	13%	56%	71
	3	36%	24%	22%	40%	116
	4	41%	16%	22%	48%	121
	5	39%	10%	16%	34%	97
	Unknown					0
Social Tariff	Yes	29%	36%	16%	52%	52
	No / not available	37%	21%	19%	47%	466

! Small base size warning <50

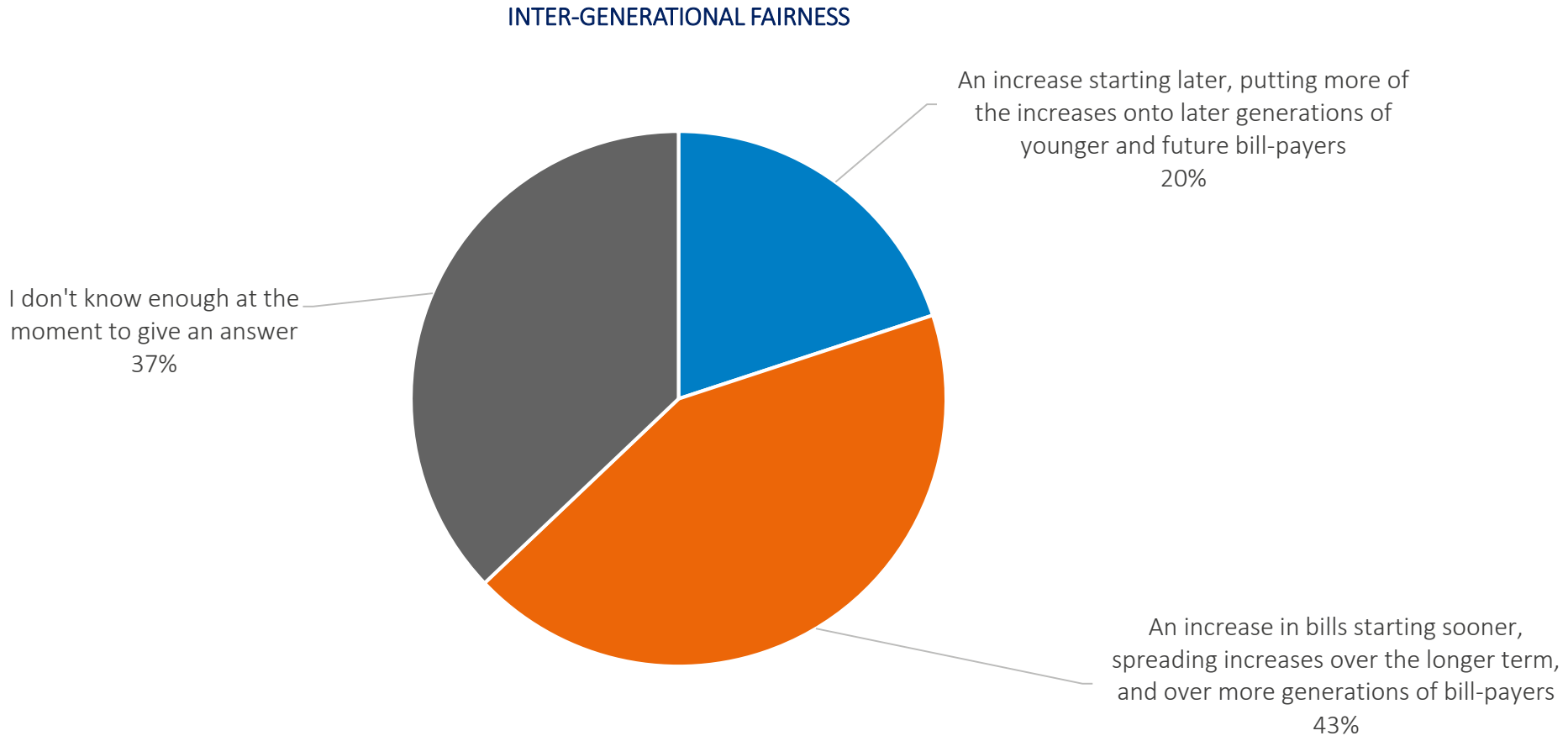
Hafren Dyfrdwy billpayers who would not find the proposed bills easy to afford* were asked what they would do to help pay for the increase in their water bills. Most would spend less on non-essentials or spend less on food shopping and essentials.



* Includes those who found the proposed bills to be neither easy nor difficult to afford

Q6: Which of the following do you think you would need to do to pay for the increase in your water bills between 2025 and 2030? BASE: THOSE WHO FOUND THE PROPOSED BILL NEITHER EASY NOR DIFFICULT, DIFFICULT OR VERY DIFFICULT TO PAY FOR (411)

Hafren Dyfrdwy billpayers were asked an in principle question about how they would prefer bill increases for long-term investments to be phased. 43% would prefer the bill increase starting sooner vs. 20% later. Over a third didn't know enough to give an answer.



Q9: Water companies have to plan their services well into the future, i.e., 20-30 years from now, taking into account forecasts for things like the effect of climate change and increases in population. It can take decades for some of the things that companies build to come into service - for example, a new reservoir can take 20-30 years. There are different ways in which these long-term investments can feed into bills. In principle, which one of the following options would you prefer? BASE: ALL (518)

Participants were informed of their **water supplier's current performance** and **future targets** for water supply interruptions, drinking water quality, and leakage. The **sewerage service provider's performance was also shown** and included the following service measures: sewage flooding inside properties, sewage flooding outside properties and pollution incidents.

Participants were also shown a **proposal for investments in four areas**: Sewerage services & environment, Protecting water supplies, Improving drinking water quality and Resilience of services to disruption from external events. The delivery of each investment area (e.g., what form it came in, such as the number of smart meters to be fitted) and spending within these areas were specific for each water company.

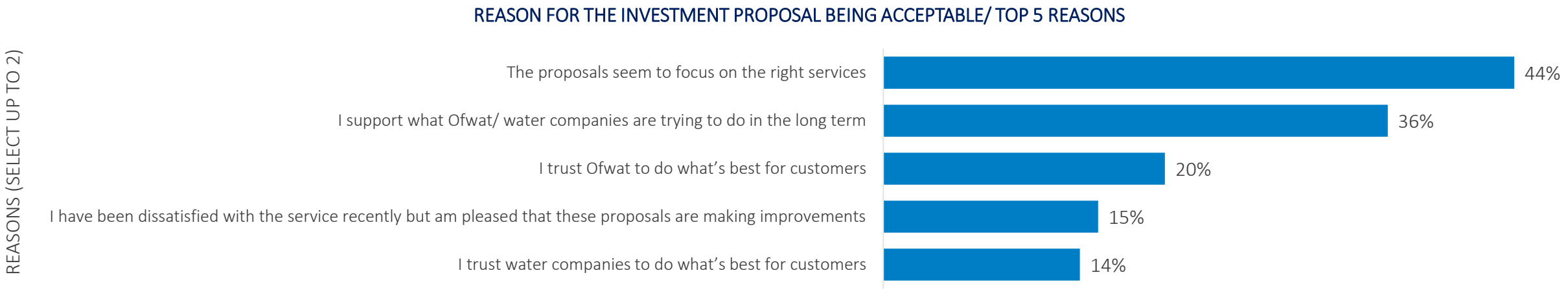
70% of Hafren Dyfrdwy billpayers find the investment proposal acceptable. After being asked about investment proposal acceptability again, but this time alongside a reminder of the proposed bills for 2025-30. The level of non-acceptance doubles, **but 53% still find the proposal acceptable.**

ACCEPTABILITY	TOP 2 / BOTTOM 2 NET %	PROPORTION FOR HAFREN DYFRDWY	RANGE FOR ALL WATER COMPANIES (ENGLAND AND WALES)	AVERAGE PERCENTAGE FOR ALL WATER COMPANIES (TOTAL)	AVERAGE PERCENTAGE FOR WALES
ACCEPTABILITY OF INVESTMENT PROPOSALS	Acceptable	70%	65% - 81%	75%	75%
	Unacceptable	18%	8% - 24%	15%	15%
ACCEPTABILITY OF INVESTMENT PROPOSALS WITH A REMINDER OF THE BILL CHANGE	Acceptable	53%	43% - 67%	58%	52%
	Unacceptable	38%	23% - 47%	33%	35%

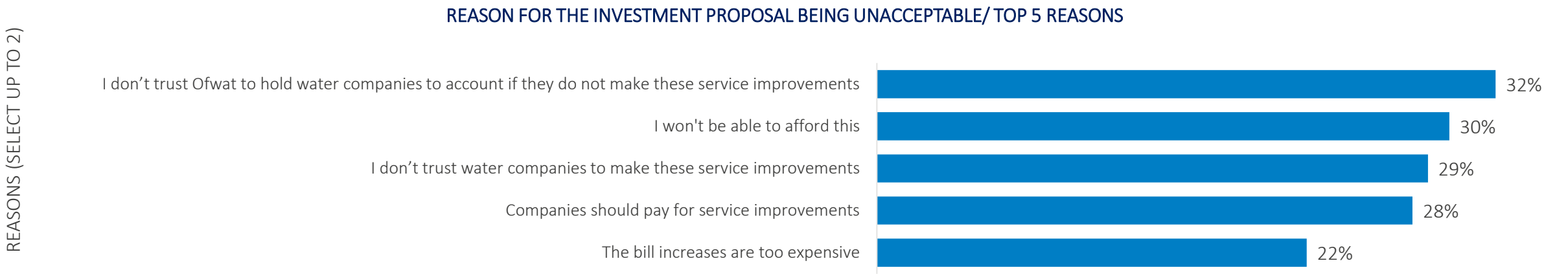
Arrows next to the numbers mark significant differences from the Total for England and Wales, ↑ = significantly more ↓ = significantly less on a 95% confidence level.

Q8: Based on everything you have seen and read about this proposal for your water and sewerage services, how acceptable or unacceptable is it to you? BASE: ALL (518)
Q10a: Now, thinking about the proposed bill levels for 2025 to 2030, the investment that is planned in services and the proposed service levels, how acceptable or unacceptable are the proposals to you? BASE: ALL (518)
NOTE: The **storm overflow investment was not included in Hafren Dyfrdwy's Draft Determination** under Sewerage services & environment, which could have affected the acceptability answers

The 70% who find the investment proposals acceptable most often cite that the proposals focus on the right services and support the longer term.



On the other hand, the 18% of those who find the investment proposals unacceptable say this is because of low trust in companies fulfilling the improvements, and due to not being able to afford the proposal.



Q8b: What are the two main reasons that you feel the proposals for your water services are acceptable? BASE: ALL THAT FOUND THE INVESTMENT PROPOSALS ACCEPTABLE (356)
Q8a: What are the two main reasons that you feel the proposals for your water services are unacceptable? BASE: ALL THAT FOUND THE INVESTMENT PROPOSALS UNACCEPTABLE (97)

To understand the acceptability of the investment proposals, we presented billpayers with investment areas within the four* categories in red text below. The investments included relevant numbers and targets from the Draft Determinations. The aim was to determine which investment proposal within each category was most important to billpayers. Some of these investment areas were shown to respondents of all water companies, and some to a subset of water companies.

The top priorities across the categories for Hafren Dyfrdwy billpayers are:

- **Improving sewage treatment processes to help river water quality** in the 'improving sewerage services and the environment' area
- **Reducing leakage** in the 'protecting water supplies' area
- **Improving the resilience of treatment works, pipes and technology** in the 'improving resilience to reduce the risk of disruption to services' area:

IMPROVING SEWERAGE SERVICES AND THE ENVIRONMENT Delivered by sewerage companies	Column %
Improving sewage treatment processes to help river water quality	49%
Reducing the use of storm overflows which release sewage into rivers	40%
Monitoring river water quality	3%
Additional septic tank treatment facilities	2%
Don't know/can't say	6%

PROTECTING WATER SUPPLIES	Column %
Reducing leakage	58%
Better management of water use	22%
Fitting smart water meters	15%
Don't know/can't say	4%

RESILIENCE OF SERVICES TO DISRUPTION FROM EXTERNAL EVENTS	Column %
Improving the resilience of treatment works, pipes and technology	86%
Improving security and resilience to cyber attacks	6%
Don't know/ can't say	8%

*Hafren Dyfrdwy were only shown the 'Replacement of lead supply pipes' investment proposal, therefore, the importance question was irrelevant.

Q7a-d: Based on what you have just read, which of these is the most important to you relating to improving sewerage services and the environment / protecting water supplies / improving drinking water quality / improving the resilience of pipes, sewers and treatment works to reduce the risk of disruption to services? BASE: ALL (518)

QUOTAS VS. ACHIEVED SAMPLE

England & Wales 2021 census regional gender and age profile and 2021 Census Approximated Social Grade figures* were applied to company quotas.

QUOTA SAMPLE STRUCTURE HAFREN DYFRDWY	COLUMN %	TARGET	ACHIEVED UNWEIGHTED %	ACHIEVED WEIGHTED %
AGE GROUPS	18-24	11%	2%	3%
	25-34	16%	18%	21%
	35-44	15%	17%	18%
	45-54	16%	17%	16%
	55-64	16%	18%	16%
	65+	25%	29%	26%
GENDER	Female	48%	52%	48%
	Male	52%	48%	52%
	Other	open	0%	0%
SOCIAL ECONOMIC GRADE	AB	22%	24%	26%
	C1	30%	31%	26%
	C2	23%	20%	21%
	DE	26%	25%	27%

S1: How old are you? BASE: ALL (518)
S2: Please select your gender. BASE: ALL (518)
Q11: Please indicate which one of the following best describes the profession of the chief income earner in your household. BASE: ALL (518)
*https://www.mrs.org.uk/pdf/JICPOPS%20regional%20evaluation%20of%20Census%202021%20ASG.pdf

Constructing the research materials

Proposed bills from 2025-30

- For most companies, this was based on data provided by Ofwat and adjusted to include forecast inflation; push to web respondents saw a personalised bill profile, online panel respondents saw a bill profile based on the average household water charges for Hafren Dyfrdwy customers*
- For Northumbrian Water and Essex and Suffolk Water, South Staffs Water and Cambridge Water, South West Bournemouth and Bristol Water, the respective companies provided the data for CCW/Impact to build specific bill profiles for each area – this meant that respondents saw something more representative of the potential bills changes in their area
- Respondents from water only companies saw a proposed bill which included proposed sewerage service charges – this was made clear in the supporting text

Water company performance data

- Performance data was based on Ofwat's Water Company Performance report 2022-23, and future performance targets as published in the Draft Determinations

Investment proposal stimulus

- This was based on Ofwat's Overview document for each water company's Draft Determination
- Where possible the wording for these was generic to support comparisons between companies; context for Wales was included
- Where helpful for respondents, company specific examples were provided under the generic wording, e.g., for large scale water supply developments

Investment costs

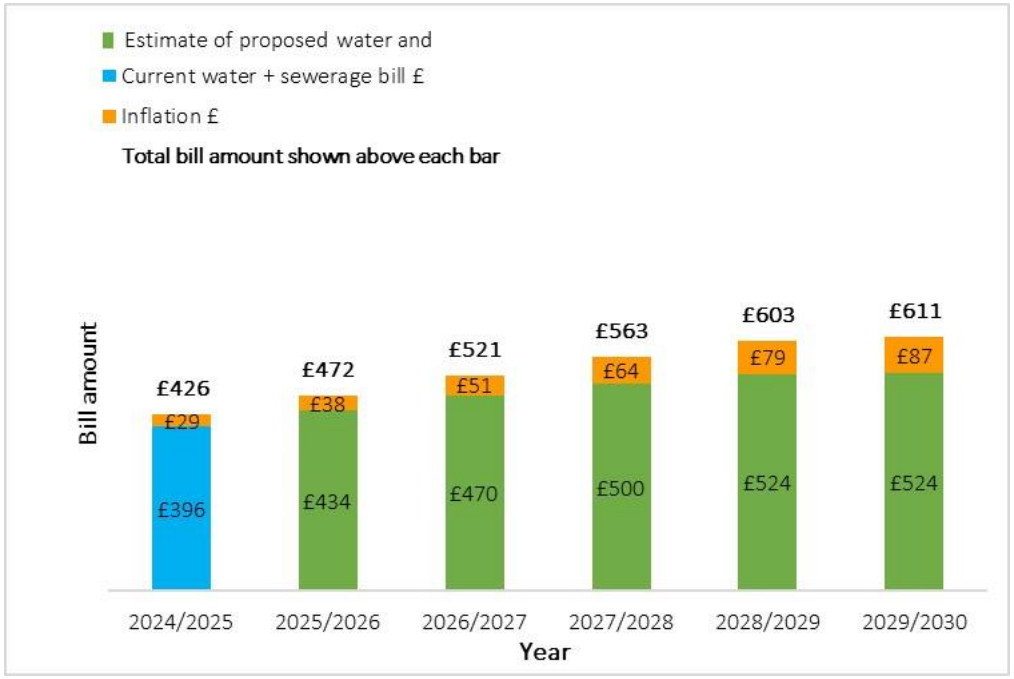
- Respondents saw the proposed investment for each investment area – the total amount over the five years from 2025-30

The questionnaire can be viewed here

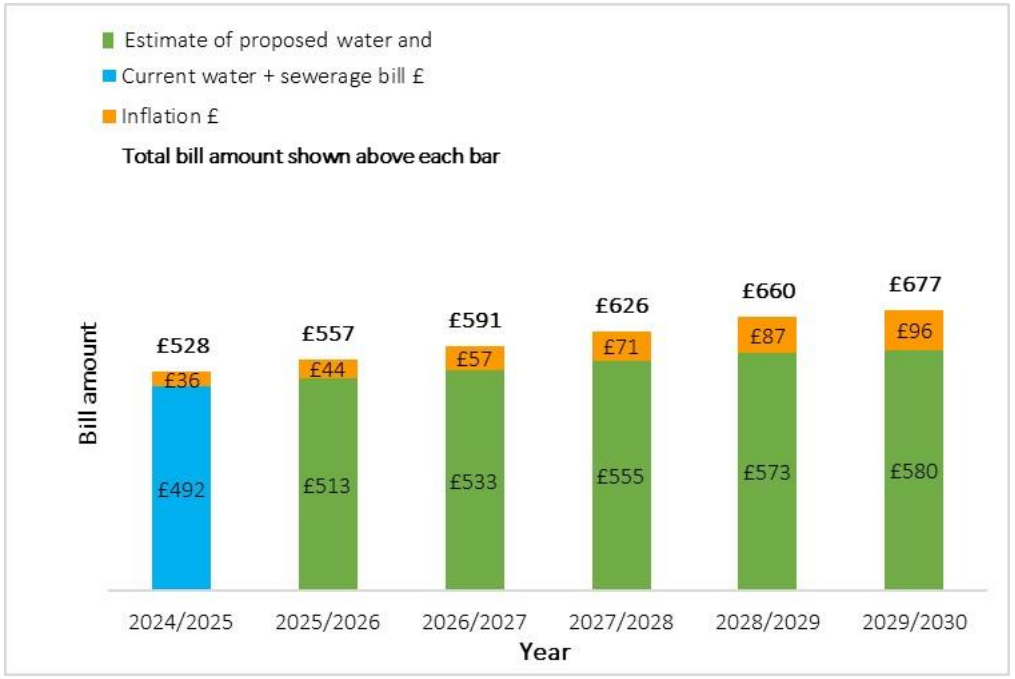
* Including water & sewerage charges

Bill profile shown at Q4 & Q10a (example for panel where average bill profile was shown)

HAFREN DYFRDWY



HAFREN DYFRDWY + DŴR CYMRU WELSH WATER



Performance tables & charts shown before Q8, TABLE 1, CHART 1: Water supply interruption over 3 hours

HAFREN DYFRDWY

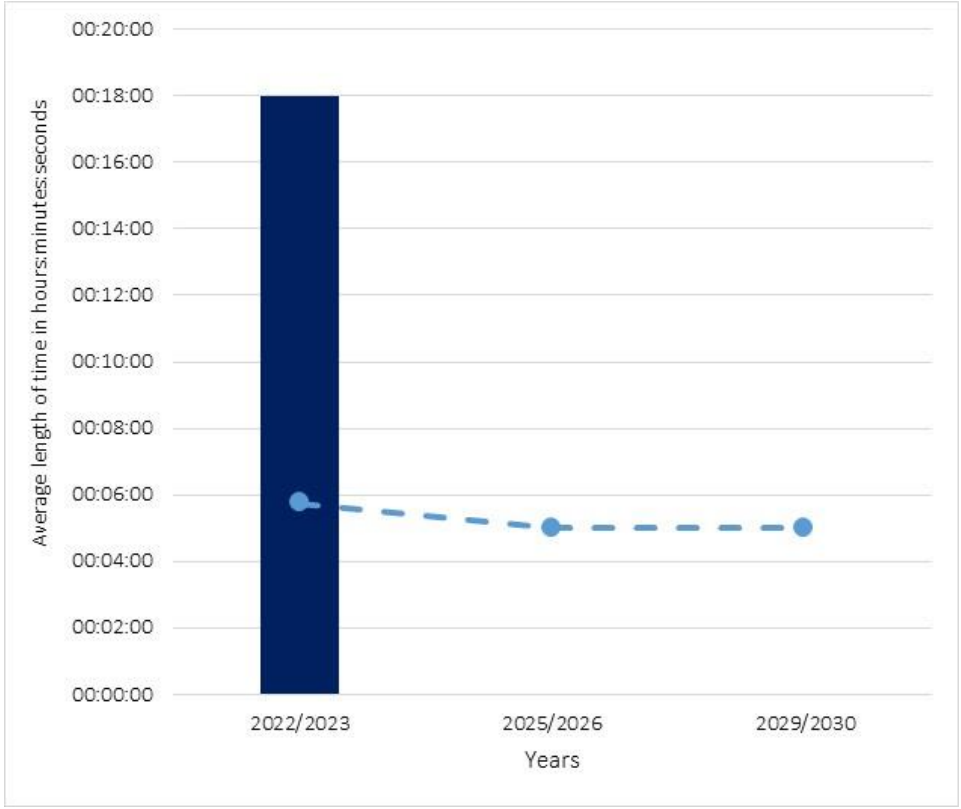
TABLE 1

COMPANY PERFORMANCE:
Water supply interruption over 3 hours
(the average length of time properties are without water in hours, minutes, seconds - hh:mm:ss)

Portsmouth Water	00:02:21	Better Performance
SES Water	00:03:51	
Wessex Water	00:04:10	
Cambridge Water	00:04:29	
South Staffs Water	00:04:29	
Bristol Water	00:08:03	
Essex and Suffolk Water	00:08:17	
Northumbrian Water	00:08:17	
South West Water including Bournemouth	00:08:42	
Severn Trent Water	00:09:10	
Yorkshire Water	00:09:27	
Affinity Water	00:12:53	
Anglian Water including Hartlepool	00:14:35	
Hafren Dyfrdwy	**00:18:00**	
Thames Water	00:19:54	
United Utilities	00:38:45	
Dŵr Cymru Welsh Water	00:44:31	
Southern Water	01:28:10	
South East Water	03:02:21	Poorer Performance

CHART 1

PROPOSALS FOR YOUR COMPANY'S PERFORMANCE FROM 2025 TO 2030
Water supply interruption over 3 hours
(the average length of time properties are without water in hours, minutes, seconds - hh:mm:ss)
Current performance
Target performance



Performance tables & charts shown before Q8, TABLE 2, CHART 2: Drinking water quality

HAFREN DYFRDWY

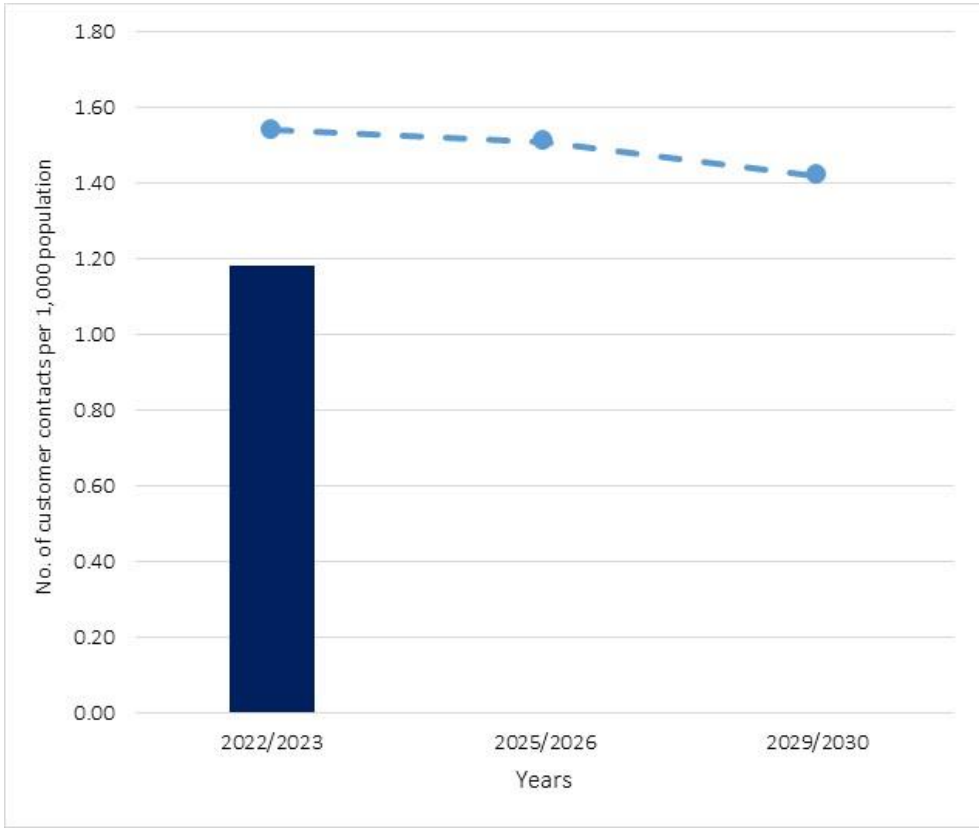
TABLE 2

COMPANY PERFORMANCE:
Drinking water quality
(number of customer contacts about drinking water quality per 1,000 population)

Portsmouth Water	0.42	Better Performance
Thames Water	0.44	
Affinity Water	0.56	
SES Water	0.64	
Cambridge Water	0.65	
South Staffs Water	0.65	
Severn Trent Water	0.85	
Essex and Suffolk Water	0.96	
Northumbrian Water	0.96	
Anglian Water including Hartlepool	1.01	
Yorkshire Water	1.02	
Wessex Water	1.14	
South East Water	1.16	
Southern Water	1.17	
Hafren Dyfrdwy	**1.18**	
Bristol Water	1.21	
United Utilities	1.41	
South West Water including Bournemouth	1.51	
Dŵr Cymru Welsh Water	2.35	Poorer Performance

CHART 2

PROPOSALS FOR YOUR COMPANY'S PERFORMANCE FROM 2025 TO 2030
Drinking water quality
(number of customer contacts about drinking water quality per 1,000 population)
Current performance
Target performance



Performance tables & charts shown before Q8, TABLE 3, CHART 3: Leaks

HAFREN DYFRDWY

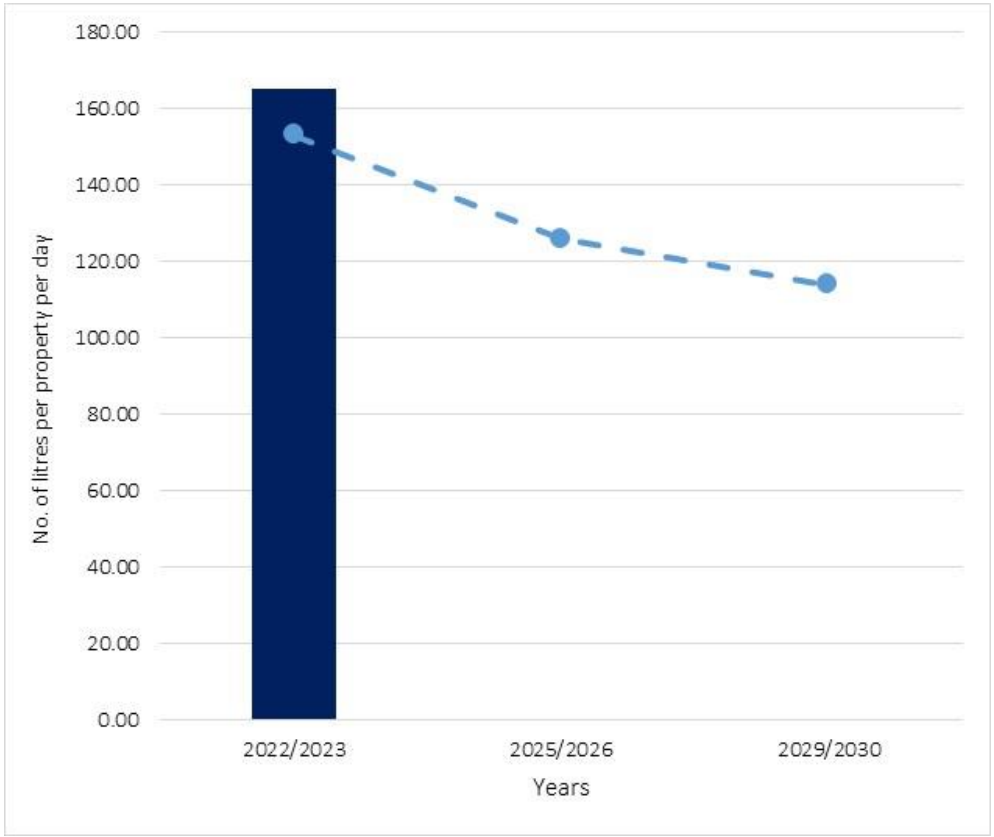
TABLE 3

COMPANY PERFORMANCE:
Leaks
(the number of litres of water leaked per property per day)

Bristol Water	66.15	Better Performance
Essex and Suffolk Water	72.43	
SES Water	76.22	
Anglian Water including Hartlepool	78.16	
Portsmouth Water	84.96	
Cambridge Water	86.44	
Southern Water	87.02	
South East Water	89.56	
Affinity Water	100.46	
South West Water including Bournemouth	103.34	
Northumbrian Water	103.68	
Wessex Water	104.15	
Severn Trent Water	107.93	
South Staffs Water	108.99	
Yorkshire Water	119.86	
United Utilities	122.26	
Thames Water	149.37	
Dŵr Cymru Welsh Water	164.79	
Hafren Dyfrdwy	**165.17**	Poorer Performance

CHART 3

PROPOSALS FOR YOUR COMPANY'S PERFORMANCE FROM 2025 TO 2030
Leaks
(the number of litres of water leaked per property per day)
Current performance
Target performance



Performance tables & charts shown before Q8, TABLE 7, CHART 7: Sewage flooding inside properties

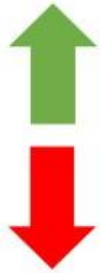
HAFREN DYFRDWY

TABLE 7

COMPANY PERFORMANCE:
Sewage flooding inside properties
(number of properties flooded by sewage for every 10,000 properties connected to the public sewer)

South West Water including Bournemouth	0.63
Dŵr Cymru Welsh Water	1.14
Northumbrian Water	1.21
Wessex Water	1.31
Hafren Dyfrdwy	**1.38**
Severn Trent Water	1.65
Anglian Water including Hartlepool	1.69
Thames Water	1.91
Southern Water	2.25
United Utilities	2.32
Yorkshire Water	2.67

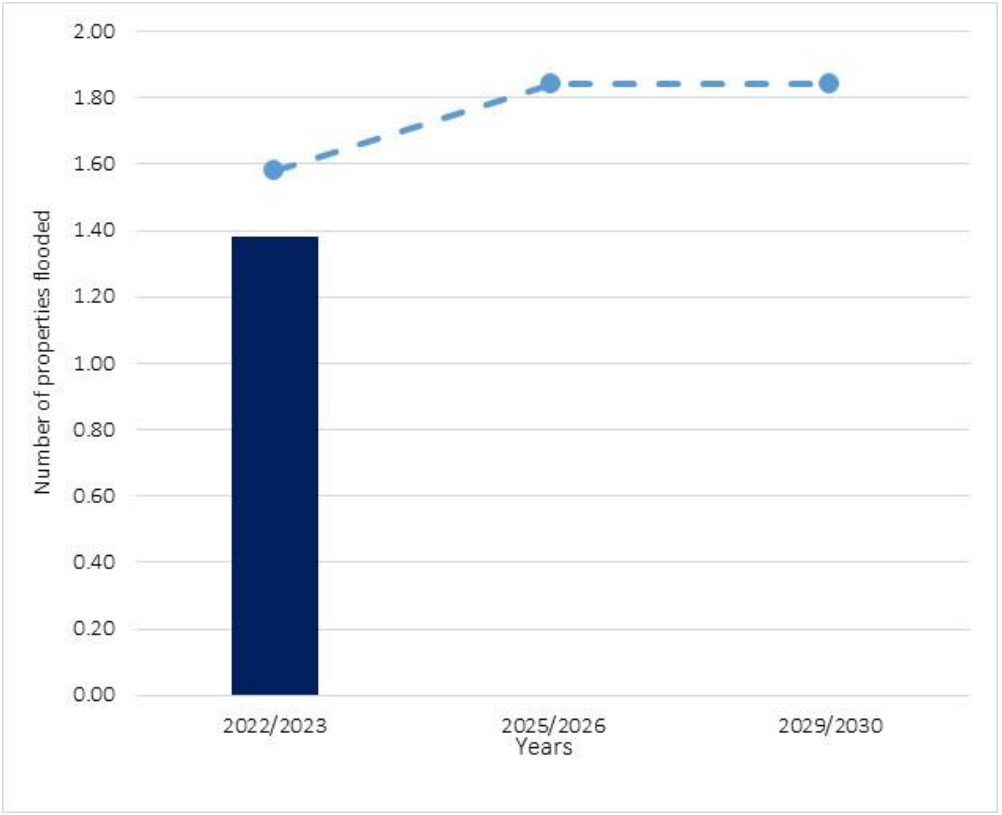
Better Performance



Poorer Performance

CHART 7

PROPOSALS FOR YOUR COMPANY'S PERFORMANCE FROM 2025 TO 2030
Sewage flooding inside properties
(number of properties flooded by sewage for every 10,000 properties connected to the public sewer)
Current performance
Target performance



Performance tables & charts shown before Q8, TABLE 8, CHART 8: Sewage flooding outside properties

HAFREN DYFRDWY

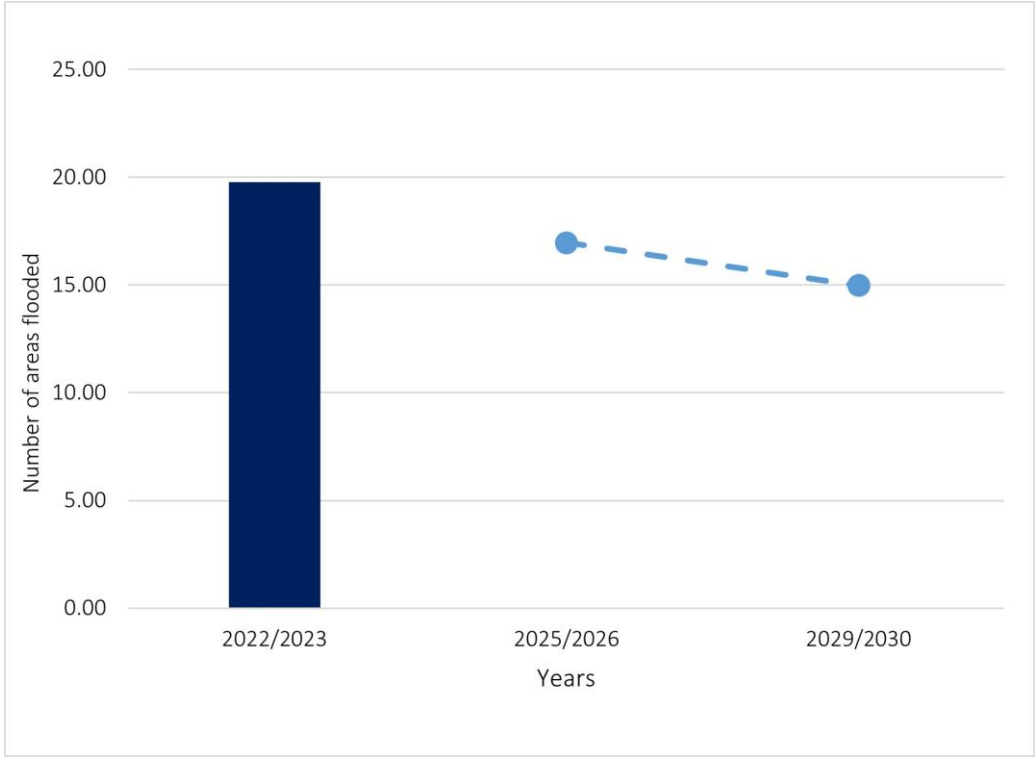
TABLE 8

COMPANY PERFORMANCE:
Sewage flooding outside properties
(number of external areas flooded by sewage for every 10,000 properties connected to the public sewer)

Severn Trent Water	12.69	Better Performance
Anglian Water including Hartlepool	16.10	
United Utilities	17.13	
Wessex Water	17.83	
Thames Water	18.41	
Southern Water	18.46	
Hafren Dyfrdwy	**19.77**	
Yorkshire Water	22.75	
Northumbrian Water	23.10	
South West Water including	23.19	
Dŵr Cymru Welsh Water	24.42	Poorer Performance

CHART 8

PROPOSALS FOR YOUR COMPANY'S PERFORMANCE FROM 2025 TO 2030
Sewage flooding outside properties
(number of external areas flooded by sewage for every 10,000 properties connected to the public sewer)
Current performance
Target performance



Performance tables & charts shown before Q8, TABLE 9, CHART 9: Pollution incidents

HAFREN DYFRDWY

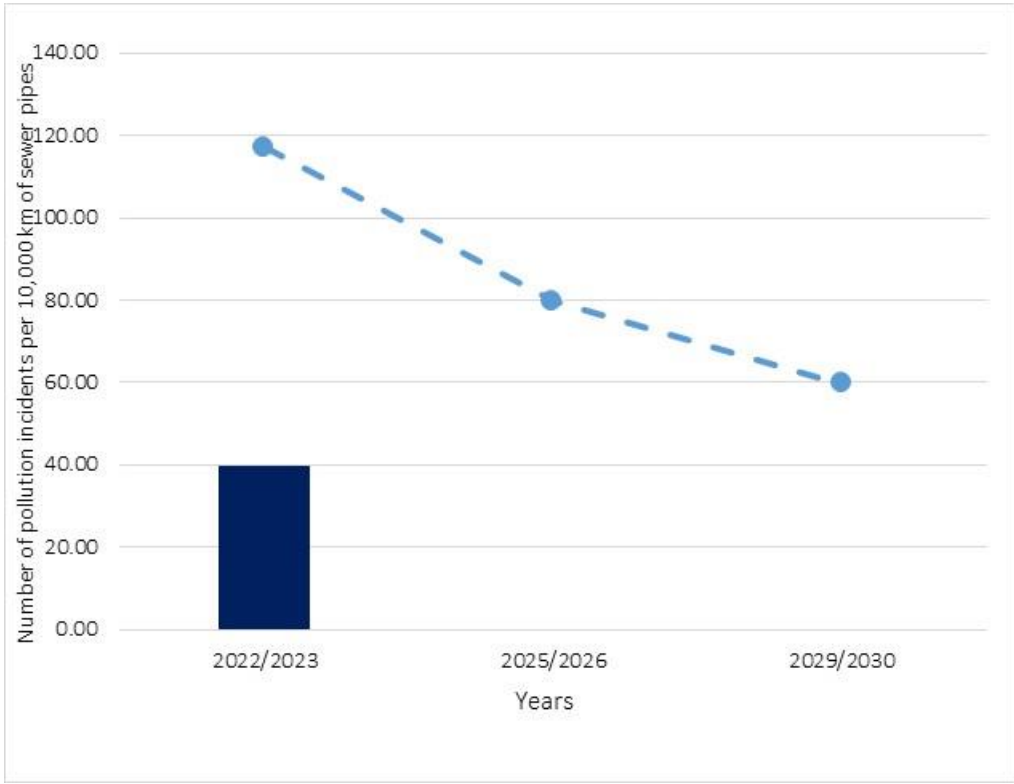
TABLE 9

COMPANY PERFORMANCE:
Pollution incidents
(the number of incidents per 10,000 km of sewer pipes)

United Utilities	16.29	Better Performance
Northumbrian Water	19.98	
Severn Trent Water	20.64	
Yorkshire Water	22.39	
Dŵr Cymru Welsh Water	24.55	
Thames Water	30.37	
Wessex Water	31.48	
Anglian Water including Hartlepool	33.36	
Hafren Dyfrdwy	**39.84**	
South West Water including Bournemouth	61.93	
Southern Water	90.11	Poorer Performance

CHART 9

PROPOSALS FOR YOUR COMPANY'S PERFORMANCE FROM 2025 TO 2030
Pollution incidents
(the number of incidents per 10,000 km of sewer pipes
Current performance
Target performance



Performance tables & charts shown before Q8, TABLE 7, CHART 7: Sewage flooding inside properties (Dŵr Cymru Welsh Water)

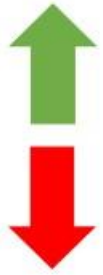
HAFREN DYFRDWY + DŴR CYMRU WELSH WATER

TABLE 7

COMPANY PERFORMANCE:
Sewage flooding inside properties
(number of properties flooded by sewage for every 10,000 properties connected to the public sewer)

South West Water including Bournemouth	0.63
Dŵr Cymru Welsh Water	**1.14**
Northumbrian Water	1.21
Wessex Water	1.31
Hafren Dyfrdwy	1.38
Severn Trent Water	1.65
Anglian Water including Hartlepool	1.69
Thames Water	1.91
Southern Water	2.25
United Utilities	2.32
Yorkshire Water	2.67

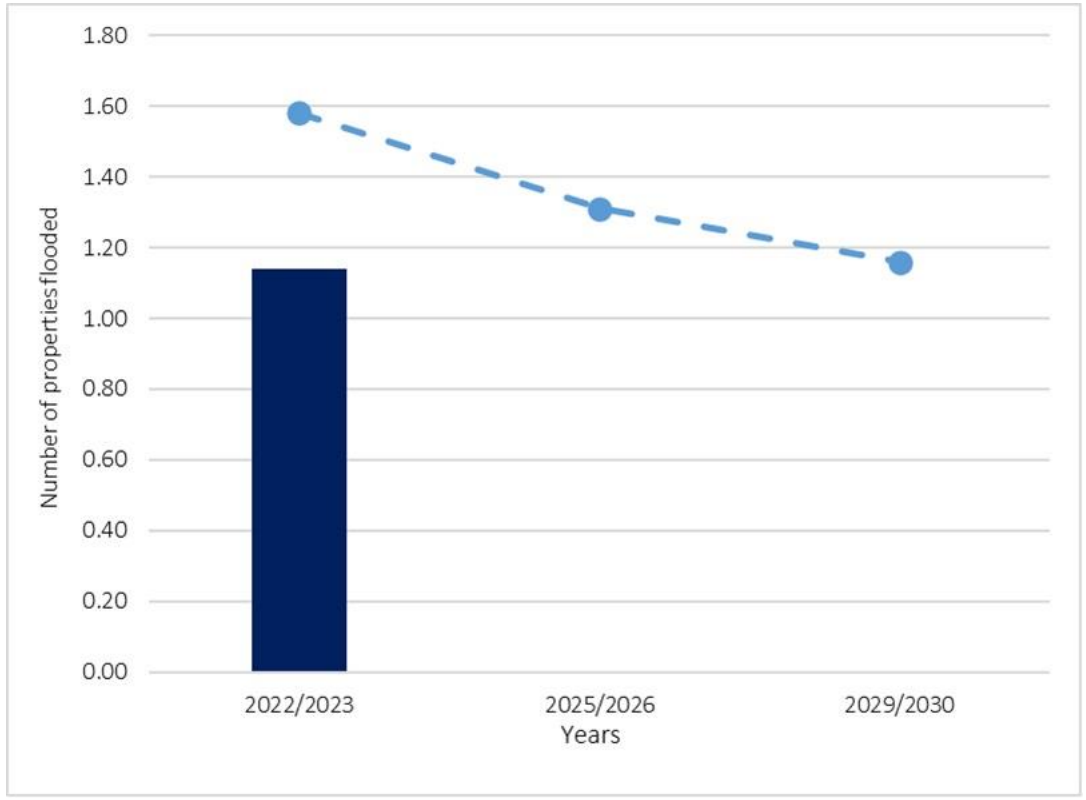
Better Performance



Poorer Performance

CHART 7

PROPOSALS FOR YOUR COMPANY'S PERFORMANCE FROM 2025 TO 2030
Sewage flooding inside properties
(number of properties flooded by sewage for every 10,000 properties connected to the public sewer)
Current performance
Target performance



Performance tables & charts shown before Q8, TABLE 8, CHART 8: Sewage flooding outside properties (Dŵr Cymru Welsh Water)

HAFREN DYFRDWY + DŴR CYMRU WELSH WATER

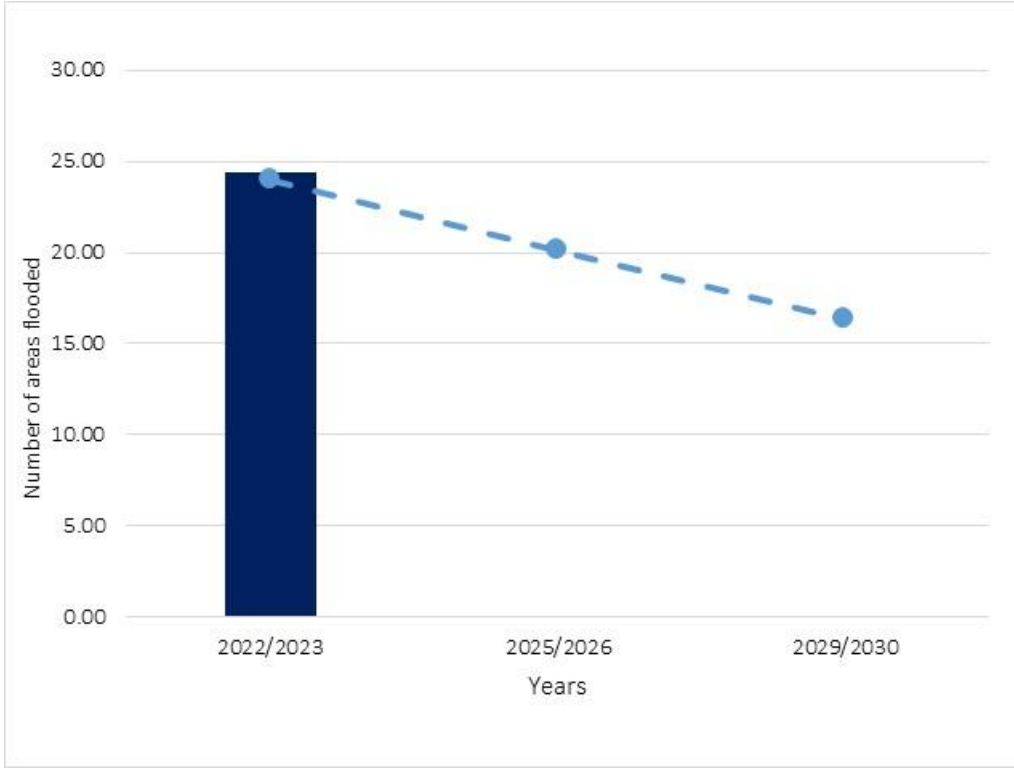
TABLE 8

COMPANY PERFORMANCE:
Sewage flooding outside properties
(number of external areas flooded by sewage for every 10,000 properties connected to the public sewer)

Severn Trent Water	12.69	Better Performance
Anglian Water including Hartlepool	16.10	
United Utilities	17.13	
Wessex Water	17.83	
Thames Water	18.41	
Southern Water	18.46	
Hafren Dyfrdwy	19.77	
Yorkshire Water	22.75	
Northumbrian Water	23.10	
South West Water including	23.19	
Dŵr Cymru Welsh Water	**24.42**	Poorer Performance

CHART 8

PROPOSALS FOR YOUR COMPANY'S PERFORMANCE FROM 2025 TO 2030
Sewage flooding outside properties
(number of external areas flooded by sewage for every 10,000 properties connected to the public sewer)
Current performance
Target performance



Performance tables & charts shown before Q8, TABLE 9, CHART 9: Pollution incidents (Dŵr Cymru Welsh Water)

HAFREN DYFRDWY + DŴR CYMRU WELSH WATER

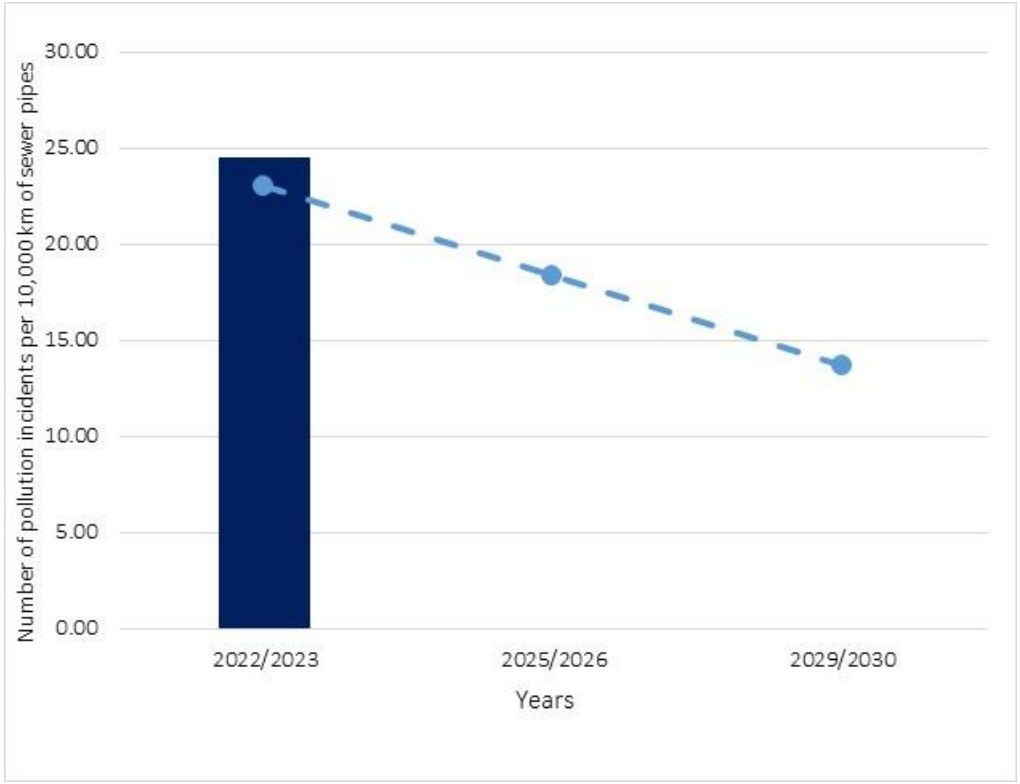
TABLE 9

COMPANY PERFORMANCE:
Pollution incidents
(the number of incidents per 10,000 km of sewer pipes)

United Utilities	16.29	Better Performance
Northumbrian Water	19.98	
Severn Trent Water	20.64	
Yorkshire Water	22.39	
Dŵr Cymru Welsh Water	**24.55**	
Thames Water	30.37	
Wessex Water	31.48	
Anglian Water including Hartlepool	33.36	
Hafren Dyfrdwy	39.84	
South West Water including Bournemouth	61.93	
Southern Water	90.11	Poorer Performance

CHART 9

PROPOSALS FOR YOUR COMPANY'S PERFORMANCE FROM 2025 TO 2030
Pollution incidents
(the number of incidents per 10,000 km of sewer pipes
Current performance
Target performance



Investment text for **Sewerage services and the environment** before Q7b

HAFREN DYFRDWY

Sewerage services and the environment

The proposal is for Hafren Dyfrdwy to invest £13 million over 2025 - 2030 to improve the environment.

The biggest areas of investment are:

£7 million to improve sewage treatment processes to prevent nutrient pollution in rivers. High levels of nutrients such as nitrogen and phosphorous occur in rivers due to things like rainwater run-off from farmland and sewage release into rivers. These nutrients mean that plants grow more quickly, taking oxygen out of the water for fish etc., harming wildlife and habitats. Improving treatment processes at sewage treatment works, will help to reduce the level of things like phosphorus before the treated water is returned to rivers and seas.
The target is to reduce the amount of phosphorus entering rivers from water company activities by 11% through processes which do more to remove this from treated sewage water before it is returned to rivers.

£2 million for additional septic tank treatment facilities. The company has one site which treats the content of septic tanks. They will provide a secondary treatment process there to meet a change in the law.

Reduce the use of storm overflows which release sewage into rivers, investment cost to be confirmed.
Storm overflows release sewage, often mixed with rainwater, into rivers or seas when sewers are full. This reduces the risk of homes and properties being flooded with sewage. This practice can also harm the environment. By reducing spill numbers, this harm may be less. All storm overflows in Wales now have a monitor fitted to measure how often and how long each is used for.
The potential performance target range is to reduce the use of storm overflows by 16% by 2029-30, down to an average of 30 spills per overflow. The exact target will be set by Ofwat based on further information from the company. This will take into account Welsh Government's priority to prioritise work on overflows that cause high harm on the environment, rather than number of spills.

HAFREN DYFRDWY + DŴR CYMRU WELSH WATER

Sewerage services and the environment

The proposal is for Dŵr Cymru Welsh Water to invest £1.3 billion to improve the environment from 2025 to 2030.

The biggest areas of investment are:

£719 million to reduce the use of storm overflows which release sewage into rivers. Storm overflows release sewage, often mixed with rainwater, into rivers or seas when sewers are full. This reduces the risk of homes and properties being flooded with sewage. This practice can also harm the environment. By reducing spill numbers, this harm may be less. All storm overflows in Wales now have a monitor fitted to measure how often and how long each is used for.
The potential performance target is to reduce the use of storm overflows by 36% by 2029-30, down to an average of 28 spills per overflow. The exact target will be set by Ofwat based on further information from the company. This will take into account Welsh Government's priority to prioritise work on overflows that cause high harm on the environment, rather than number of spills.
The company will develop wetlands and reedbeds to take treated sewage water, to allow natural processes to filter and absorb more the nutrients from the water before it is put back into rivers etc. The company will also develop more storage for rainwater, to reduce the pressure on the sewer network capacity.

£250 million to improve sewage treatment processes to prevent nutrient pollution in rivers. High levels of nutrients such as nitrogen and phosphorous occur in rivers due to things like rainwater run-off from farmland and sewage release into rivers. These nutrients mean that plants grow more quickly, taking oxygen out of the water for fish etc., harming wildlife and habitats. Improving treatment processes at sewage treatment works, will help to reduce the level of things like phosphorus before the treated water is returned to rivers and seas. **Dŵr Cymru Welsh Water has a target to reduce the amount of phosphorus entering rivers from water company activities by 17%.** As part of this it is expected to invest in wetlands. Wetlands slow rainwater run-off and let natural processes filter the water before it is returned to rivers.

£17 million for new targets to monitor river water quality. Companies must fit 'continuous river water quality monitors' at various points in rivers to get a broader understanding of how their sewage operations affect water quality. **28 river water quality monitors will be fitted on** rivers that are valued for the bio-diversity of the species that live in and around them. The monitors will provide continuous real-time information on the effect of the company's activities on watercourses. **This will help the company identify pollution and water quality issues more quickly.**

Investment text for **Protecting water supplies** before Q7b

HAFREN DYFRDWY

Protecting water supplies

The proposal is for Hafren Dyfrdwy to invest £2 million over 2025 - 2030 to ensure there is enough water to go around.

The biggest areas of investment are:

£1 million to fit smart water meters.
Smart meters help water companies to manage leakage as they provide more frequent information about water use which alerts them to leaks more quickly than meters which need to be read manually. They also help people keep track of the water they are using.
Fit smart water meters at 17,000 properties from 2025 -2030. Most of these will replace existing water meters which need to be read manually, some will be new smart meter installations at properties that have not previously had a meter. **The target is to reduce household water use by 2% from 2025 to 2030.**

£0.6 million to reduce leaks.
This will be met through improved detection of leaks and the repair and enhancement of the water pipe network. **The target is to reduce leakage by 10% from 2025 to 2030.**

£0.5 million to improve water use management.
The availability of water in the environment local to Hafren is good - there is plenty to go around which can be treated for drinking water. The company will work to preserve this surplus of water. It will do this by raising peoples' awareness of the value of water as a resource, and giving advice to customers on how to use less water.

HAFREN DYFRDWY + DŴR CYMRU WELSH WATER

Protecting water supplies

The proposal is for Hafren Dyfrdwy to invest £2 million over 2025 - 2030 to ensure there is enough water to go around.

The biggest areas of investment are:

£1 million to fit smart water meters.
Smart meters help water companies to manage leakage as they provide more frequent information about water use which alerts them to leaks more quickly than meters which need to be read manually. They also help people keep track of the water they are using.
Fit smart water meters at 17,000 properties from 2025 -2030. Most of these will replace existing water meters which need to be read manually, some will be new smart meter installations at properties that have not previously had a meter. **The target is to reduce household water use by 2% from 2025 to 2030.**

£0.6 million to reduce leaks.
This will be met through improved detection of leaks and the repair and enhancement of the water pipe network. **The target is to reduce leakage by 10% from 2025 to 2030.**

£0.5 million to improve water use management.
The availability of water in the environment local to Hafren is good - there is plenty to go around which can be treated for drinking water. The company will work to preserve this surplus of water. It will do this by raising peoples' awareness of the value of water as a resource, and giving advice to customers on how to use less water.

Investment text for **Improving drinking water quality** before Q7b

HAFREN DYFRDWY

Improving drinking water quality

The proposal is for Hafren Dyfrdwy to invest nearly £2 million over 2025 - 2030 to improve the quality of drinking water.

This will include:

£1.92 million to replace lead supply pipes which join properties to water mains.

Some older properties have lead supply pipes. To ensure water is safe to drink, it is treated with a safe chemical which stops the lead leaking out of the pipe and entering the water. However, lead can be a health risk for the very young and old, so water companies are replacing this pipework over time.

Hafren Dyfrdwy's target is to replace 230 lead supply pipes from 2025 to 2030 to improve drinking water quality.

HAFREN DYFRDWY + DŴR CYMRU WELSH WATER

Improving drinking water quality

The proposal is for Hafren Dyfrdwy to invest nearly £2 million over 2025 - 2030 to improve the quality of drinking water.

This will include:

£1.92 million to replace lead supply pipes which join properties to water mains.

Some older properties have lead supply pipes. To ensure water is safe to drink, it is treated with a safe chemical which stops the lead leaking out of the pipe and entering the water. However, lead can be a health risk for the very young and old, so water companies are replacing this pipework over time.

Hafren Dyfrdwy's target is to replace 230 lead supply pipes from 2025 to 2030 to improve drinking water quality.

Investment text for **Improving the resilience of services to disruption from external events** before Q7b

HAFREN DYFRDWY

Improving the resilience of pipes, sewers and treatment works to reduce the risk of disruption to services

The proposal is for Hafren Dyfrdwy to invest £6 million over 2025 - 2030 to improve the resilience of services.

This will include:

£5 million to improve resilience for the company's treatment works and other operational sites.

This includes more back-up power generators to reduce the chance of disruption due to heat or power failure and flood defences to protect key sites like treatment works.

£1 million on other security, including cyber.

This includes cyber security, in order to meet new statutory requirements.

HAFREN DYFRDWY + DŴR CYMRU WELSH WATER

Improving the resilience of pipes, sewers and treatment works to reduce the risk of disruption to services

The proposal is for Hafren Dyfrdwy to invest £6 million over 2025 - 2030 to improve the resilience of services.

This will include:

£5 million to improve resilience for the company's treatment works and other operational sites.

This includes more back-up power generators to reduce the chance of disruption due to heat or power failure and flood defences to protect key sites like treatment works.

£1 million on other security, including cyber.

This includes cyber security, in order to meet new statutory requirements.

IMPACT RESEARCH

Chris Ralph
Research Director
Chris.Ralph@impactmr.com

Monika Swift
Research Director
Monika.Swift@impactmr.com

Office: +44 (0) 1932 226793
Impact Research Ltd, 3 The Quintet, Churchfield Road, Walton-on-Thames, KT12 2TZ, United Kingdom

Impact Research, located in Walton-On-Thames, Surrey, was founded in 2010 by Darryl Swift and Dr. David Pearmain, focusing on research in utilities sector from the start. In 2017, we achieved ISO 20252 accreditation, which we've renewed annually since.

Over the years, we've been supporting clients by combining quantitative and qualitative methods to deliver actionable insights. Our dedicated team has built a strong reputation for excellence and innovation.

We've successfully executed projects across various sectors, including FMCG and retail, gas, electricity, water, and local authorities.

In this report, we explored water bill acceptability and affordability for the next 5 years, drawing on our expertise to provide valuable insights and recommendations for CCW and Ofwat.

IMPACT

FROM INSIGHT TO INFLUENCE