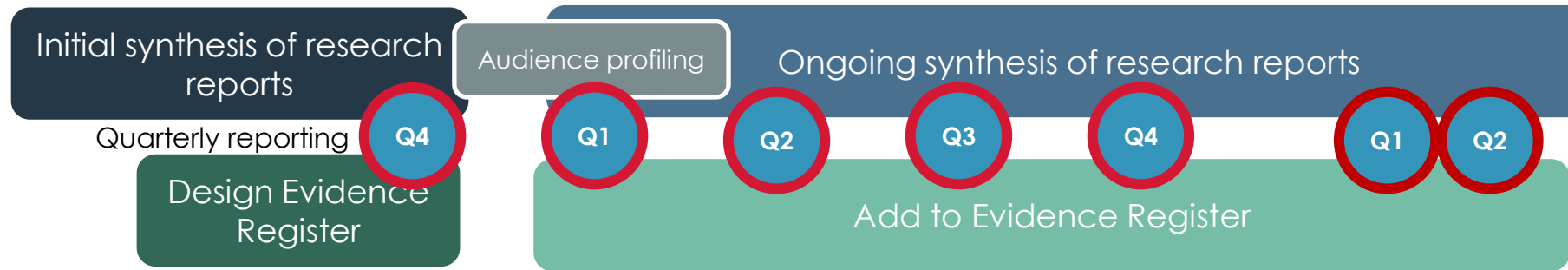# Synthesis and Triangulation workstream

Report 6: September 2023

About the synthesis

This is the sixth report for the Triangulation workstream and builds on previous work. This latest report adds new evidence from both Quarter 1 and Quarter 2 2023-4, including evidence up to September 2023.

- The purpose of this workstream is four-fold:

  1. To capture, systematically, all consumer data and insight relating to the 'Big Conversations' (including research commissioned by PW, WRSE and other published sources)
  2. To identify where there are gaps in PW's evidence base. Gaps can then be reviewed on a regular basis to inform planned and additional research briefs
  3. To start the process of triangulation early, applying a weighting to every evidence source at the outset
  4. To provide a clear framework to pinpoint where customers and consumers have shaped the business plan

- This is an ongoing process. A snapshot of the Evidence Register is available to view at any time though it is a dynamic and changing document so Blue Marble will hold the 'Master'. We will issue quarterly summaries throughout the planning period.

GIS output generated July-Aug 2022

Initial synthesis of research reports

Design Evidence Register

Methodology:

1. We participated in workshops and meetings with the PW team to understand the strategic objectives. These are reframed in language reflecting the 'Big Conversations' to have with consumers
2. The 'Big Conversations' are the starting point for a structured codeframe to log evidence systematically
3. We initially reviewed 10+ reports against the draft codeframe, finetuning the sub-themes under each Big Conversation. We now have a fixed set of codes.
4. The design captures details around the method and coverage of each report; and is structured to capture differences by customer segment (NHH, HH, Vulnerable, Future, Stakeholder)
5. Each report is assessed for its role in the Golden Thread, highlighting how insight/data is influencing the business plan

METHOD AND COVERAGE							
METHOD	METHOD NOTES	AUDIENCE(S)	GEOGRAPHIC COVERAGE	TOPIC FOCUS	INFORMED?	OVERALL SAMPLE SIZE	PW REGION SAMPLE
1. RESEARCH – Qual		1. Households	area)	3. Solely PW focus	1. Uninformed	WRITE IN	WRITE IN
2. RESEARCH – Quant		2. NHH	2. PW – all	2. Primary PW focus	2. Informed during exercise		
3. ENGAGEMENT – Qual		3. Future	3. South East (incl PW)	1. Seconday PW focus	3. Previously informed		
4. ENGAGEMENT – Quant		4. Vulnerable	4. National (incl PW)	0. No specific PW focus	4. Not specified		
5. SECONDARY		5. Stakeholders	5. Other (write in)		5. NA		
6. OTHER (Write in)		6. Retailers	6. NA				
7. NONE		7. NAVs					
		8. NA					

GOLDEN THREAD	TOPICS (BIG CONVERSATIONS). USE LETTER CODES AND WRITE IN ANY ADDITIONAL SUB THEMES					
STAGE	1. Needs, concerns and priorities?	2. Long term water supply	3. (Smart) metering	4. Infrastructure investment now	5. Interactions with PW	6. Options for economically vulnerable
1. CONTEXT (Already know)	(a) Core services	(a) Chalk streams / abstractions from sensit	(a) Universal metering	(a) Impact of climate change / net zero	(a) Channel preference	(a) Social tariff
2. VALIDATION (Confirming previc	(b) Support	(b) Water recycling	(b) Smart meters	(b) Inter-generational fairness	(b) CRM Innovation	(b) New support structures
3. SHAPING (Developing previous	(c) Community	(c) (Havant Thicket) Reservoir	(c) Per capita consumption / (	(c) Level of investment	(c) Billing platform	(c) Water poverty
4. INCLUSION (Checking consiste	(d) Environment	(d) Water sharing (transfer)	(d)	(d) Lead pipes	(d) New service model	(d) Watersure
5. ACCEPTABILITY (Plan testing)	(e) Efficiency	(e) Desalinisation	(e)	(e) Affordability in general	(e)	(e)
	(f) Water quality	(f) customer behaviour change	(f)		(f)	(f)
	(g) Wider concerns (state of the nation)	(g) supply vs demand generally	(g)		(g)	(g)
		(h) Leakage				
		(i) Drought risk				
		(j) Use of green energy to power initiatives				
		(k) Catchment management measures				

1	Customer Engagement and Triangulation PR19 summary
2	Customer Preferences to Inform Longterm Water Resource Planning Synthesis of Findings – Summary Report Water Resources South East (WRSE) March 2021
3	Customer Preferences to Inform Longterm Water Resource Planning Part A Evidence Review Water Resources South East (WRSE) February 2021
4	Customer Preferences to Inform Long-term Water Resource Planning Part B Deliberative Research Water Resources South East (WRSE) February 2021
5	Customer Preferences to Inform Long-term Water Resource Planning Part C Customer Survey Water Resources South East (WRSE) March 2021
6	Semiotics Brand Exploration
7	Yonder Clockface Initial analysis August 2021
8	Water Futures 2050 future customer insights Sept 2021
9	Water for Life Hampshire: 3 research documents 'Introductory email; Water options survey and Qualitative summary
10	WaterVoice Views of current customers on water resources. Summary report
11	Public views on the water environment
12	Household customer complaints about water companies ccwater.org.uk
13	Water Matters: highlights report 2020
14	ICS Business Benchmarking Portsmouth Water July 2020
15	2021 Service mark – Assessor Report 2021
16	ICS Who do you trust April 2021
17	Water Futures 2030 - November 2021 - Metrics for priorities
18	Water UK Omnibus Research Report Dec 2021
19	Water Recycling engagement strategy Nov_30_2021
20	Water Futures 2030 - Feedback on Regional Plan Feb '22
21	Public Attitudes Towards Smart Water Meters
22	**Portsmouth Water Foundational Qualitative Research**
23	Southern Water | Water Futures 2050 Panel | Wave 6 Feedback on WRSE plans
24	Southern Water | Water Futures Business Panel | Pilot wave Feedback on WRSE plans
25	**Portsmouth Water Stakeholder research: Business plan priorities**
26	**Portsmouth Water Barometer Wave 1 Report**
27	Southern Water Expert Insight Panel Report; SUSSEX, KENT, HAMPSHIRE AND ISLE OF WIGHT
28	Relish - reputation deep dive 07-03-22
29	Southern Water Image & Reputation Research Report
30	SW Water Futures Wave 5 report_231221_Final Jan '22.pdf
31	3522pre01_Spontaneous Priorities_Qual_v2 Dec '21.pdf
32	Understanding customers' preferences for Performance Commitments at PR24
33	Supporting vulnerable customers report 2022 FINAL
34	Cost-of-living-report-Final.pdf
35	CCW-Water-Awareness-Report.pdf
36	Southern Water - Long Term Strategy Session.docx
37	Water Futures 2030 April 2022 Report.pdf
38	Affordability Concerns and Diverse Cultures - April 2021.pdf
39	**Consumer Panel Barometer - Wave 2**
40	**Customer Advisory Panel - Report 1**
41	Vulnerable Customer Research - Wave 1
42	Southern Water: PR24 - spontaneous priorities customer and stakeholder insights
43	CMex presentation LYM 20220519 v2.ppt (also read Cmex Summary.xlsx alongside this report)
44	**Portmouth Water Audited 2021-22.xlsx AND Portsmouth Q4 2020-21 Final.xlsx**
45	**Portsmouth Water_FINAL.pdf**
46	**Portsmouth Water_Vulnerablecustomerssummer2022_Presentation_FINAL**

47	South East - Customer Priority Event - 5th October 2022 FINAL
48	Southern Water - WF2030 Diverse Cultures Summary 121022
49	Cross Cutting Customer Themes - Draft 1 Sep '22
50	**Exec Co Oct 22**
51	SW Smart Water Meter Qual Debrief_Relish_20.07.22_Final (002)
52	WRMP24 - Customer Insight Summary 05 05 22
53	Customer Summary - PR24 v4 Sep '22
54	Southern Water Repositioning Deck
55	SW NHC Panel Wave 1 Report_210722
56	Water Futures 2050 infographic June 2022
57	**Consumer Panel Barometer - Wave 3**
58	**Portsmouth Water_Crosssubsidysurvey_reportv1.0_121222**
59	FINAL-Trust-and-perceptions-views-on-the-water-sector (1).pptx
60	**PW Future Customer Panel 2022 Report FINAL Dec 2022.pptx**
61	**PW PR24 CAP2 Summary Report.pptx**
62	DWI79_2_348ex_sum Public Perception of Water Recycling for Drinking Water Use.pdf
63	**Portsmouth Water_Barometer Wave 4_Report_V2.0.pptx**
64	**PW Choices Survey Test CAP 3 Summary Report 270223.pptx**
65	Ofwat Collaborative ODI Research SP Results - Jan 23.pptx
66	Cost of living: wave three. Water customer's experiences
67	**Portsmouth Water Future Customer - Plan Choices**
68	**Customer Advisory Panel - report 4**
69	**Plan Choices Research - Non Household Customers**
70	**Portsmouth Water Plan Choices – Triangulation**
71	**Affordability and Acceptability testing - QUAL**
72	Portsmouth City Council Residents Research - Wave Four – November 2022
73	**PW Smart Meter Hypercare Research FINAL REPORT 160823**
74	**Portsmouth Minority Audience Report v1.0**
75	**PW_LTDS_Interim Findings**
76	**QuantAAT_PortsmouthWater_FULLreport_v1.0**
77	**Portsmouth Water_Barometer Wave 6_Report_V1.0 (NB NOT REPEATING WHAT WAS LOGGED IN REPORT 75)**

REPORT 6 (up to September 2023) Adding a further 12 reports including 10 Portsmouth Water specific reports.

Bold type: Portsmouth Water commissioned research

BLUE MARBLE

The **Synthesis and ongoing triangulation** includes a wide range of reports drawing on a variety of research and engagement methods across different audiences. These are both larger and smaller scale, and may have varying degrees of rigour in terms of design, analysis and reporting.

We use a two part report evaluation framework to assess: a) the validity / quality of each source overall and b) the relevance of the higher quality reports to the specific Big Conversations.

a) Assess validity / quality of each source

The **evidence score** indicates the overall quality of each source. It is based on the Blue Marble Executive team's appraisal of report **Robustness** and **Coverage.** A maximum score of 10 signifies a highly robust and credible report that has comprehensive coverage of consumers in the Portsmouth Water area. Lower scores indicate reservations in terms of design, sample size or interpretation within the report, or where the report has lesser (or no) coverage of Portsmouth Water consumers.

Further detail of the rating scales are in the appendix.

10 = Highly robust and credible for PW area

b) Assess relevance to each Big Conversation

As part of ongoing **Triangulation**, we also evaluate, for each higher quality report, how **strongly relevant** it is to informing the customer view on each Big Conversation. This is based on the Blue Marble Executive team reviewing objectives and findings in each report

Those which are explicitly designed with a strong focus are designated as '**Primary**' sources for each Big Conversation and thus will have highest weighting in Triangulation. Those where there is a lighter focus are designated **secondary** and are likely to be used as supporting evidence in Triangulation (e.g. helping develop a narrative to further understand Primary evidence).

PRIMARY: High quality report which is strongly focused on answering specific Big Conversation

SECONDARY: High quality report which is only partially focused on specific Big Conversation

BLUE MARBLE

Updated synthesis report

The latest phase of Portsmouth Water's research and engagement has brought dedicated high quality evidence to big conversations 3,4 and 6, with added high quality and more up to date insight on smart metering, long-term delivery strategy (how to invest) and specifically on business plan affordability - a key part of the PR24 research mandated by Ofwat.
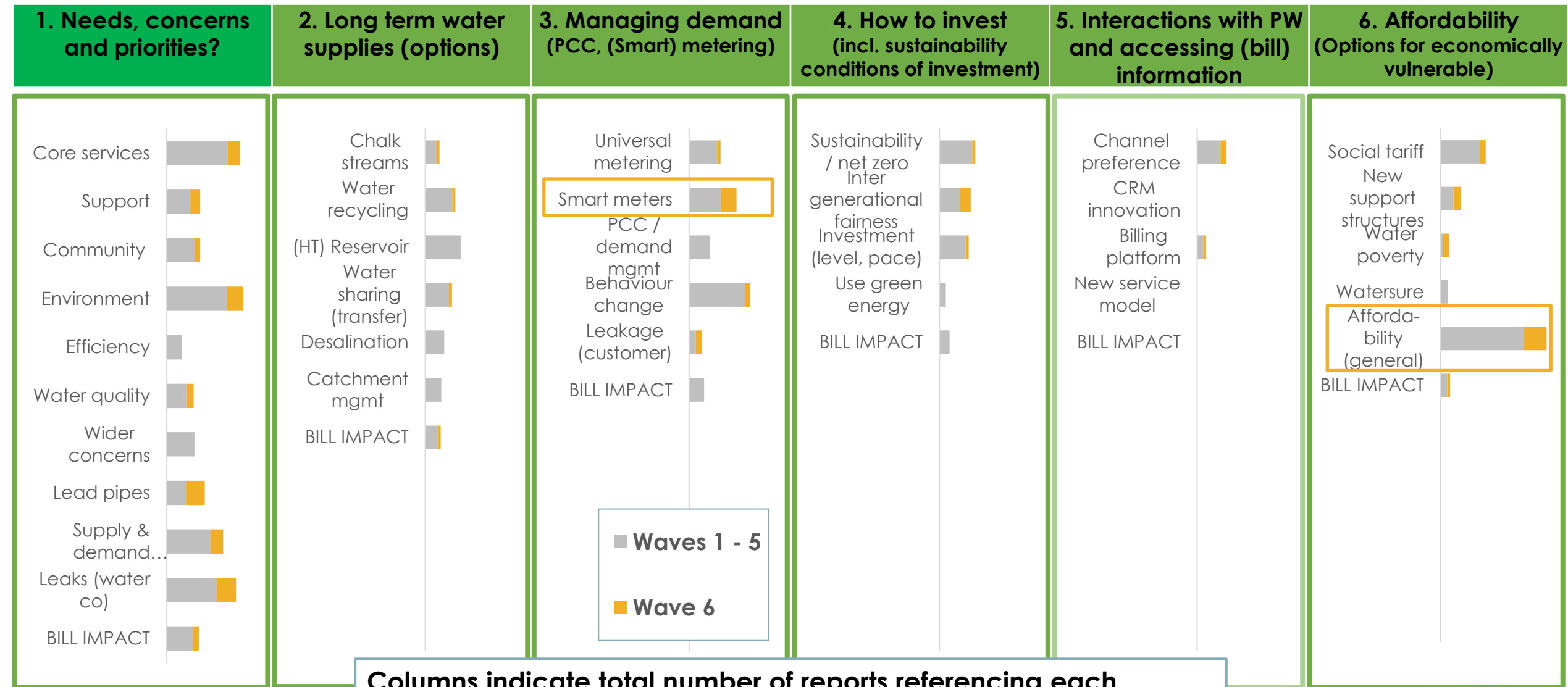
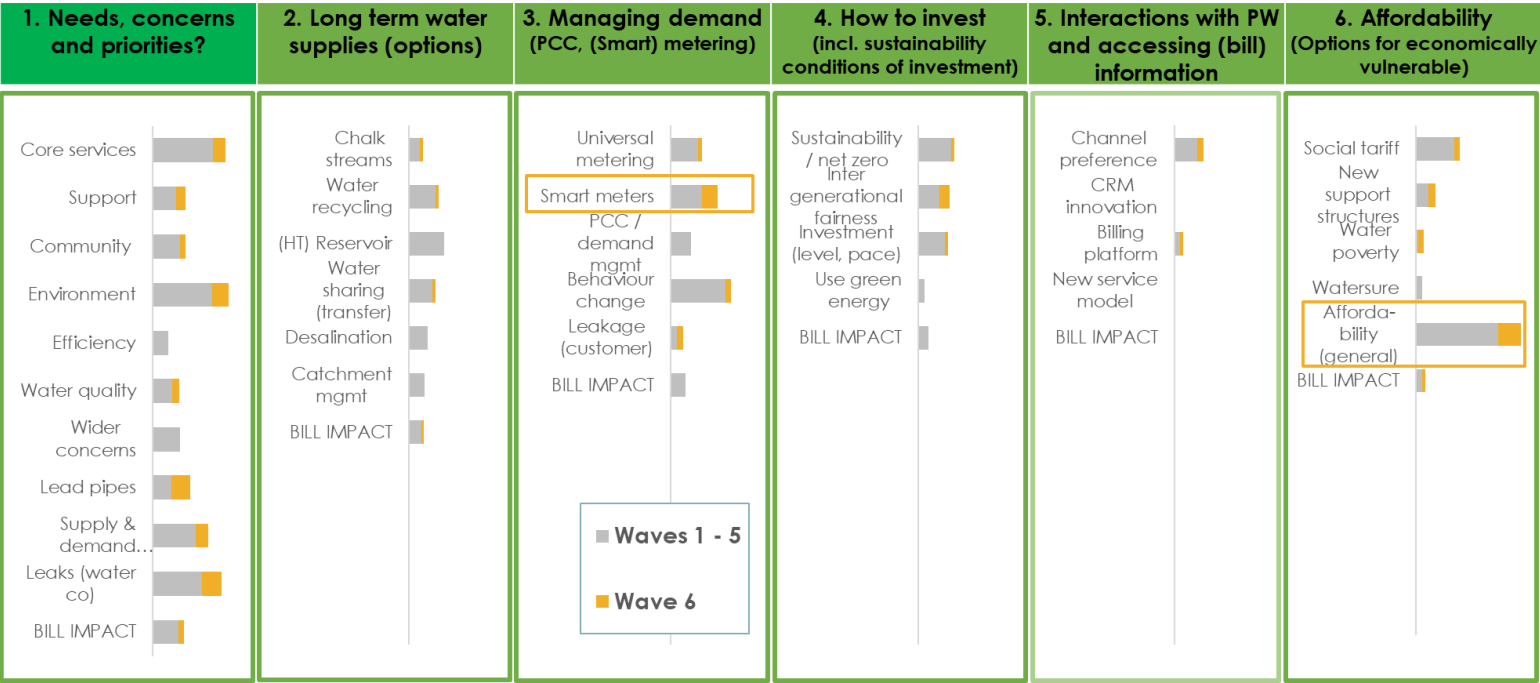| **Number of reports at September '23** (Change from Mar '23)	**Big conversations**					
	1. Needs, concerns and priorities?	**2. Long term water supplies (options)**	**3. Managing demand (PCC, (Smart) metering)**	**4. How to invest (incl. sustainability conditions of investment)**	**5. Interactions with PW and accessing (bill) information**	**6. Affordability (Options for economically vulnerable)**
PRIMARY high quality reports (score 8-10)	5 (-)	3 (-)	6 (+1)	3 (+1)	1 (-)	5 (+2)
SECONDARY high quality reports (score 8-10)	20 (+8)	5 (+1)	13 (+5)	11 (+4)	10 (+1)	11 (+2)
Mid quality reports (score 5-7)	28 (-+1	16 (-)	19 (-)	14 (-)	6 (-)	20 (+2)
Lower quality / unrated reports (score 2-4 or unrated)	4 (-)	2 (-)	1 (-)	2 (-)	-	2 (-)
Total	57 (+9)	26 (+1)	39 (+6)	30 (+5)	17 (+1)	38 (+6)

BLUE MARBLE

Most individual themes within the Big Conversations now have evidence. A notable build in evidence regarding smart water meters in the latest report.

Columns indicate total number of reports referencing each individual theme, weighted to reflect report evidence scores

1. Needs, concerns and priorities?	2. Long term water supplies (options)	3. Managing demand (PCC, (Smart) metering)	4. How to invest (incl. sustainability conditions of investment)	5. Interactions with PW and accessing (bill) information	6. Affordability (Options for economically vulnerable)

Column 1:
- Core services
- Support
- Community
- Environment
- Efficiency
- Water quality
- Wider concerns
- Lead pipes
- Supply & demand...
- Leaks (water co)
- BILL IMPACT

Column 2:
- Chalk streams
- Water recycling
- (HT) Reservoir
- Water sharing (transfer)
- Desalination
- Catchment mgmt
- BILL IMPACT

Column 3:
- Universal metering
- Smart meters
- PCC / demand mgmt
- Behaviour change
- Leakage (customer)
- BILL IMPACT

■ Waves 1 - 5
■ Wave 6

Column 4:
- Sustainability / net zero
- Inter generational fairness
- Investment (level, pace)
- Use green energy
- BILL IMPACT

Column 5:
- Channel preference
- CRM innovation
- Billing platform
- New service model
- BILL IMPACT

Column 6:
- Social tariff
- New support structures
- Water poverty
- Watersure
- Afforda-bility (general)
- BILL IMPACT

Results from the latest two Quarters includes more dedicated evidence for key customer segments:
- Minority audiences (including those with English as a second language)
  - Including how they prefer to interact with Portsmouth Water
- Future customers (University students) – views on Plan Choices and wider perspectives including channel preferences
- Non-household customers' views on Plan Choices (primarily SMEs)

In addition strengthened evidence overall on:
- Long term delivery strategy, with focus on demand management & smart meters
- Plan affordability research (still in progress) is bringing robust further detail on the impact of the cost of living crisis along with plan affordability

Gap analysis

- There is limited evidence across the Big Conversations of the views of *larger* NHH and a wide cross section of stakeholders (these audiences may need a new strategy for effective engagement).
- Looking ahead, there is still scope to do further work on Portsmouth Water CRM platform and innovation

BLUE MARBLE

What do we know so far – from all consumers?

Environment

- HH customers aware of 'environmental' issues but: disconnect between saving planet & saving water
- **NHH** don't link climate change and water scarcity and their business
- Covid has pulled people more towards local issues/community and local environment
- The environment is higher priority than in PR19: SW customer preference for going beyond the minimum & accept paying (a small amount) more for environmental Improvements.
- Unacceptable for long term plans to be at expense of environment – esp. so for **Future customers**
- **Future customers** prioritise nature based while **NHH** engineering based
- **Sewage release** is the dominant environmental issue for the water industry. Only 24% think water co.s are environmentally conscious – **trust** is lacking on this

- For PW customers, while environment is topical, it is only **a medium-level priority for PW** (a water-only supplier). This is backed up by Ofwat WTP research
- Although on learning more about local water resources and chalk streams, customers do rate preserving local environment as important for PW
- Most PW customers identify Southern Water, not Portsmouth Water, as responsible for this
- **Future PW customers** care about environmental impact, but only if it doesn't cost too much; they feel they are more conscientious than older generations and put blame on large organisations

Reliable service

- Very high importance placed on water company efficiency to ensure minimal leakage
- Long term security of supply is also a critical (hygiene) factor
- **6 in 10 trust water co.s to provide reliable service**

- Ofwat WTP shows **avoiding long term interruptions** to supply is **more highly valued than anything else,** followed by water quality
- **Future customers**: leaks need urgent attention
- Overall PW satisfaction 95%: best in industry
- CMEX fell back in 22Q1 & 21Q4): operational issues and water quality key factors
- Lead pipes emotive and urgent priority; a need for better comms stressed by Future PW customers
- Knowledge about lead pipes influences levels of concern
- Mixed reaction to phosphate dosing
- **Visually impaired customers** concerned about discoloured water
- **Hearing impaired customers** concerned about not hearing leaks
- **NHH customers** content with level of interruption: It's important but no desire to invest highly in this area
- **Overall** widespread support for small company premium – worth it for good service

Customer service

- Customers want more visibility from water co: greater focus on education
- Social value – going beyond the basics – is an expectation
- **Diverse cultures**: place greater emphasis on supporting customers
- **NHH** have higher service expectations & want better communication
- **NHH:** prioritise both price and customer service

- Customer service appears a higher priority for PW customers: satisfaction is strong and 'local feel' appreciated but service touchpoints need updating
- Satisfaction levels from **vulnerability stakeholders** has reduced (below ODI level)
- **Vulnerable** customers particularly value easy customer journey & good comms to minimise stress
- **PW customers** support PW delivering social value but it needs to be purposeful, authentic and have a sensible link to PW. Need to explain association with local orgs/charities
- **PW customers** surprised by breadth of support provided by PW for vulnerable customers

Affordability

- Theme in flux: pre cost of living crisis,, lowest cost was NOT the most important thing for most
- Cost of living now top of mind: pressures on finances have escalated
- Customers want a stable bill with support for vulnerable

- 27% of PW customers think they will struggle quite a lot/a lot over the next 12 months:
  - **Lower incomes** more so (49%)
  - Those with **vulnerability** (49%)
- Cost pressures indicated in CMEX
- **Vulnerable customers** place greater emphasis on (bill) support and making it easier to deal with PW
- **Stakeholders** emphasise PW's responsibility for helping vulnerable customers
- Specifically, indications that vulnerable PW customers more worried than others about lead pipes
- **Future PW customers** highly considerate of needs of vulnerable customers – want PW to be cost conscious & support cost-sensitive customers
- 19% of **PW customers** think overall PW and SW proposed bills to 2030 would be easy to afford

What else do we know about Portsmouth Water customers?

BLUE MARBLE

What do we know so far – from all consumers?

Awareness of water resources

- Low awareness of water resources / drought risk / strategic plans
- Water stress issues not well understood – water perceived abundant
- Perception of river / sea water quality has deteriorated in recent years - concerned about ecology and wildlife, more than bathing in it
- **Diverse cultures**: different perspectives – water on tap a luxury not taken for granted
- Need to talk about drought – not just in summer months

- Expect population growth and climate change will lead to greater demand for water
- **Future PW customers** awareness of water restrictions is limited – a third (incorrectly) think they had experienced a hosepipe ban in summer 2022. They are making more of an effort to reduce energy usage than water usage
- **PW customers** unaware of significance (or existance) of chalk streams

Demand options

- Consumers think primary focus should be on company efficiency (reducing leaks) and helping customers use less
- Proposals to abstract less and use catchment management are not well understood but the general principle to protect environments is supported (provided it is effective).
- **Future customers:** positive about reduced abstraction
- In general, consumers think water companies need to get their own houses in order (leaks), meters and education & support

- Slightly different priorities to overall SE region (e.g. slightly less averse to abstraction)
- PW long-term leakage ambitions often not thought ambitious enough
- **HH customers** broadly support demand elements of WRMP (but the smart meter element received the lowest support of the option (75%))
- **NHH customers** support leakage reduction – seen as cost effective way to increase supply.
- **PW customers** disappointed at target for leak reduction. Most opt for plan B in AAT Qual but some would prefer accelerating the plan to reach goals 5 years earlier.

Supply options

Supply options secondary to demand. Preference based on: reliability, producing large amounts of water, & lower cost.
- Broad support for **reservoirs** driven by leisure and environmental benefits, but concern over localised disruption.
- **Catchment management** a popular idea, but role unclear. Most popular with **stakeholders**
- Broadly positive about **water transfer** (if environmentally sensitive / beneficial) but don't want to be dependent on it. Concerns about sustainability of option in drought periods. A last resort option.
- Mixed views on **water recycling** with concerns over water quality and safety. Most people know little about it; greater support when people know more. Ultimately over 7 in 10 happy to drink recycled water
- **Desalinisation** lower support – high energy, carbon and environmental impact, plus cost. **Stakeholders** particularly negative
- **Tankering** has least support.
- **Aquifer storage and recovery:** welcomed, innovative, good environmentally

- Highest support for Havant Thicket Reservoir (HTR) as preferred new source, with majority supporting water recycling too. Then desalination. Water transfers the least preferred option.
- **Future customers'** concern if biodiversity at HTR site is being protected
- **PW stakeholders** supportive of new sources, provided environmental impact managed
- **PW customers** open to water recycling and want this addressed earlier
- **PW customers** want upgrading connections now as opposed to 2035

What else do we know about Portsmouth Water customers?

BLUE MARBLE

What do we know so far – from all consumers?

(Universal) metering

- **Metered customers** are more likely to help to reduce their water use vs. unmetered
- Some resistance to metering identified (larger households; think bills will increase; don't want to worry about use)
- **Younger customers** more likely trial a water meter.
- **Vulnerable**: Metering potentially source of great anxiety for those who will make sacrifices to use less (esp. for those with poor mental health) ,How will vulnerable be protected against bill increases?

- PW customers support meters once benefits explained and provided safeguards in place for financially vulnerable
- However, there is also resistance from customers who anticipate increased costs and are sceptical they can reduce water use. There is concern about mandatory metering
- Universal metering slightly less preferred in PW region vs. SE region overall (WRSE).
- **Stakeholders** supportive of meters – in a region with above average usage – but customer engagement/ comms important to get support
- In 2021-2 34% of HH customers were metered - only incremental increases over the previous two years.
- In 2021-2 over 7 in 10 of unmetered customers were aware of option to have a free water meter - fairly stable for the last few years. (NB this contrasts with under 40% who actually have one…).
- **Future PW customers** support metering in principle because fairer to charge on usage and to make people aware of their use. In practice, there is some distrust about accuracy of meters - and targets for universal (smart) metering seen as too ambitious.
- **Unmetered households** nervous about metering – esp **vulnerable customers, large HH and Muslim customers**.

Smart metering

- Broadly there is support for *smart* meters. Benefits are financial saving, enabling informed choices & helping educate. However…
- **Stakeholders** raise negative experiences of energy smart meters: increased bill anxiety; obsessive monitoring; fear service being cut off
- **Unmetered:** concern about **paying more**
- Roll out requires clear communications

- Support for smart meters initially muted, but 7 in 10 support once benefits communicated (14% still reject smart meters)
- **Unmetered:** concerned about paying more
- **Low income & (some) younger:** an additional stress of 'another bill in their living room'
- **Digitally excluded:** security concerns / fraud risks
- **Better off customers** want to save water; **worse off** want to save money
- **Oldest** most interested in detecting leaks
- **Stakeholders:** negative experiences of energy smart meters: bill anxiety; obsessive monitoring; fear being cut off
- **House shares:** concerned about potential for conflict in household
- **NHH** most positive (useful for cost control/leaks)
- **Future PW customers** generally support - make wastage tangible. *But* they assert benefits need to be communicated, and vulnerable & digitally excluded must not be left behind.

PCC/behaviour

- Nationwide, only around 1 in 4 are aware of being asked by their water co to use less water
- 35% want to hear more on how to save water
- If customers know water resources limited, there's high willingness to reduce water use (national)
- 6 /10 have not taken any action to reduce their water use in the last 6 months. But, most (76%) claim to be open to changing their behaviour if they heard they needed to because of climate change
- Customers 'taking up the slack' of water reduction seen as risky

- PW customers are less conscious than SW customers of water use, and struggle to think how to use less
- PW customers more resistant to changing water behaviours (compared to SW and SEW customers)
- Areas most prepared to change behaviour: reusing kitchen water; shorter showers. Least favoured: fewer showers and flushes
- Actual PCC averaged across measured and unmeasured is 160l in 2021-2 (versus ave. of 140l).
- …and Household usage is up 8% compared to pre-Covid, after weather is taken into account.
- **Future PW customers** think target for reducing consumption feels too ambitious; they also question strategy to use 'Get Water Fit' as their **experience of free water saving devices was poor**
- **Muslim customers** perceive themselves to have higher water usage for faith relating activities 5x a day and tend to live in larger multi-generational households

What else do we know about Portsmouth Water customers?

BLUE MARBLE

What do we know so far – from all consumers?

General principles

- Preparing fully for future challenges is a key consumer trend
- Want best value long term investment, not just cheapest / short term solution
- Majority want water companies (nationwide) to go 'beyond the basics' for meeting minimum legal requirements – particularly re: species extinction and climate change.
- When customers are informed, they are prepared to fund environmental infrastructure - and almost feel morally obliged to for future generations
- Overall, a willingness to pay for investments now to safeguard water resources and the environment for future generations
    - Although expect affordability to be taken into account
    - And water companies need to be trusted to invest rather than profit
- **Future customers** prepared to pay more to cover environmental investments (as long as bills affordable)

- Most PW customers would prioritise ensuring reliability and protecting local environments over keeping bills low (and to a lesser extent, minimising energy use).
- PW customers demonstrate bill sensitivity: they want to pay for future investments gradually – no bill shocks
- Most do not want/anticipate large increases as currently satisfied with the service (and largely unaware of future challenges)
- **Future customers** think PW targets for long term investment are too far away – 'it seems some of it could be done now'. Question transparency on progress towards long term targets
- **PW customers** generally would prefer a front-loaded bill profile rather than delaying this and burdening future customers
- **Future PW customers and vulnerable customers** would also like to see a bill increase then flatten out (with lowest bill increases in the longer run)
- **PW customers** fail to understand why some objectives' timelines are different
- 61% of PW customers (HH plus NHH) find the PW and SW business plan to 2030 acceptable. Costs, company profits and lack of trust are key reasons for low acceptability, and these largely reflect views of Southern Water

Environmental / net zero targets

- Some evidence (from WRSE) that high energy use a common issue for new supply options; the goal of using green energy is reasonable to most consumers, provided this is at a reasonable cost
- Use of chemicals for water treatment is also a common issue with future options
- **Stakeholder**s more concerned about carbon impacts of plans (e.g. desalination)
- **NHH** (in the SE more widely) sceptical of net zero targets (and the associated costs)
- **Future customers** want to see companies investing in more environmentally sustainable infrastructure today rather than waiting until the future
- Reduction in risk of emergency drought measures needs to be achieved sustainably

- Customers recognise the need to invest to provide good quality water as most urgent - recognising sustainable sources important too - but less so
- Customers positive about partnering with renewable energy provider: supportive of sustainability and use of renewable energy
- 95% are supportive of PW WRMP plan to reduce environment water use
- In Qual Plan Choices research (trading off investment against bill costs) customers choose medium investment net zero option (achieve by 2040). Customers are wary of bill implications and want to see what reaching net zero will look like in practice
- **Vulnerable customers** want to hear about tangible improvements to address climate change and see where their money is going. They supportive environmental focus - not polluting & protecting/ improving habitats and wildlife. Less likely to support high investment options
- **NHH customers** open to environmental targets but detail of plan and benefits need to be clearer
- PW customers supportive of investment to reduce flooding
- CSOs are a priority for **PW customers** – it needs to be fixed now. Target of reduced spills of 25% not enough and not ambitious enough for bill impact of £33 (relates to Southern Water)

What else do we know about Portsmouth Water customers?

BLUE MARBLE

What do we know so far – from all consumers?

Channel preference

- In general (nationally), if their water company wanted to let customers know about something important, the best way is by email; however younger customers under 35 are more likely to prefer flexible digital channels than older age groups
- Nationally, awareness of social media campaigns to save water is low
- Less then 1 in 10 nationally recall seeing water saving tips on social media in the last year with those on water meters more likely to recall them (although of these, 6 in 10 claim to have taken action).
- Claimed awareness of info sources about river / sea pollution were: 43% TV, 22% newspaper, 20% social media, 13% radio, 9% other online
- Ofwat research on trust in the water sector indicates customers who are **more frequently contacted** and **across multiple channels** are **more positive towards their water company**, particularly with direct engagement

- 39% of customers said they would prefer to contact PW by phone, 32% by email, 19% by webchat on the PW site, 5% WhatsApp and 2% write a letter. (This contrasts with the existing channel balance where very few use webchat - a lack of awareness?)
- **Future customers** have very low awareness of Portsmouth Water. On review they find Portsmouth Water's **social media** presence **inactive and inconsistent**. They make recommendations to develop more effective social media campaigns
- **Future customers** find Get Water Fit site lacking in good visual information and charts difficult to interpret
- Some PW customers think billing service is due for modernisation
- PW customers expect: quick, effective, efficient, channel choice (including live chat and phone)
- PW customers expect website to cater for straightforward issues
- Automated services seen as unable to deal with many issues (importance of real people to help)
- **Support organisations** want a named contact at PW
- Satisfaction (from support organisations) generally high across all channels
- Customers have mixed views about digitisation - concern that it will be exclusive and as a result exclude those non familiar/not able. **NHH** more positive, feels aligned to their priorities
- **Future PW customers** prefer text for important information and emails for general info. There is an appetite for a self serve portal, with an option to contact via phone if needed. Chatbots, letters and apps deemed unnecessary
- **Minority audience customers** do not understand bills. Need help from people from community; google translate is not enough

Out of a total of 145,903 contacts for PW in 2021-2:
- 32% written
- 67% telephone
- 1% webchat (incl WhatsApp)
- 0.03% social media
- 0 SMS

What else do we know about Portsmouth Water customers?

BLUE MARBLE

What do we know so far – from all consumers?

Pre cost of living crisis / pre summer 2022

- Customers open to modest bill increases. Key expectation: any bill increase accounts for needs of vulnerable and low-income households
- Affordability needs to be taken into account when investing now for future generations: **Future customers** want affordability efforts to be faster, more radical
- Nationwide picture on bill affordability shows differences by groups:
- 18–29s most likely to say bills were unaffordable and that their financial situation got worse last year (this is higher than last year)
- Those with disability/disabled person in hhld significantly more likely to disagree that their charges are affordable (same as last year)
- **Asian, mixed or 'other' ethnicity** are also more likely to disagree that their charges are affordable, which is also similar to last year
- Affordability becoming an increasingly important priority: those struggling financially feel less resilient to cost increases than they did during pandemic
- Desire for better awareness of how bills work and support available

- Decrease in HH thinking PW bills affordable or fair (2021 Water Matters)
- Low awareness of support scheme amongst vulnerable customers
- PW customers happy in principle to pay more to help others, provided the schemes reach the right people
- Some PW customers voice concern about bill increases generally (and that general proposals re investments can look costly)
- PW customers with affordability issues can have different views e.g. universal metering - and are less satisfied with PW
- PW low contact with PSR hhlds - less than 13% in 2020-21 were contacted.
- **Stakeholders** want PW to be more proactive in delivering schemes to vulnerable customers

During cost of living crisis / post summer 2022

- Pandemic and cost of living crisis has increased importance of supporting vulnerable customers
- Given price increases in electricity and gas of over 50%, water feels more affordable - electricity and gas more top of mind than water.
- **Diverse cultures:** affordability has become a much bigger issue in context of cost of living crisis. Their awareness of PSR and social tariff is very low because they engage much less than other customers, and have poor English and literacy skills.

- Affordability of TOTAL water and sewerage bill lower than in 2015. Those on lower incomes are least likely to find the bill affordable
- 12% are finding it quite or very difficult to manage financially at the moment.
- 14% are aware of any financial aid schemes from PW - a low level but up significantly from 2015. Over half of those who need it are unaware of PW bill support scheme
- Perceived affordability is not always determined by HH income - significant numbers in middling income brackets are struggling to afford.
- Great majority support principle of social tariff although a substantial minority don't think this should be solely funded by other customers; some think PW should pay some or all from their profits.
- 70% find £3 on the bill for social tariff acceptable. On balance there's evidence that people would prefer a smaller subsidy that reaches a wider range of customers - perhaps indicative of broader anxiety from cost of living increases.
- In Qualitative Plan Choices research customers opted for 'medium' rather than 'high' social tariff option. There was uncertainty and confusion around the alternative nationwide scheme and PWs role in this
- **Future customers** think it is good to help, but ask what happens when people can't pay at all
- **Vulnerable** are most concerned about long term bill increases
- **Almost all PW city council residents** experienced increase to cost of living (94%) – attributed to rising food (97%) and gas/electricity bills (88%). 52% unable to meet day to day cost of living
- **PW customers** feel eligibility criteria for financial support should be widened (but need robust eligibility criteria). Despite most supporting proposed cross subsidy some question the model. Also unhappy that there are different schemes for PW and SW
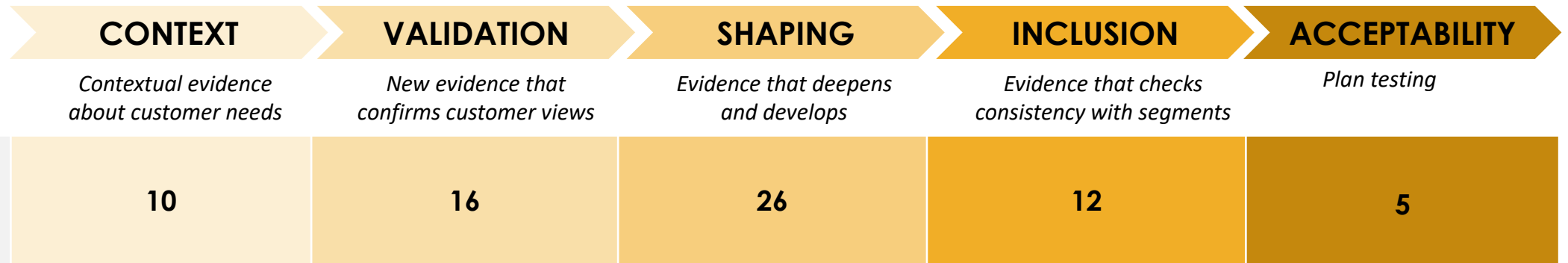- Low awareness amongst vulnerable customers of ST and PSR and unsure of how to apply for this

What else do we know about Portsmouth Water customers?

Summary

The Golden Thread

	CONTEXT	VALIDATION	SHAPING	INCLUSION	ACCEPTABILITY
	Contextual evidence about customer needs	*New evidence that confirms customer views*	*Evidence that deepens and develops*	*Evidence that checks consistency with segments*	*Plan testing*
How many reports contribute to each step in the Golden Thread?	10	16	26	12	5

- We have been monitoring evidence sources and indicating where each has a clear role in 'the Golden Thread' under the high level codes, as shown above
- The key to the Golden Thread is showing where the research and insight has informed aspects of the plan ('you said, we did')

BLUE MARBLE

Summary & conclusions

Results from the latest Jan-August reports provides:

- Detailed exploration of plan choices from a range of research projects (triangulated in report 70 'Plan Choices Triangulation')
- Sample related gaps have been filled through in-depth research with minority 'hard to hear' groups
- A topic specific project relating to smart meters (which for customers is the most contentious area of the draft business plan)
- The results from the Affordability and Acceptability research (following Ofwat's guidance) relating to the draft business plan

Cost of living crisis continues to be prominent in consumers' minds
- We continue to see price sensitivity which will be having a direct impact on perceptions of bill affordability – and shaping levels of acceptability for specific investment areas

- The remaining slides summarise how the ongoing synthesis has informed the draft business plan
- These conclusions are the culmination of Portsmouth Water's two-year programme of customer engagement
  - Using ongoing research vehicles and
  - Projects commissioned specifically to inform the plan development
  - Project commissioned specifically to plug evidence gaps when they became apparent.
- Supplemented with a systematic review of a wide variety of other relevant evidence sources.
- The following slides are updated from '*Summary of Engagement Triangulation for PW Sept 2023*'

BLUE MARBLE

Overall affordability & acceptability

- The whole body of evidence leads to the conclusion that Portsmouth Water customers endorse the draft business plan.

- However, the diagram below illustrates a nuanced response to the plan elements (notably smart metering and leakage).

- Around three quarters (76%) of customers rate the plan *acceptable* or *very acceptable*. (Notably this level of acceptability drops to 61% when related to the joint Portsmouth and Southern Water plan). Customers are far less confident about their ability (or willingness) to afford the plan. Around 1 in 10 (12%) say they are already struggling to pay their water and sewerage bills. When presented with the joint bill impact (PW and SW), 44% say it will be *very* or *fairly difficult* to afford.

CUSTOMER SENTIMENT
Higher priority

PLAN ENDORSEMENT: Weaker/ conditional

- **Leakage** is an emotive issue. The level of proposed investment, however, can disappoint relative to spend/emphasis elsewhere.

- **Maintain reliable supply**: PW seen to be doing well - does not need to do go further in this area
- **Water quality:** high levels of acceptability to improve performance at no additional cost on the bill

PLAN ENDORSEMENT: Stronger

- **Smart meters:** not perceived to be meeting a customer need – nor linked with leakage reduction. Majority support plan once informed about the rationale – and on the basis of no bill impact*.

* NB final plans did include £13.25 bill impact

- **Lead pipes**: once informed, importance increases. Focusing on buildings associated with children and vulnerable reflects the key concerns customers have
- **Environment:** not an urgent investment, customers are happy with the plan

CUSTOMER SENTIMENT
Lower priority

Transformational change needed in customer mindset to see role and significance of smart meters in managing demand. Customer comms will be critical.

BLUE MARBLE

What were customers responding to?

1

Customer priorities

- Unprompted discussions
- General statements about aspects of the plan
- Descriptions of the long-term vision

2

Review of Plan Choices

- Customers were given descriptions of investments with three bill impact options.
- Set in context of long-term vision 2025- 2050

3

Acceptability & Affordability

- Customers were given information about 6 areas of the plan: 3 performance commitments and 3 areas of significant investment
- Acceptability based on whole bill impact from 2025-30

REDUCING LEAKAGE	▲
Low: Reduce leakage by 50% **by 2050**. This meets minimum government expectations	£0.00
Medium: Reduce leakage by 50% **by 2045**.	£0.40
High: Reduce leakage by 50% **by 2040**. This is what Portsmouth Water would like to do	£0.55

FINDING AND REPLACING WATER PIPES MADE OF LEAD	▲
Low: All homes have access to water with no exposure to lead **by 2070**.	£0.00
Medium: All homes have access to water with no exposure to lead **by 2060**.	£1.05
High: All homes have access to water with no exposure to lead **by 2050**. This is what Portsmouth Water would like to do.	£1.47

KEEPING YOUR WATER SUPPLY RELIABLE	▲
Low: The number of households without water for 3 hours in any year goes up from 1 in 100 to 1 in 20 (as reliable as the industry average)	£0.00
Medium: The number of households without water for 3 hours in any year stays at 1 in 100 (the most reliable in the country)	£0.67
High: No-one would be without water for 3 hours in any year. This is what Portsmouth Water would like to do.	£1.35

ENHANCING THE LOCAL ENVIRONMENT	▲
Low: Make sure biodiversity doesn't deteriorate at our key sites and no increase in our grants to enhance the environment	£0.00
Medium: Improve biodiversity at our key sites by 2030 but no increase in our grants to enhance the environment	£0.06
High: Improve biodiversity at our key sites by 2030 and double our grants to enhance the environment	£0.08

	WATER SUPPLY INTERRUPTIONS LASTING LONGER THAN THREE HOURS	THE APPEARANCE, TASTE AND SMELL OF TAP WATER	REDUCING LEAKS
CHALLENGE	Maintain our water supplies as the most reliable in the country, and at least as reliable as they are today (an average of 2 minutes 15 seconds).	Maintain our position as one of the best performing companies with lower contacts than the industry target.	Maintain our position as one of the best performing companies and reduce leaks from 77 litres per property per day to 56 litres by 2030.
2025-2030	Invest more to upgrade ageing water treatment works, pumps and water mains. To maintain our industry leading service, would cost an additional £3.35 plus inflation on bills by 2030.	Add more ultraviolet treatment to our works, partner with landowners to stop pollutants reaching water sources and replace more water mains.	Transform our network into a 'smart' one to monitor flows, employ advanced sound and satellite technology, repair leaks on customers' supply pipes free of charge (conditions apply) and increase our workforce. Our fast-track plan to reduce leakage would cost an extra £2.75 plus inflation on bills by 2030.
LONG TERM	Keep our services the most reliable in the country and work towards no interruptions beyond three hours.	Keep our water quality contacts among the lowest in the country.	Halve leakage by 50% by 2040, 10 years earlier than we must.

WHERE WE'D LIKE TO INVEST TO DO MORE

	INSTALLING SMART METERS	REMOVING LEAD PIPES	IMPROVING THE ENVIRONMENT
CHALLENGE	Our customers use more water than most in the UK. We need to make better use of water available and find and fix more leaks to meet the challenges of climate change, population growth and to protect the environment.	Lead water pipes are now banned because they can impact the development of young children. We've replaced most lead pipes on our network and use harmless chemicals to reduce traces of lead. We want to remove lead pipes completely.	The environment we rely on is under threat from climate change. We want to further improve land we own for plants and animals and give more grants to help others create wildflower meadows, ponds, improve woodlands and do research.
2025-2030	Install smart meters for nearly half our customers, supported by water-saving advice and tools for households and businesses, as well as free leak repairs on supply pipes (conditions apply). We'll make sure all customers can afford their bill.	Replace lead pipes so all schools and vulnerable homes can access water with no exposure to lead by 2030, and at a further 15% of homes. The 15% of homes would cost an extra £41 million and add £5.25 plus inflation on bills by 2030.	Improve the environment at our key sites and double the grants we give each year to £100,000. To increase our environmental work would cost an extra £4.75 million and add 40p plus inflation on bills by 2030.
LONG TERM	Install smart meters for all households by 2035 and trial innovative water-saving tariffs.	Find and replace lead pipes at all homes by 2060.	Continue to invest in environmental partnerships to maintain the environment for water supplies.

BLUE MARBLE

Weighing the evidence - Reliable supply

1 Is this a priority for customers?	**2** Evidence from the long-term plan choices	Tensions / conflicts / sample differences in evidence	Understanding reasons behind tensions / conflicts
Reliability of supply/future supplies was the highest priority in the priorities triangulation exercise. Ofwat WTP shows avoiding long term interruptions to supply is more highly valued than anything else (followed by water quality).	Consumers tended towards the **medium option** on the choices research. Portsmouth Water do not need to go beyond their existing – industry leading – level of reliability.	Those **who cannot afford** the water & sewerage bill, as well as those on the **borderline of affordability**, are more likely than others to opt for a reduction in reliability (to the industry average), if this means no bill increase. **Future customers** indicate a greater preference for the high investment option. **NHH** felt improving supply interruption was important.	**Future customers** have a strong sense of social justice and fairness; we suggest this may foment belief that no one should be without water (particularly vulnerable people reliant on a steady supply). For **NHH**, their perspective I more about the commercial impact of being without water even for a short time.

Portsmouth Water

Water supply interruptions, lasting longer than 3 hours

What does this mean? It would not be possible to draw water from the taps or flush the toilet; it may be necessary to buy bottled water. Sometimes business operations may be affected.

How are Portsmouth Water performing on this? Water companies are measured on the length of time properties are without water. The measure used is the duration without water for more than 3 hours by minutes per property. Portsmouth Water's performance on this measure is currently 2 mins 21 secs. **Portsmouth Water met their target for this metric last year.**

What is the plan for this?

By 2030	Maintain the average time per year properties are without water for more than three hours at the current level.
How will they do it?	• Portsmouth Water will invest in replacing ageing parts of their network. • They will invest more in upgrading water treatment works, pumps, and water mains.
Cost on bill	This will add **£3.35** to the average annual bill (excluding inflation) by 2030.

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3 Plan Acceptability

Water supply interruptions is less important than the other performance commitments covered in the research:

Most important: **Reducing leaks** 52%
Water quality 34%
Supply interruptions 10%
DK 4%

Qualitatively we understands that the relative position of supply interruptions is linked to the fact that PW are already performing well against the industry and are meeting targets (and few had any sense that this was an area for improvement in need of significant investment).

Weighing up evidence for overall balanced view

Strong evidence that customers hold reliability of supply highly.
- Ensuring that customers don't experience severe interruption to their supply is seen as important, particularly for customers with families or vulnerabilities who might rely on a steady water supply – and businesses/ organisations.
- The plan is maintaining an already strong position in customers' minds. The Plan Choices work tested a more ambitious outcome but on balance this was not chosen – the extra spend not deemed to be required.
- Hence including a 'maintain' target in the plan is backed by the evidence: PW is already doing well and does not need to do even more in this area.

BLUE MARBLE

1 Is this a priority for customers?	2 Evidence from the long term plan choices	Tensions / conflicts / sample differences in evidence	Understanding reasons behind tensions / conflicts
While tap water quality was generally satisfactory in PW's qualitative evidence, and so deemed less of a priority, it was a higher priority in the survey data: poor perceived taste, appearance or water hardness is often connected to lower satisfaction. CCW/Ofwat and Southern Water research also assign water quality a very high priority. Current performance for colour and appearance (Water matters 2021) is 95% for PW customers indicating this is not an area of concern.	No choices included for water quality. Water supply issues (taste, pressure) mentioned spontaneously by 4% in the Consultation Survey	NA	NA

The appearance, taste and smell of tap water

What does this mean? Tap water may look discoloured or taste/smell different to usual. Although still safe to drink, people may prefer bottled water as a precaution until it returns to normal.

How are Portsmouth Water performing on this?
Water companies are measured on the number of customer contacts received regarding the appearance, taste and smell of tap water. The measure used is the number of customer contacts regarding incidents, per 1,000 population. Portsmouth Water currently receive 0.41 contacts regarding incidents per 1,000 population. **Portsmouth Water met their target for this metric last year.**

What is the plan for this?

By 2030	Achieve a rate of 0.37 contacts per 1,000 population regarding the appearance, taste and smell of tap water.
How will they do it?	• Add more ultraviolet treatment to treatment works. • Partner with landowners to stop pollutants reaching water sources. • Replace more water mains.
Cost on bill	**No extra cost** on the bill up to 2030.

3 Plan Acceptability

Of the three performance commitments covered in the research, water quality is most important for a third of customers – lower than the leakage but above the supply interruptions.

Most important: **Reducing leaks** 52%
Water quality 34%
Supply interruptions 10%
DK 4%

In the **deliberative (qualitative) research**, customers rated water quality as an important area for investment but had no concerns about existing quality. They supported the plan target and no bill impact.

Weighing up evidence for overall balanced view

Evidence supports the proposed target in the business plan.
• Customers expect high quality water and happy to see PW performing highly compared to the industry
• The plan is uncontentious: high levels of acceptability to improve performance at no additional cost on the bill.

Portsmouth Water

BLUE MARBLE

Weighing the evidence – Reducing leaks

1 Is this a priority for customers?	2 Evidence from the long term plan choices	Tensions / conflicts / sample differences in evidence	Understanding reasons behind tensions / conflicts
Throughout the body of evidence there is very strong endorsement from consumers that fixing leaks in the pipe network is a top priority for Portsmouth Water.	Evidence consistently points to majority endorsement of the **high investment option** for reducing leakage ahead of the industry commitment. Qualitative insight suggest some are keen for even greater urgency / ambition in this area than the 'high' option offers.	• Universally important – and urgent. • Some think water companies should 'get their houses in order' before asking customers to reduce their usage.	Customers support leakage reduction for many reasons: • **NHH** see it as an effective way to increase supplies • **HH** felt that leak reduction was the best was to manage demand over the long term. • **Future customers** believe leakage will only worsen over time, becoming more costly, so it makes sense to address the issue as soon as possible

Reducing leaks

What does this mean? Leaks can affect customers directly if their water supply is affected. They are sometimes unnoticed if underground. But leakage is often seen in the media and has a cost to people on their bills and a cost to the environment.

How are Portsmouth Water performing on this? Water companies are measured on the amount of water lost due to leaks from water mains and pipes. The measure used is annual leakage per property served (litres per day). Portsmouth Water's annual leakage served currently stands at 77 litres per property per day. **Portsmouth Water met their target for this metric last year.**

What is the plan for this?

By 2030	Reduce leakage from 77 litres to 56 litres per property per day. (Portsmouth Water then plan to halve today's leakage by 2040, ahead of the government target.)
How will they do it?	• Transform the network into a 'smart' one to monitor flows, and use sound & satellite technology. • Repair leaks on customers' supply pipes free of charge (*conditions apply*).
Cost on bill	This will add **£2.75** to the average annual bill (excluding inflation) by 2030.

3 Plan Acceptability

Reducing leaks is seen as the most important of the 3 performance commitments:

Most important: **Reducing leaks** 52%
Water quality 34%
Supply interruptions 10%
DK 4%

In the **deliberative (qualitative) research**, high levels of acceptance for the proposed plan – and it seems affordable – however some are disappointed with the rate of progress planned and were interested to see accelerated investment to halve leakage 5 years earlier (by 2035).

Weighing up evidence for overall balanced view

There is strong evidence for supporting ambitious leakage targets. In customers' eyes, potential to improve on the draft targets proposed.
• This is the most emotive area of the plan – and a tangible way in which customers can judge Portsmouth Water.
• Leakage seen as a fundamental issue that undermines the credibility of water efficiency campaigns and supply schemes.
• Customers introduced to the LTDS note that leakage targets over the long term look unambitious with only 1% reduction from 2020 levels achieved between 2040 and 2045.

BLUE MARBLE

Weighing the evidence – Smart meters

1 Is this a priority for customers?	**2** Evidence from the long-term plan choices	Sample differences in evidence across the engagement programme
Smart metering is a low priority for customers. While support for smart meters is initially muted, 7 in 10 support once benefits communicated (14% still reject smart meters) This resistant minority are concerned about bills rising, unclear how they can save money, unhappy to lose 'guilt free' water use, and some have data/security fears.	Not included in plan choices	• **Unmetered:** concerned about paying more • **Low income and (some) younger:** see smart meters as an additional stress of 'another bill in their living room' • **Digitally excluded:** data security concerns / fraud risks • **Better off customers** want to save water; **worse off** want to save money • **Oldest** most interested in detecting leaks • **Stakeholders:** negative experiences of energy smart meters: bill anxiety; obsessive monitoring; fear being cut off • **House shares:** concerned about potential for conflict where have no control on how water efficient others are • **NHH** most positive • **Future customers** generally support as make wastage tangible. *But* they assert benefits need to be communicated, and vulnerable & digitally excluded must not be left behind. • **Generally:** Access to personalised smart meter data only really appealed for a minority

Saving water by installing smart water meters (Portsmouth Water)

What does this mean? Installing (smart) water meters can encourages water saving by increasing awareness of usage through real-time monitoring, can reduces wastage by helping identify leaks, and makes bills fairer, as all customers pay for what they use.

What is the current situation? The environment in the area is water stressed. To prevent environmental damage, new legislation will limit how much water is taken from natural sources. This will require a reduction in water use. Smart meters will facilitate reductions, but currently, few properties have them.

What is the plan for this?

By 2030	Meeting new environmental legislation by saving water used by customers.
How will they do it?	• Portsmouth Water will install smart meters in 50% of properties by 2030 (and in all properties by 2035). • Portsmouth Water will ensure all customers can afford their bill when they are moved to meters.
Cost on bill	This will add **£13.25** to the average annual bill (excluding inflation) by 2030.

3 Plan Acceptability

Saving water by installing smart meters is the least important of the three business plan investments tested:

Most important: **Removing lead pipes** 39%
Improving the environment 33%
Saving water by installing smart meters 19%
DK 9%

NB: In the **deliberative (qualitative) research**, the plan for smart meter introduction bore no bill impact. Customers held mixed views with some resistant but were accepting on the basis of no bill impact. (The plan was revised ahead of the quantitative survey.)

Weighing up evidence for overall balanced view

Broadly there is support for smart meters when understood as enabling financial saving, informed choices & helping educate.
• However, there is a significant minority – often lower income and vulnerable households – that object.
• Additionally, there is lower willingness generally to pay for smart meter rollout while the benefits are not fully understood.
• Evidence from the LTDS work highlights that customers often do not link smart meters and leak reduction but see as separate initiatives: they are not clear why smart meters appear to be the main focus of the delivery plan where leakage targets look unambitious.
• While a minority actively welcome smart meters, there are many barriers that Portsmouth Water will need to help customers overcome through its delivery and communications. These barriers to water smart meters can vary by customer segment and call for targeted communications where possible.

BLUE MARBLE

Weighing the evidence – Lead pipes

1 Is this a priority for customers?

Lead pipe replacement was a lower priority when set against all areas of PW's operation (where reliable water supplies, leak reduction etc. are of higher importance).
However, once informed about the lead issue, the issue evokes a more emotional response and is seen as a higher priority.

Lead is the most important of the three discretionary areas in the business plan.

2 Evidence from the long term plan choices

When shown long term investment choices for lead replacement, on balance the widespread preference was for the high investment option (no exposure to lead by 2050).

NB a substantial minority opt for no additional investment reflecting the view that lead pipes are not a significant issue and / or that it is not PW's responsibility to fix (at a cost to bill payers).

Tensions / conflicts / sample differences in evidence

Older generations more likely than younger households to be sceptical about the need to replace lead pipes.

Specifically, indications **that vulnerable customers** more worried than others about lead pipes and want to see more ambitious plans for lead.

Understanding reasons behind tensions / conflicts

Two key factors affecting response:
• Whether customers are **informed** or not. In qualitative work where the impact of lead could be discussed, the issue becomes very emotive, and customers want to see lead eradicated.

• **Proximity to children**…younger households and older people with grandchildren in schools more positive about lead replacement.

Portsmouth Water — Removing lead pipes

What does this mean? Lead used to be a common material used for water pipes, both in water companies' networks and in people's properties. However, it was banned for new pipes because it can impact the health and development of very young children.

What is the current situation? Portsmouth Water have replaced most lead pipes in their network, and use harmless chemicals to reduce traces of lead.

What is the plan for this?

By 2030	Replace lead pipes so all schools and vulnerable homes can access water with no exposure to lead by 2030.
How will they do it?	Portsmouth Water will replace lead pipes that belong to them when they find them, and let customers know how to replace theirs when they find them too.
Cost on bill	This will add **£0.40** to the average annual bill (excluding inflation) by 2030.

3 Plan Acceptability

Lead pipe replacement is deemed to be more important than environmental improvements or installing smart meters:

Most important: **Removing lead pipes** 39%
Improving the environment 33%
Saving water by installing smart meters 19%
DK 9%

In the deliberative research, the majority of customers were happy with the proposed plan on the basis that the current situation is safe (once informed about phosphate dosing). Some want to eliminate lead more quickly with a one-off bill rise.

Weighing up evidence for overall balanced view

Where people are informed about the impact of lead pipes, replacement is an emotive issue, and most see as very important due to its potential health implications, especially for children.
• The plan to focus efforts on buildings associated with children and vulnerable customers reflects the key concerns customers have
• Communication of the reasons for the spend in this area may be particularly important.
  • Customers are largely unaware of the issue – and the relevance of investment is only clear once informed
  • Potential for push back where people feel pipe replacement is the responsibility of the householder, not the water company.

BLUE MARBLE

Weighing the evidence – Improving the environment

1 Is this a priority for customers?	2 Evidence from the long term plan choices	Tensions / conflicts / sample differences in evidence	Understanding reasons behind tensions / conflicts
For PW customers, while environment is topical, it is only a medium-level priority for PW (a water-only supplier). This is backed up by Ofwat WTP research. On learning more about local water resources and chalk streams, customers do rate preserving local environment as important for PW.	The majority choose the high investment option (albeit a relatively low cost on the bill). Future customers are particularly likely to choose the high option here, having high levels of concern over environmental issues. Customers see as an important to enhance and protect the environment, in an effort to counter the negative impact that we have on the environment more broadly.	**Future (students)** demonstrate higher than average understanding of environmental issues and concerns over what the future might hold. **Future customers** care about environmental impact but not at any cost.	Frustration from future customers over lack of urgency from government and industry in addressing the issues. But there are cost sensitivities too with this audience: they do not want cost of delivering better outcomes to fall on their generation.

Improving the environment at key sites

What does this mean? The environment we rely on is under threat from climate change.

What is the current situation? Portsmouth Water provides £50,000 in annual grants to support environmental improvements. Recent grants include; funding for Staple Ash Farm Pond restoration by South Downs National Park; a walkover survey on the river Ems by the Arun and Rothers Rivers Trust; and water vole protection through fencing and bank planting at Wickham Water Meadows by Wickham Parish Council.

What is the plan for this?

By 2030	Double the grants given each year to £100,000 for environmental work.
How will they do it?	• Improve the environment at key sites through ecological surveys on water voles, otters, bats and reptiles etc. • Plant trees and hedgerows, create ponds, restore chalk streams and create bat and bird nesting places.
Cost on bill	This will add **£0.40** to the average annual bill (excluding inflation) by 2030.

3 Plan Acceptability

Improving the environment was rated most important by a third of the survey sample.

Most important: **Removing lead pipes** 39%
Improving the environment 33%
Saving water by installing smart meters 19%
DK 9%

Qualitatively supportive of environmental targets. Bill impact seen to be very small - even so some question whether customers should fund or whether it should be CSR /grants

Weighing up evidence for overall balanced view

Evidence supports environmental improvements
• Support for plan detail, to double grants and improve key sites
• While not seen as urgent investment, customers are willing and able to pay

Appendix

The evidence score is the sum of the 'Robustness Rating' and the 'Coverage Rating'

Robustness

Points

Category	
High: Best practice method demonstrated AND sample size proportionate (if applicable) AND high quality analysis & interpretation in report	5
	4
Mid: Minor reservations* on method OR less proportionate sample size OR some reservations on quality of analysis & interpretation	3
	2
Low: Major reservations on method OR very small sample size OR major reservations on quality of analysis & interpretation (i.e. bias) OR not customer-based insight	1

+

Coverage

Points

Category	
High: Highly robust coverage of Portsmouth Water region.	5
	4
Mid: Moderately robust coverage of Portsmouth Water region (sample / report may cover multiple regions)	3
	2
Low: No coverage of Portsmouth Water region	1

*Includes where report does not provide adequate evidence of method

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