



Our Business Plan for 2020 – 2025

Appendix 4: Our Outcomes and Performance Commitments

September 2018

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1 Overview

In this Appendix, we set out the key areas that have fed into Chapter 4 on “Our Outcomes and Performance Commitments”.

In Section 2, we have given detailed descriptions for each of our PCs. These fall under the following categories:

- Definition;
- Unit;
- Target;
- Evidence that target is stretching;
- Evidence of customer support for target;
- Does the PC protect current and future customers;
- 20-year view (AMP5 through to AMP8);
- ODI type (Financial/non-financial; outperformance payment/underperformance payment/both);
- Do customers support the ODI rates;
- P-ranges (performance in “PC units”)
- Delivery mechanism;
- Dependencies.

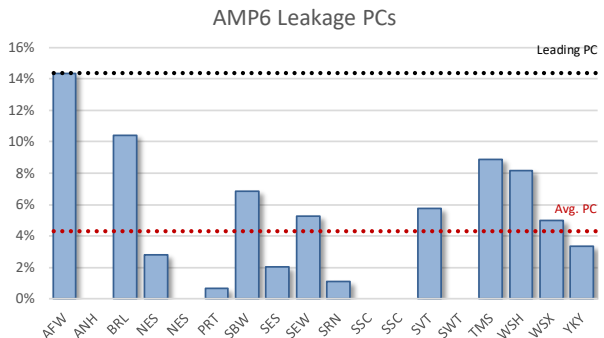
In Section 3, we set out the detailed approach we have taken to calculating our Financial ODIs, including modelling the underlying costs and benefits and running them through the Ofwat equations to generate the outperformance payment and underperformance payment rates.

In Section 4, we provide a detailed description of our Environmental Innovation Performance Commitment, which explains the community projects we’ll be seeking to implement and what outcomes they’re designed to achieve.

2 Our Performance Commitments

2.1 Common PCs – required and defined by Ofwat

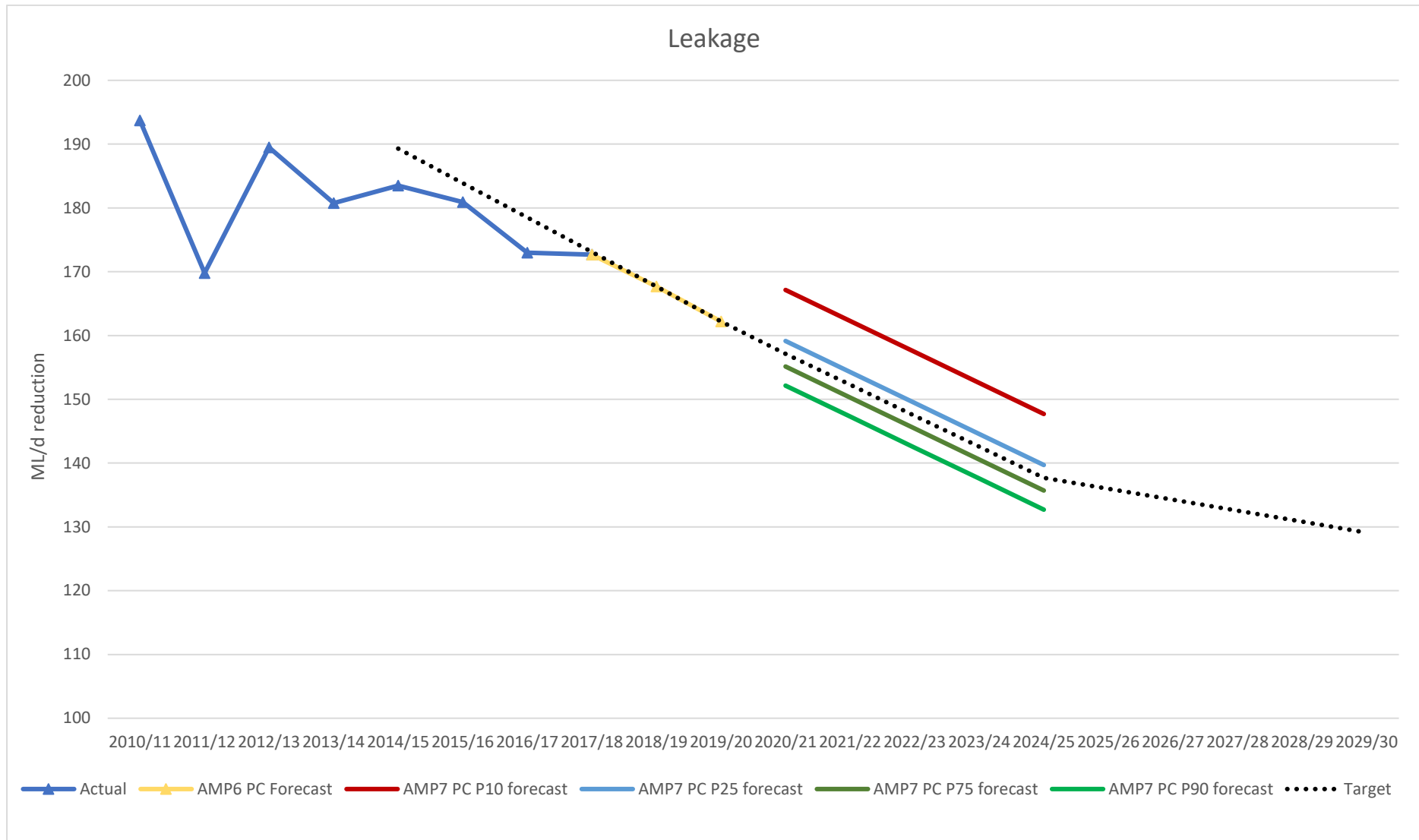
2.1.1 Leakage

| | |
|--|--|
| Definition | <ul style="list-style-type: none"> This is a common PC as defined by Ofwat. Annual average leakage is defined as the sum of distribution system leakage, including service reservoir losses and trunk main leakage plus customer supply pipe leakage. It is reported as the three-year average of the annual arithmetic mean (referred to as ‘average’ in the guidance) daily leakage expressed in mega-litres per day (ML/d). |
| Unit | <ul style="list-style-type: none"> Percentage point reduction in leakage over AMP7, base year 2019/20. |
| Target | <ul style="list-style-type: none"> 15% reduction over AMP7. Our starting position at the beginning of AMP7 at 31 March 2020 is forecast to be 162.2 ML/d (under the old measurement methodology). This is our PC target for 2019/20, we are not forecasting any under or outperformance. At the end of AMP7 we are targeting a level of leakage of 137.7 ML/d (under the old methodology), which equates to a 15% leakage reduction of 24.50 ML/d over the period. The change in methodology makes little difference to Affinity Water (In 2017/18 we reported leakage of 172.3 in table 3S, and 172.7 in 3A). In order to avoid confusion and methodological uncertainty, we have expressed our leakage reduction in percentage rather than ML/d terms. This is consistent with our Water Resources Management Plan methodology. |
| Evidence that target is stretching | <ul style="list-style-type: none"> Ofwat has set an expectation that leakage should be reduced by at least 15% over AMP7. Our target is 15%; equivalent to 27% since 2014/15. Our current target of 14% during AMP6 is the highest in the industry, and we are matching this for AMP7. Other companies will not have delivered 14% during AMP6. <div style="text-align: center;"> <p>AMP6 Leakage PCs</p>  </div> |
| Evidence of customer support for target | <ul style="list-style-type: none"> 71% of customers strongly support finding ways to reduce leakage; 89% support it (see Appendix 3). Target largely driven by regulatory requirements. |

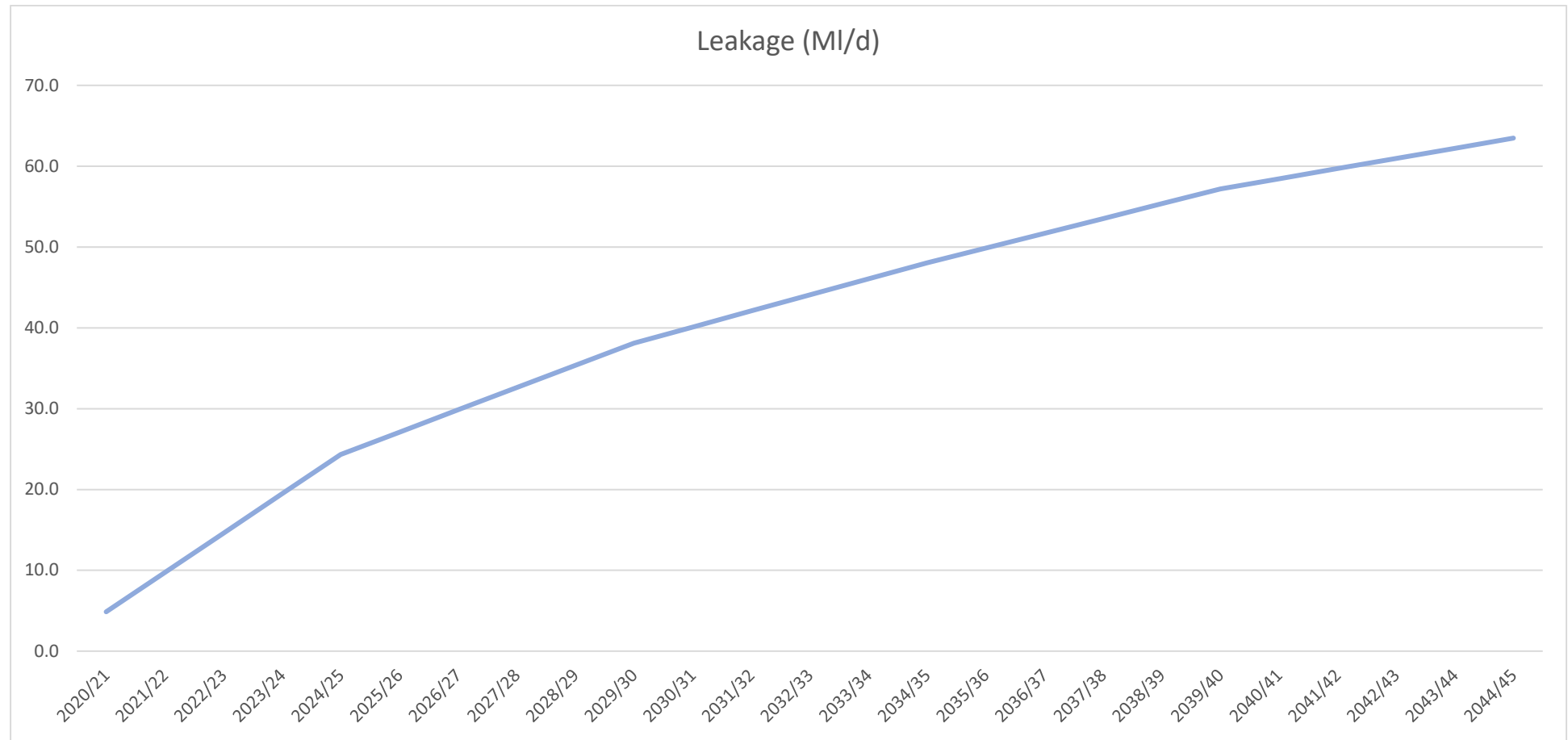
| <p>(e.g. they are willing to pay for costs of achieving it, incl. outperformance payment ODIs; they can afford to pay for it).</p> | <ul style="list-style-type: none"> • Large proportion of customers support AFW exceeding Ofwat targets (see Appendix 3). • When presenting costs of reduction, then 38% customers support leakage reduction of 11% and 31% support more expensive 15% reduction (see Appendix 3). • Leakage is an emotive issue and customers are generally shocked at current levels of leakage, perceiving as ‘very high’ and do not appreciate being asked to save water or having temporary restrictions implemented (see Appendix 3). | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---------|---------|---------|---------|---------|---------|-----------|-----|-----|-----|------|------|------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|------|------|------------|-----|-----|-----|------|------|------------|-----|-----|------|------|------|
| <p>Does the PC protect current and future customers?</p> | <ul style="list-style-type: none"> • We have ensured that our investment for leakage in AMP7 delivers for current customers, and forms part of an ambitious future leakage reduction plan that will deliver for future customers. We have been careful to ensure that we are balancing costs over time to ensure inter-generational equity. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>20-year view (AMP5 through to AMP8)</p> | <ul style="list-style-type: none"> • See following page for leakage expressed in MI/d. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>ODI type (Financial/non-financial; outperformance payment/underperformance payment/both)</p> | <ul style="list-style-type: none"> • Financial incentives with both outperformance and underperformance payments that will be applied in-period to revenue depending on the outturn performance compared to target i.e. unit-based incentives. • In-period means that any payments will be applied at the first possible opportunity so that an incentive payment from performance in year 1 will be reflected in bills in year 3. • We are not proposing a dead band but will apply an outperformance payment cap at 0.1% below the forecast P90 for each year and underperformance payment collar (at 3.57% above the target) to limit total incentive exposure for this PC both on outperformance and underperformance. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Do customers support the ODI rates?</p> | <ul style="list-style-type: none"> • We have tested the calibrated incentive rates as part of an overall package using P10/90 and P25/75. The projected performance and potential range (represented by P25/75) was specifically tested with customers. We expect the range of bill impacts to be +£0.50 to -£4.00 over the AMP. • Our specific engagement with customers showed this range to be acceptable. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>P-ranges (performance in “percentage point reduction”)</p> | <table border="1"> <thead> <tr> <th></th> <th>2020/21</th> <th>2021/22</th> <th>2022/23</th> <th>2023/24</th> <th>2024/25</th> </tr> </thead> <tbody> <tr> <td>PC</td> <td>3.0</td> <td>6.0</td> <td>9.0</td> <td>12.0</td> <td>15.0</td> </tr> <tr> <td>P10</td> <td>0.0</td> <td>0.9</td> <td>3.6</td> <td>6.2</td> <td>8.9</td> </tr> <tr> <td>P25</td> <td>2.1</td> <td>5.1</td> <td>8.1</td> <td>11.1</td> <td>14.1</td> </tr> <tr> <td>P75</td> <td>3.5</td> <td>6.5</td> <td>9.5</td> <td>12.5</td> <td>15.5</td> </tr> <tr> <td>P90</td> <td>6.1</td> <td>8.9</td> <td>11.8</td> <td>14.6</td> <td>17.5</td> </tr> </tbody> </table> | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | PC | 3.0 | 6.0 | 9.0 | 12.0 | 15.0 | P10 | 0.0 | 0.9 | 3.6 | 6.2 | 8.9 | P25 | 2.1 | 5.1 | 8.1 | 11.1 | 14.1 | P75 | 3.5 | 6.5 | 9.5 | 12.5 | 15.5 | P90 | 6.1 | 8.9 | 11.8 | 14.6 | 17.5 |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PC | 3.0 | 6.0 | 9.0 | 12.0 | 15.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P10 | 0.0 | 0.9 | 3.6 | 6.2 | 8.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P25 | 2.1 | 5.1 | 8.1 | 11.1 | 14.1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P75 | 3.5 | 6.5 | 9.5 | 12.5 | 15.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P90 | 6.1 | 8.9 | 11.8 | 14.6 | 17.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Delivery mechanism</p> | <ul style="list-style-type: none"> • We plan to invest over AMP7 to maintain and improve our infrastructure to achieve levels of leakage lower than ever seen before using innovative technology such as | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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|---------------------|--|
| | <p>our new reporting system 'WaterNet', fast logging, satellite technology and investing in leading techniques such as perma-loggers to improve our monitoring and response times to leaks. Other elements include:</p> <ul style="list-style-type: none"> ○ Free supply pipe repair policy to be promoted where cost effective ○ Further leakage reductions after 2025 to achieve 50% reduction by 2050 ○ Strategy to be developed in AMP7 under innovation projects. <ul style="list-style-type: none"> ● We have dedicated skilled teams at a community level who have excellent local knowledge and support from contract teams who have long standing relationships with us. We are investing in enhanced understanding of seasonal usage patterns for future reporting, which will enable us to identify more precisely true leakage as opposed to customer or commercial usage enabling us to be significantly more cost effective and efficient. |
| Dependencies | <ul style="list-style-type: none"> ● Weather, technology, resources |

Figure A1: Leakage (MI/d reduction) AMP5 to AMP8



25-year forecast

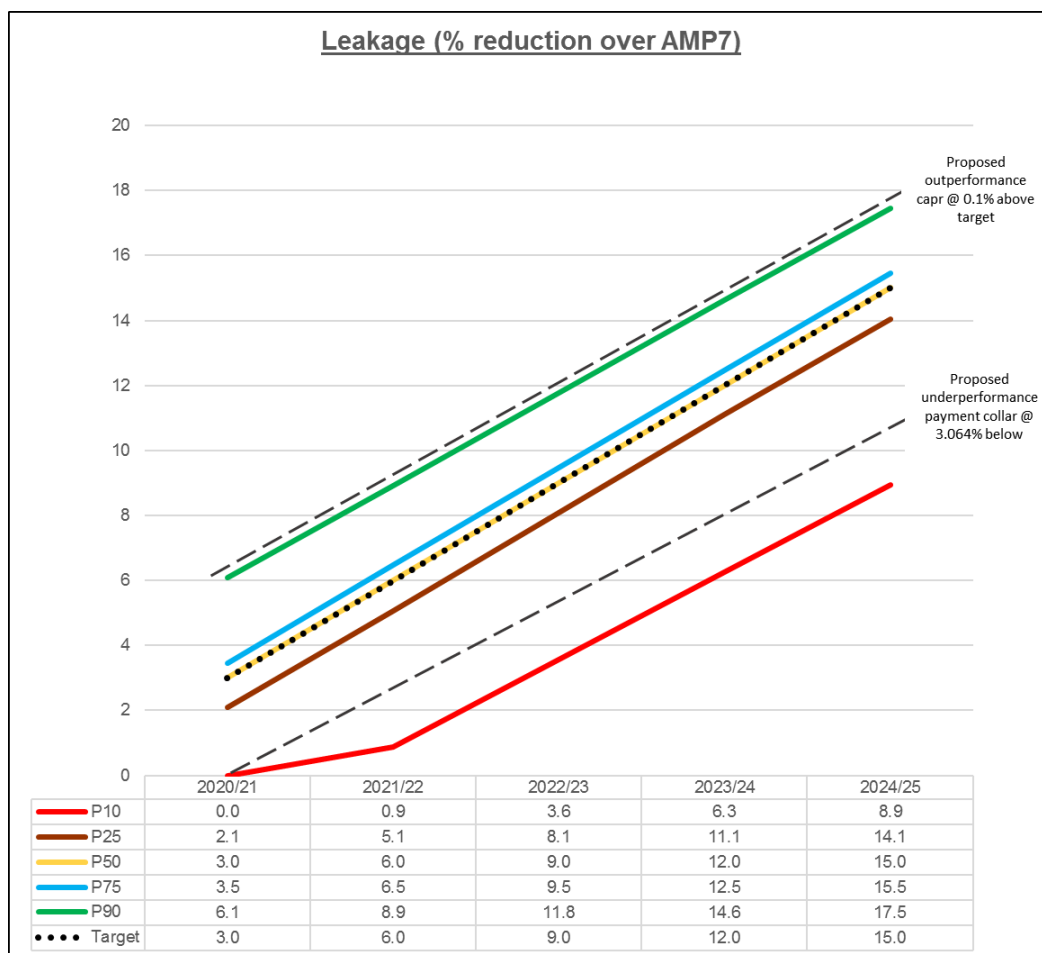


| 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | 2030/31 | 2031/32 | 2032/33 | 2033/34 | 2034/35 | 2035/36 | 2036/37 | 2037/38 | 2038/39 | 2039/40 | 2040/41 | 2041/42 | 2042/43 | 2043/44 | 2044/45 |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 4.9 | 9.7 | 14.6 | 19.5 | 24.3 | 27.1 | 29.8 | 32.6 | 35.4 | 38.1 | 40.1 | 42.1 | 44.1 | 46.1 | 48.0 | 49.9 | 51.7 | 53.5 | 55.3 | 57.2 | 58.4 | 59.7 | 61.0 | 62.2 | 63.5 |

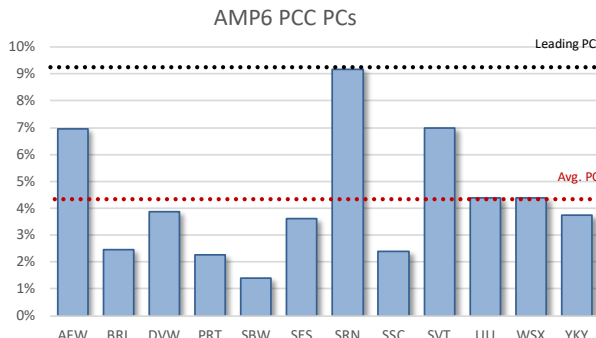
Final ODI Design – Leakage

| Leakage | % reduction over individual AMPs | | | | | | | | | | | | | | |
|----------------------------|----------------------------------|---------|---------|-----------------------------|---------|----------------------|---------|---------|---------|---------|---------|---------|----------|---------|---------|
| | AMP6 | | | | | AMP7 | | | | | AMP8 | | | | |
| | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 |
| Actual | 180.9 | 173.0 | 172.7 | | | | | | | | | | | | |
| Target | 2.85 | 5.71 | 8.56 | 11.41 | 14.32 | 3.0 | 6.0 | 9.0 | 12.0 | 15.0 | 1.3 | 2.6 | 3.8 | 5.0 | 6.3 |
| AMP6 PC Forecast | | | 172.7 | 167.7 | 162.2 | | | | | | | | | | |
| P10 | | | | | 162.2 | 0.0 | 0.9 | 3.6 | 6.3 | 8.9 | | | | | |
| P25 | | | | | 162.2 | 2.1 | 5.1 | 8.1 | 11.1 | 14.1 | | | | | |
| P50 | | | | | 162.2 | 3.0 | 6.0 | 9.0 | 12.0 | 15.0 | | | | | |
| P75 | | | | | 162.2 | 3.5 | 6.5 | 9.5 | 12.5 | 15.5 | | | | | |
| P90 | | | | | 162.2 | 6.1 | 8.9 | 11.8 | 14.6 | 17.5 | | | | | |
| Incentive rates | | | | Under/Outperformance | | | | | | | | | | | |
| Underperformance pay | £ 819,673 | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | |
| Outperformance pay | £ 606,292 | | | | | | | | | | | | | | |
| | | | | | | AMP6 PC Forecast | - 3.00 | - 5.12 | - 5.44 | - 5.75 | - 6.06 | | | | |
| | | | | | | AMP7 PC P10 forecast | - 0.91 | - 0.94 | - 0.92 | - 0.90 | - 0.94 | | | | |
| | | | | | | AMP7 PC P25 forecast | - | - | - | - | - | | | | |
| ODI detailed design | Financial | | | | | AMP7 PC P50 forecast | 0.46 | 0.46 | 0.46 | 0.46 | 0.46 | | | | |
| | | | | | | AMP7 PC P75 forecast | 3.08 | 2.93 | 2.77 | 2.62 | 2.47 | | | | |
| ODI type: | £ + / (-) unit based | | | | | | 3.18 | 3.03 | 2.87 | 2.72 | 2.57 | | | | |
| ODI form: | Revenue | | | | | | | | | | | | | | |
| ODI timing: | In period | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | AMP7 | | |
| ODI Cap/Collar: | Yes | | | | | AMP6 PC Forecast | -£ 2.46 | -£ 4.20 | -£ 4.46 | -£ 4.71 | -£ 4.97 | | -£ 20.80 | | |
| ODI Dead band: | None | | | | | AMP7 PC P10 forecast | -£ 0.74 | -£ 0.77 | -£ 0.76 | -£ 0.74 | -£ 0.77 | | -£ 3.79 | | |
| Other: | n/a | | | | | AMP7 PC P25 forecast | £ - | £ - | £ - | £ - | £ - | | £ - | | |
| | | | | | | AMP7 PC P50 forecast | £ 0.28 | £ 0.28 | £ 0.28 | £ 0.28 | £ 0.28 | | £ 1.40 | | |
| | | | | | | AMP7 PC P75 forecast | £ 1.869 | £ 1.775 | £ 1.681 | £ 1.588 | £ 1.495 | | £ 8.41 | | |

| Caps, Collars and Dead bands | | | | | | |
|--------------------------------------|---------|---------|---------|---------|---------|--------------------------|
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | |
| Underperformnce collar @ 3.064% | - 3.60 | - 3.60 | - 3.60 | - 3.60 | - 3.60 | |
| Outrperformnce capr @ 0.1% above tar | 6.2 | 9.0 | 11.9 | 14.7 | 17.6 | |
| AMP6 PC Forecast | -3.0 | -3.6 | -3.6 | -3.6 | -3.6 | when collar takes effect |
| AMP7 PC P10 forecast | -0.9 | -0.9 | -0.9 | -0.9 | -0.9 | |
| AMP7 PC P25 forecast | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| AMP7 PC P50 forecast | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | |
| AMP7 PC P75 forecast | 3.1 | 2.9 | 2.8 | 2.6 | 2.5 | |
| | 3.2 | 3.0 | 2.9 | 2.7 | 2.6 | |
| Calibrated incentives due £m | | | | | | |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | AMP7 |
| AMP6 PC Forecast | -£ 2.46 | -£ 2.95 | -£ 2.95 | -£ 2.95 | -£ 2.95 | -£ 14.28 |
| AMP7 PC P10 forecast | -£ 0.74 | -£ 0.77 | -£ 0.76 | -£ 0.74 | -£ 0.77 | -£ 3.79 |
| AMP7 PC P25 forecast | £ - | £ - | £ - | £ - | £ - | £ - |
| AMP7 PC P50 forecast | £ 0.28 | £ 0.28 | £ 0.28 | £ 0.28 | £ 0.28 | £ 1.40 |
| AMP7 PC P75 forecast | £ 1.87 | £ 1.77 | £ 1.68 | £ 1.59 | £ 1.50 | £ 8.41 |
| | £ 1.93 | £ 1.84 | £ 1.74 | £ 1.65 | £ 1.56 | £ 8.71 |



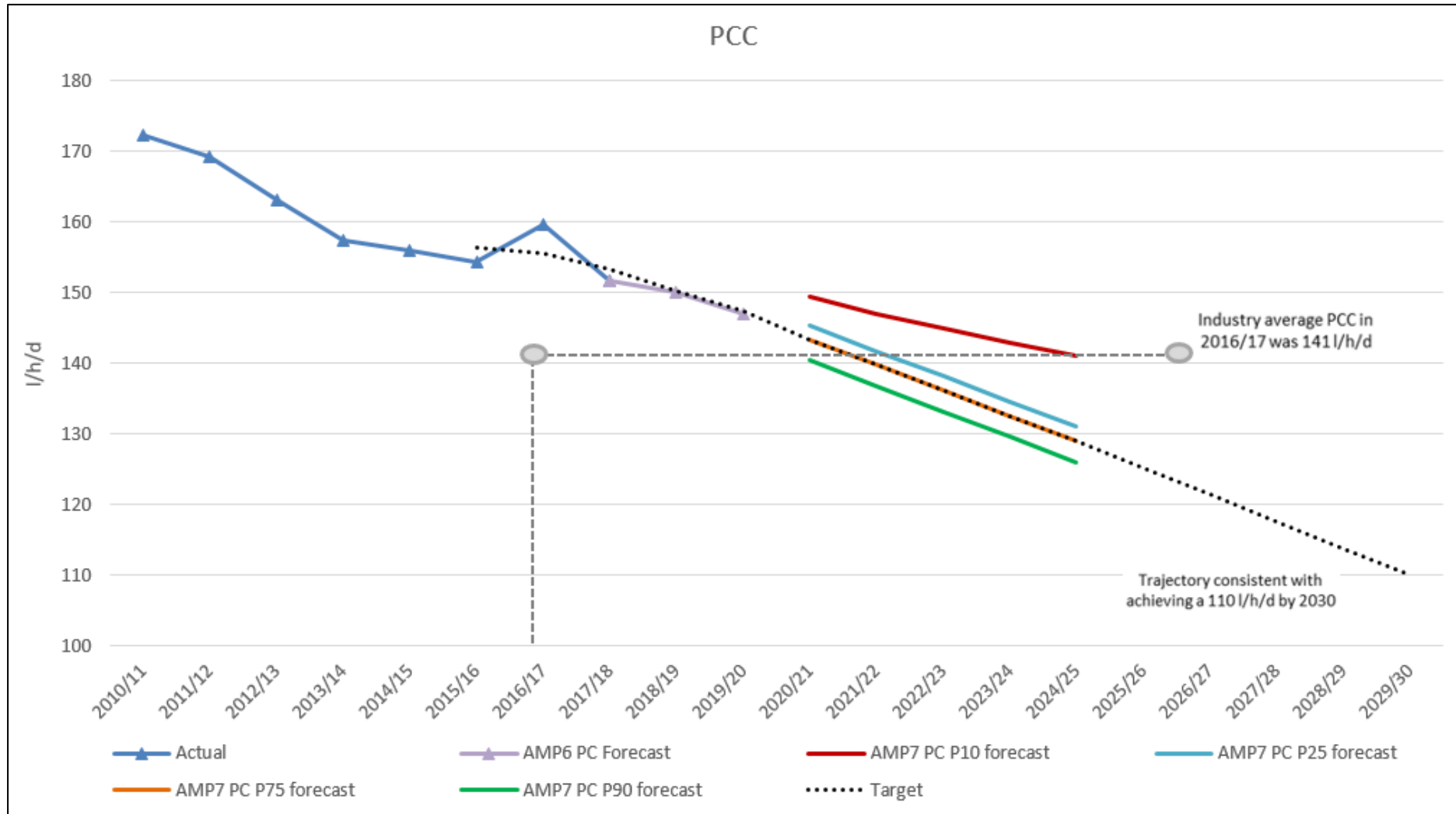
2.1.2 Per Capita Consumption

| Definition | <ul style="list-style-type: none"> This is a common PC as defined by Ofwat. Annual average per capita consumption is defined as the sum of measured household consumption and unmeasured household consumption divided by the total household population. | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--------|------------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|----|------|-----|------|-----|------|
| Unit | <ul style="list-style-type: none"> Average amount of water used by each person that lives in a household property (litres per head per day). It is reported as the annual arithmetic mean per capita consumption expressed in litres per person per day (l/h/d). | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Target | <ul style="list-style-type: none"> Reduction to 129 l/h/d by end of AMP7. Our starting position at the beginning of AMP7 at 31 March 2020 is forecast to be 147.4 l/h/d. This is our PC target for 2019/20, we are not forecasting any under or outperformance. Our target at the end of AMP7 is 129.0 l/h/d, which equates to a reduction of 18 l/h/d over the period. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Evidence that target is stretching | <ul style="list-style-type: none"> Our target represents the lowest that we have ever delivered. Current industry average PCC (2016/17) is 141 and the lowest is 127. Our target brings us within 2 l/h/d of the current lowest PCC by the end of AMP7 Our current target of 7% during AMP6 is the second highest in the industry, and we are nearly doubling this for AMP7. <div>  <table border="1"> <caption>AMP6 PCC PCs Data</caption> <thead> <tr> <th>Region</th> <th>Percentage</th> </tr> </thead> <tbody> <tr><td>AFW</td><td>7.0%</td></tr> <tr><td>BRL</td><td>2.5%</td></tr> <tr><td>DVW</td><td>3.8%</td></tr> <tr><td>PRT</td><td>2.2%</td></tr> <tr><td>SBW</td><td>1.5%</td></tr> <tr><td>SES</td><td>3.5%</td></tr> <tr><td>SRN</td><td>9.0%</td></tr> <tr><td>SSC</td><td>2.5%</td></tr> <tr><td>SVT</td><td>7.0%</td></tr> <tr><td>UU</td><td>4.2%</td></tr> <tr><td>WSX</td><td>4.2%</td></tr> <tr><td>YKY</td><td>3.8%</td></tr> </tbody> </table> </div> | Region | Percentage | AFW | 7.0% | BRL | 2.5% | DVW | 3.8% | PRT | 2.2% | SBW | 1.5% | SES | 3.5% | SRN | 9.0% | SSC | 2.5% | SVT | 7.0% | UU | 4.2% | WSX | 4.2% | YKY | 3.8% |
| Region | Percentage | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AFW | 7.0% | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BRL | 2.5% | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DVW | 3.8% | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PRT | 2.2% | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SBW | 1.5% | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SES | 3.5% | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SRN | 9.0% | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SSC | 2.5% | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SVT | 7.0% | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UU | 4.2% | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WSX | 4.2% | | | | | | | | | | | | | | | | | | | | | | | | | | |
| YKY | 3.8% | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Evidence of customer support for target (e.g. they are willing to pay for costs of achieving it, incl. outperformance payment ODIs; they can afford to pay for it). | <ul style="list-style-type: none"> The overall aim of reducing consumption was generally supported and seen as a good idea by customers (see Appendix 3). Target largely driven by regulatory expectations Most future customers agree that there is a need to save water and they agreed that individuals should be careful about the amount of water they use (see Appendix 3). 78% say they are careful about how much water they personally use and 61% of participants said they felt they would be able to make a small reduction in household water consumption (see Appendix 3). Negative reactions when the idea of mandatory restrictions on personal water use was suggested (see Appendix 3). | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Does the PC protect | <ul style="list-style-type: none"> We have ensured that our investment delivers for | | | | | | | | | | | | | | | | | | | | | | | | | | |

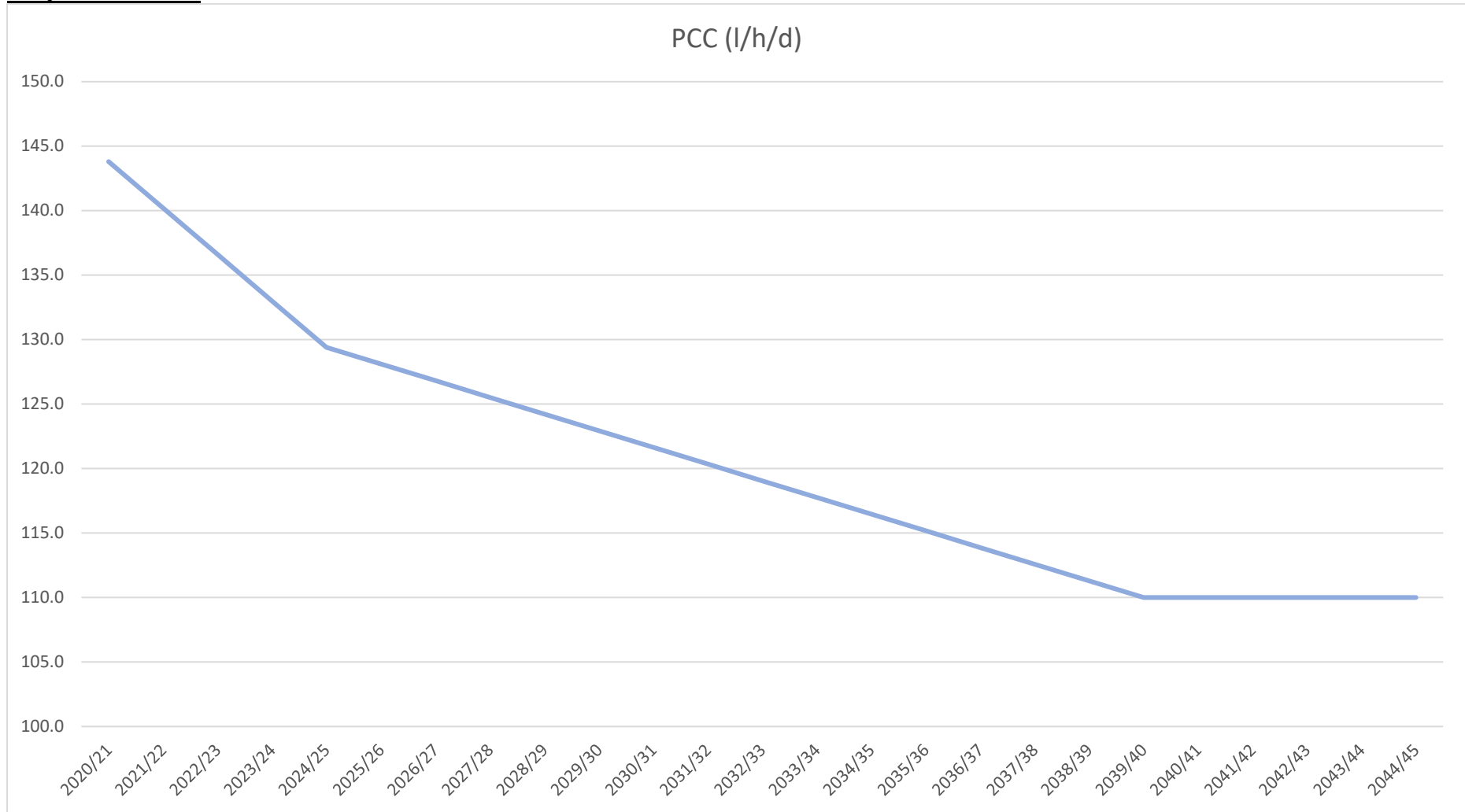
| current and future customers? | current customers, and forms part of an ambitious future reduction plan that will deliver for customers. We have been careful to ensure that we are balancing costs over time to ensure inter-generational equity. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---------|---------|---------|---------|---------|---------|-----------|-------|-------|-------|-------|-------|------------|-------|-------|-------|-------|-------|------------|-------|-------|-------|-------|-------|------------|-------|-------|-------|-------|-------|------------|-------|-------|-------|-------|-------|
| 20-year view (AMP5 through to AMP8) | <ul style="list-style-type: none"> See following page. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ODI type (Financial/non-financial; outperformance payment/underperformance payment/both) | <ul style="list-style-type: none"> Financial incentives with both outperformance and underperformance payments that will be applied in-period to revenue depending on the outturn performance compared to target i.e. unit based incentives. In-period means that any payments will be applied at the first possible opportunity so that an incentive payment from performance in year 1 will be reflected in bills in year 3. We are not proposing a dead band but will apply an outperformance payment cap (1 l/h/d below the forecast P90 for each year and underperformance payment collar (at 5l/h/d above the target) to limit total incentive exposure for this PC both on outperformance and underperformance. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Do customers support the ODI rates? | <ul style="list-style-type: none"> We have tested the calibrated incentive rates as part of an overall package using P10/90 and P25/75. The projected performance and potential range (represented by P25/75) was specifically tested with customers. We expect the range of bill impacts to be +£0.50 to -£4.00 over the AMP. Our specific engagement with customers showed this range to be acceptable. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P-ranges (performance in l/h/d) | <table border="1"> <thead> <tr> <th></th> <th>2020/21</th> <th>2021/22</th> <th>2022/23</th> <th>2023/24</th> <th>2024/25</th> </tr> </thead> <tbody> <tr> <td>PC</td> <td>143.8</td> <td>140.2</td> <td>136.6</td> <td>133.0</td> <td>129.4</td> </tr> <tr> <td>P10</td> <td>148.4</td> <td>146.7</td> <td>144.9</td> <td>143.2</td> <td>139.4</td> </tr> <tr> <td>P25</td> <td>145.3</td> <td>141.7</td> <td>138.1</td> <td>134.5</td> <td>130.9</td> </tr> <tr> <td>P75</td> <td>143.8</td> <td>140.2</td> <td>136.6</td> <td>133.0</td> <td>129.4</td> </tr> <tr> <td>P90</td> <td>140.8</td> <td>137.2</td> <td>133.6</td> <td>130.0</td> <td>126.4</td> </tr> </tbody> </table> | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | PC | 143.8 | 140.2 | 136.6 | 133.0 | 129.4 | P10 | 148.4 | 146.7 | 144.9 | 143.2 | 139.4 | P25 | 145.3 | 141.7 | 138.1 | 134.5 | 130.9 | P75 | 143.8 | 140.2 | 136.6 | 133.0 | 129.4 | P90 | 140.8 | 137.2 | 133.6 | 130.0 | 126.4 |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PC | 143.8 | 140.2 | 136.6 | 133.0 | 129.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P10 | 148.4 | 146.7 | 144.9 | 143.2 | 139.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P25 | 145.3 | 141.7 | 138.1 | 134.5 | 130.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P75 | 143.8 | 140.2 | 136.6 | 133.0 | 129.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P90 | 140.8 | 137.2 | 133.6 | 130.0 | 126.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Delivery mechanism | <ul style="list-style-type: none"> We will extend the scope and remit of our existing water efficiency programme to encompass everything the company will be doing to reduce our per capita consumption (PCC). This consists of six programmes namely <ul style="list-style-type: none"> fast data water efficiency schemes water reuse schemes national water efficiency campaign unmeasured non- household meters baseline water savings (water savings programme). By the end of AMP7 we will have 90% of properties metered with approximately 50% with new AMR meters. We can measure water going into communities of around 500-2,000 properties through our DMA flow measuring infrastructure. Based on customer | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | |
|----------------------------|--|
| | <p>engagement surveys we know that our customers will respond to more informative information on water use rather than to financial incentives. This fast data project therefore focusses on improving the way we communicate to individual users, combines this with a community and regional view and offers help to customers to reduce their consumption if they request this.</p> |
| <p>Dependencies</p> | <ul style="list-style-type: none"> • Weather, technology, resources • Completion of metering program • Significant programmes of customer behaviour change • Wider water conservation messaging and support from authorities and government. |

Figure A2 Per Capita Consumption 20 Year View – AMP5 to AMP8



25-year forecast



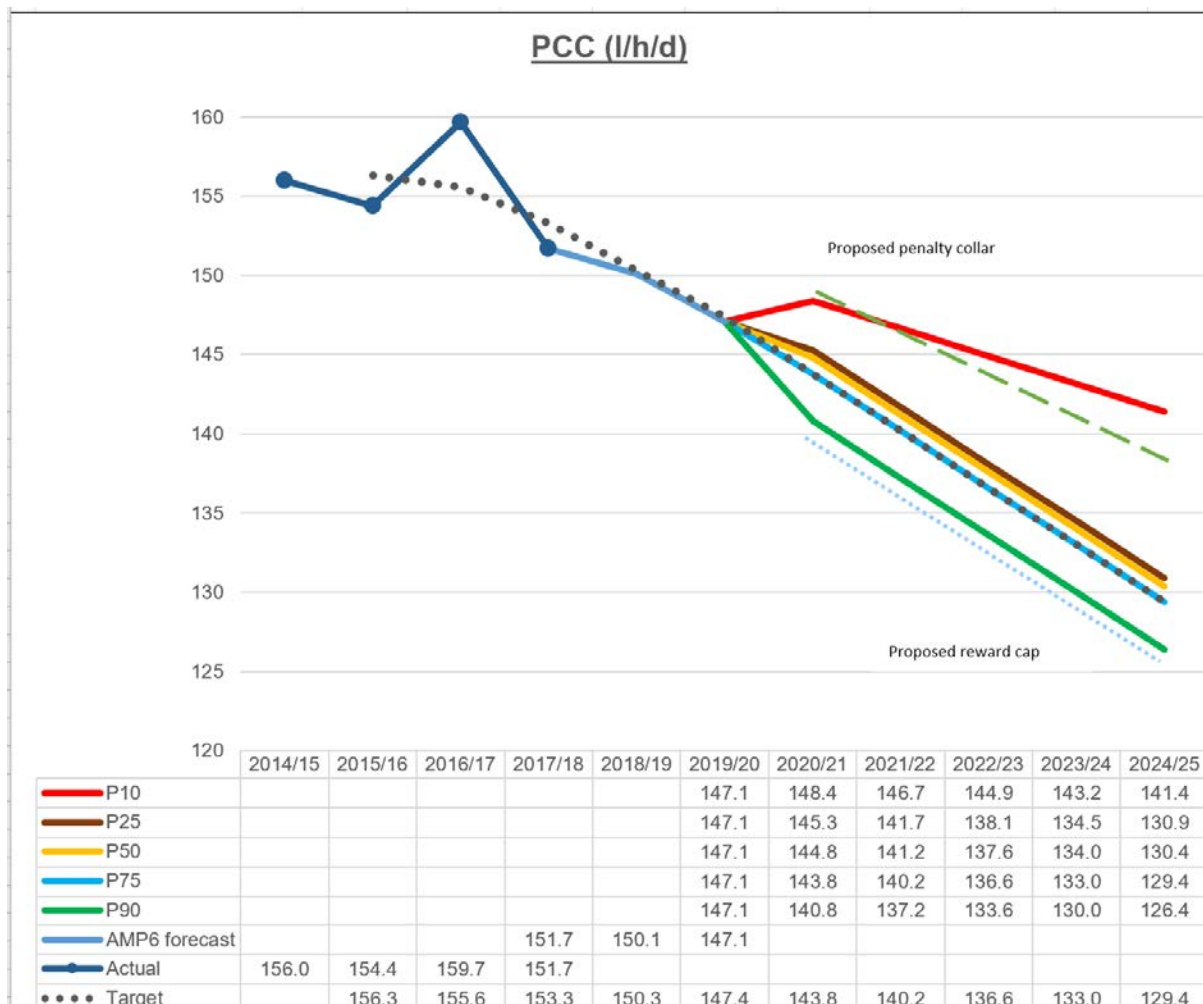
| 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | 2030/31 | 2031/32 | 2032/33 | 2033/34 | 2034/35 | 2035/36 | 2036/37 | 2037/38 | 2038/39 | 2039/40 | 2040/41 | 2041/42 | 2042/43 | 2043/44 | 2044/45 |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 143.8 | 140.2 | 136.6 | 133.0 | 129.4 | 128.1 | 126.8 | 125.5 | 124.2 | 122.9 | 121.6 | 120.3 | 119.1 | 117.8 | 116.5 | 115.2 | 113.9 | 112.6 | 111.3 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 |

Final ODI Design - PCC

| PCC | l/h/d | | | | | | | | | | | | | | | | | | | |
|----------------------------|--------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------------------------|---------|---------|---------|---------|---|---------|---------|---------|----------|
| | AMP5 | | | | | AMP6 | | | | | AMP7 | | | | | AMP8 | | | | |
| | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 |
| Actual | 172.2 | 169.2 | 163.2 | 157.4 | 156.0 | 154.4 | 159.7 | 151.7 | | | | | | | | | | | | |
| Target | | | | | | 156.3 | 155.6 | 153.3 | 150.3 | 147.4 | 143.8 | 140.2 | 136.6 | 133.0 | 129.4 | 125.2 | 121.4 | 117.6 | 113.8 | 110.0 |
| AMP6 PC Forecast | | | | | | | | 151.7 | 150.1 | 147.1 | | | | | | | | | | |
| AMP7 PC P10 forecast | | | | | | | | | | 147.1 | 148.4 | 146.7 | 144.9 | 143.2 | 141.4 | finish 12 above target, year 1 4.6 above target | | | | |
| AMP7 PC P25 forecast | | | | | | | | | | 147.1 | 145.3 | 141.7 | 138.1 | 134.5 | 130.9 | 2 above target | | | | |
| AMP7 PC P50 forecast | | | | | | | | | | 147.1 | 144.8 | 141.2 | 137.6 | 134.0 | 130.4 | 1 higher than target | | | | |
| AMP7 PC P75 forecast | | | | | | | | | | 147.1 | 143.8 | 140.2 | 136.6 | 133.0 | 129.4 | equal to target | | | | |
| AMP7 PC P90 forecast | | | | | | | | | | 147.1 | 140.8 | 137.2 | 133.6 | 130.0 | 126.4 | 3 below target | | | | |
| Incentive rates | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | Under/Outperformance | | | | | | | | | |
| | | | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | |
| Underperformance payment | £ | 490,154 | | | | | | | | | AMP7 PC P10 forecast | -4.6 | -6.4 | -8.3 | -10.2 | -12.0 | | | | |
| Outperformance payment | £ | 364,627 | | | | | | | | | AMP7 PC P25 forecast | -1.5 | -1.5 | -1.5 | -1.5 | -1.5 | | | | |
| | | | | | | | | | | | AMP7 PC P50 forecast | -1.0 | -1.0 | -1.0 | -1.0 | -1.0 | | | | |
| ODI detailed design | Non-financial | | | | | | | | | | AMP7 PC P75 forecast | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| | | | | | | | | | | | AMP7 PC P90 forecast | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | | | |
| | ODI type: £ + / (-) unit based | | | | | | | | | | | | | | | | | | | |
| | ODI form: Revenue | | | | | | | | | | | | | | | | | | | |
| | ODI timing: In period | | | | | | | | | | | | | | | | | | | |
| | ODI Cap/Collar: Yes | | | | | | | | | | AMP7 PC P10 forecast | -£ 2.25 | -£ 3.16 | -£ 4.07 | -£ 4.98 | -£ 5.88 | | | | -£ 20.34 |
| | ODI Dead band: None | | | | | | | | | | AMP7 PC P25 forecast | -£ 0.74 | -£ 0.74 | -£ 0.74 | -£ 0.74 | -£ 0.74 | | | | -£ 3.68 |
| | Other: n/a | | | | | | | | | | AMP7 PC P50 forecast | -£ 0.49 | -£ 0.49 | -£ 0.49 | -£ 0.49 | -£ 0.49 | | | | -£ 2.45 |
| | | | | | | | | | | | AMP7 PC P75 forecast | £ - | £ - | £ - | £ - | £ - | | | | £ - |
| | | | | | | | | | | | AMP7 PC P90 forecast | £ 1.09 | £ 1.09 | £ 1.09 | £ 1.09 | £ 1.09 | | | | £ 5.47 |

| Caps, Collars and Dead bands | | | | | | |
|-------------------------------|---------|---------|---------|---------|---------|-------------------------------|
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | |
| Penalty collar @ 5 MI/d | -5.0 | -5.0 | -5.0 | -5.0 | -5.0 | Reward at 1 l/h/d over target |
| | 148.80 | 145.20 | 141.60 | 138.00 | 134.40 | |
| Reward cap @ 1 l/h/d beyond F | 139.80 | 136.20 | 132.60 | 129.00 | 125.40 | |
| | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | |
| AMP7 PC P10 forecast | -4.6 | -5.0 | -5.0 | -5.0 | -5.0 | when collar takes effect |
| AMP7 PC P25 forecast | -1.5 | -1.5 | -1.5 | -1.5 | -1.5 | |
| AMP7 PC P50 forecast | -1.0 | -1.0 | -1.0 | -1.0 | -1.0 | |
| AMP7 PC P75 forecast | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| AMP7 PC P90 forecast | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | when cap takes effect |

| Calibrated incentives due £m | | | | | | | |
|------------------------------|---------|---------|---------|---------|---------|----------|-----------------------------|
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | AMP7 | Effect of cap and dead band |
| AMP7 PC P10 forecast | -£ 2.25 | -£ 2.45 | -£ 2.45 | -£ 2.45 | -£ 2.45 | -£ 12.06 | £ 8.28 |
| AMP7 PC P25 forecast | -£ 0.74 | -£ 0.74 | -£ 0.74 | -£ 0.74 | -£ 0.74 | -£ 3.68 | £ - |
| AMP7 PC P50 forecast | -£ 0.49 | -£ 0.49 | -£ 0.49 | -£ 0.49 | -£ 0.49 | -£ 2.45 | £ - |
| AMP7 PC P75 forecast | £ - | £ - | £ - | £ - | £ - | £ - | £ - |
| AMP7 PC P90 forecast | £ 1.09 | £ 1.09 | £ 1.09 | £ 1.09 | £ 1.09 | £ 5.47 | £ - |

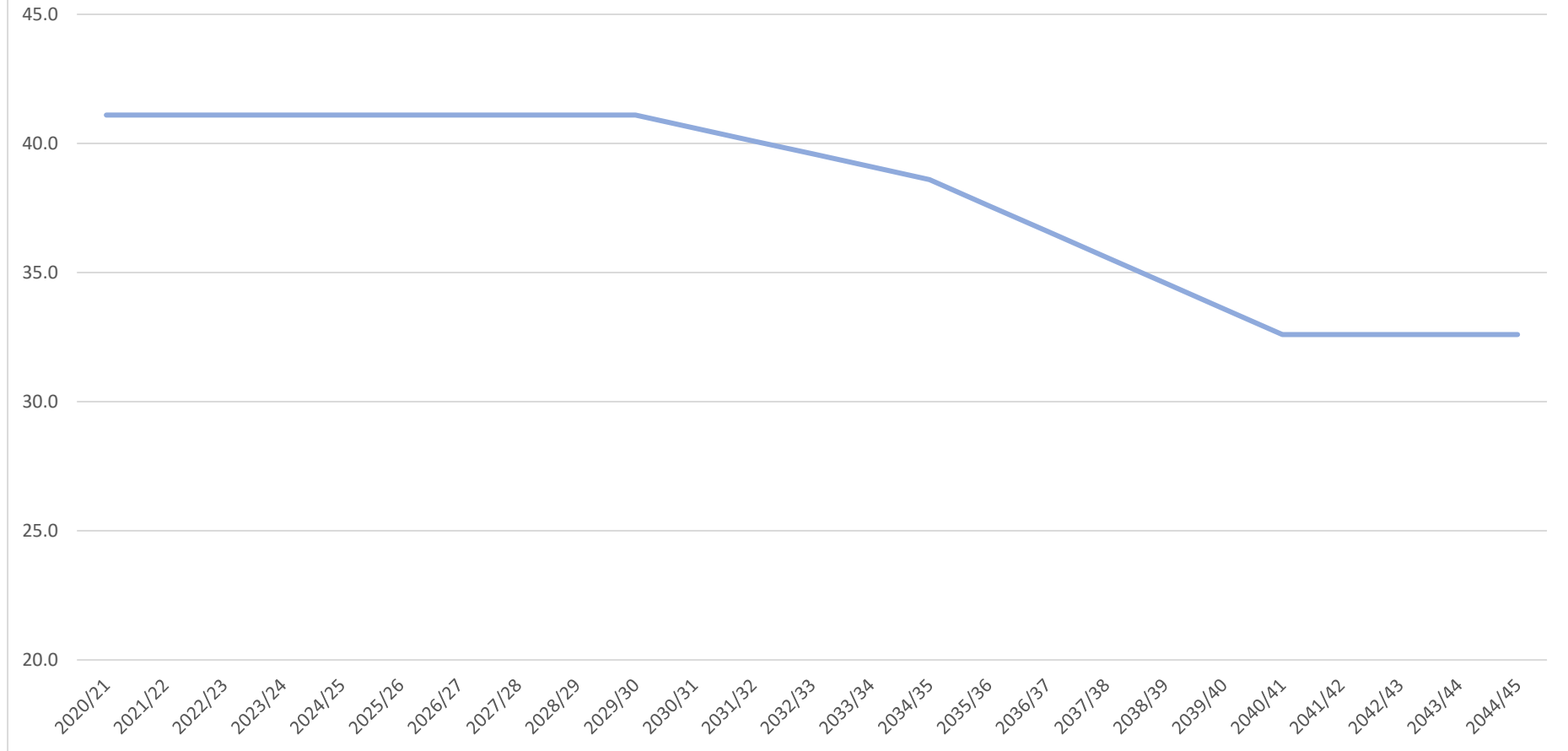


2.1.3 Risk of Severe Restrictions in a Drought

| | |
|--|--|
| Definition | <ul style="list-style-type: none"> This is a common PC as defined by Ofwat. The population is 'at risk' if the supply-demand balance calculation in each water resource zone (as used for water resource planning) for the 1-in-200-year drought event results in a shortfall (deficit). This will occur when the theoretical deployable output minus outage allowance (available supply) is less than the dry year demand plus base year target headroom (demand plus uncertainty). |
| Unit | <ul style="list-style-type: none"> Percentage of population served that would experience severe supply restrictions (for example, standpipes or rota cuts) in a 1 in 200-year drought. |
| Target | <ul style="list-style-type: none"> Improve from 42.9% to 41.1% over AMP7 considering further significant reduction from resource base. |
| Evidence that target is stretching | <ul style="list-style-type: none"> Cross company comparisons are particularly difficult due to lack of baseline comparability; for example, performance will reflect things such as Victorian engineering investment, historical population growth and environmental sensitivity of operating environment. This is a new PC introduced for AMP7 so we don't have an equivalent existing measure on the same basis. |
| Evidence of customer support for target (e.g. they are willing to pay for costs of achieving it, incl. outperformance payment ODIs; they can afford to pay for it). | <ul style="list-style-type: none"> Drought not seen as a problem, as we live in a wet country (see Appendix 3). The public assume that the UK has ample water resources so there should be no excuse for water shortages or hosepipe bans (see Appendix 3). Stakeholder participants had mixed views on drought resilience, and requested more information on how droughts are defined and exactly what restrictions might be put in place (see Appendix 3). |
| Does the PC protect current and future customers? | <ul style="list-style-type: none"> We have ensured that investment seeks to maintain performance for current and future customers in response to additional future pressure for further abstraction reduction and additional reductions in the underlying water resources supply base. |
| 20-year view (AMP5 through to AMP8) | <ul style="list-style-type: none"> Maintain existing performance in response to further environmental challenges and expected additional reductions in abstraction from future WINEP programmes. |
| ODI type (Financial/non-financial; outperformance payment/underperformance payment/both) | <ul style="list-style-type: none"> We have not assigned a financial ODI to this Common PC. This is because any improved performance to this PC will be through investment in other PCs. For example, by reducing our PCC and leakage levels and implementing the sustainability reductions (through new network connections) we will improve our drought resilience. Therefore, this will lead to outperformance payment multiples if we outperform on these contingent PCs, and if we underperform, we could be exposed to double- |

| | jeopardy. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|----------------|----------------|----------------|----------------|----------------|----------------|-----------|------|------|------|------|------|------------|------|------|------|------|------|------------|------|------|------|------|------|------------|------|------|------|------|------|------------|------|------|------|------|------|
| Do customers support the ODI rates? | <ul style="list-style-type: none"> • Not applicable | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P-ranges (performance in “% company population exposed to 1-in-200 drought restrictions”) | <table border="1"> <thead> <tr> <th></th> <th>2020/21</th> <th>2021/22</th> <th>2022/23</th> <th>2023/24</th> <th>2024/25</th> </tr> </thead> <tbody> <tr> <td>PC</td> <td>41.1</td> <td>41.1</td> <td>41.1</td> <td>41.1</td> <td>41.1</td> </tr> <tr> <td>P10</td> <td>41.1</td> <td>41.2</td> <td>41.4</td> <td>41.8</td> <td>42.2</td> </tr> <tr> <td>P25</td> <td>41.1</td> <td>41.1</td> <td>41.1</td> <td>41.1</td> <td>41.1</td> </tr> <tr> <td>P75</td> <td>41.1</td> <td>41.1</td> <td>41.1</td> <td>41.1</td> <td>41.1</td> </tr> <tr> <td>P90</td> <td>41.1</td> <td>41.0</td> <td>40.8</td> <td>40.4</td> <td>40.0</td> </tr> </tbody> </table> | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | PC | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | P10 | 41.1 | 41.2 | 41.4 | 41.8 | 42.2 | P25 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | P75 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | P90 | 41.1 | 41.0 | 40.8 | 40.4 | 40.0 |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PC | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P10 | 41.1 | 41.2 | 41.4 | 41.8 | 42.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P25 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P75 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P90 | 41.1 | 41.0 | 40.8 | 40.4 | 40.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Delivery mechanism | <ul style="list-style-type: none"> • Successful delivery of other PCs (leakage, PCC, SRs). | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dependencies | <ul style="list-style-type: none"> • Weather, technology, resources • Speed, rate and impact of sustainability reductions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

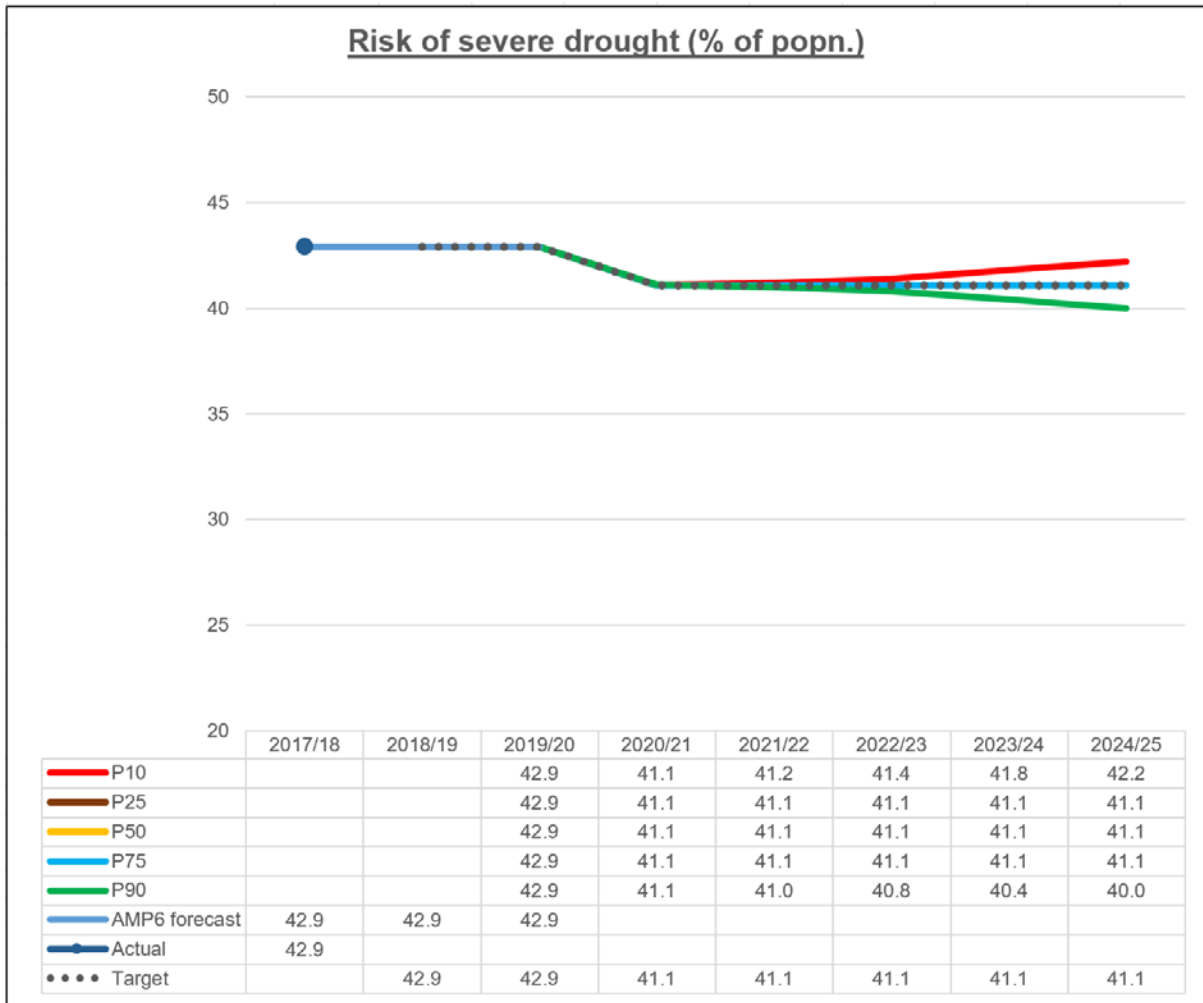
Drought resilience (% AFW population exposed to 1/200 event)



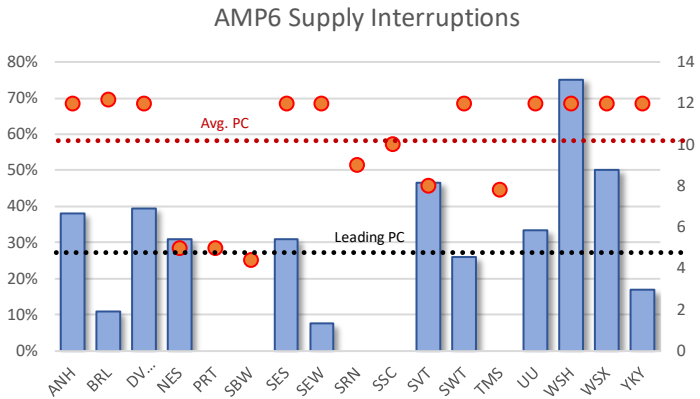
| 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | 2030/31 | 2031/32 | 2032/33 | 2033/34 | 2034/35 | 2035/36 | 2036/37 | 2037/38 | 2038/39 | 2039/40 | 2040/41 | 2041/42 | 2042/43 | 2043/44 | 2044/45 | |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------|
| 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 40.6 | 40.1 | 39.6 | 39.1 | 38.6 | 37.6 | 36.6 | 35.6 | 34.6 | 33.6 | 32.6 | 32.6 | 32.6 | 32.6 | 32.6 | 32.6 |

Final ODI Design – Drought resilience

| Drought | % of population at risk of severe restriction in a 1:200 drought | | | | | | | | | | | | | | | | | | | | |
|----------------------------|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----|
| | AMP5 | | | | | AMP6 | | | | AMP7 | | | | | AMP8 | | | | | | |
| | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | |
| Actual | | | | | | | | 42.9 | | | | | | | | | | | | | |
| Target | | | | | | | | | 42.9 | 42.9 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | |
| AMP6 PC Forecast | | | | | | | | 42.9 | 42.9 | 42.9 | | | | | | | | | | | |
| AMP7 PC P10 forecast | | | | | | | | | | 42.9 | 41.1 | 41.2 | 41.4 | 41.8 | 42.2 | | | | | | |
| AMP7 PC P25 forecast | | | | | | | | | | 42.9 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | | | | | | |
| AMP7 PC P50 forecast | | | | | | | | | | 42.9 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | | | | | | |
| AMP7 PC P75 forecast | | | | | | | | | | 42.9 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | | | | | | |
| AMP7 PC P90 forecast | | | | | | | | | | 42.9 | 41.1 | 41.0 | 40.8 | 40.4 | 40.0 | | | | | | |
| Incentive rates | | | | | | | | | | | Under/Outperformance | | | | | | | | | | |
| | | | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | |
| Underperformance payment | £ | | - | | | | | | | | AMP7 PC P10 forecast | 0.0 | -0.1 | -0.3 | -0.7 | -1.1 | | | | | |
| Outperformance payment | £ | | - | | | | | | | | AMP7 PC P25 forecast | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | |
| | | | | | | | | | | | AMP7 PC P50 forecast | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | |
| ODI detailed design | | | | | | | | | | | AMP7 PC P75 forecast | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | |
| | | | | | | | | | | | AMP7 PC P90 forecast | 0.0 | 0.1 | 0.3 | 0.7 | 1.1 | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| ODI type: | Non-financial | | | | | | | | | | | | | | | | | | | | |
| ODI form: | n/a | | | | | | | | | | Uncalibrated incentives due £m | | | | | | | | | | |
| ODI timing: | n/a | | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | AMP7 | |
| ODI Cap/Collar: | n/a | | | | | | | | | | AMP7 PC P10 forecast | £ - | £ - | £ - | £ - | £ - | | | | | £ - |
| ODI Dead band: | n/a | | | | | | | | | | AMP7 PC P25 forecast | £ - | £ - | £ - | £ - | £ - | | | | | £ - |
| | n/a | | | | | | | | | | AMP7 PC P50 forecast | £ - | £ - | £ - | £ - | £ - | | | | | £ - |
| | n/a | | | | | | | | | | AMP7 PC P75 forecast | £ - | £ - | £ - | £ - | £ - | | | | | £ - |
| | n/a | | | | | | | | | | AMP7 PC P90 forecast | £ - | £ - | £ - | £ - | £ - | | | | | £ - |



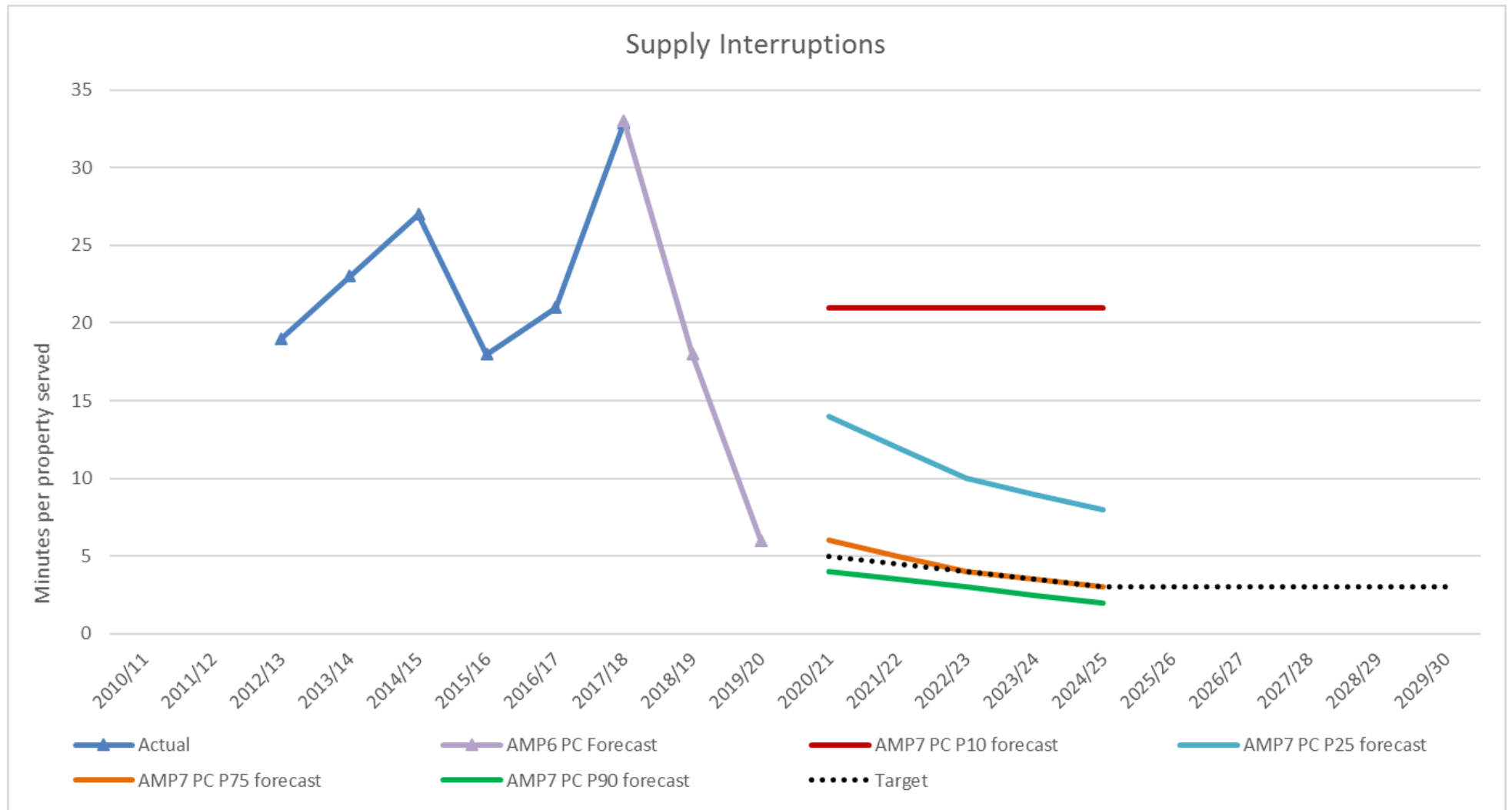
2.1.4 Water Supply Interruptions

| Definition | <ul style="list-style-type: none"> This is a common PC as defined by Ofwat. Supply interruptions in terms of the average number of minutes lost per customer for the whole customer base for interruptions that lasted 3 hours or more. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|---|---|-----|-----|----|-----|-----|----|-------|-----|----|-----|-----|----|-----|-----|----|-----|-----|----|-----|-----|----|-----|----|----|-----|-----|----|-----|-----|----|-----|-----|----|-----|-----|----|-----|-----|----|-----|-----|----|-----|-----|----|-----|-----|----|-----|-----|----|
| Unit | <ul style="list-style-type: none"> Average supply interruption greater than or equal to three hours (minutes per property). | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Target | <ul style="list-style-type: none"> Target is to reduce supply interruptions from 6 minutes per property to 3 minutes per property by end of AMP7 Our starting position at the beginning of AMP7 at 31 March 2020 is forecast to be 6 mins. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Evidence that target is stretching | <ul style="list-style-type: none"> Ofwat expects companies to target upper quartile performance. Based on 2016/17 data that would mean less than 4 minutes. Our proposals assume we end AMP6 at 6 minutes and improve performance to 3 minutes by the end of AMP7. This is a considerable stretch from our performance the last couple of years. However, recent performance, since September 2017, has been considerably better. The effectiveness of our operational response remains critical. The target is significantly better than any historical performance. Our current target of 320 properties or less impacted by an interruption lasting more than 12 hours is not directly comparable to any other companies. However, in AMP6 the average target is 9.5 mins by the end of 2019/20 showing how much further all companies will need to go in AMP7. <div> <p style="text-align: center;">AMP6 Supply Interruptions</p>  <table border="1"> <caption>AMP6 Supply Interruptions Data</caption> <thead> <tr> <th>Company</th> <th>Percentage of Properties Affected (Left Y-axis)</th> <th>Average Minutes per Property (Right Y-axis)</th> </tr> </thead> <tbody> <tr><td>ANH</td><td>38%</td><td>12</td></tr> <tr><td>BRL</td><td>12%</td><td>12</td></tr> <tr><td>DV...</td><td>38%</td><td>12</td></tr> <tr><td>NES</td><td>30%</td><td>12</td></tr> <tr><td>PRT</td><td>28%</td><td>12</td></tr> <tr><td>SBW</td><td>25%</td><td>12</td></tr> <tr><td>SES</td><td>30%</td><td>12</td></tr> <tr><td>SEW</td><td>8%</td><td>12</td></tr> <tr><td>SRN</td><td>52%</td><td>12</td></tr> <tr><td>SSC</td><td>45%</td><td>12</td></tr> <tr><td>SVT</td><td>45%</td><td>12</td></tr> <tr><td>SWT</td><td>25%</td><td>12</td></tr> <tr><td>TMS</td><td>45%</td><td>12</td></tr> <tr><td>UUU</td><td>35%</td><td>12</td></tr> <tr><td>WSH</td><td>75%</td><td>12</td></tr> <tr><td>WSX</td><td>50%</td><td>12</td></tr> <tr><td>YKY</td><td>18%</td><td>12</td></tr> </tbody> </table> </div> | Company | Percentage of Properties Affected (Left Y-axis) | Average Minutes per Property (Right Y-axis) | ANH | 38% | 12 | BRL | 12% | 12 | DV... | 38% | 12 | NES | 30% | 12 | PRT | 28% | 12 | SBW | 25% | 12 | SES | 30% | 12 | SEW | 8% | 12 | SRN | 52% | 12 | SSC | 45% | 12 | SVT | 45% | 12 | SWT | 25% | 12 | TMS | 45% | 12 | UUU | 35% | 12 | WSH | 75% | 12 | WSX | 50% | 12 | YKY | 18% | 12 |
| Company | Percentage of Properties Affected (Left Y-axis) | Average Minutes per Property (Right Y-axis) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANH | 38% | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BRL | 12% | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DV... | 38% | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NES | 30% | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PRT | 28% | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SBW | 25% | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SES | 30% | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SEW | 8% | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SRN | 52% | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SSC | 45% | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SVT | 45% | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SWT | 25% | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TMS | 45% | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UUU | 35% | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WSH | 75% | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WSX | 50% | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| YKY | 18% | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Evidence of customer support for target (e.g. they are willing to pay for costs of achieving it, incl. outperformance payment ODIs; they can afford to pay for it). | <ul style="list-style-type: none"> Target largely driven by regulatory requirements. Future customers particularly valued an uninterrupted supply as an important part of the service provided to customers (see Appendix 3). Those who hadn't previously experienced an interruption felt that higher levels of compensation should be available (see Appendix 3). Half of customers found current compensation for unplanned interruptions as 'about right' and the other | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

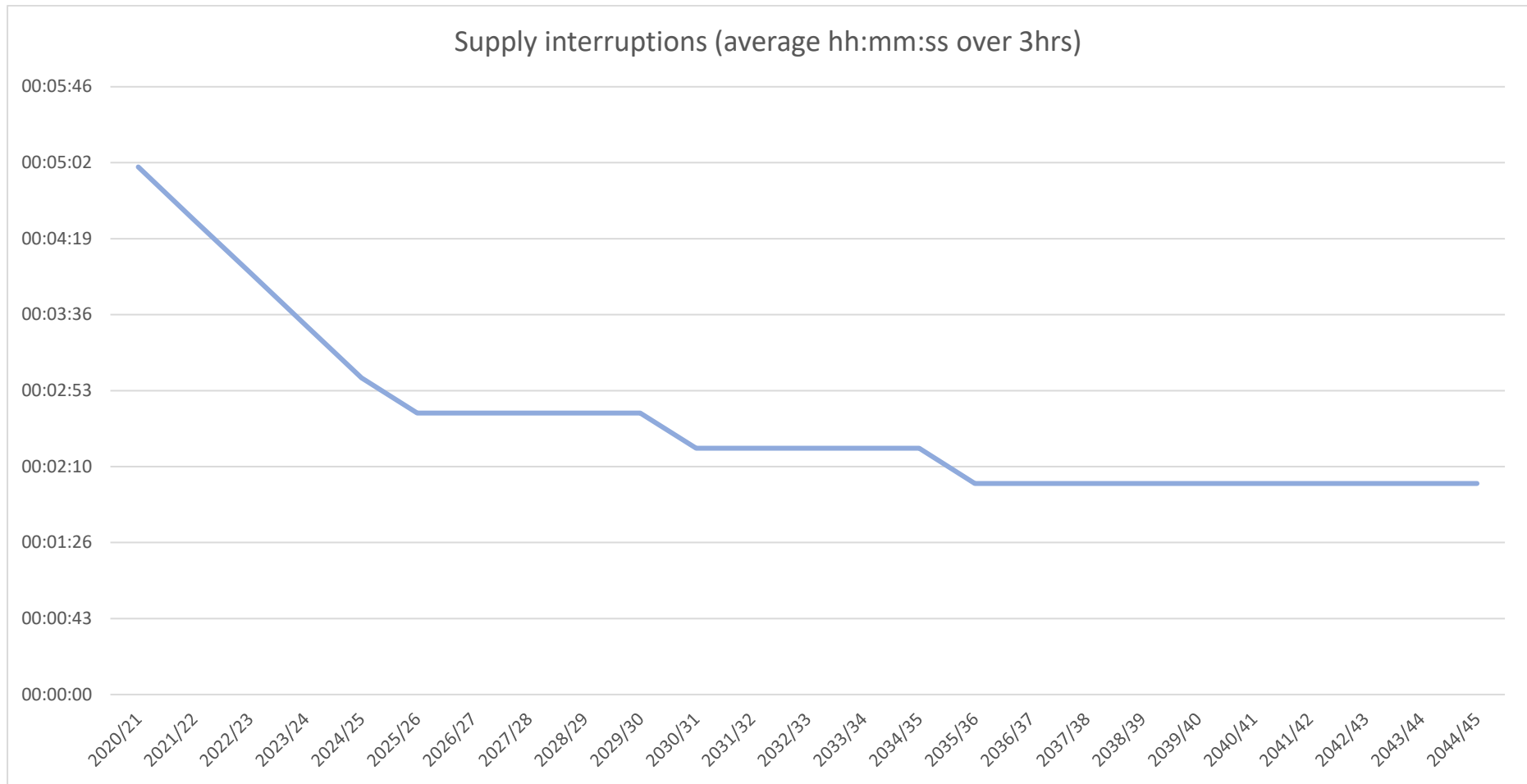
| | <p>half felt it was 'far too/too little' (see section 7 below).</p> <ul style="list-style-type: none"> • There is higher acceptance of planned interruptions over unplanned interruptions with most customers finding compensation for planned interruptions appropriate (see section 7 below). | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---------|---------|---------|---------|---------|---------|-----------|-----|-----|-----|-----|-----|------------|------|------|------|------|------|------------|------|------|------|-----|-----|------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|
| Does the PC protect current and future customers? | <ul style="list-style-type: none"> • We have ensured that our investment for supply interruptions for AMP7 delivers for current customers, and through reducing supply interruptions to, on average, no more than three minutes we will maintain a good standard for future customers. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20-year view (AMP5 through to AMP8) | <ul style="list-style-type: none"> • See following page. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ODI type (Financial/non-financial; outperformance payment/underperformance payment/both) | <ul style="list-style-type: none"> • Financial incentives with both outperformance and underperformance payments that will be applied in-period to revenue depending the outturn performance compared to target i.e. unit based incentives. • In-period means that any payments will be applied at the first possible opportunity so that an incentive payment from performance in year 1 will be reflected in bills in year 3. • We are proposing a deadband so that performance between PC target and 3 mins in each year will not incur an underperformance payment. • We will also apply a collar (at 10mins minus the year 1 target) to limit total incentive exposure for this PC on underperformance. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Do customers support the ODI rates? | <ul style="list-style-type: none"> • We have tested the calibrated incentive rates as part of an overall package using P10/90 and P25/75. The projected performance and potential range (represented by P25/75) was specifically tested with customers. We expect the range of bill impacts to be +£0.50 to -£4.00 over the AMP. • Our specific engagement with customers showed this range to be acceptable. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P-ranges (performance in "minutes per property") | <table border="1"> <thead> <tr> <th></th> <th>2020/21</th> <th>2021/22</th> <th>2022/23</th> <th>2023/24</th> <th>2024/25</th> </tr> </thead> <tbody> <tr> <td>PC</td> <td>5.0</td> <td>4.5</td> <td>4.0</td> <td>3.5</td> <td>3.0</td> </tr> <tr> <td>P10</td> <td>21.0</td> <td>21.0</td> <td>20.0</td> <td>19.0</td> <td>18.0</td> </tr> <tr> <td>P25</td> <td>12.0</td> <td>12.0</td> <td>10.0</td> <td>9.0</td> <td>8.0</td> </tr> <tr> <td>P75</td> <td>6.0</td> <td>5.0</td> <td>4.0</td> <td>3.5</td> <td>3.0</td> </tr> <tr> <td>P90</td> <td>4.0</td> <td>3.5</td> <td>3.0</td> <td>2.5</td> <td>2.0</td> </tr> </tbody> </table> | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | PC | 5.0 | 4.5 | 4.0 | 3.5 | 3.0 | P10 | 21.0 | 21.0 | 20.0 | 19.0 | 18.0 | P25 | 12.0 | 12.0 | 10.0 | 9.0 | 8.0 | P75 | 6.0 | 5.0 | 4.0 | 3.5 | 3.0 | P90 | 4.0 | 3.5 | 3.0 | 2.5 | 2.0 |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PC | 5.0 | 4.5 | 4.0 | 3.5 | 3.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P10 | 21.0 | 21.0 | 20.0 | 19.0 | 18.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P25 | 12.0 | 12.0 | 10.0 | 9.0 | 8.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P75 | 6.0 | 5.0 | 4.0 | 3.5 | 3.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P90 | 4.0 | 3.5 | 3.0 | 2.5 | 2.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Delivery mechanism | <ul style="list-style-type: none"> • We continue to make significant progress against our five core packages: <ul style="list-style-type: none"> ○ Functional Standby: enhancing and supplementing the capability and capacity of functional standby ○ Network Control Desk: continues to develop and grow and played a pivotal role to our response to the cold and hot weather events in February and March and then across June and July. The team will be able to deliver further benefits as other associated programmes deliver throughout the year. ○ Contractors: tender process for the replacement | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | |
|---------------------|---|
| | <p>of incumbent interim contracts to make necessary changes to a turnkey delivery model.</p> <ul style="list-style-type: none"> ○ Equipment and Materials: continue to strengthen our restoration capabilities by investing in equipment and materials that are key to our rapid response to restoring customer's supplies. ○ Extended Working Window: updated terms and conditions to promote extended working window to be introduced in 2018 in readiness for AMP 7 when we will require a further shift change in our performance to meet the new ODI of property minutes. <ul style="list-style-type: none"> ● As aforementioned, tackling performance in this area is mainly around speed and effectiveness of our operational response. |
| Dependencies | <ul style="list-style-type: none"> ● Weather, technology, resources |

Figure A3: Supply Interruptions 20 Year View – AMP5 to AMP8



25-year forecast – Supply interruptions

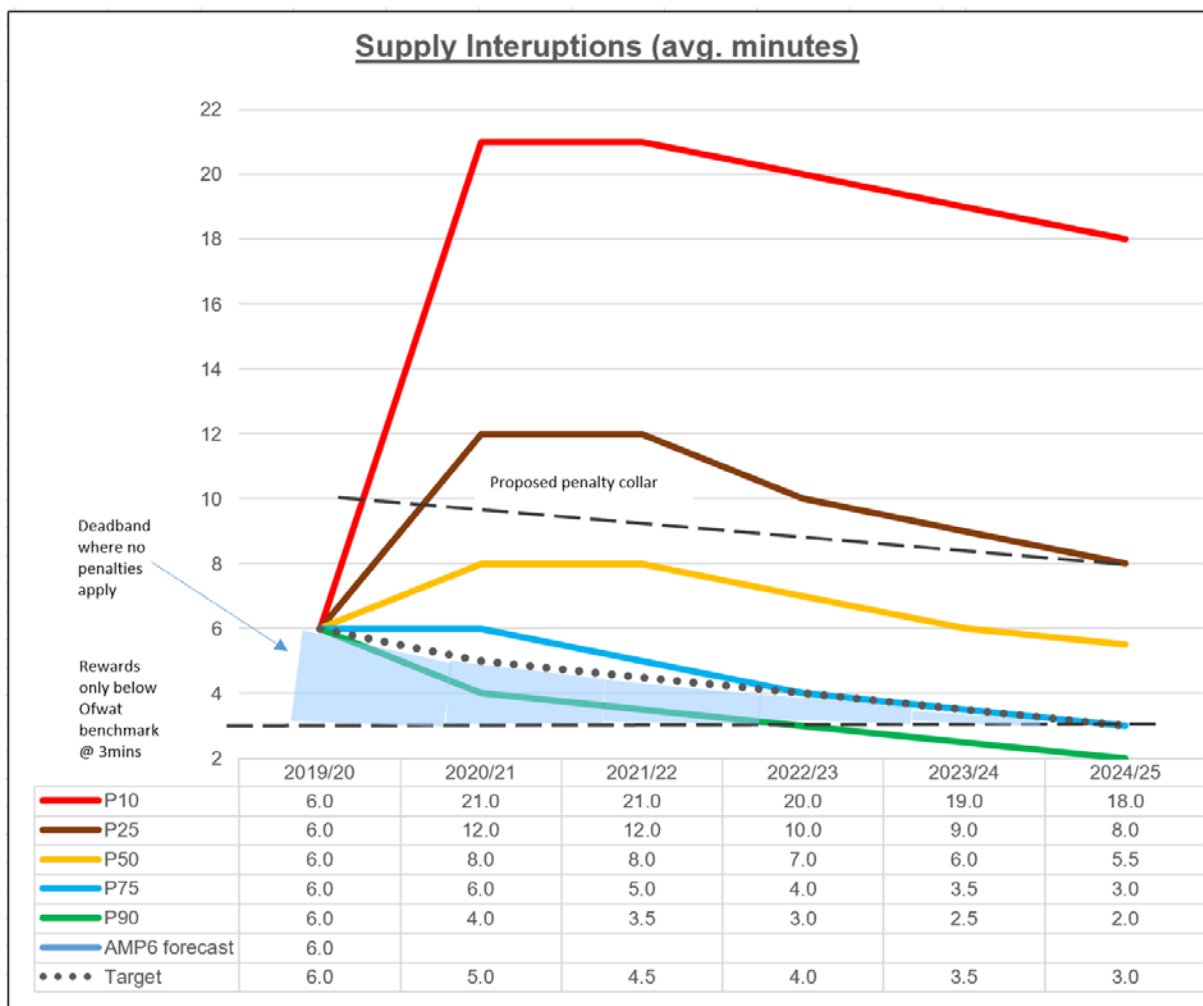


| 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | 2030/31 | 2031/32 | 2032/33 | 2033/34 | 2034/35 | 2035/36 | 2036/37 | 2037/38 | 2038/39 | 2039/40 | 2040/41 | 2041/42 | 2042/43 | 2043/44 | 2044/45 |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 00:05:00 | 00:04:30 | 00:04:00 | 00:03:30 | 00:03:00 | 00:02:40 | 00:02:40 | 00:02:40 | 00:02:40 | 00:02:40 | 00:02:20 | 00:02:20 | 00:02:20 | 00:02:20 | 00:02:20 | 00:02:00 | 00:02:00 | 00:02:00 | 00:02:00 | 00:02:00 | 00:02:00 | 00:02:00 | 00:02:00 | 00:02:00 | 00:02:00 |
| 5:00 | 4:30 | 4:00 | 3:30 | 3:00 | 2:40 | 2:40 | 2:40 | 2:40 | 2:40 | 2:20 | 2:20 | 2:20 | 2:20 | 2:20 | 2:00 | 2:00 | 2:00 | 2:00 | 2:00 | 2:00 | 2:00 | 2:00 | 2:00 | 2:00 |

Final ODI Design – Supply interruptions

| Supply Interruptions | Minutes per property served =>3 hours | | | | | | | | | | | | | | | | | | | | |
|----------------------------|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------------------------|---------|---------|---------|---------|---------|----------|---------|---------|---------|--|
| | AMP5 | | | | | AMP6 | | | | AMP7 | | | | | AMP8 | | | | | | |
| | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | |
| Actual | | | 19.0 | 23.0 | 27.0 | 18.0 | 21.0 | 32.9 | | | | | | | | | | | | | |
| Target | | | | | | | | | 6.0 | | 5.0 | 4.5 | 4.0 | 3.5 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| AMP6 PC Forecast | | | | | | | 33.0 | 18.0 | 6.0 | | | | | | | | | | | | |
| AMP7 PC P10 forecast | | | | | | | | | 6.0 | | 21.0 | 21.0 | 20.0 | 19.0 | 18.0 | | | | | | |
| AMP7 PC P25 forecast | | | | | | | | | 6.0 | | 12.0 | 12.0 | 10.0 | 9.0 | 8.0 | | | | | | |
| AMP7 PC P50 forecast | | | | | | | | | 6.0 | | 8.0 | 8.0 | 7.0 | 6.0 | 5.5 | | | | | | |
| AMP7 PC P75 forecast | | | | | | | | | 6.0 | | 6.0 | 5.0 | 4.0 | 3.5 | 3.0 | | | | | | |
| AMP7 PC P90 forecast | | | | | | | | | 6.0 | | 4.0 | 3.5 | 3.0 | 2.5 | 2.0 | | | | | | |
| Incentive rates | | | | | | | | | | | Under/Outperformance | | | | | | | | | | |
| Underperformance payment | £ | 326,667 | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | |
| Outperformance payment | £ | 299,417 | | | | | | | | | AMP7 PC P10 forecast | -16.0 | -16.5 | -16.0 | -15.5 | -15.0 | | | | | |
| ODI detailed design | Financial | | | | | | | | | | AMP7 PC P25 forecast | -7.0 | -7.5 | -6.0 | -5.5 | -5.0 | | | | | |
| | ODI type: £ + / (-) unit based | | | | | | | | | | AMP7 PC P50 forecast | -3.0 | -3.5 | -3.0 | -2.5 | -2.5 | | | | | |
| | ODI form: Revenue | | | | | | | | | | AMP7 PC P75 forecast | -1.0 | -0.5 | 0.0 | 0.0 | 0.0 | | | | | |
| | ODI timing: In period | | | | | | | | | | AMP7 PC P90 forecast | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | | | | | |
| | ODI Cap/Collar: Yes collar on penalties | | | | | | | | | | Uncalibrated incentives due £m | | | | | | | | | | |
| | ODI Dead band: Applied between target and expected Ofwat benchmark | | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | AMP7 | | | | | |
| | Other: n/a | | | | | | | | | | AMP7 PC P10 forecast | -£ 5.23 | -£ 5.39 | -£ 5.23 | -£ 5.06 | -£ 4.90 | -£ 25.81 | | | | |
| | | | | | | | | | | | AMP7 PC P25 forecast | -£ 2.29 | -£ 2.45 | -£ 1.96 | -£ 1.80 | -£ 1.63 | -£ 10.13 | | | | |
| | | | | | | | | | | | AMP7 PC P50 forecast | -£ 0.98 | -£ 1.14 | -£ 0.98 | -£ 0.82 | -£ 0.82 | -£ 4.74 | | | | |
| | | | | | | | | | | | AMP7 PC P75 forecast | -£ 0.33 | -£ 0.16 | £ - | £ - | £ - | -£ 0.49 | | | | |
| | | | | | | | | | | | AMP7 PC P90 forecast | £ 0.30 | £ 0.30 | £ 0.30 | £ 0.30 | £ 0.30 | £ 1.50 | | | | |

| Caps, Collars and Dead bands | | | | | | | |
|---|---------|---------|---------|---------|---------|---------|--------------------------------------|
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | |
| Penalty cap @ 5 mins above tar | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | 10mins minus Y1 target |
| Dead Band @ anything above 3 mins but below AMP7 target | | | | | | | |
| | 10.0 | 9.5 | 9.0 | 8.5 | 8.0 | | |
| AMP7 PC P10 forecast | -5.0 | -5.0 | -5.0 | -5.0 | -5.0 | | when collar takes effect |
| AMP7 PC P25 forecast | -5.0 | -5.0 | -5.0 | -5.0 | -5.0 | | |
| AMP7 PC P50 forecast | -3.0 | -3.5 | -3.0 | -2.5 | -2.5 | | |
| AMP7 PC P75 forecast | -1.0 | -0.5 | 0.0 | 0.0 | 0.0 | | |
| AMP7 PC P90 forecast | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | | |
| Revised P90 (3 min benchmark) | 0 | 0 | 0 | 0.5 | 1 | | Rewards only when better than 3 mins |
| Calibrated incentives due £m | | | | | | | |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | AMP7 | Effect of collar and dead band |
| AMP7 PC P10 forecast | -£ 1.63 | -£ 1.63 | -£ 1.63 | -£ 1.63 | -£ 1.63 | -£ 8.17 | £ 17.64 |
| AMP7 PC P25 forecast | -£ 1.63 | -£ 1.63 | -£ 1.63 | -£ 1.63 | -£ 1.63 | -£ 8.17 | £ 1.96 |
| AMP7 PC P50 forecast | -£ 0.98 | -£ 1.14 | -£ 0.98 | -£ 0.82 | -£ 0.82 | -£ 4.74 | £ - |
| AMP7 PC P75 forecast | -£ 0.33 | -£ 0.16 | £ - | £ - | £ - | -£ 0.49 | £ - |
| AMP7 PC P90 forecast | £ - | £ - | £ - | £ 0.15 | £ 0.30 | £ 0.45 | -£ 1.05 |

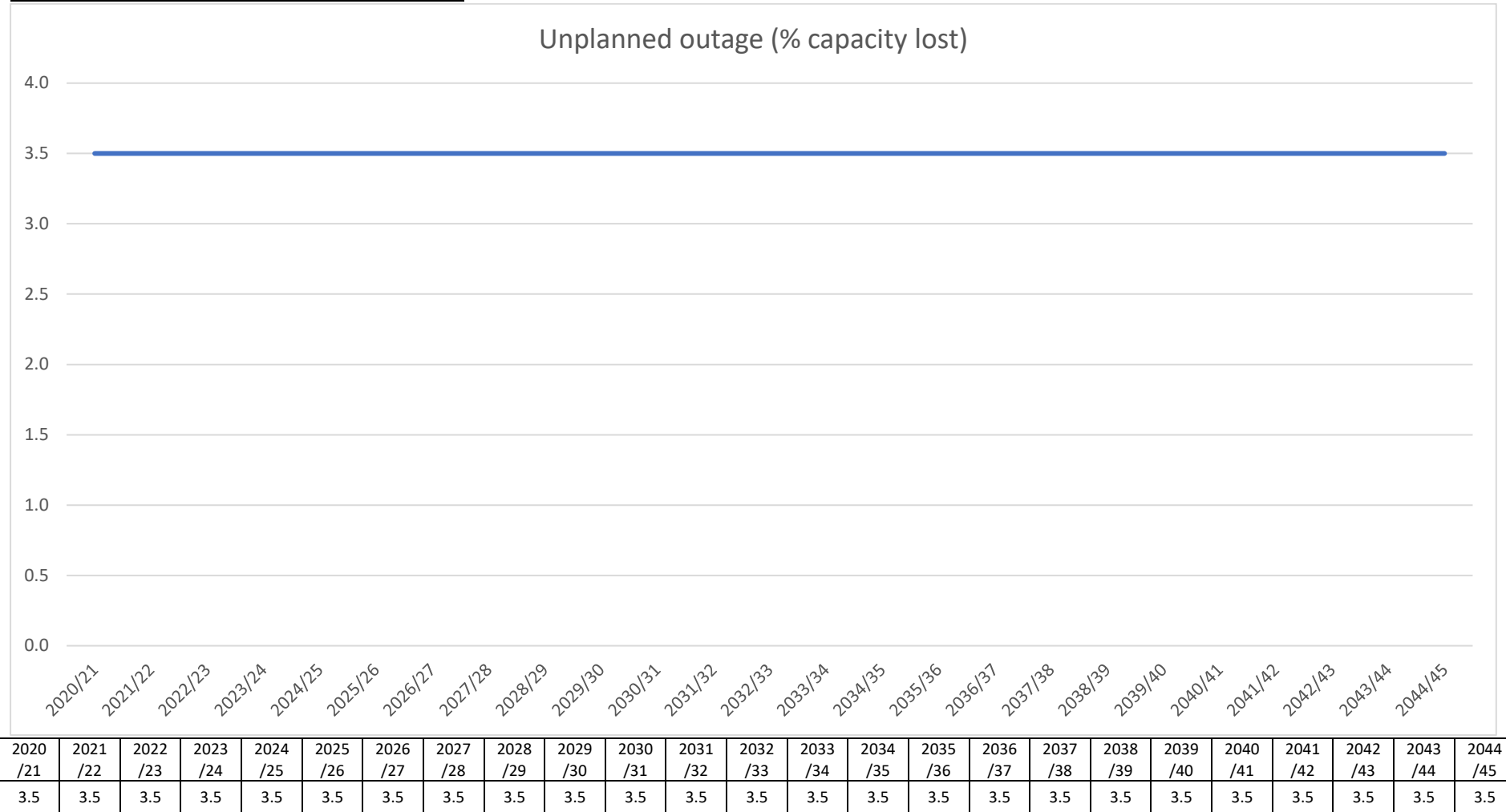


2.1.5 Unplanned Outage

| | |
|--|--|
| Definition | <ul style="list-style-type: none"> • This is a common PC as defined by Ofwat. • This measure is to be used as a means of assessing asset health (primarily for non-infrastructure – above ground assets), for water abstraction and water treatment activities. • It is defined as the annualised unavailable flow, based on the peak week production capacity (or PWPC), for each company. This measure is proportionate to both the frequency of asset failure as well as the criticality and scale of the assets that are causing an outage. |
| Unit | <ul style="list-style-type: none"> • Percentage of maximum production capacity lost on temporary basis |
| Target | <ul style="list-style-type: none"> • Target is to maintain 3.5% production capacity lost on a temporary basis, equivalent to 41 MI/d or less. • Our starting position at the beginning of AMP7 at 31 March 2020 is forecast to be 41 MI/d this is broadly consistent with outage calculations used in our existing AMP6 Water Available for Use measure. |
| Evidence that target is stretching | <ul style="list-style-type: none"> • This target is intended to achieve stable serviceability of above ground assets. In this sense, it is not stretching in absolute terms but in relative terms we will need our above ground assets to be available as often as possible as part of strategy to underpin operational changes necessary to mitigate the impact of reductions in abstraction through the WINEP programme. • Cross company comparisons are particularly difficult due to lack of baseline comparability. |
| Evidence of customer support for target (e.g. they are willing to pay for costs of achieving it, incl. outperformance payment ODIs; they can afford to pay for it). | <ul style="list-style-type: none"> • Target largely driven by regulatory requirements. • Most customers are happy for Affinity Water to get on with the job. Customers consider maintaining the health of the assets to be important, as it ensures that they have a regular and reliable supply of water (see Appendix 3). • There is no evidence to suggest that customers expect us to deliver significant improvement in this area (see Appendix 3). |
| Does the PC protect current and future customers? | <ul style="list-style-type: none"> • For the purposes of preserving intergenerational fairness, we have set this PC to ensure that we maintain the current level of asset health; this is because a significant improvement now would be paid for by current customers but future customers would realise more of the benefits. |
| 20-year view (AMP5 through to AMP8) | <ul style="list-style-type: none"> • Not available historically on directly comparable basis – projected to be maintained at AMP7 target level for foreseeable future. |
| ODI type (Financial/non-financial; outperformance payment/underperformance payment/both) | <ul style="list-style-type: none"> • Financial incentives but only underperformance payments that will be applied in-period to revenue. • In-period means that any payments will be applied at the first possible opportunity so that an incentive payment from performance in year 1 will be reflected in bills in year 3. |

| | <ul style="list-style-type: none"> We are proposing an underperformance payment collar at 4.3% (which is the P10 outcome). | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---------|---------|---------|---------|---------|---------|-----------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|
| Do customers support the ODI rates? | <ul style="list-style-type: none"> We have tested the calibrated incentive rates as part of an overall package using P10/90 and P25/75. The projected performance and potential range (represented by P25/75) was specifically tested with customers. We expect the range of bill impacts to be +£0.50 to -£4.00 over the AMP. Our specific engagement with customers showed this range to be acceptable. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P-ranges (performance in “production capacity lost on a temporary basis”) | <table border="1"> <thead> <tr> <th></th> <th>2020/21</th> <th>2021/22</th> <th>2022/23</th> <th>2023/24</th> <th>2024/25</th> </tr> </thead> <tbody> <tr> <td>PC</td> <td>3.5</td> <td>3.5</td> <td>3.5</td> <td>3.5</td> <td>3.5</td> </tr> <tr> <td>P10</td> <td>4.3</td> <td>4.3</td> <td>4.3</td> <td>4.3</td> <td>4.3</td> </tr> <tr> <td>P25</td> <td>3.9</td> <td>3.9</td> <td>3.9</td> <td>3.9</td> <td>3.9</td> </tr> <tr> <td>P75</td> <td>3.4</td> <td>3.4</td> <td>3.4</td> <td>3.4</td> <td>3.4</td> </tr> <tr> <td>P90</td> <td>3.2</td> <td>3.2</td> <td>3.2</td> <td>3.2</td> <td>3.2</td> </tr> </tbody> </table> | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | PC | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | P10 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | P25 | 3.9 | 3.9 | 3.9 | 3.9 | 3.9 | P75 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | P90 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PC | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P10 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P25 | 3.9 | 3.9 | 3.9 | 3.9 | 3.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P75 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P90 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Delivery mechanism | <ul style="list-style-type: none"> Deliver capital improvement projects that: <ul style="list-style-type: none"> Maintain reliable operation of treatment and water source based facilities. Prevent failure of water source and treatment infrastructure and equipment. Improve process efficiency of water source and treatment facilities. Maintain asset reliability, resilience and efficiency. Operate storage assets to balance demand across areas of supply while ensuring compliance with water quality regulations and minimise contamination risks. Construct new storage assets to provide resilience to supply and allow for inspection & maintenance in compliance with reservoirs Act 1975 as well as undertake maintenance to preserve serviceability of our storage asset and minimise whole life costs. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dependencies | <ul style="list-style-type: none"> Weather, technology, planned maintenance programmes, asset criticality assessment and operational uncertainty. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

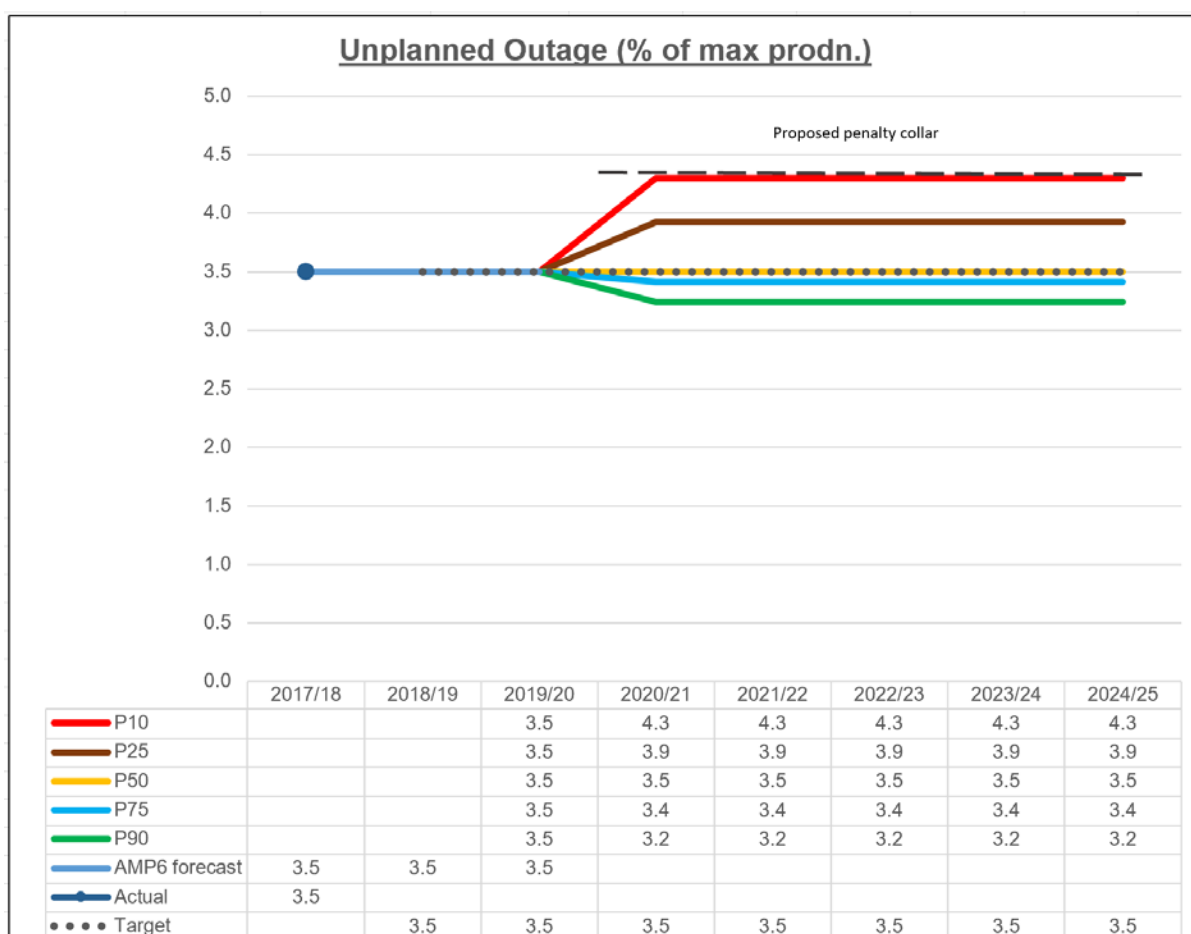
25-year forecast – Unplanned Outage



Final ODI Design – Unplanned Outage

| Unplanned outage | % of production capacity | | | | | | | | | | | | | | | | | | | | |
|----------------------------|---|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| | AMP5 | | | | | AMP6 | | | | AMP7 | | | | | AMP8 | | | | | | |
| | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | |
| Actual | | | | | | | | 3.5 | | | | | | | | | | | | | |
| Target | | | | | | | | | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | |
| AMP6 PC Forecast | | | | | | | | 3.5 | 3.5 | 3.5 | | | | | | | | | | | |
| AMP7 PC P10 forecast | | | | | | | | | | 3.5 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | | | | | | |
| AMP7 PC P25 forecast | | | | | | | | | | 3.5 | 3.9 | 3.9 | 3.9 | 3.9 | 3.9 | | | | | | |
| AMP7 PC P50 forecast | | | | | | | | | | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | | | | | | |
| AMP7 PC P75 forecast | | | | | | | | | | 3.5 | 3.4 | 3.4 | 3.4 | 3.4 | 3.4 | | | | | | |
| AMP7 PC P90 forecast | | | | | | | | | | 3.5 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | | | | | | |
| Incentive rates | | | | | | | | | | | Under/Outperformance | | | | | | | | | | |
| Underperformance payment | £ | 1,739,048 | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | |
| Outperformance payment | £ | - | | | | | | | | | AMP7 PC P10 forecast | -0.8 | -0.8 | -0.8 | -0.8 | -0.8 | | | | | |
| | | | | | | | | | | | AMP7 PC P25 forecast | -0.4 | -0.4 | -0.4 | -0.4 | -0.4 | | | | | |
| | | | | | | | | | | | AMP7 PC P50 forecast | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | |
| ODI detailed design | Financial | | | | | | | | | | AMP7 PC P75 forecast | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | | | | |
| | | | | | | | | | | | AMP7 PC P90 forecast | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | | | | | |
| | ODI type: £ (-) unit based | | | | | | | | | | | | | | | | | | | | |
| | ODI form: Revenue | | | | | | | | | | Uncalibrated incentives due £m | | | | | | | | | | |
| | ODI timing: In period | | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | AMP7 | |
| | ODI Cap/Collar: Collar applied at P90 level | | | | | | | | | | AMP7 PC P10 forecast | -£ 1.39 | -£ 1.39 | -£ 1.39 | -£ 1.39 | -£ 1.39 | | | | -£ 6.96 | |
| | ODI Dead band: None | | | | | | | | | | AMP7 PC P25 forecast | -£ 0.74 | -£ 0.74 | -£ 0.74 | -£ 0.74 | -£ 0.74 | | | | -£ 3.71 | |
| | Other: Benefits set equal to costs | | | | | | | | | | AMP7 PC P50 forecast | £ - | £ - | £ - | £ - | £ - | | | | £ - | |
| | | | | | | | | | | | AMP7 PC P75 forecast | £ - | £ - | £ - | £ - | £ - | | | | £ - | |
| | | | | | | | | | | | AMP7 PC P90 forecast | £ - | £ - | £ - | £ - | £ - | | | | £ - | |

| Caps, Collars and Dead bands | | | | | | | | | | |
|-------------------------------------|---------|---------|---------|---------|---------|--------------------------|------------------|--|--|--|
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | |
| Penalty collar @ 4.3% | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | | | | | |
| | -0.80 | -0.80 | -0.80 | -0.80 | -0.80 | | | | | |
| AMP7 PC P10 forecast | -0.8 | -0.8 | -0.8 | -0.8 | -0.8 | when collar takes effect | | | | |
| AMP7 PC P25 forecast | -0.4 | -0.4 | -0.4 | -0.4 | -0.4 | | | | | |
| AMP7 PC P50 forecast | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | |
| AMP7 PC P75 forecast | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | | | | | |
| AMP7 PC P90 forecast | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | | | | | |
| Calibrated incentives due £m | | | | | | | | | | |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | AMP7 | Effect of collar | | | |
| AMP7 PC P10 forecast | -£ 1.39 | -£ 1.39 | -£ 1.39 | -£ 1.39 | -£ 1.39 | -£ 6.96 | £ - | | | |
| AMP7 PC P25 forecast | -£ 0.74 | -£ 0.74 | -£ 0.74 | -£ 0.74 | -£ 0.74 | -£ 3.71 | £ - | | | |
| AMP7 PC P50 forecast | £ - | £ - | £ - | £ - | £ - | £ - | £ - | | | |
| AMP7 PC P75 forecast | £ - | £ - | £ - | £ - | £ - | £ - | £ - | | | |
| AMP7 PC P90 forecast | £ - | £ - | £ - | £ - | £ - | £ - | £ - | | | |

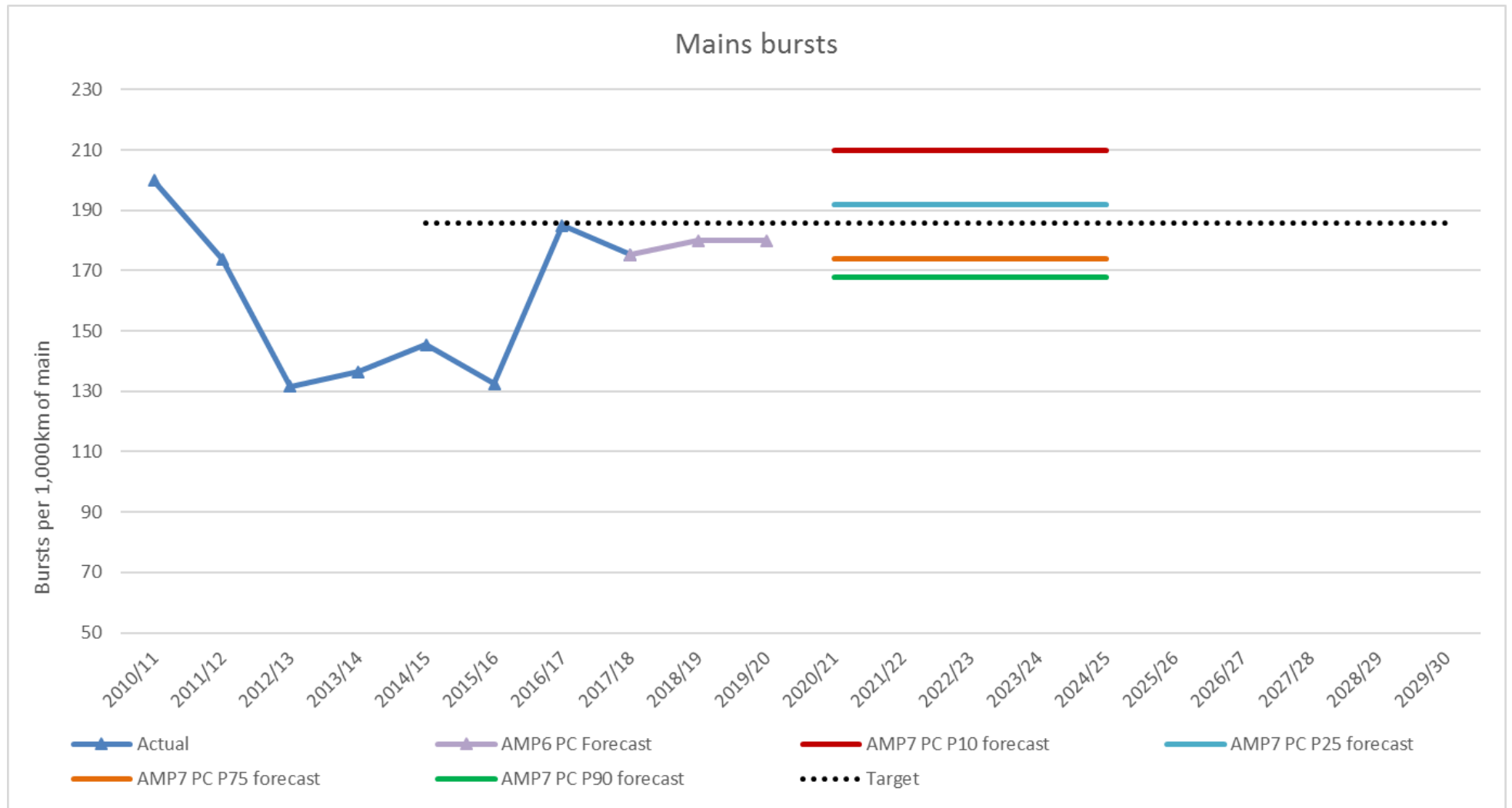


2.1.6 Mains Bursts

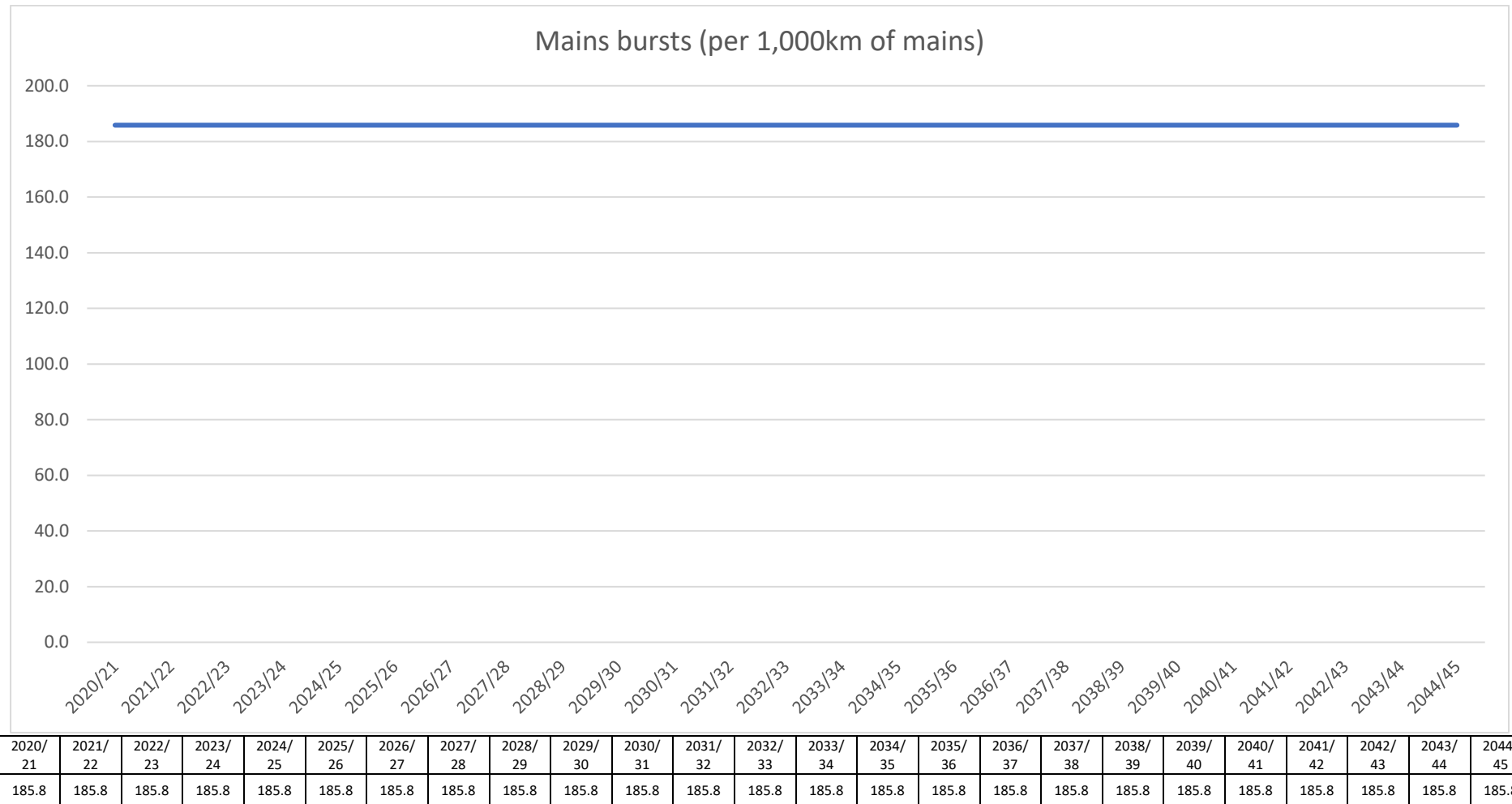
| | |
|--|--|
| Definition | <ul style="list-style-type: none"> • This is a common PC as defined by Ofwat. • Number of mains bursts per thousand kilometres of total length of mains. • Mains bursts include all physical repair work to mains from which water is lost. This is attributable to pipes, joints or joint material failures or movement, caused or deemed to be caused by conditions of original pipe laying or subsequent changes in ground conditions (such as changes to a road formation, loading, etc. where the costs of repair cannot be recovered from a third party). |
| Unit | <ul style="list-style-type: none"> • Mains repairs (or bursts) per 1,000km of mains |
| Target | <ul style="list-style-type: none"> • Target is to maintain performance at 186 bursts per 1,000km of mains • Our starting position at the beginning of AMP7 at 31 March 2020 is forecast to be 186 bursts per 1,000km which we will seek to maintain across AMP7. • Mains bursts is a key infrastructure asset health measure for Ofwat. |
| Evidence that target is stretching | <ul style="list-style-type: none"> • This target is intended to maintain stable serviceability of below ground assets. In this sense, it is not stretching in absolute terms but in relative terms we will need maintain our assets and the rates of burst to ensure that our operational response can seek to minimise supply interruption. • Eight companies have an explicit PC for numbers of mains bursts in AMP6 and all eight companies are maintaining existing PC levels across the AMP. |
| Evidence of customer support for target (e.g. they are willing to pay for costs of achieving it, incl. outperformance payment ODIs; they can afford to pay for it). | <ul style="list-style-type: none"> • Target largely driven by regulatory requirements. • Most customers are happy for Affinity Water to get on with the job. Customers consider maintaining the health of the assets to be important, as it ensures that they have a regular and reliable supply of water (see Appendix 3). • There is no evidence to suggest that customers expect us to delivery significant improvement in this area (see Appendix 3). |
| Does the PC protect current and future customers? | <ul style="list-style-type: none"> • For the purposes of preserving intergenerational fairness, we have set this PC to ensure that we maintain the current level of performance; this is because a significant improvement now would be paid for by current customers but future customers would realise more of the benefits. |
| 20-year view (AMP5 through to AMP8) | <ul style="list-style-type: none"> • See attached |
| ODI type (Financial/non-financial; outperformance payment/underperformance payment/both) | <ul style="list-style-type: none"> • Financial incentives but only underperformance payments that will be applied in-period to revenue. • In-period means that any payments will be applied at the first possible opportunity so that an incentive payment from performance in year 1 will be reflected in bills in year 3. |

| | <ul style="list-style-type: none"> We are applying an underperformance payment collar of 200 mains bursts per annum (which is outside the P10 range). | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---------|---------|---------|---------|---------|---------|-----------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|
| Do customers support the ODI rates? | <ul style="list-style-type: none"> We have tested the calibrated incentive rates as part of an overall package using P10/90 and P25/75. The projected performance and potential range (represented by P25/75) was specifically tested with customers. We expect the range of bill impacts to be +£0.50 to -£4.00 over the AMP. Our specific engagement with customers showed this range to be acceptable. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P-ranges (performance in “bursts per 1,000km of mains”) | <table border="1"> <thead> <tr> <th></th> <th>2020/21</th> <th>2021/22</th> <th>2022/23</th> <th>2023/24</th> <th>2024/25</th> </tr> </thead> <tbody> <tr> <td>PC</td> <td>186</td> <td>186</td> <td>186</td> <td>186</td> <td>186</td> </tr> <tr> <td>P10</td> <td>198</td> <td>198</td> <td>198</td> <td>198</td> <td>198</td> </tr> <tr> <td>P25</td> <td>192</td> <td>192</td> <td>192</td> <td>192</td> <td>192</td> </tr> <tr> <td>P75</td> <td>174</td> <td>174</td> <td>174</td> <td>174</td> <td>174</td> </tr> <tr> <td>P90</td> <td>168</td> <td>168</td> <td>168</td> <td>168</td> <td>168</td> </tr> </tbody> </table> | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | PC | 186 | 186 | 186 | 186 | 186 | P10 | 198 | 198 | 198 | 198 | 198 | P25 | 192 | 192 | 192 | 192 | 192 | P75 | 174 | 174 | 174 | 174 | 174 | P90 | 168 | 168 | 168 | 168 | 168 |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PC | 186 | 186 | 186 | 186 | 186 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P10 | 198 | 198 | 198 | 198 | 198 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P25 | 192 | 192 | 192 | 192 | 192 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P75 | 174 | 174 | 174 | 174 | 174 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P90 | 168 | 168 | 168 | 168 | 168 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Delivery mechanism | <ul style="list-style-type: none"> Deliver capital maintenance and improvement programmes that include: <ul style="list-style-type: none"> Trunk mains replacement Monitoring – including situational awareness Condition assessment Cathodic protection Distribution mains replacement Hot spot and calmer network programmes Maintain asset reliability, resilience and efficiency. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dependencies | <ul style="list-style-type: none"> Weather, planned maintenance programmes, asset criticality assessment supply chain. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Figure A4: Mains Bursts 20 Year View – AMP5 to AMP8



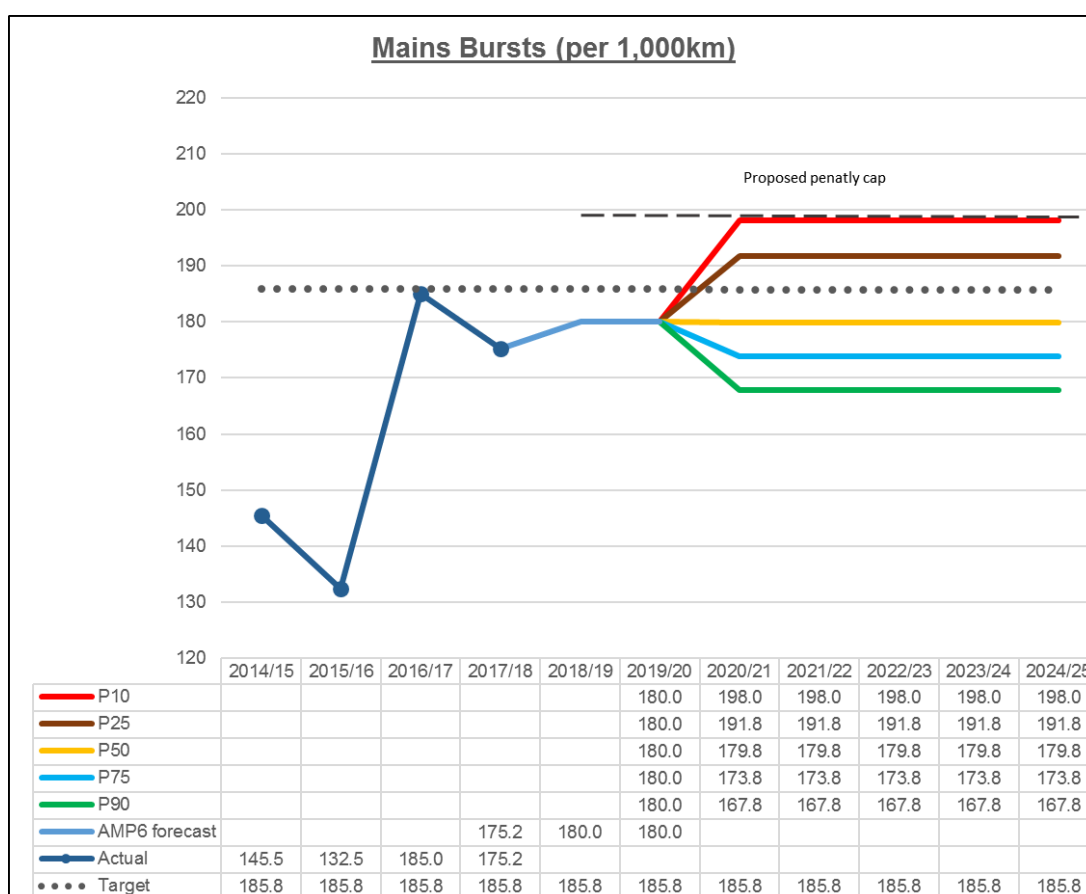
25-year forecast – Mains bursts



Final ODI Design – Mains bursts

| Mains bursts | No. per 1,000km | | | | | | | | | | | | | | | | | | | |
|----------------------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | AMP5 | | | | | AMP6 | | | | | AMP7 | | | | | AMP8 | | | | |
| | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 |
| Actual | 199.8 | 173.8 | 131.6 | 136.5 | 145.5 | 132.5 | 185.0 | 175.2 | | | | | | | | | | | | |
| Target | | | | | 185.8 | 185.8 | 185.8 | 185.8 | 185.8 | 185.8 | 185.8 | 185.8 | 185.8 | 185.8 | 185.8 | 185.8 | 185.8 | 185.8 | 185.8 | 185.8 |
| AMP6 PC Forecast | | | | | | | | 175.2 | 180.0 | 180.0 | | | | | | | | | | |
| AMP7 PC P10 forecast | | | | | | | | | | 180.0 | 198.0 | 198.0 | 198.0 | 198.0 | 198.0 | | | | | |
| AMP7 PC P25 forecast | | | | | | | | | | 180.0 | 191.8 | 191.8 | 191.8 | 191.8 | 191.8 | | | | | |
| AMP7 PC P50 forecast | | | | | | | | | | 180.0 | 179.8 | 179.8 | 179.8 | 179.8 | 179.8 | | | | | |
| AMP7 PC P75 forecast | | | | | | | | | | 180.0 | 173.8 | 173.8 | 173.8 | 173.8 | 173.8 | | | | | |
| AMP7 PC P90 forecast | | | | | | | | | | 180.0 | 167.8 | 167.8 | 167.8 | 167.8 | 167.8 | | | | | |
| Incentive rates | | | | | | | | | | | Under/Outperformance | | | | | | | | | |
| | | | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | |
| Underperformance payment | £ | 89,709 | | | | | | | | | AMP7 PC P10 forecast | -12.2 | -12.2 | -12.2 | -12.2 | -12.2 | | | | |
| Outperformance payment | £ | - | | | | | | | | | AMP7 PC P25 forecast | -6.0 | -6.0 | -6.0 | -6.0 | -6.0 | | | | |
| | | | | | | | | | | | AMP7 PC P50 forecast | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | | | | |
| ODI detailed design | Financial | | | | | | | | | | AMP7 PC P75 forecast | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | | | | |
| | | | | | | | | | | | AMP7 PC P90 forecast | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | | | | |
| ODI type: | £ (-) unit based | | | | | | | | | | | | | | | | | | | |
| ODI form: | Revenue | | | | | | | | | | | | | | | | | | | |
| ODI timing: | In period | | | | | | | | | | | | | | | | | | | |
| ODI Cap/Collar: | Cap | | | | | | | | | | | | | | | | | | | |
| ODI Dead band: | None | | | | | | | | | | | | | | | | | | | |
| Other: | Benefits set equal to costs | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | Uncalibrated incentives due £m | | | | | | | | | |
| | | | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | AMP7 |
| | | | | | | | | | | | AMP7 PC P10 forecast | -£ 1.09 | -£ 1.09 | -£ 1.09 | -£ 1.09 | -£ 1.09 | | | | -£ 5.47 |
| | | | | | | | | | | | AMP7 PC P25 forecast | -£ 0.54 | -£ 0.54 | -£ 0.54 | -£ 0.54 | -£ 0.54 | | | | -£ 2.69 |
| | | | | | | | | | | | AMP7 PC P50 forecast | £ - | £ - | £ - | £ - | £ - | | | | £ - |
| | | | | | | | | | | | AMP7 PC P75 forecast | £ - | £ - | £ - | £ - | £ - | | | | £ - |
| | | | | | | | | | | | AMP7 PC P90 forecast | £ - | £ - | £ - | £ - | £ - | | | | £ - |

| Caps, Collars and Dead bands | | | | | | | | | | |
|------------------------------|---------|---------|---------|---------|---------|---------|--|--|--|-----------------------|
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | |
| | 198.00 | 198.00 | 198.00 | 198.00 | 198.00 | | | | | |
| | -12.2 | -12.2 | -12.2 | -12.2 | -12.2 | | | | | |
| | | | | | | | | | | |
| AMP7 PC P10 forecast | -12.2 | -12.2 | -12.2 | -12.2 | -12.2 | | | | | |
| AMP7 PC P25 forecast | -6.0 | -6.0 | -6.0 | -6.0 | -6.0 | | | | | |
| AMP7 PC P50 forecast | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | | | | | |
| AMP7 PC P75 forecast | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | | | | | |
| AMP7 PC P90 forecast | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Calibrated incentives due £m | | | | | | | | | | |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | AMP7 | | | | |
| AMP7 PC P10 forecast | -£ 1.09 | -£ 1.09 | -£ 1.09 | -£ 1.09 | -£ 1.09 | -£ 5.47 | | | | Effect of cap and dea |
| AMP7 PC P25 forecast | -£ 0.54 | -£ 0.54 | -£ 0.54 | -£ 0.54 | -£ 0.54 | -£ 2.69 | | | | £ - |
| AMP7 PC P50 forecast | £ - | £ - | £ - | £ - | £ - | £ - | | | | £ - |
| AMP7 PC P75 forecast | £ - | £ - | £ - | £ - | £ - | £ - | | | | £ - |
| AMP7 PC P90 forecast | £ - | £ - | £ - | £ - | £ - | £ - | | | | £ - |



2.1.7 Water Quality Compliance, Compliance Risk Index (CRI)

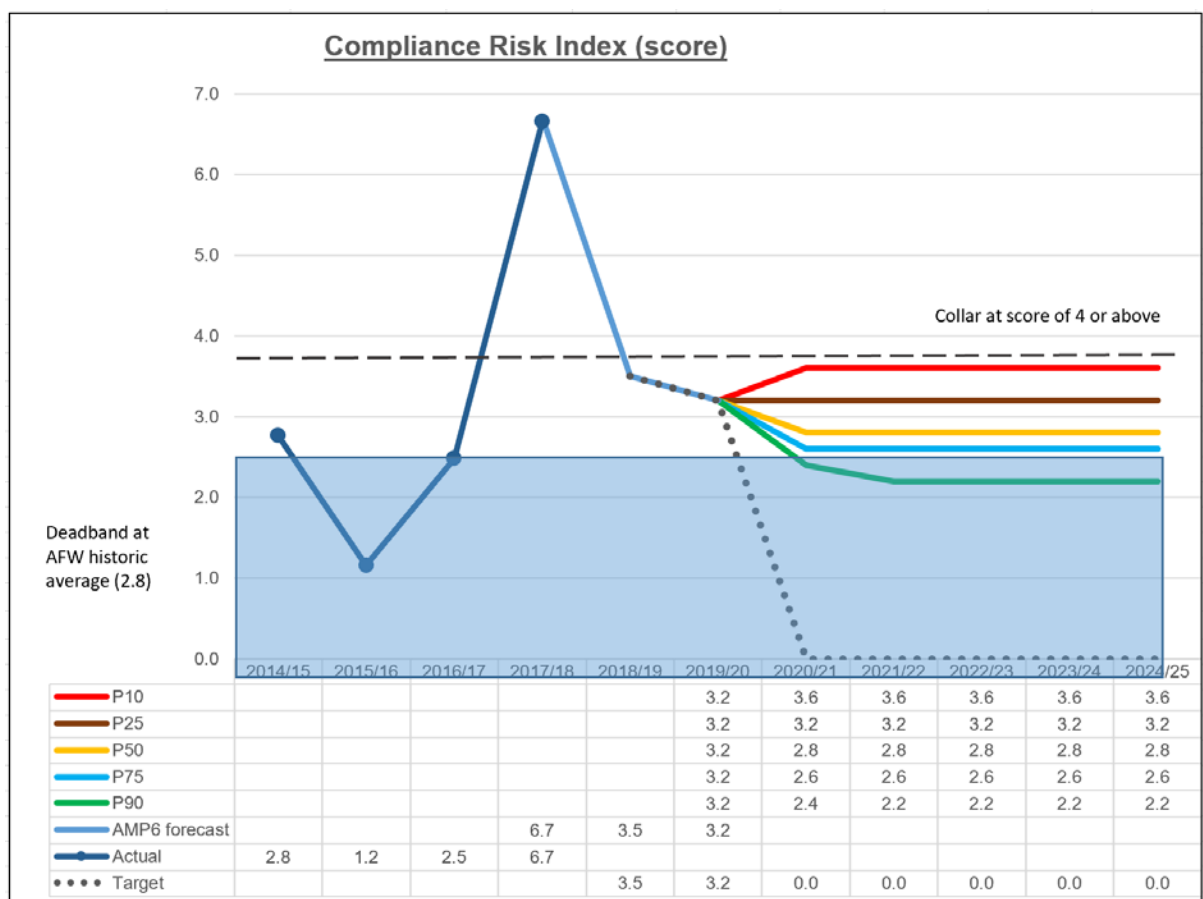
| | |
|--|--|
| Definition | <ul style="list-style-type: none"> This is a common PC as defined by Ofwat and the Drinking Water Inspectorate (DWI). The Compliance Risk Index (CRI) is a measure designed to illustrate the risk arising from treated water compliance failures, and it aligns with the current risk based approach to regulation of water supplies used by the Drinking Water Inspectorate (DWI). |
| Unit | <ul style="list-style-type: none"> Score under the DWI's Compliance Risk Index, (risk based monitoring methodology to assess company compliance with water quality standards). |
| Target | <ul style="list-style-type: none"> Target is a score of zero. Our starting position at the beginning of AMP7 at 31 March 2020 is forecast to be less than 2.8 based compared to an industry average in 2017 Of 3.5. |
| Evidence that target is stretching | <ul style="list-style-type: none"> We are proposing a target of 0 with a deadband up to 2.8. We have included a deadband as there is still some uncertainty as to how this measure will be calculated, and whether the methodology may be adjusted in AMP7. 2.8 is a lower score than our shadow reporting of this measure for the last two years (3.5), because we will be completing two pesticide removal projects during the current AMP period which should improve our score. Our water quality compliance is already very high and we will continue to target a score of zero. CRI is a new measure, so there is limited historical and comparative information available. |
| Evidence of customer support for target (e.g. they are willing to pay for costs of achieving it, incl. outperformance payment ODIs; they can afford to pay for it). | <ul style="list-style-type: none"> 79% of customers consider guaranteeing a supply of high quality water they can trust as extremely important for Affinity Waters' future (see Appendix 3). Customers are positive about the quality of the water they receive, 80% trust the quality of the water they receive and prioritised receiving a high quality of water (see Appendix 3). Clean/safe water was mentioned by most future customers when asked about what the most important thing about their water supply was, the majority also recognised that clean/safe water is a crucial resource (see Appendix 3). Of the positive drivers influencing value for money, water quality has risen significantly (see Appendix 3). |
| Does the PC protect current and future customers? | <ul style="list-style-type: none"> This is a new measure for assessing water quality, and we are working to maintain a target that will ensure that both current and future customers can continue to trust the quality of their water supply. |
| 20-year view (AMP5 through to AMP8) | <ul style="list-style-type: none"> Not available – new measure. We cannot forecast a score for this measure beyond AMP7 as we will always target zero. |
| ODI type (Financial/non- | <ul style="list-style-type: none"> Financial incentives but only underperformance |

| financial; outperformance payment/underperformance payment/both) | <p>payments that will be applied in-period to revenue.</p> <ul style="list-style-type: none"> • In-period means that any payments will be applied at the first possible opportunity so that an incentive payment from performance in year 1 will be reflected in bills in year 3. • We are proposing a dead band at 2.8. • We are proposing a collar at 4. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---------|---------|---------|---------|---------|---------|-----------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|
| Do customers support the ODI rates? | <ul style="list-style-type: none"> • We have tested the calibrated incentive rates as part of an overall package using P10/90 and P25/75. The projected performance and potential range (represented by P25/75) was specifically tested with customers. We expect the range of bill impacts to be +£0.50 to -£4.00 over the AMP. • Our specific engagement with customers showed this range to be acceptable. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P-ranges (performance in “CRI score”) | <table border="1"> <thead> <tr> <th></th> <th>2020/21</th> <th>2021/22</th> <th>2022/23</th> <th>2023/24</th> <th>2024/25</th> </tr> </thead> <tbody> <tr> <td>PC</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> </tr> <tr> <td>P10</td> <td>3.6</td> <td>3.6</td> <td>3.6</td> <td>3.6</td> <td>3.6</td> </tr> <tr> <td>P25</td> <td>3.2</td> <td>3.2</td> <td>3.2</td> <td>3.2</td> <td>3.2</td> </tr> <tr> <td>P75</td> <td>2.6</td> <td>2.6</td> <td>2.6</td> <td>2.6</td> <td>2.6</td> </tr> <tr> <td>P90</td> <td>2.4</td> <td>2.2</td> <td>2.2</td> <td>2.2</td> <td>2.2</td> </tr> </tbody> </table> | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | PC | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | P10 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | P25 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | P75 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | P90 | 2.4 | 2.2 | 2.2 | 2.2 | 2.2 |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PC | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P10 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P25 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P75 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P90 | 2.4 | 2.2 | 2.2 | 2.2 | 2.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Delivery mechanism | <ul style="list-style-type: none"> • Deliver capital improvement projects that: <ul style="list-style-type: none"> ○ Maintain reliable operation of treatment and water source based facilities. ○ Prevent failure of water source and treatment infrastructure and equipment. ○ Improve process efficiency of water source and treatment facilities. • Maintain asset reliability, resilience and efficiency. • Operate storage assets to balance demand across areas of supply while ensuring compliance with water quality regulations and minimise contamination risks. • Construct new storage assets to provide resilience to supply and allow for inspection & maintenance in compliance with reservoirs Act 1975 as well as undertake maintenance to preserve serviceability of our storage asset and minimise whole life costs. • Provide high quality drinking water by enhancing our treatment and monitoring capability for Metaldehyde and pesticides to meet our obligations under DWI regulations. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dependencies | <ul style="list-style-type: none"> • Weather, planned maintenance programmes, asset criticality and inspection and sampling regimes. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Final ODI Design – CRI

| CRI | Index score per year | | | | | | | | | | | | | | | | | | | | |
|----------------------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------------------------------------|---------|---------|----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| | AMP5 | | | | | AMP6 | | | | | AMP7 | | | | | AMP8 | | | | | |
| | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | |
| Actual | | | | | 2.8 | 1.2 | 2.5 | 6.7 | | | | | | | | | | | | | |
| Target | | | | | | | | | 3.5 | 3.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| AMP6 PC Forecast | | | | | | | | 6.7 | 3.5 | 3.2 | | | | | | | | | | | |
| AMP7 PC P10 forecast | | | | | | | | | | 3.2 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | | | | | | |
| AMP7 PC P25 forecast | | | | | | | | | | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 | | | | | | |
| AMP7 PC P50 forecast | | | | | | | | | | 3.2 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | | | | | | |
| AMP7 PC P75 forecast | | | | | | | | | | 3.2 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | | | | | | |
| AMP7 PC P90 forecast | | | | | | | | | | 3.2 | 2.4 | 2.2 | 2.2 | 2.2 | 2.2 | | | | | | |
| Incentive rates | | | | | | | | Under/Outperformance | | | | | | | | | | | | | |
| | | | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | |
| Underperformance payment | £ | 483,074 | | | | | | | | | AMP7 PC P10 forecast | -3.6 | -3.6 | -3.6 | -3.6 | -3.6 | | | | | |
| Outperformance payment | £ | - | | | | | | | | | AMP7 PC P25 forecast | -3.2 | -3.2 | -3.2 | -3.2 | -3.2 | | | | | |
| | | | | | | | | | | | AMP7 PC P50 forecast | -2.8 | -2.8 | -2.8 | -2.8 | -2.8 | | | | | |
| ODI detailed design | Financial | | | | | | | | | | AMP7 PC P75 forecast | -2.6 | -2.6 | -2.6 | -2.6 | -2.6 | | | | | |
| | | | | | | | | | | | AMP7 PC P90 forecast | -2.4 | -2.2 | -2.2 | -2.2 | -2.2 | | | | | |
| ODI type: | £ (-) unit based | | | | | | | | | | | | | | | | | | | | |
| ODI form: | Revenue | | | | | | | | | | | | | | | | | | | | |
| ODI timing: | In period | | | | | | | | | | | | | | | | | | | | |
| ODI Cap/Collar: | Yes | | | | | | | | | | | | | | | | | | | | |
| ODI Dead band: | Yes | | | | | | | | | | | | | | | | | | | | |
| Other: | Benefits set equal to costs | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | Uncalibrated incentives due £m | | | | | | | | | | | | | |
| | | | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | |
| | | | | | | | | | | | AMP7 PC P10 forecast | -£ 1.74 | -£ 1.74 | -£ 1.74 | -£ 1.74 | -£ 1.74 | -£ 8.70 | | | | |
| | | | | | | | | | | | AMP7 PC P25 forecast | -£ 1.55 | -£ 1.55 | -£ 1.55 | -£ 1.55 | -£ 1.55 | -£ 7.73 | | | | |
| | | | | | | | | | | | AMP7 PC P50 forecast | -£ 1.35 | -£ 1.35 | -£ 1.35 | -£ 1.35 | -£ 1.35 | -£ 6.76 | | | | |
| | | | | | | | | | | | AMP7 PC P75 forecast | -£ 1.26 | -£ 1.26 | -£ 1.26 | -£ 1.26 | -£ 1.26 | -£ 6.28 | | | | |
| Notes: | | | | | | | | | | | AMP7 PC P90 forecast | -£ 1.16 | -£ 1.06 | -£ 1.06 | -£ 1.06 | -£ 1.06 | -£ 5.41 | | | | |

| Caps, Collars and Dead bands | | | | | | | |
|------------------------------|---------|---------|---------|---------|---------|--------------------------|--------------------------------|
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | |
| Dead Band below 2.8 | -2.8 | -2.8 | -2.8 | -2.8 | -2.8 | | |
| Collar @ anything above 4 | -4.0 | -4.0 | -4.0 | -4.0 | -4.0 | | |
| AMP7 PC P10 forecast | -0.8 | -0.8 | -0.8 | -0.8 | -0.8 | when collar takes effect | |
| AMP7 PC P25 forecast | -0.4 | -0.4 | -0.4 | -0.4 | -0.4 | | |
| AMP7 PC P50 forecast | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| AMP7 PC P75 forecast | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| AMP7 PC P90 forecast | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Calibrated incentives due £m | | | | | | | |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | AMP7 | Effect of collar and dead band |
| AMP7 PC P10 forecast | -£ 0.39 | -£ 0.39 | -£ 0.39 | -£ 0.39 | -£ 0.39 | -£ 1.93 | £ 6.76 |
| AMP7 PC P25 forecast | -£ 0.19 | -£ 0.19 | -£ 0.19 | -£ 0.19 | -£ 0.19 | -£ 0.97 | £ 6.76 |
| AMP7 PC P50 forecast | £ - | £ - | £ - | £ - | £ - | £ - | £ 6.76 |
| AMP7 PC P75 forecast | £ - | £ - | £ - | £ - | £ - | £ - | £ 6.28 |
| AMP7 PC P90 forecast | £ - | £ - | £ - | £ - | £ - | £ - | £ 5.41 |



2.1.8 Customer measure of experience (C-MeX)

| | |
|---|--|
| Definition | <ul style="list-style-type: none"> This is a common PC as defined by Ofwat. |
| Unit | <ul style="list-style-type: none"> Ofwat will finalise the unit of measurement following the completion of ongoing trials. |
| Target | <ul style="list-style-type: none"> The measure will be a continuation of the comparative performance of all companies on an ongoing basis. Our starting position at the beginning of AMP7 at 31 March 2020 is forecast to be improved, in terms of SIM, than our position at the end of 2017/18, but we cannot say directly how this will translate to a C-Mex score. |
| Evidence that target is stretching | <ul style="list-style-type: none"> Targets will be determined by relative performance to other companies (similar to SIM), so there is no need to set targets for this measure. |
| Evidence of customer support for target | <ul style="list-style-type: none"> Ofwat will determine the scale of outperformance and underperformance payments. |
| Does the PC protect current and future customers? | <ul style="list-style-type: none"> PC aims to incentivise all companies to delivery services that are valued by today's customers. |
| 20-year view (AMP5 through to AMP8) | <ul style="list-style-type: none"> Not available – new measure. |
| ODI type (Financial/non-financial; outperformance payment/underperformance payment/both) | <ul style="list-style-type: none"> Financial incentives with both outperformance and underperformance payments that will be applied, we assume, in-period, to revenue depending the outturn performance compared to peers i.e. unit based incentives. In-period means that any payments will be applied at the first possible opportunity so that an incentive payment from performance in year 1 will be reflected in bills in year 3. Ofwat are unlikely to propose a dead band. Ofwat has suggested caps and collars in respect of revenue percentages for this PC both on outperformance and underperformance. |
| Do customers support the ODI rates? | <ul style="list-style-type: none"> Not applicable (Ofwat determined) |
| P-ranges (performance in units) | <ul style="list-style-type: none"> Not applicable – awaiting confirmation of Ofwat methodology. |
| Delivery mechanism | <ul style="list-style-type: none"> Investment in more nimble and innovative technology solutions is an enabling factor for AMP7. Our goal is to embrace emerging technology and be quick to market with new capability that will deliver improved customer service and support greater customer value through efficient cost to serve. Technology is one of the tools that plays a role, our culture and values as an organisation are also vital in ensuring we pass the full benefits of our capabilities back the customer. |
| Dependencies | <ul style="list-style-type: none"> Customer experience improvement programme, retail household price control funding, digital journey and |

| | |
|--|---|
| | effectiveness of community engagement and strategy. |
|--|---|

Final ODI Design – C-MEX

| Incentive rates - average household retail revenue across AMP7 | | | Under/Outperformance | | | | | | | |
|--|------------------|--|---------------------------------------|----------------------|---------|---------|---------|---------|---------|----------|
| | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | |
| Underperformance payment | £ | 147 (assumes £25 per year across AMP7) | Bottom 3 | AMP7 PC P10 forecast | -2.4% | -2.4% | -2.4% | -2.4% | -2.4% | |
| Outperformance payment | £ | - | 12th 15th | AMP7 PC P25 forecast | -1.2% | -1.2% | -1.2% | -1.2% | -1.2% | |
| | | | 8th to 11th | AMP7 PC P50 forecast | 0% | 0% | 0% | 0% | 0% | |
| ODI detailed design | Financial | | 4th to 7th | AMP7 PC P75 forecast | 0.4% | 0.4% | 0.4% | 0.4% | 0.4% | |
| | | | Top3 | AMP7 PC P90 forecast | 1.2% | 1.2% | 1.2% | 1.2% | 1.2% | |
| ODI type: £ + / (-) unit based | | | | | | | | | | |
| ODI form: Revenue | | | Uncalibrated incentives due £m | | | | | | | |
| ODI timing: In period | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | AMP7 |
| ODI Cap/Collar: None - see notes below | | | | AMP7 PC P10 forecast | -£ 3.53 | -£ 3.53 | -£ 3.53 | -£ 3.53 | -£ 3.53 | -£ 17.64 |
| ODI Dead band: None | | | | AMP7 PC P25 forecast | -£ 1.76 | -£ 1.76 | -£ 1.76 | -£ 1.76 | -£ 1.76 | -£ 8.82 |
| Other: n/a | | | | AMP7 PC P50 forecast | £ - | £ - | £ - | £ - | £ - | £ - |
| | | | | AMP7 PC P75 forecast | £ 0.59 | £ 0.59 | £ 0.59 | £ 0.59 | £ 0.59 | £ 2.94 |
| Notes: | | | | AMP7 PC P90 forecast | £ 1.76 | £ 1.76 | £ 1.76 | £ 1.76 | £ 1.76 | £ 8.82 |
| Ofwat will rank companies each year top 3 receive payment upto 1.2% retail revenue | | | | | | | | | | |
| Top 3, if above a cross-sector threshold could earn upto 2.4% of retail revenue | | | | | | | | | | |
| Poorest performers receive penalty upto 2.4% of retail revenue | | | | | | | | | | |

2.1.9 Developer measure of experience (D-MeX)

| | |
|---|--|
| Definition | <ul style="list-style-type: none"> This is a common PC as defined by Ofwat. |
| Unit | <ul style="list-style-type: none"> Ofwat will finalise the unit of measurement following the completion of ongoing trials. |
| Target | <ul style="list-style-type: none"> The measure will be a continuation of the comparative performance of all companies on an ongoing basis. Our starting position at the beginning of AMP7 at 31 March 2020 is forecast to be improved, given the progress we have been making against the industry league tables for developer services. We cannot say directly how this will translate to a D-Mex score. |
| Evidence that target is stretching | <ul style="list-style-type: none"> Targets will be determined by relative performance to other companies (similar to SIM), so there is no need to set targets for this measure. |
| Evidence of customer support for target | <ul style="list-style-type: none"> Ofwat will determine the scale of outperformance and underperformance payments. |
| Does the PC protect current and future customers? | <ul style="list-style-type: none"> PC aims to incentivise all companies to deliver services that are valued by developers today. |
| 20-year view (AMP5 through to AMP8) | <ul style="list-style-type: none"> Not available – new measure. |
| ODI type (Financial/non-financial; outperformance payment/underperformance payment/both) | <ul style="list-style-type: none"> Financial incentives with both outperformance and underperformance payments that will be applied, we assume, in-period, to revenue depending the outturn performance compared to peers i.e. unit based incentives. In-period means that any payments will be applied at the first possible opportunity so that an incentive payment from performance in year 1 will be reflected in bills in year 3. Ofwat are unlikely to propose a dead band. Ofwat has suggested caps and collars in respect of revenue percentages for this PC both on outperformance and underperformance. |
| Do customers support the ODI rates? | <ul style="list-style-type: none"> Not applicable (Ofwat determined) |
| P-ranges (performance in units) | <ul style="list-style-type: none"> Not applicable – awaiting confirmation of Ofwat methodology. |
| Delivery mechanism | <ul style="list-style-type: none"> Develop service offering to provide defined and dedicated vision, accountability and ownership and resources; Accreditation schemes for Design Self-Assessment and Routine In-line mains connections. Lead the water industry into the Developer Self-Serve world. |
| Dependencies | <ul style="list-style-type: none"> External developer market and general economic trends, self-lay developers, digital portal and self-service functions. |

Final ODI Design – D-MEX

| Incentive rates - average household retail revenue across AMP7 | | | Under/Outperformance | | | | | | |
|---|------------------|---------------------------------------|----------------------------------|---------|---------|---------|---------|---------|--|
| | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | |
| Underperformance payment | £ | 16 (assumes £10 per year across AMP7) | Bottom 3 AMP7 PC P10 forecast | -5.0% | -5.0% | -5.0% | -5.0% | -5.0% | |
| Outperformance payment | £ | - | 12th 15th AMP7 PC P25 forecast | -2.5% | -2.5% | -2.5% | -2.5% | -2.5% | |
| | | | 8th to 11th AMP7 PC P50 forecast | 0% | 0% | 0% | 0% | 0% | |
| ODI detailed design | Financial | | 4th to 7th AMP7 PC P75 forecast | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | |
| | | | Top3 AMP7 PC P90 forecast | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | |
| ODI type: £ + / (-) unit based | | | | | | | | | |
| ODI form: Revenue | | | | | | | | | |
| ODI timing: In period | | | | | | | | | |
| ODI Cap/Collar: None - see notes below | | | | | | | | | |
| ODI Dead band: None | | | | | | | | | |
| Other: n/a | | | | | | | | | |
| | | | | | | | | | |
| Notes: | | | | | | | | | |
| Ofwat will rank companies each year top 3 receive payment upto 2.5% of developer services revenue | | | | | | | | | |
| Poorest performers receive penalty upto 5.0% of developer services revenue | | | | | | | | | |

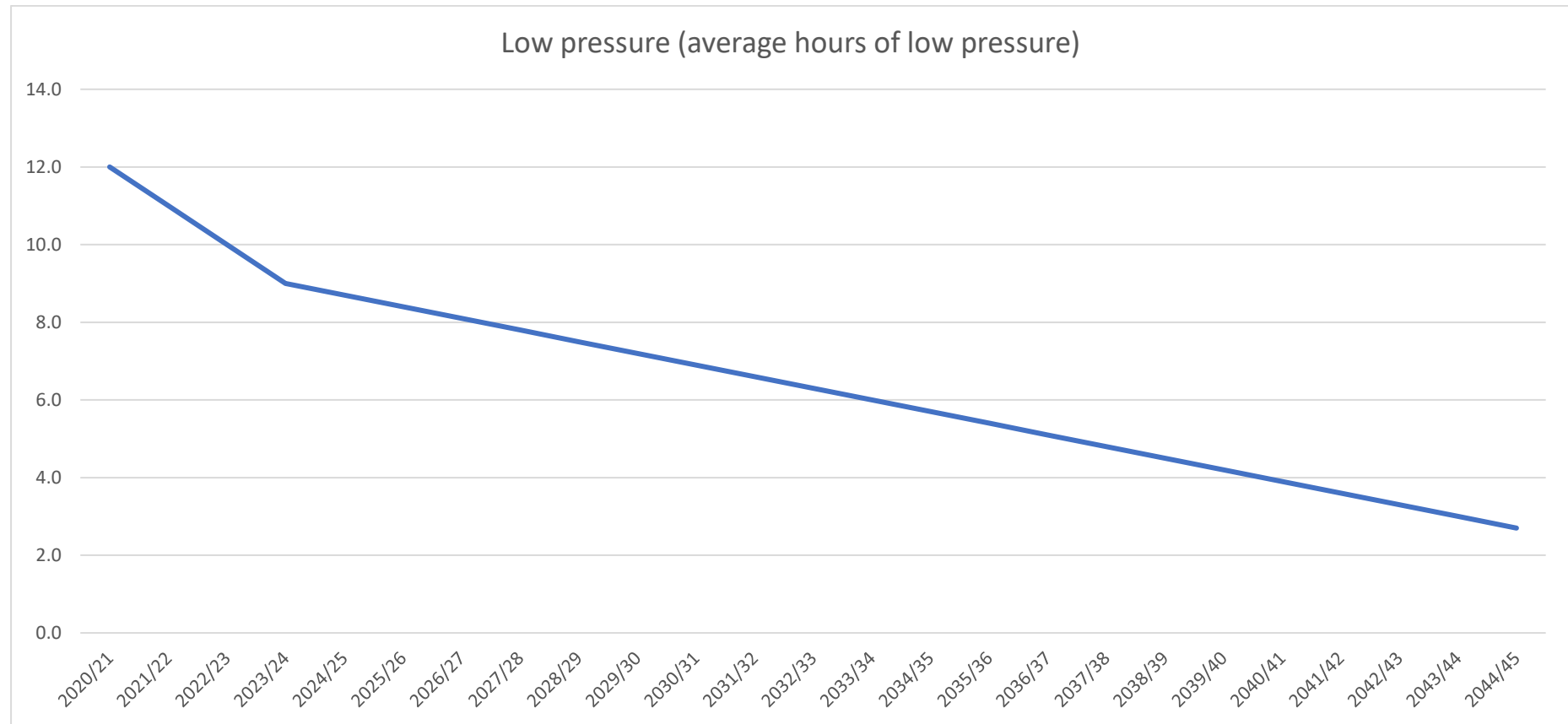
2.2 Bespoke – required by Ofwat but defined by Affinity Water

2.2.1 Properties experiencing longer/repeated instances of low pressure

| | |
|--|--|
| Definition | <ul style="list-style-type: none"> Water pressure for properties that experience longer/repeated instances of low pressure than covered by the DG2 indicator. |
| Unit | <ul style="list-style-type: none"> The measure will be cumulative property hours and minutes below 15 metres normalised by total number of properties. The measure will reset to zero at the start of each year on 1 April. This PC is a measure of our success in providing a minimum pressure to properties. The definition of low pressure is pressure below 15m head. The measure is designed to work in a similar way to Ofwat's measure of supply interruptions, with performance quantified as units of time per customer, measured by our DG2 and Critical Point loggers. Critical point loggers are being installed in every District Meter Area and most unmeasured areas. This will provide high coverage and we will add a further 800 reportable loggers, as a result this will identify additional areas of properties receiving low pressure. |
| Target | <ul style="list-style-type: none"> The target is to reduce average hours of low pressure to 8.7 by the end of AMP7. Our starting position at the beginning of AMP7 at 31 March 2020 is forecast to be around 12 hours using an equivalent measure. |
| Evidence that target is stretching | <ul style="list-style-type: none"> The target is a considerable improvement on current performance. The comparative information that is available on Discover Water does not directly relate to this metric, instead focussing on property numbers. |
| Evidence of customer support for target | <ul style="list-style-type: none"> Poor pressure is one of the most common causes of complaint, from multiple sources of customer contact (see Appendix 3). In-depth customer interviews found that in low pressure areas, customers have little understanding of the causes of low pressure, and whether it is the responsibility of the water company or the customer. It also showed that many become “resigned” to the fact that their pressure is low, though the operational data shows that there were a significant number of complaints about shower pressure (see Appendix 3). Two workshops were held with our CCG resilience and environment sub-group. The objective was to develop bespoke commitments around resilience to have a “better connected” network to improve supply to those at the extremities of the network or with a single source of supply and, in response to customer contact, improve pressure to those “living with” low pressure (see |

| | Appendix 3). | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---------|---------|---------|---------|---------|---------|-----------|------|------|------|-----|-----|------------|------|------|------|------|------|------------|------|------|------|------|------|------------|------|------|------|-----|-----|------------|------|-----|-----|-----|-----|
| Does the PC protect current and future customers? | <ul style="list-style-type: none"> We have ensured that our investment for resolving low pressure at AMP7 delivers for customers currently affected by low pressure and for future customers resident in the areas impacted. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20-year view (AMP5 through to AMP8) | <ul style="list-style-type: none"> Not available – new measure. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ODI type (Financial/non-financial; outperformance payment/underperformance payment/both) | <ul style="list-style-type: none"> Financial incentives with both outperformance and underperformance payments that will be applied in-period to revenue depending the outturn performance compared to target i.e. unit based incentives. In-period means that any payments will be applied at the first possible opportunity so that an incentive payment from performance in year 1 will be reflected in bills in year 3. We are not proposing a dead band but will apply a collar at 4 hours above the target each year to limit total incentive exposure for this PC on underperformance. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Do customers support the ODI rates? | <ul style="list-style-type: none"> We have tested the calibrated incentive rates as part of an overall package using P10/90 and P25/75. The projected performance and potential range (represented by P25/75) was specifically tested with customers. We expect the range of bill impacts to be +£0.50 to -£4.00 over the AMP. Our specific engagement with customers showed this range to be acceptable. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P-ranges (performance in “average hours of low pressure per property”) | <table border="1"> <thead> <tr> <th></th> <th>2020/21</th> <th>2021/22</th> <th>2022/23</th> <th>2023/24</th> <th>2024/25</th> </tr> </thead> <tbody> <tr> <td>PC</td> <td>12.0</td> <td>11.0</td> <td>10.0</td> <td>9.0</td> <td>8.7</td> </tr> <tr> <td>P10</td> <td>14.0</td> <td>14.0</td> <td>13.0</td> <td>12.0</td> <td>11.0</td> </tr> <tr> <td>P25</td> <td>13.0</td> <td>13.0</td> <td>12.0</td> <td>11.0</td> <td>10.0</td> </tr> <tr> <td>P75</td> <td>12.0</td> <td>11.0</td> <td>10.0</td> <td>9.0</td> <td>8.0</td> </tr> <tr> <td>P90</td> <td>10.0</td> <td>9.0</td> <td>8.0</td> <td>7.0</td> <td>6.0</td> </tr> </tbody> </table> | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | PC | 12.0 | 11.0 | 10.0 | 9.0 | 8.7 | P10 | 14.0 | 14.0 | 13.0 | 12.0 | 11.0 | P25 | 13.0 | 13.0 | 12.0 | 11.0 | 10.0 | P75 | 12.0 | 11.0 | 10.0 | 9.0 | 8.0 | P90 | 10.0 | 9.0 | 8.0 | 7.0 | 6.0 |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PC | 12.0 | 11.0 | 10.0 | 9.0 | 8.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P10 | 14.0 | 14.0 | 13.0 | 12.0 | 11.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P25 | 13.0 | 13.0 | 12.0 | 11.0 | 10.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P75 | 12.0 | 11.0 | 10.0 | 9.0 | 8.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P90 | 10.0 | 9.0 | 8.0 | 7.0 | 6.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Delivery mechanism | <ul style="list-style-type: none"> We aim to provide all customers with 15 metres head (1.5 bar) at their property’s boundary. Solutions include rezoning the network and installing new or changing the operation of existing valves. More expensive solutions include installing booster pumps, increasing the diameter or number of existing water mains, or building cross-connections in the pipe network. In AMP6, we have installed around 1,000 additional loggers with the aim to have a pressure point at the highest point in every DMA and unmeasured area. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dependencies | <ul style="list-style-type: none"> Weather, technology, planned maintenance programmes, asset criticality assessment and operational uncertainty | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

25-year forecast – Low Pressure

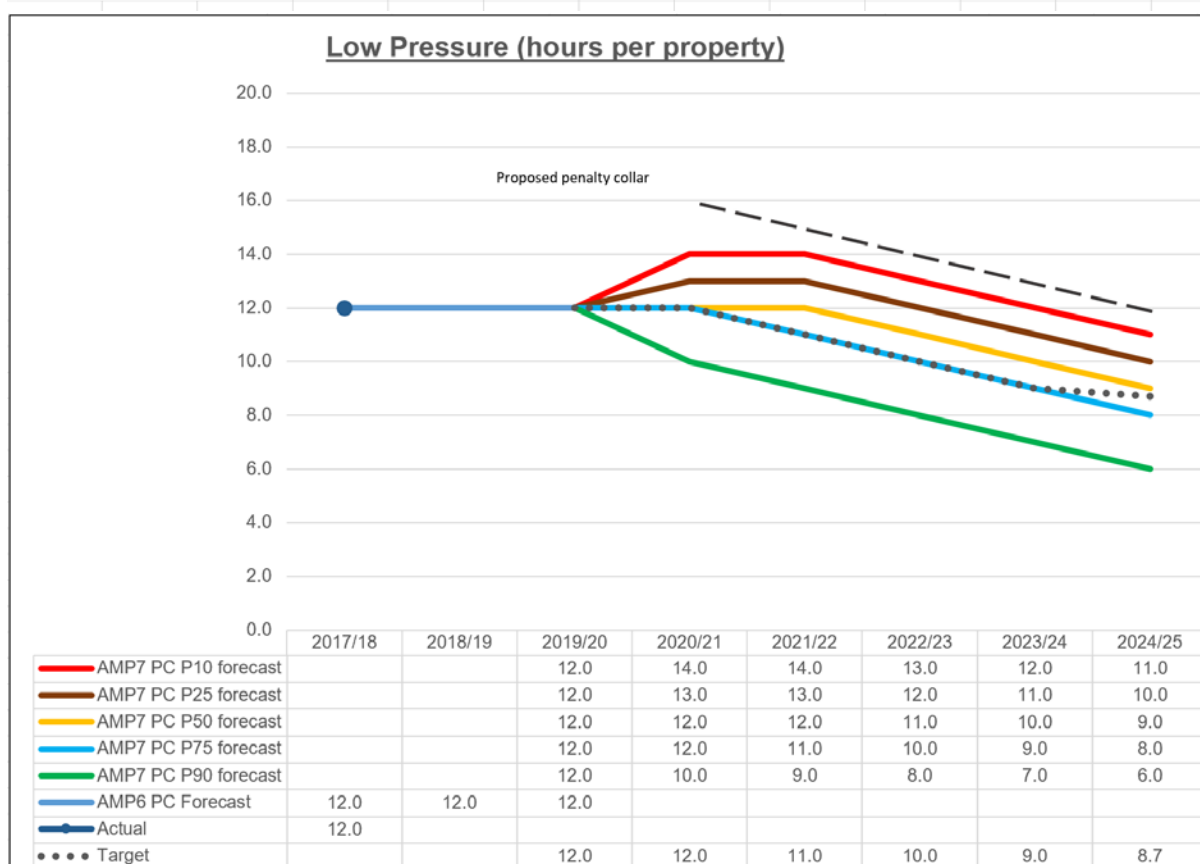


| 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | 2030/31 | 2031/32 | 2032/33 | 2033/34 | 2034/35 | 2035/36 | 2036/37 | 2037/38 | 2038/39 | 2039/40 | 2040/41 | 2041/42 | 2042/43 | 2043/44 | 2044/45 |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 12.0 | 11.0 | 10.0 | 9.0 | 8.7 | 8.4 | 8.1 | 7.8 | 7.5 | 7.2 | 6.9 | 6.6 | 6.3 | 6.0 | 5.7 | 5.4 | 5.1 | 4.8 | 4.5 | 4.2 | 3.9 | 3.6 | 3.3 | 3.0 | 2.7 |

Final ODI Design – Low Pressure

| Low Pressure | Hours per property served | | | | | | | | | | | | | | | | | | | | |
|---|---------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| | AMP5 | | | | | AMP6 | | | | AMP7 | | | | | AMP8 | | | | | | |
| | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | |
| Actual | | | | | | | | 12.0 | | | | | | | | | | | | | |
| Target | | | | | | | | | 12.0 | 12.0 | 11.0 | 10.0 | 9.0 | 8.7 | 7.9 | 7.1 | 6.2 | 5.4 | 4.6 | | |
| AMP6 PC Forecast | | | | | | | | 12.0 | 12.0 | 12.0 | | | | | | | | | | | |
| AMP7 PC P10 forecast | | | | | | | | | | 12.0 | 14.0 | 14.0 | 13.0 | 12.0 | 11.0 | | | | | | |
| AMP7 PC P25 forecast | | | | | | | | | | 12.0 | 13.0 | 13.0 | 12.0 | 11.0 | 10.0 | | | | | | |
| AMP7 PC P50 forecast | | | | | | | | | | 12.0 | 12.0 | 12.0 | 11.0 | 10.0 | 9.0 | | | | | | |
| AMP7 PC P75 forecast | | | | | | | | | | 12.0 | 12.0 | 11.0 | 10.0 | 9.0 | 8.0 | | | | | | |
| AMP7 PC P90 forecast | | | | | | | | | | 12.0 | 10.0 | 9.0 | 8.0 | 7.0 | 6.0 | | | | | | |
| Incentive rates | | | | | | | | | | | Under/Outperformance | | | | | | | | | | |
| | | | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | |
| Underperformance payment | £ | 466,253 | | | | | | | | | AMP7 PC P10 forecast | -2.0 | -3.0 | -3.0 | -3.0 | -2.3 | | | | | |
| Outperformance payment | £ | 238,892 | | | | | | | | | AMP7 PC P25 forecast | -1.0 | -2.0 | -2.0 | -2.0 | -1.3 | | | | | |
| | | | | | | | | | | | AMP7 PC P50 forecast | 0.0 | -1.0 | -1.0 | -1.0 | -0.3 | | | | | |
| | | | | | | | | | | | AMP7 PC P75 forecast | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | | | | | |
| | | | | | | | | | | | AMP7 PC P90 forecast | 2.0 | 2.0 | 2.0 | 2.0 | 2.7 | | | | | |
| ODI detailed design | | | | | | | | | | | Financial | | | | | | | | | | |
| ODI type: £ + / (-) unit based | | | | | | | | | | | | | | | | | | | | | |
| ODI form: Revenue | | | | | | | | | | | | | | | | | | | | | |
| ODI timing: In period | | | | | | | | | | | | | | | | | | | | | |
| ODI Cap/Collar: Yes collar on penalties | | | | | | | | | | | | | | | | | | | | | |
| ODI Dead band: None | | | | | | | | | | | | | | | | | | | | | |
| Other: n/a | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | Uncalibrated incentives due £m | | | | | | | | | | |
| | | | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | AMP7 | | | | | |
| | | | | | | | | | | | AMP7 PC P10 forecast | -£ 0.93 | -£ 1.40 | -£ 1.40 | -£ 1.40 | -£ 1.07 | -£ 6.20 | | | | |
| | | | | | | | | | | | AMP7 PC P25 forecast | -£ 0.47 | -£ 0.93 | -£ 0.93 | -£ 0.93 | -£ 0.61 | -£ 3.87 | | | | |
| | | | | | | | | | | | AMP7 PC P50 forecast | £ - | -£ 0.47 | -£ 0.47 | -£ 0.47 | -£ 0.14 | -£ 1.54 | | | | |
| | | | | | | | | | | | AMP7 PC P75 forecast | £ - | £ - | £ - | £ - | £ 0.17 | £ 0.17 | | | | |
| | | | | | | | | | | | AMP7 PC P90 forecast | £ 0.48 | £ 0.48 | £ 0.48 | £ 0.48 | £ 0.65 | £ 2.56 | | | | |

| Caps, Collars and Dead bands | | | | | | | |
|------------------------------|---------|---------|---------|---------|---------|--------------------------|------------------|
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | |
| Penalty collar @ 4 hours | -4.0 | -4.0 | -4.0 | -4.0 | -4.0 | | |
| | 16.00 | 15.00 | 14.00 | 13.00 | 12.70 | | |
| AMP7 PC P10 forecast | -2.0 | -3.0 | -3.0 | -3.0 | -2.3 | when collar takes effect | |
| AMP7 PC P25 forecast | -1.0 | -2.0 | -2.0 | -2.0 | -1.3 | | |
| AMP7 PC P50 forecast | 0.0 | -1.0 | -1.0 | -1.0 | -0.3 | | |
| AMP7 PC P75 forecast | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | | |
| AMP7 PC P90 forecast | 2.0 | 2.0 | 2.0 | 2.0 | 2.7 | | |
| Calibrated incentives due £m | | | | | | | |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | AMP7 | Effect of collar |
| AMP7 PC P10 forecast | -£ 0.93 | -£ 1.40 | -£ 1.40 | -£ 1.40 | -£ 1.07 | -£ 6.20 | £ - |
| AMP7 PC P25 forecast | -£ 0.47 | -£ 0.93 | -£ 0.93 | -£ 0.93 | -£ 0.61 | -£ 3.87 | £ - |
| AMP7 PC P50 forecast | £ - | £ 0.47 | £ 0.47 | £ 0.47 | £ 0.14 | £ 1.54 | £ - |
| AMP7 PC P75 forecast | £ - | £ - | £ - | £ - | £ 0.17 | £ 0.17 | £ - |
| AMP7 PC P90 forecast | £ 0.48 | £ 0.48 | £ 0.48 | £ 0.48 | £ 0.65 | £ 2.56 | £ - |



2.2.2 Customers in vulnerable circumstances satisfied with our service

| | |
|---|--|
| <p>Definition</p> | <ul style="list-style-type: none"> • Survey of Affinity Water’s customers who are: <ul style="list-style-type: none"> ○ registered on our Priority Services Register (PSR) and/or ○ receiving financial assistance through the WaterSure tariff or our social tariff; and/or ○ recorded on our billing system as on flexible payment plans, being bespoke payment plans mutually agreed with the customer based on an affordability assessment • Of these customers we will ascertain the percentage satisfied with the service they have received from Affinity Water following an interaction with us. |
| <p>Unit</p> | <ul style="list-style-type: none"> • The percentage of customers scoring 4/5 or 5/5 in the survey asking the question: “On a scale of 1 – 5 how satisfied are you with the service you received from Affinity Water?” |
| <p>Target</p> | <ul style="list-style-type: none"> • The target is to achieve a score of 82% or higher across AMP7. • We have attempted to design the survey process to make it as customer-friendly as possible. We hope that this will elicit a high number of responses from customers; however, there is a possibility that some customers will not want to participate in the survey. |
| <p>Evidence that target is stretching</p> | <ul style="list-style-type: none"> • No such target exists that is directly comparable with historic performance or that of other companies. • The detailed design of the survey is not completed, so targets cannot be set, but these are non-financial measures. |
| <p>Evidence of customer support for target</p> | <ul style="list-style-type: none"> • We have used workshops and interviews to gain insight and review our ‘Inclusive Services Journey’. This has then been used to inform the development of performance commitment for services provided to customers in vulnerable circumstances. • We have held workshops with our CCG vulnerability sub-group to review current services to customers in vulnerable circumstances and to propose and develop options for bespoke performance commitments. • This performance commitment reflects the view we share with our CCG sub-group that we should measure the satisfaction of customers in vulnerable circumstances with the service we provide. • Calls and website visits show that low income tariffs and payments plans are key causes for contact, suggesting people want to find out more about the support they can receive. • Nearly a quarter of Affinity Water customers could be considered vulnerable. They are more likely to be over 65 years old and living in single person households. |
| <p>Does the PC protect current and future</p> | <ul style="list-style-type: none"> • This PC seeks to monitor and improve the service offered to current vulnerable customers, however the ongoing nature of this PC will ensure lessons learned |

| customers? | and improvements will also benefit vulnerable customers in future. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---------|---------|---------|---------|---------|---------|-----------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|
| 20-year view (AMP5 through to AMP8) | <ul style="list-style-type: none"> Not available – new measure. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ODI type (Financial/non-financial; outperformance payment/underperformance payment/both) | <ul style="list-style-type: none"> This is a reputational (non-financial incentive) ODI We think it would be inappropriate for this performance commitment to have a financial incentive. We do not think a water company should receive an outperformance payment for providing good service to customers in vulnerable circumstances. We do not need a financial incentive to get this right as this is a matter of corporate pride. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Do customers support the ODI rates? | <ul style="list-style-type: none"> Not applicable | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P-ranges (performance in “percentage of customers scoring 4/5 or 5/5”) | <table border="1"> <thead> <tr> <th></th> <th>2020/21</th> <th>2021/22</th> <th>2022/23</th> <th>2023/24</th> <th>2024/25</th> </tr> </thead> <tbody> <tr> <td>PC</td> <td>82%</td> <td>82%</td> <td>82%</td> <td>82%</td> <td>82%</td> </tr> <tr> <td>P10</td> <td>69%</td> <td>69%</td> <td>69%</td> <td>69%</td> <td>69%</td> </tr> <tr> <td>P25</td> <td>75%</td> <td>75%</td> <td>75%</td> <td>75%</td> <td>75%</td> </tr> <tr> <td>P75</td> <td>85%</td> <td>85%</td> <td>85%</td> <td>85%</td> <td>85%</td> </tr> <tr> <td>P90</td> <td>90%</td> <td>90%</td> <td>90%</td> <td>90%</td> <td>90%</td> </tr> </tbody> </table> | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | PC | 82% | 82% | 82% | 82% | 82% | P10 | 69% | 69% | 69% | 69% | 69% | P25 | 75% | 75% | 75% | 75% | 75% | P75 | 85% | 85% | 85% | 85% | 85% | P90 | 90% | 90% | 90% | 90% | 90% |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PC | 82% | 82% | 82% | 82% | 82% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P10 | 69% | 69% | 69% | 69% | 69% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P25 | 75% | 75% | 75% | 75% | 75% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P75 | 85% | 85% | 85% | 85% | 85% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P90 | 90% | 90% | 90% | 90% | 90% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Delivery mechanism | <ul style="list-style-type: none"> Understanding our demographics, including key vulnerability characteristics is critical in developing our strategy to deliver an inclusive service. We have used internal (e.g. PSR) and external (e.g. Credit bureau, RNIB, Acorn) sources to identify the potential needs of customers and help plan for services to better support them. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dependencies | <ul style="list-style-type: none"> Customer experience improvement programme, retail household price control funding, digital journey and effectiveness of community engagement and strategy. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

25-year forecast – Customers in vulnerable circumstances satisfied with our service



| 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | 2030/31 | 2031/32 | 2032/33 | 2033/34 | 2034/35 | 2035/36 | 2036/37 | 2037/38 | 2038/39 | 2039/40 | 2040/41 | 2041/42 | 2042/43 | 2043/44 | 2044/45 |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 82% | 82% | 82% | 82% | 82% | 85% | 85% | 85% | 85% | 85% | 90% | 90% | 90% | 90% | 90% | 90% | 90% | 90% | 90% | 90% | 90% | 90% | 90% | 90% | 90% |

Final ODI Design – Customers in vulnerable circumstances satisfied with our service

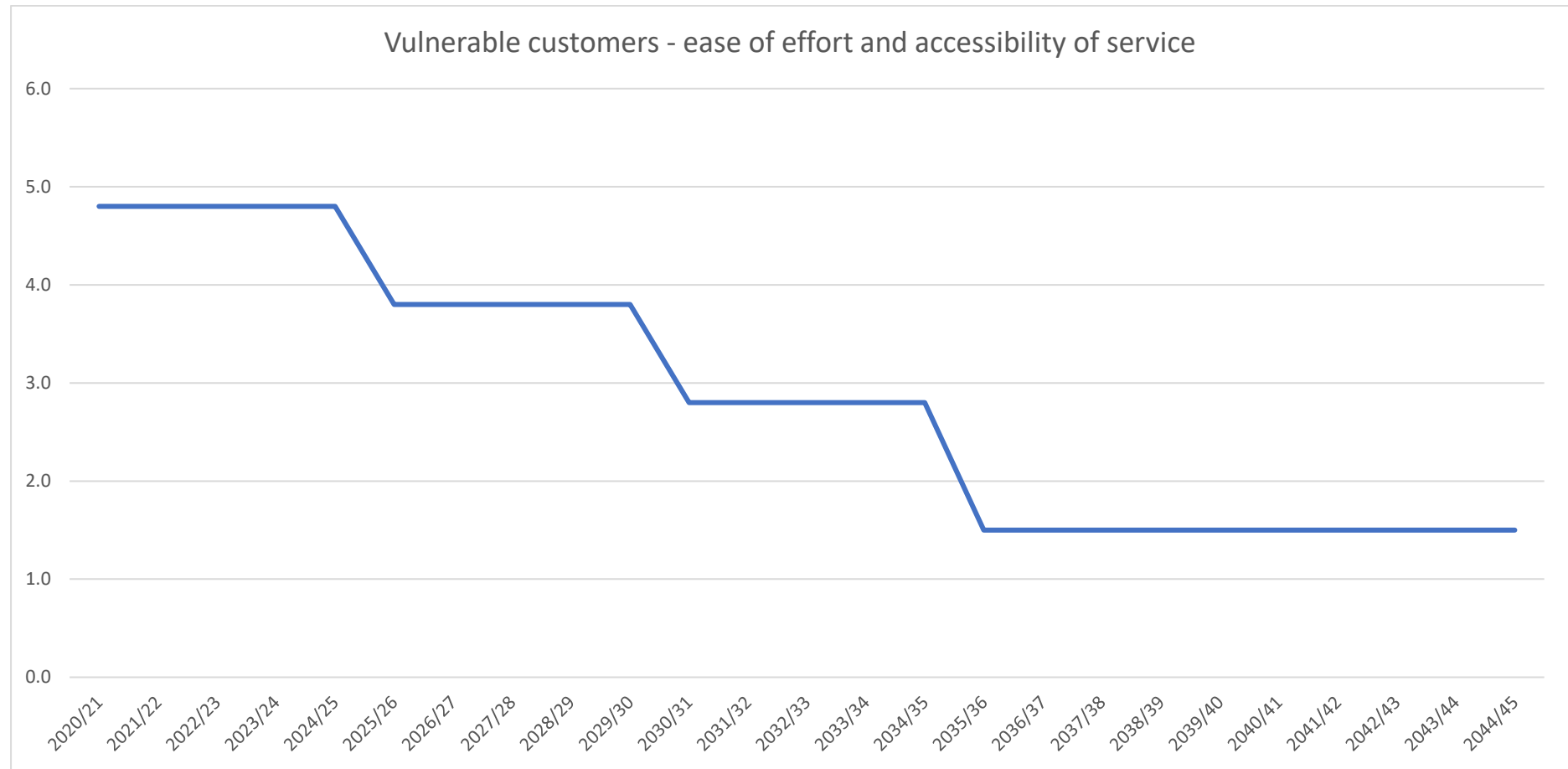
| Customers in vulnerable circumstances satisfied with our service | | | | | % score | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|----------------------|---------|---------|-----------------------------|---------|---------|---------|---------------------------------------|---------|----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|--|---------|---------|-----|--|--|---------|---------|-----|--|--|---------|--|-----|--|--|------|--|--|--|--|
| | | AMP5 | | | | | AMP6 | | | | | AMP7 | | | | | AMP8 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | | | | | | | | | | | | | | | | | | | | | | |
| Actual | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Target | | | | | | | | | | | 82% | 82% | 82% | 82% | 82% | 85% | 85% | 85% | 85% | 85% | | | | | | | | | | | | | | | | | | | | | | | |
| AMP6 PC Forecast | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMP7 PC P10 forecast | | | | | | | | | | | 69% | 69% | 69% | 69% | 69% | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMP7 PC P25 forecast | | | | | | | | | | | 75% | 75% | 75% | 75% | 75% | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMP7 PC P50 forecast | | | | | | | | | | | 82% | 82% | 82% | 82% | 82% | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMP7 PC P75 forecast | | | | | | | | | | | 85% | 85% | 85% | 85% | 85% | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMP7 PC P90 forecast | | | | | | | | | | | 90% | 90% | 90% | 90% | 90% | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Incentive rates | | | | | Under/Outperformance | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | 2020/21 | | | | | 2021/22 | | | | | 2022/23 | | | | | 2023/24 | | | | | 2024/25 | | | | | | | | | | | | | |
| Underperformance payment | | £ | | - | | | | | | | AMP7 PC P10 forecast | | | | | 69% | | | | | 69% | | | | | 69% | | | | | 69% | | | | | 69% | | | | | | | |
| Outperformance payment | | £ | | - | | | | | | | AMP7 PC P25 forecast | | | | | 75% | | | | | 75% | | | | | 75% | | | | | 75% | | | | | 75% | | | | | | | |
| ODI detailed design | | Non-financial | | | | | | | AMP7 PC P50 forecast | | | | | 82% | | | | | 82% | | | | | 82% | | | | | 82% | | | | | 82% | | | | | | | | | |
| | | | | | | | | | AMP7 PC P75 forecast | | | | | 85% | | | | | 85% | | | | | 85% | | | | | 85% | | | | | 85% | | | | | | | | | |
| | | | | | | | | | AMP7 PC P90 forecast | | | | | 90% | | | | | 90% | | | | | 90% | | | | | 90% | | | | | 90% | | | | | | | | | |
| ODI type: | | Non-financial | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ODI form: | | n/a | | | | | | | Uncalibrated incentives due £m | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ODI timing: | | n/a | | | | | | | | | | | | 2020/21 | | | | | 2021/22 | | | | | 2022/23 | | | | | 2023/24 | | | | | 2024/25 | | | | | AMP7 | | | | |
| ODI Cap/Collar: | | n/a | | | | | | | AMP7 PC P10 forecast | | | | | £ - | | | | | £ - | | | | | £ - | | | | | £ - | | | | | £ - | | | | | £ - | | | | |
| ODI Dead band: | | n/a | | | | | | | AMP7 PC P25 forecast | | | | | £ - | | | | | £ - | | | | | £ - | | | | | £ - | | | | | £ - | | | | | £ - | | | | |
| Other: | | n/a | | | | | | | AMP7 PC P50 forecast | | | | | £ - | | | | | £ - | | | | | £ - | | | | | £ - | | | | | £ - | | | | | £ - | | | | |
| | | | | | | | | | AMP7 PC P75 forecast | | | | | £ - | | | | | £ - | | | | | £ - | | | | | £ - | | | | | £ - | | | | | £ - | | | | |
| | | | | | | | | | AMP7 PC P90 forecast | | | | | £ - | | | | | £ - | | | | | £ - | | | | | £ - | | | | | £ - | | | | | £ - | | | | |

2.2.3 Customers in vulnerable circumstances who found us easy to deal with

| | |
|--|---|
| Definition | <ul style="list-style-type: none"> • Survey of Affinity Water’s customers who are: <ul style="list-style-type: none"> ○ registered on our Priority Services Register (PSR) and/or ○ receiving financial assistance through the WaterSure tariff or our social tariff; and/or ○ recorded on our billing system as on flexible payment plans, being bespoke payment plans mutually agreed with the customer based on an affordability assessment • Of these customers we will ascertain the percentage of these customers that found us easy to deal with following an interaction with us. |
| Unit | <ul style="list-style-type: none"> • Average score out of 10 of given by vulnerable customers for ease of effort and accessibility when dealing with us (where 1 = easy and 10 = hard). |
| Target | <ul style="list-style-type: none"> • The target is to achieve a score of 4.8 or lower out of 10 (where 1 is the best score) across AMP7. • We have attempted to design the survey process to make it as customer-friendly as possible. We hope that this will elicit a high number of responses from customers; however, there is a possibility that some customers will not want to participate in the survey. |
| Evidence that target is stretching | <ul style="list-style-type: none"> • No such target exists that is directly comparable with historic performance or that of other companies. • The detailed design of the survey is not completed, so targets cannot be set, but these are non-financial measures. |
| Evidence of customer support for target | <ul style="list-style-type: none"> • We have used workshops and interviews to gain insight and review our ‘Inclusive Services Journey’. This has then been used to inform the development of performance commitment for services provided to customers in vulnerable circumstances. • We have held workshops with our CCG vulnerability sub-group to review current services to customers in vulnerable circumstances and to propose and develop options for bespoke performance commitments. • This performance commitment reflects the view we share with our CCG sub-group that we should measure how easy it is for customers in vulnerable circumstances to deal with Affinity Water. • Calls and website visits show that low income tariffs and payments plans are key causes for contact, suggesting people want to find out more about the support they can receive. • Nearly a quarter of Affinity Water customers could be considered vulnerable. They are more likely to be over 65 years old and living in single person households. |
| Does the PC protect current and future | <ul style="list-style-type: none"> • This PC seeks to monitor and improve the service offered to current vulnerable customers, however the |

| customers? | ongoing nature of this PC will ensure lessons learned and improvements will also benefit vulnerable customers in future. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---------|---------|---------|---------|---------|---------|-----------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|
| 20-year view (AMP5 through to AMP8) | <ul style="list-style-type: none"> Not available – new measure. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ODI type (Financial/non-financial; outperformance payment/underperformance payment/both) | <ul style="list-style-type: none"> This is a reputational (non-financial incentive) ODI We think it would be inappropriate for this performance commitment to have a financial incentive. We do not think a water company should receive an outperformance payment for providing good service to customers in vulnerable circumstances. We do not need a financial incentive to get this right as this is a matter of corporate pride. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Do customers support the ODI rates? | <ul style="list-style-type: none"> Not applicable | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P-ranges (performance in “average score”) | <table border="1"> <thead> <tr> <th></th> <th>2020/21</th> <th>2021/22</th> <th>2022/23</th> <th>2023/24</th> <th>2024/25</th> </tr> </thead> <tbody> <tr> <td>PC</td> <td>4.8</td> <td>4.8</td> <td>4.8</td> <td>4.8</td> <td>4.8</td> </tr> <tr> <td>P10</td> <td>7.0</td> <td>7.0</td> <td>7.0</td> <td>7.0</td> <td>7.0</td> </tr> <tr> <td>P25</td> <td>5.5</td> <td>5.5</td> <td>5.5</td> <td>5.5</td> <td>5.5</td> </tr> <tr> <td>P75</td> <td>4.0</td> <td>4.0</td> <td>4.0</td> <td>4.0</td> <td>4.0</td> </tr> <tr> <td>P90</td> <td>3.0</td> <td>3.0</td> <td>3.0</td> <td>3.0</td> <td>3.0</td> </tr> </tbody> </table> | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | PC | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | P10 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | P25 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | P75 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | P90 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PC | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P10 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P25 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P75 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P90 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Delivery mechanism | <ul style="list-style-type: none"> Understanding our demographics, including key vulnerability characteristics is critical in developing our strategy to deliver an inclusive service. We have used internal (e.g. PSR) and external (e.g. Credit bureau, RNIB, Acorn) sources to identify the potential needs of customers and help plan for services to better support them. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dependencies | <ul style="list-style-type: none"> Customer experience improvement programme, retail household price control funding, digital journey and effectiveness of community engagement and strategy | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

25-year forecast – Customers in vulnerable circumstances who found us easy to deal with



| 2020 /21 | 2021 /22 | 2022 /23 | 2023 /24 | 2024 /25 | 2025 /26 | 2026 /27 | 2027 /28 | 2028 /29 | 2029 /30 | 2030 /31 | 2031 /32 | 2032 /33 | 2033 /34 | 2034 /35 | 2035 /36 | 2036 /37 | 2037 /38 | 2038 /39 | 2039 /40 | 2040 /41 | 2041 /42 | 2042 /43 | 2043 /44 | 2044 /45 |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |

Final ODI Design – Customers in vulnerable circumstances who found us easy to deal with

| Customers in vulnerable circumstances who find us easy to deal with | | | | | | | | | | | | | | | | | | | score | | | | | | |
|---|---------|---------|---------|---------|---------|---------|---------------------------------------|---------|---------|---------|---------|----------------------|---------|---------|---------|---------|---------|---------|---------|-----|-----|--|--|--|--|
| AMP5 | | | | | AMP6 | | | | | AMP7 | | | | | AMP8 | | | | | | | | | | |
| 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | | | | | | |
| Actual | | | | | | | | | | | | | | | | | | | | | | | | | |
| Target | | | | | | | | | | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | | | | | | |
| AMP6 PC Forecast | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMP7 PC P10 forecast | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMP7 PC P25 forecast | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMP7 PC P50 forecast | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMP7 PC P75 forecast | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMP7 PC P90 forecast | | | | | | | | | | | | | | | | | | | | | | | | | |
| Incentive rates | | | | | | | Under/Outperformance | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | | | | |
| Underperformance payment | £ | - | | | | | AMP7 PC P10 forecast | | | | | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | | | | | | | | | |
| Outperformance payment | £ | - | | | | | AMP7 PC P25 forecast | | | | | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | | | | | | | | | |
| | | | | | | | AMP7 PC P50 forecast | | | | | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | | | | | | | | | |
| ODI detailed design | | | | | | | Non-financial | | | | | AMP7 PC P75 forecast | | | | | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | | | | |
| | | | | | | | AMP7 PC P90 forecast | | | | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | | | | | | | | |
| ODI type: Non-financial | | | | | | | | | | | | | | | | | | | | | | | | | |
| ODI form: n/a | | | | | | | Uncalibrated incentives due £m | | | | | | | | | | | | | | | | | | |
| ODI timing: n/a | | | | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | AMP7 | | | | | | | | |
| ODI Cap/Collar: n/a | | | | | | | AMP7 PC P10 forecast | | | | | £ - | £ - | £ - | £ - | £ - | £ - | | | | | | | | |
| ODI Dead band: n/a | | | | | | | AMP7 PC P25 forecast | | | | | £ - | £ - | £ - | £ - | £ - | £ - | | | | | | | | |
| Other: n/a | | | | | | | AMP7 PC P50 forecast | | | | | £ - | £ - | £ - | £ - | £ - | £ - | | | | | | | | |
| | | | | | | | AMP7 PC P75 forecast | | | | | £ - | £ - | £ - | £ - | £ - | £ - | | | | | | | | |
| | | | | | | | AMP7 PC P90 forecast | | | | | £ - | £ - | £ - | £ - | £ - | £ - | | | | | | | | |

2.2.4 Environmental innovation

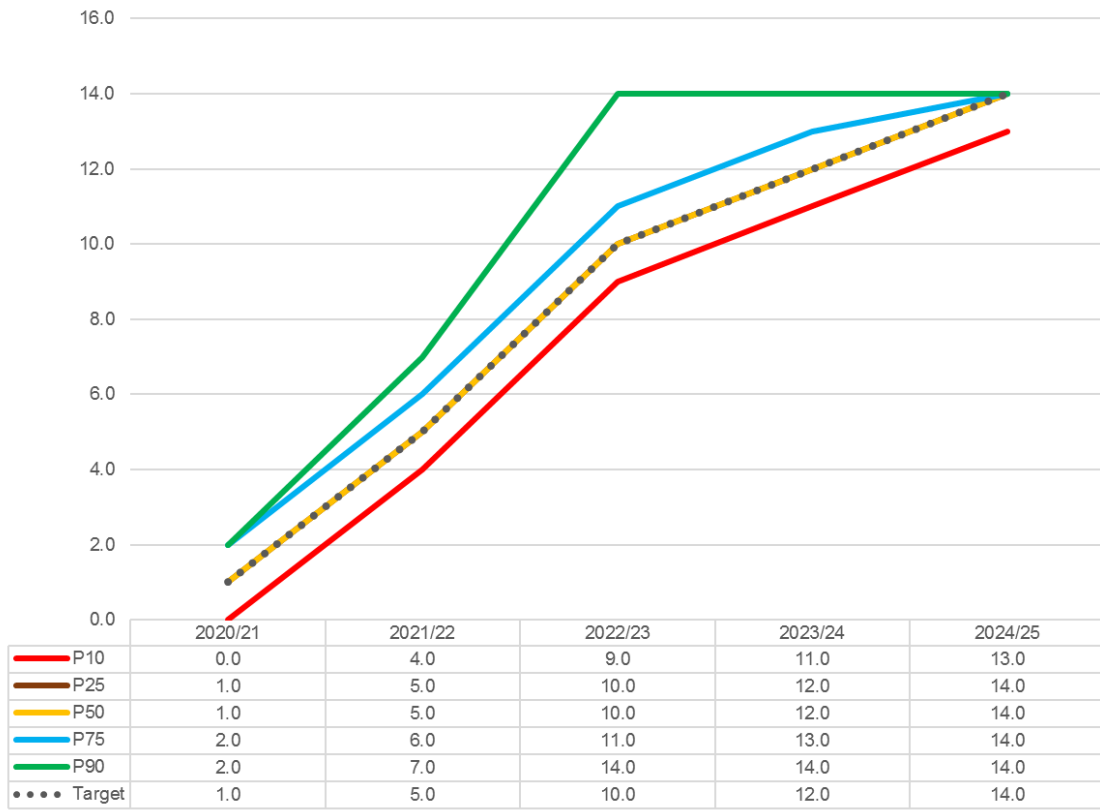
| | |
|--|--|
| Definition | <ul style="list-style-type: none"> • Completing eight environmentally focussed, innovative pilot projects in our communities, enabling us to improve the knowledge and evidence of water use within our catchments. • Bringing together sector experts, charities, community and environmental groups and other stakeholders to trial the delivery of a range of innovative multi-party projects linked to different environmental themes and water use behaviours. |
| Unit | <ul style="list-style-type: none"> • Number of project units delivered across the AMP. |
| Target | <ul style="list-style-type: none"> • 14 project units delivered across AMP7. • There are eight projects to be delivered in AMP7, but these vary in size and cost, with 7 projects being worth half the total project budget, and the other project being worth the remaining half of the budget. • To resolve this, we assume the largest project accounts for 7 units, and the other 7 units being assigned to the remaining projects. • Delivery of this PC will be reviewed annually against a clear programme setting out project timescales, objectives and cost forecasts. • It is currently expected that we will complete the delivery of all projects by the end of 2023/24 (year 4 of AMP7) to allow sufficient time for larger scale implementation of effective projects to be developed for our AMP8 Business Plan submission. |
| Evidence that target is stretching | <ul style="list-style-type: none"> • This is an entirely new commitment and so it is not possible to quantify the extent to which this target is stretching. |
| Evidence of customer support for target (e.g. they are willing to pay for costs of achieving it, incl. outperformance payment ODIs; they can afford to pay for it). | <ul style="list-style-type: none"> • 82% of customers supported raising awareness of how everyone can help protect the water environment (see Appendix 3). • Customers associate protecting the environment with future generations. This includes the need to educate future generations about water scarcity and looking after our resources for future generations (see Appendix 3). • The proposed projects were developed following discussions with our CCG resilience and environment sub-group, which led to workshops to progress the development of the proposals. The projects were evaluated to ensure they met the following criteria: <ul style="list-style-type: none"> ○ Benefit the environment ○ Innovative ○ Not part of business as usual ○ Goes beyond a statutory requirement ○ Relevant to customers ○ Measurable ○ Could be supported by partners. • Projects were categorised to identify those that the working group feel met the requirements and delivery timeframe. |

| Does the PC protect current and future customers? | <ul style="list-style-type: none"> Completion of the pilot projects will deliver benefits to current customers, but will also foster continued community engagement and innovation that will benefit future customers. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---------|---------|---------|---------|---------|---------|-----------|-----|-----|------|------|------|------------|-----|-----|-----|------|------|------------|-----|-----|------|------|------|------------|-----|-----|------|------|------|------------|-----|-----|------|------|------|
| 20-year view (AMP5 through to AMP8) | <ul style="list-style-type: none"> Not available – new measure. Whilst we cannot forecast the target past AMP7 as it will be affected by the future of the WFD under BREXIT and other legislative drivers, we expect to always have at least one innovation project per zone per AMP into the future so 8 at minimum related to biodiversity linked to our estate. These projects would be adapted to encompass any other regulatory requirements. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ODI type (Financial/non-financial; outperformance payment/underperformance payment/both) | <ul style="list-style-type: none"> Financial incentives with both outperformance and underperformance payments that will be applied in-period to revenue depending on the outturn performance compared to target i.e. unit based incentives based on the timing of delivery against a clear schedule. In-period means that any payments will be applied at the first possible opportunity so that an incentive payment from performance in year 1 will be reflected in bills in year 3. We are not proposing a dead band or a cap or collar as the total incentive exposure for this PC both on outperformance and underperformance is limited by timing within the AMP. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Do customers support the ODI rates? | <ul style="list-style-type: none"> We have tested the calibrated incentive rates as part of an overall package using P10/90 and P25/75. The projected performance and potential range (represented by P25/75) was specifically tested with customers. We expect the range of bill impacts to be +£0.50 to -£4.00 over the AMP. Our specific engagement with customers showed this range to be acceptable. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P-ranges (performance in “project units”) | <table border="1"> <thead> <tr> <th></th> <th>2020/21</th> <th>2021/22</th> <th>2022/23</th> <th>2023/24</th> <th>2024/25</th> </tr> </thead> <tbody> <tr> <td>PC</td> <td>1.0</td> <td>5.0</td> <td>10.0</td> <td>12.0</td> <td>14.0</td> </tr> <tr> <td>P10</td> <td>0.0</td> <td>4.0</td> <td>9.0</td> <td>11.0</td> <td>13.0</td> </tr> <tr> <td>P25</td> <td>1.0</td> <td>5.0</td> <td>10.0</td> <td>12.0</td> <td>14.0</td> </tr> <tr> <td>P75</td> <td>2.0</td> <td>6.0</td> <td>11.0</td> <td>13.0</td> <td>14.0</td> </tr> <tr> <td>P90</td> <td>2.0</td> <td>7.0</td> <td>14.0</td> <td>14.0</td> <td>14.0</td> </tr> </tbody> </table> | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | PC | 1.0 | 5.0 | 10.0 | 12.0 | 14.0 | P10 | 0.0 | 4.0 | 9.0 | 11.0 | 13.0 | P25 | 1.0 | 5.0 | 10.0 | 12.0 | 14.0 | P75 | 2.0 | 6.0 | 11.0 | 13.0 | 14.0 | P90 | 2.0 | 7.0 | 14.0 | 14.0 | 14.0 |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PC | 1.0 | 5.0 | 10.0 | 12.0 | 14.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P10 | 0.0 | 4.0 | 9.0 | 11.0 | 13.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P25 | 1.0 | 5.0 | 10.0 | 12.0 | 14.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P75 | 2.0 | 6.0 | 11.0 | 13.0 | 14.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P90 | 2.0 | 7.0 | 14.0 | 14.0 | 14.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Delivery mechanism | <ul style="list-style-type: none"> The pilot projects aim to bring together different sector experts, charities, faith groups, developers and housing groups, schools and academia and wider stakeholders to deliver a range of projects across each our communities, gathering evidence and trialling delivery methods. This takes a holistic, multiparty view of catchment scale water use to engage local people, and link their water using behaviours with the aquatic environment. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dependencies | <ul style="list-style-type: none"> Weather, resources, delivery partners and implementation of community delivery model. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Final ODI Design – Environmental Innovation

| Environmental Innovation | No. of projects delivered cumulative | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|--------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------------------------|---------|---------|---------|---------|---------|-------------|---------|---------|---------|--|--|
| | AMP5 | | | | | AMP6 | | | | AMP7 | | | | | AMP8 | | | | | | | |
| | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | | |
| Actual | | | | | | | | | | | | | | | | | | | | | | |
| Target | | | | | | | | | | | 1.0 | 5.0 | 10.0 | 12.0 | 14.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| AMP6 PC Forecast | | | | | | | | | | | | | | | | | | | | | | |
| AMP7 PC P10 forecast | | | | | | | | | | 0.0 | 0.0 | 4.0 | 9.0 | 11.0 | 13.0 | | | | | | | |
| AMP7 PC P25 forecast | | | | | | | | | | 0.0 | 1.0 | 5.0 | 10.0 | 12.0 | 14.0 | | | | | | | |
| AMP7 PC P50 forecast | | | | | | | | | | 0.0 | 1.0 | 5.0 | 10.0 | 12.0 | 14.0 | | | | | | | |
| AMP7 PC P75 forecast | | | | | | | | | | 0.0 | 2.0 | 6.0 | 11.0 | 13.0 | 14.0 | | | | | | | |
| AMP7 PC P90 forecast | | | | | | | | | | 0.0 | 2.0 | 7.0 | 14.0 | 14.0 | 14.0 | | | | | | | |
| Incentive rates | | | | | | | | | | | Under/Outperformance | | | | | | | | | | | |
| | | | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | | |
| Underperformance payment | £ | 2,833 | | | | | | | | | AMP7 PC P10 forecast | -1.0 | -1.0 | -1.0 | -1.0 | -1.0 | | | | | | |
| Outperformance payment | £ | 2,833 | | | | | | | | | AMP7 PC P25 forecast | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| | | | | | | | | | | | AMP7 PC P50 forecast | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| ODI detailed design | Financial | | | | | | | | | | AMP7 PC P75 forecast | 1.0 | 1.0 | 1.0 | 1.0 | 0.0 | | | | | | |
| | | | | | | | | | | | AMP7 PC P90 forecast | 1.0 | 2.0 | 4.0 | 2.0 | 0.0 | | | | | | |
| ODI type: | £ + / (-) unit based | | | | | | | | | | | | | | | | | | | | | |
| ODI form: | Revenue | | | | | | | | | | Uncalibrated incentives due £m | | | | | | | | | | | |
| ODI timing: | In period | | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | AMP7 | | | | | |
| ODI Cap/Collar: | None | | | | | | | | | | AMP7 PC P10 forecast | -£ 0.00 | -£ 0.00 | -£ 0.00 | -£ 0.00 | -£ 0.00 | | -£ 0.01 | | | | |
| ODI Dead band: | None | | | | | | | | | | AMP7 PC P25 forecast | £ - | £ - | £ - | £ - | £ - | | £ - | | | | |
| Other: | Benefits set equal to costs | | | | | | | | | | AMP7 PC P50 forecast | £ - | £ - | £ - | £ - | £ - | | £ - | | | | |
| | | | | | | | | | | | AMP7 PC P75 forecast | £ 0.00 | £ 0.00 | £ 0.00 | £ 0.00 | £ - | | £ 0.01 | | | | |
| | | | | | | | | | | | AMP7 PC P90 forecast | £ 0.00 | £ 0.01 | £ 0.01 | £ 0.01 | £ - | | £ 0.03 | | | | |

Environmental Innovation (Projects delivered)

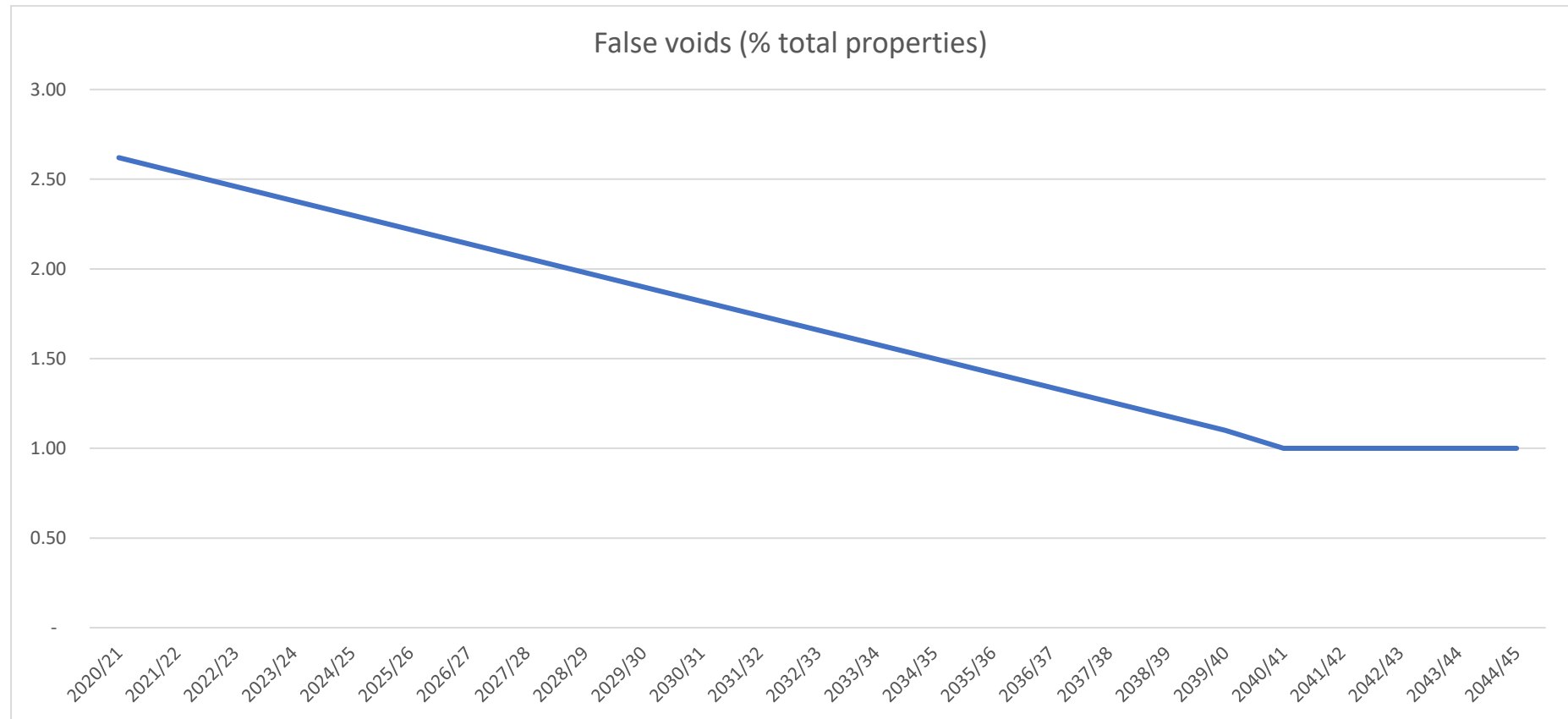


2.2.5 False voids

| | |
|---|---|
| Definition | <ul style="list-style-type: none"> • A false void is a property listed as void on the company system, but is in fact occupied and using water. In such circumstances, the customer in the property is gaining free water and the rest of the customer base are effectively subsidising them (through the revenue control). • If we find a ‘false void’ (i.e. a property listed as empty, but which is occupied), that will reduce the bill for all other customers, as we will seek to recover the same total revenue, but from a larger customer base. |
| Unit | <ul style="list-style-type: none"> • Number of false voids identified – annual measure in property numbers. |
| Target | <ul style="list-style-type: none"> • 2.3% residential void rate at end of AMP7. |
| Evidence that target is stretching | <ul style="list-style-type: none"> • This is an entirely new commitment and so it is not possible to quantify the extent to which this target is stretching. • We do however know that a 2.3% residential void rate equates to upper quartile industry performance in 2016/17 (latest year for which data is available). |
| Evidence of customer support for target | <ul style="list-style-type: none"> • Target driven by regulatory requirements. • Little direct customer support for this issue although it is safe to assume there is widespread support for the removal of any implicit cross-subsidy between bill payers and those customers occupying a void or gap site. |
| Does the PC protect current and future customers? | <ul style="list-style-type: none"> • The PC protects all bill paying customers by keeping bills as low as possible and avoiding unsupported cross-subsidy. Identifying false voids and putting them into charge reduces bills for both current and future customers. |
| 20-year view (AMP5 through to AMP8) | <ul style="list-style-type: none"> • Not available – new measure. |
| ODI type (Financial/non-financial; outperformance payment/underperformance payment/both) | <ul style="list-style-type: none"> • Financial incentives with both outperformance and underperformance payments that will be applied in-period to revenue depending the outturn performance compared to target i.e. unit based. • In-period means that any payments will be applied at the first possible opportunity so that an incentive payment from performance in year 1 will be reflected in bills in year 3. • We are not proposing a dead band or a cap or collar as the total incentive exposure for this PC both on outperformance and underperformance is limited by the scale of the issue. |
| Do customers support the ODI rates? | <ul style="list-style-type: none"> • We have tested the calibrated incentive rates as part of an overall package using P10/90 and P25/75. The projected performance and potential range (represented by P25/75) was specifically tested with customers. We |

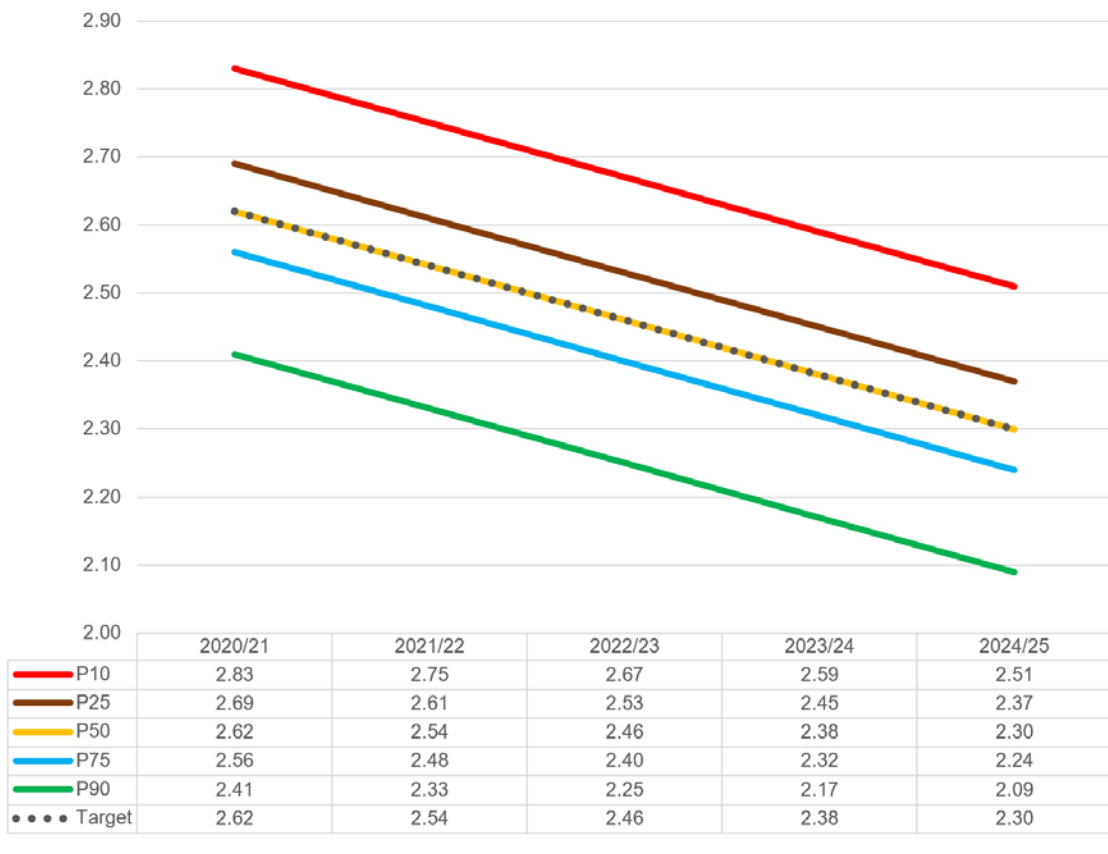
| | <p>expect the range of bill impacts to be +£0.50 to -£4.00 over the AMP.</p> <ul style="list-style-type: none"> Our specific engagement with customers showed this range to be acceptable. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|----------------|----------------|----------------|----------------|----------------|----------------|-----------|------|------|------|------|------|------------|------|------|------|------|------|------------|------|------|------|------|------|------------|------|------|------|------|------|------------|------|------|------|------|------|
| P-ranges (performance in “% residential void rate”) | <table border="1"> <thead> <tr> <th></th> <th>2020/21</th> <th>2021/22</th> <th>2022/23</th> <th>2023/24</th> <th>2024/25</th> </tr> </thead> <tbody> <tr> <td>PC</td> <td>2.62</td> <td>2.54</td> <td>2.46</td> <td>2.38</td> <td>2.30</td> </tr> <tr> <td>P10</td> <td>2.83</td> <td>2.75</td> <td>2.67</td> <td>2.59</td> <td>2.51</td> </tr> <tr> <td>P25</td> <td>2.69</td> <td>2.61</td> <td>2.53</td> <td>2.45</td> <td>2.37</td> </tr> <tr> <td>P75</td> <td>2.56</td> <td>2.48</td> <td>2.40</td> <td>2.32</td> <td>2.24</td> </tr> <tr> <td>P90</td> <td>2.41</td> <td>2.33</td> <td>2.25</td> <td>2.17</td> <td>2.09</td> </tr> </tbody> </table> | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | PC | 2.62 | 2.54 | 2.46 | 2.38 | 2.30 | P10 | 2.83 | 2.75 | 2.67 | 2.59 | 2.51 | P25 | 2.69 | 2.61 | 2.53 | 2.45 | 2.37 | P75 | 2.56 | 2.48 | 2.40 | 2.32 | 2.24 | P90 | 2.41 | 2.33 | 2.25 | 2.17 | 2.09 |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PC | 2.62 | 2.54 | 2.46 | 2.38 | 2.30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P10 | 2.83 | 2.75 | 2.67 | 2.59 | 2.51 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P25 | 2.69 | 2.61 | 2.53 | 2.45 | 2.37 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P75 | 2.56 | 2.48 | 2.40 | 2.32 | 2.24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P90 | 2.41 | 2.33 | 2.25 | 2.17 | 2.09 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Delivery mechanism | <ul style="list-style-type: none"> We have a dedicated team in Retail that are tasked with investigating and identifying false voids; they do this through credit record searches as well as meter readings and in-person visits to suspected false voids. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dependencies | <ul style="list-style-type: none"> Developer services, billing records and debt management services. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

25-year forecast – False Voids



| 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | 2030/31 | 2031/32 | 2032/33 | 2033/34 | 2034/35 | 2035/36 | 2036/37 | 2037/38 | 2038/39 | 2039/40 | 2040/41 | 2041/42 | 2042/43 | 2043/44 | 2044/45 |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 2.6 | 2.5 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 1.9 | 1.8 | 1.7 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.3 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |

False Voids (% of connected properties)

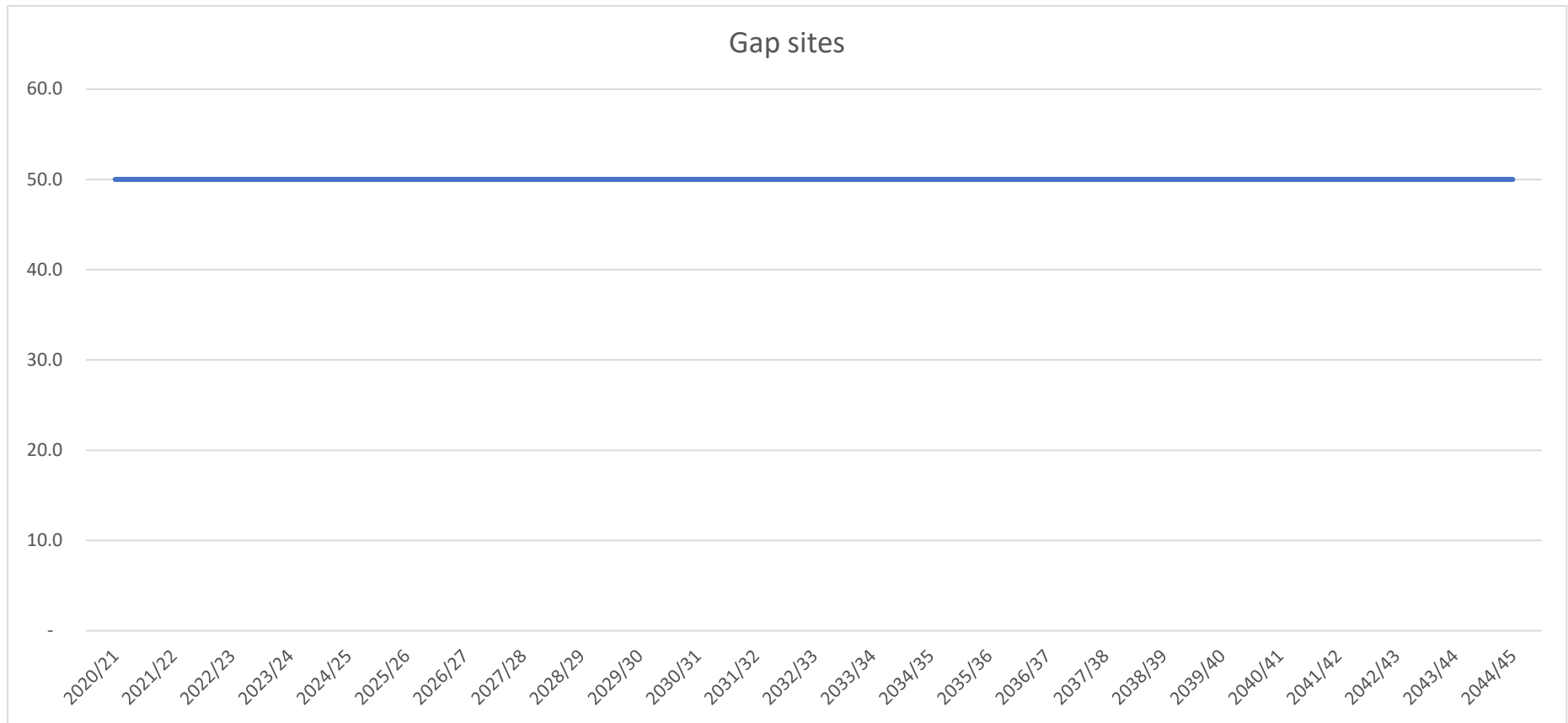


2.2.6 Gap properties

| Definition | <ul style="list-style-type: none"> A gap site is a property that was previously not listed on our billing database but has subsequently been added to our billing database and is now in charge. If we find a 'false void' (i.e. a property listed as empty, but which is occupied), that will reduce the bill for all other customers, as we will seek to recover the same total revenue, but from a larger customer base. The same is true of a 'gap' site. | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---------|---------|---------|---------|---------|---------|-----------|----|----|----|----|----|------------|----|----|----|----|----|------------|----|----|----|----|----|
| Unit | <ul style="list-style-type: none"> Number of gap sites identified – annual measure in property numbers. | | | | | | | | | | | | | | | | | | | | | | | | |
| Target | <ul style="list-style-type: none"> 50 gap sites identified every year of AMP7. | | | | | | | | | | | | | | | | | | | | | | | | |
| Evidence that target is stretching | <ul style="list-style-type: none"> This is an entirely new commitment and so it is not possible to quantify the extent to which this target is stretching. | | | | | | | | | | | | | | | | | | | | | | | | |
| Evidence of customer support for target | <ul style="list-style-type: none"> Target driven by regulatory requirements. Little direct customer support for this issue although it is safe to assume there is widespread support for the removal of any implicit cross-subsidy between bill payers and those customers occupying a gap site. | | | | | | | | | | | | | | | | | | | | | | | | |
| Does the PC protect current and future customers? | <ul style="list-style-type: none"> The PC protects all bill paying customers by keeping bills as low as possible and avoiding unsupported cross-subsidy. Identifying gap sites and putting them into charge reduces bills for both current and future customers. | | | | | | | | | | | | | | | | | | | | | | | | |
| 20-year view (AMP5 through to AMP8) | <ul style="list-style-type: none"> Not available – new measure. | | | | | | | | | | | | | | | | | | | | | | | | |
| ODI type (Financial/non-financial; outperformance payment/underperformance payment/both) | <ul style="list-style-type: none"> Financial incentives with both outperformance and underperformance payments that will be applied in-period to revenue depending the outturn performance compared to target i.e. unit based. In-period means that any payments will be applied at the first possible opportunity so that an incentive payment from performance in year 1 will be reflected in bills in year 3. We are not proposing a dead band or a cap or collar as the total incentive exposure for this PC both on outperformance and underperformance is limited by the scale of the issue. | | | | | | | | | | | | | | | | | | | | | | | | |
| Do customers support the ODI rates? | <ul style="list-style-type: none"> We have tested the calibrated incentive rates as part of an overall package using P10/90 and P25/75. The projected performance and potential range (represented by P25/75) was specifically tested with customers. We expect the range of bill impacts to be +£0.50 to -£4.00 over the AMP. Our specific engagement with customers showed this range to be acceptable. | | | | | | | | | | | | | | | | | | | | | | | | |
| P-ranges (performance in “number of gap sites identified”) | <table border="1"> <thead> <tr> <th></th> <th>2020/21</th> <th>2021/22</th> <th>2022/23</th> <th>2023/24</th> <th>2024/25</th> </tr> </thead> <tbody> <tr> <td>PC</td> <td>50</td> <td>50</td> <td>50</td> <td>50</td> <td>50</td> </tr> <tr> <td>P10</td> <td>10</td> <td>10</td> <td>10</td> <td>10</td> <td>10</td> </tr> <tr> <td>P25</td> <td>30</td> <td>30</td> <td>30</td> <td>30</td> <td>30</td> </tr> </tbody> </table> | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | PC | 50 | 50 | 50 | 50 | 50 | P10 | 10 | 10 | 10 | 10 | 10 | P25 | 30 | 30 | 30 | 30 | 30 |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | | | | | | | | | | | | | | | |
| PC | 50 | 50 | 50 | 50 | 50 | | | | | | | | | | | | | | | | | | | | |
| P10 | 10 | 10 | 10 | 10 | 10 | | | | | | | | | | | | | | | | | | | | |
| P25 | 30 | 30 | 30 | 30 | 30 | | | | | | | | | | | | | | | | | | | | |

| | | | | | | |
|---------------------------|--|-----|-----|-----|-----|-----|
| | P75 | 60 | 60 | 60 | 60 | 60 |
| | P90 | 100 | 100 | 100 | 100 | 100 |
| Delivery mechanism | <ul style="list-style-type: none"> We have a dedicated team in Retail that are tasked with investigating and identifying false voids; in the process of these investigations they may be notified or become aware of gap sites. | | | | | |
| Dependencies | <ul style="list-style-type: none"> Developer services, billing records and debt management services. | | | | | |

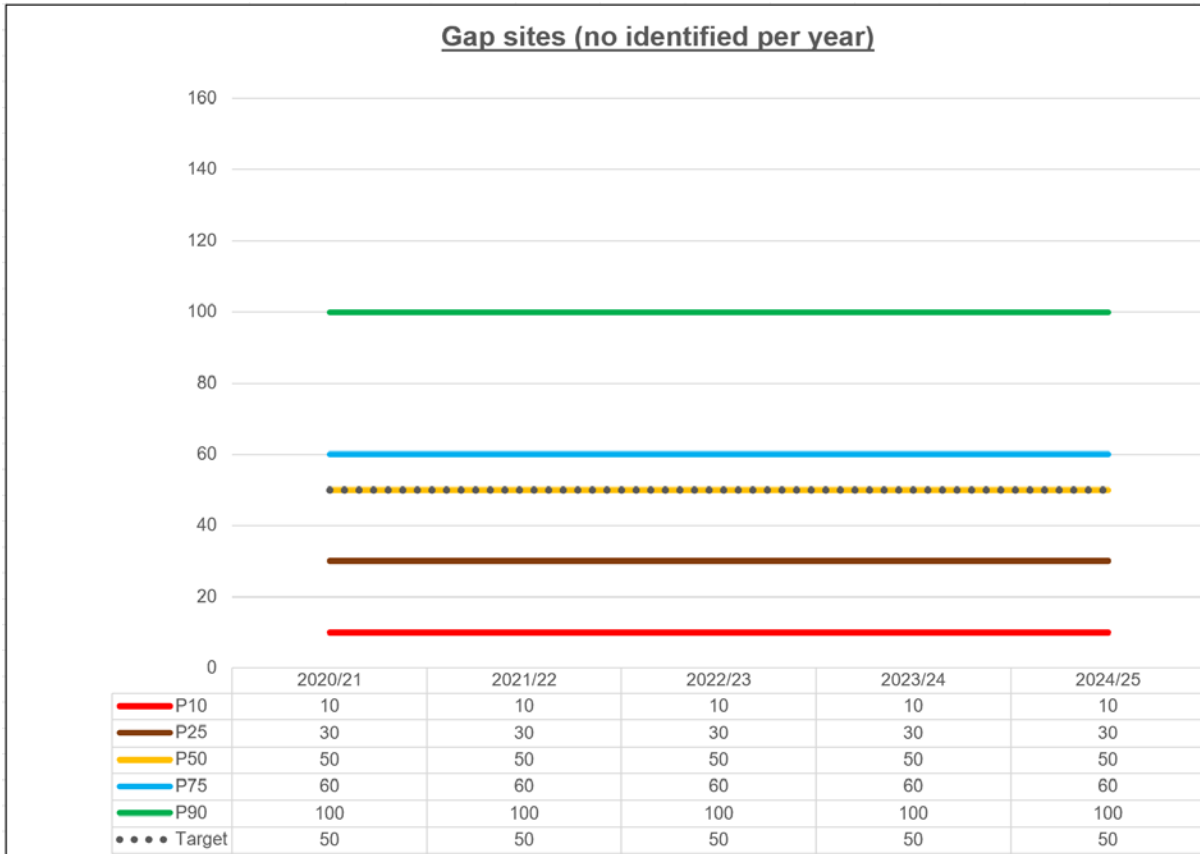
25-year forecast – Gap Sites



| 2020 /21 | 2021 /22 | 2022 /23 | 2023 /24 | 2024 /25 | 2025 /26 | 2026 /27 | 2027 /28 | 2028 /29 | 2029 /30 | 2030 /31 | 2031 /32 | 2032 /33 | 2033 /34 | 2034 /35 | 2035 /36 | 2036 /37 | 2037 /38 | 2038 /39 | 2039 /40 | 2040 /41 | 2041 /42 | 2042 /43 | 2043 /44 | 2044 /45 |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 |

Final ODI Design – Gap Sites

| Gap sites | Gap sites No. identified | | | | | | | | | | | | | | | | | | | |
|--------------------------|--------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | AMP6 | | AMP7 | | | AMP8 | | | | |
| | | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | |
| Actual | | | | | | | | | | | | | | | | | | | | |
| Target | | | | | | | | | | 50 | 50 | 50 | 50 | 50 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | |
| AMP6 PC Forecast | | | | | | | | | | | | | | | | | | | | |
| AMP7 PC P10 forecast | | | | | | | | | 0.0 | 10 | 10 | 10 | 10 | 10 | | | | | | |
| AMP7 PC P25 forecast | | | | | | | | | 0.0 | 30 | 30 | 30 | 30 | 30 | | | | | | |
| AMP7 PC P50 forecast | | | | | | | | | 0.0 | 50 | 50 | 50 | 50 | 50 | | | | | | |
| AMP7 PC P75 forecast | | | | | | | | | 0.0 | 60 | 60 | 60 | 60 | 60 | | | | | | |
| AMP7 PC P90 forecast | | | | | | | | | 0.0 | 100 | 100 | 100 | 100 | 100 | | | | | | |
| Incentive rates | | | | | | | | | | Under/Outperformance | | | | | | | | | | |
| | | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | |
| Underperformance payment | £ | 717 | | | | | | | | AMP7 PC P10 forecast | -40 | -40 | -40 | -40 | -40 | | | | | |
| Outperformance payment | £ | 717 | | | | | | | | AMP7 PC P25 forecast | -20 | -20 | -20 | -20 | -20 | | | | | |
| | | | | | | | | | | AMP7 PC P50 forecast | 0 | 0 | 0 | 0 | 0 | | | | | |
| ODI detailed design | Financial | | | | | | | | | AMP7 PC P75 forecast | 10 | 10 | 10 | 10 | 10 | | | | | |
| | | | | | | | | | | AMP7 PC P90 forecast | 50 | 50 | 50 | 50 | 50 | | | | | |
| | | | | | | | | | | Uncalibrated incentives due £m | | | | | | | | | | |
| | | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | AMP7 | | | | | |
| ODI type: £ + unit based | | | | | | | | | | AMP7 PC P10 forecast | -£ 0.03 | -£ 0.03 | -£ 0.03 | -£ 0.03 | -£ 0.03 | -£ 0.14 | | | | |
| ODI form: Revenue | | | | | | | | | | AMP7 PC P25 forecast | -£ 0.01 | -£ 0.01 | -£ 0.01 | -£ 0.01 | -£ 0.01 | -£ 0.07 | | | | |
| ODI timing: In period | | | | | | | | | | AMP7 PC P50 forecast | £ - | £ - | £ - | £ - | £ - | £ - | | | | |
| ODI Cap/Collar: None | | | | | | | | | | AMP7 PC P75 forecast | £ 0.01 | £ 0.01 | £ 0.01 | £ 0.01 | £ 0.01 | £ 0.04 | | | | |
| ODI Dead band: None | | | | | | | | | | AMP7 PC P90 forecast | £ 0.04 | £ 0.04 | £ 0.04 | £ 0.04 | £ 0.04 | £ 0.18 | | | | |
| Other: | | | | | | | | | | | | | | | | | | | | |
| Notes: | | | | | | | | | | | | | | | | | | | | |

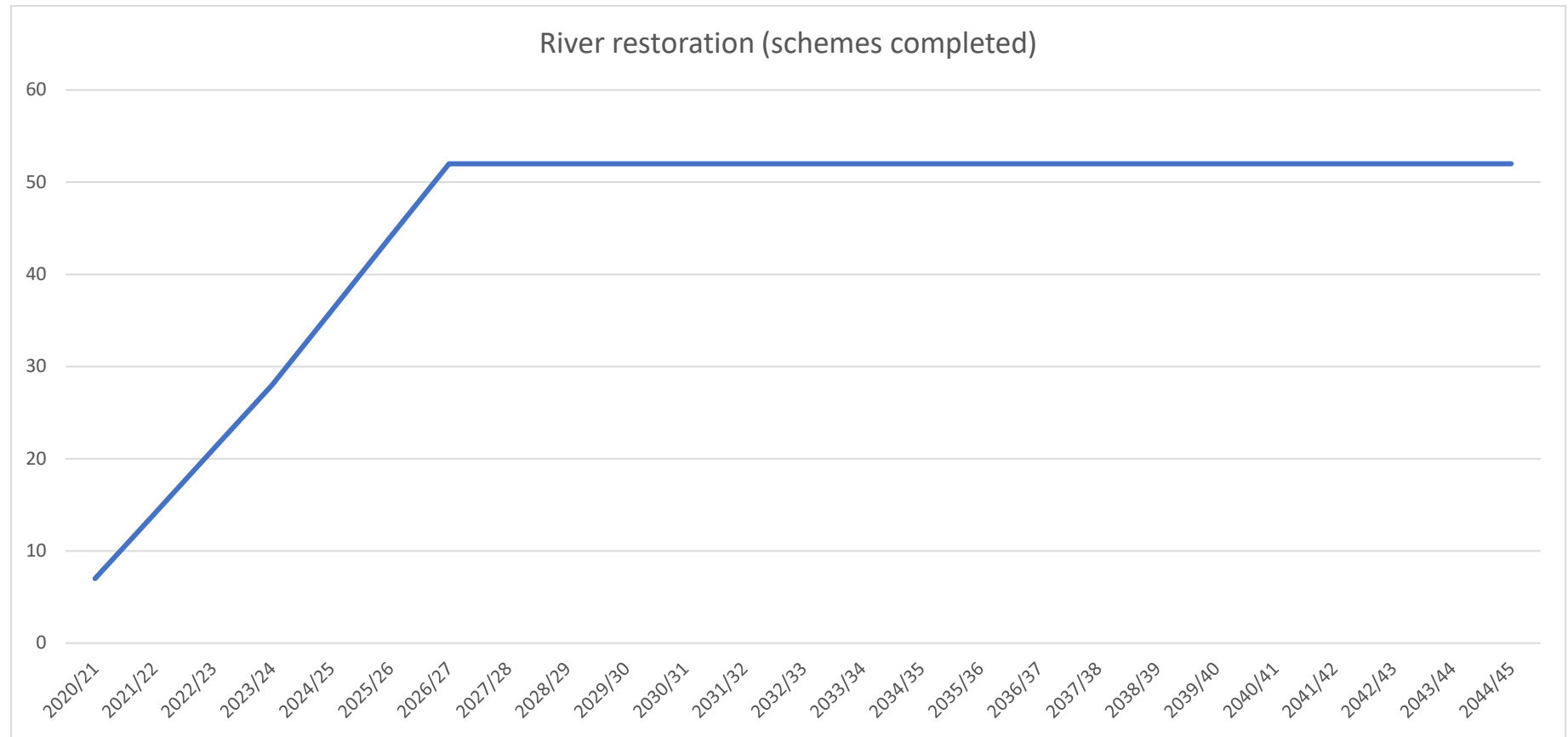


2.2.7 River Restoration

| | |
|--|---|
| Definition | <ul style="list-style-type: none"> The performance commitment is to complete river restoration schemes. This PC measures our success in delivering river restoration/habitat enhancement schemes in water bodies identified under the Water Framework Directive. A programme of measures for AMP7 is being developed with the Environment Agency through the Water Industry National Environment Programme. |
| Unit | <ul style="list-style-type: none"> Number of river restoration/habitat enhancement schemes as included in WINEP3 completed in AMP7. |
| Target | <ul style="list-style-type: none"> 36 projects (units) delivered across AMP7. These are “green” status morphological projects. Implementation of a substantial programme in AMP6 has shown projects may be divided into small and large projects that will count as 1 and 2 project units respectively. Definition of measures for WINEP3 has been achieved through establishing a cost benefit ratio of each project and setting a target unit cost and target date for delivery. The performance commitment excludes sustainable abstraction reductions because they are included in a separate bespoke performance commitment. Under circumstances that third party permissions (i.e. landowner agreement) for any project detailed in WINEP3 cannot be achieved, agreement will be sought with the Environment Agency to amend the project outcome. Affinity Water will not incur an underperformance payment where access to land to undertake any project has been refused or delayed. |
| Evidence that target is stretching | <ul style="list-style-type: none"> This is an entirely new commitment and so it is not possible to quantify the extent to which this target is stretching. |
| Evidence of customer support for target (e.g. they are willing to pay for costs of achieving it, incl. outperformance payment ODIs; they can afford to pay for it). | <ul style="list-style-type: none"> Customers value the environment and think that Affinity has a role to protect it (see Appendix 3). 77% of customers visit the water environment at least once a year, with 41% visiting every month (see Appendix 3). Customers associate protecting the environment with future generations. This includes the need to educate future generations about water scarcity and looking after our resources for future generations (see Appendix 3). |
| Does the PC protect current and future customers? | <ul style="list-style-type: none"> Improving and maintaining river quality will improve the environment for both current and future customers. |
| 20-year view (AMP5 through to AMP8) | <ul style="list-style-type: none"> Not available – new measure. |
| ODI type (Financial/non-financial; outperformance payment/underperformance payment/both) | <ul style="list-style-type: none"> Financial incentives with both outperformance and underperformance payments that will be applied in-period to revenue depending the outturn performance compared to target i.e. unit based incentives based on the timing of delivery against a clear schedule. |

| | <ul style="list-style-type: none"> In-period means that any payments will be applied at the first possible opportunity so that an incentive payment from performance in year 1 will be reflected in bills in year 3. We are not proposing a dead band or a cap or collar as the total incentive exposure for this PC both on outperformance and underperformance is limited by timing within the AMP. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---------|---------|---------|---------|---------|---------|-----------|---|----|----|----|----|------------|---|----|----|----|----|------------|---|----|----|----|----|------------|---|----|----|----|----|------------|---|----|----|----|----|
| Do customers support the ODI rates? | <ul style="list-style-type: none"> We have tested the calibrated incentive rates as part of an overall package using P10/90 and P25/75. The projected performance and potential range (represented by P25/75) was specifically tested with customers. We expect the range of bill impacts to be +£0.50 to -£4.00 over the AMP. Our specific engagement with customers showed this range to be acceptable. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P-ranges (performance in “project unit completed”) | <table border="1"> <thead> <tr> <th></th> <th>2020/21</th> <th>2021/22</th> <th>2022/23</th> <th>2023/24</th> <th>2024/25</th> </tr> </thead> <tbody> <tr> <td>PC</td> <td>7</td> <td>14</td> <td>21</td> <td>28</td> <td>36</td> </tr> <tr> <td>P10</td> <td>5</td> <td>12</td> <td>19</td> <td>28</td> <td>36</td> </tr> <tr> <td>P25</td> <td>7</td> <td>13</td> <td>20</td> <td>27</td> <td>36</td> </tr> <tr> <td>P75</td> <td>7</td> <td>15</td> <td>22</td> <td>29</td> <td>36</td> </tr> <tr> <td>P90</td> <td>7</td> <td>15</td> <td>24</td> <td>32</td> <td>36</td> </tr> </tbody> </table> | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | PC | 7 | 14 | 21 | 28 | 36 | P10 | 5 | 12 | 19 | 28 | 36 | P25 | 7 | 13 | 20 | 27 | 36 | P75 | 7 | 15 | 22 | 29 | 36 | P90 | 7 | 15 | 24 | 32 | 36 |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PC | 7 | 14 | 21 | 28 | 36 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P10 | 5 | 12 | 19 | 28 | 36 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P25 | 7 | 13 | 20 | 27 | 36 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P75 | 7 | 15 | 22 | 29 | 36 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P90 | 7 | 15 | 24 | 32 | 36 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Delivery mechanism | <ul style="list-style-type: none"> The National Environment Programme (NEP) is a list of environmental improvement schemes defined by the EA to ensure that water companies meet European and national targets related to water. These projects help demonstrate to the regulators and wider pressure groups that Affinity Water takes its commitment to the environment seriously. Through monitoring, investigation, biodiversity and morphological works we can demonstrate that the rivers fed by groundwater in our abstraction areas are flourishing and that continued abstraction at the existing licenses is sustainable without the need for further abstraction reductions. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dependencies | <ul style="list-style-type: none"> Weather, resources, delivery partners and implementation of community delivery model. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

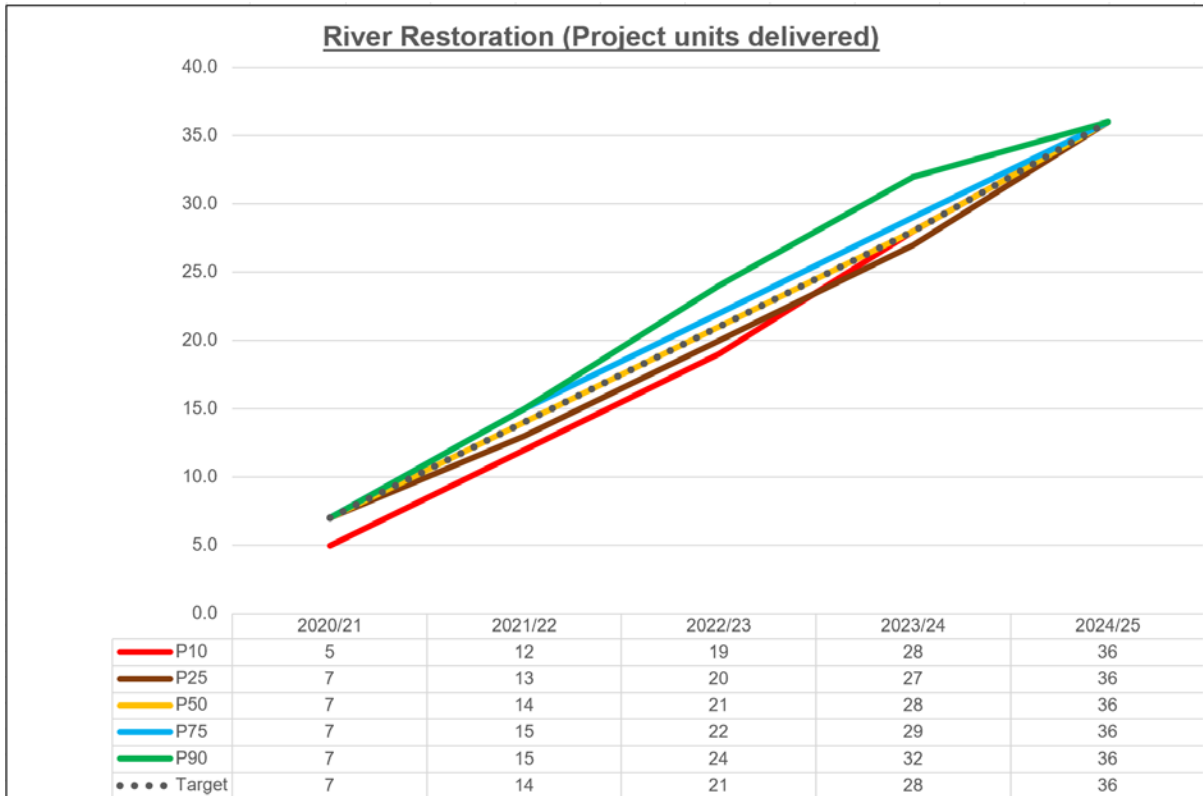
25-year forecast – River Restoration



| 2020 /21 | 2021 /22 | 2022 /23 | 2023 /24 | 2024 /25 | 2025 /26 | 2026 /27 | 2027 /28 | 2028 /29 | 2029 /30 | 2030 /31 | 2031 /32 | 2032 /33 | 2033 /34 | 2034 /35 | 2035 /36 | 2036 /37 | 2037 /38 | 2038 /39 | 2039 /40 | 2040 /41 | 2041 /42 | 2042 /43 | 2043 /44 | 2044 /45 |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 7 | 14 | 21 | 28 | 36 | 44 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 |

Final ODI Design – River Restoration

| River Restoration | No. of project units delivered cumulative | | | | | | | | | | | | | | | | | | | |
|--------------------------------|---|---------|---------|------------|---------|---------|---------|---------|---------|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| | AMP5 | | | | | AMP6 | | | | | AMP7 | | | | | AMP8 | | | | |
| | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 |
| Actual | | | | | | | | | | | | | | | | | | | | |
| Target | | | | | | | | | | | 7 | 14 | 21 | 28 | 36 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| AMP6 PC Forecast | | | | | | | | | | | | | | | | | | | | |
| AMP7 PC P10 forecast | | | | | | | | | 0.0 | | 5 | 12 | 19 | 28 | 36 | | | | | |
| AMP7 PC P25 forecast | | | | | | | | | 0.0 | | 7 | 13 | 20 | 27 | 36 | | | | | |
| AMP7 PC P50 forecast | | | | | | | | | 0.0 | | 7 | 14 | 21 | 28 | 36 | | | | | |
| AMP7 PC P75 forecast | | | | | | | | | 0.0 | | 7 | 15 | 22 | 29 | 36 | | | | | |
| AMP7 PC P90 forecast | | | | | | | | | 0.0 | | 7 | 15 | 24 | 32 | 36 | | | | | |
| Incentive rates | | | | | | | | | | Under/Outperformance | | | | | | | | | | |
| | | | | | | | | | | 2020/21 2021/22 2022/23 2023/24 2024/25 | | | | | | | | | | |
| Underperformance payment | £ | 420,663 | £ | 420,663.08 | | | | | | AMP7 PC P10 forecast | -2.0 | -2.0 | -2.0 | 0.0 | 0.0 | | | | | |
| Outperformance payment | £ | 215,575 | £ | 215,575.44 | | | | | | AMP7 PC P25 forecast | 0.0 | -1.0 | -1.0 | -1.0 | 0.0 | | | | | |
| | | | | | | | | | | AMP7 PC P50 forecast | | | | | | | | | | |
| | | | | | | | | | | AMP7 PC P75 forecast | | | | | | | | | | |
| | | | | | | | | | | AMP7 PC P90 forecast | | | | | | | | | | |
| | | | | | | | | | | 0.0 1.0 3.0 4.0 0.0 | | | | | | | | | | |
| ODI detailed design | | | | | | | | | | Financial | | | | | | | | | | |
| ODI type: £ + / (-) unit based | | | | | | | | | | | | | | | | | | | | |
| ODI form: Revenue | | | | | | | | | | Uncalibrated incentives due £m | | | | | | | | | | |
| ODI timing: In period | | | | | | | | | | 2020/21 2021/22 2022/23 2023/24 2024/25 AMP7 | | | | | | | | | | |
| ODI Cap/Collar: None | | | | | | | | | | AMP7 PC P10 forecast -£ 0.84 -£ 0.84 -£ 0.84 £ - £ - -£ 2.52 | | | | | | | | | | |
| ODI Dead band: None | | | | | | | | | | AMP7 PC P25 forecast £ - -£ 0.42 -£ 0.42 -£ 0.42 £ - -£ 1.26 | | | | | | | | | | |
| Other: | | | | | | | | | | AMP7 PC P50 forecast £ - £ - £ - £ - £ - £ - | | | | | | | | | | |
| | | | | | | | | | | AMP7 PC P75 forecast £ - £ 0.22 £ 0.22 £ 0.22 £ - £ 0.65 | | | | | | | | | | |
| | | | | | | | | | | AMP7 PC P90 forecast £ - £ 0.22 £ 0.65 £ 0.86 £ - £ 1.72 | | | | | | | | | | |



2.3 Legacy – AMP6 PCs that will continue into AMP7 defined by Affinity Water

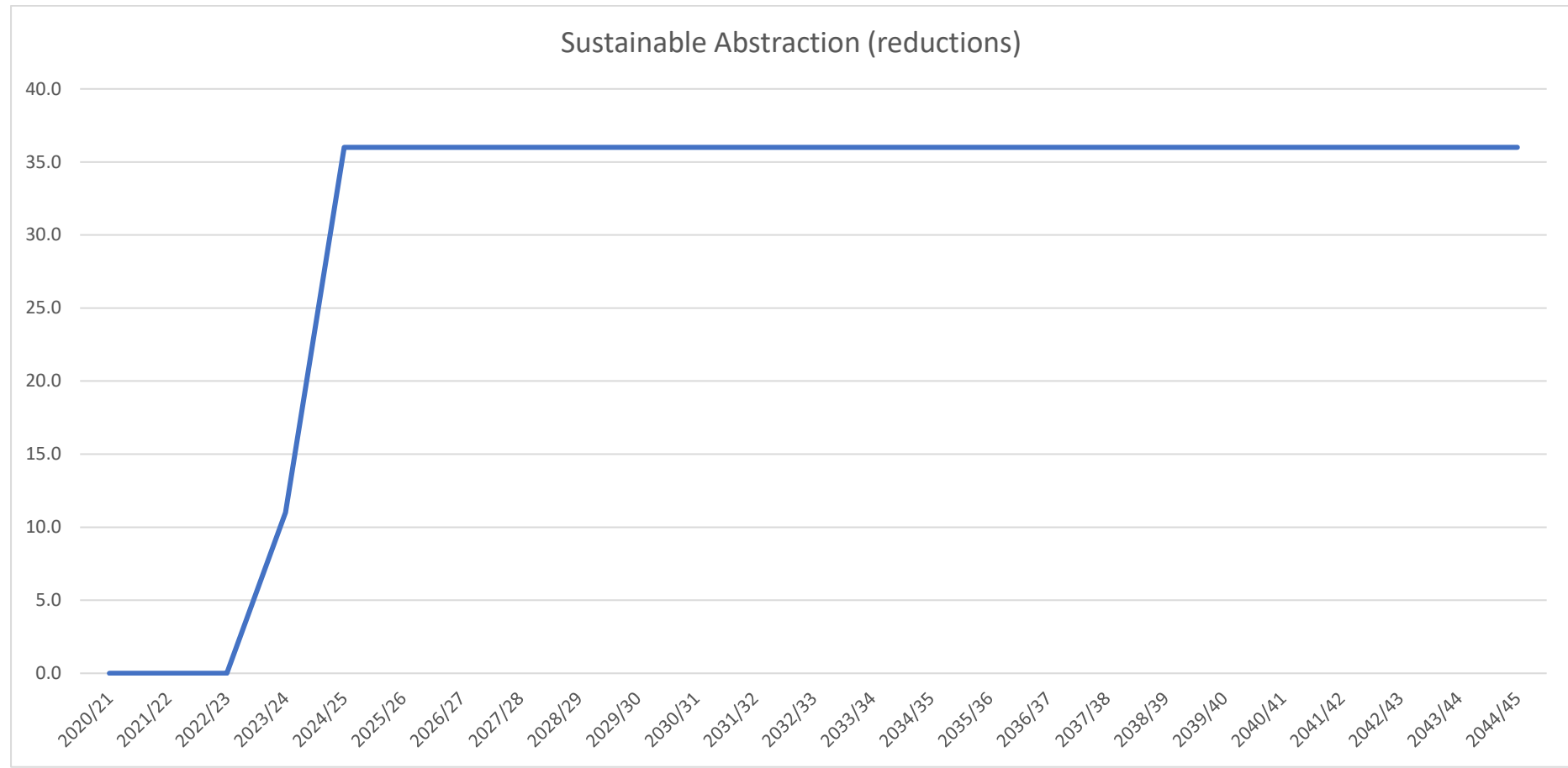
2.3.1 Sustainable Abstraction

| | |
|---|---|
| Definition | <ul style="list-style-type: none"> This performance commitment relates to the reduction in average deployable output made by December 2024, because of delivering the sustainability reductions programme. Sustainability reductions are decreases in deployable output due to a sustainability change to support Water Framework Directive (WFD) objectives. |
| Unit | <ul style="list-style-type: none"> Reduction in DO in million litres per day (MI/d). This is calculated as the reduction in the combined total annual average deployable output (in MI/d), between 2020 and 2025, of sources included in the sustainability reduction programme in our business plan submission, which will include a selection of reductions from WINEP3. |
| Target | <ul style="list-style-type: none"> Target is a reduction of 33 MI/d by end of AMP7. The aggregate total of deployable output reductions included in our sustainability reduction programme for achievement by 31 December 2024 will form the baseline target. The reduction in deployable output volume will be assessed as part of the annual update of the Water Resources Management Plan and through assessment of the aggregate total of distribution input for the previous year which is subject to independent audit. |
| Evidence that target is stretching | <ul style="list-style-type: none"> This is a bespoke PC with no comparative information available Historical performance is not directly relevant as each SR has its own unique characteristics but the 33 MI/d is in addition to 42MI/d delivered in AMP6. |
| Evidence of customer support for target (e.g. they are willing to pay for costs of achieving it, incl. outperformance payment ODIs; they can afford to pay for it). | <ul style="list-style-type: none"> Customers value the environment and think that Affinity has a role to protect it (see Appendix 3). Nine in ten customers (89%) say that the local environment is important to them personally, with half (50%) agreeing strongly. Similarly, two-thirds (67%) support Affinity Water reducing the amount of water taken from the water environment (see Appendix 3). Customers generally supported Affinity Water in taking less water from the environment (see Appendix 3). Abstraction hard to engage with and suspicion that the environment might be prioritised over customers (see Appendix 3). Customers only prioritised reducing abstraction after they understood what it was (see Appendix 3). A slight majority of future customers agree in taking less water from rivers and a majority agreed that we must take less water from aquifers (see Appendix 3). |
| Does the PC protect current and future customers? | <ul style="list-style-type: none"> Customers associate protecting the environment with future generations. This includes the need to educate future generations about water scarcity and looking after our resources for future generations. |

| 20-year view (AMP5 through to AMP8) | <ul style="list-style-type: none"> • Not available – new measure. • Our forecast assumes we will complete all reductions necessary to achieve good status by 2027 under the WFD. At the moment the EA are targeting completion by 2024 of all WINEP3 green and amber SR's to measure improvement by 2027 so we expect to complete all SR in AMP7 and good status by 2027 so flat after AMP7. We have no 'red' WINEP3 requirements. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--------|---------|--------|--------|--------|--------|--|--|---|---|---|---|-----------|-----|-----|-----|------|------|------------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|------|------------|-----|-----|------|------|------|------------|-----|------|------|------|------|
| ODI type (Financial/non-financial; outperformance payment/underperformance payment/both) | <ul style="list-style-type: none"> • Financial incentives with both outperformance and underperformance payments that will be applied in-period to revenue depending the outturn performance compared to target i.e. unit based incentives based on the timing of delivery against a clear schedule. • In-period means that any payments will be applied at the first possible opportunity so that an incentive payment from performance in year 1 will be reflected in bills in year 3. • We are not proposing a dead band or a cap or collar as the total incentive exposure for this PC both on outperformance and underperformance is limited by timing within the AMP. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Do customers support the ODI rates? | <ul style="list-style-type: none"> • We have tested the calibrated incentive rates as part of an overall package using P10/90 and P25/75. The projected performance and potential range (represented by P25/75) was specifically tested with customers. We expect the range of bill impacts to be +£0.50 to -£4.00 over the AMP. • Our specific engagement with customers showed this range to be acceptable. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P-ranges (performance in “MI/d reduction”) | <table border="1"> <thead> <tr> <th></th> <th>2020/21</th> <th>2021/2</th> <th>2022/2</th> <th>2023/2</th> <th>2024/2</th> </tr> <tr> <th></th> <th></th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> </tr> </thead> <tbody> <tr> <td>PC</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>11.0</td> <td>36.0</td> </tr> <tr> <td>P10</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> </tr> <tr> <td>P25</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>36.0</td> </tr> <tr> <td>P75</td> <td>0.0</td> <td>0.0</td> <td>11.0</td> <td>17.0</td> <td>36.0</td> </tr> <tr> <td>P90</td> <td>0.0</td> <td>10.0</td> <td>18.0</td> <td>33.0</td> <td>36.0</td> </tr> </tbody> </table> | | 2020/21 | 2021/2 | 2022/2 | 2023/2 | 2024/2 | | | 2 | 3 | 4 | 5 | PC | 0.0 | 0.0 | 0.0 | 11.0 | 36.0 | P10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | P25 | 0.0 | 0.0 | 0.0 | 0.0 | 36.0 | P75 | 0.0 | 0.0 | 11.0 | 17.0 | 36.0 | P90 | 0.0 | 10.0 | 18.0 | 33.0 | 36.0 |
| | 2020/21 | 2021/2 | 2022/2 | 2023/2 | 2024/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 2 | 3 | 4 | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PC | 0.0 | 0.0 | 0.0 | 11.0 | 36.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P25 | 0.0 | 0.0 | 0.0 | 0.0 | 36.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P75 | 0.0 | 0.0 | 11.0 | 17.0 | 36.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P90 | 0.0 | 10.0 | 18.0 | 33.0 | 36.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Delivery mechanism | <ul style="list-style-type: none"> • Sustainability reductions are decreases in deployable output due to a sustainability change which are proposed by the Environment Agency to improve river flow and ecology and to meet Water Framework Directive (WFD) objectives. • The Environment Agency uses the Water Industry National Environment Programme (WINEP) tables to notify proposed reductions and they are being considered as part of the development of our PR19 Water Resources Management Plan. • This PC relates to the reduction in average deployable output to be made by December 2024, because of changes to the volumes of water that Affinity Water can abstract, effected either through modification or revocation of abstraction licences or under an agreement pursuant to Section 20 of the Water Resources Act 1991. • Investments include, but are not limited to, abstraction reduction in St Albans, Digswell, Sundon reservoir water conditioning, water efficiency and water reuse schemes as well as strategic supply transfer schemes and a potential regional reservoir including public inquiry. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | |
|---------------------|---|
| Dependencies | <ul style="list-style-type: none">• Weather, resources, and investments outlined above. |
|---------------------|---|

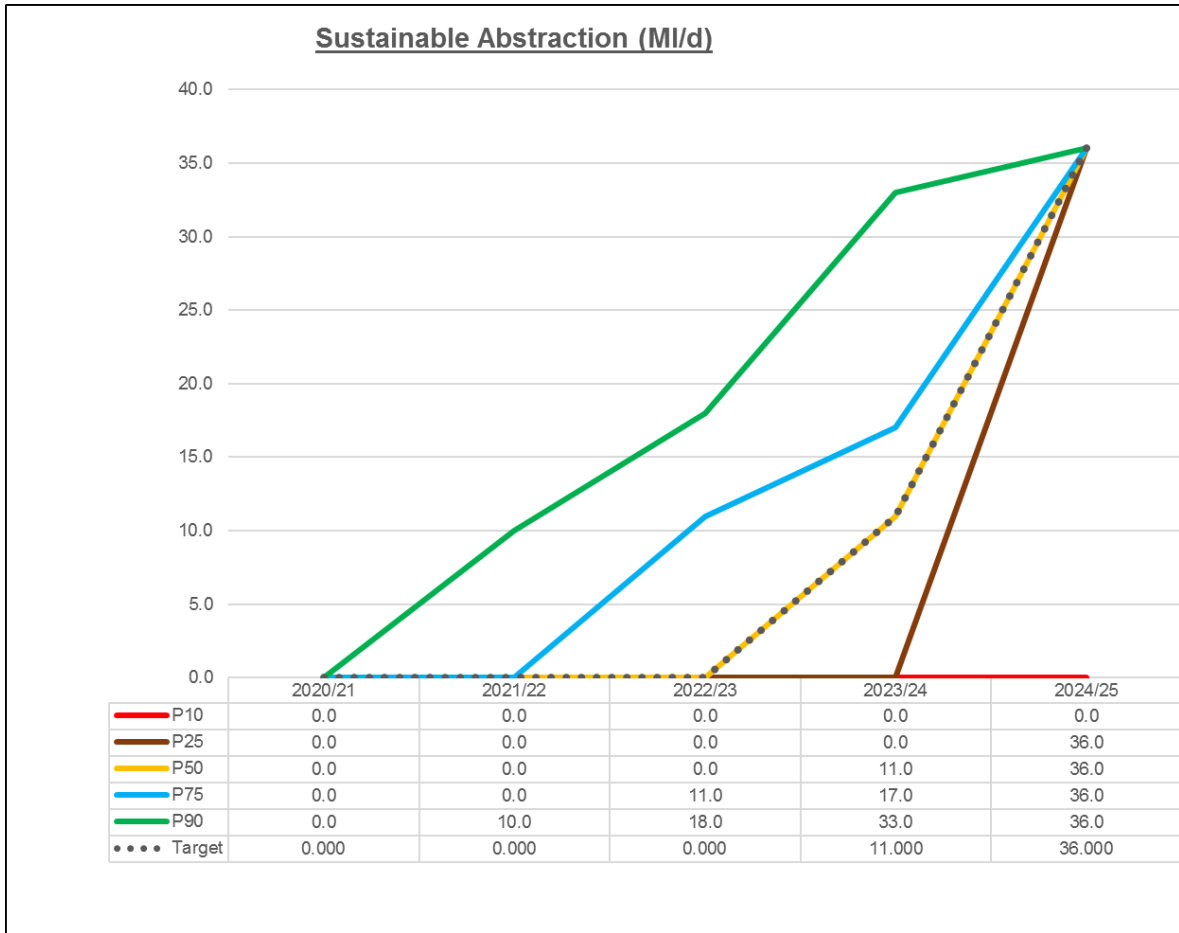
25-year forecast – Sustainable Abstraction



| 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | 2030/31 | 2031/32 | 2032/33 | 2033/34 | 2034/35 | 2035/36 | 2036/37 | 2037/38 | 2038/39 | 2039/40 | 2040/41 | 2041/42 | 2042/43 | 2043/44 | 2044/45 | |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------|
| 0.0 | 0.0 | 0.0 | 11.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 |

Final ODI Design – Sustainable Abstraction

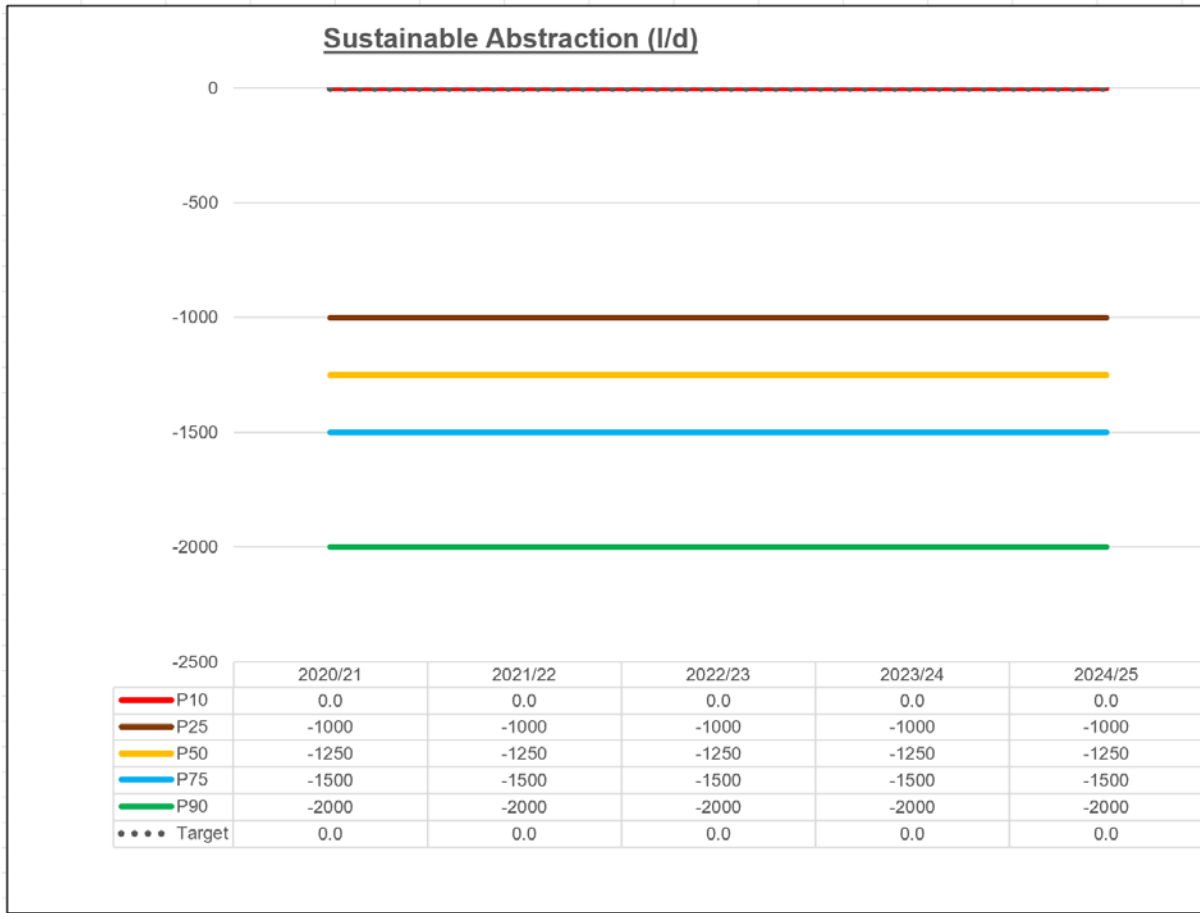
| Sustainable Abstraction | Ml/d reduction in DO | | | | | | | | | | | | | | | | | | | | |
|----------------------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------------------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| | AMP5 | | | | | AMP6 | | | | AMP7 | | | | | AMP8 | | | | | | |
| | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30 | |
| Actual | | | | | | | | | | | | | | | | | | | | | |
| Target | | | | | | | | | | | 0.00 | 0.00 | 0.00 | 11.00 | 36.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| AMP6 PC Forecast | | | | | | | | | | | | | | | | | | | | | |
| AMP7 PC P10 forecast | | | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| AMP7 PC P25 forecast | | | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 36.0 | | | | | | |
| AMP7 PC P50 forecast | | | | | | | | | | 0.0 | 0.0 | 0.0 | 0.0 | 11.0 | 36.0 | | | | | | |
| AMP7 PC P75 forecast | | | | | | | | | | 0.0 | 0.0 | 0.0 | 11.0 | 17.0 | 36.0 | | | | | | |
| AMP7 PC P90 forecast | | | | | | | | | | 0.0 | 0.0 | 10.0 | 18.0 | 33.0 | 36.0 | | | | | | |
| Incentive rates | | | | | | | | | | | Under/Outperformance | | | | | | | | | | |
| | | | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | |
| Underperformance payment | £ | 241,036 | £ | 48,207 | | | | | | AMP7 PC P10 forecast | 0.0 | 0.0 | 0.0 | -11.0 | -36.0 | | | | | | |
| Outperformance payment | £ | 179,307 | £ | 35,861 | | | | | | AMP7 PC P25 forecast | 0.0 | 0.0 | 0.0 | -11.0 | 0.0 | | | | | | |
| | | | | | | | | | | AMP7 PC P50 forecast | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| ODI detailed design | Financial | | | | | | | | | AMP7 PC P75 forecast | 0.0 | 0.0 | 11.0 | 6.0 | 0.0 | | | | | | |
| | | | | | | | | | | AMP7 PC P90 forecast | 0.0 | 10.0 | 18.0 | 22.0 | 0.0 | | | | | | |
| ODI type: | £ + / (-) unit based | | | | | | | | | | | | | | | | | | | | |
| ODI form: | Revenue | | | | | | | | | | | | | | | | | | | | |
| ODI timing: | In period | | | | | | | | | | | | | | | | | | | | |
| ODI Cap/Collar: | None | | | | | | | | | | | | | | | | | | | | |
| ODI Dead band: | None | | | | | | | | | | | | | | | | | | | | |
| Other: | Benefits set equal to costs | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | Uncalibrated incentives due £m | | | | | | | | | | | |
| | | | | | | | | | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | AMP7 | | | | | |
| | | | | | | | | | | AMP7 PC P10 forecast | £ - | £ - | £ - | -£ 0.53 | -£ 1.74 | -£ 2.27 | | | | | |
| | | | | | | | | | | AMP7 PC P25 forecast | £ - | £ - | £ - | -£ 0.53 | £ - | -£ 0.53 | | | | | |
| | | | | | | | | | | AMP7 PC P50 forecast | £ - | £ - | £ - | £ - | £ - | £ - | | | | | |
| | | | | | | | | | | AMP7 PC P75 forecast | £ - | £ - | £ 0.39 | £ 0.22 | £ - | £ 0.61 | | | | | |
| | | | | | | | | | | AMP7 PC P90 forecast | £ - | £ 0.36 | £ 0.65 | £ 0.79 | £ - | £ 1.79 | | | | | |



2.3.2 Abstraction Incentive Mechanism

| | |
|---|--|
| Definition | <ul style="list-style-type: none"> The objective of the Abstraction Incentive Mechanism (AIM) is to encourage water companies to reduce the environmental impact of abstracting water at environmentally sensitive sites in low flow periods (e.g. droughts). This PC remains unchanged from PR14, it is a “PR14 continuation” of our current measurement. It is also in line with Ofwat PR19 definition of AIM. |
| Unit | <ul style="list-style-type: none"> AIM score (Megalitres) |
| Target | <ul style="list-style-type: none"> Target is zero for each year of AMP7 (a negative score would result in an outperformance payment). A review of the AIM triggers and baseline abstraction will be undertaken on a quarterly and annual basis to validate the selected values. Once validated, the actual abstraction figures will be measured against the AIM baseline abstraction values, for the time period(s) that the catchment triggers were activated in that period. This will happen annually, between 1 April and 31 March. The individual normalised scores for each source/group of sources will then be totalised to indicate the company performance. |
| Evidence that target is stretching | <ul style="list-style-type: none"> To achieve a negative score (and outperformance payment) under AIM we need to reduce our “dry period” abstraction from environmentally-important catchments and replace the supply with alternative sources. This is always a challenging activity because activation of the AIM depends on being in a dry period, so if the target was set at less than zero we could incur an underperformance payment just because there had been no dry-period which caused the AIM to activate. |
| Evidence of customer support for target (e.g. they are willing to pay for costs of achieving it, incl. outperformance payment ODIs; they can afford to pay for it). | <ul style="list-style-type: none"> Customers value the environment and think that Affinity has a role to protect it (see Appendix 3). Nine in ten customers (89%) say that the local environment is important to them personally, with half (50%) agreeing strongly. Similarly, two-thirds (67%) support Affinity Water reducing the amount of water taken from the water environment (see Appendix 3). Customers generally supported Affinity Water in taking less water from the environment (see Appendix 3). A slight majority of future customers agree in taking less water from rivers and a majority agreed that we must take less water from aquifers (see Appendix 3). |
| Does the PC protect current and future customers? | <ul style="list-style-type: none"> The purpose of abstraction reductions is to preserve the environment for both current and future customers. |
| 20-year view (AMP5 through to AMP8) | <ul style="list-style-type: none"> Not available – new measure. We are forecasting a continuing (minimum) target of zero, with everything above zero being a positive environmental benefit. |

| ODI type (Financial/non-financial; outperformance payment/underperformance payment/both) | <ul style="list-style-type: none"> Financial incentives with outperformance payments only that will be applied in-period to revenue depending the outturn performance compared to target i.e. unit based incentives. In-period means that any payments will be applied at the first possible opportunity so that an incentive payment from performance in year 1 will be reflected in bills in year 3. We are not proposing a dead band or a cap or collar. We do not consider underperformance payments to be appropriate. As every unit volume of groundwater abstraction reduced from the AIM baseline must be replaced either by more expensive alternative supplies or reductions in use, we are anticipating the outperformance payment will reflect the opportunity cost of replacement water. (adjusted for the Totex sharing mechanism) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---------|---------|---------|---------|---------|---------|-----------|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|------------|-------|-------|-------|-------|-------|------------|-------|-------|-------|-------|-------|------------|-------|-------|-------|-------|-------|
| Do customers support the ODI rates? | <ul style="list-style-type: none"> We have tested the calibrated incentive rates as part of an overall package using P10/90 and P25/75. The projected performance and potential range (represented by P25/75) was specifically tested with customers. We expect the range of bill impacts to be +£0.50 to -£4.00 over the AMP. Our specific engagement with customers showed this range to be acceptable. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P-ranges (performance in “AIM score - ML”) | <table border="1"> <thead> <tr> <th></th> <th>2020/21</th> <th>2021/22</th> <th>2022/23</th> <th>2023/24</th> <th>2024/25</th> </tr> </thead> <tbody> <tr> <td>PC</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> </tr> <tr> <td>P10</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> </tr> <tr> <td>P25</td> <td>-1000</td> <td>-1000</td> <td>-1000</td> <td>-1000</td> <td>-1000</td> </tr> <tr> <td>P75</td> <td>-1500</td> <td>-1500</td> <td>-1500</td> <td>-1500</td> <td>-1500</td> </tr> <tr> <td>P90</td> <td>-2000</td> <td>-2000</td> <td>-2000</td> <td>-2000</td> <td>-2000</td> </tr> </tbody> </table> | | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | PC | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | P10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | P25 | -1000 | -1000 | -1000 | -1000 | -1000 | P75 | -1500 | -1500 | -1500 | -1500 | -1500 | P90 | -2000 | -2000 | -2000 | -2000 | -2000 |
| | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PC | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P25 | -1000 | -1000 | -1000 | -1000 | -1000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P75 | -1500 | -1500 | -1500 | -1500 | -1500 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P90 | -2000 | -2000 | -2000 | -2000 | -2000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Delivery mechanism | <ul style="list-style-type: none"> Where Sustainability Reductions (SRs) have reduced Deployable Output (DO) to zero MI/d, the AIM will no longer apply to these sources as the impact of abstraction has been mitigated. Where DO has not been reduced to zero MI/d, there remains the potential for a residual abstraction influence and so there is a benefit in continuing to assess AIM against a lower AIM baseline. This will be in line with the post-SR licence once the latter is in place. Also, we have applied groupings between sources that are in the same catchment and share the same AIM trigger which is typically the downstream gauge of both sources in the grouping, such that the benefit of their combined operation can be realised. The reason for the grouping is to allow operational resilience during a low flow period and allows an accurate AIM score to be calculated when applying the normalisation. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dependencies | <ul style="list-style-type: none"> Weather and underlying water resources. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

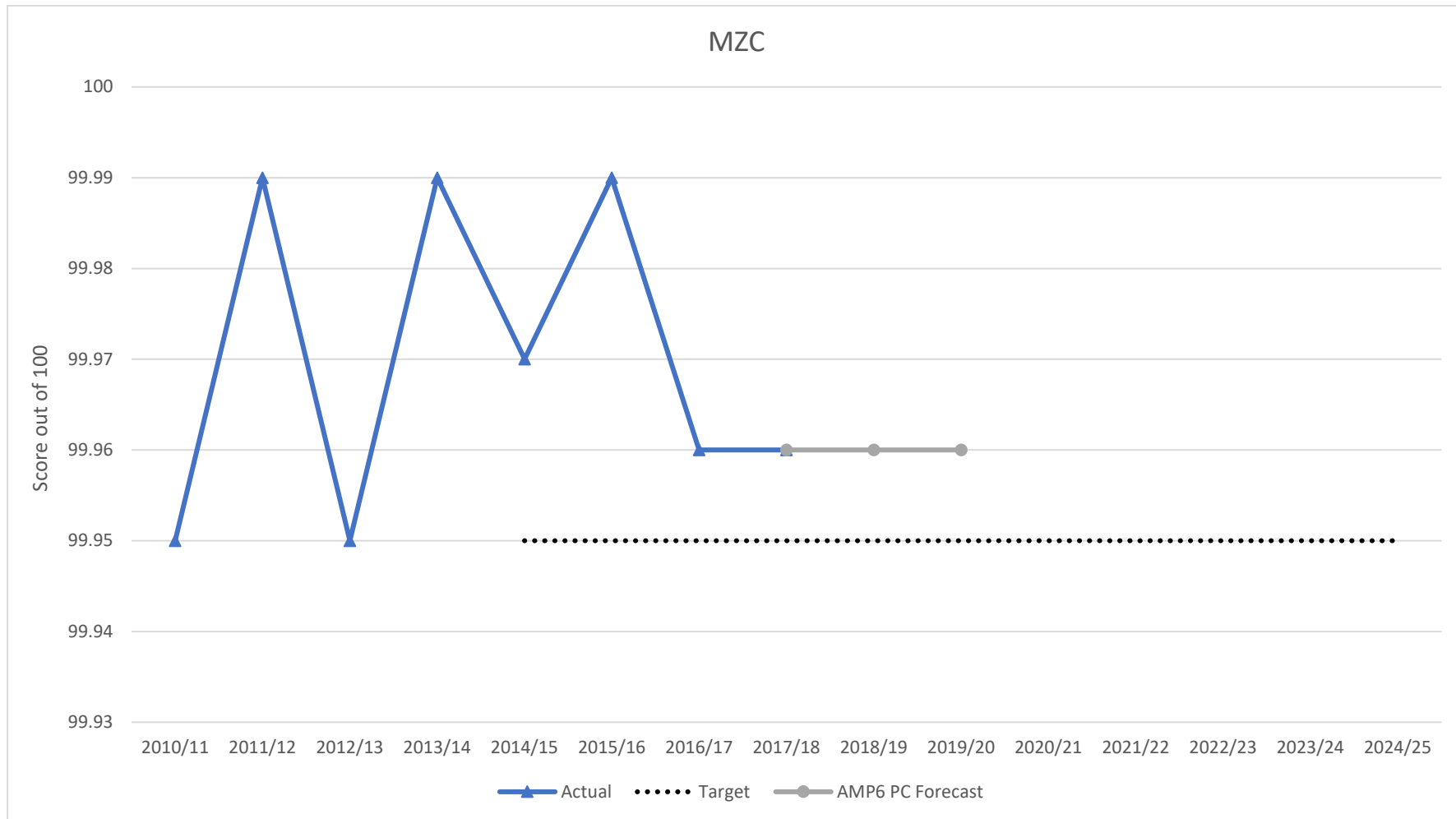


2.3.3 Water Quality – Mean Zonal Compliance

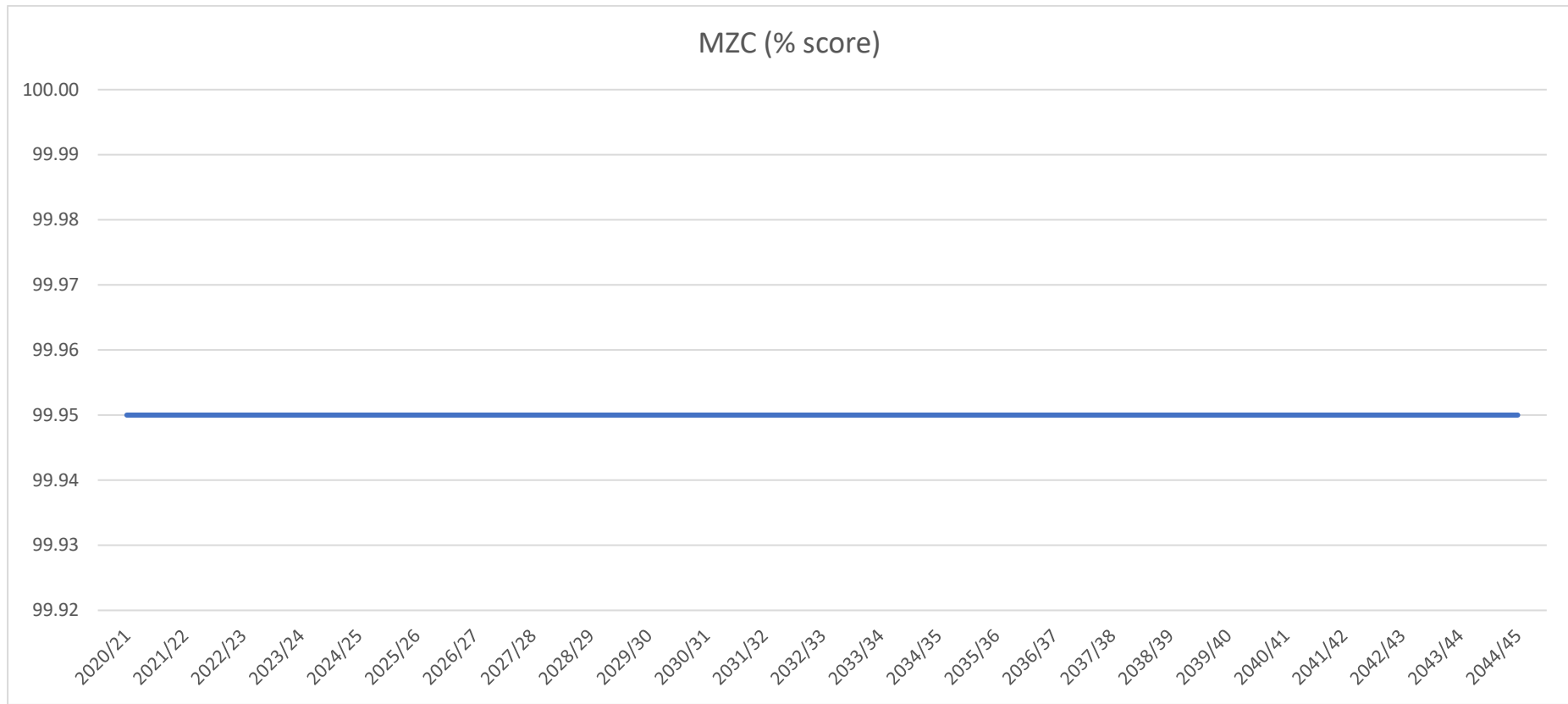
| | |
|---|---|
| Definition | <ul style="list-style-type: none"> Mean Zonal Compliance (MZC) is a measure of compliance with the relevant drinking water standards for 39 key chemical and microbiological parameters that are tested to establish the quality of water and is the main measure used by Drinking Water Inspectorate to demonstrate compliance. This is contained within the Drinking Water Directive and The Water Supply (Water Quality) Regulations 2016. |
| Unit | <ul style="list-style-type: none"> MZC performance is measured annually as a percentage. The unit is percentage compliance with standards a year on a calendar year basis. This PC remains unchanged from PR14, it is a “PR14 continuation” of our current measurement. |
| Target | <ul style="list-style-type: none"> No lower score than 99.95 for each year of AMP7. |
| Evidence that target is stretching | <ul style="list-style-type: none"> This measure is intended to show customers continuity in water quality measurement. It is designed to work in conjunction with the CRI discussed earlier. |
| Evidence of customer support for target (e.g. they are willing to pay for costs of achieving it, incl. outperformance payment ODIs; they can afford to pay for it). | <ul style="list-style-type: none"> 79% of customers consider guaranteeing a supply of high quality water they can trust as extremely important for Affinity Waters’ future (see Appendix 3). Customers are positive about the quality of the water they receive, 80% trust the quality of the water they receive and prioritised receiving a high quality of water (see Appendix 3). Clean/safe water was mentioned by most future customers when asked about what the most important thing about their water supply was, the majority also recognised that clean/safe water is a crucial resource (see Appendix 3). Of the positive drivers influencing value for money, water quality has risen significantly (see Appendix 3). |
| Does the PC protect current and future customers? | <ul style="list-style-type: none"> We will maintain a target that will ensure that both current and future customers can continue to trust the quality of their water supply. |
| 20-year view (AMP5 through to AMP8) | <ul style="list-style-type: none"> See following page |
| ODI type (Financial/non-financial; outperformance payment/underperformance payment/both) | <ul style="list-style-type: none"> This is a reputational (non-financial incentive) ODI We have retained this PC to provide clear reporting to customers, retaining continuity with existing reporting. |
| Do customers support the ODI rates? | Not applicable |
| P-ranges (performance in “MZC score”) | <ul style="list-style-type: none"> Not available |
| Delivery mechanism | <ul style="list-style-type: none"> Deliver capital improvement projects that: <ul style="list-style-type: none"> Maintain reliable operation of treatment and water source based facilities. Prevent failure of water source and treatment |

| | |
|---------------------|---|
| | <p>infrastructure and equipment.</p> <ul style="list-style-type: none"> ○ Improve process efficiency of water source and treatment facilities. • Maintain asset reliability, resilience and efficiency. • Operate storage assets to balance demand across areas of supply while ensuring compliance with water quality regulations and minimise contamination risks. • Construct new storage assets to provide resilience to supply and allow for inspection & maintenance in compliance with reservoirs Act 1975 as well as undertake maintenance to preserve serviceability of our storage asset and minimise whole life costs. • Provide high quality drinking water by enhancing our treatment and monitoring capability for Metaldehyde and pesticides to meet our obligations under DWI regulations. |
| Dependencies | <ul style="list-style-type: none"> • Weather, planned maintenance programmes, asset criticality and inspection and sampling regimes. |

MZC 20 Year View – AMP5 to AMP8



25-year forecast – MZC



| 2020/ 21 | 2021/ 22 | 2022/ 23 | 2023/ 24 | 2024/ 25 | 2025/ 26 | 2026/ 27 | 2027/ 28 | 2028/ 29 | 2029/ 30 | 2030/ 31 | 2031/ 32 | 2032/ 33 | 2033/ 34 | 2034/ 35 | 2035/ 36 | 2036/ 37 | 2037/ 38 | 2038/ 39 | 2039/ 40 | 2040/ 41 | 2041/ 42 | 2042/ 43 | 2043/ 44 | 2044/ 45 |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 99.95 | 99.95 | 99.95 | 99.95 | 99.95 | 99.95 | 99.95 | 99.95 | 99.95 | 99.95 | 99.95 | 99.95 | 99.95 | 99.95 | 99.95 | 99.95 | 99.95 | 99.95 | 99.95 | 99.95 | 99.95 | 99.95 | 99.95 | 99.95 | 99.95 |

3 ODI Calculation Methodology

3.1 Financial ODIs – overall approach

Ofwat requires companies to use the following equation to generate the ODI rates:

ODI underperformance (underperformance payment) = Incremental benefit – (incremental cost x p)

ODI outperformance (outperformance payment) = Incremental benefit x (1-p)¹

This paper sets out our approach to calculating the incremental costs and benefits for each of our PCs. The “p” value is the sharing rate, which we have set at 50% for all of our financial ODIs.

Table 1 shows a summary of the ODI values we have calculated.

Table 1: All financial ODI values

| PC | Unit | Benefit | Cost | Under performance payment | Out performance payment |
|----------------------------|--|---------------|---------------|---------------------------|-------------------------|
| Supply interruptions | Average supply interruption greater than three hours (mins per property) | £598,833.90 | £544,333.33 | £326,667.23 | £299,416.95 |
| Leakage | % reduced over AMP7, base year 2019/20 | £1,212,583.18 | £785,820.35 | £819,673.01 | £606,291.59 |
| PCC | Litres per head per day (l/h/d) | £729,253.87 | £478,199.26 | £490,154.24 | £364,626.94 |
| Unplanned outage | Lost capacity as % of total company maximum production capacity | £3,478,095.24 | £3,478,095.24 | £1,739,047.62 | N/A |
| Mains bursts | No. of burst mains per 1,000 km of pipe (per year) | £179,417.59 | £179,417.59 | £89,708.79 | N/A |
| CRI | Per point of score | £966,148.75 | £966,148.75 | £483,074.38 | N/A |
| Low water pressure | Average hours per property of persistent low pressure | £477,784.50 | £23,062.02 | £466,253.49 | £238,892.25 |
| Environmental innovation | Number of projects completed | £5,666.67 | £5,666.67 | £2,833.33 | £2,833.33 |
| River quality improvements | Per project | £431,150.87 | £20,975.57 | £420,663.08 | £215,575.44 |
| Sustainability reductions | MI/d reduction | £358,614.47 | £235,157.03 | £241,035.96 | £179,307.24 |
| False void | % residential void rate | £4,933,250.70 | £403,001.15 | £4,731,750.13 | £2,466,625.35 |
| Gap | Number of gaps detected | £1,433.26 | £1,433.26 | £716.63 | £716.63 |
| AIM | ML | £157.00 | £188.40 | N/A | £78.50 |

¹ Delivering Water 2020: Our final methodology for the 2019 price review, Ofwat, December 2017, Appendix 2, p.91

3.1.1 Exclusions

Risk of severe restrictions in a drought

We have decided not to assign a financial ODI to this Common PC. This is because any improved performance to this PC will be through investment in other PCs. For example, by reducing our PCC and leakage levels and implementing the sustainability reductions (through new network connections) we will improve our drought resilience. Therefore, this will lead to outperformance payment multiples if we outperform on these contingent PCs, and if we underperform, we could be exposed to double-jeopardy.

3.1.2 Caps, collars and deadbands

We have followed the Ofwat guidance in not setting caps, collars and deadbands for the majority of our ODIs.

However, in the case of the Leakage and PCC ODIs, we have set collars on the basis that under our P10 scenarios our underperformance payments would far exceed 3% of RoRE, exposing us to significant financial risk. For PCC, we have set an underperformance payment collar at 5Ml/d over the target reduction (per annum). For Leakage, we have set the underperformance payment collar at 3.064% under the target reduction (per annum).

We have also set outperformance payment caps for Leakage and PCC. For Leakage we have set a outperformance payment cap 0.1% beyond the forecast P90 for each year. For PCC, have set a outperformance payment cap at 1 l/h/d beyond the forecast P90 for each year.

We have also put in underperformance payment collars for unplanned outage and mains bursts at the P10 levels. These are 4.3% of production capacity each year for unplanned outage, and for mains bursts this is at 200 mains burst per 1,000km of main each year. We have also imposed an underperformance payment collar for low pressure at 4 hours above the target reduction each year; this is beyond our P10 scenario, so we do not envisage it being triggered in AMP7.

Our CRI score target is zero, however due to this being a new measure and the risk of measurement changes during AMP7 leading to significant score variability, we have set a deadband at our current shadow reporting score of 2.8, and an underperformance payment collar at 4, for every year of AMP7.

We have introduced a deadband for supply interruptions. This is because we are starting AMP7 at a disadvantage to the majority of other companies, as our AMP6 target was “properties subject to an unplanned interruption over 12 hours”. We have therefore set deadbands to protect the company from underperformance payments in cases where we have made significant improvements beyond any level that we have historically achieved. We have a deadband for 3-5 minutes in year 1, 3-4.5 minutes for year 2, 3-4.0 minutes for year 3, 3-3.5 minutes for year 4 and no deadband in year 5. We have also set an underperformance payment collar at 5 minutes above the year 1 target, fixed over the AMP.

3.2 Approach to calculating costs

We have annualised the costs for our ODI calculations.

This is done to represent the fact that under the regulatory regime, capital expenditure is treated as “slow money” and billed to customers in line with the depreciation rate of the asset.

Operational expenditure is treated as “fast money”, which flows through to customer bills in the year in which it is incurred; where we have an OPEX figure for the whole of AMP7, we annualise this cost over the five years of the period.

We also include a Return on Capital calculation to represent this “cost” element of the bill to consumers.

The purpose of this approach is to ensure that customers are reimbursed for the costs they have borne, in-period, for any under-delivery of a given Performance Commitment for which a financial ODI is attached.

3.2.1 Modelling methodology

1. We take the relevant CAPEX and OPEX calculations to achieve a given PC target.
2. For CAPEX depreciation (slow-money):
 - We assume a lifetime (in years) of the asset.
 - We assume linear depreciation, so we divide the total CAPEX investment by the number of years of the lifetime of the asset. This is the **Depreciation** part of the bill.
3. For Return on Capital:
 - The ROC is based on the annual total CAPEX added to RCV (minus depreciation).
 - Similar to the CAPEX depreciation, the customer will be paying an ROC as the total CAPEX added to RCV is depreciated each year of AMP7.
 - To represent this effect as a single figure, we take the Y1 total CAPEX (minus zero depreciation) and the Y5 CAPEX (minus depreciation x 5), and take the mean of these two values. This represents the “average amount” of depreciated CAPEX on which ROC will be computed over AMP7.
 - We use an indicative ROC/WACC rate of 2.4%, and apply this to the average depreciated CAPEX, to get the ROC figure.
4. For OPEX (fast-money)
 - We take the OPEX for the investment and divide it by five, as this represents that, as “fast-money”, the customer pays for it in the year in which it is incurred.
5. We then add the OPEX, depreciation and ROI together to give a figure that represents the total per annum cost for customer for that PC.
6. Finally, we take the unit delta for the PC (e.g. Ml/d reduction) and use it as the denominator, with the total cost value as the numerator.
7. This then provides a “cost per unit”.
8. We consider this to be a marginal cost, as the total costs for each of our PCs are based on modelling outputs that give the most efficient costs for meeting stretching targets, and therefore represent the most economically efficient points on a cost curve to meet the output target.

3.2.2 Components of the individual ODIs

Supply interruptions

In order to reduce our supply interruptions target from the current level of 12 minutes average supply interruption greater than three hours per property, to 3 minutes, we will need to make significant OPEX investments.

As this is OPEX-only, we do not assume a level of depreciation.

We treat the reduction delta of 9 minutes as the denominator.

This gives a cost of £544,333.33 per minute per property interrupted.

Table 2: Business plan investment - Supply interruptions

| | CAPEX | OPEX |
|---|-----------------------|-------------|
| <i>Risk Mitigation (reducing SI from 12 to 3mins)</i> | OPEX only used for SI | £24,495,000 |

Leakage

To reduce our leakage, we will need to undertake a combination of both OPEX and CAPEX activities. Operational costs involve the labour costs incurred in going out to detect the leaks, and the capital costs include the installation of district meters, pressure reducing valves and purchasing leakage detection equipment.

Table 3: Business plan investment - Leakage

| | CAPEX | OPEX |
|---|-------------|-------------|
| <i>Leakage</i> | £ - | £48,585,720 |
| <i>Leakage Infrastructure and Maintenance</i> | £14,170,000 | £ - |
| <i>Network Ancillaries</i> | £40,000,000 | £ - |
| Total | £54,170,000 | £48,585,720 |

One year of OPEX is £9,717,144.

We assume that the assets involved in this measure have a lifespan of 60 years on average. This gives a one-year depreciation of £902,833.

The return on capital is calculated as £1,245,910.

Our target is a 15.1% reduction on our assumed AMP6 end position of 162.2 MI/d. This equates to 24.5 MI/d reduction over AMP7. We use the 15.1 percentage point reduction as the denominator.

Table 4: Leakage cost calculations

| Category | Value |
|-----------------------|-------------|
| Depreciation (1 year) | £902,833 |
| Return on Capital | £1,245,910 |
| OPEX (1 year) | £9,717,144 |
| Total | £11,865,887 |
| Denominator | 15.1 |
| Unit cost | £785,820 |

The unit cost is £785,820.35 per percentage point.

PCC

A significant amount our investment in reducing consumption will be in installing boundary boxes and meters. There are a number of other investments that will be required as well, which are CAPEX-heavy.

Table 5: Business plan investment - PCC

| | CAPEX | OPEX |
|------------------------------------|---------------------|-------------------|
| Fast data | £12,300,000 | £0 |
| Water Efficiency Schemes | £14,140,000 | £0 |
| Water Reuse Schemes | £28,040,000 | £0 |
| National water efficiency campaign | £3,000,000 | £0 |
| Unmeasured non-household meters | £7,530,000 | £0 |
| Baseline Water Saving | £69,350,000 | £5,865,000 |
| Total | £134,360,000 | £5,865,000 |

One year of OPEX is £1,173,000.

We assume that on average, these assets have an assumed lifespan of 30 years. This gives a one-year depreciation of £4,478,667.

The return on capital is calculated as £2,955,920.

Our target is a reduction to 129 l/h/d by end of AMP7, and our starting position at the beginning of AMP7 is forecast to be 147 l/h/d. This equates to a reduction of 18 l/h/d over the period.

Table 6: PCC cost calculations

| Category | Value |
|-----------------------|------------|
| Depreciation (1 year) | £4,478,667 |
| Return on Capital | £2,955,920 |
| OPEX (1 year) | £1,173,000 |
| Total | £8,607,587 |
| Denominator | 18 |
| Unit cost | £478,199 |

This gives a unit cost of £478,199 per l/h/d reduction.

Unplanned outage

We plan to spend £11,000,000 on CAPEX per annum in AMP7 to maintain our unplanned outage level of 3.5% (lost capacity as % of total company maximum production capacity). This equates to a total cost over AMP7 of £55,000,000.

These investments include repairing and replacing long-life non-infrastructure assets like reservoirs and pumping stations, but mainly involve shorter-lived M&E work. We therefore assume an average asset lifespan of 30 years. This gives a one-year depreciation of £1,833,333.

The return on capital is calculated as £1,210,000.

We assume that if we did not make the CAPEX investment, our unplanned outage level of 3.5% would increase by an additional 25% over AMP7. This would translate to an additional 0.875 percentage points. We therefore use 0.875 as the denominator.

Table 7: Unplanned outage cost calculations

| Category | Value |
|-----------------------|------------|
| Depreciation (1 year) | £1,833,333 |
| Return on Capital | £1,210,000 |
| OPEX (1 year) | £0 |
| Total | £3,043,333 |
| Denominator | 0.875 |
| Unit cost | £3,478,095 |

This gives a cost of £3,478,095 per percentage point of lost capacity as % of total company maximum production capacity.

Mains bursts

To proactively prevent bursts, we need to renew the network of mains that supply our customers.

Table 8: Business plan investment - Mains bursts

| | CAPEX | OPEX |
|------------------------------------|-------------|------|
| <i>Distribution Mains Renewals</i> | £38,000,000 | £ - |
| Total | £38,000,000 | £ - |

Mains are long-life assets with an assumed lifespan of 100 years. This gives a one-year depreciation of £380,000.

The return on capital is calculated as £889,200.

We are proposing that our target is to main the AMP6 level of 186 burst mains per 1,000 km of pipe (per year). However, we do not think it is plausible that without investment our number of mains bursts would increase so sharply over the AMP, so we instead use our Pioneer model to assess the real effect of not making this investment.

The Pioneer model output shows that without this investment, we would see a rise in absolute mains bursts of 118 over the AMP. Normalised by 1000km of mains (16.68), this gives a figure of 7.074. We use 7.074 as the delta for the cost figure.

Table 9: Mains bursts cost calculations

| Category | Value |
|-----------------------|----------|
| Depreciation (1 year) | £380,000 |
| Return on Capital | £889,200 |

| | |
|---------------|------------|
| OPEX (1 year) | £0 |
| Total | £1,269,200 |
| Denominator | 7.074 |
| Unit cost | £179,418 |

This gives a cost of £179,418 per mains burst per prevented per 1,000km of main.

CRI

There are numerous activities which a water company undertakes in order to preserve water quality, which are fundamental to maintaining a CRI score of zero.

Table 10: Business plan investment - CRI

| | CAPEX | OPEX |
|---|--------------------|-------------------|
| Nitrates Management | £9,955,677 | £ - |
| Other Pollutants - Disinfections Compliance | £889,385 | £ - |
| Egham aluminium management | £640,200 | £1,950,000 |
| Disinfection in Dour | £3,000,000 | £ - |
| GAC | £7,151,531 | £ - |
| Iver aluminium management | £2,324,400 | £1,950,000 |
| North Mymms Turbidity | £3,849,000 | £ - |
| Egham Chertsey Walton Ozone | £1,898,000 | £ - |
| Iver Ozone | £4,798,000 | £ - |
| Disinfection at Denge | £286,877 | £ - |
| Total | £34,793,069 | £3,900,000 |

One year of OPEX is £780,000.

We assume that the assets involved in this measure have a lifespan of 30 years on average. This gives a one-year depreciation of £1,159,769.

The return on capital is calculated as £765,448.

We are targeting a CRI score of zero, however given that this is a new measure and there is a possibility of scoring and measurement errors, we are proposing a deadband set at the level of the current shadow reporting average of 2.8. We use this as the denominator.

Table 11: CRI cost calculations

| Category | Value |
|----------|-------|
|----------|-------|

| | |
|-----------------------|------------|
| Depreciation (1 year) | £1,159,769 |
| Return on Capital | £765,448 |
| OPEX (1 year) | £780,000 |
| Total | £2,705,217 |
| Denominator | 2.8 |
| Unit cost | £966,149 |

This gives a cost of £966,149 per point of CRI.

Low water pressure

The general activities to tackle low water pressure involve installing booster pumps, laying reinforcements, new district meters and installing pressure control valves.

Table 12: Business plan investment - Resolving persistent low pressure

| | CAPEX | OPEX |
|--------------|------------|------|
| Low Pressure | £2,500,000 | £ - |

We assume the assets have an overall assumed average lifespan of 60 years. This gives a one-year depreciation of £41,667.

The return on capital is calculated as £57,500.

Meeting our target of 8.6 hours per property of persistent low pressure will mean a decrease of 4.3 hours from our end of AMP6 level of 12 hours. This is the denominator we use to create the “per unit” cost for this PC.

Table 13: Low pressure cost calculations

| Category | Value |
|-----------------------|---------|
| Depreciation (1 year) | £41,667 |
| Return on Capital | £57,500 |
| OPEX (1 year) | £0 |
| Total | £99,167 |
| Denominator | 4.3 |
| Unit cost | £23,062 |

This gives a cost of £23,062 per hour of persistent low pressure reduced.

Environmental innovation

We are planning to implement eight pilot projects over AMP7, all of which are assumed to be CAPEX-only investments.

Table 14: Business plan investment - Environmental innovation

| | CAPEX | OPEX |
|--|------------|------|
| Resilience and Environment Community Pilot schemes | £2,000,000 | £0 |

We assume that on average, these investments have a lifespan of 60 years. This gives a one-year depreciation of £33,333.

The return on capital is calculated as £46,000.

Given that these projects vary in size and cost, with one project in particular accounting for around half the total budget, we propose that the cost is calculated as 1/14th of the total project cost. This weighting is based on 7 projects being worth half the total project budget, and the other half (7 units) of the budget being assigned to the remaining project. We therefore use 14 as the denominator.

Table 15: Environmental innovation cost calculations

| Category | Value |
|-----------------------|---------|
| Depreciation (1 year) | £33,333 |
| Return on Capital | £46,000 |
| OPEX (1 year) | £0 |
| Total | £79,333 |
| Denominator | 14 |
| Unit cost | £5,667 |

This gives a cost of £5,667 per unit of project completed.

False void

The cost for locating a false void are entirely OPEX based. We have calculated a cost of £28.27 per void detected.

This figure needs to be expressed as “voids as a % of total household billed properties”. To do this, we take our total property number (1,425,795) and divide by 100. This gives a 1% of total billed properties figure of 14,258.

We multiply the cost figure of £28.27 by 14,258, giving a “total cost for 1% of void reduction” of £403,001.

Given the value is entirely OPEX-based and within-year, we do not annualise it.

Gap

We do not have a specific cost associated with gap site detection, so we have simply set benefits equal to costs.

River quality improvements

In order to improve the quality of our rivers, we need to invest in schemes such as rerouting rivers and streams (morphological works).

Table 16: Business plan investment - River quality improvements

| | CAPEX | OPEX |
|----------------------------|--------------------|------------|
| Level river support scheme | £500,000 | £ - |
| Morphological Works | £18,536,654 | £ - |
| Total | £19,036,654 | £ - |

We assume these are long-life assets, with a lifespan of 60 years. This gives a one-year depreciation of £317,278.

The return on capital is calculated as £437,843.

Our target is to complete 36 projects, so we use this number as the denominator.

Table 17: River quality improvements cost calculations

| Category | Value |
|-----------------------|----------|
| Depreciation (1 year) | £317,278 |
| Return on Capital | £437,843 |
| OPEX (1 year) | £0 |
| Total | £755,121 |
| Denominator | 36 |
| Unit cost | £20,976 |

This gives a cost of £20,976 per project.

Sustainability reductions

In order to reduce our abstractions from groundwater sources, we need to invest in assets that will enable us to source water from alternative surface water supplies. These involve building new treatment works (Sundon) or creating new water connections.

Table 18: Business plan investment - Sustainability reductions

| | CAPEX | OPEX |
|-------------------------------------|--------------------|--------------------|
| Sundon Reservoir | £27,887,000 | £2,118,000 |
| Sustainability Reduction: Digswell | £5,941,592 | £ - |
| Sustainability Reduction: 33MLD | £44,987,424 | £19,565,509 |
| Sustainability Reduction: St Albans | £7,490,208 | £ - |
| Total | £86,306,224 | £21,683,509 |

One year of OPEX is £4,336,702.

We assume that the assets involved in this measure have a lifespan of 60 years on average. This gives a one-year depreciation of £1,438,437.

The return on capital is calculated as £1,985,043.

Our target is 33 million litres per day reduction (MI/d) in DO over AMP7, so we treat this as the denominator.

Table 19: Sustainability reductions cost calculations

| Category | Value |
|-----------------------|------------|
| Depreciation (1 year) | £1,438,437 |
| Return on Capital | £1,985,043 |
| OPEX (1 year) | £4,336,702 |
| Total | £7,760,182 |
| Denominator | 33 |
| Unit cost | £235,157 |

This gives a cost of £235,157 per MI/d reduction.

AIM

Operating AIM always has a greater cost associated with it than doing nothing. This is because the alternative sources of water available (Grafham or more expensive groundwater sources) are always costlier than using locally sourced groundwater.

We assume an indicative average groundwater cost of £60 per ML. When operating AIM, we instead need to draw water from an alternative source, and for the sake of simplicity we assume that this is Grafham. This has a higher cost of £217 per ML. The delta between these two sources, £157, is assumed to be the marginal cost of operating AIM.

AIM does not have an underperformance payment associated with it, and the target is set at zero. This is because the activation of the scoring mechanism, and therefore the activity and costs, are contingent on exogenous factors (a “dry-year” trigger). We do however use the cost figure to compute the benefit valuation (see page 117).

3.3 Approach to calculating benefits

3.3.1 Views on WTP research and valuing benefits

We have been concerned about the known weaknesses of willingness to pay (WTP) research in developing our business plan and have therefore taken a more innovative and wide-ranging approach to understanding the views and preferences of our customers. In particular, WTP research tends to overestimate the willingness of customers to pay for ‘siloes’ improvements in performance. We think that the right approach to understanding customer preferences is to consider as wide an evidence base as possible. Excessive weight should not be given to any single view or numerical estimate that has been produced. We have taken account of not only our own research, but also the research of other companies and the research and views of other organisations that represent the views of customers such as Ofwat, CC Water, the EA, and our own CCG.

The one exception was in the case of supply interruptions. We feel that the issue of supply interruptions is the aspect of a water company’s service that is most suitable for WTP

research. Customers are directly affected by supply interruptions and can therefore easily estimate the true value of the inconvenience that arises. We commissioned an innovative piece of research from Accent that asked customers to choose between an interruption and several different levels of compensation. This allowed us to assess the level of compensation that was required to make the customer positively choose to have the supply interruption (because they think the compensation is greater than the inconvenience).

We also do not wish to reject the use of WTP data altogether. We have therefore used WTP metadata produced by Accent as an input into the calculation of our ODI rates. We feel that this data is more reliable, statistically and methodologically robust than any study that we could have commissioned. We feel that this course of action is both efficient (remembering that half of all such costs are borne by customers), and gives a more nuanced and robust result than we could have obtained by over-relying on WTP research.

3.3.2 How we set the benefit levels

In setting our benefit valuations, we have endeavoured to make sure that they satisfy the Ofwat formulas such that our penalties are always higher than our rewards for the majority of our ODIs. We believe that this condition is necessary for where we are seeking to improve our performance, as it ensures the penalty of not meeting the target will always exceed the reward for beating it, maintaining the concept that our target will always be the minimum standard we seek to reach.

In order for this relationship between rewards and penalties to hold, the Ofwat equation requires that benefits exceed costs. In computing the benefits, we have sought to follow this principle that benefits always exceed the costs. As we have not commissioned WTP research for any of the ODIs except supply interruptions, we have instead calibrated our costs against external benefit valuation approaches, and then set the benefits at such a level that:

1. They cover the costs;
2. They are plausible and within the range of other similar external valuations of benefits.

It should also be noted that there are some instances where we have not been able to obtain appropriate external valuations:

- Unplanned outage
- Mains bursts
- CRI
- Environmental innovation

In these cases, we have simply set the benefits equal to the costs.

For unplanned outage and mains bursts, these are underperformance payment-only ODIs where we are seeking to maintain our performance. This is to preserve intergenerational fairness, as a significant improvement now would be paid for by current customers but future customers would realise more of the benefits. We also believe that attempting to value these benefits is not appropriate as customers cannot place value in exceeding these targets as the outcomes are not transparent to them.

In the case of CRI, we are targeting a score of 0 as we do not want any failures, therefore we cannot outperform on this measure and so cannot assess the benefits of outperformance.

Our projects for environmental innovation were developed with continued and direct customer input into their scope and goals. Prospective projects were presented as options to

customers, as long with the attendant costs, therefore the final selection's costs represent a true "WTP" value. We have therefore set benefits equal to costs for this measure.

As previously discussed, we have taken a variety of approaches to calibrating the benefit values for our ODIs. We have listed these in Table 20.

Table 20: List of benefit sources

| PC | Source of benefit valuation |
|----------------------------|--|
| Supply interruptions | Accent and PJM Economics report for Affinity Water, " <i>Exploration of Supply Outage Compensation Levels</i> ", June 2018. |
| Leakage | Accent and PJM Economics, " <i>Comparative Review of PR19 WTP Results: Final Report</i> ", June 2018. |
| PCC | Environment Agency, " <i>Operational Catchment Economic Appraisal - Final Appraisal Report and Audit Trail: Colne</i> ", February 2018 Environment Agency, " <i>Operational Catchment Economic Appraisal - Final Appraisal Report and Audit Trail: Upper Lee</i> ", February 2018 |
| Unplanned outage | We have not sought to get a WTP value for this measure, as we are proposing to main current target. Underperformance payment only, so benefits set equal to costs. Underperformance payment only, so benefits set equal to costs. |
| Mains bursts | We have not sought to get a WTP value for this measure, as we are proposing to main current target. Underperformance payment only, so benefits set equal to costs. Underperformance payment only, so benefits set equal to costs. |
| CRI | We have not sought to get a WTP value for this measure, as we believe that customers expect us to produce the highest quality possible, and therefore minimise the CRI score. Underperformance payment only, so benefits set equal to costs. |
| Low water pressure | Accent and PJM Economics, " <i>Comparative Review of PR19 WTP Results: Final Report</i> ", June 2018. |
| Environmental innovation | Benefits set equal to costs. |
| False void | Affinity assessment |
| Gap | Affinity assessment |
| River quality improvements | Environment Agency, " <i>Water pollution natural capital calculator</i> ", April 2018. |
| Sustainability reductions | Environment Agency, " <i>Operational Catchment Economic Appraisal - Final Appraisal Report and Audit Trail: Colne</i> ", February 2018 Environment Agency, " <i>Operational Catchment Economic Appraisal - Final Appraisal Report and Audit Trail: Upper Lee</i> ", February 2018 |
| AIM | Ofwat suggested multiplier |

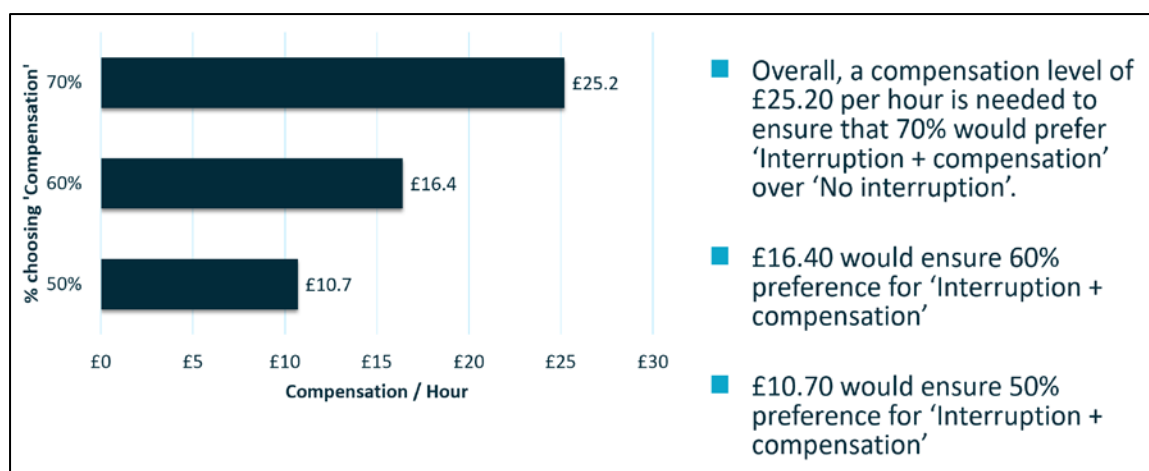
3.3.3 Components of the individual ODIs

Supply interruptions

We commissioned Accent to conduct research with our customers to discover the level at which respondents would prefer “interruption plus compensation” to “no interruption”.² This effectively gave a willingness-to-pay (WTP) estimate per avoided interruption.

As Figure 2 shows, 70% of customers chose an “interruption plus compensation” level of £25.20 per hour of supply interruption.

Figure 1: Supply interruptions - AFW results



We also note that, using Accent’s industry wide survey results, our WTP figure is in the lower range of the industry figures on WTP for supply interruptions greater than 3 hours, and between 3 to 6 hours.³ To convert from the “per property” figure to the “per hour” figure, we take the data shown in Table 21, and in the case of interruptions=>3hrs we divide by 3, and for 3-6 hour interruptions we divide by the median of 3-6, which is 4.5. This then gives the results in Table 22.

Table 21: All-industry WTP on supply interruptions

| Study | Unit | Unit value (£/unit/year) | | |
|---|---|--------------------------|------|-------|
| | | HH | NHH | Total |
| Supply interruptions >3 hours | | | | |
| Q | 1 property affected by a planned supply interruption (> 3 hours) | £23 | | |
| G | 1 property affected by unexpected interruptions to supply lasting 3 hours or longer | £132 | £961 | £177 |

² Accent and PJM Economics report for Affinity Water, “*Exploration of Supply Outage Compensation Levels*”, June 2018.

³ Accent and PJM Economics, “*Comparative Review of PR19 WTP Results: Final Report*”, June 2018.

| | | | | |
|---------------------------------------|---|--------|---------|--------|
| Q | 1 property affected by an unexpected supply interruption (> 3 hours) | £632 | | |
| I | 1 property affected by planned or unplanned interruptions (<12 hours) | £1,312 | £5,161 | £1,528 |
| Supply interruptions 3-6 hours | | | | |
| L | 1 property affected by a planned interruption (3-6 hours) | £91 | £706 | £120 |
| L | 1 property affected by an unplanned interruption (3-6 hours) | £136 | £1,565 | £203 |
| M | 1 property affected by a planned interruption (3-6 hours) | £157 | £1,586 | £232 |
| M | 1 property affected by an unexpected interruption (3-6 hours) | £282 | £4,224 | £488 |
| E | 1 property affected (3-6 hours) | £310 | £701 | £329 |
| T | 1 property affected by unplanned service interruptions (typically lasting around 6 hours) | £319 | £10,840 | £895 |
| J | 1 property affected by a short-term interruption to supply (3-6 hours) | £515 | £2,524 | £636 |

Table 22: All-industry WTP for supply interruption (per hour)

| Study | WTP unit value (£/hr lost) - 2017/18 prices | Position |
|-------|---|------------|
| Q | £7.94 | Quartile 1 |
| G | £27.62 | Quartile 1 |
| Q | £46.72 | Quartile 1 |
| I | £53.40 | Quartile 2 |
| L | £61.11 | Quartile 2 |
| M | £75.72 | Quartile 3 |
| L | £112.32 | Quartile 3 |
| E | £146.38 | Quartile 3 |
| M | £205.99 | Quartile 4 |
| T | £218.19 | Quartile 4 |
| J | £527.53 | Quartile 4 |

Whilst these surveys will have had different methodological approaches to ours, we are nevertheless satisfied that the valuation from our WTP research of £25.20 per hour of supply

interruption compares well with these other industry findings. It also meets our requirement of exceeding our costs, so we therefore choose this in preference to the lower valuations given by 60% and 50% of customers.

We convert our WTP figure £25.20 per hour of supply interruption to a per minute value by dividing by 60, and then multiply by the number of Affinity Water's billed customers (1,425,795). This gives a value of £598,833.90 per minute of interruption per property.

Leakage

We have used Accent's WTP report for the whole of the water industry to set our WTP level.⁴

To do this, we have conducted quartile analysis of the WTP data for Leakage (expressed as £/MI/d) shown on page 12 of the report, with the quartiles arranged as lowest WTP = upper quartile. We also adjust the WTP values for inflation to put them in 2017/18 prices (from 2016/17 prices).

As our target is based on % reduction from the AMP6 end position, we need to convert one unit of MI/d into an equivalent percentage. This is simply done by dividing the MI/d reduction by the percentage point reduction, giving a conversion factor of 1.6225MI/d = 1%. We adjust the WTP values by these numbers.

Our leakage cost of £785,820.35 sits in the third quartile, so we use the third to fourth quartile boundary of £1,212,583.18 as our benefit value.

Table 23: Leakage WTP metadata

| Study | WTP unit value (1 MI/d of water lost through leakage) - 2017/18 prices | Position | WTP unit value (Converted to 1% reduction) - 2017/18 prices | Position |
|-------|--|------------|---|------------|
| Q | £25,160.94 | Quartile 1 | £40,823.62 | Quartile 1 |
| C | £132,921.17 | Quartile 1 | £215,664.60 | Quartile 1 |
| A | £155,027.75 | Quartile 1 | £251,532.52 | Quartile 1 |
| D | £246,818.09 | Quartile 2 | £400,462.35 | Quartile 2 |
| E | £304,484.31 | Quartile 2 | £494,025.80 | Quartile 2 |
| G | £493,644.47 | Quartile 3 | £800,938.15 | Quartile 3 |
| P | £680,262.95 | Quartile 3 | £1,103,726.64 | Quartile 3 |
| U | £769,718.77 | Quartile 4 | £1,248,868.70 | Quartile 4 |
| I | £1,068,379.18 | Quartile 4 | £1,733,445.22 | Quartile 4 |
| B | £1,174,770.18 | Quartile 4 | £1,906,064.62 | Quartile 4 |

| | |
|------------|---------------|
| Quartile 1 | £288,764.98 |
| Quartile 2 | £647,481.97 |
| Quartile 3 | £1,212,583.18 |

⁴ Accent and PJM Economics, "Comparative Review of PR19 WTP Results: Final Report", June 2018.

PCC

We set our benefit level by assuming that a reduction in consumption is equivalent to a reduction in abstraction. We therefore use the Environment Agency's Benefit Cost Ratio for Sustainability Reductions. To do this, we take the average of the BCR in the Upper Lee and Colne area (1.76 and 1.29, so 1.52) and multiply the cost for PCC by this number. This gives a benefit of £729,253.87 per MI/d reduction.

Unplanned outage

We have been unable to ascertain a WTP value for this measure. As this measure is underperformance payment-only, we have set the benefits equal to the costs.

Mains bursts

We have been unable to ascertain a WTP value for this measure. As this measure is underperformance payment-only, we have set the benefits equal to the costs.

CRI

We have not sought to get a WTP value for this measure, as we believe that customers expect us to produce the highest quality possible, and therefore minimise the CRI score. As this measure is underperformance payment-only, we have set the benefits equal to the costs.

Environmental innovation

We have developed this measure with continued and direct customer input into its scope and goals. Prospective projects were presented as options to customers, along with the attendant costs, therefore the final selection's costs represent a true "WTP" value. We have therefore set benefits equal to costs for this measure.

Low water pressure

We have used Accent's WTP report for the whole of the water industry to set our WTP level.⁵

Given this measure relates to "persistent low pressure", we take the valuations from studies M and J which specifically relate to "persistent low water pressure". We adjust these figures for inflation and then take the average, as shown in Table 24.

⁵ Accent and PJM Economics, "Comparative Review of PR19 WTP Results: Final Report", June 2018.

Table 24: Low water pressure WTP metadata

| Study | Unit | WTP unit value (£/unit) - 2016/17 prices | WTP unit value (£/unit) - 2017/18 prices |
|---------|--|--|--|
| M | 1 property affected by persistent low water pressure | £485 | £502 |
| J | 1 property affected by persistent low water pressure | £1,110 | £1,149.66 |
| Average | | | £826 |

We then convert this value from a “per property” unit into a “per hour per property average” unit. To do this, we take the average hours of low pressure experienced by Affinity customers in 2017/18 (3,047,658) and divide this by the number of properties affected by instances of low pressure in 2017/18 (74,185). This gives an “average hours of low pressure per affected property” of 41.

Given we’ve assumed average asset lives of 60 years for the capital invested in resolving this measure, we also assume that the effect of “avoided low pressure” will last for 60 years, so we multiply 60 by 41 to give a value of 2,464, representing “hours of avoided low pressure per affected property”.

Finally, we divide the “per property” WTP value by this “hours of avoided low pressure per affected property” figure. This gives a “WTP per hour avoided low pressure per affected property” value of £0.34. As the PC and ODI rate will be expressed as per total properties, we then multiply the benefit figure by our total billed property number of 1,425,795.

This calculation gives a £ per average hours of low pressure per property of £477,784.50.

False void

We compute the false void benefit using “avoided loss of wholesale revenue”. To do this, we take our current average water bill (£175) and net off the cost to serve (retail) component, approximately £20. This gives a “wholesale revenue” water bill of £155. We then take Thames’s current sewerage bill (£180) and net off the cost to serve (we assume this is also £20), giving a “wholesale revenue” sewerage bill of £155. We add these two numbers together to get an indicative total wholesale revenue bill of £315. This figure represents one year of lost revenue for one false void.

Given that we are aware of voids, and we will eventually detect them, we make the conservative assumption that each false void only equates to one year of lost revenue.

This figure needs to be expressed as “voids as a % of total household billed properties”. To do this, we take our total property number (1,425,795) and divide by 100. This gives a 1% of total billed properties figure of 14,258.

We multiply the benefit figure of £315 by 14,258, giving a “benefit for 1% of void reduction” of £4,491,254.

Gap sites

A gap site may go unnoticed forever, meaning the attendant loss of revenue is potentially infinite. However, to match the five-year price control period, we measure the benefits over five years. This ensures that benefits of additional gap detection achieved in AMP7 are shared with customers in AMP7.

To calculate this figure, we take our current average water bill (£175) and net off the cost to serve (retail) component, approximately £20. This gives a “wholesale revenue” water bill of £155. We then take Thames’s current sewerage bill (£180) and net off the cost to serve (we assume this is also £20), giving a “wholesale revenue” sewerage bill of £155. We add these two numbers together to get an indicative total wholesale revenue bill of £315. This figure represents one year of lost revenue for one gap site.

Given we assume that each gap site represents 5 years of lost revenue, we calculate an NPV over AMP7 (5 years), with a discount rate of 2.4%, on the revenue figure of £315. As shown in Table 25, we compute the NPV of £315 from this year (to account for the fact that by 2020/21 we’ll already have lost two years of discounted revenue). We take the sum only for the AMP7 period however, as this represents the period for which the ODIs will be calculated.

Table 25: NPV of lost revenue from a gap site (5 years)

| | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | Sum |
|------------------------|---------|---------|---------|---------|---------|---------|---------|------------------|
| NPV calculation | £315.00 | £307.62 | £300.41 | £293.37 | £286.49 | £279.78 | £273.22 | £1,433.26 |
| Discount rate | 2.4% | | | | | | | |

This gives a benefit figure, in NPV terms, of £1,433.26 per gap site detected. We do also note that a gap site found after 2020/21 would have different five-year NPV, however we have chosen to make the simplifying assumption that when we find a gap site it must have been in existence at least from 2020. The NPV therefore reflects the approximate benefits foregone by there being a gap site in existence.

River quality improvements

We take the list of rivers covered by the AMP7 “green” morphological projects, alongside the km of the rivers benefitting from the work. These are shown in Table 26. We do not use the Sustainability Reduction effects as these will be covered under the separate PC for that measure.

Table 26: "Green" river projects for AMP7

| River | Action Type | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 | Total (km) |
|--------------|-------------|--------------|--------------|--------------|--------------|----------------|----------------|
| Ver | SR | 0 | 0 | 0 | 0 | 21.430 | 21.430 |
| | Morph | 0.763 | 0.763 | 0.763 | 0.763 | 0 | 3.052 |
| Beane | Morph | 0.763 | 0.763 | 0.763 | 0.763 | 0 | 3.052 |
| Upper Lea | SR | 0 | 0 | 0 | 0 | 10.300 | 10.300 |
| | Morph | 0.763 | 0.763 | 0.763 | 0.763 | 0 | 3.052 |
| Mimram | SR | 0 | 0 | 0.000 | 0 | 10.300 | 10.300 |
| | Morph | 0.763 | 0.763 | 0.763 | 0.763 | 0 | 3.052 |
| Misbourne | SR | 0 | 0 | 0 | 0 | 16.900 | 16.900 |
| | Morph | 0.763 | 0.763 | 0.763 | 0.763 | 0 | 3.052 |
| Gade | Morph | 0.763 | 0.763 | 0 | 0.763 | 0.763 | 3.052 |
| Cam | SR (ND) | 0 | 0 | 0 | 0 | 46.828 | 43.828 |
| Ivel | SR (ND) | 0 | 0 | 0 | 0 | 1.200 | 1.200 |
| Total | | 4.578 | 4.578 | 3.815 | 4.578 | 107.721 | 125.270 |

We then put these rivers and “km improved” through the EA water pollution natural capital calculator.⁶ We assume a “benefit” lifetime of 100 years.

The EA’s model computes the cost of a river going from an initial state to a worse state. We take each of our rivers and assess them as going from “good” to their current state. The assumption is this is equivalent to the benefit of going in the opposite direction.

Table 27: EA model output - Ver

| Water pollution natural capital calculator | |
|--|----------------------------|
| Catchment | Colne |
| Waterbody | Ver |
| Length of impact | |
| distance to next tributary | 3.052 km |
| Duration of impact to: | |
| Fish | 100 years |
| Invertebrates | 100 years |
| Plants | 100 years |
| Condition before incident | |
| Fish | Good or better |
| Invertebrates | Good or better |
| Plants | Good or better |
| Condition after incident | |
| Fish | Moderate |
| Invertebrates | Moderate |
| Plants | Moderate |
| Scaling factor (1=default) | 1.0 |
| Results | 2016€ |
| | Central High |
| Total | 1,664,000 1,961,000 |

Table 28: EA model output - Beane

| Water pollution natural capital calculator | |
|--|----------------------------|
| Catchment | Upper Lee |
| Waterbody | Beane |
| Length of impact | |
| distance to next tributary | 3.052 km |
| Duration of impact to: | |
| Fish | 100 years |
| Invertebrates | 100 years |
| Plants | 100 years |
| Condition before incident | |
| Fish | Good or better |
| Invertebrates | Good or better |
| Plants | Good or better |
| Condition after incident | |
| Fish | Poor |
| Invertebrates | Poor |
| Plants | Poor |
| Scaling factor (1=default) | 1.0 |
| Results | 2016€ |
| | Central High |
| Total | 2,445,000 2,881,000 |

Table 29: EA model output - Upper Lea

| Water pollution natural capital calculator | |
|--|----------------------------|
| Catchment | Upper Lee |
| Waterbody | Upper Lea |
| Length of impact | |
| distance to next tributary | 3.052 km |
| Duration of impact to: | |
| Fish | 100 years |
| Invertebrates | 100 years |
| Plants | 100 years |
| Condition before incident | |
| Fish | Good or better |
| Invertebrates | Good or better |
| Plants | Good or better |
| Condition after incident | |
| Fish | Bad |
| Invertebrates | Bad |
| Plants | Bad |
| Scaling factor (1=default) | 1.0 |
| Results | 2016€ |
| | Central High |
| Total | 3,388,000 3,992,000 |

Table 30: EA model output - Mimram

| Water pollution natural capital calculator | |
|--|----------------------------|
| Catchment | Upper Lee |
| Waterbody | Mimram |
| Length of impact | |
| distance to next tributary | 3.052 km |
| Duration of impact to: | |
| Fish | 100 years |
| Invertebrates | 100 years |
| Plants | 100 years |
| Condition before incident | |
| Fish | Good or better |
| Invertebrates | Good or better |
| Plants | Good or better |
| Condition after incident | |
| Fish | Moderate |
| Invertebrates | Moderate |
| Plants | Moderate |
| Scaling factor (1=default) | 1.0 |
| Results | 2016€ |
| | Central High |
| Total | 1,327,000 1,563,000 |

⁶ Environment Agency, “Water pollution natural capital calculator”, April 2018. <https://www.gov.uk/government/publications/water-pollution-natural-capital-calculator>

Table 31: EA model output - Misbourne

| Water pollution natural capital calculator | |
|--|---------------------|
| Catchment | Colne |
| Waterbody | Misbourne |
| Length of impact | |
| distance to next tributary | 3.052 km |
| Duration of impact to: | |
| Fish | 100 years |
| Invertebrates | 100 years |
| Plants | 100 years |
| Condition before incident | |
| Fish | Good or better |
| Invertebrates | Good or better |
| Plants | Good or better |
| Condition after incident | |
| Fish | Moderate |
| Invertebrates | Moderate |
| Plants | Moderate |
| Scaling factor (1=default) | 1.0 |
| Results | 2016€ |
| | Central High |
| Total | 1,664,000 1,961,000 |

Table 32: EA model output - Gade

| Water pollution natural capital calculator | |
|--|---------------------|
| Catchment | Colne |
| Waterbody | Gade |
| Length of impact | |
| distance to next tributary | 3.052 km |
| Duration of impact to: | |
| Fish | 100 years |
| Invertebrates | 100 years |
| Plants | 100 years |
| Condition before incident | |
| Fish | Good or better |
| Invertebrates | Good or better |
| Plants | Good or better |
| Condition after incident | |
| Fish | Bad |
| Invertebrates | Bad |
| Plants | Bad |
| Scaling factor (1=default) | 1.0 |
| Results | 2016€ |
| | Central High |
| Total | 4,236,000 4,992,000 |

The sum of these values is then divided by the total number of projects (36) to give a benefit per project.

This gives a per project benefit of £431,150.87.

Sustainable Abstraction

We calculate the benefit for reducing the water we take from the environment by using the Environment Agency’s Benefit Cost Ratio for Sustainability Reductions. To do this, we take the average of the BCR in the Upper Lee and Colne area (1.76 and 1.29, so 1.52) and multiply the cost for Sustainability Reductions by this number. This gives a benefit of £358,614.47 per ML/d reduction.

AIM

We have attempted to compute a benefit valuation for AIM using an average value per river catchment affected in AMP7. Each catchment’s NWEBS value per kilometre per day was multiplied by the potential length of river that may benefit through the operation of AIM. These figures were then averaged to give a weighted average, accounting for the fact that one catchment may be of a higher natural capital value than another or in some catchments a particularly long length of river could benefit. This gave a benefit per ML of £1,489.63.

However, we felt that given our high performance in AMP6 for AIM, this benefit valuation could lead to extremely high outperformance payments. We have instead used Ofwat’s suggested “AIM multiplier” of 1.2 times the marginal cost.⁷ This gives a benefit of £188.40 per ML.

⁷ Delivering Water 2020: Our final methodology for the 2019 price review, Ofwat, December 2017, Appendix 2, p.37

4 Environmental Innovation Projects

4.1 Summary

We will complete eight environmentally focussed, innovative pilot projects in our communities, enabling us to improve the knowledge and evidence of water use within our catchments.

These projects will bring together sector experts, charities, community, environmental groups and other stakeholders to trial the delivery of a range of innovative multi-party projects linked to different environmental themes and water use behaviours.

4.2 Our approach

The delivery of this PC will be reviewed annually against a clear programme setting out project timescales, objectives and cost forecasts. It is currently expected that we will complete the delivery of all projects by the end of 2023/24 (year 4 of AMP7) to allow sufficient time for larger scale implementation of effective projects to be developed for our AMP8 Business Plan submission.

The pilot projects aim to bring together different sector experts, charities, faith groups, developers and housing groups, schools and academia and wider stakeholders to deliver a range of projects across each of our communities, gathering evidence and trialling delivery methods. This takes a holistic, multiparty view of catchment scale water use to engage local people, and link their water using behaviours with the aquatic environment.

The proposed projects were developed following discussions with our CCG resilience and environment sub-group, which led to workshops to progress the development of the proposals.

The projects were evaluated to ensure they met the following criteria:

- Benefit the environment
- Innovative
- Not part of business as usual
- Goes beyond a statutory requirement
- Relevant to customers
- Measurable
- Could be supported by partners

Projects were categorised to identify those that the working group felt met the requirements and delivery timeframe.

The projects will apply the principles of Natural Capital to evaluate wider societal value of initiatives and investments to identify the following outputs:

1. Water saving opportunities in partnership with other stakeholders such as building controls

2. Define and quantify the water cycles in the community to determine the availability of water, working with the market as a whole to include, retailers and NHH customers along with HH customers
3. Water re-use and recycling options including sustainable drainage for the next cycle of water resources management plans
4. Contingency plans for multi-sectors to manage the effects of drought
5. Opportunities to reduce diffuse and point source pollution through partner working to improve the availability of resources
6. Options for cost beneficial eco-services by us to the local community
7. Citizen and school science opportunities in the water environment and community

The scope of each project is documented below:

4.2.1 Lee Catchment Project (flagship project to investigate and influence catchment scale water use)

Holistic Water Management – Lee

This is a multi-stakeholder project that aims to identify opportunities for use of local water recycling from rainfall, SUDs, investigate the impact of sustainability reductions, recharge, effluent reuse, decentralising sewerage treatment, catchment management, along with community engagement, and demand management activities to reduce demand. The project will correlate with the EA concept of catchment system operator. It will bring together physical water saving tools and initiatives at a domestic, and where possible commercial, scale twinned with community outreach programmes to create water saving communities.

Methodology

This project involves working in a new and unique way to deliver a multi-party, multi-channel project incorporating changes in a variety of water use behaviours. It provides opportunities to work with new and existing housing stock (through links to local plans/planning process/housing associations). We are seeking the following goals:

- Development of delivery model
- Reduction in PCC
- Reconnecting people with the local aquatic environment
- Micro-component, consumption and network data
- Environmental data and evidence gathering. (Water available for use, No deterioration, Water Framework Directive (WFD))
- Community engagement
- Education and bespoke research
- Water balance and water cycle at a catchment level (catchment mass balance)
- Public acknowledgement, engagement and awareness before and after the programme.

We will utilise the principles of Natural Capital and Eco systems services to evaluate the positive environmental benefits of taking a whole catchment approach to sustainable water management.

Environment and Innovation

The aim is to produce a delivery model that can be replicated in subsequent AMP's and different communities by:

- Reconnecting people with their local aquatic environment.
- Reducing demand, therefore assisting in supporting more water either available as WAFU or remaining in the environment supporting WFD objectives
- Innovative approach to delivery, looking holistically at the water cycle and engaging the local community to reduce demand.
- Utilising existing stakeholders and partners within the community
- Use of Citizen Science in support of project evaluation.

4.2.2 Affordable housing (Colne)

We will work with social housing providers and councils to influence water using devices and white goods in the home, combining goods, technology and behavioural aspects to engage with residents and establish a method of working with residents and providers of social housing.

Methodology

Working in partnership with providers and trusted sector experts to engage with housing stock providers/developers/managers to influence the technology, products and goods that are installed into properties. We will take a twin track approach working with residents, community groups and councils to engage and inform people how their water using behaviours link to the environment and how small behaviour changes can also influence household bills.

Environment and Innovation

Our objectives are:

- Development of a delivery model for use with social housing residents and providers
- Evaluation of different products/technology
- Reduction in PCC
- A project delivered in partnership with third party organisations

4.2.3 Targeted Campaigns (Brett and Wey)

Working with a third-party behaviour change organisation we will deliver a targeted behaviour change campaign, within a defined community that will encourage people to reduce water use. The campaign will focus on specific behaviours with specified audiences identified through mapping, aiming to achieve defined overall target in line with PR19 objectives around PCC. The work will build on learning from the pilot phase of TapChat pilot and other engagement initiatives.

This project should deliver financial, environmental and social benefits for participation e.g. helping households save money, protecting a local river and helping to create a greener neighbourhood, and saving time that could be spent with the family.

The benefits include:

- Build on learning from pilot phase to develop a model of working to deliver water efficiency
- Reduction of PCC
- Build positive sentiment within local community
- Build a sense of local pride and improve local focal point within a community

The benefits will be measured in terms of a reduction in PCC, reach on social media and sentiment. Baseline measurement would be undertaken prior to work starting, including qualitative (attitudes, values, behaviours) and quantitative data.

One aspect of these projects is the desire to form links with academic institutes. This would embed a highly skilled practitioner providing rigorous independent assessment and guidance on the impact of different interventions.

Methodology

The behaviour change interventions will use proven techniques building on academic evidence and third-party experience including; creating a local sense of pride, nudge, peer support and removing local barriers to action.

Interventions include: creating a community fund for greening a local area of town, those that commit to take action will be able to vote, target behaviours by direct incentives (nudge), for example toothbrush cup giveaways at school gates, working with religious leaders to create materials relevant to their community, peer support -recruit local people as advocates, remove barriers to action by setting up a pop up shop to learn where water comes from, book Home Water Efficiency Checks (HWECs) and get devices.

Environment and innovation

We will target a Reduction in demand. In the right geographic area this may support the delivery of sustainability reductions. We hope to Engage and inform communities about where their water comes from, and the impact it has locally.

The project would provide a model of working interventions that had been robustly, independently assessed, including tracking of participants after interventions. This would provide invaluable insight for engagement on water efficiency going forward. The project would be delivered in partnership with community groups/organisations. These will be confirmed following community mapping and evaluation. The project provides a model for working in a geographic locality for water efficiency engagement that could be easily replicated.

4.2.4 Faith Groups – Grey Water Recycling (Pinn)

This project involves grey water recycling at a large Mosque in the Pinn community - one of the largest, most influential and willing mosques in North West London. Such mosques tend to be high water users and use extra water for faith purposes. The aim is to encourage water efficiency (via community leaders – e.g. Imams, Councillors, Cabinet Members) and if feasible install a grey water recycling plant on site in the mosque recycling the water used from ablution (or wudu). This is the water worshippers use to wash certain limbs before daily set of prayers and can add up to be a significant volume daily.

The mosque will save water and money on water bills. It will also support the wider community with key water saving messages - this in turn can reduce the impact of the water

saving programme (WSP) i.e. moving to metered bills. This project also provides good PR opportunities and will build trust and the brand with the community.

We hope to achieve a reduction in demand amongst the wider community as water saving messages are propagated and fed back home. The data that is collected will also be used to improve our understanding of the relationship between water use during Ramadan and leakage.

Methodology

The first step is to identify a suitable and willing mosque or faith group that is willing to participate and champion the project. We will seek opportunities to work with Local Authorities or Councillors responsible for Environment. We will deliver messages and projects through imams and local mosque trustees. We will seek competent contractors to build a potential grey water recycling plant.

Environment and innovation

We hope to achieve the following outcomes:

- Reduce demand through education and potential grey water recycling.
- Establish a method of working with faith groups and implementing grey water recycling with mosques.
- The project will be delivered in partnership with Mosque Trustee, local Imams and Champions
- We will involve Local Authorities, local Councillors, Cabinet Member for Environment or communities. This model could be replicated with similar communities or faith groups who use more water for faith purposes or other.

4.2.5 Education methods (Misbourne)

This project will compare different types of educational engagement and their impact (focusing on attitudes towards water conservation / valuing water as a natural resource). We will compare the following types of engagement:

- Engage students in a classroom only
- Engage students in a classroom + 1 engagement at a chalk stream
- Engage students in a series of lessons (6-10) at a chalk stream, once per week / fortnight (similar to the Forest Schools scheme)

We will investigate and assess the longevity of the "caring for my water resources" message i.e. the time the recollection/benefits last. We will seek to provide tangible evidence of the most effective educational engagement around water conservation, allowing us to allocate resources in the most beneficial and effective way.

Methodology

This project will engage with a large number of people by encouraging students to share this message with the wider school community for example with the school community and parents / carers / families. We hope this will broaden the 'reach' of our key messages around water conservation. Although it must be noted that the level of engagement will be different (direct vs indirect).

There is also an opportunity to install smart meters in the schools involved to measure any changes in water usage in school (although this would depend on how the project is delivered, whether the whole school is involved, and the existing infrastructure of the school)

We intend to carry out attitudinal and behavioural surveys about water at key milestones in the project with the students and staff involved ensuring there is data collected before, during and after to allow us to assess the impact of the engagement and the longevity of the message.

Environment and Innovation

This project is designed to:

- Raise awareness and understanding about the importance of water and chalk streams
- Educate future generations about water and understanding the most beneficial and effective way to do this

4.2.6 Education smart meters in schools (Dour)

This project will install smart meters in 10 schools where they are not already in place and train the staff / students how to use them to monitor their water usage. This is designed to engage students on water conservation / behaviour change as part of a whole school water saving initiative. This will include the use of 'control' schools.

We will compare these different types of educational engagement and their impact (focusing on attitudes towards water conservation / valuing water as a natural resource).

We will investigate and assess the longevity of the "caring for my water resources" message i.e. the time the recollection/benefits last. It is hope that this will provide tangible evidence of the most effective educational engagement around water conservation, allowing us to allocate resources in the most beneficial and effective way.

This project has the potential to engage with a large number of people if students share this message with the wider school community, therefore broadening the 'reach' of our key messages around water conservation (although it must be noted that the level of engagement will be different).

Methodology

- Install smart water meters in 10 schools who do not already have them
- Carry out educational engagement sessions and "water meter training", which focuses on water conservation
- Raise awareness and understanding about the importance of water as a natural resource
- Educate future generations about water and understanding the most impactful / effective way to do this
- Attitudinal and behavioural surveys about water taken at key milestones.
- Water use data from smart meters taken at key milestones.

Environment and Innovation

Our Education Team currently engages with a group of children up to three times per academic year but the majority is a one-off engagement. There is relatively immediate feedback about the engagement but no information about a 'baseline' measure or a longer term impact of children's attitudes / behaviours around water or water use data; mainly due to the constraints around safeguarding issues and contacting / liaising with children directly. These projects provide the opportunity to understand (through longer term data gathered) the longevity of the message with actual water use, to identify how effective the engagement is and how frequently we might need to be engaging with a school community.

We will identify appropriate partners once the location has been selected.

4.2.7 New Developments (Stort)

This project will Work with councils, partners and developers in an area of the country identified for future growth, to develop sustainable homes, reducing water consumption and flood risk.

The intention is to reduce PCC from current level for domestic and commercial properties and to create links with local groups to connect people's behaviours and activities with the natural environment. There will be an evaluation of the role of SUDs, rainwater harvesting, local treatment plants/grey water reuse and water efficient goods/technology.

Methodology

We will work in partnership with providers and trusted sector experts to engage with housing developers and councils to influence the technology, products and goods that are installed into properties. We will also work with residents and community groups to engage and inform people how their water using behaviours link to the environment and the how small behaviour changes can also influence household bills. We will also go beyond the immediate home to look at a development scale and investigate how best practise surface water management can reduce flood risk and benefit the environment. The project will include the measurement of engagement, awareness of water issues and measured PCC

Environment and Innovation

We hope to achieve:

- A reduction in PCC
- The evaluation of different products/technology
- Development of a delivery model that could be carried forward and rolled in other locations working with other councils and developers.

4.3 Customer support

82% of customers supported raising awareness of how everyone can help protect the water environment.

Nearly 70% of customers supported investment in local environment pilots.

The following bullet points summarise the findings from customer research around the environment:

- Customers value the environment.

- Customers think Affinity Water has a role to protect the environment.
- Most visit the water environment only occasionally.
- When unprompted, customers don't immediately make the connection between their water use and the environment - but they do when time is spent discussing water use.
- When asked directly, a majority of customers think it's important to save water for the benefit of the environment.
- Customers are keen to be offered advice on how they can reduce their consumption and some identify awareness-raising and publicity as important

The innovative campaign to raise awareness of water usage driven by third parties, such as Hubbub has shown that there is a positive response to these initiatives and customers are able to reduce their PCC.

4.3.1 Work with CCG Sub Group

The outcomes of the meetings with the CCG to develop bespoke commitments in the area of the Environment was the proposal for pilot projects which would promote a reduction of water use, promote customer education on the link between water and the environment and improve environmental status.

To lead on our community focus, it is proposed that pilots will be undertaken within each community, associating each one to a specific characteristic of the region. This would be of small scale during AMP7, with success being rolled out during AMP8. It was agreed that partnering with other organisations such as the county councils/river groups, would help support and promote such initiatives. Emphasis was put on the proposed projects being innovative and not part of business as usual. It is essential that the results are measurable.

A sub group was formed composed of experts from around the Business.

4.3.2 Development Work

A workshop was held where the following information was mapped/discussed per community. The aim was to identify where there were environmental needs, any known customer views and which stakeholders we could work with to support any potential project. The group was formed from experts working in each of these areas of the Business.

- Supply issues
- PCC and meter penetration
- Partners
- Environmental issues
- Customer contact
- Education - reach
- New Developments

With a better understanding of the work currently being undertaken and any issues in the communities, the group was asked to put forward high-level project ideas that would address one or more of the following environmental issues:

- Reducing demand
- River Restoration
- Education (linking environment to water used)
- Catchment Management
- Biodiversity
- Sustainable Drainage

To ensure projects remained relevant to the aim of the Bespoke Commitment, the following guidelines were given:

- Benefit the environment
- Innovative
- Not part of Business as Usual
- Goes beyond a statutory requirement
- Relevant to customers
- Measurable
- Could be supported by partners

Individual proposals were put forward and analysed against the agreed criteria. Assessing each of the proposed projects and their merits against the objectives. During discussions, it soon became very clear how inter-related the projects were and how much more effective a holistic project would be with each of these areas brought together.

Projects were categorised to identify those that the group felt met the requirements. A short list was drawn up, identifying those that were specific to a particular community. These are listed in the table below.

| Community | Project |
|-----------|---|
| Misbourne | Study on how educational engagement affects water demand in schools |
| Colne | Affordable housing |
| Lee | Holistic Water Management |
| Pinn | Faith groups – grey water recycling |
| Wey | Targeted campaign – High users |
| Stort | New Developments |
| Dour | Use of Smart meters in school |
| Brett | Targeted Campaign – Hard to reach customers |

Following the discussions and the interlinked nature of a number of the proposed areas of work a project was put forwards encompassing a number of different smaller projects, it was agreed that this broader flagship project would receive a greater share of the funding in order to develop future deliver models and ensure that it was possible to take a catchment based approach in line with current thinking. The Holistic water management project assigned to the Lee community has a significantly broader scope than the other proposed projects.

Each of the pilot projects has been associated with a community however it is possible that projects could be delivered in different Communities.

5 PC targets and level of stretch

5.1 How stretching are our PR19 PCs?

Our PC proposals, as a package, constitute particularly stretching targets. This is particularly important because our WRMP, while directly impacting the PCs related to PCC, Leakage, Sustainability Reductions (all of which are significant reductions) will also create a much more challenging operating environment in the future so maintaining current service levels will be increasingly tougher to achieve.

To that end, a target can be considered stretching if it represents higher performance than a company has historically achieved in absolute terms (such as leakage reduction) or if a company is maintaining performance in much more demanding circumstances (such as maintaining supply in the face of increased abstraction reduction).

This can be conceptualised as absolute stretch (i.e. leakage where this is a clear reduction) versus relative stretch (which is maintaining a level of performance by having to work harder to stand still).

The result of our WRMP is that the average output (and therefore the average wear and tear) of our surface WTWs increases and so does their criticality. The loss of 33ML of groundwater through Sustainability Reductions will impact on our ability to plan site outages.

Our WRMP requires the delivery of significant demand side schemes for AMP7, which means that we're substituting groundwater for demand reductions which means we will be effectively reducing the number of sites that are available to planned outages for maintenance, which will likely result in those sites being used more than normal, which increased maintenance needs and thus makes it more challenging to maintain existing levels of unplanned outage.

While it is possible that the company could target being the leading company on all PCs this is an unrealistic proposition for two main reasons. Firstly, this would be prohibitively expensive and would have a significant impact on customer bills. Secondly, and more importantly, customers have not expressed a clear preference for improvement in number of core base service measures such as mains bursts, instead customers have focussed on the service impact of a mains burst and so prefer us to focus on our operational response to a supply interruption or to tackle any leakage arising.

It is tougher to assess level of stretch for the new bespoke PCs however it worth clarifying that for C-Mex and D-Mex Ofwat will be applying a very similar comparative approach to SIM with strong incentives for out/underperformance.

5.2 How do we measure stretch?

'Stretch' is not easy to define. It can be defined in many ways and for assessing our AMP7 PC targets we have used three methods:

- Historical performance
- Comparative performance
- Expert opinion

5.2.1 Historical performance

Our preferred approach is to consider how a target compares past historical performance. A target can be considered stretching if it represents higher performance than a company has historically achieved in absolute terms (such as leakage reduction) or if a company is

maintaining performance in much more demanding circumstances (such as maintaining supply in the face of increased abstraction reduction).

Where we have historical data, often the case for several common PCs (leakage for example) we have set out the AMP7 targets in the context of a 20-year view covering AMP5 (2010 to 2015) through to where we anticipate we will be in AMP8 (2025 to 2030).

This does not readily apply to all PCs, many of the bespoke AMP7 PCs are new or did not exist previously or existed but were defined differently. Where historical data is not available we have instead relied on comparative performance.

5.2.2 Comparative performance

We can also measure stretch by comparing to other companies where directly comparable measures exist. This is the thinking behind Ofwat's desire for common PCs to improve the direct comparability across companies. An example of this is supply interruptions where Ofwat wants companies to set targets that represent upper quartile performance compared to the rest of the industry.

It should be noted, however, that some PCs which appear at first glance to be comparable, are in fact not. An example of this is mains bursts. Mains bursts are affected by factors such as topography, soil type, pipe age and pipe material. These factors are beyond management control and can vary very significantly between companies. This is also true in relation to water resources. The underlying water resource position of each company is unique, reflecting the geology, geography, river catchment and river basin characteristics of each company's supply area. Nevertheless, this comparison is helpful in some instances and will become increasingly useful in future. The third method we have used is expert opinion.

5.2.3 Expert Opinion

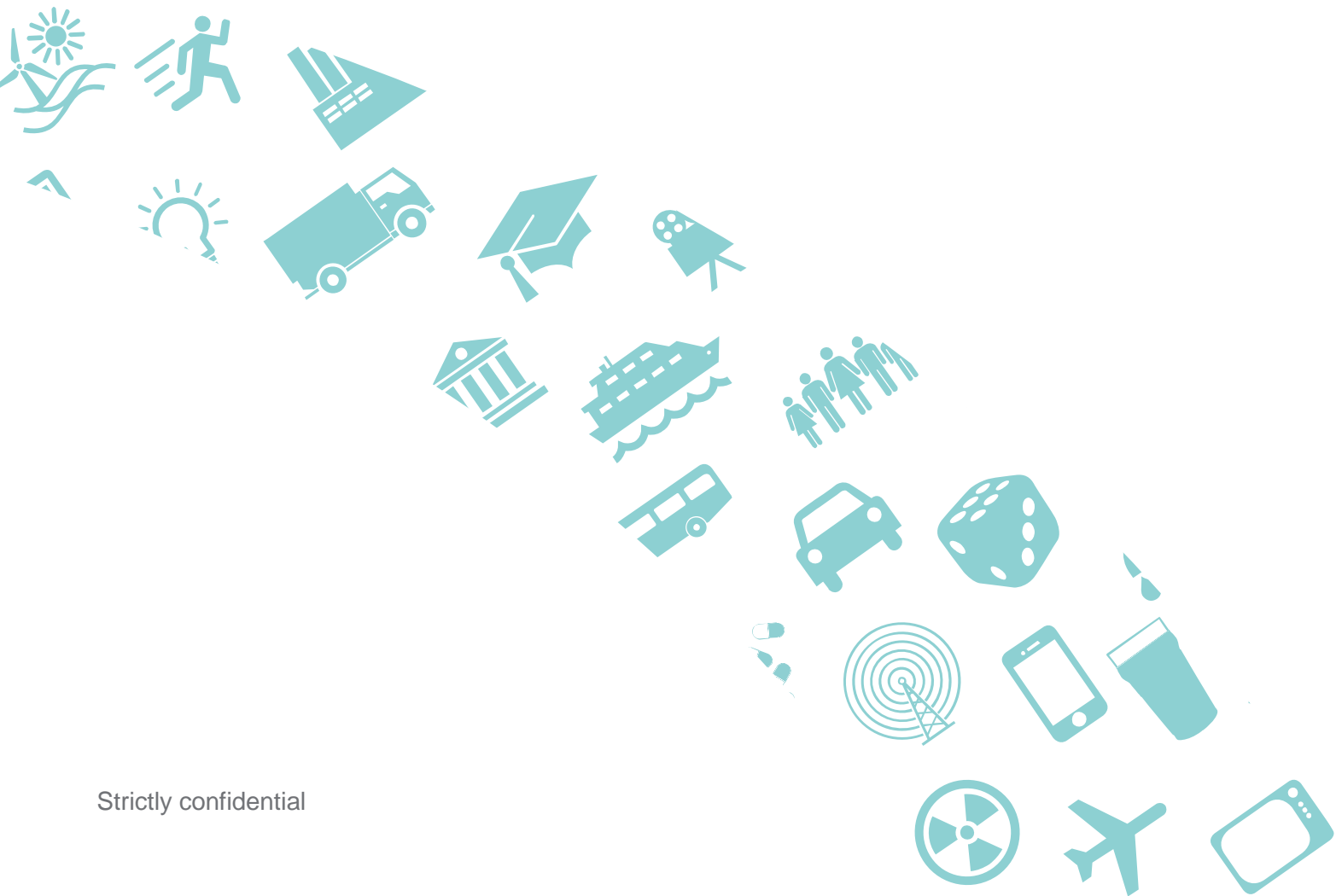
This can be helpful when historic and comparative information is not widely available or where performance targets relate to complex sets of activities unique to an individual company. For example, target levels around things like unplanned outage appear simple but this measure is influenced by a wide range of activities and interventions carried out by companies.

6 Frontier Economics, “Approach to Setting Outcome Delivery Incentives”, Assurance Review for Affinity Water.

APPROACH TO SETTING OUTCOME DELIVERY INCENTIVES

Assurance Review for Affinity Water

August 2018



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EXECUTIVE SUMMARY

Affinity Water (Affinity) has commissioned Frontier Economics to carry out an assurance review of Affinity's approach to setting Outcome Delivery Incentive rates (ODIs) for PR19.

The review covers the overall approach that Affinity has taken in the following areas:

- setting Outcome Delivery Incentives (ODIs);
- the use of caps, collars and deadbands; and
- the application of enhanced incentive rates for clear out-performance or under-performance.

The scope of this review does not cover assurance of the inputs to the incentive rate calculations (i.e. the cost inputs and the benefit/valuation inputs).

Setting incentive rates

In reviewing Affinity's approach to setting ODIs we have addressed the following areas.

- **The choice between financial and reputational incentives.** Affinity has set financial ODIs as the default, and applied reputational only incentives to one common PC and three bespoke PCs. This approach is consistent with Ofwat's expectations for PR19.
- **The application of the Ofwat formula for calculating financial ODIs.** Affinity has used the Ofwat formula to calculate its financial ODIs. This approach is consistent with Ofwat's expectations for PR19.
- **Details in the application of the ODIs.** Affinity has confirmed that all of its financial ODIs will be in-period, and that all financial ODIs will be linked to revenue rather than the RCV. This approach is consistent with Ofwat's expectations for PR19.

The use of caps, collars and deadbands

Affinity has not applied caps, collars and deadbands to its ODIs as a default. However, by exception, Affinity has applied underperformance collars to seven PCs and underperformance deadbands to two of its PCs. Affinity has provided explanations for why it is appropriate to apply these collars and deadbands. We note that Affinity has not provided evidence to us on any customer engagement relating to caps and collars, which would have helped to support its case. Overall, this approach is not inconsistent with Ofwat's methodology.

Approach to enhanced incentive rates

Affinity has chosen not to include enhanced incentives, and has provided reasons for this choice. This approach appears reasonable as under the Ofwat methodology it is not necessary for companies to include enhanced ODIs.

1 INTRODUCTION

Affinity Water (Affinity) has commissioned Frontier Economics to carry out an assurance review of its approach to setting Outcome Delivery Incentive rates (ODIs) for PR19.

The review covers the overall approach that Affinity has taken in the following three areas:

- setting ODIs, including whether the ODIs are in-period, and whether the incentives are revenue or RCV based;
- the use of caps, collars and deadbands; and
- the use of enhanced incentives for clear out-performance or under-performance.

This paper is structured around these three areas. In each case we provide a brief summary of Ofwat's guidance and expectations in the area, and then present our findings in relation to Affinity's approach.

The scope of this review does not cover the inputs to the ODI calculations (i.e. the cost inputs and the benefit/valuation inputs) or a thorough QA of all of the calculations.

2 SETTING INCENTIVE RATES

2.1 Introduction

This section covers the overall approach taken in setting incentive rates.

2.2 Ofwat guidance

Ofwat's general guidance on ODIs is that they should be financial by default. In addition, Ofwat's methodology for PR19 sets out the formulas that companies should use to calculate the incentive rates, i.e. the payments for underperformance and outperformance.

These ODI formulas are shown in Figure 1 below.

Figure 1 Ofwat formula for ODI payments

| | |
|----------------------------------|--|
| Underperformance payments | • Incremental benefit – [incremental cost * p] |
| Outperformance payments | • Incremental benefit * [1-p] |

In the formula p stands for the cost sharing rate in the totex sharing mechanism. Ofwat's guidance is to assume 50% for the cost sharing rate unless there is a good reason to use an alternative.

The formulas are designed to ensure that the value of the payments relates to the benefits from the change in service, and also reflect the customer share of the costs that may be associated with the performance level.

Ofwat has also set out its expectations for two further aspects of how financial ODIs should apply in practice.

- **In-period ODIs.** Ofwat stated that the default for financial ODIs is that they should be applied on an in-period basis, unless companies can justify why an in-period ODI is not appropriate for certain PCs. This is because in Ofwat's view, in-period ODIs "*bring service performance payments closer in time to when customers received the service performance*".¹
- **Revenue linked.** Ofwat continues to expect all in-period financial ODIs to be linked to revenue, rather than the Regulatory Capital Value (RCV). It has also stated that end of period ODIs by default should be linked to revenue, unless companies can justify with evidence why this should not be the case. This decision has been made to increase the strength of the incentives.

¹ Ofwat (2017), Delivering Water 2020: Our methodology for the 2019 price review, Appendix 2: Delivering outcomes for customers, p. 78.

2.3 Review of Affinity's approach

In reviewing Affinity's approach to setting ODIs we have addressed the following areas:

- the choice between financial and reputational incentives;
- the application of the formula for calculating financial ODIs; and
- details relating to the application of financial incentives (i.e. in-period ODIs and revenue based ODIs).

Choice between financial and reputational

We understand that Affinity adopted the following approach to decide where to apply financial ODIs.

- In principle, Affinity agrees that financial ODIs should be applied as the default.
- Affinity then reviewed its suite of PCs and ODIs, to consider whether it would be appropriate to apply only reputational ODIs in some cases, i.e. by exception.
- Following this review, Affinity applied reputational incentives only to one common PC. the 'risk of severe restrictions in a drought' (i.e. the common resilience PC). The rationale for this decision is that Affinity's investment on two other PCs (per capita consumption and leakage) will affect its performance on the resilience PC, meaning that any potential ODIs on the resilience PC may overlap with other financial ODIs. Affinity felt on balance it would be most appropriate to apply reputational ODIs to the resilience PC, to avoid any potential overlaps across ODIs, and to ensure that it could maintain financial ODIs on per capita consumption and leakage.
- In addition, Affinity applied reputational only incentives to three bespoke PCs; mean zonal compliance, and two PCs relating to customer satisfaction with support for vulnerable customers. In the case of mean zonal compliance Affinity concluded that there was a strong overlap with the common PC compliance risk index and therefore the risk of double-counting if a financial incentive was included. For the customer satisfaction PCs on vulnerability Affinity concluded that it was not appropriate to include financial incentives (with the corresponding impact on customer bills) in relation to supporting vulnerable customers.

In our view, the decision process adopted by Affinity is reasonable and it is valid to consider the potential overlaps across different measures. It has also resulted in financial ODIs as the default option, with reputational only incentives being applied by exception. In these exceptions, Affinity has provided a rationale for not applying financial ODIs. Overall we consider that Affinity's decision process and its outcomes package that results from it, are therefore consistent with Ofwat's expectations for PR19.

We also note that Affinity has applied both out and underperformance payments to all PCs as a default, with the following exceptions.

- For asset health PCs (unplanned outage and mains burst), Affinity has applied only underperformance ODIs.

- For the Compliance Risk Index, Affinity has applied only underperformance ODIs. This is because Affinity has been consistent with Ofwat's expectations and set the PC level at the maximum possible, so it is not possible to achieve any outperformance.
- For the Abstraction Incentive Mechanism, Affinity has applied only outperformance payments.

Affinity's approach in applying financial ODIs is consistent with Ofwat's approach. Ofwat stated that it does not expect outperformance payments on asset health PCs, unless a company can show that any outperformance would lead to customer benefits. For CRI Affinity has set the PC level at the maximum level and therefore outperformance payments do not apply.

Application of the ODI formula

Affinity has applied the ODI formula both in the way that it has calculated its outperformance payments and also in the way that it has calculated its underperformance payments. In particular, it has mechanistically used the formulas correctly, and has used an assumed cost sharing ratio of 50% in the formulas. Affinity has also made appropriate assumptions in the way that it has annualised the costs that are used in the calculation of underperformance payments. Affinity's approach for calculating the incentive rates for the Abstraction Incentive Mechanism is consistent with Ofwat's expectations.

Overall, Affinity's approach in applying the formulas is consistent with Ofwat's expectations for PR19.

In addition, although we have not reviewed the underlying cost and benefit inputs to these formulas, we note that the pattern of the ODI rates is consistent with Ofwat's general expectation. By this we mean that for any given measure the unit underperformance payment rate is greater than or equal to the outperformance rate. This result arises when the assumed benefit value is greater than or equal to the cost value.

Details in the application of the ODIs

Affinity has confirmed that all of its financial ODIs will be in-period, and that all financial ODIs will be linked to revenue rather than the RCV. This approach is consistent with Ofwat's expectations for PR19.

3 CAPS, COLLARS AND DEADBANDS

3.1 Introduction

In setting the ODIs for individual PCs, companies can propose the use of caps, collars and deadbands.

- A cap imposes a level where better performance than this level does not result in any additional outperformance payments.
- A collar imposes a level where worse performance than this level does not result in any additional underperformance payments.
- A deadband introduces a range around the PC level where within the range no outperformance or underperformance payments are earned.

3.2 Ofwat guidance

The Ofwat PR19 methodology stated that companies can propose outperformance payment caps and underperformance payment collars on individual ODIs. In doing so, it stated that companies will need to consider the costs and benefits of such caps and collars. Companies should also engage with customers on their proposed approach.

The main cost is that these individual caps and collars reduce the incentives for companies to improve their performance near, at and beyond the cap and collar.

There are benefits of such caps and collars. These include:

- avoiding the exposure of companies and customers to unlimited, or very high, outperformance and underperformance payments on individual ODIs; and
- allowing companies to have higher ODI rates, focused over a smaller performance range.

Ofwat stated that caps and collars are more likely to be appropriate in the following situations:

- where data quality is lower;
- where there is less comparative or historical information on performance;
- where the P10 / P90 levels are harder to estimate; or
- where the evidence on customer benefits is less robust.

In terms of deadbands around the PC level, Ofwat has discouraged companies from proposing this for the following reasons:

- deadbands remove the incentive for companies to improve their performance;
- they require judgement in setting the level and may reduce transparency for customers;
- since customers experience the downside and upside of the fluctuations in terms of their service, Ofwat considers it reasonable that any appropriate adjustments are made to bills; and

- finally, that companies are “able to manage the financial consequences of ODIs as part of considering the impact of ODIs in the round in their applications for their in-period ODI determinations”².

Ofwat’s guidance is that companies that propose deadbands should provide strong evidence as to why their proposals are appropriate and in the interests of their customers. Ofwat cite the example of the Compliance Risk Index (where the PC level is set at the theoretical maximum) as a case where there is a rationale for including a deadband.

3.3 Review of Affinity’s approach

We have reviewed Affinity’s approach to the use of caps and collars, and deadbands in the design of ODIs. We provide a summary of our findings in this section.

Approach to caps and collars

Affinity designed its ODIs with the default being that there would not be any caps and collars on individual ODIs. However, by exception, Affinity has included ODI collars in the following seven areas:

- per capita consumption – at 5 Ml/day higher than the PC level in each year (i.e. the PC level in each year plus 5 Ml/day);
- leakage – 3.57 percentage points below the PC level in each year (i.e. the PC level in each year minus 3.57 percentage points³);
- unplanned outage – at 4.3% of production capacity each year;
- mains burst – at 200 bursts per 1,000km each year;
- compliance risk index – at 4 each year;
- supply interruptions – 10 minutes per property each year; and
- low pressure – at 4 hours above the PC level in each year (i.e. the PC level in each year plus 4 hours).

We understand that Affinity introduced these underperformance collars because it has committed to stretching PC levels that would lead to material financial risks, if no individual collars were applied. For example, Affinity’s calculations showed that in the case of leakage and per capita consumption, if underperformance payment collars were not applied in either case the potential downside could equate to over 3% of Return on Regulatory Equity (RoRE) on each of these PCs. The application of underperformance payment collars on individual ODIs therefore ensures that the incentives package is more balanced across Affinity’s suite of PCs. Affinity also notes that in most cases the collar level applies at performance levels worse than the P10 level and that therefore the company retains meaningful financial incentives over a clear majority of potential performance levels.

² Ofwat (2017), Delivering Water 2020: Our methodology for the 2019 price review, Appendix 2: Delivering outcomes for customers, p. 95.

³ Note that the PC is expressed as a % reduction from a base level, so this structure acts as a collar on underperformance payments.

We note that, in the materials provided to us to review, there is no reference to any customer engagement in relation to this decision.

In terms of potential overperformance payment caps, Affinity has reviewed its RoRE calculations and does not consider that its customers would be exposed to an unreasonably high level of risk from upside performance (i.e. outperformance payments and increases in bills), and therefore does not consider it necessary to apply outperformance payment caps to individual ODIs.

Our assessment of this approach is as follows.

- The decision to apply collars to seven PCs is not inconsistent with Ofwat’s guidance. Affinity’s default position was to not include caps and collars which was in line with the guidance. Affinity then identified a number of PCs where it considered collars were appropriate. The primary rationale for this relates to managing the magnitude of ODI underperformance in relation to extreme underperformance. Given that Affinity’s downside RoRE exposure is towards the high end of Ofwat’s indicated range, this reasoning appears to be consistent with Ofwat’s expectations for justifying the inclusion on collars.
- To comply with Ofwat’s guidance and expectations in this area Affinity should include details of its engagement on ODIs.

Approach to deadbands

Affinity designed its ODIs with the default being that there would not be any deadbands. However, by exception, Affinity has included underperformance deadbands in the following two areas.

- Compliance risk index – a deadband between zero and 2.8. Affinity has applied a deadband because this is a new PC, meaning that there is some uncertainty around likely performance levels.
- Supply interruptions –
 - a deadband between 3 minutes per property and 5 minutes per property in 2020/21 (PC level at 5 minutes per year);
 - a deadband between 3 minutes per property and 4.5 minutes per property in 2021/22 (PC level at 4.5 minutes per year);
 - a deadband between 3 minutes per property and 4 minutes per property in 2022/23 (PC level at 4 minutes per year);
 - a deadband between 3 minutes per property and 3.5 minutes per property in 2023/24 (PC level at 3.5 minutes per year); and
 - no deadband in 2024/25.

While this is a more established PC for the industry in general, it is a new definition for Affinity. There is therefore more uncertainty in Affinity’s possible performance levels on this PC.

Our assessment of this approach is as follows.

- Affinity’s overall approach in only applying deadbands by exception is in-line with Ofwat’s expectations for PR19.

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- In the case of the Compliance Risk Index, Affinity's approach is consistent with the Ofwat methodology.
- In the case of supply interruptions and in Affinity's particular case, the approach is not inconsistent with the Ofwat methodology.

4 ENHANCED INCENTIVE RATES

4.1 Introduction

This section addresses the inclusion of enhanced incentive rates. These are higher outperformance payments or underperformance penalties that can be applied only to common PCs. Enhanced outperformance payments could only apply to industry-leading performance, while enhanced underperformance would be for performance that falls behind the industry lower quartile.

4.2 Ofwat guidance

One of Ofwat's stated goals for PR19 is to offer higher financial returns to companies that are "ambitious and innovative ... with high quality business plans that set new standards for the sector" compared to those that just make improvements that keep them in-line with the rest of the sector. One of the mechanisms Ofwat is implementing to achieve this is by offering enhanced incentives.

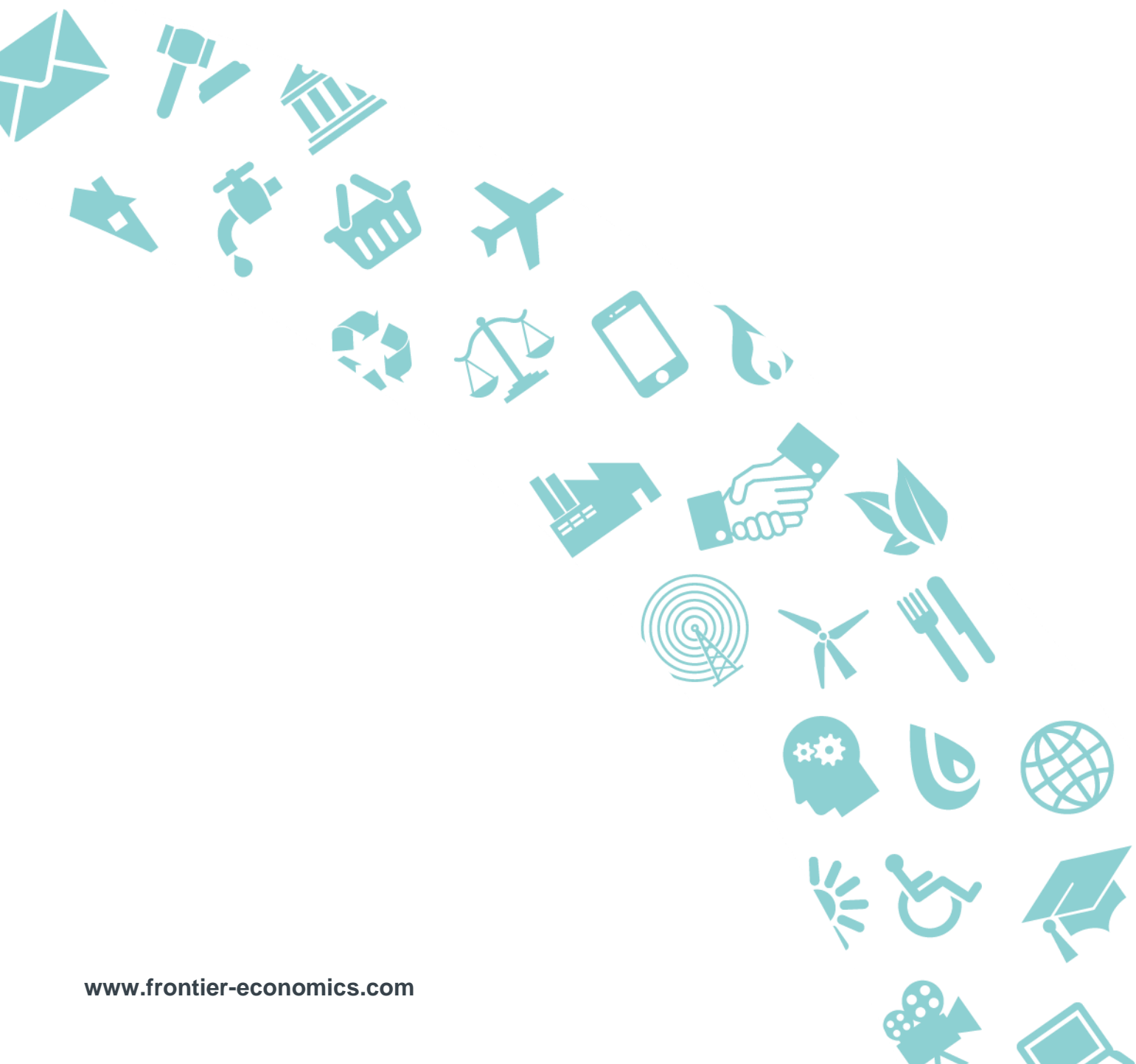
Ofwat has therefore encouraged companies to include enhanced out and underperformance payments on the common PCs. Any enhanced outperformance payments must be accompanied by enhanced underperformance payments to provide a balanced set of incentives.

4.3 Review of Affinity's approach

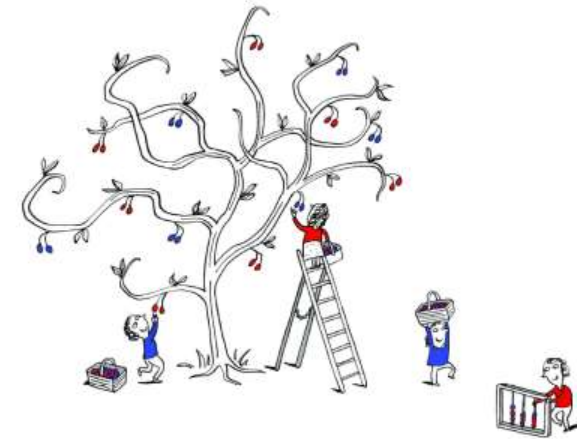
Affinity has chosen not to include enhanced ODIs in its outcomes package. We understand that Affinity has chosen this approach for the following two reasons.

- Affinity considers that for the specific common PCs where enhanced payments could be applied, its PC levels and standard incentive rates are sufficiently stretching and powerful.
- In addition, Affinity's RoRE range without applying enhanced ODIs is within Ofwat's indicative range. It is likely that if Affinity applied enhanced ODIs, its RoRE range would fall outside of Ofwat's indicative range, at least on the P10 side.

Affinity's approach is not inconsistent with Ofwat's methodology, as companies do not necessarily have to include enhanced incentives. In addition, Affinity has provided reasons why it has adopted this approach, which support its chosen approach.



7 Accent and PJM Economics, “Exploration of Supply Outage Compensation Levels”, June 2018.



Exploration of Supply Outage Compensation Levels

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P3206pre01_FinalReport_v1



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International Standard ISO 20252

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Background

Background

- Accent and PJM Economics have been appointed by Affinity Water (AW) to explore levels of compensation for supply interruptions.
- **Key question:** What level of payment will fully compensate customers for the inconvenience of a supply interruption?
- True compensation amounts may serve as a willingness-to-pay (WTP) estimate per avoided interruption in the future.
- WTP is needed for setting ODI rate for PR19.

2 Methodology

Methodology – Stated Preference Design

- At the core of the survey design was a stated preference (SP) exercise containing sequences of questions like this:

| | |
|---------------------------------|----------------------------------|
| Type of interruption | Planned (48 hours' notice given) |
| Duration of interruption | 6 hours |
| Compensation paid | £60 |

Which option would you prefer?

Option A (Interruption + compensation)
Option B (No interruption)

- Type, duration, and compensation level varied across the sequences of questions according to an experimental design.

Methodology – Attributes and Levels

| Attribute | Levels |
|----------------------------|----------------------------------|
| Type of interruption | Planned (48 hours' notice given) |
| | Unplanned (no notice given) |
| Duration of interruption | 3 hours |
| | 6 hours |
| | 12 hours |
| Compensation paid (£/hour) | £2.50 |
| | £5.0 |
| | £10 |
| | £20 |
| | £30 |

- The design included 30 (2*3*5) combinations.
- Each person saw 10 of these, with 3 blocks thereby covering the full set of possibilities.
- Each block was presented in two different orders to mitigate against order effects.

Methodology – Data Characteristics

| Characteristic | Value | Frequency | | Share in population |
|----------------|-------------|-----------|------|---------------------|
| | | N | % | |
| Region | Central | 445 | 88.6 | |
| | East | 20 | 4.0 | |
| | South East | 37 | 7.4 | |
| Gender | Male | 238 | 47.4 | 49% |
| | Female | 264 | 52.6 | 51% |
| Age | 16-29 | 40 | 8.0 | 22% |
| | 30-44 | 195 | 39.0 | 27% |
| | 45-64 | 161 | 32.2 | 31% |
| | 65 or older | 104 | 20.8 | 20% |
| SEG | A/B | 187 | 37.3 | 28% |
| | C1/C2 | 232 | 46.2 | 52% |
| | D/E | 75 | 14.9 | 20% |
| | Not stated | 8 | 1.6 | |

- A sample of 502 online responses was obtained via a panel (Research now).
- Most respondents in Central region
- Younger age group (16-29 years old) underrepresented
- Balanced SEG groups
- Weighted by Gender, Age and SEG to correct for the divergence between the population target profile and the achieved sample proportions

Methodology – Data Characteristics (cont.)

| Characteristic | Value | Frequency | |
|-------------------------|-----------------|-----------|------|
| | | N | % |
| Bill size | £0 - £200 | 77 | 15.3 |
| | £200.1 – £400 | 197 | 39.3 |
| | £400.1 - £600 | 98 | 19.5 |
| | £600.1 – £1000 | 38 | 7.6 |
| | More than £1000 | 16 | 3.2 |
| | Not stated | 76 | 15.1 |
| Bill summary statistics | Mean | £402 | |
| | Median | £380 | |
| | Min | £50 | |
| | Max | £3,120 | |
| Bill disclosure | Estimate | 252 | 50.2 |
| | Exact amount | 174 | 34.7 |
| | Not stated | 76 | 15.1 |
| Water meter status | Water meter | 285 | 56.8 |
| | No water meter | 196 | 39.0 |
| | Not stated | 21 | 4.2 |

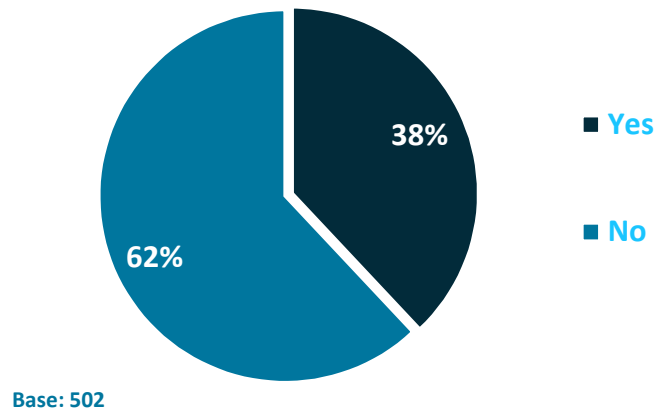
- Wide spread of water bills with a concentration between £200 and £400.
- Majority of bills were estimates rather than exact measures
- Majority of respondents had a water meter



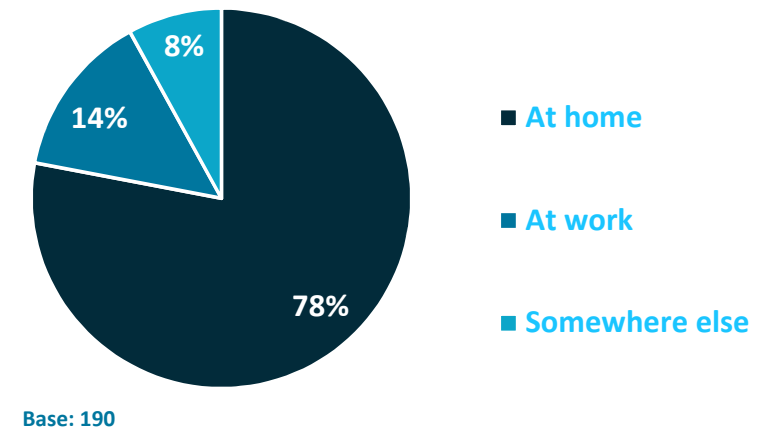
Key Results

Results – Experience of Interruptions to Water Supply

Have you ever experienced an interruption to your water supply?



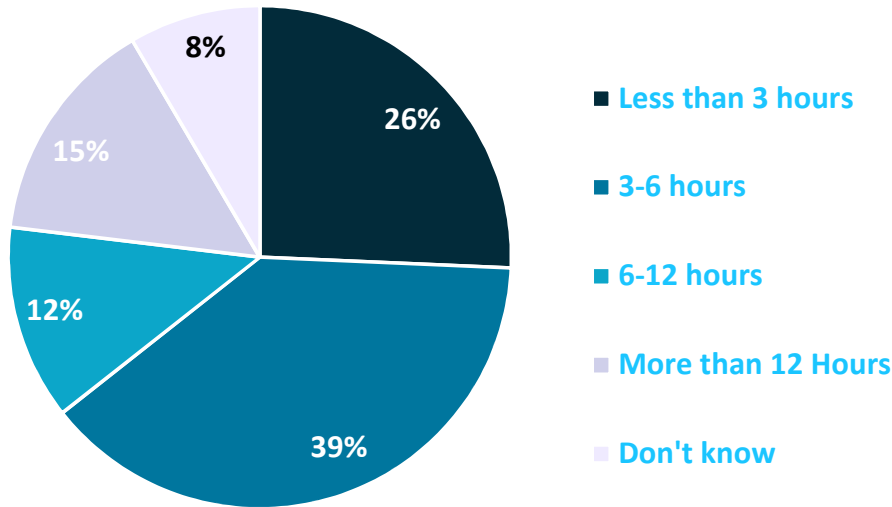
If yes, where did this happen?



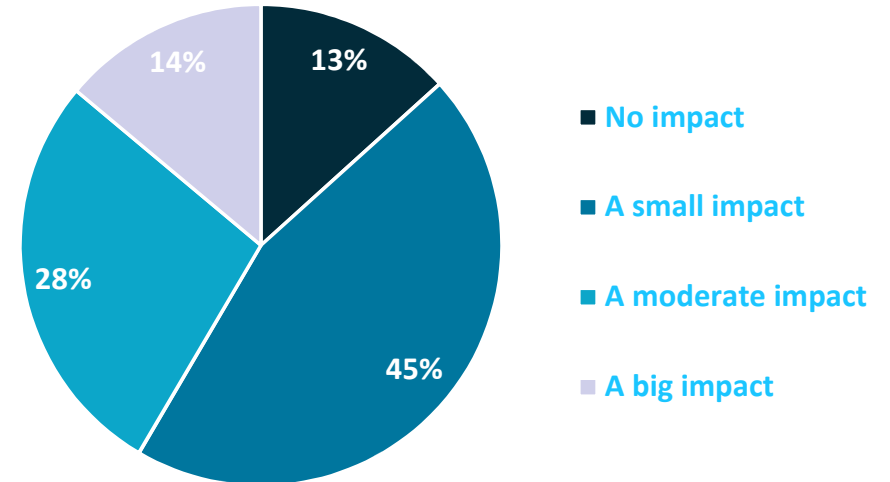
- Over one third of all participants have previously experienced an interruption to their water supply.
- For the vast majority, this happened within their property

Results – Duration of interruption and impact on customer

Duration

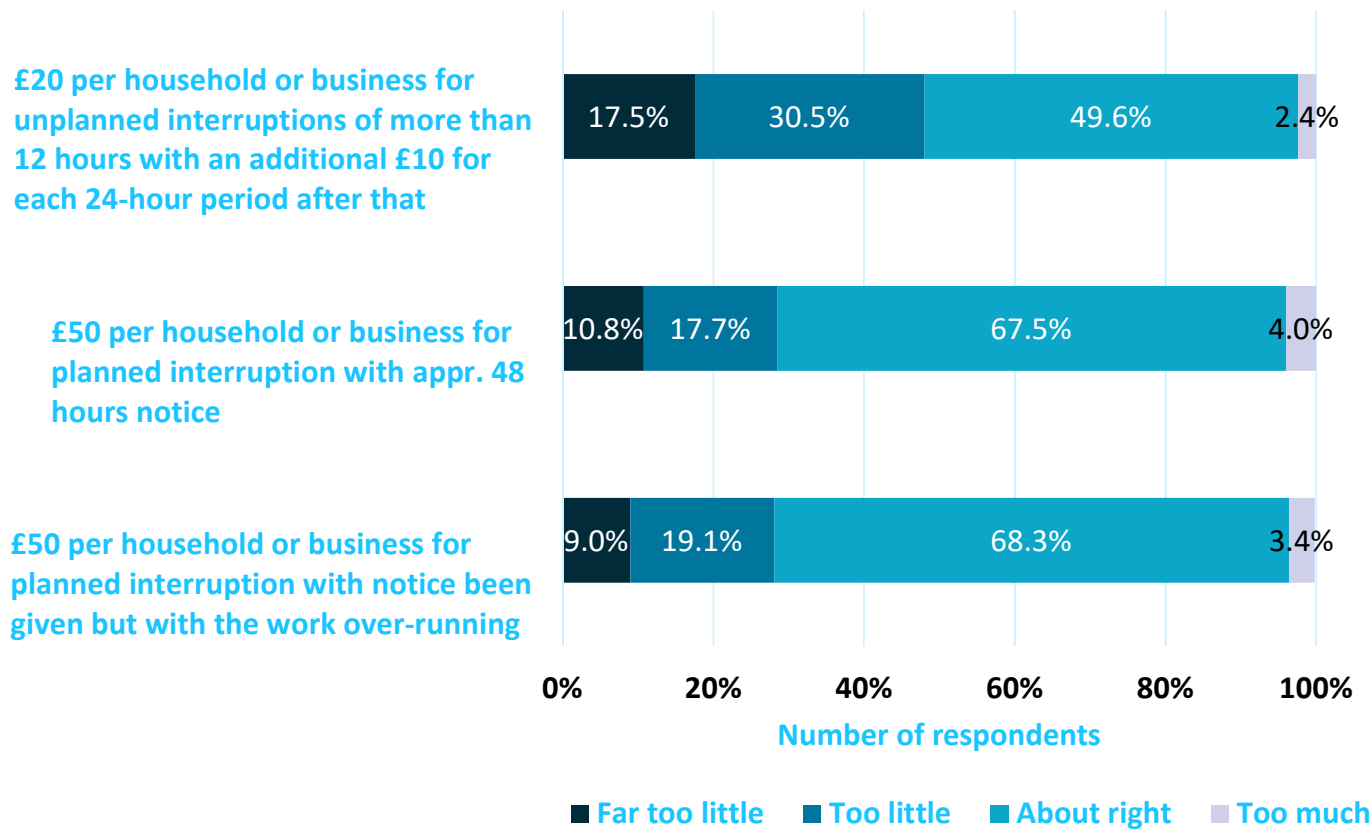


Impact



- Appr. 2/3 of all interrupts lasted less than 6 hours with the biggest concentration between 3 and 6 hours.
- 58% of all interruptions had little or no impact on the household
- The length of the duration and perceived severity of the impact seem partially connected as data reveal a modest correlation between both magnitudes. (R=0.64)

Results – Attitude towards current compensation



Base: 502

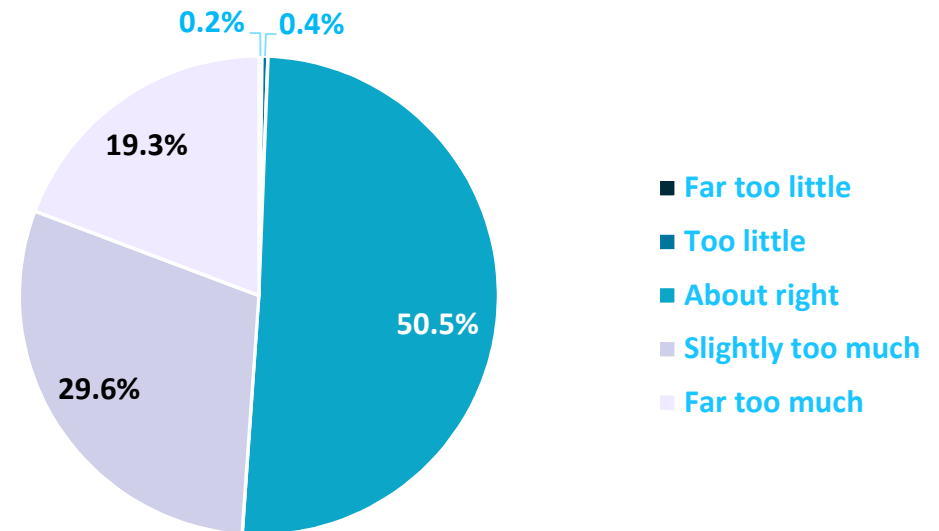
- Half found current compensation for unplanned interruptions as 'About right', the other half felt it was 'Too little' or 'Far too little'
- Most found current compensation for planned interruption and 'planned interruption with over-running work' appropriate

Results – Attitude towards current Water Bill

■ Equal shares

- About half the respondents think their bill is about right.
- Almost half think their bill is either slightly or far too expensive.

■ These results are in line with others in the industry.



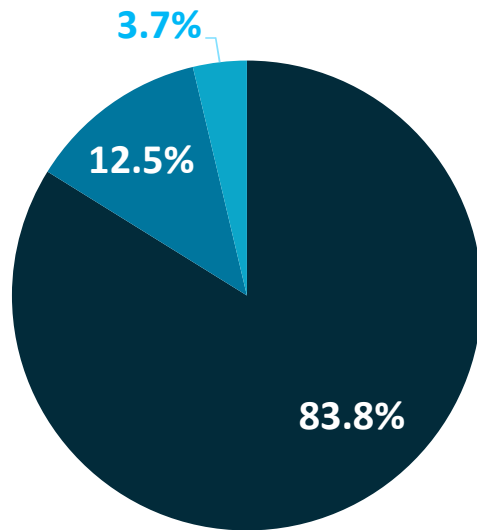
Base: 502

Results – Proportions Choosing ‘Interruption & Compensation’ over ‘No Interruption’

| Type of interruption | Length | Compensation [£ / hour] | | | | |
|----------------------|----------|-------------------------|-------|-------|-------|-------|
| | | £2.50 | £5 | £10 | £20 | £30 |
| Unplanned | 3 hours | 19.9% | 33.3% | 50.0% | 52.4% | 68.7% |
| | 6 hours | 16.7% | 31.4% | 52.6% | 61.1% | 61.6% |
| | 12 hours | 27.6% | 36.5% | 61.9% | 67.2% | 64.8% |
| Planned | 3 hours | 39.7% | 50.0% | 56.1% | 60.0% | 78.0% |
| | 6 hours | 28.2% | 46.6% | 64.3% | 70.1% | 68.9% |
| | 12 hours | 23.6% | 43.8% | 63.9% | 73.9% | 76.4% |

- As expected, higher proportions chose ‘Interruption & compensation’ with higher compensation, but effect flattens at the highest rates for long interruptions.
- Weaker correlation with duration
- Higher share chose ‘Interruption & Compensation’ when interruption was planned

Results – Proportions Always Choosing ‘Interruption & Compensation’ or ‘No Interruption’



- Traders - chose both options at least once
- Choose always 'Interruption+Compensation'
- Choose always 'No interruption'

Base: 502

- The vast majority (83.8%) traded between alternatives.
- But 12.5% always chose ‘Interruption + compensation’
- And 3.7% always chose ‘No interruption’
- The total number of non-traders was 16.1% (down from 32.1% at the pilot stage)

Results – Econometric Model

| Variable | Mean | | Std. deviation | |
|----------------------------|--------|------------|----------------|------------|
| | Coef | Std. error | Coef | Std. error |
| Duration [hours] | 0.020 | (0.013) | 0.076 | (0.014)*** |
| Compensation [£/hour] | 0.164 | (0.012)*** | 0.155 | (0.012)*** |
| Planned interruption [1,0] | 0.862 | (0.110)*** | 1.324 | (0.148)*** |
| ASC (Interruption) [1,0] | -2.089 | (0.158)*** | 2.013 | (0.139)*** |
| No. observations | 4,964 | | | |

Mixed logit model, with normal distributions assumed for all variables; * signifies 10% significance; ** signifies 5% significance; *** signifies 1% significance

- The likelihood of choosing ‘*Interruption + Compensation*’ increases with
 - If the interruptions are planned
 - The compensation level
 - The length of interruption

- The results are intuitively correct and measured with good precision.

An econometric model is needed to derive predicted choices at different compensation levels for different types of interruption and for different segments.

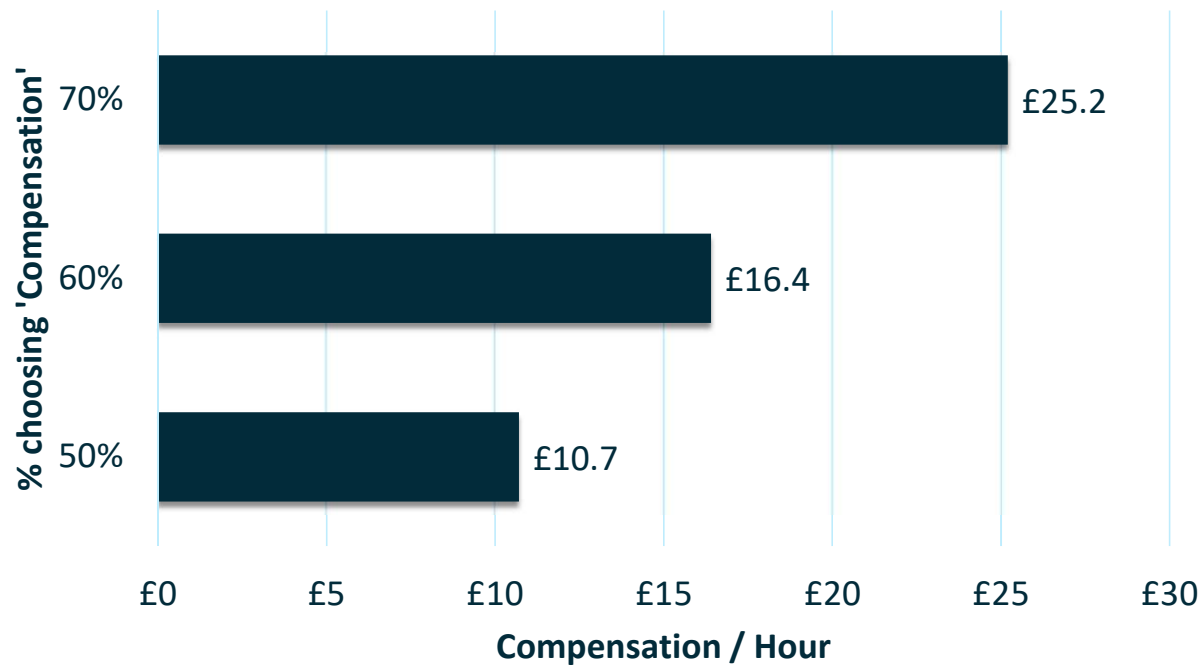
Results – Predicted Shares from Simulation

| Type of interruption | Length | Compensation [£/Hour] | | | | |
|----------------------|----------|-----------------------|------------|------------|------------|------------|
| | | £2.50 | £5 | £10 | £20 | £30 |
| Unplanned | 3 hours | 25% | 31% | 45% | 64% | 72% |
| | 6 hours | 26% | 32% | 46% | 65% | 72% |
| | 12 hours | 28% | 34% | 48% | 66% | 73% |
| Planned | 3 hours | 39% | 45% | 58% | 72% | 77% |
| | 6 hours | 40% | 46% | 58% | 72% | 77% |
| | 12 hours | 42% | 48% | 60% | 73% | 78% |
| OVERALL * | | 29% | 35% | 49% | 66% | 73% |

- Results are in line with expectation:
 - Higher acceptance of planned than unplanned interruptions
 - Higher acceptance with higher compensation
 - Little effect due to duration.

**Based on 75%/25% ratio of unplanned/planned and 60%/30%/10% ratio for 3h, 6h, 12h. Weights supplied by Affinity Water.*

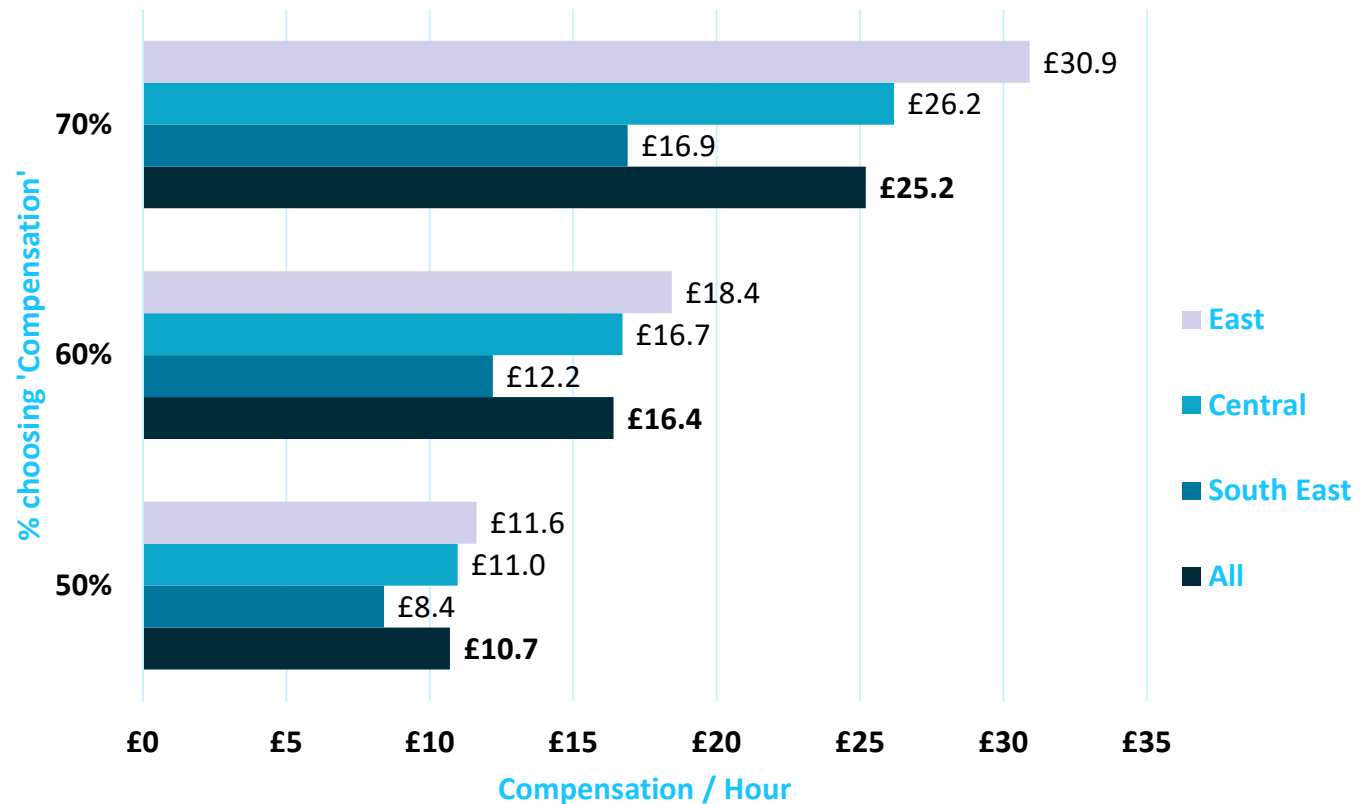
Results – Predicted Compensation Required for 50%, 60% and 70% to Prefer ‘Interruption + Compensation’ Over ‘No Interruption’



- Overall, a compensation level of £25.20 per hour is needed to ensure that 70% would prefer ‘Interruption + compensation’ over ‘No interruption’.
- £16.40 would ensure 60% preference for ‘Interruption + compensation’
- £10.70 would ensure 50% preference for ‘Interruption + compensation’

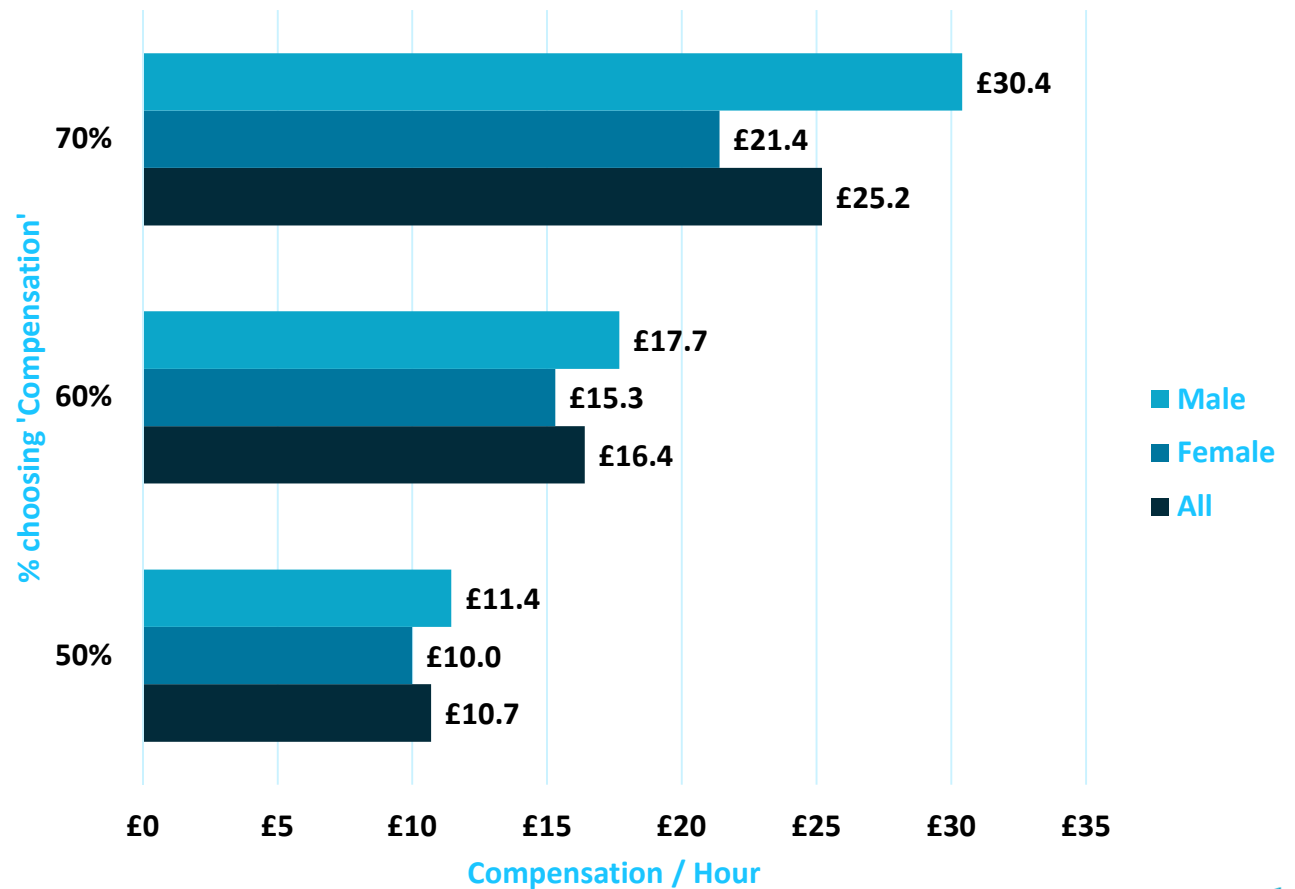
Results – Predicted Compensation Required by Region

- Customers in the South East appear to be more price sensitive i.e. a smaller compensation is required to prompt them to prefer 'Interruption + compensation'



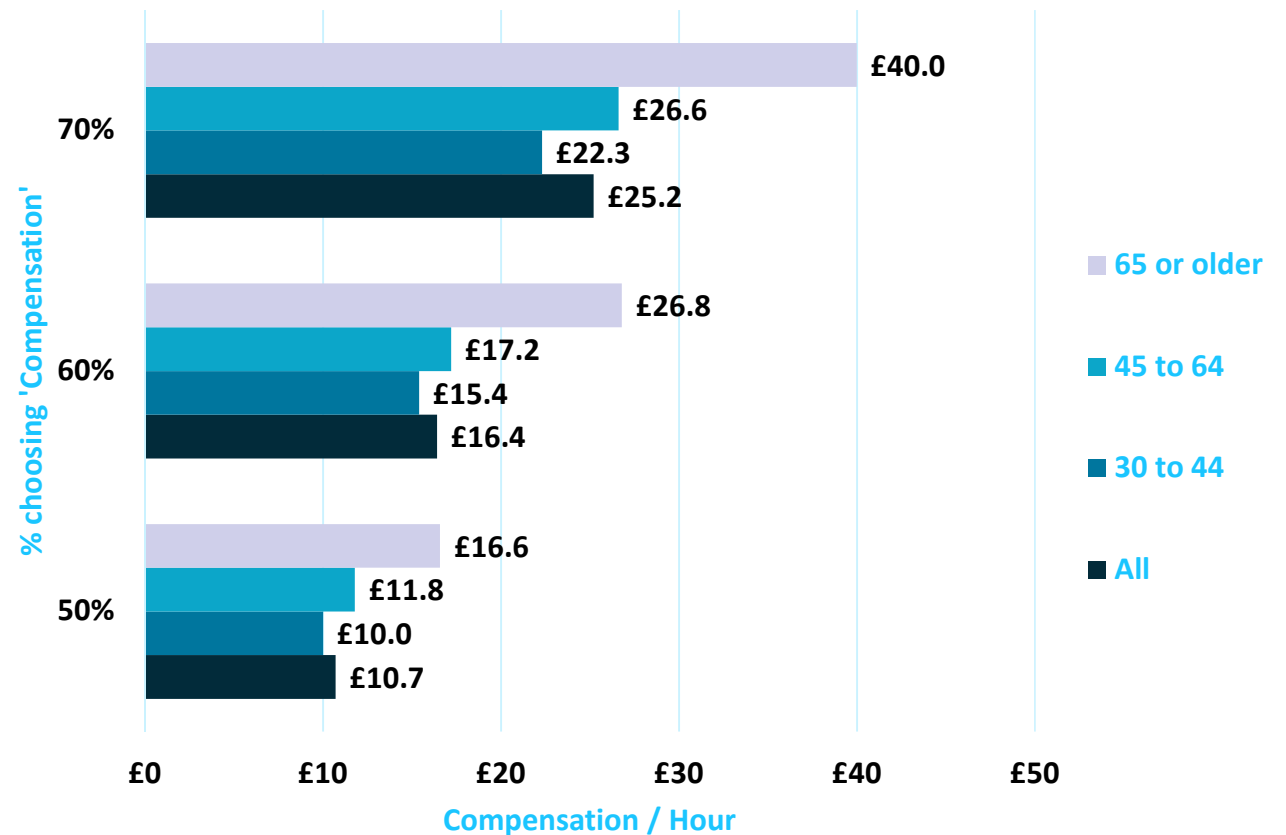
Results – Predicted Compensation Required by Gender

- There are only minor differences between the genders for 50% and 60% preference rates
- However, to achieve 70% preference for interruption + compensation would require more compensation for men than for women.



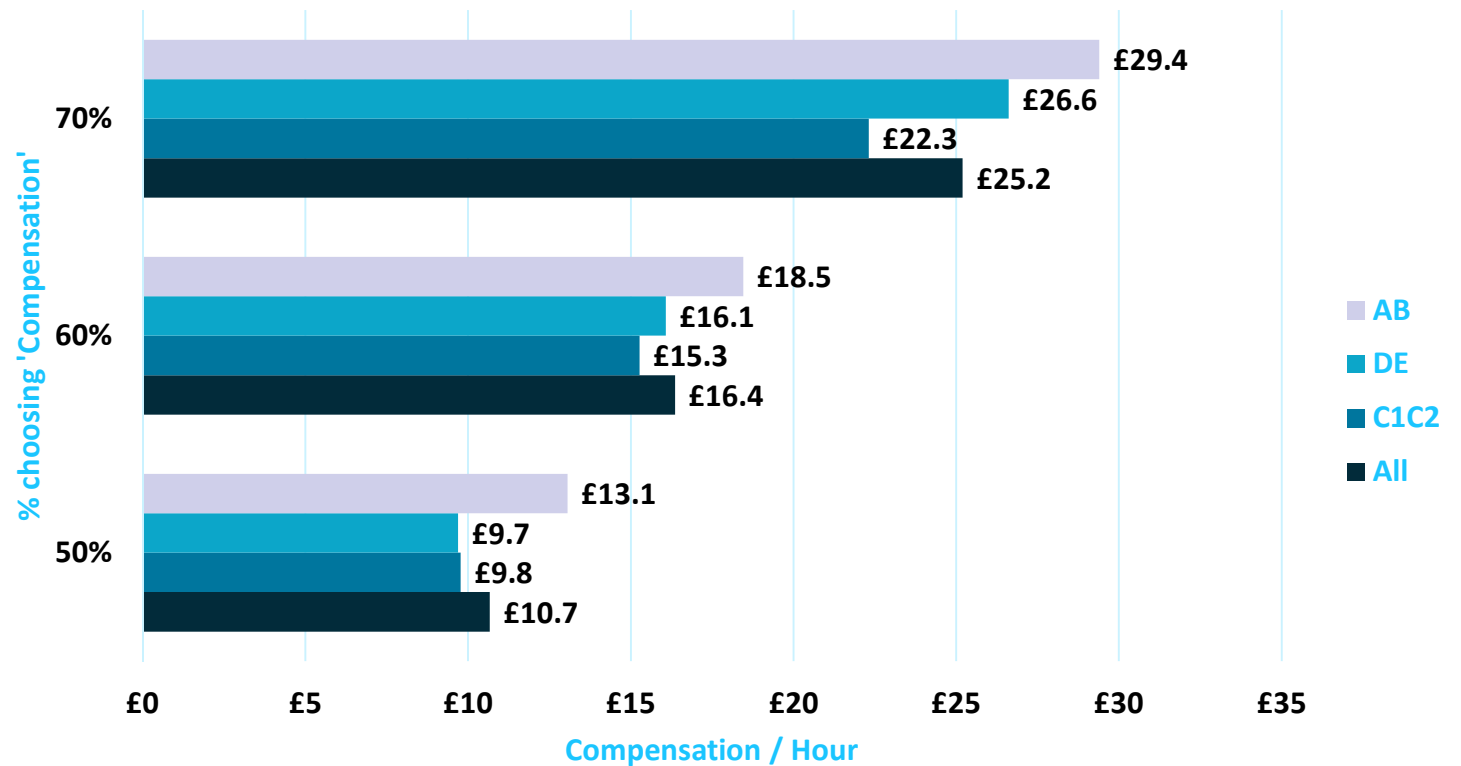
Results – Predicted Compensation Required by Age Group

- The oldest customers (65plus) require substantially higher levels of compensation than other age groups.



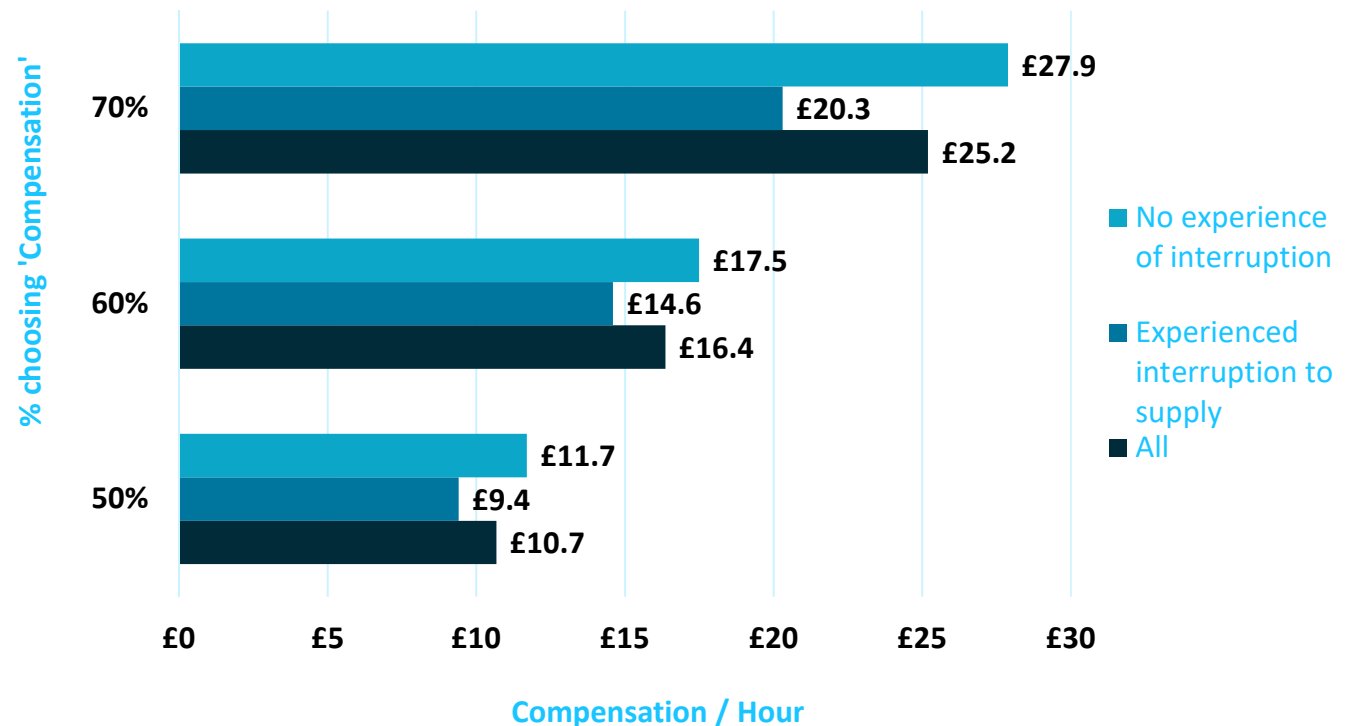
Results – Predicted Compensation Required by SEG Segment

- 'AB' customers require more compensation than other SEG groups to choose 'Interruption + compensation'



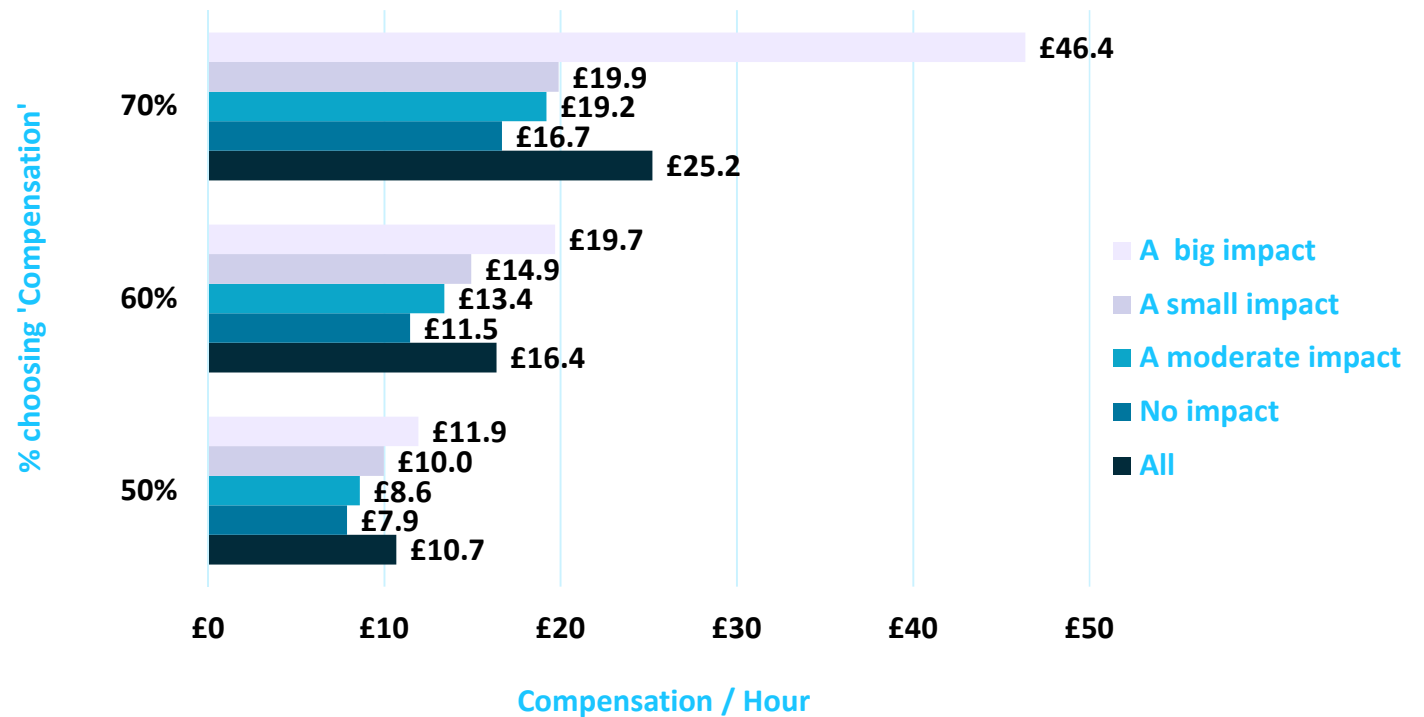
Results – Predicted Compensation Required by Experience of an Interruption

- Those without experience of an interruption require more compensation than those who have experienced an interruption.
- This suggests that interruptions may not be as bad as people think they are who haven't experienced them.



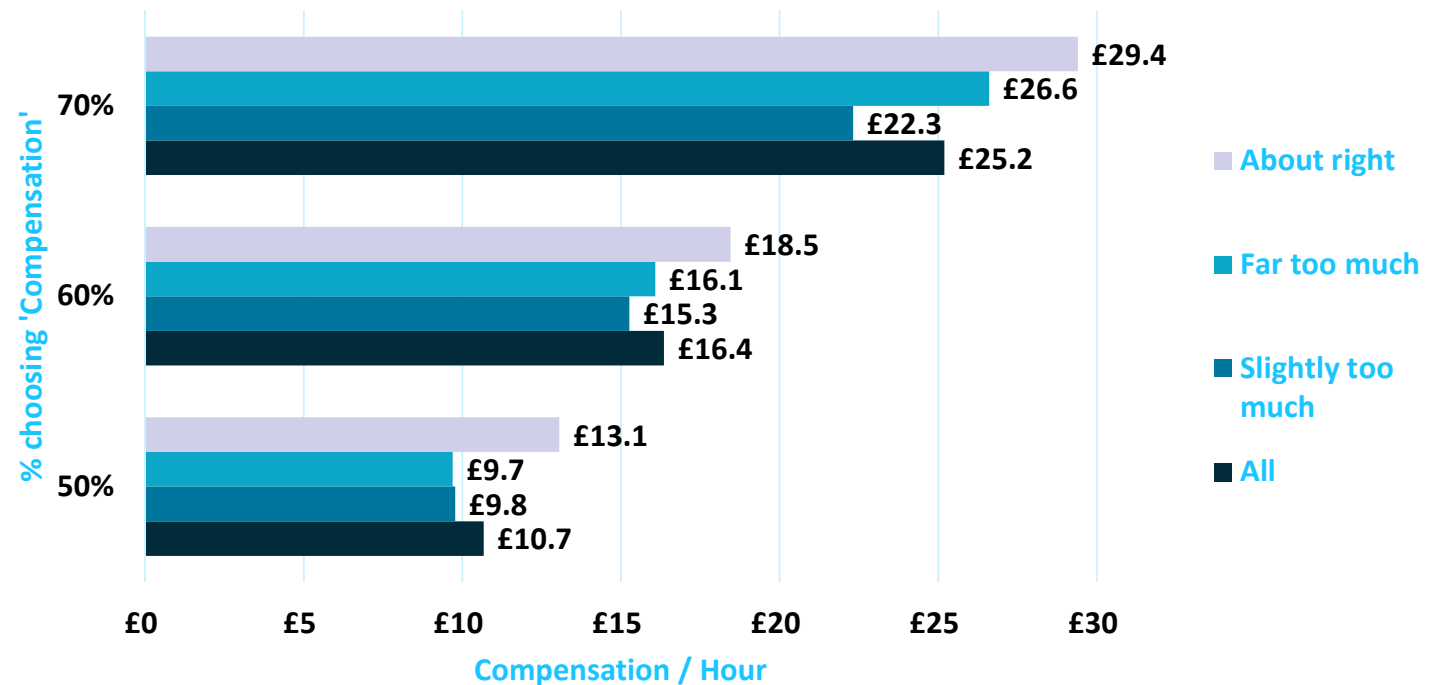
Results – Predicted Compensation Required by Impact of Experienced Interruption

- Those who perceived a past interruption as having 'A big impact' required significantly higher compensation than others.
- The relationship among all impact categories is as expected.

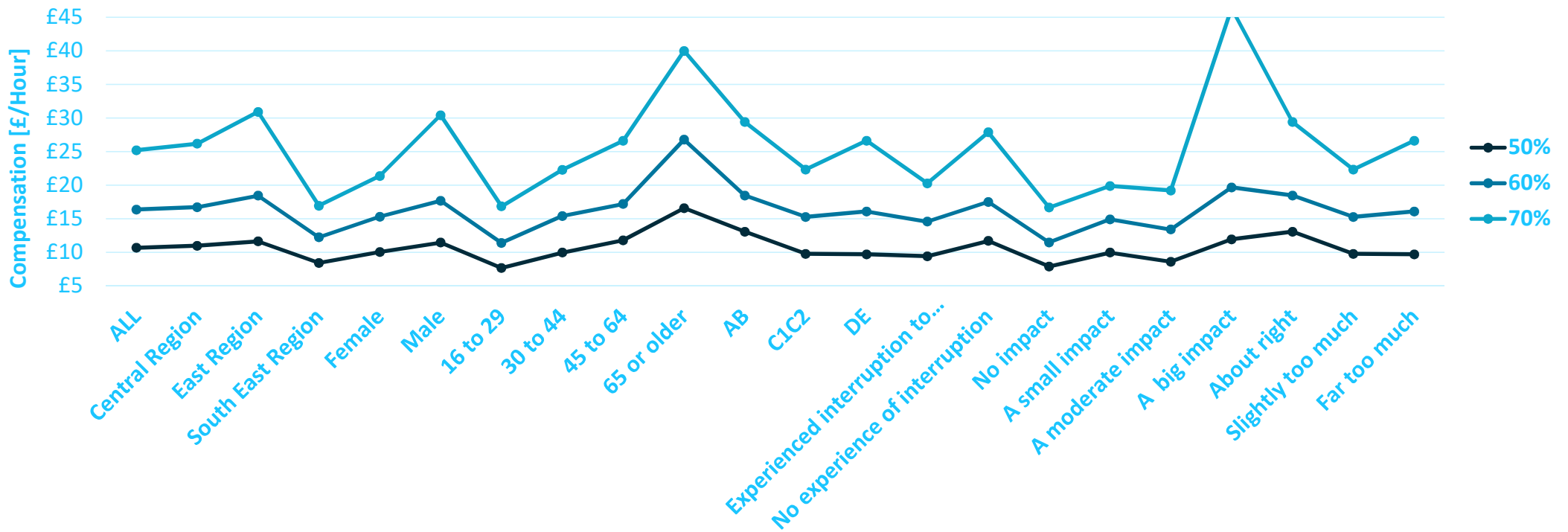


Results – Predicted Compensation Required by Bill Attitudes

- Those who think their current bill is 'about right' ask for slightly higher compensation.
- This is as expected given that these customers are likely to be the least financially constrained.



Results – Predicted Compensation Required for All Segments



➤ Compensation need highest for '65 or older' and those having experienced 'A big impact' interruption.

Results – Survey Feedback

- Most participants felt able to make comparisons between the presented options.
- Questions and attributes were generally considered to be understandable and realistic.

| Feedback question | YES | NO |
|---|-------|-------|
| Did you generally feel able to make comparisons between the options presented to you? | 90.6% | 9.4% |
| Did you find any of the options hard to understand? | 8.0% | 92.0% |
| Did anything you were asked about seem unrealistic to you? | 17.1% | 82.9% |

Results – Survey Feedback

- Biggest reason for saying ‘unrealistic’ was the seemingly too-high amounts of total compensation.

| Unrealistic Aspects | Frequency [N] |
|---|---------------|
| Amount of compensation generally too high / not realistic | 38 |
| Some of the amounts offered for compensation too high / not realistic | 23 |
| No water for 12 hours | 5 |
| The concept of offering/accepting compensation for interruption | 4 |
| Time scale of interruption | 3 |
| Most of it | 3 |
| Compensation is generally too little | 2 |
| Interruption to water supply in general | 1 |
| The amount of compensation both higher and lower | 1 |
| We live near a constant burst drain that never gets fixed | 1 |



Conclusions

Conclusion

- Compensation at an hourly rate is an effective measure of WTP to avoid a supply interruption.
- Overall, £10.70 per hour is required for 50% to prefer 'Interruption + compensation', £16.40 per hour for 60% and £25.20 for 70%, respectively.
- The amount required depends on
 - Type of interruption (planned / unplanned)
 - Duration of interruption
 - Customers' age and social economic background
 - Customers' previous experience with supply interruption
- The survey has performed well overall and has generated meaningful and reasonably precise results. We therefore recommend these results to Affinity Water for use in determining ODI rates.

8 PR19 Final Bespoke Performance Commitment Definitions

We have attached updated Bespoke PC pro forma templates alongside our App1 table submission and data table commentary. Information in the attached pro forma templates should be read in conjunction with the information set out in the this Appendix.

Outcome C: Minimising disruption to you and your community

Company performance commitment reference: 10

PC name: Properties experiencing longer/repeated instances of low pressure

Unique ID: PR19AFW_10

Short definition

Water pressure for properties that experience longer/repeated instances of low pressure than covered by the DG2 indicator.

The current DG2 indicator (as set out in the final definition for PR19 <https://www.ofwat.gov.uk/wp-content/uploads/2017/12/Properties-at-risk-of-receiving-low-pressure.pdf>) does not differentiate properties that suffer from repeated low pressure as it does not report the frequency or duration of these events. It therefore does not take into account properties that experience low-pressure issues throughout the year of varying duration; not only at high demand periods, but also short durations caused by, for example, large commercial users filling tanks.

This performance commitment will incentivise pressure improvement schemes to target those properties which currently receive the most frequent drops in mains pressure.

Measurement

The measure will be cumulative property hours and minutes below 15 metres normalised by total number of properties.

The measure will reset to zero at the start of each year on 1 April.

15m head in the distribution main at each point of supply will be used as the reference level. The source of the data to measure this will be:

- o CP/DG2 loggers reported through our Waternet system (network telemetry)
- o Complaints – repeat low pressure contact, verified to be a network issue

Pressures recorded below 15m head for a duration of greater than 1 hour will be recorded under this performance commitment (this aligns to the DG2 measure).

The number of properties will be calculated using our Geographical Information System (GIS) and modelling tools based on ground level difference from the logger.

Mitigation / exceptions

The PC will exclude from measurement for exceptional peak demand (we will exclude the 5 days of the year when demand is at its highest) in line with our current DG2 reporting. The exclusion allows for extremes that we are not able to plan for and would prove costly to remedy, as it would otherwise drive disproportionate investment in assets that would not be required for 99% of the year, and which would not guarantee a year-on-year improvement for customers. The measure will exclude reductions in water pressure pursuant to authorisation made by an ordinary drought order or emergency drought order under Section 74 of the Water Resources Act 1991.

We will not exclude one-off incidents due to operational activity (planned maintenance, mains bursts, failure of network equipment). The scope of this PC is therefore wider than the current DG2 measure. The PC will highlight areas which are subject to frequent operational failures and therefore incentivise investigations and solutions to these issues.

Any other information relating to the performance commitment

This is an “out and under” (reward & penalty) ODI.

Full definition of the performance commitment

This PC is a measure of our success in providing a minimum pressure to properties. The definition of low pressure is pressure below 15m head. The measure is designed to work in a similar way to Ofwat's measure of supply interruptions, with performance quantified as units of time per customer, measured by our DG2 and Critical Point loggers. Critical point loggers are being installed in every District Meter Area and most unmeasured areas. This will provide high coverage and we will add a further 800 reportable loggers, as a result this will identify additional areas of properties receiving low pressure.

Current measure

We currently report pressure under the DG2 serviceability indicator metric which is reported through Discover Water. The Discover Water tables, which can be found through the Ofwat website, compare DG2 results and other indicators across all water companies. This will be continued in AMP7 as a water indicator on the Asset Health long list which companies can select to report on.

We do not currently have a performance commitment against DG2 but is aiming to have 100 properties on the register at the end of AMP6. There are also a small but significant number of poor pressure locations that have been a direct result of new developments in the area. These are being addressed through strategic infrastructure schemes with contributions from the Infrastructure Charge. The Strategic Infrastructure programme of work allows us to plan forward for those areas where new developments will affect our current customers' pressure.

Customer Insight

Low pressure issues are the second highest reason for customers contacting us, after supply interruptions. In-depth customer interviews found that in low pressure areas, customers have little understanding of the causes of low pressure, and whether it is the responsibility of the water company or the customer. It also showed that many become “resigned” to the fact that their pressure is low, though the operational data shows that there were a significant number of complaints about shower pressure. Awareness of the boundary between the customer and network needs to be provided (website etc) to support this

commitment and reduce customer contact. Part of any communication needs to include an awareness for plumbers to ensure that they are installing the correct diameter internal pipework to support the lowest possible pressure received as advised by us.

Support from CCG

Two workshops were held with our CCG resilience and environment sub-group. The objective was to develop bespoke commitments in the area of resilience to have a “better connected” network to improve supply to those at the extremities of the network or with a single source of supply and, in response to customer contact, improve pressure to those “living with” low pressure. Internal working groups were formed to review the options and develop proposals for commitment(s). We reviewed options for Bespoke Performance Commitments on:

- Single Supply system
- Unprotected works in flood risk zones
- Longer/repeated instances of low pressure

Due to the emphasis on developing commitments to reflect customer issues, we reviewed our customer contact data as summarised above. This led to an investigation into a bespoke commitment around low pressure.

Reporting processes

Various processes will be put in place and maintained to ensure that the data feeding this performance commitment is accurate:

1. Logger failures - a regular review of the reporting loggers to ensure they are correctly calibrated.
2. Low pressure calls for investigation and reporting - to effectively use existing information received from customer contact on low pressure.
3. Repeat calls (outside incidents) will require a site visit to confirm whether pressure is below the 15m reference level in the main. We will adopt a process to log and report through the performance commitment.
4. Maintenance of the data and reporting – we will undertake regular review of the data received and challenge figures to ensure that reporting remains accurate and the PC will be subject to our formal Reporter review as part of our year end regulatory reporting.

Outcome D: Providing a great service that you value

Company performance commitment reference: 11

PC name: Customers in vulnerable circumstances satisfied with our service

Unique ID: PR19AFW_11

Short definition

This performance commitment is to undertake a survey of Affinity Water's customers who are:

- (a) registered on our Priority Services Register (PSR) and/or
- (b) receiving financial assistance through the WaterSure tariff or our social tariff; and/or
- (c) recorded on our billing system as on flexible payment plans, being bespoke payment plans mutually agreed with the customer based on an affordability assessment

and who contact us, to ascertain the percentage of these customers satisfied with the service they have received from Affinity Water following an interaction with us.

Measurement

The percentage of customers scoring 4/10 or 5/10 in the survey. The survey will ask the following question:

"On a scale of 1 – 10 how satisfied are you with the service you received from Affinity Water?"

Mitigation / exceptions

Customers who do not respond to the survey or do not provide a score will be excluded from the calculation.

Any other information relating to the performance commitment

This is a reputational (non-financial incentive) ODI

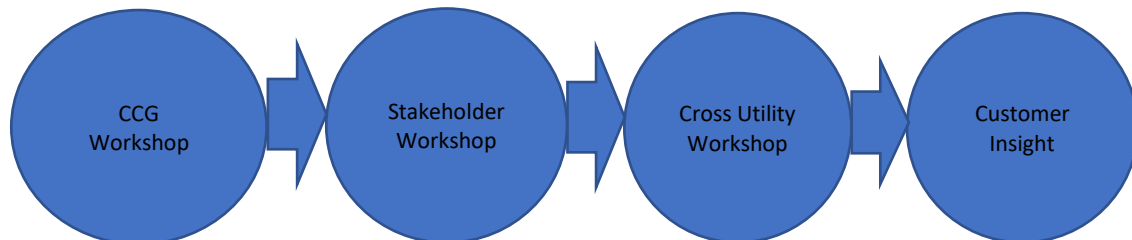
We have attempted to design the survey process to make it as customer-friendly as possible. We hope that this will elicit a high number of responses from customers; however, there is a possibility that some customers will not want to participate in the survey.

We think it would be inappropriate for this performance commitment to have a financial incentive. We do not think a water company should receive a reward for providing good service to customers in vulnerable circumstances. We do not need a financial incentive to get this right as this is a matter of corporate pride.

Full definition of the performance commitment

We have used workshops and interviews to gain insight and review our 'Inclusive Services Journey'. This has then been used to inform the development of performance commitment for services provided to customers in vulnerable circumstances. Our engagement strategy is set out below.

Engagement Strategy



Support from our Customer Challenge Group (CCG)

We have held workshops with our CCG vulnerability sub-group to review current services to customers in vulnerable circumstances and to propose and develop options for bespoke performance commitments. This performance commitment reflects the view we share with our CCG sub-group that we should measure the satisfaction of customers in vulnerable circumstances with the service we provide.

A road map has been shared with our CCG showing our plan of activities, systems and processes required to meet our AMP7 ambition to provide an award-winning service to our customers in vulnerable circumstances that is consistent across all operations.

Customer Insight

Three areas of insight have been used to inform the strategy and this bespoke PC:

- involvement with industry-wide projects (e.g. Water UK) to improve the experience for vulnerable customers and through sharing experiences from the energy sector
- in-depth interviews with vulnerable customers
- workshops with partners/stakeholders including our CCG

Outcome D: Providing a great service that you value

Company performance commitment reference: 12

PC name: Customers in vulnerable circumstances who found us easy to deal with

Unique ID: PR19AFW_12

Short definition

This performance commitment is to undertake a monthly survey of Affinity Water's customers who are:

- (a) registered on our Priority Services Register (PSR) and/or
- (b) receiving financial assistance through the WaterSure tariff or our social tariff; and/or
- (c) recorded on our billing system as on flexible payment plans, these are bespoke payment plans mutually agreed with the customer based on an affordability assessment

and who contact us, to ascertain the percentage of these customers that found us easy to deal with following an interaction with us.

We have included this PC alongside the PC "Customers in vulnerable circumstances satisfied with service." This separate measure is particularly important for customers in vulnerable circumstances as a customer may have special requirements and/or are going through a difficult time; we want to ensure that as well as being satisfied with the overall service, customers found dealing with us to be easy, clear and simple.

Measurement

The percentage of customers scoring 4/10 or 5/10 in the survey. The survey will ask the following question:

"On a scale of 1 – 10 how easy are Affinity Water to deal with?"

Mitigation / exceptions

We have attempted to design the survey process to make it as customer-friendly as possible. We hope that this will elicit the maximum number of responses from customers; however, there is a possibility that some customers will not want to engage.

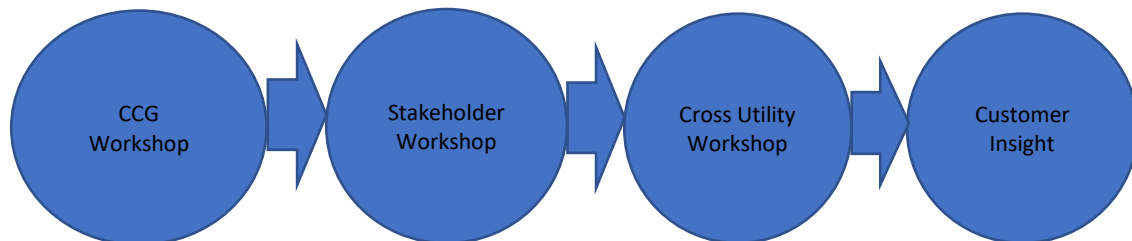
Any other information relating to the performance commitment

This is a reputational (non-financial incentive) ODI as we think it would be inappropriate to have this as a financial incentive. We do not think a water company should receive a reward for providing good service to vulnerable customers. We do not need a financial incentive to get this right as this is a matter of corporate pride.

Full definition of the performance commitment

We have used workshops and interviews to gain insight and review our 'Inclusive Services Journey'. This has been used to inform the development of our PC for services provided to customers in vulnerable circumstances. Our engagement strategy is set out below.

Engagement Strategy



Support from our Customer Challenge Group (CCG)

We have held workshops with our CCG vulnerability sub-group to review current services to customers in vulnerable circumstances and to propose and develop options for bespoke PCs. This PC reflects the view we share with our CCG sub-group that we should measure how easy it is for customers in vulnerable circumstances to deal with Affinity Water.

A road map has been shared with our CCG showing our plan of activities, systems and processes required to meet our AMP7 ambition to provide an award-winning service to our customers in vulnerable circumstances that is consistent across all operations.

Customer Insight

Three areas of insight have been used to inform the strategy and the bespoke PC:

- involvement with industry wide projects (e.g. Water UK) to improve the experience for vulnerable customers and through sharing experiences from the energy sector
- in-depth interviews with vulnerable customers
- workshops with partners/stakeholders including our CCG

Outcome A: Making sure our customers and communities have enough water while leaving more water in the environment

Company performance commitment reference: 13

PC name: Environmental innovation

Unique ID: PR19AFW_13

Short definition

Completing eight environmentally focussed, innovative pilot projects in our communities, enabling us to improve the knowledge and evidence of water use within our catchments. Bringing together sector experts, charities, community and environmental groups and other stakeholders to trial the delivery of a range of innovative multi-party projects linked to different environmental themes and water use behaviours.

Measurement

Delivery of this PC will be reviewed annually against a clear programme setting out project timescales, objectives and cost forecasts. The overall programme has been detailed earlier in Appendix 4. Given that these projects vary in size and cost, with one project in particular accounting for around half the total budget, we propose that the cost is calculated as 1/14th of the total project cost. This weighting is based on 7 projects being worth half the total project budget, and the other half (7 units) of the budget being assigned to the remaining project. We therefore use 14 as the denominator.

it is currently expected that we will complete the delivery of all projects by the end of 2023/24 (year 4 of AMP7) to allow sufficient time for larger scale implementation of effective projects to be developed for our AMP8 Business Plan submission.

Mitigation/Exceptions

N/A

Any other information relating to the performance commitment

This is an “out and under” (reward & penalty) ODI.

Our Community sub-committee of the Board will have oversight of the delivery of these environmental innovative projects.

Full definition of the performance commitment

This PC measures our success in completing environmentally focussed pilot projects in each community which are innovative and may be replicated and expanded if successful.

The pilot projects aim to bring together different sector experts, charities, faith groups, developers and housing groups, schools and academia and wider stakeholders to deliver a range of projects across each our communities, gathering evidence and trialling delivery

methods. This takes a holistic, multiparty view of catchment scale water use to engage local people, and link their water using behaviours with the aquatic environment.

The proposed projects are being developed following discussions with our CCG resilience and environment sub-group, which led to workshops to progress the development of the proposals. The projects were evaluated to ensure they met the following criteria:

- Benefit the environment
- Innovative
- Not part of business as usual
- Goes beyond a statutory requirement
- Relevant to customers
- Measurable
- Could be supported by partners.

Projects will be categorised to identify those that the working group feel meet the requirements and delivery timeframe.

The projects will apply the principles of Natural Capital to evaluate wider societal value of initiatives and investments to identify the following outputs:

1. Options for cost beneficial eco-services by us to the local community
2. Define and quantify the water cycles in the community to determine the availability of water
3. Water re-use and recycling options for the next cycle of water resources management plans
4. Contingency plans for multi-sectors to manage the effects of drought
5. Opportunities to reduce diffuse and point source pollution through partner working to improve the availability of resources
6. Water saving opportunities in partnership with other stakeholders such as building controls
7. Citizen and school science opportunities in the water environment and community

Outcome D: Providing a great service that you value

Company performance commitment reference: 14

PC name: False voids

Unique ID: PR19AFW_14

Short definition

False voids.

A false void is a property listed as void on the company system, but is in fact occupied and using water. In such circumstances, the customer in the property is gaining free water and the rest of the customer base are effectively subsidising them (through the revenue control).

Measurement

We propose that this PC is measured annually in terms of % of properties recorded on our billing system.

Mitigation / exceptions

Any property included in a bulk billing arrangement between Affinity Water and a local authority or social landlord is excluded from the measurement of void properties.

Any property within the Affinity Water supply area supplied by a water supply licensee is excluded from measurement.

Any other information relating to the performance commitment

This is an “out and under” ODI.

Full definition of the performance commitment

If we find a ‘false void’ (i.e. a property listed as empty, but which is occupied), that will reduce the bill for all other customers, as we will seek to recover the same total revenue, but from a larger customer base.

We are currently considering how best to establish baselines for false voids. For gap sites, it is not possible to set a ‘baseline’. By definition, gap sites are sites that are not known.

Outcome A: Making sure our customers and communities have enough water while leaving more water in the environment

Company performance commitment reference: 15

PC name: River restoration

Unique ID: PR19AFW_15

Short definition

The performance commitment is to complete river restoration schemes.

Measurement

Number of river restoration/habitat enhancement schemes included in WINEP3 completed in AMP7.

Implementation of a substantial programme in AMP6 has shown projects may be divided into small and large projects. Definition of measures for WINEP3 has been achieved through establishing a cost benefit ratio of each project and setting a target unit cost and target date for delivery. Our target is to complete 36 projects, these are the projects designated with a “green” status, opposed to the total of 84 “green” and “amber” projects. We are only using the 36 “green” projects for the purposes of the ODI and so we use this number as the denominator.

Mitigation / exceptions

The performance commitment excludes sustainable abstraction reductions because they are included in a separate bespoke performance commitment.

Under circumstances that third party permissions (i.e. landowner agreement) for any project detailed in WINEP3 cannot be achieved, agreement will be sought with the Environment Agency to amend the project outcome. Affinity Water will not incur a penalty where access to land to undertake any project has been refused or delayed.

Any other information relating to the performance commitment

This is an “under and over” (penalty and reward) ODI.

Full definition of the performance commitment

This PC measures our success in delivering river restoration/habitat enhancement schemes in water bodies identified under the Water Framework Directive. A programme of measures for AMP7 is being developed with the Environment Agency through the Water Industry National Environment Programme.

Outcome A: Making sure our customers and communities have enough water while leaving more water in the environment

Company performance commitment reference: 16

PC name: Sustainable abstraction, average annual reduction

Unique ID: PR19AFW_16

Short definition

This performance commitment relates to the reduction in average deployable output made by December 2024, as a result of delivering the sustainability reductions programme.

Sustainability reductions are decreases in deployable output due to a sustainability change to support Water Framework Directive (WFD) objectives.

Measurement

Million litres per day (Ml/d)

This is calculated as the reduction in the combined total annual average deployable output (in Ml/d), between 2020 and 2025, of sources included in the sustainability reduction programme in our business plan submission, which will include a selection of reductions from WINEP3.

The aggregate total of deployable output reductions included in our sustainability reduction programme for achievement by 31 December 2024 will form the baseline target.

The reduction in deployable output volume will be assessed as part of the annual update of the Water Resources Management Plan and through assessment of the aggregate total of distribution input for the previous year which is subject to independent audit.

This PC is a continuation of our PR14 performance commitment.

Mitigation / exceptions

No reward or penalty will apply unless the:

- abstraction licence to which the sustainability reduction notified by the Environment Agency has been modified or revoked so that Affinity Water is precluded from abstracting the volume of water so notified; or
- an agreement not to abstract such water (except in such instances where it is necessary so to do to meet Affinity Water's public water supply duties) has been entered with the Environment Agency pursuant to Section 20 of the Water Resources Act 1991.

Where a reduction is not required and other mitigation measures are more appropriate, this volume will be excluded from the PC. Alternative mitigation measures include, but are not

limited to, river restoration, habitat enhancement and the provision of river support, as reflected in our River Restoration PC.

Any other information relating to the performance commitment

This is a “out & under” (reward & penalty) ODI in respect of reductions made by an agreement under section 20 of the Water Resources Act 1991 and an out (reward) ODI in respect of reductions made by revocation or amendment of an abstraction licence.

Full definition of the performance commitment

This PC measures our success in delivering our outcome of “Making sure our customers and communities have enough water while leaving more water in the environment.”

Sustainability reductions are decreases in deployable output due to a sustainability change which are proposed by the Environment Agency to improve river flow and ecology and to meet Water Framework Directive (WFD) objectives. The Environment Agency uses the Water Industry National Environment Programme (WINEP) tables to notify proposed reductions and they are being considered as part of the development of our PR19 Water Resources Management Plan.

This PC relates to the reduction in average deployable output to be made by December 2024, as a result of changes to the volumes of water that Affinity Water can abstract, effected either through modification or revocation of abstraction licences or under an agreement pursuant to Section 20 of the Water Resources Act 1991. It will be calculated as the reduction in the combined total annual average deployable output (in Ml/d), between 2020 and 2025, of sources included in the sustainability reduction programme achieved ahead of 31 December 2024.

Outcome A: Making sure our customers and communities have enough water while leaving more water in the environment

Company performance commitment reference: 17

PC name: Abstraction Incentive Mechanism

Unique ID: PR19AFW_17

Short definition

The objective of the Abstraction Incentive Mechanism (AIM) is to encourage water companies to reduce the environmental impact of abstracting water at environmentally sensitive sites in low flow periods (e.g. droughts).

Measurement

A review of the AIM triggers and baseline abstraction will be undertaken on a quarterly and annual basis to validate the selected values. Once validated, the actual abstraction figures will be measured against the AIM baseline abstraction values, for the time period(s) that the catchment triggers were activated in that period. This will happen annually, between 1 April and 31 March. The individual normalised scores for each source/group of sources will then be totalised to indicate the company performance.

This PC remains unchanged from PR14, it is a “PR14 continuation” of our current measurement.

Mitigation / exceptions

Where Sustainability Reductions (SRs) have reduced Deployable Output (DO) to zero MI/d, the AIM will no longer apply to these sources as the impact of abstraction has been mitigated. Where DO has not been reduced to zero MI/d, there remains the potential for a residual abstraction influence and so there is a benefit in continuing to assess AIM against a lower AIM baseline. This will be in line with the post-SR licence once the latter is in place. Also, we have applied groupings between sources that are in the same catchment and share the same AIM trigger which is typically the downstream gauge of both sources in the grouping, such that the benefit of their combined operation can be realised. The reason for the grouping is to allow operational resilience during a low flow period and allows an accurate AIM score to be calculated when applying the normalisation. For our Slip End source that has a licence condition to reduce abstraction in steps relative to river flows, a stepped AIM baseline will be adopted at the 95%-ile of the licensed volume instead of a fixed AIM baseline abstraction for a fixed trigger.

Any other information relating to the performance commitment

This is an “out” (reward only) ODI.

We propose a target of zero for the normalised AIM baseline score at the company scale, so that a negative score results in a reward. We do not consider penalties to be appropriate. As every unit volume of groundwater abstraction reduced from the AIM baseline has to be replaced either by more expensive alternative supplies or reductions in use, we are

anticipating the reward to reflect the opportunity cost of replacement water.

Full definition of the performance commitment

The objective of the Abstraction Incentive Mechanism (AIM) is to encourage water companies to reduce the environmental impact of abstracting water at environmentally sensitive sites in low flow periods (i.e. droughts). Following the Ofwat methodology on AIM, the AIM triggers and baseline abstraction values have been calculated for each catchment and source. These values have been peer reviewed by internal and external stakeholders, they are robust whilst an ongoing assessment is undertaken on a quarterly basis. Affinity Water put forward a total of 23 groundwater sources to be included in AIM for PR14, which were deemed as potentially environmentally sensitive by previous studies. AIM came into force in reputational form on 1st April 2016. Seven sources have been subject to sustainability reductions since then, with three of them having reduced their DO to zero MI/d (full cessation). These abstractions will be excluded from the AIM list of sources going forward as the abstraction impact is considered to have been mitigated. As such, this reduces the number of sources to 20 that will be carried forward into AMP7. We will be using this PC to monitor our success in reducing the environmental impact of our abstraction activities from those 20 sources for the remainder of AMP6 and into AMP7 on an annual basis. The PR14 AIM reporting will define the marginal cost of voluntary reductions in groundwater in sensitive water bodies and this will set the opportunity cost for reward at PR19 subject to adjustment for further investment needed to maintain the supply/demand balance.

Outcome B: Supplying high quality water you can trust

Company performance commitment reference: 18

PC name: Mean Zonal Compliance

Unique ID: PR19AFW_18

Short definition

Mean Zonal Compliance (MZC) is a measure of compliance with the relevant drinking water standards for 39 key chemical and microbiological parameters that are tested to establish the quality of water and is the main measure used by Drinking Water Inspectorate to demonstrate compliance. This is contained within the Drinking Water Directive and The Water Supply (Water Quality) Regulations 2016.

Measurement

MZC performance is measured annually as a percentage. The unit is percentage compliance with standards a year on a calendar year basis.

This PC remains unchanged from PR14, it is a “PR14 continuation” of our current measurement.

Mitigation / exceptions

N/A

Any other information relating to the performance commitment

This an “under” (penalty-only) ODI, if CRI is a non-financial PC as we have proposed, otherwise it is a non-financial ODI.

We are retaining MZC as a measure of water quality as we believe that this is a clear and understandable standard for customers, and therefore preferable to the new Compliance Risk Index (CRI) as a measure of quality performance. MZC is a mature measure as it has been in use for several years and trends observed are well understood. Therefore, it can be used to help demonstrate the changes in water quality performance year on year at Affinity Water and can be used to differentiate companies’ performance levels. This measure is already successfully used on the “Discover Water” website to explain water quality compliance.

Full definition of the performance commitment

The full definition of mean zonal compliance is set out in: *“Calculation and composition of indices published in the Chief Inspector’s Report - February 2016*, available from the Drinking Water Inspectorate website.

Outcome D: Providing a great service that you value

Company performance commitment reference: 14

PC name: Gap properties

Unique ID: PR19AFW_19

Short definition

A gap site is a property that was previously not listed on our billing database but has subsequently been added to our billing database and is now in charge.

Measurement

We propose that this PC is measured annually in property numbers.

Mitigation / exceptions

Any property included in a bulk billing arrangement between Affinity Water and a local authority or social landlord is excluded from the measurement of void properties.

Any property within the Affinity Water supply area supplied by a water supply licensee is excluded from measurement.

Any other information relating to the performance commitment

This is an “out” (outperformance only) ODI for gap sites.

Full definition of the performance commitment

If we find a ‘false void’ (i.e. a property listed as empty, but which is occupied), that will reduce the bill for all other customers, as we will seek to recover the same total revenue, but from a larger customer base. The same is true of a ‘gap’ site.

We are currently considering how best to establish baselines for false voids. For gap sites, it is not possible to set a ‘baseline’. By definition, gap sites are sites that are not known.