

| CW1 - Totex analysis - water resources and water network+ (post frontier shift and real price effects) | | |
|--|--|--|
| Line description | | Commentary |
| | Operating expenditure | |
| 1 | Base operating expenditure | This table has been populated from the output of the new ADD tables and applying the RPEs and frontier shift as set out in the supporting document 'SRN-DDR-026 Real Price Effect and Frontier Shift Methodology'. |
| 2 | Enhancement operating expenditure | |
| 3 | Developer services operating expenditure | |
| 4 | Total operating expenditure excluding third party services | |
| 5 | Third party services | |
| 6 | Total operating expenditure | |
| | Developer services revenue | |
| 7 | Grants and contributions - operating expenditure | |
| | Capital expenditure | |
| 8 | Base capital expenditure | |
| 9 | Enhancement capital expenditure | |
| 10 | Developer services capital expenditure | |
| 11 | Total gross capital expenditure excluding third party services | |
| 12 | Third party services | |
| 13 | Total gross capital expenditure | |
| | Developer services revenue | |
| 14 | Grants and contributions - capital expenditure | |
| 15 | Net totex | |
| | Cash expenditure | |
| 16 | Pension deficit recovery payments | |
| 17 | Other cash items | |
| 18 | Totex including cash items | |
| | Atypical expenditure | |
| 19 | High Park DWI prosecution | |

| | | |
|----|----------------------------|---|
| 20 | Item 2 | The only Atypical item relates to the High Park DWI prosecution as detailed in our 2022-23 APR. |
| 21 | Item 3 | |
| 22 | Item 4 | |
| 23 | Item 5 | |
| 24 | Total atypical expenditure | Calculation |

| CW1a - Totex analysis - water resources and water network+ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|---------------|--------|--------|-------|-------|-------|-------|-------|-------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------------|--------|--------|--------|--------|--------|-------|-------|-------|
| Line description | Commentary | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Operating expenditure | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Base operating expenditure | <p>Principal use recharges are included within this row. Details are as below, in £m</p> <table border="1"> <thead> <tr> <th>Business unit</th> <th>22-23</th> <th>23-24</th> <th>24-25</th> <th>25-26</th> <th>26-27</th> <th>27-28</th> <th>28-29</th> <th>29-30</th> </tr> </thead> <tbody> <tr> <td>Water resources</td> <td>2.017</td> <td>1.573</td> <td>1.573</td> <td>1.819</td> <td>1.554</td> <td>0.639</td> <td>0.155</td> <td>0.143</td> </tr> <tr> <td>Raw water treatment</td> <td>0.037</td> <td>0.030</td> <td>0.030</td> <td>0.028</td> <td>0.019</td> <td>0.013</td> <td>0.011</td> <td>0.010</td> </tr> <tr> <td>Raw water storage</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> </tr> <tr> <td>Water treatment</td> <td>8.547</td> <td>6.918</td> <td>6.918</td> <td>6.877</td> <td>4.936</td> <td>2.893</td> <td>2.052</td> <td>1.892</td> </tr> <tr> <td>Treated water distribution</td> <td>6.731</td> <td>5.214</td> <td>5.214</td> <td>5.236</td> <td>3.758</td> <td>2.016</td> <td>1.312</td> <td>1.209</td> </tr> <tr> <td>Total water</td> <td>17.332</td> <td>13.735</td> <td>13.735</td> <td>13.960</td> <td>10.267</td> <td>5.562</td> <td>3.531</td> <td>3.254</td> </tr> </tbody> </table> <p>PUA recharges are predominantly made for office leases, IT networks and security, as well as some commercial vehicles.</p> | Business unit | 22-23 | 23-24 | 24-25 | 25-26 | 26-27 | 27-28 | 28-29 | 29-30 | Water resources | 2.017 | 1.573 | 1.573 | 1.819 | 1.554 | 0.639 | 0.155 | 0.143 | Raw water treatment | 0.037 | 0.030 | 0.030 | 0.028 | 0.019 | 0.013 | 0.011 | 0.010 | Raw water storage | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Water treatment | 8.547 | 6.918 | 6.918 | 6.877 | 4.936 | 2.893 | 2.052 | 1.892 | Treated water distribution | 6.731 | 5.214 | 5.214 | 5.236 | 3.758 | 2.016 | 1.312 | 1.209 | Total water | 17.332 | 13.735 | 13.735 | 13.960 | 10.267 | 5.562 | 3.531 | 3.254 |
| Business unit | 22-23 | 23-24 | 24-25 | 25-26 | 26-27 | 27-28 | 28-29 | 29-30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water resources | 2.017 | 1.573 | 1.573 | 1.819 | 1.554 | 0.639 | 0.155 | 0.143 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Raw water treatment | 0.037 | 0.030 | 0.030 | 0.028 | 0.019 | 0.013 | 0.011 | 0.010 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Raw water storage | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water treatment | 8.547 | 6.918 | 6.918 | 6.877 | 4.936 | 2.893 | 2.052 | 1.892 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Treated water distribution | 6.731 | 5.214 | 5.214 | 5.236 | 3.758 | 2.016 | 1.312 | 1.209 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total water | 17.332 | 13.735 | 13.735 | 13.960 | 10.267 | 5.562 | 3.531 | 3.254 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Enhancement operating expenditure | Any material changes year on year will be mentioned in the CW3 commentary | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Developer services operating expenditure | No commentary – consistent over AMP 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Total operating expenditure excluding third party services | Calculation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Third party services | No commentary – consistent over AMP 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Total operating expenditure | Calculation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Developer services revenue | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Grants and contributions - operating expenditure | Nil | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Capital expenditure | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Base capital expenditure | The AMP8 base capex programme is covered in detail in SRN19 Botex Technical Annex | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Enhancement capital expenditure | Any material changes year on year will be mentioned in the CW3 commentary | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Developer services capital expenditure | Any material changes year on year will be mentioned in the DS2e commentary | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | Total gross capital expenditure excluding third party services | Calculation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | Third party services | Variations due to timing of specific schemes for which 3 rd party contributions are anticipated | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | Total gross capital expenditure | Calculation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Developer services revenue | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | Grants and contributions - capital expenditure | Any changes worth noting will be mentioned in the DS1e commentary | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



| 15 | Net totex | Calculation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|-----------------------------------|--|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Cash expenditure | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | Pension deficit recovery payments | <p>Pension deficit recovery payments have been excluded from CW1a as payments after 2025 are not recovered from customers per IN 13/17. Details are as below, in £m of the deficit payments we forecast to make across AMP8</p> <table border="1"> <thead> <tr> <th>Business unit</th> <th>22-23</th> <th>23-24</th> <th>24-25</th> <th>25-26</th> <th>26-27</th> <th>27-28</th> <th>28-29</th> <th>29-30</th> </tr> </thead> <tbody> <tr> <td>Water resources</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.230</td> <td>0.230</td> <td>0.230</td> <td>0.230</td> <td>0.165</td> </tr> <tr> <td>Raw water treatment</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> </tr> <tr> <td>Raw water storage</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.028</td> <td>0.028</td> <td>0.028</td> <td>0.028</td> <td>0.020</td> </tr> <tr> <td>Water treatment</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>2.892</td> <td>2.892</td> <td>2.892</td> <td>2.892</td> <td>2.084</td> </tr> <tr> <td>Treated water distribution</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>3.130</td> <td>3.130</td> <td>3.130</td> <td>3.130</td> <td>2.256</td> </tr> <tr> <td>Total water</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>6.280</td> <td>6.280</td> <td>6.280</td> <td>6.280</td> <td>4.526</td> </tr> </tbody> </table> | Business unit | 22-23 | 23-24 | 24-25 | 25-26 | 26-27 | 27-28 | 28-29 | 29-30 | Water resources | 0.000 | 0.000 | 0.000 | 0.230 | 0.230 | 0.230 | 0.230 | 0.165 | Raw water treatment | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Raw water storage | 0.000 | 0.000 | 0.000 | 0.028 | 0.028 | 0.028 | 0.028 | 0.020 | Water treatment | 0.000 | 0.000 | 0.000 | 2.892 | 2.892 | 2.892 | 2.892 | 2.084 | Treated water distribution | 0.000 | 0.000 | 0.000 | 3.130 | 3.130 | 3.130 | 3.130 | 2.256 | Total water | 0.000 | 0.000 | 0.000 | 6.280 | 6.280 | 6.280 | 6.280 | 4.526 |
| Business unit | 22-23 | 23-24 | 24-25 | 25-26 | 26-27 | 27-28 | 28-29 | 29-30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water resources | 0.000 | 0.000 | 0.000 | 0.230 | 0.230 | 0.230 | 0.230 | 0.165 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Raw water treatment | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Raw water storage | 0.000 | 0.000 | 0.000 | 0.028 | 0.028 | 0.028 | 0.028 | 0.020 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water treatment | 0.000 | 0.000 | 0.000 | 2.892 | 2.892 | 2.892 | 2.892 | 2.084 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Treated water distribution | 0.000 | 0.000 | 0.000 | 3.130 | 3.130 | 3.130 | 3.130 | 2.256 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total water | 0.000 | 0.000 | 0.000 | 6.280 | 6.280 | 6.280 | 6.280 | 4.526 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | Other cash items | Nil | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | Totex including cash items | There are no equity issuance costs within our AMP8 plan. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Atypical expenditure | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | High Park DWI prosecution | The only atypical item relates to the High Park DWI prosecution as detailed in our 22-23 APR. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | Item 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | Item 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | Item 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | Item 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | Total atypical expenditure | Calculation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| CW2 - Base expenditure analysis - water resources and water network+ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|---------------|---------------|---------------|--------------|--------------|--------------|-------|-------|-------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|
| Line description | | Commentary | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Operating expenditure | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Power | All AMP8 base opex costs run off our 24-25 budget, which is used as a baseline. All efficiencies budgeted to be received over the duration of AMP8 have been included from 1 st April 2025. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Income treated as negative expenditure | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Bulk Supply/Bulk discharge | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Renewals expensed in year (infrastructure) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Renewals expensed in year (non-infrastructure) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Other operating expenditure | <p>All AMP8 base opex costs run off our 24-25 budget, which is used as a baseline. All efficiencies budgeted to be received over the duration of AMP8 have been included from 1st April 2025.</p> <p>To this we have added additional amounts to cover increased catchment management costs.</p> <p>Principal use recharges are included within this row. Details are as below, in £m</p> <table border="1"> <thead> <tr> <th>Business unit</th> <th>22-23</th> <th>23-24</th> <th>24-25</th> <th>25-26</th> <th>26-27</th> <th>27-28</th> <th>28-29</th> <th>29-30</th> </tr> </thead> <tbody> <tr> <td>Water resources</td> <td>2.017</td> <td>1.573</td> <td>1.573</td> <td>1.819</td> <td>1.554</td> <td>0.639</td> <td>0.155</td> <td>0.143</td> </tr> <tr> <td>Raw water treatment</td> <td>0.037</td> <td>0.030</td> <td>0.030</td> <td>0.028</td> <td>0.019</td> <td>0.013</td> <td>0.011</td> <td>0.010</td> </tr> <tr> <td>Raw water storage</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> <td>0.000</td> </tr> <tr> <td>Water treatment</td> <td>8.547</td> <td>6.918</td> <td>6.918</td> <td>6.877</td> <td>4.936</td> <td>2.893</td> <td>2.052</td> <td>1.892</td> </tr> <tr> <td>Treated water distribution</td> <td>6.731</td> <td>5.214</td> <td>5.214</td> <td>5.236</td> <td>3.758</td> <td>2.016</td> <td>1.312</td> <td>1.209</td> </tr> <tr> <td>Total water</td> <td>17.332</td> <td>13.735</td> <td>13.735</td> <td>13.960</td> <td>10.267</td> <td>5.562</td> <td>3.531</td> <td>3.254</td> </tr> </tbody> </table> <p>PUA recharges are predominantly made for office leases, IT networks and security, as well as some commercial vehicles.</p> <p>There are no equity issuance costs within our AMP8 plan.</p> | Business unit | 22-23 | 23-24 | 24-25 | 25-26 | 26-27 | 27-28 | 28-29 | 29-30 | Water resources | 2.017 | 1.573 | 1.573 | 1.819 | 1.554 | 0.639 | 0.155 | 0.143 | Raw water treatment | 0.037 | 0.030 | 0.030 | 0.028 | 0.019 | 0.013 | 0.011 | 0.010 | Raw water storage | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Water treatment | 8.547 | 6.918 | 6.918 | 6.877 | 4.936 | 2.893 | 2.052 | 1.892 | Treated water distribution | 6.731 | 5.214 | 5.214 | 5.236 | 3.758 | 2.016 | 1.312 | 1.209 | Total water | 17.332 | 13.735 | 13.735 | 13.960 | 10.267 | 5.562 | 3.531 | 3.254 |
| Business unit | 22-23 | 23-24 | 24-25 | 25-26 | 26-27 | 27-28 | 28-29 | 29-30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water resources | 2.017 | 1.573 | 1.573 | 1.819 | 1.554 | 0.639 | 0.155 | 0.143 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Raw water treatment | 0.037 | 0.030 | 0.030 | 0.028 | 0.019 | 0.013 | 0.011 | 0.010 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Raw water storage | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water treatment | 8.547 | 6.918 | 6.918 | 6.877 | 4.936 | 2.893 | 2.052 | 1.892 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Treated water distribution | 6.731 | 5.214 | 5.214 | 5.236 | 3.758 | 2.016 | 1.312 | 1.209 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total water | 17.332 | 13.735 | 13.735 | 13.960 | 10.267 | 5.562 | 3.531 | 3.254 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Local authority and Cumulo rates | Movements in rates are described in our CW10 commentary. This figure was revised for the 25 th Jan 24 submission. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Service Charges | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Canal & River Trust abstraction charges/ discharge consents | Not applicable | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Environment Agency / NRW abstraction charges/ discharge consents | All AMP8 base opex costs run off our 24-25 budget, which is used as a baseline. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Other abstraction charges/ discharge consents | Not applicable | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Location specific costs & obligations | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| 11 | Costs associated with Traffic Management Act | All AMP8 base opex costs run off our 24-25 budget, which is used as a baseline. |
| 12 | Costs associated with lane rental schemes | |
| 13 | Statutory water softening | Not applicable |
| 14 | Total base operating expenditure | Calculation |
| | Capital expenditure | |
| 15 | Maintaining the long term capability of the assets - infra | The AMP8 base capex programme is covered in detail in SRN19 Botex Technical Annex |
| 16 | Maintaining the long term capability of the assets - non-infra | |
| 17 | Total base capital expenditure | |
| | Traffic Management Act | |
| 18 | Projects incurring costs associated with Traffic Management Act | This number is based on our 23-24 actual run rate. |

| CW3 - Enhancement expenditure - water resources and water network+ | | |
|--|---|--|
| Line description | Commentary | |
| | EA/NRW environmental programme (WINEP/NEP) | |
| 1 | Biodiversity and conservation; (WINEP/NEP) water capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. |
| 2 | Biodiversity and conservation; (WINEP/NEP) water opex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. Data taken from EAs AMP8 WINEP spreadsheet and costings associated with AMP8 |
| 3 | Biodiversity and conservation; (WINEP/NEP) water totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. Data taken from EAs AMP8 WINEP spreadsheet and costings associated with AMP8 |
| 4 | Eels/fish entrainment screens; (WINEP/NEP) water capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. None planned in AMP8 – investigation only to determine requirement for AMP9 implementation |
| 5 | Eels/fish entrainment screens; (WINEP/NEP) water opex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. |
| 6 | Eels/fish entrainment screens; (WINEP/NEP) water totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. |
| 7 | Eels/fish passes; (WINEP/NEP) water capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. None planned in AMP8 – investigation only to determine requirement for AMP9 implementation |
| 8 | Eels/fish passes; (WINEP/NEP) water opex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. |
| 9 | Eels/fish passes; (WINEP/NEP) water totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. |
| 10 | Invasive Non Native Species; (WINEP/NEP) water capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. |
| 11 | Invasive Non Native Species; (WINEP/NEP) water opex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. Data taken from EAs AMP8 WINEP spreadsheet and costings associated with AMP8 |
| 12 | Invasive Non Native Species; (WINEP/NEP) water totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. Data taken from EAs AMP8 WINEP spreadsheet and costings associated with AMP8 |
| 13 | Drinking Water Protected Areas; (WINEP/NEP) water capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. |
| 14 | Drinking Water Protected Areas; (WINEP/NEP) water opex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. Data taken from EAs AMP8 WINEP spreadsheet and costings associated with AMP8 |



| | | |
|----|---|--|
| 15 | Drinking Water Protected Areas; (WINEP/NEP) water totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. Data taken from EAs AMP8 WINEP spreadsheet and costings associated with AMP8 |
| 16 | Water Framework Directive; (WINEP/NEP) water capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. |
| 17 | Water Framework Directive; (WINEP/NEP) water opex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. Data taken from EAs AMP8 WINEP spreadsheet and costings associated with AMP8 |
| 18 | Water Framework Directive; (WINEP/NEP) water totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. Data taken from EAs AMP8 WINEP spreadsheet and costings associated with AMP8 |
| 19 | Wetland creation; (WINEP/NEP) water capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. |
| 20 | Wetland creation; (WINEP/NEP) water opex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. Nothing specific under this driver, Wetlands may form part of the preferred solution to be delivered under the Biodiversity and Conservation drivers in AMP8 (following completion of AMP7 investigations in 2025) |
| 21 | Wetland creation; (WINEP/NEP) water totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. |
| 22 | Trade effluent discharge flow monitoring; (WINEP/NEP) water capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. |
| 23 | Trade effluent discharge flow monitoring; (WINEP/NEP) water opex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. Data taken from EAs AMP8 WINEP spreadsheet and costings associated with AMP8 |
| 24 | Trade effluent discharge flow monitoring; (WINEP/NEP) water totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. Data taken from EAs AMP8 WINEP spreadsheet and costings associated with AMP8 |
| 25 | 25 year environment plan; (WINEP/NEP) water capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. |
| 26 | 25 year environment plan; (WINEP/NEP) water opex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. None planned in AMP8 – investigation only to determine requirement for AMP9 |
| 27 | 25 year environment plan; (WINEP/NEP) water totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. |
| 28 | Investigations; (WINEP/NEP) - desk based study only water capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. |
| 29 | Investigations; (WINEP/NEP) - desk based study only water opex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. No desk based investigations planned for AMP8 |
| 30 | Investigations; (WINEP/NEP) - desk based study only water totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. |



| | | |
|------------------------------|---|---|
| 31 | Investigations; (WINEP/NEP) - survey, monitoring or simple modelling water capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. |
| 32 | Investigations; (WINEP/NEP) - survey, monitoring or simple modelling water opex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. Data taken from EAs AMP8 WINEP spreadsheet and costings associated with AMP8 |
| 33 | Investigations; (WINEP/NEP) - survey, monitoring or simple modelling water totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. Data taken from EAs AMP8 WINEP spreadsheet and costings associated with AMP8 |
| 34 | Investigations; (WINEP/NEP) - multiple surveys, and/or monitoring locations, and/or complex modelling water capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. |
| 35 | Investigations; (WINEP/NEP) - multiple surveys, and/or monitoring locations, and/or complex modelling water opex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. Data taken from EAs AMP8 WINEP spreadsheet and costings associated with AMP8 |
| 36 | Investigations; (WINEP/NEP) - multiple surveys, and/or monitoring locations, and/or complex modelling water totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. Data taken from EAs AMP8 WINEP spreadsheet and costings associated with AMP8 |
| 37 | Investigations total; (WINEP/NEP) water capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. |
| 38 | Investigations total; (WINEP/NEP) water opex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. Data taken from EAs AMP8 WINEP spreadsheet and costings associated with AMP8 |
| 39 | Investigations total; (WINEP/NEP) water totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. Data taken from EAs AMP8 WINEP spreadsheet and costings associated with AMP8 |
| 40 | Total environmental programme expenditure; (WINEP/NEP) water totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. represented in table CW3 |
| Supply-demand balance | | |
| 41 | Supply-side improvements delivering benefits in 2025-2030; SDB capex | Since our October submission we have updated and resubmitted our rdWRMP24 to Defra. We have therefore updated our CW3 supply lines to reflect our new plan revised plan. Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset and internal company plans. See SRN26 Water Resources - Supply Enhancement Business Case and SRN-DDR-028 – Water Resources – Supply Enhancement Cost Evidence Case for details of AMP8 spend. Please note that schemes have been split into the supply-side improvements delivering benefits 2025-2030 based on our old WRMP24 dates, which have now been revised. Please see CW8 for correct categorisation. |
| 42 | Supply-side improvements delivering benefits in 2025-2030; SDB opex | Since our October submission we have updated and resubmitted our rdWRMP24 to Defra. We have therefore updated our CW3 supply lines to reflect our new plan revised plan. Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset and internal company plans. |

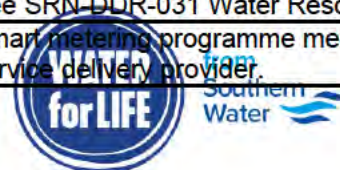
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| | | See SRN26 Water Resources - Supply Enhancement Business Case and SRN-DDR-028 – Water Resources – Supply Enhancement Cost Evidence Case for details of AMP8 spend. Please note that schemes have been split into the supply-side improvements delivering benefits 2025-2030 based on our old WRMP24 dates, which have now been revised. Please see CW8 for correct categorisation. |
| 43 | Supply-side improvements delivering benefits in 2025-2030; SDB totex | Since our October submission we have updated and resubmitted our rdWRMP24 to Defra. We have therefore updated our CW3 supply lines to reflect our new plan revised plan. Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset and internal company plans. See SRN26 Water Resources - Supply Enhancement Business Case and SRN-DDR-028 – Water Resources – Supply Enhancement Cost Evidence Case for details of AMP8 spend. Please note that schemes have been split into the supply-side improvements delivering benefits 2025-2030 based on our old WRMP24 dates, which have now been revised. Please see CW8 for correct categorisation. |
| 44 | Demand-side improvements delivering benefits in 2025-2030 (excl leakage and metering); SDB capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset and internal company plans. See SRN27 Water Resources – Demand Enhancement Business Case and SRN-DDR-030 – Water Resources – Demand (Water Efficiency) Enhancement Cost Evidence Case for details of AMP8 spend |
| 45 | Demand-side improvements delivering benefits in 2025-2030 (excl leakage and metering); SDB opex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset and internal company plans. See SRN27 Water Resources – Demand Enhancement Business Case and SRN-DDR-030 – Water Resources – Demand (Water Efficiency) Enhancement Cost Evidence Case for details of AMP8 spend |
| 46 | Demand-side improvements delivering benefits in 2025-2030 (excl leakage and metering); SDB totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset and internal company plans. See SRN27 Water Resources – Demand Enhancement Business Case and SRN-DDR-030 – Water Resources – Demand (Water Efficiency) Enhancement Cost Evidence Case for details of AMP8 spend |
| 47 | Leakage improvements delivering benefits in 2025-2030; SDB capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset and internal company plans. See SRN27 Water Resources – Demand Enhancement Business Case and SRN-DDR-029 – Water Resources – Demand (Leakage) Enhancement Cost Evidence Case for details of AMP8 spend |
| 48 | Leakage improvements delivering benefits in 2025-2030; SDB opex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset and internal company plans. See SRN27 Water Resources – Demand Enhancement Business Case and SRN-DDR-029 – Water Resources – Demand (Leakage) Enhancement Cost Evidence Case for details of AMP8 spend |
| 49 | Leakage improvements delivering benefits in 2025-2030; SDB totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset and internal company plans. |

| | | |
|----|--|---|
| | | See SRN27 Water Resources – Demand Enhancement Business Case and SRN-DDR-029 – Water Resources – Demand (Leakage) Enhancement Cost Evidence Case for details of AMP8 spend |
| 50 | Internal interconnectors delivering benefits in 2025-2030; SDB capex | Since our October submission we have updated and resubmitted our rdWRMP24 to Defra. We have therefore updated our CW3 interconnector lines to reflect our new plan revised plan. Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset and internal company plans. See SRN26 Water Resources - Supply Enhancement Business Case and SRN-DDR-028 – Water Resources – Supply Enhancement Cost Evidence Case for details of AMP8 spend. Please note that schemes have been split into the interconnectors delivering benefits 2025-2030 based on our old WRMP24 dates, which have now been revised. Please see CW8 for correct categorisation. |
| 51 | Internal interconnectors delivering benefits in 2025-2030; SDB opex | Since our October submission we have updated and resubmitted our rdWRMP24 to Defra. We have therefore updated our CW3 interconnector lines to reflect our new plan revised plan. Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset and internal company plans. SRN26 Water Resources - Supply Enhancement Business Case and SRN-DDR-028 – Water Resources – Supply Enhancement Cost Evidence Case for details of AMP8 spend. Please note that schemes have been split into the interconnectors delivering benefits 2025-2030 based on our old WRMP24 dates, which have now been revised. Please see CW8 for correct categorisation. |
| 52 | Internal interconnectors delivering benefits in 2025-2030; SDB totex | Since our October submission we have updated and resubmitted our rdWRMP24 to Defra. We have therefore updated our CW3 interconnector lines to reflect our new plan revised plan. Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset and internal company plans. SRN26 Water Resources - Supply Enhancement Business Case and SRN-DDR-028 – Water Resources – Supply Enhancement Cost Evidence Case for details of AMP8 spend. Please note that schemes have been split into the interconnectors delivering benefits 2025-2030 based on our old WRMP24 dates, which have now been revised. Please see CW8 for correct categorisation. |
| 53 | Supply demand balance improvements delivering benefits starting from 2031; SDB capex | Since our October submission we have updated and resubmitted our rdWRMP24 to Defra. We have therefore updated our CW3 supply lines to reflect our new plan revised plan. Figure is sum of capex for supply side and internal interconnectors schemes. Please see SRN26- Water Resources – Supply business case and SRN-DDR-028 – Water Resources – Supply Enhancement Cost Evidence Case . Please note that schemes have been split into the supply-side improvements delivering benefits starting from 2031 based on our old WRMP24 dates, which have now been revised. Please see CW8 for correct categorisation. |
| 54 | Supply demand balance improvements delivering benefits starting from 2031; SDB opex | Since our October submission we have updated and resubmitted our rdWRMP24 to Defra. We have therefore updated our CW3 supply lines to reflect our new plan revised plan. |



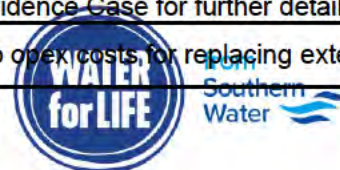
| | | |
|----|--|--|
| | | Figure is sum of opex for supply side and internal interconnectors schemes. Please see SRN26- Water Resources – Supply business case and SRN-DDR-028 – Water Resources – Supply Enhancement Cost Evidence Case . Please note that schemes have been split into the supply-side improvements delivering benefits starting from 2031 based on our old WRMP24 dates, which have now been revised. Please see CW8 for correct categorisation. |
| 55 | Supply demand balance improvements delivering benefits starting from 2031; SDB totex | Since our October submission we have updated and resubmitted our rdWRMP24 to Defra. We have therefore updated our CW3 supply lines to reflect our new plan revised plan. Figure is sum of Totex for supply side and internal interconnectors schemes. Please see SRN26- Water Resources – Supply business case and SRN-DDR-028 – Water Resources – Supply Enhancement Cost Evidence Case . Please note that schemes have been split into the supply-side improvements delivering benefits starting from 2031 based on our old WRMP24 dates, which have now been revised. Please see CW8 for correct categorisation. |
| 56 | Strategic regional resource solutions; SDB capex | Figures are the sum of SRN costs for HWTWRP, SESRO and T2ST SROs. For further details see rows in CW8 and response document SRN-DDR-032. The Raw Water Transfer figure in 2025-26 is incorrect due to a data transfer issue and the correct value is 58.244 – this is for HWTWRP as set out in SRN-DDR-032 – Water Resources – Strategic Resource Options Enhancement Cost Evidence Case . |
| 57 | Strategic regional resource solutions; SDB opex | Zero expenditure against this line because none are operational in AMP8. |
| 58 | Strategic regional resource solutions; SDB totex | Calculated row. |
| 59 | Total supply demand expenditure; SDB totex | Calculated row |
| | Metering | |
| 60 | New meters requested by existing customers (optants); metering capex | For details see Technical Annex 'SRN17 Direct Procurement for Customers & Alternative Delivery Model', Enhancement Business Case 'SRN24 Meter Replacement' and SRN-DDR-031 – Water Resources – Smart Metering Enhancement Cost Evidence Case . |
| 61 | New meters requested by existing customers (optants); metering opex | |
| 62 | New meters requested by existing customers (optants); metering totex | |
| 63 | New meters introduced by companies for existing customers; metering capex | |
| 64 | New meters introduced by companies for existing customers; metering opex | |
| 65 | New meters introduced by companies for existing customers; metering totex | |
| 66 | New meters for existing customers - business; metering capex | |
| 67 | New meters for existing customers - business; metering opex | |

| | | |
|----|--|---|
| 68 | New meters for existing customers - business; metering totex | |
| 69 | Replacement of existing basic meters with AMR meters for residential customers; metering capex | |
| 70 | Replacement of existing basic meters with AMR meters for residential customers; metering opex | |
| 71 | Replacement of existing basic meters with AMR meters for residential customers; metering totex | |
| 72 | Replacement of existing basic meters with AMI meters for residential customers; metering capex | |
| 73 | Replacement of existing basic meters with AMI meters for residential customers; metering opex | |
| 74 | Replacement of existing basic meters with AMI meters for residential customers; metering totex | |
| 73 | Replacement of existing AMR meters with AMI meters for residential customers; metering capex | |
| 76 | Replacement of existing AMR meters with AMI meters for residential customers; metering opex | |
| 77 | Replacement of existing AMR meters with AMI meters for residential customers; metering totex | |
| 78 | Replacement of existing basic meters with AMR meters for business customers; metering capex | |
| 79 | Replacement of existing basic meters with AMR meters for business customers; metering opex | |
| 80 | Replacement of existing basic meters with AMR meters for business customers; metering totex | |
| 81 | Replacement of existing basic meters with AMI meters for business customers; metering capex | |
| 82 | Replacement of existing basic meters with AMI meters for business customers; metering opex | |
| 83 | Replacement of existing basic meters with AMI meters for business customers; metering totex | |
| 84 | Replacement of existing AMR meters with AMI meters for business customers; metering capex | |
| 85 | Replacement of existing AMR meters with AMI meters for business customers; metering opex | |
| 86 | Replacement of existing AMR meters with AMI meters for business customers; metering totex | |
| 87 | Smart meter infrastructure; metering capex | Smart metering programme SRN internal costs for systems development and other. See SRN DDR-031 Water Resources - Smart Metering Enhancement Cost Evidence Case. |
| 88 | Smart meter infrastructure; metering opex | Smart metering programme meter replacement costs that we are proposing are delivered by a service delivery provider. |



| | | |
|----|--|---|
| | | See SRN-DDR-031 Water Resources - Smart Metering Enhancement Cost Evidence Case. |
| 89 | Smart meter infrastructure; metering totex | Ofwat DD smart metering total base adjustment and enhancement allowances. See SRN-DDR-031 Water Resources - Smart Metering Enhancement Cost Evidence Case. |
| 90 | Total metering expenditure; metering totex | Calculated row. |
| | Water quality improvements | |
| 91 | Improvements to taste, odour and colour (grey solutions); enhancement capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. £0. No known taste, odour and colour issues requiring enhancement spend in AMP8 |
| 92 | Improvements to taste, odour and colour (grey solutions); enhancement opex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. £0. No known taste, odour and colour issues requiring enhancement spend in AMP8 |
| 93 | Improvements to taste, odour and colour (grey solutions); enhancement totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. £0. No known taste, odour and colour issues requiring enhancement spend in AMP8 |
| 94 | Improvements to taste, odour and colour (green solutions); enhancement capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. £0. No known taste, odour and colour issues requiring enhancement spend in AMP8 |
| 95 | Improvements to taste, odour and colour (green solutions); enhancement opex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. £0. No known taste, odour and colour issues requiring enhancement spend in AMP8 |
| 96 | Improvements to taste, odour and colour (green solutions); enhancement totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. £0. No known taste, odour and colour issues requiring enhancement spend in AMP8 |
| 97 | Addressing raw water quality deterioration (grey solutions); enhancement capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. For AMP8 figures include the following enhancements: <ul style="list-style-type: none"> • Nitrate concentration reduction • Disinfection Future Resilience Programme • Climate Change Adaptation Study • Emerging Contaminants Study (including PFAS). See SRN30 Raw Water Deterioration Enhancement Business Case and SRN-DDR-037 Raw Water Deterioration Enhancement Cost Evidence Case. |
| 98 | Addressing raw water quality deterioration (grey solutions); enhancement opex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. For AMP8 figures include the following enhancements: <ul style="list-style-type: none"> • Nitrate concentration reduction • Disinfection Future Resilience Programme • Climate Change Adaptation Study • Emerging Contaminants Study (including PFAS). |

| | | |
|-----|---|---|
| | | See SRN30 Raw Water Deterioration Enhancement Business Case and SRN-DDR-037 Raw Water Deterioration Enhancement Cost Evidence Case. |
| 99 | Addressing raw water quality deterioration (grey solutions); enhancement totex | <p>Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans.</p> <p>For AMP8 figures include the following enhancements:</p> <ul style="list-style-type: none"> • Nitrate concentration reduction • Disinfection Future Resilience Programme • Climate Change Adaptation Study • Emerging Contaminants Study (including PFAS). <p>See SRN30 Raw Water Deterioration Enhancement Business Case and SRN-DDR-037 Raw Water Deterioration Enhancement Cost Evidence Case.</p> |
| 100 | Addressing raw water quality deterioration (green solutions); enhancement capex | Green solutions such as catchment management are funded through WINEP |
| 101 | Addressing raw water quality deterioration (green solutions); enhancement opex | Green solutions such as catchment management are funded through WINEP |
| 102 | Addressing raw water quality deterioration (green solutions); enhancement totex | Green solutions such as catchment management are funded through WINEP |
| 103 | Conditioning water to reduce plumbosolvency; enhancement capex | No enhancement spend to reduce plumbosolvency |
| 104 | Conditioning water to reduce plumbosolvency; enhancement opex | No enhancement spend to reduce plumbosolvency |
| 105 | Conditioning water to reduce plumbosolvency; enhancement totex | No enhancement spend to reduce plumbosolvency |
| 106 | Lead communication pipes replaced or relined; enhancement capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. For AMP8 Comm pipe Capex. See SRN31 Lead Enhancement Business Case and SRN-DDR-038 Lead Enhancement Cost Evidence Case for further details. |
| 107 | Lead communication pipes replaced or relined; enhancement opex | No opex costs for replacing comm pipes |
| 108 | Lead communication pipes replaced or relined; enhancement totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. As per comm pipe capex For AMP8, as per Comm pipe Capex. See SRN31 Lead Enhancement Business Case and SRN-DDR-038 Lead Enhancement Cost Evidence Case, for further details). |
| 109 | External lead supply pipes replaced or relined; enhancement capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our recent annual reporting dataset and internal company plans. AMP8 external supply pipe Capex. Outside of the public buildings programme, we assume 75% of customers allow pipe replacement, when the associated comm pipe is replaced. See SRN31 Lead Enhancement Business Case and SRN-DDR-038 Lead Enhancement Cost Evidence Case for further details. |
| 110 | External lead supply pipes replaced or relined; enhancement opex | No opex costs for replacing external supply pipes. |



| 111 | External lead supply pipes replaced or relined; enhancement totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our recent annual reporting dataset and internal company plans. For AMP8, as per external supply pipe capex. Outside of public buildings programme, we assume 75% of customers allow pipe replacement, when comm pipe is replaced. See SRN31 Lead Enhancement Business Case and SRN-DDR-038 Lead Enhancement Cost Evidence Case, for further details. | | | | | | | | | | |
|--------------------------------------|---|--|----------|----------|---------|---------|---------|---------|----------|----------|----------|----------|
| 112 | Internal lead supply pipes replaced or relined; enhancement capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our recent annual reporting dataset (July 2023) and internal company plans. AMP8 internal supply pipe Capex. Outside of the public buildings programme, we assume 25% of customers will accept a grant and replace their internal supply pipe, when the comm pipe is replaced. See SRN31 Lead Enhancement Business Case and SRN-DDR-038 Lead Enhancement Cost Evidence Case for further details). | | | | | | | | | | |
| 113 | Internal lead supply pipes replaced or relined; enhancement opex | No opex costs for replacing internal supply pipes | | | | | | | | | | |
| 114 | Internal lead supply pipes replaced or relined; enhancement totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our recent annual reporting dataset (July 2023) and internal company plans. For AMP8, as per internal supply pipe capex. Outside of the public buildings programme, we assume 25% of customers will accept a grant and replace their internal supply pipe, when the comm pipe is replaced. See SRN31 Lead Enhancement Business Case and SRN-DDR-038 Lead Enhancement Cost Evidence Case for further details). | | | | | | | | | | |
| 115 | Other lead reduction related activity; enhancement capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. No other lead enhancement activity in AMP8. | | | | | | | | | | |
| 116 | Other lead reduction related activity; enhancement opex | No other lead enhancement activity in AMP8. | | | | | | | | | | |
| 117 | Other lead reduction related activity; enhancement totex | No other lead enhancement activity in AMP8. | | | | | | | | | | |
| Water resilience and security | | | | | | | | | | | | |
| 118 | Resilience; enhancement water capex | <p>Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. AMP8 Capex for resilience enhancement in the following areas:</p> <ul style="list-style-type: none"> • Supply Resilience Enhancement Programme to upgrade 5 of our largest sites. See SRN27 Supply Resilience Enhancement Programme Enhancement Business Case • Network resilience and disinfection enhancement. See SRN-DDR-037 Water Network Resilience and Disinfection Enhancement Cost Evidence Case, for further details. • Climate Resilience. See SRN-DDR-041 Climate Resilience Cost Evidence Case for further information. <p>The AMP8 total capex in this row is incorrect due to a data transfer issue associated with our disinfection improvement programme. The total costs on this row should be increased by:</p> <table border="1"> <thead> <tr> <th>2025-26</th> <th>2026-27</th> <th>2027-28</th> <th>2028-29</th> <th>2029-30</th> </tr> </thead> <tbody> <tr> <td>1.60116</td> <td>3.224716</td> <td>3.224716</td> <td>2.765916</td> <td>1.160116</td> </tr> </tbody> </table> | 2025-26 | 2026-27 | 2027-28 | 2028-29 | 2029-30 | 1.60116 | 3.224716 | 3.224716 | 2.765916 | 1.160116 |
| 2025-26 | 2026-27 | 2027-28 | 2028-29 | 2029-30 | | | | | | | | |
| 1.60116 | 3.224716 | 3.224716 | 2.765916 | 1.160116 | | | | | | | | |



| | | |
|-----|--|---|
| 119 | Resilience; enhancement water opex | No opex arising from these schemes in AMP8. |
| 120 | Resilience; enhancement water totex | Calculated row |
| 121 | Security - SEMD; enhancement water capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. AMP8 Capex for SEMD enhancements: See SRN35 Security and Emergency Measures Direction, Enhancement Business Case and SRN-DDR-043 Security and Emergency Measures Direction (SEMD) Enhancement Cost Evidence Case for further details. |
| 122 | Security - SEMD; enhancement water opex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. AMP8 Opex for SEMD enhancements: See SRN35 Security and Emergency Measures Direction, Enhancement Business Case and SRN-DDR-043 Security and Emergency Measures Direction (SEMD) Enhancement Cost Evidence Case for further details. |
| 123 | Security - SEMD; enhancement water totex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. AMP8 Totex for SEMD enhancements: See SRN35 Security and Emergency Measures Direction, Enhancement Business Case and SRN-DDR-043 Security and Emergency Measures Direction (SEMD) Enhancement Cost Evidence Case for further details. |
| 124 | Security - Cyber; enhancement water capex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. [REDACTED] See SRN34 Network & Information Systems Enhancement Business Case and SRN-DDR-042 Network and Information Systems (NIS) Enhancement Cost Evidence Case for further details. |
| 125 | Security - Cyber; enhancement water opex | Values for 2022-2025 are based on AMP7 actual and forecast values aligned to our most recent annual reporting dataset (July 2023) and internal company plans. [REDACTED] |
| 126 | Security - Cyber; enhancement water totex | Calculated row. |
| | Net zero | |
| 127 | Greenhouse gas reduction (net zero); enhancement water capex | No expenditure against this line |
| 128 | Greenhouse gas reduction (net zero); enhancement water opex | No expenditure against this line |
| 129 | Greenhouse gas reduction (net zero); enhancement water totex | Calculated cells |
| | Other enhancement (Freeform lines - by exception) | |
| 130 | Additional line 1; capex | AMP8 zero |



| 131 | Additional line 1; opex | zero | | | | | | | | | | | | |
|---------|---|--|---------|---------|---------|---------|---------|---------|---------|-------|--------|--------|-------|-------|
| 132 | Additional line 2; Alternative delivery AMP 8 water capex | The £28.5m in 2026-27 is for land purchase for our Littlehampton and Medway Water Recycling DPC projects | | | | | | | | | | | | |
| 133 | Additional line 2: Alternative Delivery - opex | We have included a total of £32.49m across years 1 and 2 to cover our DPC development costs for the delivery of our Littlehampton and Medway water recycling schemes. This is included under Water Resources. We have also included £14.16m in year 1 to cover our DPC development costs for Smart metering, this is included under Treated water distribution | | | | | | | | | | | | |
| 134 | Additional line 3; Reservoir safety water capex | Reservoir safety Capex. These costs are incorrect as they have a reduction for SEW contributions on our Weir Wood scheme which is no longer applicable due to the change in our supply agreement. The correct numbers are: <table border="1" data-bbox="994 485 1765 564"> <thead> <tr> <th></th> <th>2025-26</th> <th>2026-27</th> <th>2027-28</th> <th>2028-29</th> <th>2029-30</th> </tr> </thead> <tbody> <tr> <td>CW3.133</td> <td>6.227</td> <td>12.408</td> <td>10.751</td> <td>1.523</td> <td>0.000</td> </tr> </tbody> </table> <p>See SRN-DDR-035 Reservoir Safety Enhancement Cost Evidence Case, for further details.</p> | | 2025-26 | 2026-27 | 2027-28 | 2028-29 | 2029-30 | CW3.133 | 6.227 | 12.408 | 10.751 | 1.523 | 0.000 |
| | 2025-26 | 2026-27 | 2027-28 | 2028-29 | 2029-30 | | | | | | | | | |
| CW3.133 | 6.227 | 12.408 | 10.751 | 1.523 | 0.000 | | | | | | | | | |
| 135 | Additional line 3: Havant Thicket - payments to Portsmouth water - opex | Our payments to PWS have been updated to reflect their company specific WAC of 4.1% for the reservoir. Please see SRN-DDR-032 Water Resources - Strategic Resource Options Enhancement Cost Evidence Case for further information. | | | | | | | | | | | | |
| 136 | Additional line 4; Mains replacement Capex | Based on our leakage mains replacement cost model rate of £416/m. See SRN-DDR-029 Water Resources - Demand (Leakage) Enhancement Cost Evidence Case. | | | | | | | | | | | | |
| 144 | Total other enhancement water expenditure | Calculated cells | | | | | | | | | | | | |
| | Total enhancement | | | | | | | | | | | | | |
| 145 | Total enhancement expenditure; water capex | Calculated line from above investment | | | | | | | | | | | | |
| 146 | Total enhancement expenditure; water opex | | | | | | | | | | | | | |
| 147 | Total enhancement expenditure; water totex | | | | | | | | | | | | | |

| CW4 - Raw water transport, raw water storage and water treatment data | | |
|---|---|---|
| Line description | | Commentary |
| Raw water transport and storage | | |
| 1 | Total number of balancing reservoirs | Assumption that we are not building any more balancing reservoirs this AMP or next therefore no change in baseline figure Data confidence grade: A2 |
| 2 | Total volumetric capacity of balancing reservoirs | |
| 3 | Total number of raw water transport stations | Assumption that we are not building any new raw water transport stations therefore no change in baseline figure Data confidence grade: B2 |
| 4 | Total installed power capacity of raw water transport pumping stations | |
| 5 | Total length of raw water transport mains and other conveyors | Assumption that we are not building any new transport mains or other conveyors therefore no change in baseline figure Data confidence grade: C5 |
| 6 | Average pumping head ~ raw water transport | AMP7/8 forecast is flatlined. Required improvements identified during RC23 and RC24 year-end assurance are being addressed, but it is not known what impact these will have on performance in combination with AMP7 & 8 schemes. Confidence grade C3 |
| 7 | Energy consumption – raw water transport (MWh) | Forecasts have been updated with a revised methodology using 2023/24 actuals as the base year data. Electricity included additional growth at 1.5% each year, additional consumption requirements from energy opex costs for new assets converted to volume using £0.26. Energy consumption from transport and gas are extrapolated using historical data. No renewable and efficiency plans at the time. Delays or early completions of Water for Life Hampshire will have a significant impact to the numbers. Confidence grade B4 |
| 8 | Total number of raw water transport imports | Change in CW4.11 reflects new 2023/24 outturn data. No new schemes will affect this number but yearly variation would be expected based on external demand. Data confidence grade: A2 |
| 9 | Water imported from 3rd parties to raw water transport systems | |
| 10 | Total number of raw water transport exports | |
| 11 | Water exported to 3rd parties from raw water transport systems | |
| 12 | Total length of raw and pre-treated (non-potable) water transport mains for supplying customers | Assumption that we are not creating any new non-potable supplies to customers therefore no change in baseline figure Data confidence grade: B3 |
| Water treatment - treatment type analysis | | |
| 13/14 | All simple disinfection works – number and volume treated | 2026/27 East Woodhay increase by 1.2Ml/d therefore +1.2; Barton Stacey DFRP moving site 1.82Ml/d from simple disinfection works to W4 works therefore -1.82. Values of 0 indicate where we have no site with that particular treatment category. 23/24 GW treatment type updated at Chilton WSW from GSD to GW4 due to installation of Amazons. Data confidence grade: A2 |

| | | |
|-------------------------------------|------------------------------------|--|
| 15/16 | W1 works number and volume treated | WRMP24 has revised date for Smock Alley from 2024/25 to 2028/29, increase number of W1 works by 3.12MI/d; WRMP24 has revised date Rogate and Rotherfield from 2025/26 to 2028/29, increase number of W1 works by 1.6MI/d. Values of 0 indicate where we have no site with that particular treatment category. Data confidence grade: A2 |
| 17/18 | W2 works number and volume treated | 2023/2024 Twyford has moved from W2 to W4 due to installation of Amazons therefore -20.15MI/d, 2028/29 Wingham DFRP moves Wingham from W2 to W4 therefore -20.6MI/d, 2028/29 Patching moves from W2 to W4 due to nitrate improvements therefore -4.57MI/d, 2028/29 Mossy Bottom moves from W2 to W4 due to nitrate improvements therefore -3.38MI/d, 2029/30 Calbourne DFRP moves Calbourne from W2 to W4 therefore -1.5MI/d. Values of 0 indicate where we have no site with that particular treatment category. Data confidence grade: A2 |
| 19/20 | W3 works number and volume treated | 2028/29 Luton DFRP moves Luton from W3 to W4 therefore -11.5MI/d. Values of 0 indicate where we have no site with that particular treatment category. Data confidence grade: A2 |
| 21/22 | W4 works number and volume treated | 2023/2024 Twyford has moved from W2 to W4 due to installation of Amazons therefore +20.15MI/d, Barton Stacey DFRP moving site +1.82MI/d from simple disinfection works to W4 works, 2028/29 Wingham DFRP moves Wingham from W2 to W4 therefore +20.6MI/d, 2028/29 Luton DFRP moves Luton from W3 to W4 therefore +11.5MI/d, 2028/29 Patching moves from W2 to W4 due to nitrate improvements therefore +4.57MI/d, 2028/29 Mossy Bottom moves from W2 to W4 due to nitrate improvements therefore +3.38MI/d, 2029/30 Calbourne DFRP moves Calbourne from W2 to W4 therefore +1.5MI/d, Keycol nitrates bring site back online into W4 category therefore +1.8MI/d 2023/2024 GW4 number updated as Sutton WSW, Martin Mill WSW, Martin Gorse WSW excluded as requires downstream blending Data confidence grade: A2 |
| 23/24 | W5 works number and volume treated | 2027/28 Recycling moving Sandown from W5 to W6 so -12MI/d. Values of 0 indicate where we have no site with that particular treatment category. 23/24 GW5 treatment type updated at Southover WSW from GW4 to GW5 due to installation of Amazons. Flemings Road Woodnesborough WSW not included as requires downstream blending. Data confidence grade: A2 |
| 25/26 | W6 works number and volume treated | 2027/28 value updated as WRMP24 has revised Sandown recycling delivery date to (moving Sandown from W5 to W6 and increasing water treatment therefore +20.5MI/d). Values of 0 indicate where we have no site with that particular treatment category. Data confidence grade: A2 |
| Water treatment - works size | | |
| 27/28 | WTWs in size band 1 number and DI | 2025/26 Rogate scheme delivery date revised from 2025/26 to 2028/29 (+1.6MI/d), percentage of total DI calculated across all size bands, 23/24 update slightly changes forecast. Weirwood WSW zero output, Martin Mill WSW not included as requires downstream blending Data confidence grade: A2 |

| | | |
|--|--|---|
| 29/30 | WTWs in size band 2 number and DI | WRMP24 has revised delivery date of Smock Alley from 2024/25 to 2028/29 (+3.12MI/d), 2027/28 planned improvements at East Woodhay move East Woodhay from size band 2 to size band 3 therefore -1 Data confidence grade: A2 |
| 31/32 | WTWs in size band 3 number and DI | 2027/28 planned improvements at East Woodhay move East Woodhay from size band 2 to size band 3 therefore +4.8MI/d, percentage of total DI calculated across all size bands 23/24 base year update Martin Gorse WSW & Sutton WSW not included as requires downstream blending Data confidence grade: A2 |
| 33/34 | WTWs in size band 4 number and DI | WRMP has revised delivery date of Recycling at Sandown to 2030/31 (increasing size to size band 5 therefore -12MI/d), percentage of total DI calculated across all size bands. 23/24 base year update, Weirwood WSW zero output, Flemings Road Woodnesborough not included as requires downstream blending. Data confidence grade: A2 |
| 35/36 | WTWs in size band 5 number and DI | WRMP has revised delivery date of Recycling at Sandown to 2030/31 (increasing size to size band 5 therefore +20.5MI/d, percentage of total DI calculated across all size bands Data confidence grade: A2 |
| 37/38 | WTWs in size band 6 number and DI | No change to size category 6, percentage of total DI calculated across all size bands Data confidence grade: A2 |
| 39/40 | WTWs in size band 7 number and DI | Percentage of total DI calculated across all size bands Data confidence grade: A2 |
| 41/42 | WTWs in size band 8 number and DI | No sites in size band 8, percentage of total DI calculated across all size bands Data confidence grade: A2 |
| Water treatment - other information | | |
| 43 | Peak week production capacity | WRMP has revised delivery date of Smock Alley from 2024/25 to 2028/29 (therefore +3.12MI/d) and Rogate from 2025/26 to 2028/29 (therefore +1.6MI/d), 2027/28 East Woodhay improvement completion therefore +1.2MI/d, WRMP has revised delivery date of Sandown recycling delayed from 2027/28 to 2030/31 (+8.5MI/d) Data confidence grade: A2 |
| 44 | Peak week production capacity having enhancement expenditure for grey solution improvements to address raw water quality deterioration | 2027/28 Bowcombe nitrates +3MI/d, 2027/28 Hazells nitrates +7.62MI/d, 2027/28 Fawkham nitrates +5.2MI/d, 2028/29 Madehurst nitrates +4.16MI/d, 2028/29 Stanhope Lodge nitrates +6.2MI/d, 2028/29 Patching nitrates +4.57MI/d, 2028/29 Mossy bottom nitrates +3.38MI/d, 2028/29 Patcham nitrates +17.5MI/d, 2029/30 Keycol nitrates +1.8MI/d 2029/30 Martin Mill nitrates +1.8MI/d, 2029/30 Martin Gorse nitrates +4.7MI/d, 2029/30 Ringwoud nitrates +4.36MI/d Data confidence grade: A2 |
| 45 | Peak week production capacity having enhancement expenditure for green solutions improvements to address raw water quality deterioration | Assume catchment management benefit will be seen after 2030 so no change Data confidence grade: A2 |
| 46 | Total water treated at more than one type of works | 2023/24 Sutton disinfection volume pumping to Marting Gorse for nitrate removal and back +6MI/d, 2027/28 Sandown recycling completion +8.5MI/d Data confidence grade: A2 |



| | | |
|----|--|---|
| 47 | Number of treatment works requiring remedial action because of raw water deterioration | 2022/23 Goldstone +1, 2027/28 Bowcombe nitrates +1, 2027/28 Hazells nitrates +1, 2027/28 Fawkham nitrates +1, 2028/29 Madehurst nitrates +1, 2028/29 Stanhope Lodge nitrates +1, 2028/29 Patching nitrates +1, 2028/29 Mossy bottom nitrates +1, 2028/29 Patcham nitrates +1, 2029/30 Keycol nitrates +1 2029/30 Martin Mill nitrates +1, 2029/30 Martin Gorse nitrates +1, 2029/30 Ringwould nitrates +1 Data confidence grade: A2 |
| 48 | Zonal population receiving water treated with orthophosphate | Increases in this figure are driven by the revised dWRMP24 population forecast and thus takes account of increased population, housing and econometric trends Data confidence grade: A2 |
| 49 | Average pumping head – water treatment | AMP7/8 forecast is flatlined. Required improvements identified during RC23 and RC24 year-end assurance are being addressed, but it is not known what impact these will have on performance in combination with AMP7 & 8 schemes. Confidence grade C3 |
| 50 | Energy consumption - water treatment (MWh) | Forecasts have been updated with a revised methodology using 2023/24 actuals as the base year data. Electricity included additional growth at 1.5% each year, additional consumption requirements from energy opex costs for new assets converted to volume using £0.26. Energy consumption from transport and gas are extrapolated using historical data. Renewable generation is from solar projects, therefore delays or cancellations of the projects will impact the numbers but is expected to be minimal. Confidence grade B4 |
| 51 | Total number of water treatment imports | Data confidence grade: A2 |
| 52 | Water imported from 3rd parties to water treatment works | |
| 53 | Total number of water treatment exports | |
| 54 | Water exported to 3rd parties from water treatment works | |
| 55 | Total number of water treatment works effluent discharges requiring new MCERTS flow monitoring | 2026/27 Rogate 31/12/2026 Data confidence grade: B2 |

| CW4a- Transition and accelerated programme - Raw water transport, raw water storage and water treatment data | | |
|--|----------------|--|
| Line description | | Commentary |
| | CW4a all lines | |
| 1 - 55 | CW4a all lines | No transitional or accelerated programme of works relating to the lines in table CW4a therefore left blank Data confidence grade: A1 |



| CW5 - Treated water distribution - assets and operations | | |
|--|--|--|
| Line description | | Commentary |
| | Assets and operations | |
| 1 | Total installed power capacity of potable water pumping stations | Calculated based on ratio of baseline figures of CW5.1 and CW5.16 applied to future forecast in CW5.16. Changes therefore increase in line with CW5.16 Confidence grade B2 |
| 2 | Total volumetric capacity of service reservoirs | 2025/26 Remove Cooks castle -5MI/d, 2025/26 Cooks castle replacement +4.75MI/d, 2025/26 Perry Hill +8MI/d, 2027/28 Yewhill +9MI/d. 23/24 base year update changes forecast. Confidence grade A2 |
| 3 | Total volumetric capacity of water towers | 2023/24 base year update changes forecast Confidence grade A2 |
| 4 | Water delivered (non-potable) | APR24 performance flatlined for AMP7/8 forecast. Confidence grade A2 |
| 5 | Water delivered (potable) | The 2023-24 figures are based on the convergence methodology. The figures from 2024/25 are forecast numbers from our revised draft WRMP24. Confidence grade A3 |
| 6 | Water delivered (billed measured residential properties) | The 2023-24 figures are based on the convergence methodology. The figures from 2024/25 are forecast numbers from our revised draft WRMP24. Confidence grade A2 |
| 7 | Water delivered (billed measured businesses) | The 2023-24 figures are based on the convergence methodology. The figures from 2024/25 are forecast numbers from our revised draft WRMP24. Confidence grade B3 |
| 8 | Proportion of distribution input derived from impounding reservoirs | No new impounding reservoirs, proportions calculated in line with methodology. Where multiple treatments exist across a site, the proportion has been allocated accordingly. Confidence grade A2 |
| 9 | Proportion of distribution input derived from pumped storage reservoirs | No new pumped storage reservoirs, proportions calculated in line with methodology, slight changes due to other categories of water being made available. Where multiple treatments exist across a site, the proportion has been allocated accordingly. Confidence grade A2 |
| 10 | Proportion of distribution input derived from river abstractions | No new river abstractions, proportions calculated in line with methodology, slight changes due to other categories of water being made available. Where multiple treatments exist across a site, the proportion has been allocated accordingly. Confidence grade A2 |
| 11 | Proportion of distribution input derived from groundwater works, excluding managed aquifer recharge (MAR) water supply schemes | 2024/25 WRMP24 has revised delivery date of Smock Alley to 2028/29 (+3.12MI/d), 2025/26 and Rogate to 2028/29 (+1.6MI/d) 2027/28 East Woodhay improvement +1.2MI/d, 2029/30 Keycol returned to service +1.8MI/d, proportions calculated in line with methodology. Where multiple treatments exist across a site, the proportion has been allocated accordingly. Confidence grade A2 |
| 12 | Proportion of distribution input derived from artificial recharge (AR) water supply schemes | No new artificial recharge schemes, proportions calculated in line with methodology. Where multiple treatments exist across a site, the proportion has been allocated accordingly. |

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| | | Confidence grade A2 |
| 13 | Proportion of distribution input derived from aquifer storage and recovery (ASR) water supply schemes | No new aquifer storage and recovery schemes, proportions calculated in line with methodology. Where multiple treatments exist across a site, the proportion has been allocated accordingly. Confidence grade A2 |
| 14 | Proportion of distribution input derived from saline abstractions | Proportions calculated in line with methodology. Where multiple treatments exist across a site, the proportion has been allocated accordingly. Confidence grade A2 |
| 15 | Proportion of distribution input derived from water reuse schemes | WRMP24 has revised Sandown delivery date to 2030/31 (8.5Ml/d), DI assumed to be in 1:500 scenario rather than normal year. Proportions calculated in line with methodology. Where multiple treatments exist across a site, the proportion has been allocated accordingly. Confidence grade A2 |
| 16 | Total number of potable water pumping stations that pump into and within the treated water distribution system | Sum of CW5.17 to CW5.20 Confidence grade A2 Historic growth rate stayed consistent at around 255 potable water pumping stations that pump into and within the treated water distribution system. There was a drop to about 239 potable water pumping stations that pump into and within the treated water distribution system in 2022/23 and from here we forecast a few new additions in AMP7 and AMP8. The drop in 2022/23 was largely due to a reduction in potable water pumping stations that re-pump water already within the treated water distribution system. |
| 17 | Number of potable water pumping stations delivering treated groundwater into the treated water distribution system | Assume no new potable water pumping stations delivering treated groundwater into the treated water distribution system, 2023/24 base year update, 2023 total – 66, 2024 total – 67, Increase of 1 made up by 1 new out of service, and 2 new in service. Confidence grade A1 |
| 18 | Number of potable water pumping stations delivering surface water into the treated water distribution system | Assume no new potable water pumping stations delivering surface water into the treated water distribution system. 2023/24 base year update, 2023 total – 6. 2024 total – 5, Reduction of 1 due to site now out of service Confidence grade A1 |
| 19 | Number of potable water pumping stations that re-pump water already within the treated water distribution system | 2024/25 Whitley bank (Cook's castle), 2025/26 Interzonal transfer (HSW-HRZ): Romsey Town and Broadlands valve (3.1Ml/d). The following 5 pumping stations will be completed in AMP8, assumed 1 per year: Thanet +1, IOW network reconfiguration +2, Bi-directional booster at Crabwood +1, Redford booster station +1. 23/24 base year update, 2023 total – 167, 2024 total – 157, Reduction of 10. This is made up by 12 boosters new out of service, and 2 boosters new in service. Confidence grade A2 |
| 20 | Number of potable water pumping stations that pump water imported from a 3rd party supply into the treated water distribution system | Assume no new potable water pumping stations that pump water imported from a 3rd party supply into the treated water distribution system Confidence grade AX |
| 21 | Total number of service reservoirs | 2025/26 Remove Cooks castle and add Cooks castle replacement 2025/26 Perry hill therefore +1. 23/24 base year update, 2023 total - 235, 2024 total – 222, Reduction of 13, this is due to 15 New Out of Service, and 2 New In Service. Additional changes, resulting in positive 2 count Confidence grade A2 |



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| 22 | Number of water towers | Updated to APR value Confidence grade A1 |
| 23 | Energy consumption – treated water distribution (MWh) | Forecasts have been updated with a revised methodology using 2023/24 actuals as the base year data Electricity included additional growth at 1.5% each year, additional consumption requirements from energy opex costs for new assets converted to volume using £0.26. Energy consumption from transport and gas are extrapolated using historical data. No renewable and efficiency plans at the time. Delays or early completions of AMP7 and AMP8 schemes will impact the numbers. Confidence grade B4 |
| 24 | Average pumping head – treated water distribution | AMP7/8 forecast is flatlined. Required improvements identified during RC23 and RC24 year-end assurance are being addressed, but it is not known what impact these will have on performance in combination with AMP7 & 8 schemes. Confidence grade C3 |
| 25 | Total number of treated water distribution imports | Import: SEW Kingston to KTZ Near Canterbury (2Ml/d) +1, Bulk import (SNZ): SES re-zoning extension (4Ml/d) already existing so no increase Confidence grade A2 |
| 26 | Water imported from 3rd parties to treated water distribution systems | |
| 27 | Total number of treated water distribution exports | No new schemes will affect this number, 2023/24 base year update adjusts forecast Confidence grade A2 |
| 28 | Water exported to 3rd parties from treated water distribution systems | |
| 29 | Peak 7 day rolling average distribution input | For 2022-23 this is reported performance. The figures from 2023-24 are forecast numbers from our revised draft WRMP24. This assumes that the peak 7 day rolling average distribution input is the same as the critical peak planning scenario in the draft WRMP24. The peak week varies year on year and is generally sometime in July or August. The actual peak week for 2022/23 occurred between 15th and 21st July 2022. Confidence grade A2 |
| 30 | Peak 7 day rolling average distribution input / annual average distribution input | Calculated row (Ofwat formulae) |
| Water balance - Company level | | |
| 31 | Measured household consumption (excluding supply pipe leakage) | The 2023-24 figures are based on the convergence methodology. The figures from 2024/25 are forecast numbers from our revised draft WRMP24. Confidence grade A2 |
| 32 | Unmeasured household consumption (excluding supply pipe leakage) | The 2023-24 figures are based on the convergence methodology. The figures from 2024/25 are forecast numbers from our revised draft WRMP24. Confidence grade A3 |
| 33 | Measured non-household consumption (excluding supply pipe leakage) | The 2023-24 figures are based on the convergence methodology. The figures from 2024/25 are forecast numbers from our revised draft WRMP24. Confidence grade B3 |
| 34 | Unmeasured non-household consumption (excluding supply pipe leakage) | The 2023-24 figures are based on the convergence methodology. The figures from 2024/25 are forecast numbers from our revised draft WRMP24. Confidence grade B3 |

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| 35 | Total annual leakage | The 2023-24 figures are based on the convergence methodology. The figures from 2024/25 are forecast numbers from our revised draft WRMP24. There are significant reductions in total leakage in 2023-24 and 2024-25. This is because of our leakage reduction plan for the remainder of AMP7 which seeks to bring leakage more in line with our PR19 forecast by committing extra resources to our leakage reduction activities. Confidence grade A3 |
| 36 | Distribution system operational use | The 2023-24 figures are based on the convergence methodology. The figures from 2024/25 are forecast numbers from our revised draft WRMP24. Confidence grade A4 |
| 37 | Water taken unbilled | |
| 38 | Distribution input | The 2023-24 figures are based on the convergence methodology. The figures from 2024/25 are forecast numbers from our revised draft WRMP24. Confidence grade B2 |
| 39 | Distribution input (pre-MLE) | The figures from 2024-25 are assumed numbers based on past performance. Confidence grade B2 |
| 40-48 | Water balance - Region 1 | Not Applicable for SRN - company level only |
| 49 -57 | Water balance - Region 2 | Not Applicable for SRN - company level only |
| | Components of total leakage (post MLE) - Company level | |
| 58 | Leakage upstream of DMA | 2023/24 derived from operational programmes confidence grade A2 AMP7 Y4 & 5, AMP8 Y1-5, extrapolated based on WRMP24 and PR24 projections, confidence grade C5 |
| 59 | Distribution main losses | AMP7 Taken from water Balance Annual Return and WRMP24, Confidence Grade A2 AMP8 Taken from PR24 submission, subject to approval, Confidence Grade B4 |
| 60 | Customer supply pipe losses – measured households excluding void properties | |
| 61 | Customer supply pipe losses – unmeasured households excluding void properties | |
| 62 | Customer supply pipe losses – measured non-households excluding void properties | |
| 63 | Customer supply pipe losses – unmeasured non-households excluding void properties | |
| 64 | Customer supply pipe losses – void measured households | |
| 65 | Customer supply pipe losses – void unmeasured households | |
| 66 | Customer supply pipe losses – void measured non-households | |
| 67 | Customer supply pipe losses – void unmeasured non-households | |
| 68-77 | Components of total leakage (post MLE) - Region 1 | Not Applicable for SRN |
| 78-87 | Components of total leakage (post MLE) - Region 2 | Not Applicable for SRN |

| CW6 - Water network+ - Mains, communication pipes and other data | | |
|--|--|--|
| Line description | Commentary | |
| | Treated water distribution - mains analysis | |
| | Update to how we capture information about new requisition mains has led to an increase in length of new mains requisitions and SLPs (data comes from DS6.1) in year 2023/24, this is seen as a temporary increase due to the reporting methodology and therefore our forecast and forecast methodology remains the same. We have updated our base mains length as a review of assumptions identified that a raw water main had been included in the calculation, which has now been removed. All changes other changes are as a consequence of updates to our delivery plans (Rownhams, WRMP24 and lead replacement programme) and associated future forecasting. | |
| 1 | Total length of potable mains as at 31 March | Uses forecast from DS6.1. 23-24 figures updated from DS4, which includes APR values for requisitions. Revised WRMP24 has amended delivery dates of interconnector schemes. Therefore forecast mains lengths are now 99.9km of new mains in 2024-25. 69.1Km of new mains in 2025-26, 68.8Km of new mains in 2026-27, 68.8Km of new mains in 2027-28, 68.8Km of new mains in 2028-29 and 68.8Km of new mains in 2029-30. Confidence grade A2 |
| 2 | Total length of potable mains relined | Calculated based on historic increase in mains lengths from 2011 to 2023, historically no relining reported. Confidence grade AX |
| 3 | Total length of potable mains renewed | Values have been updated to take account that we have revised our discolouration strategy and therefore reduced the amount of mains replacement completed under the Rownhams scheme and base values have been updated to remove the replacement of a raw water main (Darwell to Beauport), reducing annual mains length value attributed to base expenditure to 8.2km per year. CW6.3: 2023/24 Fairlee road +2km, Swale +3km, 2024/25 Rownhams AMP7 0km, 2025/26 12.5km Rownhams AMP7 carryover + 20km from mains replacement programme + 8.2km base expenditure, 2026/27 12.5km Rownhams AMP7 carryover + 40km from mains replacement programme + 8.2km base expenditure, 2027/28 60km from mains replacement programme + 8.2km base expenditure, 2028/29 80km from mains replacement programme + 8.2km base expenditure, 2029/30 100km from mains replacement programme + 8.2km base expenditure. |
| 4 | Total length of new potable mains | Uses forecast from DS6.1. 99.9Km of new mains in 2023-24, forecast mains lengths are now 69.1Km of new mains in 2025-26, 68.8Km of new mains in 2026-27, 68.8Km of new mains in 2027-28, 68.8Km of new mains in 2028-29 and 68.8Km of new mains in 2029-30 Confidence grade A3 |
| 5 | Total length of potable water mains (≤ 320 mm) | Baseline year split between CW6.5, CW6.6, CW6.7 and CW6.8 applied to the total length of potable mains in CW6.1. 23-24 values updated based on OCF 460. Forecasts updated based on DS6 update, changes to Rownhams programme and base expenditure as detailed in CW6.1 commentary. Confidence grade B3 |
| 6 | Total length of potable water mains (> 320 mm and ≤ 450 mm) | |
| 7 | Total length of potable water mains (> 450 mm and ≤ 610 mm) | |
| 8 | Total length of potable water mains (> 610 mm) | |
| | Treated water distribution - mains age profile | |
| 9 | Total length of potable mains laid or structurally refurbished pre-1880 | |

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| 10 | Total length of potable mains laid or structurally refurbished between 1881 and 1900 | Base year ratio of the lines CW6.9 to CW6.16 will apply when removing mains that are to be relined from CW6.3. 3-24 values updated based on OCF 460. Forecasts updated based on DS6 update, changes to Rownhams programme and base expenditure. Confidence grade C4 |
| 11 | Total length of potable mains laid or structurally refurbished between 1901 and 1920 | |
| 12 | Total length of potable mains laid or structurally refurbished between 1921 and 1940 | |
| 13 | Total length of potable mains laid or structurally refurbished between 1941 and 1960 | |
| 14 | Total length of potable mains laid or structurally refurbished between 1961 and 1980 | |
| 15 | Total length of potable mains laid or structurally refurbished between 1981 and 2000 | |
| 16 | Total length of potable mains laid or structurally refurbished between 2001 and 2020 | |
| 17 | Total length of potable mains laid or structurally refurbished post 2021 | All new mains and relined mains will be added to this total. 2023/24 Fairlee road +2km, Swale +3km, 2024/25 -0, 2025/26 12.5km Rownhams AMP7 carryover + 20km from mains replacement programme + 8.2km base expenditure, 2026/27 12.5km Rownhams AMP7 carryover + 40km from mains replacement programme + 8.2km base expenditure, 2027/28 60km from mains replacement programme + 8.2km base expenditure, 2028/29 80km from mains replacement programme + 8.2km base expenditure, 2029/30 100km from mains replacement programme + 8.2km base expenditure. Confidence grade C4 |
| Communication and supply pipes | | |
| 18 | Number of lead communication pipes | Number of lead communication pipes replaced or relined for water quality: Long term average c50 per AMP, therefore c10 per year. From WQ failures - Long term average c50 per AMP, therefore c10 per year. From leakage repairs - Long term average c250 per AMP, therefore c50 replaced during reactive leakage activity per year. From public building programme – 200 comm pipes in AMP8. Increasing programme starting with 15 comm pipes in year 1 of AMP. From increasing metering penetration – 3748 comm pipes (Yr 1 15%, Yr 2 15%, Yr3 20%, Yr4 25%, Yr5 25%) Number of lead communication pipes replaced for other reasons: WRMP programme to replace 600 comm pipes, starting at 80 per year increasing uniformly to 160 in year 5 of AMP. Confidence grade C5 |
| 19 | Number of galvanised iron communication pipes | Won't lay any more galvanised iron pipes so figure will not change. Confidence grade C5 |
| 20 | Number of other communication pipes | Assumed lead replacements from AMP8 mains replacement programme will appear in CW6.20, Number of lead communication pipes replaced or relined for water quality: From WQ failures - Long term average c50 per AMP, therefore c10 per year. From leakage repairs - Long term average c250 per AMP, therefore c50 replaced during reactive leakage activity per year. |

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| | | <p>From public building programme – 200 comm pipes in AMP8. Increasing programme starting with 15 comm pipes in year 1 of AMP.</p> <p>From increasing metering penetration – 3748 comm pipes (Yr 1 15%, Yr 2 15%, Yr3 20%, Yr4 25%, Yr5 25%)</p> <p>Number of lead communication pipes replaced for other reasons: WRMP programme to replace 600 comm pipes, starting at 80 per year increasing uniformly to 160 in year 5 of AMP.</p> <p>Confidence grade C5</p> |
| <p>In addition to the recorded numbers we also anticipate that we will discover a significant number of lead comm and supply pipes whilst targeting leakage reduction through our mains renewal programme. These numbers have not been captured in the data lines due to the high level of uncertainty associated with them. Uncertainty comes from the following areas:</p> <ul style="list-style-type: none"> • Total mains length – our WRMP proposals for demand management and hence leakage reduction and mains renewals will not be approved until 2024 at the earliest. • Location of mains renewal – the exact location of the mains which will be renewed will be dependent on the total length approved through WRMP and the leakage location data generated in AMP8. • Unknown take-up by customers of external and internal supply pipe replacement. <p>Mains growth is linked with DS6 which includes mains required for new developments. We have an estimated number of future developments and an associated mains length.</p> | | |
| 21 | Number of lead communication pipes replaced or relined for water quality | <p>From WQ failures - Long term average c50 per AMP, therefore c10 per year.</p> <p>From leakage repairs - Long term average c250 per AMP, therefore c50 replaced during reactive leakage activity per year.</p> <p>From public building programme – 200 comm pipes in AMP8. Increasing programme starting with 15 comm pipes in year 1 of AMP.</p> <p>From increasing metering penetration – 3748 comm pipes (Yr 1 15%, Yr 2 15%, Yr3 20%, Yr4 25%, Yr5 25%)</p> <p>Confidence grade C5</p> |
| 22 | Number of lead communication pipes replaced for other reasons | WRMP programme to replace 600 comm pipes, starting at 80 per year increasing uniformly to 160 in year 5 of AMP. Confidence grade C5 |
| 23 | Total length of lead communication pipes replaced or relined | Based on a typical street being 8m wide with two 1.5m pavements, a typical comm pipe length would be c5.5m. Confidence grade C5 |
| 24 | Number of external lead supply pipes replaced or relined | Assuming that 100% of public building owners and 75% of homeowners allow us to replace their external supply pipe when we replace the comm pipe leading to their property. The proposed percentage is uncertain. Confidence grade C5 |
| 25 | Total length of external lead supply pipes replaced or relined | Assuming typical length of external supply pipe matches typical length of comm pipe. Confidence grade C5 |
| 26 | Number of internal lead supply pipes replaced or relined | Assuming that 100% of public building owners and 25% of homeowners allow us to replace their external supply pipe when we replace the comm pipe leading to their property. The proposed percentage is uncertain. Confidence grade C5 |
| 27 | Total length of internal lead supply pipes replaced or relined | Assuming typical length of internal supply pipe matches typical length of comm pipe. Confidence grade C5 |
| | Other | |

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| 28 | Company area | Assume no change in company area therefore figure stays the same. Confidence grade C2 |
| 29 | Compliance Risk Index | See also OUT2.2. |
| 30 | Event Risk Index | 2023/2024 is projected performance based on our 2023 score to date. Year on year variations are largely due to Regulation 31 events which significantly impact this measure. For the purposes of these calculations, it has been assumed that there will be no Regulation 31 failures. WSR ingress will be resolved largely by 2025 with completion of majority of WSR inspections; assumed 25% reduction in 2025 and 10% each year thereafter. Discoloration and loss of supply events in distribution/zone will reduce by 50% by 2030. Assumed 10% per year from 2025. WSW events will reduce from 2025 to 2030 with site improvements at 4 surface water sites; assumed 10% reduction in 2027 after first major delivery phase and 5% per year thereafter. Confidence grade B5 |

| CW6a- Transition and accelerated programme - Water network+ - Mains, communication pipes and other data | | |
|---|----------------|---|
| Line description | | Commentary |
| | CW6a all lines | |
| 1-23 | CW6a all lines | No transitional or accelerated programme of works relating to the lines in table CW6a therefore left blank. Data confidence grade: A1 |



| CW7 - Demand management - Metering activities | | |
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| Line description | | Commentary |
| Metering activities - Totex expenditure | | |
| 1 | New optant meter installation for existing customers | We have included costs input for CW7 rows 1 to 5 for AMP8, as allowed by Ofwat during Draft Determination, however this is being delivered by Market Based Delivery, therefore CW3 confirms in-house costs relating to Smart Metering, and SUP12 confirms Smart Metering costs to be delivered by 3 rd party delivery. Confidence grade B3. There are no basic or AMI meter upgrades up to the end of AMP7. |
| 2 | New selective meter installation for existing customers | We have deferred 33,870 unmetered conversions from AMP7 to AMP8 due to the complex nature of these installs, minus completed Optant Installs completed in AMP7 (3,857). We intend to install smart AMI meters in these properties in AMP8. We have not included any costs associated with this activity in CW7.2 as it has been funded in AMP7. The installation profile falls into Reliability Band B and Accuracy Band 3 (outside +/- 5%, within +/-10%). Outturn meters replaced in any year are likely to differ from forecasts for operational reasons. There may be factors outside of our control that result in variation from forecast (e.g. availability of meters). Year on year variations reflect the variability in the size of Water Resource Zones in which replacements are completed in each year. |
| 3 | New business meter installation for existing customers | See CW7.1 commentary |
| 4 | Residential meters renewed | See CW7.1 commentary |
| 5 | Business meters renewed | See CW7.1 commentary |
| Metering activities - Explanatory variables | | |
| 6 | New optant meters installed for existing customers | There are no basic or AMI meter installs up to the end of AMP7. See CW7.7 |
| 7 | New selective meters installed for existing customers | We have deferred 33,870 unmetered conversions from AMP7 to AMP8 due to the complex nature of these installs, minus completed Optant Installs completed in AMP7 (3,857). We intend to install smart AMI meters in these properties in AMP8. We have not included any costs associated with this activity in CW7.2 as it has been funded in AMP7. The installation profile falls into Reliability Band B and Accuracy Band 3 (outside +/- 5%, within +/-10%). Outturn meters replaced in any year are likely to differ from forecasts for operational reasons. There may be factors outside of our control that result in variation from forecast (e.g. availability of meters). Year on year variations reflect the variability in the size of Water Resource Zones in which replacements are completed in each year. |
| 8 | New business meters installed for existing customers | There are no business meters installs for existing customers in AMP8. |

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| 9 | Residential meters renewed | <p>The replacement profile for meters has been estimated assuming an area-by-area rollout in which we will prioritise WRZs at greatest water stress. Annual replacements vary as the rollout scales up and due to the different size of the WRZs targeted each year.</p> <p>The replacement profile for meters falls into Reliability Band B and Accuracy Band 3 (outside +/- 5%, within +/-10%). Outturn meters replaced in any year are likely to differ from forecasts for operational reasons. There may be factors outside of our control that result in variation from forecast (e.g. availability of meters).</p> <p>Residential meters renewed are the sum of residential basic meters renewed and residential AMR meters renewed.</p> <p>Business meters renewed are the sum of business basic meters renewed and business AMR meters renewed. This is up to the allowed volume of meter renewals and meter upgrades as confirmed by Ofwat's Price Control Deliverable, Base Adjustment, and Enhancement Models (984,926).</p> <p>We only plan to replace existing meters with AMI meters in AMP8 and therefore the number of meters replaced with basic or AMR meters is 0 for 2025-26 to 2029-30.</p> |
| 10 | Business meters renewed | See CW7.9 commentary |
| 11 | Replacement of basic meters with smart meters for household customers | See CW7.9 commentary |
| 12 | Replacement of AMR meter with AMI meters for household customers | See CW7.9 commentary |
| 13 | Replacement of basic meters with smart meters for business customers | See CW7.9 commentary |
| 14 | Replacement of AMR meter with AMI meters for business customers | See CW7.9 commentary |
| 15 | New residential meters installed for existing customers – supply-demand balance benefit | See CW7.9 commentary |
| 16 | New business meters installed for existing customers – supply-demand balance benefit | See CW7.8 commentary |
| 17 | Replacement of basic meter with smart meters for household customers – supply-demand balance benefit | <p>Benefits relating to Wastage (PCC) and Leakage are included in these lines. PCC and leakage benefits attributed to smart metering increase from year to year in AMP8 as more smart meters are installed. No benefit is assumed in Year 1 of AMP8 for the PCC benefit and in Year 1 and 2 for the leakage benefit.</p> <p>PCC benefit attributed to smart metering increases from year to year in AMP8 as more smart meters are installed. The PCC benefit falls into Reliability Band C and Accuracy Band 5 (outside +/- 25%, within +/-50%). Estimates are based on extrapolation of a limited number of studies. PCC benefits in each year will be dependent on the number of smart meters installed and the resulting change in consumer behaviour.</p> |



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| 18 | Replacement of AMR meter with AMI meter for household customers– supply-demand balance benefit | See CW7.17 commentary |
| 19 | Replacement of basic meter with smart meters for business customers – supply-demand balance benefit | Benefits relating to Wastage (Business Demand) and Leakage are included in these lines. PCC and leakage benefits attributed to smart metering increase from year to year in AMP8 as more smart meters are installed. No benefit is assumed in Year 1 of AMP8 for the PCC benefit and in Year 1 and 2 for the leakage benefit. |
| 20 | Replacement of AMR meter with AMI meter for business customers– supply-demand balance benefit | See CW7.19 commentary |
| 21 | Residential properties - meter penetration | See SUP1.B commentary |
| Per capita consumption (excluding supply pipe leakage) | | |
| 22 | Per capita consumption (measured) | This figure applies to billed measured households and excludes underground supply pipe leakage. This value has been calculated from dWRMP24 Table 3c as the weighted average dry year annual average PCC, using rows 18FP (Measured HH – PCC) and 34 FP (Measured HH properties excluding voids). The PCC forecast represents the impact of all demand-side measured, including both metering and water efficiency. |
| 23 | Per capita consumption (unmeasured) | This figure applies to billed unmeasured households and excludes underground supply pipe leakage. This value has been calculated from dWRMP24 Table 3c as the weighted average dry year annual average PCC, using rows 19FP (Unmeasured HH – PCC) and 35 FP (Unmeasured HH properties excluding voids). The PCC forecast represents the impact of all demand-side measured, including both metering and water efficiency. |
| Average unit cost of typical metering activities - new meter installation | | |
| 24 | New meter installation - residential property - cost per property | During AMP7, we made the decision to repurpose activity from increasing penetration, to instead preparing for our 2025-2030 Smart Metering Programme due to the limited benefit expected with marginally increased penetration, and the urgency associated with our upcoming programme. We plan to deliver the new installations committed to PR19 during AMP8, without requesting additional allowance. Total savings from new meter installations in residential properties are calculated by multiplying the total number of new meter installations (CW7.7) by an assumed 16% reduction in consumption and the estimated consumption per property for unmetered properties in that year. The MI/d benefit falls into Reliability Band C and Accuracy Band 5 (outside +/- 25%, within +/- 50%). Estimates are based on extrapolation of a limited number of studies. Water savings benefits in each year will be dependent on the number of new meter installations and the resulting change in consumer behavior. |
| 25 | New meter installation - business property - cost per property | We do not plan to undertake any new meter installations for business properties. |
| Average unit cost of typical metering activities - meter replacement | | |
| 26 | Replacement of existing basic meter - residential property - cost per property - total cost | Unit costs are updated to reflect the allowed unit cost as communicated by the Sector Wide Base Adjustment document (PR24 Cost Assessment Master Dataset, Meter replacement sector wide base costs adjustment) |

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| 27 | Replacement of existing basic meter - residential property - enhancement element of total cost | No enhancement elements are included for meter replacement. All costs associated with upgrading the meter are included within the Meter Upgrade section. |
| 28 | Replacement of existing basic meter - business property - cost per property - total cost | See CW7.26 and CW7.27 commentary |
| 29 | Replacement of existing basic meter - business property - enhancement element of total cost | See CW7.26 and CW7.27 commentary |
| 30 | Replacement of existing AMR meter - residential property - cost per property - total cost | See CW7.26 and CW7.27 commentary |
| 31 | Replacement of existing AMR meter - residential property - enhancement element of total cost | See CW7.26 and CW7.27 commentary |
| 32 | Replacement of existing AMR meter - business property - cost per property - total cost | See CW7.26 and CW7.27 commentary |
| 33 | Replacement of existing AMR meter - business property - enhancement element of total cost | See CW7.26 and CW7.27 commentary |
| | Average unit cost of typical metering activities - meter upgrade | |
| 34 | Upgrade of existing basic meter - residential property - cost per property - total cost | Unit costs are updated to reflect the allowed enhancement unit cost as. The Meter Upgrade Unit Cost (£76.84) is calculated by dividing total enhancement allowance by total number of upgrades allowed (as confirmed in PCD) |
| 35 | Upgrade of existing basic meter - residential property - enhancement element of total cost | N/A - all costs associated with upgrading the meter are confirmed by CW7.34. Some costs associated with fitting upgraded units were confirmed by Ofwat as included within the meter replacement unit cost. |
| 36 | Upgrade of existing basic meter - business property - cost per property - total cost | See CW7.34 and CW7.35 commentary |
| 37 | Upgrade of existing basic meter - business property - enhancement element of total cost | See CW7.34 and CW7.35 commentary |
| 38 | Upgrade of existing AMR meter - residential property - cost per property - total cost | See CW7.34 and CW7.35 commentary |
| 39 | Upgrade of existing AMR meter - residential property - enhancement element of total cost | See CW7.34 and CW7.35 commentary |
| 40 | Upgrade of existing AMR meter - business property - cost per property - total cost | See CW7.34 and CW7.35 commentary |
| 41 | Upgrade of existing AMR meter - business property - enhancement element of total cost | See CW7.34 and CW7.35 commentary |
| | Average benefits of typical metering activities - new meter installations | |
| 42 | New meter installation - residential property - benefits per meter installation | See CW7.34 and CW7.35 commentary |
| 43 | New meter installation - business property - benefits per meter installation | See CW7.34 and CW7.35 commentary |

| Average benefits of typical metering activities - meter replacement | | |
|---|--|--|
| 44 | Replacement of existing basic meter - residential property - benefits per meter installation | N/A - left blank because all benefits are associated with meter upgrade activity. See CW7.48 and CW7.49 for further details. |
| 45 | Replacement of existing basic meter - business property - benefits per meter installation | N/A - left blank because all benefits are associated with meter upgrade activity. See CW7.48 and CW7.49 for further details. |
| 46 | Replacement of existing AMR meter - residential property - benefits per meter installation | N/A - left blank because all benefits are associated with meter upgrade activity. See CW7.48 and CW7.49 for further details. |
| 47 | Replacement of existing AMR meter - business property - benefits per meter installation | N/A - left blank because all benefits are associated with meter upgrade activity. See CW7.48 and CW7.49 for further details. |
| Average benefits of typical metering activities - meter upgrade | | |
| 48 | Upgrade of existing basic meter - residential property - benefits per meter installation | PCC and leakage benefits attributed to smart metering increase from year to year in AMP8 as more smart meters are installed. No benefit is assumed in Year 1 of AMP8 for the PCC benefit and in Year 1 and 2 for the leakage benefit. The PCC and leakage benefits fall into Reliability Band C and Accuracy Band 5 (outside +/- 25%, within +/-50%). Estimates are based on extrapolation of a limited number of studies. Benefits in each year will be dependent on the number of smart meters installed and the resulting change in consumer behaviour. |
| 49 | Upgrade of existing basic meter - business property - benefits per meter installation | Business Demand and leakage benefits attributed to smart metering increase from year to year in AMP8 as more smart meters are installed. No benefit is assumed in Year 1 of AMP8 for the PCC benefit and in Year 1 and 2 for the leakage benefit. The PCC and leakage benefits fall into Reliability Band C and Accuracy Band 5 (outside +/- 25%, within +/-50%). Estimates are based on extrapolation of a limited number of studies. Benefits in each year will be dependent on the number of smart meters installed and the resulting change in consumer behaviour. |
| 50 | Upgrade of existing AMR meter - residential property - benefits per meter installation | See CW7.34 commentary |
| 51 | Upgrade of existing AMR meter - business property - benefits per meter installation | See CW7.34 commentary |

| CW7a- Transition and accelerated programme - Demand management - Metering activities | | |
|--|----------------|--|
| Line description | | Commentary |
| | CW7a all lines | |
| 1-23 | CW7a all lines | No transitional or accelerated programme of works relating to the lines in table CW7a therefore left blank Data confidence grade: A1 |



| CW8 - WRMP schemes (excluding leakage and metering activities) | | |
|--|---|---|
| Line description | | Commentary |
| | Scheme name | |
| 1 | Waterlevel Extreme Drought Resilience Service (without insurance) | <p>Schemes included in CW8 represent the schemes selected by our best value plan for the draft revised draft WRMP24 (rdWRMP24) as part of WRSE regional planning. Since our October 2023 submission, we have revised our plan to account for the revision in date of our SRO and key schemes Littlehampton Recycling and Sandown Recycling. We have therefore updated our CW8 to align to this revised plan.</p> <p>In October CW8 included a line for WRMP mitigation, in revising our dWRMP24 plan we have removed this line. We are now including the following new or accelerated schemes:</p> <ul style="list-style-type: none"> • Groundwater (HRZ): Remove constraints at Horsebridge • Groundwater : Petworth WSW return to service with a new borehole • Waterlevel Extreme Drought Resilience Service • Treatment capacity (HSE): Enhancement for HWTWRP • Recycling (SHZ): Tonbridge to Bewl Reservoir (5.7MI/d) • Interzonal transfer (HSW-HRZ): Romsey Town and Broadlands valve expansion (5MI/d) <p>The following schemes are no longer included:</p> <ul style="list-style-type: none"> • Groundwater: Eastern Yar replacement BH • Groundwater: Newchurch LGS • Storage: River Adur offline Reservoir - Planning • Transfer: Winter transfer stage 1 - Provision of a permanent sludge treatment facility at Pulborough WSW (2MI/d) <p>The schemes included in CW8 are comparable to preferred options in table 4,5 and 8 of the rdWRMP24 as submitted in August 2024. They are reported using the same scheme names and scheme references as rdWRMP24, as used for the WRSE model. Our WRMP24 is in draft, has not been signed off by the Secretary of State and hence is subject to change.</p> <p>To align with the table format of CW8 which is limited to 50 lines, schemes with no AMP8 spend have been summed into a single line at the bottom of CW8. Those with no AMP8 spend are included in a supplementary table. To process the data into two separate sheets, schemes were filtered based on AMP8 Capex or Opex spend, those with no AMP8 spend were removed to a separate tab. Checks were made that no schemes were missed and that in splitting the schemes the key values of opex, capex and benefit are accurate.</p> |
| 2 | Interzonal transfer (HWZ-HSW): Yew Hill to Rownhams, [REDACTED] bi-directional - potable (60MI/d) SLM | |
| 3 | Import: SEW Kingston to KTZ Near Canterbury (2MI/d) | |
| 4 | Outwood To Turners Hill: 10MI/d | |
| 5 | Bulk import (SNZ): SES re-zoning extension (4MI/d) | |
| 6 | Groundwater: Petworth WSW return to service with a new borehole (4.0MI/d) | |
| 7 | Recycling: Littlehampton WwTW (15MI/d) | |
| 8 | Groundwater: Lewes road (3.5MI/d) | |
| 9 | Transfer: Bi-directional transfer (SWZ-SNZ) (15MI/d) | |
| 10 | Import: PWC at Pulborough extension (15MI/d) | |
| 11 | Import from Portsmouth Water (additional 30MI/d) | |
| 12 | Hampshire grid (reversible link HW-HA) ALM | |
| 13 | Transfer: Romsey Town & Broadlands valve (HRZ-HSW) (3.1MI/d) | |
| 14 | Transfer: Romsey Town & Broadlands valve (HSW-HRZ) (3.1MI/d) | |
| 15 | Additional import from Portsmouth Water (Additional 21MI/d) | |
| 16 | Hampshire grid (reversible link HSE-HW) SLM | |
| 17 | Recycling: Sittingbourne industrial reuse (7.5MI/d) | |
| 18 | Transfer: KTZ-KME (14MI/d) | |
| 19 | Recycling: Medway WwTW (12.8MI/d) | |
| 20 | Transfer: Utilise full existing KME-KTZ transfer capacity (9MI/d) | |
| 21 | Transfer: Winter transfer Stage 2: New main Shoreham/North Shoreham and Brighton A (4MI/d) | |
| 22 | Groundwater: recomission Gravesend source (2.7MI/d) | |



| | | |
|----|--|---|
| 23 | Recycling: Sandown WwTW (8.1MI/d) | <p>The schemes that make up this line have been included in a supplementary table alongside this commentary. These schemes in tandem with those in the CW8 submitted are the supply side and internal interconnector schemes selected by our best value plan.</p> <p>This reflects our rdWRMP with the exception of the following updates to schemes:</p> <ol style="list-style-type: none"> 1) SRO scheme cost profiles; These have been updated to align with project team cost profiles as the schemes have advanced since WRMP24 submission. 2) Costs for the following schemes have been aligned with project team cost profiles as the schemes have advanced since our October submission and therefore do not align with WRMP24. These were updated via updates to the Master Enhancement List: <ul style="list-style-type: none"> • Sandown Recycling • Medway Recycling • Littlehampton Recycling • Southampton Link Main (Interzonal transfer (HWZ-HSW): Yew Hill to Rownhams, [REDACTED] bi-directional - potable (60MI/d) SLM and Hampshire grid (reversible link HSE-HW) • Andover Link Main (Hampshire grid (reversible link HW-HA) ALM) 3) Costs have been updated for: Treatment capacity (HSE): Enhancement for HWTWRP. We are now including funding for half of the installation of a ceramics membrane filtration system at our [REDACTED] as this is required to enable the utilisation of transfers from Havant Thicket. We have apportioned the spend for this enhancement across the two areas; our strategic resilience enhancement case and WRMP supply enhancement case, to better reflect where the enhancement benefit is. 4) We are now including AMP8 costs for the following schemes: <ul style="list-style-type: none"> • Smock Alley- The cost of this scheme has increased and therefore we are now requesting further funds in AMP8 to complete the scheme • Rogate- The cost of this scheme has increased and therefore we are now requesting further funds in AMP8 to complete the scheme • SES re-zoning extension- This scheme was selected for the first time in WRMP24 and therefore enhancement funding is required to deliver the expansion and continue the transfer already in place. • Newbury Groundwater (East Woodhay)- This is a multi- AMP scheme that we had omitted AMP8 funding request from in October, we have therefore amended our CW8 table to request the funding that is required to complete the scheme. <p>These updates were also made via updates to the master enhancement list.</p> |
| 24 | Import: Havant Thicket - [REDACTED] direct raw water transfer (90MI/d) | |
| 25 | Treatment capacity (HSE): Enhancement for HWTWRP | |
| 26 | Romsey Groundwater | |
| 27 | Transfer: Romsey Town & Broadlands valve (HSW to HRZ) | |
| 28 | Newbury Groundwater | |
| 29 | Groundwater (HRZ): Remove constraints at Horsebridge (2.5MI/d) | |
| 30 | New Reservoir - SESRO 150Mm3 (SWS: 30%) | |
| 31 | T2ST Potable resource: Crabwood to Yew Hill | |
| 32 | Test MAR - Planning & Development | |
| 33 | Recycling (SHZ): Tonbridge to Bewl Reservoir (5.7MI/d) | |
| 34 | Home audits | |
| 35 | Water audits - Business | |
| 36 | Partnership funds - business | |
| 37 | Water efficiency education | |
| 38 | Groundwater (SNZ): Smock Alley (3.1MI/d) | |
| 39 | Groundwater (SNZ): Rogate refurbishment (1.6MI/d) | |

- 5) We have included costs for our Littlehampton Recycling and Medway Recycling schemes in our CW8 table. These have been selected for alternative delivery via DPC and had previously been excluded from the CW8 table. We are now including the delivery costs for these in CW8 and therefore this will not align with CW3. Development costs for these schemes appear in CW3.
- 6) We had previously submitted that Sittingbourne recycling would be delivered by alternative delivery DPC. Following draft determination Sittingbourne will be delivered via a large scheme gated mechanism and therefore we have now included our full scheme costs in CW8
- 7) We had previously submitted that Sandown recycling would be delivered by alternative delivery DPC. Following draft determination we suggest that Sandown should be delivered via an enhanced engagement mechanism and therefore we have now included our full scheme costs in CW8

Where a scheme has had AMP7 investment, this has been aligned to current AMP7 values, as used in CW3. The total values however will not align as CW3 only includes spend from 22-23, where as CW8 includes full AMP7 spend per scheme. CW3 also includes supply and demand capex and opex for WRMP19 schemes delivering in AMP7, that do not require enhancement spend in AMP8 and are therefore not in CW8.

As part of our PR19 submission, we committed to deliver a number of long term supply and demand schemes identified as required by WRMP19. These schemes were covered by our long term supply and demand performance commitment are were:

- 8) **Ford Wastewater Treatment Works (WwTW) indirect potable water reuse;**
- 9) **Utilise full existing transfer capacity;**
- 10) **East Woodhay Water Supply Works (WSW);**
- 11) Bournemouth Water supply from Knapp Mill;
- 12) Coastal desalination - Shoreham Harbour;
- 13) Sussex Coast - Lower Greensand;
- 14) **■■■■■ winter transfer: Stage 2;**
- 15) **Aylesford WwTW indirect potable water reuse - Eccles Lake;**
- 16) **Sandown WwTW indirect potable water reuse; and**
- 17) **Internal interconnections.**

The schemes highlighted in bold continue to be progressed as part of WRMP24. The 3 remaining schemes, Bournemouth Water supply from Knapp Mill, Coastal desalination and Sussex coast- Lowe greensands, have been deemed unfeasible. Our progress against this commitment is detailed in our past performance annex and the Supply side enhancement business case of our October submission.

Cost data included in CW8 will differ from dWRMP24 as it has been adjusted to the 2022-23 price base based on CPIH values. Multipliers included in dWRMP24 have been removed and reindexed expenditure values have adjusted to business approved multipliers for Indirect Costs, Risk and Corporate Overheads.



| | | |
|----|------------------------|--|
| | | <p>Where an internal interconnector scheme is delivery new assets within AMP8, internal interconnector asset information has been populated. We have reviewed the previous interconnector information provided in October against our project information as our scope has matured to update this. As many of our interconnector schemes are bidirectional, which is represented as two schemes in the dWRMP24, the assets have only been recorded against one direction of the internal interconnector to avoid duplication of assets. We have updated pipe material for a number of our schemes as we now have this information as part of our design. Internal interconnector schemes delivering benefit after AMP8 or where the assets are already in place have not had the interconnector information added.</p> <p>No schemes are delivered as part of the green recovery programme or commenced as part of the accelerated delivery programme.</p> <p>WRSE modelling assumes that schemes are available from the start of each financial year, therefore for each scheme the full benefit will be available from this time and a full years opex has been included in the profile. We have not included any partial year opex costs. For schemes delivering benefit after 2029-30, we have taken the average opex over the period to the end of the planning period. There are no schemes that we stop utilising after 2029-30.</p> <p>We have included transitional expenditure for our Sandown Recycling scheme. This aligns with CW12</p> <p>Import: Havant Thicket - [REDACTED] direct raw water transfer (90MI/d) was updated in the 25th Jan 24 submission due to the Site 72 adjustment. The value included for HWTWRP incorrect due to a data transfer issue and the correct value is 58.244 – this is as set out in SRN-DDR-032 – Water Resources – Strategic Resource Options Enhancement Cost Evidence Case.</p> |
| 40 | WRMP Scheme spend AMP9 | <p>To align with the table format of CW8 which is limited to 50 lines, schemes with no AMP8 spend have been removed to the CW8 AMP9 and DPC supplementary tab. Data From the schemes within this supplementary tab have been summed and the value included in this line. Please note that the benefits (MI/d) from the following DPC schemes: Recycling: Medway (Aylesford) WwTW, Recycling: Littlehampton (Ford) WwTW, Recycling: Sandown WwTW and Recycling: Sittingbourne WwTW have not been included in this line and can be found in CW8 AMP9 and DPC supplementary tab.</p> |
| 51 | Total | <p>This line totals the values of the rows above. See CW8.1-39 for commentary</p> |

CW8 AMP9 and DPC - WRMP schemes (excluding leakage and metering activities). Supplementary table

| Line description | | Commentary |
|------------------|--|---|
| | Scheme name | |
| 52 | T2ST (120 MI/d T2ST) Spur to Andover | Schemes included in the CW8 AMP9 and DPC supplementary table represent the schemes selected by our best value plan for the draft revised WRMP24 (rdWRMP24) as part of WRSE regional planning that either have: <ul style="list-style-type: none"> No AMP8 spend or; Will be delivered by a DPC route. |
| 53 | Groundwater: Eastern Yar replacement BH (1.5MI/d) | |
| 54 | Desalination: Isle of Sheppey (20MI/d) | |
| 55 | Desalination: River Thames estuary (20MI/d) Phase 2 | |
| 56 | Desalination: River Thames estuary (20MI/d) Construction | Since our October 2024 we have revised our plan to take into account the revision in date of our SRO and key schemes Littlehampton Recycling and Sandown Recycling. We have therefore updated our CW8 to align to this revised plan. |
| 57 | Recycling: Recharge of Havant Thicket reservoir from Budds Farm and new WRP (60MI/d) | |
| 58 | Desalination: East Thanet coast & transfer (20MI/d) | The schemes included in CW8 are comparable to preferred options in table 4,5 and 8 of the rdWRMP24 as submitted in August 2024. They are reported using the same scheme names and scheme references as WRMP24, as used for the WRSE model. Our dWRMP24 is currently in draft and has not been signed off by the Secretary of State and hence is subject to change |
| 59 | Canterbury (Broad Oak) to near Canterbury GW (20 MI/d) | |
| 60 | Pulborough to Worthing: 30MI/d | |
| 61 | Transfer: Winter transfer stage 1 - Provision of a permanent sludge treatment facility at Pulborough WSW (2MI/d) | The schemes in the CW8 AMP9 and DPC supplementary table, in tandem with those in the CW8 Table, are the supply side and internal interconnector schemes selected by our best value plan. This reflects our rdWRMP24, please see the commentary for CW8 for commentary on the limited exceptions. |
| 62 | Hampshire grid (reversible link HA-HK) | |
| 63 | Desalination: Tidal River Arun (20MI/d) Phase 2 | |
| 64 | Desalination: Tidal River Arun (10MI/d) | |
| 65 | Tilmore to Pulborough: 10MI/d | As part of our PR19 submission, we committed to deliver a number of long term supply and demand schemes identified as required by WRMP19. These schemes were covered by our long term supply and demand performance commitment are were: <ul style="list-style-type: none"> Ford Wastewater Treatment Works (WwTW) indirect potable water reuse; Utilise full existing transfer capacity; East Woodhay Water Supply Works (WSW); Bournemouth Water supply from Knapp Mill; Coastal desalination - Shoreham Harbour; Sussex Coast - Lower Greensand; winter transfer: Stage 2; Aylesford WwTW indirect potable water reuse - Eccles Lake; Sandown WwTW indirect potable water reuse; and Internal interconnections |
| 66 | Drought option - supply side (HSE): Candover drought permit/order (extension to 2034/35) | |
| 67 | Drought option - supply side (HSW): drought permit (extension to 2034/5) | |
| 68 | Storage: River Adur offline Reservoir - Construction | |
| 69 | Recycling: Hastings WTW conjunctive use with Darwell reservoir (15.3MI/d) | |
| 70 | Rye groundwater reconfiguration | |
| 71 | Worthing to Brighton: 40MI/d | |
| 72 | Hampshire grid (reversible link HW-HSE) SLM | |
| 73 | Storage: Raising Bewl by 0.4m (3MI/d) | |
| 74 | Groundwater: Newchurch LGS (1.9MI/d) | |

The schemes highlighted in bold continue to be progressed as part of WRMP24. The 3 remaining schemes, Bournemouth Water supply from Knapp Mill, Coastal desalination and Sussex coast - Lowe greensands, have been deemed unfeasible.



| | | |
|----|---|---|
| 75 | Test MAR - Construction | Cost data included in CW8 will differ from WRMP24 as it has been adjusted to the 2022-23 price base based on CPHI values. Multipliers included in WRMP24 have been removed and reindexed expenditure values have adjusted to business approved multipliers for Indirect Costs, Risk and Corporate Overheads. |
| 76 | T2ST (120 MI/d T2ST) Spur to Kingsclere | |
| 77 | Havant Thicket To Pulborough WTW: 50MI/d | Internal interconnector asset information has been populated using the WRMP24 fact files and design documents where available. As many of our interconnector schemes are bidirectional, which is represented as two schemes in the WRMP, the assets have only been recorded against one direction of the internal interconnector to avoid duplication of assets. At this stage of design a decision has not been made on pipe material therefore this information has not been included. Internal interconnector schemes where the assets are already in place have not had the interconnector information added. |
| 78 | Conjunctive use benefit (HSE): Budds Farm and Havant Thicket 20MI/d | |
| 79 | Desalination (KME): Isle of Sheppey (20MI/d) | |
| 80 | Desalination: River Thames estuary (20MI/d) Planning & Development | |
| 81 | Desalination (KMW): Thames Estuary (10MI/d) | |
| 82 | Desalination: East Thanet coast & transfer (20MI/d) Planning | No schemes are delivered as part of the green recovery programme or commenced as part of the accelerated delivery programme. |
| 83 | Storage (SNZ): Blackstone Reservoir (19.5MI/d) | |
| 84 | Storage: River Adur offline Reservoir - Planning | WRSE modelling assumes that schemes are available from the start of each financial year, therefore for each scheme the full benefit will be available from this time and a full years opex has been included in the profile. We have not included any partial year opex costs. For schemes delivering benefit after 29-30, we have taken the average opex over the period to the end of the planning period. |
| 85 | T2ST Sparsholt to Crabwood to Yew Hill | |

| CW9 - Enhancement expenditure (cumulative) - water resources and water network+ | |
|---|---|
| Line description | Commentary |
| General comment | Cumulative expenditure on water enhancement schemes completed or anticipated to complete in financial years ending March 2023 to March 2030. For details of the schemes see table CW3 |



| CW10 - Wholesale water local authority rates | | |
|--|---|---|
| Line description | | Commentary |
| | Rateable value | |
| 1 | Rateable value | Actual figures from VOA provided for 2022-23 from revaluation in April 2017. This was revised for the Jan 25 th submission in the rates adjustment. |
| Water wholesale local authority rates | | |
| 2 | Wholesale Water business rates charge for current year before transitional relief | Business rates charge. This was revised for the Jan 25 th submission in the rates adjustment. |
| 3 | Wholesale Water business rates transitional relief | This was revised for the Jan 25 th submission in the rates adjustment. |
| 4 | Wholesale Water business rates charge for current year after transitional relief | Revaluation due in April 2026, unknown what that increase will be. The UBR multiplier may change over the period however unknown what the changes will be. Assumptions made; <ul style="list-style-type: none"> • An increase for Water of 10% for the revaluation in April 2026 • CW10 Business rates charge (line 2) based on UBR multiplier of 0.512 which is the current multiplier. |
| 5 | Adjustments to wholesale water business rates charge for prior years | |
| 6 | [Other wholesale water business rates adjustments 1] | |
| 7 | [Other wholesale water business rates adjustments 2] | |
| 8 | [Other wholesale water business rates adjustments 3] | |
| 9 | Wholesale Water business rates forecast for Business Plan | |
| Analysis of change in charge before transitional relief | | |
| 10 | Change in wholesale water business rates costs from prior year | See above. CW10.11 was revised for the Jan 25 th submission in the rates adjustment. |
| 11 | Change in wholesale water business rates costs due to the impact of any revaluation | |
| 12 | Change in wholesale water business rates costs due to change in asset stock | |
| 13 | [Change in wholesale water business rates costs due to other 1] | |
| 14 | [Change in wholesale water business rates costs due to other 2] | |
| 15 | [Change in wholesale water business rates costs due to other 3] | |
| 16 | Change in wholesale water business rates charge before transitional relief | |
| 17 | Check difference | |

| CW11 - Third party costs by business unit for the wholesale water service | | |
|---|---|--|
| Line description | | Commentary |
| | Third party costs ~ price control (operating expenditure) | |
| 1 | Non potable water (which are not bulk supplies) | Nil |
| 2 | Rechargeable opex - Fluoridation | Nil |
| 3 | Rechargeable opex - Fire hydrant install & repair | Based on forecast for March 2025 |
| 4 | Rechargeable opex - third party damage | Nil |
| 5 | Rechargeable opex - build over | Nil |
| 6 | Other rechargeable opex | Nil |
| 7 | Total third party water service costs ~ price control (operating expenditure) | Calculation |
| 8 | Diversions - s185 - opex | Based on forecast for March 2025 |
| 9 | Diversions - NRSWA - opex | |
| 10 | Diversions - other non-section 185 diversions - opex | |
| 11 | Total third party water service costs ~ price control (operating expenditure) | Calculation |
| | Third party costs ~ non price control (operating expenditure) | |
| 12 | Bulk supplies (water) opex | Based on forecast for March 2025 |
| 13 | Reservoir operating agreements opex | Nil |
| 14 | Other excluded charge opex | Nil |
| 15 | Total third party water service costs ~ non price control (operating expenditure) | Calculation |
| | Third party costs ~ price control (capital expenditure) | |
| 16 | Non potable water (which are not bulk supplies) | None assumed in plan based on historic activity. |
| 17 | Rechargeable capex - Fluoridation | |
| 18 | Rechargeable capex - Fire hydrant install & repair | |
| 19 | Rechargeable capex - third party damage | |
| 20 | Rechargeable capex - build over | |
| 21 | Other rechargeable capex | |

| | | |
|----|---|--|
| 22 | Third party water price control capex excluding developer services | |
| 23 | Diversions - s185 - capex | No material variation in costs. Costs have been forecast in line with historic activity. Although the timing is anticipated to vary. |
| 24 | Diversions - NRSWA - capex | None assumed in plan based on historic activity. |
| 25 | Diversions - other non-section 185 diversions - capex | |
| 26 | Total third party water service costs ~ price control (capital expenditure) | Total calculation. |
| | Third party costs ~ non price control (capital expenditure) | |
| 27 | Bulk supplies (water) capex | No material variation in costs. Costs have been forecast in line with historic activity. Although the timing is anticipated to vary. |
| 28 | Reservoir operating agreements capex | None assumed in plan based on historic activity. |
| 29 | Other excluded charge capex | |
| 30 | Total third party water service costs ~ non price control (capital expenditure) | Total calculation. |

| CW12 - Transitional expenditure - water resources and water network+ | | |
|--|---|---|
| Line description | Commentary | |
| | EA/NRW environmental programme (WINEP/NEP) | |
| 1 | Biodiversity and conservation; (WINEP/NEP) water capex | Capex schemes related to nitrates added |
| 2 | Biodiversity and conservation; (WINEP/NEP) water opex | No transitional expenditure against this line |
| 3 | Biodiversity and conservation; (WINEP/NEP) water totex | Calculated row |
| 4 | Eels/fish entrainment screens; (WINEP/NEP) water capex | No transitional expenditure against this line |
| 5 | Eels/fish entrainment screens; (WINEP/NEP) water opex | No transitional expenditure against this line |
| 6 | Eels/fish entrainment screens; (WINEP/NEP) water totex | No transitional expenditure against this line |
| 7 | Eels/fish passes; (WINEP/NEP) water capex | No transitional expenditure against this line |
| 8 | Eels/fish passes; (WINEP/NEP) water opex | No transitional expenditure against this line |
| 9 | Eels/fish passes; (WINEP/NEP) water totex | No transitional expenditure against this line |
| 10 | Invasive Non Native Species; (WINEP/NEP) water capex | No transitional expenditure against this line |
| 11 | Invasive Non Native Species; (WINEP/NEP) water opex | No transitional expenditure against this line |
| 12 | Invasive Non Native Species; (WINEP/NEP) water totex | No transitional expenditure against this line |
| 13 | Drinking Water Protected Areas; (WINEP/NEP) water capex | No transitional expenditure against this line |
| 14 | Drinking Water Protected Areas; (WINEP/NEP) water opex | No transitional expenditure against this line |
| 15 | Drinking Water Protected Areas; (WINEP/NEP) water totex | No transitional expenditure against this line |
| 16 | Water Framework Directive; (WINEP/NEP) water capex | No transitional expenditure against this line |
| 17 | Water Framework Directive; (WINEP/NEP) water opex | No transitional expenditure against this line |
| 18 | Water Framework Directive; (WINEP/NEP) water totex | No transitional expenditure against this line |
| 19 | Wetland creation; (WINEP/NEP) water capex | No transitional expenditure against this line |
| 20 | Wetland creation; (WINEP/NEP) water opex | No transitional expenditure against this line |
| 21 | Wetland creation; (WINEP/NEP) water totex | No transitional expenditure against this line |
| 22 | Trade effluent discharge flow monitoring; (WINEP/NEP) water capex | No transitional expenditure against this line |
| 23 | Trade effluent discharge flow monitoring; (WINEP/NEP) water opex | No transitional expenditure against this line |



| | | |
|----|---|---|
| 24 | Trade effluent discharge flow monitoring; (WINEP/NEP) water totex | No transitional expenditure against this line |
| 25 | 25 year environment plan; (WINEP/NEP) water capex | No transitional expenditure against this line |
| 26 | 25 year environment plan; (WINEP/NEP) water opex | No transitional expenditure against this line |
| 27 | 25 year environment plan; (WINEP/NEP) water totex | No transitional expenditure against this line |
| 28 | Investigations; (WINEP/NEP) - desk based study only water capex | No transitional expenditure against this line |
| 29 | Investigations; (WINEP/NEP) - desk based study only water opex | No transitional expenditure against this line |
| 30 | Investigations; (WINEP/NEP) - desk based study only water totex | No transitional expenditure against this line |
| 31 | Investigations; (WINEP/NEP) - survey, monitoring or simple modelling water capex | WINEP investigations added |
| 32 | Investigations; (WINEP/NEP) - survey, monitoring or simple modelling water opex | No transitional expenditure against this line |
| 33 | Investigations; (WINEP/NEP) - survey, monitoring or simple modelling water totex | Calculated row |
| 34 | Investigations; (WINEP/NEP) - multiple surveys, and/or monitoring locations, and/or complex modelling water capex | No transitional expenditure against this line |
| 35 | Investigations; (WINEP/NEP) - multiple surveys, and/or monitoring locations, and/or complex modelling water opex | No transitional expenditure against this line |
| 36 | Investigations; (WINEP/NEP) - multiple surveys, and/or monitoring locations, and/or complex modelling water totex | No transitional expenditure against this line |
| 37 | Investigations total; (WINEP/NEP) water capex | No transitional expenditure against this line |
| 38 | Investigations total; (WINEP/NEP) water opex | No transitional expenditure against this line |
| 39 | Investigations total; (WINEP/NEP) water totex | No transitional expenditure against this line |
| 40 | Total environmental programme expenditure; (WINEP/NEP) water totex | No transitional expenditure against this line |
| | Supply-demand balance | |
| 41 | Supply-side improvements delivering benefits in 2025-2030; SDB capex | This is both expenditure on Sandown WRP above the PR19FD allowance for this scheme that has been spent in progressing the scheme in AMP7. |
| 42 | Supply-side improvements delivering benefits in 2025-2030; SDB opex | No transitional expenditure against this line |
| 43 | Supply-side improvements delivering benefits in 2025-2030; SDB totex | Calculated row. |
| 44 | Demand-side improvements delivering benefits in 2025-2030 (excl leakage and metering); SDB capex | No transitional expenditure against this line |

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| 45 | Demand-side improvements delivering benefits in 2025-2030 (excl leakage and metering); SDB opex | No transitional expenditure against this line |
| 46 | Demand-side improvements delivering benefits in 2025-2030 (excl leakage and metering); SDB totex | No transitional expenditure against this line |
| 47 | Leakage improvements delivering benefits in 2025-2030; SDB capex | This is expenditure on our leakage enhancement mains replacement programme as part of the planning and development of the delivery of the AMP8 programme and design of the year 1 schemes. |
| 48 | Leakage improvements delivering benefits in 2025-2030; SDB opex | No transitional expenditure against this line |
| 49 | Leakage improvements delivering benefits in 2025-2030; SDB totex | Calculated row. |
| 50 | Internal interconnectors delivering benefits in 2025-2030; SDB capex | No transitional expenditure against this line |
| 51 | Internal interconnectors delivering benefits in 2025-2030; SDB opex | No transitional expenditure against this line |
| 52 | Internal interconnectors delivering benefits in 2025-2030; SDB totex | No transitional expenditure against this line |
| 53 | Supply demand balance improvements delivering benefits starting from 2031; SDB capex | No transitional expenditure against this line |
| 54 | Supply demand balance improvements delivering benefits starting from 2031; SDB opex | No transitional expenditure against this line |
| 55 | Supply demand balance improvements delivering benefits starting from 2031; SDB totex | No transitional expenditure against this line |
| 56 | Total supply demand expenditure; SDB totex | Calculated row |
| | Metering | |
| 57 | New meters requested by existing customers (optants); metering capex | No transitional expenditure against this line |
| 58 | New meters requested by existing customers (optants); metering opex | No transitional expenditure against this line |
| 59 | New meters requested by existing customers (optants); metering totex | No transitional expenditure against this line |
| 60 | New meters introduced by companies for existing customers; metering capex | No transitional expenditure against this line |
| 61 | New meters introduced by companies for existing customers; metering opex | No transitional expenditure against this line |
| 62 | New meters introduced by companies for existing customers; metering totex | No transitional expenditure against this line |
| 63 | New meters for existing customers - business; metering capex | No transitional expenditure against this line |
| 64 | New meters for existing customers - business; metering opex | No transitional expenditure against this line |

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| 65 | New meters for existing customers - business; metering totex | No transitional expenditure against this line |
| 66 | Replacement of existing basic meters with AMR meters for residential customers; metering capex | No transitional expenditure against this line |
| 67 | Replacement of existing basic meters with AMR meters for residential customers; metering opex | No transitional expenditure against this line |
| 68 | Replacement of existing basic meters with AMR meters for residential customers; metering totex | No transitional expenditure against this line |
| 69 | Replacement of existing basic meters with AMI meters for residential customers; metering capex | No transitional expenditure against this line |
| 70 | Replacement of existing basic meters with AMI meters for residential customers; metering opex | No transitional expenditure against this line |
| 71 | Replacement of existing basic meters with AMI meters for residential customers; metering totex | No transitional expenditure against this line |
| 72 | Replacement of existing AMR meters with AMI meters for residential customers; metering capex | No transitional expenditure against this line |
| 73 | Replacement of existing AMR meters with AMI meters for residential customers; metering opex | No transitional expenditure against this line |
| 74 | Replacement of existing AMR meters with AMI meters for residential customers; metering totex | No transitional expenditure against this line |
| 75 | Replacement of existing basic meters with AMR meters for business customers; metering capex | No transitional expenditure against this line |
| 76 | Replacement of existing basic meters with AMR meters for business customers; metering opex | No transitional expenditure against this line |
| 77 | Replacement of existing basic meters with AMR meters for business customers; metering totex | No transitional expenditure against this line |
| 78 | Replacement of existing basic meters with AMI meters for business customers; metering capex | No transitional expenditure against this line |
| 79 | Replacement of existing basic meters with AMI meters for business customers; metering opex | No transitional expenditure against this line |
| 80 | Replacement of existing basic meters with AMI meters for business customers; metering totex | No transitional expenditure against this line |
| 81 | Replacement of existing AMR meters with AMI meters for business customers; metering capex | No transitional expenditure against this line |
| 82 | Replacement of existing AMR meters with AMI meters for business customers; metering opex | No transitional expenditure against this line |
| 83 | Replacement of existing AMR meters with AMI meters for business customers; metering totex | No transitional expenditure against this line |
| 84 | Smart meter infrastructure; metering capex | Expenditure on smart meter replacement programme development to enable delivery of AMP8 replacement profile. |
| 85 | Smart meter infrastructure; metering opex | No transitional expenditure against this line |



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| 86 | Smart meter infrastructure; metering totex | Calculated row. |
| 87 | Total metering expenditure; metering totex | Calculated row. |
| | Water quality improvements | |
| 88 | Improvements to taste, odour and colour (grey solutions); enhancement capex | No transitional expenditure against this line |
| 89 | Improvements to taste, odour and colour (grey solutions); enhancement opex | No transitional expenditure against this line |
| 90 | Improvements to taste, odour and colour (grey solutions); enhancement totex | No transitional expenditure against this line |
| 91 | Improvements to taste, odour and colour (green solutions); enhancement capex | No transitional expenditure against this line |
| 92 | Improvements to taste, odour and colour (green solutions); enhancement opex | No transitional expenditure against this line |
| 93 | Improvements to taste, odour and colour (green solutions); enhancement totex | No transitional expenditure against this line |
| 94 | Addressing raw water quality deterioration (grey solutions); enhancement capex | No transitional expenditure against this line |
| 95 | Addressing raw water quality deterioration (grey solutions); enhancement opex | No transitional expenditure against this line |
| 96 | Addressing raw water quality deterioration (grey solutions); ; enhancement totex | No transitional expenditure against this line |
| 97 | Addressing raw water quality deterioration (green solutions); enhancement capex | No transitional expenditure against this line |
| 98 | Addressing raw water quality deterioration (green solutions); enhancement opex | No transitional expenditure against this line |
| 99 | Addressing raw water quality deterioration (green solutions); enhancement totex | No transitional expenditure against this line |
| 100 | Conditioning water to reduce plumbosolvency; enhancement capex | No transitional expenditure against this line |
| 101 | Conditioning water to reduce plumbosolvency; enhancement opex | No transitional expenditure against this line |
| 102 | Conditioning water to reduce plumbosolvency; enhancement totex | No transitional expenditure against this line |
| 103 | Lead communication pipes replaced or relined; enhancement capex | No transitional expenditure against this line |
| 104 | Lead communication pipes replaced or relined; enhancement opex | No transitional expenditure against this line |
| 105 | Lead communication pipes replaced or relined; enhancement totex | No transitional expenditure against this line |

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| 106 | External lead supply pipes replaced or relined; enhancement capex | No transitional expenditure against this line |
| 107 | External lead supply pipes replaced or relined; enhancement opex | No transitional expenditure against this line |
| 108 | External lead supply pipes replaced or relined; enhancement totex | No transitional expenditure against this line |
| 109 | Internal lead supply pipes replaced or relined; enhancement capex | No transitional expenditure against this line |
| 110 | Internal lead supply pipes replaced or relined; enhancement opex | No transitional expenditure against this line |
| 111 | Internal lead supply pipes replaced or relined; enhancement totex | No transitional expenditure against this line |
| 112 | Other lead reduction related activity; enhancement capex | No transitional expenditure against this line |
| 113 | Other lead reduction related activity; enhancement opex | No transitional expenditure against this line |
| 114 | Other lead reduction related activity; enhancement totex | No transitional expenditure against this line |
| | Water resilience and security | |
| 115 | Resilience; enhancement water capex | Expenditure as part of our Supply Resilience Enhancement Case across the 4 sites needed to meet our DWI FEO dates. Delivery of the 7Ml/d initial treatment capacity at Weir Wood. |
| 116 | Resilience; enhancement water opex | No transitional expenditure against this line |
| 117 | Resilience; enhancement water totex | Calculated row. |
| 118 | Security - SEMD; enhancement water capex | No transitional expenditure against this line |
| 119 | Security - SEMD; enhancement water opex | No transitional expenditure against this line |
| 120 | Security - SEMD; enhancement water totex | No transitional expenditure against this line |
| 121 | Security - Cyber; enhancement water capex | No transitional expenditure against this line |
| 122 | Security - Cyber; enhancement water opex | No transitional expenditure against this line |
| 123 | Security - Cyber; enhancement water totex | No transitional expenditure against this line |
| | Net zero | |
| 124 | Greenhouse gas reduction (net zero); enhancement water capex | No transitional expenditure against this line |
| 125 | Greenhouse gas reduction (net zero); enhancement water opex | No transitional expenditure against this line |
| 126 | Greenhouse gas reduction (net zero); enhancement water totex | No transitional expenditure against this line |
| | Other enhancement (Freeform lines - by exception) | |

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| 127 | Additional line 1; enhancement water capex | Land purchase for the HWTWRP SRO water recycling plant. See SRN-DDR-032 Water Resources - Strategic Resource Options Enhancement Cost Evidence Case. |
| 128 | Additional line 1; enhancement water opex | No transitional expenditure against this line |
| 129 | Additional line 2; enhancement water capex | No transitional expenditure against this line |
| 130 | Additional line 2; enhancement water opex | No transitional expenditure against this line |
| 131 | Additional line 3; enhancement water capex | No transitional expenditure against this line |
| 132 | Additional line 3; enhancement water opex | No transitional expenditure against this line |
| 133 | Additional line 4; enhancement water capex | No transitional expenditure against this line |
| 134 | Additional line 4; enhancement water opex | No transitional expenditure against this line |
| 135 | Additional line 5; enhancement water capex | No transitional expenditure against this line |
| 136 | Additional line 5; enhancement water opex | No transitional expenditure against this line |
| 137 | Total other enhancement water expenditure | Calculated row. |
| | Total transitional expenditure | |
| 138 | Total transitional expenditure; water capex | Calculated row. |
| 139 | Total transitional expenditure; water opex | Calculated row. |
| 140 | Total transitional expenditure; water totex | Calculated row. |

| CW13 - Best value analysis (enhancement expenditure) - water resources and water network+ | |
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| Line description | Commentary |
| EA/NRW environmental programme (WINEP/NEP) | |
| 1 | Biodiversity and conservation; BVA (WINEP/NEP) water capex |
| 2 | Biodiversity and conservation; BVA (WINEP/NEP) water opex |
| 3 | Biodiversity and conservation; BVA (WINEP/NEP) water totex |
| 4 | Biodiversity and conservation; BVA (WINEP/NEP) water third party contributions |
| 5 | Eels/fish entrainment screens; BVA (WINEP/NEP) water capex |
| 6 | Eels/fish entrainment screens; BVA (WINEP/NEP) water opex |
| 7 | Eels/fish entrainment screens; BVA (WINEP/NEP) water totex |
| 8 | Eels/fish entrainment screens; BVA (WINEP/NEP) water third party contributions |
| 9 | Eels/fish passes; BVA (WINEP/NEP) water capex |
| 10 | Eels/fish passes; BVA (WINEP/NEP) water opex |
| 11 | Eels/fish passes; BVA (WINEP/NEP) water totex |
| 12 | Eels/fish passes; BVA (WINEP/NEP) water third party contributions |
| 13 | Invasive Non Native Species; BVA (WINEP/NEP) water capex |
| 14 | Invasive Non Native Species; BVA (WINEP/NEP) water opex |
| 15 | Invasive Non Native Species; BVA (WINEP/NEP) water totex |
| 16 | Invasive Non Native Species; BVA (WINEP/NEP) water third party contributions |
| 17 | Drinking Water Protected Areas; BVA (WINEP/NEP) water capex |
| 18 | Drinking Water Protected Areas; BVA (WINEP/NEP) water opex |
| 19 | Drinking Water Protected Areas; BVA (WINEP/NEP) water totex |
| 20 | Drinking Water Protected Areas; BVA (WINEP/NEP) water third party contributions |
| 21 | Water Framework Directive; BVA (WINEP/NEP) water capex |
| 22 | Water Framework Directive; BVA (WINEP/NEP) water opex |
| 23 | Water Framework Directive; BVA (WINEP/NEP) water totex |
| 24 | Water Framework Directive; BVA (WINEP/NEP) water third party contributions |

See enhancement business case SRN33 – WINEP – Supporting Water Abstraction for details.

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| 25 | Wetland creation; BVA (WINEP/NEP) water capex |
| 26 | Wetland creation; BVA (WINEP/NEP) water opex |
| 27 | Wetland creation; BVA (WINEP/NEP) water totex |
| 28 | Wetland creation; BVA (WINEP/NEP) water third party contributions |
| 29 | Trade effluent discharge flow monitoring; BVA (WINEP/NEP) water capex |
| 30 | Trade effluent discharge flow monitoring; BVA (WINEP/NEP) water opex |
| 31 | Trade effluent discharge flow monitoring; BVA (WINEP/NEP) water totex |
| 32 | Trade effluent discharge flow monitoring; BVA (WINEP/NEP) water third party contributions |
| 33 | 25 year environment plan; BVA (WINEP/NEP) water capex |
| 34 | 25 year environment plan; BVA (WINEP/NEP) water opex |
| 35 | 25 year environment plan; BVA (WINEP/NEP) water totex |
| 36 | 25 year environment plan; BVA (WINEP/NEP) water third party contributions |
| 37 | Investigations; BVA (WINEP/NEP) - desk based study only water capex |
| 38 | Investigations; BVA (WINEP/NEP) - desk based study only water opex |
| 39 | Investigations; BVA (WINEP/NEP) - desk based study only water totex |
| 40 | Investigations; BVA (WINEP/NEP) - desk based study only water third-party contributions |
| 41 | Investigations; BVA (WINEP/NEP) - survey, monitoring or simple modelling water capex |
| 42 | Investigations; BVA (WINEP/NEP) - survey, monitoring or simple modelling water opex |
| 43 | Investigations; BVA (WINEP/NEP) - survey, monitoring or simple modelling water totex |
| 44 | Investigations; BVA (WINEP/NEP) - survey, monitoring or simple modelling water third-party contributions |
| 45 | Investigations; BVA (WINEP/NEP) - multiple surveys, and/or monitoring locations, and/or complex modelling water capex |
| 46 | Investigations; BVA (WINEP/NEP) - multiple surveys, and/or monitoring locations, and/or complex modelling water opex |
| 47 | Investigations; BVA (WINEP/NEP) - multiple surveys, and/or monitoring locations, and/or complex modelling water totex |



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| 48 | Investigations; BVA (WINEP/NEP) - multiple surveys, and/or monitoring locations, and/or complex modelling water third-party contributions | |
| 49 | Investigations total; BVA (WINEP/NEP) water capex | |
| 50 | Investigations total; BVA (WINEP/NEP) water opex | |
| 51 | Investigations total; BVA (WINEP/NEP) water totex | |
| 52 | Investigations total; BVA (WINEP/NEP) water third-party contributions | |
| 53 | Total environmental programme expenditure; BVA (WINEP/NEP) water capex | |
| 54 | Total environmental programme expenditure; BVA (WINEP/NEP) water opex | |
| 55 | Total environmental programme expenditure; BVA (WINEP/NEP) water totex | |
| 56 | Total environmental programme expenditure; BVA (WINEP/NEP) water third party contributions | |
| Supply-demand balance | | |
| 57 | Supply-side improvements delivering benefits in 2025-2030; BVA SDB capex | See enhancement Business Case SRN26 – Water Resources – Supply and SRN-DDR-028 – Water Resources – Supply Enhancement Cost Evidence Case |
| 58 | Supply-side improvements delivering benefits in 2025-2030; BVA SDB opex | |
| 59 | Supply-side improvements delivering benefits in 2025-2030; BVA SDB totex | |
| 60 | Supply-side improvements delivering benefits in 2025-2030; BVA SDB third party contributions | |
| 61 | Demand-side improvements delivering benefits in 2025-2030 (excl leakage and metering); BVA SDB capex | See enhancement Business Case SRN27 – Water Resources – Demand, SRN-DDR-029 – Water Resources – Demand (leakage) Enhancement Cost Evidence Case and SRN-DDR-030 – Water Resources – Demand (water efficiency) Enhancement Cost Evidence Case |
| 62 | Demand-side improvements delivering benefits in 2025-2030 (excl leakage and metering); BVA SDB opex | |
| 63 | Demand-side improvements delivering benefits in 2025-2030 (excl leakage and metering); BVA SDB totex | |
| 64 | Demand-side improvements delivering benefits in 2025-2030 (excl leakage and metering); BVA SDB third party contributions | |
| 65 | Leakage improvements delivering benefits in 2025-2030; BVA SDB capex | |
| 66 | Leakage improvements delivering benefits in 2025-2030; BVA SDB opex | |
| 67 | Leakage improvements delivering benefits in 2025-2030; BVA SDB totex | |
| 68 | Leakage improvements delivering benefits in 2025-2030; BVA SDB third party contributions | |

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| 69 | Internal interconnectors delivering benefits in 2025-2030; BVA SDB capex | <p>See enhancement Business Case SRN26 – Water Resources – Supply and SRN-DDR-028 – Water Resources – Supply Enhancement Cost Evidence Case</p> <p>CW13.73 was revised for the 25th Jan 2024 submission due to the Site 72 adjustment.</p> |
| 70 | Internal interconnectors delivering benefits in 2025-2030; BVA SDB opex | |
| 71 | Internal interconnectors delivering benefits in 2025-2030; BVA SDB totex | |
| 72 | Internal interconnectors delivering benefits in 2025-2030; BVA SDB third party contributions | |
| 73 | Supply demand balance improvements delivering benefits starting from 2031; BVA SDB capex | |
| 74 | Supply demand balance improvements delivering benefits starting from 2031; BVA SDB opex | |
| 75 | Supply demand balance improvements delivering benefits starting from 2031; BVA SDB totex | |
| 76 | Supply demand balance improvements delivering benefits starting from 2031; BVA SDB third party contributions | |
| 77 | Total supply demand expenditure; BVA SDB capex | |
| 78 | Total supply demand expenditure; BVA SDB opex | |
| 79 | Total supply demand expenditure; BVA SDB totex | |
| 80 | Total supply demand expenditure; BVA SDB third party contributions | |
| Metering | | |
| 81 | New meters requested by existing customers (optants); BVA metering capex | <p>For details, see enhancement Business Case SRN24 – Meter replacement and Technical annex SRN17 Direct procurement for Customers and Alternative deliver Model and SRN-DDR-031 – Water Resources – Smart Metering Enhancement Cost Evidence Case</p> |
| 82 | New meters requested by existing customers (optants); BVA metering opex | |
| 83 | New meters requested by existing customers (optants); BVA metering totex | |
| 84 | New meters requested by existing customers (optants); BVA metering third party contributions | |
| 85 | New meters introduced by companies for existing customers; BVA metering capex | |
| 86 | New meters introduced by companies for existing customers; BVA metering opex | |
| 87 | New meters introduced by companies for existing customers; BVA metering totex | |
| 88 | New meters introduced by companies for existing customers; BVA metering third party contributions | |
| 89 | New meters for existing customers - business; BVA metering capex | |

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| 90 | New meters for existing customers - business; BVA metering opex |
| 91 | New meters for existing customers - business; BVA metering totex |
| 92 | New meters for existing customers - business; BVA metering third party contributions |
| 93 | Replacement of existing basic meters with AMR meters for residential customers; BVA metering capex |
| 94 | Replacement of existing basic meters with AMR meters for residential customers; BVA metering opex |
| 95 | Replacement of existing basic meters with AMR meters for residential customers; BVA metering totex |
| 96 | Replacement of existing basic meters with AMR meters for residential customers; BVA metering third party contributions |
| 97 | Replacement of existing basic meters with AMI meters for residential customers; BVA metering capex |
| 98 | Replacement of existing basic meters with AMI meters for residential customers; BVA metering opex |
| 99 | Replacement of existing basic meters with AMI meters for residential customers; BVA metering totex |
| 100 | Replacement of existing basic meters with AMI meters for residential customers; BVA metering third party contributions |
| 101 | Replacement of existing AMR meters with AMI meters for residential customers; BVA metering capex |
| 102 | Replacement of existing AMR meters with AMI meters for residential customers; BVA metering opex |
| 103 | Replacement of existing AMR meters with AMI meters for residential customers; BVA metering totex |
| 104 | Replacement of existing AMR meters with AMI meters for residential customers; BVA metering third party contributions |
| 105 | Replacement of existing basic meters with AMR meters for business customers; BVA metering capex |
| 106 | Replacement of existing basic meters with AMR meters for business customers; BVA metering opex |
| 107 | Replacement of existing basic meters with AMR meters for business customers; BVA metering totex |
| 108 | Replacement of existing basic meters with AMR meters for business customers; BVA metering third party contributions |
| 109 | Replacement of existing basic meters with AMI meters for business customers; BVA metering capex |



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| 110 | Replacement of existing basic meters with AMI meters for business customers; BVA metering opex | |
| 111 | Replacement of existing basic meters with AMI meters for business customers; BVA metering totex | |
| 112 | Replacement of existing basic meters with AMI meters for business customers; BVA metering third party contributions | |
| 113 | Replacement of existing AMR meters with AMI meters for business customers; BVA metering capex | |
| 114 | Replacement of existing AMR meters with AMI meters for business customers; BVA metering opex | |
| 115 | Replacement of existing AMR meters with AMI meters for business customers; BVA metering totex | |
| 116 | Replacement of existing AMR meters with AMI meters for business customers; BVA metering third party contributions | |
| 117 | Smart meter infrastructure; BVA metering capex | |
| 118 | Smart meter infrastructure; BVA metering opex | |
| 119 | Smart meter infrastructure; BVA metering totex | |
| 120 | Smart meter infrastructure; BVA metering third party contributions | |
| 121 | Total metering expenditure; BVA metering capex | |
| 122 | Total metering expenditure; BVA metering opex | |
| 123 | Total metering expenditure; BVA metering totex | |
| 124 | Total metering expenditure; BVA metering third party contributions | |
| | Water quality improvements | |
| 125 | Improvements to taste, odour and colour (grey solutions); BVA enhancement capex | £0. No known taste, odour and colour issues requiring enhancement spend in AMP8 |
| 126 | Improvements to taste, odour and colour (grey solutions); BVA enhancement opex | £0. No known taste, odour and colour issues requiring enhancement spend in AMP8 |
| 127 | Improvements to taste, odour and colour (grey solutions); BVA enhancement totex | £0. No known taste, odour and colour issues requiring enhancement spend in AMP8 |
| 128 | Improvements to taste, odour and colour (grey solutions); BVA enhancement totex | £0. No known taste, odour and colour issues requiring enhancement spend in AMP8 |
| 129 | Improvements to taste, odour and colour (green solutions); BVA enhancement capex | £0. No known taste, odour and colour issues requiring enhancement spend in AMP8 |
| 130 | Improvements to taste, odour and colour (green solutions); BVA enhancement opex | £0. No known taste, odour and colour issues requiring enhancement spend in AMP8 |
| 131 | Improvements to taste, odour and colour (green solutions); BVA enhancement totex | £0. No known taste, odour and colour issues requiring enhancement spend in AMP8 |

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| 132 | Improvements to taste, odour and colour (green solutions); BVA enhancement totex | £0. No known taste, odour and colour issues requiring enhancement spend in AMP8 |
| 133 | Conditioning water to reduce plumbosolvency; BVA enhancement capex | No enhancement spend to reduce plumbosolvency |
| 134 | Conditioning water to reduce plumbosolvency; BVA enhancement opex | No enhancement spend to reduce plumbosolvency |
| 135 | Conditioning water to reduce plumbosolvency; BVA enhancement totex | No enhancement spend to reduce plumbosolvency |
| 136 | Conditioning water to reduce plumbosolvency; BVA enhancement third party contributions | No enhancement spend to reduce plumbosolvency |
| 137 | Lead communication pipes replaced or relined; BVA enhancement capex | See SRN31 Lead Enhancement Business Case and SRN-DDR-038 Lead Enhancement Cost Evidence Case, for further details. NPV based on AMP8 spend. |
| 138 | Lead communication pipes replaced or relined; BVA enhancement opex | |
| 139 | Lead communication pipes replaced or relined; BVA enhancement totex | |
| 140 | Lead communication pipes replaced or relined; BVA enhancement third party contributions | |
| 141 | External lead supply pipes replaced or relined; BVA enhancement capex | |
| 142 | External lead supply pipes replaced or relined; BVA enhancement opex | |
| 143 | External lead supply pipes replaced or relined; BVA enhancement totex | |
| 144 | External lead supply pipes replaced or relined; BVA enhancement third party contributions | |
| 145 | Internal lead supply pipes replaced or relined; BVA enhancement capex | |
| 146 | Internal lead supply pipes replaced or relined; BVA enhancement opex | |
| 147 | Internal lead supply pipes replaced or relined; BVA enhancement totex | |
| 148 | Internal lead supply pipes replaced or relined; BVA enhancement third party contributions | |
| 149 | Other lead reduction related activity; BVA enhancement capex | |
| 150 | Other lead reduction related activity; BVA enhancement opex | |
| 151 | Other lead reduction related activity; BVA enhancement totex | |
| 152 | Other lead reduction related activity; BVA enhancement third party contributions | See SRN31 Lead Enhancement Business Case, for further details. |
| 153 | Addressing raw water quality deterioration (grey solutions); BVA enhancement capex | See SRN30 Raw Water Deterioration Enhancement Business Case, for further details. |



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| 154 | Addressing raw water quality deterioration (grey solutions); BVA enhancement opex | See SRN30 Raw Water Deterioration Enhancement Business Case, for further details. |
| 155 | Addressing raw water quality deterioration (grey solutions); BVA enhancement totex | See SRN30 Raw Water Deterioration Enhancement Business Case, for further details. |
| 156 | Addressing raw water quality deterioration (grey solutions); BVA enhancement third party contributions | See SRN30 Raw Water Deterioration Enhancement Business Case, for further details. |
| 157 | Addressing raw water quality deterioration (green solutions); BVA enhancement capex | Green solutions such as catchment management are funded through WINEP |
| 158 | Addressing raw water quality deterioration (green solutions); BVA enhancement opex | Green solutions such as catchment management are funded through WINEP |
| 159 | Addressing raw water quality deterioration (green solutions); BVA enhancement totex | Green solutions such as catchment management are funded through WINEP |
| 160 | Addressing raw water quality deterioration (green solutions); BVA enhancement third party contributions | Green solutions such as catchment management are funded through WINEP |
| 161 | Total water quality enhancement expenditure; BVA enhancement capex | Sum of relevant lines above. |
| 162 | Total water quality enhancement expenditure; BVA enhancement opex | Sum of relevant lines above. |
| 163 | Total water quality enhancement expenditure; BVA enhancement totex | Sum of relevant lines above. |
| 164 | Total water quality enhancement expenditure; BVA enhancement third party contributions | Sum of relevant lines above. |
| Water resilience and security | | |
| 165 | Resilience; BVA enhancement water capex | <ul style="list-style-type: none"> • Supply Resilience Enhancement Programme to upgrade our 4 largest sites. . See SRN25 Supply Resilience Enhancement Programme Enhancement Business Case, for further details. • Disinfection Future Resilience Programme. See SRN30 Raw Water Deterioration Enhancement Business Case, for further details. • Operational resilience enhancements to improve heat and power resilience. See SRN51 Resilience - Heat Enhancement Business Case and SRN49 Resilience - Power Enhancement Business Case, for further details |
| 166 | Resilience; BVA enhancement water opex | <ul style="list-style-type: none"> • Supply Resilience Enhancement Programme to upgrade our 4 largest sites. . See SRN25 Supply Resilience Enhancement Programme Enhancement Business Case, for further details. • Disinfection Future Resilience Programme. See SRN30 Raw Water Deterioration Enhancement Business Case, for further details. • Operational resilience enhancements to improve heat and power resilience. See SRN51 Resilience - Heat Enhancement Business Case and SRN49 Resilience - Power Enhancement Business Case, for further details |

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| 167 | Resilience; BVA enhancement water totex | <ul style="list-style-type: none"> Supply Resilience Enhancement Programme to upgrade our 4 largest sites. . See SRN25 Supply Resilience Enhancement Programme Enhancement Business Case, for further details. Disinfection Future Resilience Programme. See SRN30 Raw Water Deterioration Enhancement Business Case, for further details. Operational resilience enhancements to improve heat and power resilience. See SRN51 Resilience - Heat Enhancement Business Case and SRN49 Resilience - Power Enhancement Business Case, for further details |
| 168 | Resilience; BVA enhancement water third party contributions | <ul style="list-style-type: none"> Supply Resilience Enhancement Programme to upgrade our 4 largest sites. . See SRN25 Supply Resilience Enhancement Programme Enhancement Business Case, for further details. Disinfection Future Resilience Programme. See SRN30 Raw Water Deterioration Enhancement Business Case, for further details. Operational resilience enhancements to improve heat and power resilience. See SRN51 Resilience - Heat Enhancement Business Case and SRN49 Resilience - Power Enhancement Business Case, for further details |
| 169 | Security - SEMD; BVA enhancement water capex | See SRN35 Security and Emergency Measures Direction, Enhancement Business Case for further details. |
| 170 | Security - SEMD; BVA enhancement water opex | See SRN35 Security and Emergency Measures Direction, Enhancement Business Case for further details |
| 171 | Security - SEMD; BVA enhancement water totex | See SRN35 Security and Emergency Measures Direction, Enhancement Business Case for further details. |
| 172 | Security - SEMD; BVA enhancement water third party contributions | See SRN35 Security and Emergency Measures Direction, Enhancement Business Case for further details |
| 173 | Security - cyber; BVA enhancement water capex | See SRN34 Network & Information Systems Enhancement Business Case, for further details. This figure was revised in the 25 th January 2024 submission due to the eNIS adjustment. |
| 174 | Security - cyber; BVA enhancement water opex | See SRN34 Network & Information Systems Enhancement Business Case, for further details. |
| 175 | Security - cyber; BVA enhancement water totex | See SRN34 Network & Information Systems Enhancement Business Case, for further details. |
| 176 | Security - cyber; BVA enhancement water third party contributions | See SRN34 Network & Information Systems Enhancement Business Case, for further details. |
| 177 | Total resilience enhancement expenditure; BVA enhancement water capex | Sum of relevant lines above |
| 178 | Total resilience enhancement expenditure; BVA enhancement water opex | Sum of relevant lines above |
| 179 | Total resilience enhancement expenditure; BVA enhancement water totex | Sum of relevant lines above |
| 180 | Total resilience enhancement expenditure; BVA enhancement water third party contributions | Sum of relevant lines above |
| | Net zero | |
| 181 | Greenhouse gas reduction (net zero); BVA enhancement water capex | No expenditure against these lines |



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| 182 | Greenhouse gas reduction (net zero); BVA enhancement water opex | |
| 183 | Greenhouse gas reduction (net zero); BVA enhancement water totex | |
| 184 | Greenhouse gas reduction (net zero); BVA enhancement water third party contributions | |
| Additional - freeform enhancement lines | | |
| 185 | Additional line 2 - Corporate overheads for Alternative delivery; BVA enhancement water capex | For details, see SRN-DDR-039 – Market Based Delivery |
| 186 | Additional line 2 - Corporate overheads for Alternative delivery; BVA enhancement water opex | |
| 187 | Additional line 2 - Corporate overheads for Alternative delivery; BVA enhancement water totex | |
| 188 | Additional line 2 - Corporate overheads for Alternative delivery; BVA enhancement water third party contributionsx | |
| 189 | Additional line 3 - Reservoir safety, BVA enhancement water capex | See SRN32 Reservoir Safety Enhancement Business Case, and SRN-DDR-035 Reservoir Safety Enhancement Cost Evidence Case |
| 190 | Additional line 3 - Reservoir safety, BVA enhancement water opex | |
| 191 | Additional line 3 - Reservoir safety, ; BVA enhancement water totex | |
| 192 | Additional line 3 - Reservoir safety, BVA enhancement water third party contributions | |
| 193 | Additional line - Mains replacement; BVA enhancement water capex | See SRN27 Water Resources – Demand and SRN-DD-029 Water Resources – Demand (leakage) Enhancement Cost Evidence Case for details |
| 194 | Additional line - Mains replacement; BVA enhancement water opex | |
| 195 | Additional line - Mains replacement; BVA enhancement water totex | |
| 196 | Additional line - Mains replacement; BVA enhancement water third party contributionsx | |
| 197 | Additional line - WRMP mitigation; BVA enhancement water capex | Line no longer used |
| 198 | Additional line - WRMP mitigation; BVA enhancement water opex | Line no longer used |



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| 199 | Additional line - WRMP mitigation; BVA enhancement water totex | Line no longer used |
| 200 | Additional line - WRMP mitigation; BVA enhancement water third party contributionsx | Line no longer used |
| 201 | Additional line 3 - Havant Thicket - payments to Portsmouth water; BVA enhancement water capex | See SRN04 Costs and Outcomes approach and SRN-DDR-032 Strategic Resource Option Enhancement Cost Evidence Case for details |
| 202 | Additional line 3 - Havant Thicket - payments to Portsmouth water; BVA enhancement water opex | |
| 203 | Additional line 3 - Havant Thicket - payments to Portsmouth water; BVA enhancement water totex | |
| 204 | Additional line 3 - Havant Thicket - payments to Portsmouth water; BVA enhancement water third party contributionsx | |
| 205 | Total other enhancement expenditure; BVA enhancement water capex | Line calculated from above investment |
| 206 | Total other enhancement expenditure; BVA enhancement water opex | Line calculated from above investment |
| 207 | Total other enhancement expenditure; BVA enhancement water totex | Line calculated from above investment |
| 208 | Total other enhancement expenditure; BVA enhancement water third party contributions | Line calculated from above investment |
| | Total enhancement | |
| 209 | Total enhancement water expenditure; BVA capex | Line calculated from above investment |
| 210 | Total enhancement water expenditure; BVA opex | Line calculated from above investment |
| 211 | Total enhancement water expenditure; BVA totex | Line calculated from above investment |
| 212 | Total enhancement water expenditure; BVA third party contributions | Line calculated from above investment |

| CW14 - Best value analysis of alternative option (enhancement expenditure) - water resources and water network+ | |
|---|---|
| Line description | Commentary |
| EA/NRW environmental programme (WINEP/NEP) | |
| 1 | Biodiversity and conservation; BVA (WINEP/NEP) water capex |
| 2 | Biodiversity and conservation; BVA (WINEP/NEP) water opex |
| 3 | Biodiversity and conservation; BVA (WINEP/NEP) water totex |
| 4 | Biodiversity and conservation; BVA (WINEP/NEP) water third party contributions |
| 5 | Eels/fish entrainment screens; BVA (WINEP/NEP) water capex |
| 6 | Eels/fish entrainment screens; BVA (WINEP/NEP) water opex |
| 7 | Eels/fish entrainment screens; BVA (WINEP/NEP) water totex |
| 8 | Eels/fish entrainment screens; BVA (WINEP/NEP) water third party contributions |
| 9 | Eels/fish passes; BVA (WINEP/NEP) water capex |
| 10 | Eels/fish passes; BVA (WINEP/NEP) water opex |
| 11 | Eels/fish passes; BVA (WINEP/NEP) water totex |
| 12 | Eels/fish passes; BVA (WINEP/NEP) water third party contributions |
| 13 | Invasive Non Native Species; BVA (WINEP/NEP) water capex |
| 14 | Invasive Non Native Species; BVA (WINEP/NEP) water opex |
| 15 | Invasive Non Native Species; BVA (WINEP/NEP) water totex |
| 16 | Invasive Non Native Species; BVA (WINEP/NEP) water third party contributions |
| 17 | Drinking Water Protected Areas; BVA (WINEP/NEP) water capex |
| 18 | Drinking Water Protected Areas; BVA (WINEP/NEP) water opex |
| 19 | Drinking Water Protected Areas; BVA (WINEP/NEP) water totex |
| 20 | Drinking Water Protected Areas; BVA (WINEP/NEP) water third party contributions |
| 21 | Water Framework Directive; BVA (WINEP/NEP) water capex |
| 22 | Water Framework Directive; BVA (WINEP/NEP) water opex |
| 23 | Water Framework Directive; BVA (WINEP/NEP) water totex |

See enhancement business case SRN33 – WINEP – Supporting Water Abstraction for details.

See enhancement business case SRN33 – WINEP – Supporting Water Abstraction for details.

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| 24 | Water Framework Directive; BVA (WINEP/NEP) water third party contributions | | |
| 25 | Wetland creation; BVA (WINEP/NEP) water capex | | |
| 26 | Wetland creation; BVA (WINEP/NEP) water opex | | |
| 27 | Wetland creation; BVA (WINEP/NEP) water totex | | |
| 28 | Wetland creation; BVA (WINEP/NEP) water third party contributions | | |
| 29 | Trade effluent discharge flow monitoring; BVA (WINEP/NEP) water capex | | |
| 30 | Trade effluent discharge flow monitoring; BVA (WINEP/NEP) water opex | | |
| 31 | Trade effluent discharge flow monitoring; BVA (WINEP/NEP) water totex | | |
| 32 | Trade effluent discharge flow monitoring; BVA (WINEP/NEP) water third party contributions | | |
| 33 | 25 year environment plan; BVA (WINEP/NEP) water capex | | |
| 34 | 25 year environment plan; BVA (WINEP/NEP) water opex | | |
| 35 | 25 year environment plan; BVA (WINEP/NEP) water totex | | |
| 36 | 25 year environment plan; BVA (WINEP/NEP) water third party contributions | | |
| 37 | Investigations; BVA (WINEP/NEP) - desk based study only water capex | | |
| 38 | Investigations; BVA (WINEP/NEP) - desk based study only water opex | | |
| 39 | Investigations; BVA (WINEP/NEP) - desk based study only water totex | | <p>See enhancement business case SRN33 – WINEP – Supporting Water Abstraction for details.</p> |
| 40 | Investigations; BVA (WINEP/NEP) - desk based study only water third-party contributions | | |
| 41 | Investigations; BVA (WINEP/NEP) - survey, monitoring or simple modelling water capex | | |
| 42 | Investigations; BVA (WINEP/NEP) - survey, monitoring or simple modelling water opex | | |
| 43 | Investigations; BVA (WINEP/NEP) - survey, monitoring or simple modelling water totex | | |
| 44 | Investigations; BVA (WINEP/NEP) - survey, monitoring or simple modelling water third-party contributions | | |
| 45 | Investigations; BVA (WINEP/NEP) - multiple surveys, and/or monitoring locations, and/or complex modelling water capex | | |
| 46 | Investigations; BVA (WINEP/NEP) - multiple surveys, and/or monitoring locations, and/or complex modelling water opex | | |

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| 47 | Investigations; BVA (WINEP/NEP) - multiple surveys, and/or monitoring locations, and/or complex modelling water totex | |
| 48 | Investigations; BVA (WINEP/NEP) - multiple surveys, and/or monitoring locations, and/or complex modelling water third-party contributions | |
| 49 | Investigations total; BVA (WINEP/NEP) water capex | |
| 50 | Investigations total; BVA (WINEP/NEP) water opex | |
| 51 | Investigations total; BVA (WINEP/NEP) water totex | |
| 52 | Investigations total; BVA (WINEP/NEP) water third-party contributions | |
| 53 | Total environmental programme expenditure; BVA (WINEP/NEP) water capex | |
| 54 | Total environmental programme expenditure; BVA (WINEP/NEP) water opex | |
| 55 | Total environmental programme expenditure; BVA (WINEP/NEP) water totex | See enhancement business case SRN33 – WINEP – Supporting Water Abstraction for details. |
| 56 | Total environmental programme expenditure; BVA (WINEP/NEP) water third party contributions | |
| Supply-demand balance | | |
| 57 | Supply-side improvements delivering benefits in 2025-2030; BVA SDB capex | See enhancement Business Case SRN26 – Water Resources – Supply and SRN-DDR-028 – Water Resources – Supply Enhancement Cost Evidence Case |
| 58 | Supply-side improvements delivering benefits in 2025-2030; BVA SDB opex | |
| 59 | Supply-side improvements delivering benefits in 2025-2030; BVA SDB totex | |
| 60 | Supply-side improvements delivering benefits in 2025-2030; BVA SDB third party contributions | |
| 61 | Demand-side improvements delivering benefits in 2025-2030 (excl leakage and metering); BVA SDB capex | See enhancement Business Case SRN27 – Water Resources – Demand, SRN-DDR-029 – Water Resources – Demand (leakage) Enhancement Cost Evidence Case and SRN-DDR-030 – Water Resources – Demand (water efficiency) Enhancement Cost Evidence Case |
| 62 | Demand-side improvements delivering benefits in 2025-2030 (excl leakage and metering); BVA SDB opex | |
| 63 | Demand-side improvements delivering benefits in 2025-2030 (excl leakage and metering); BVA SDB totex | |
| 64 | Demand-side improvements delivering benefits in 2025-2030 (excl leakage and metering); BVA SDB third party contributions | |
| 65 | Leakage improvements delivering benefits in 2025-2030; BVA SDB capex | |
| 66 | Leakage improvements delivering benefits in 2025-2030; BVA SDB opex | |
| 67 | Leakage improvements delivering benefits in 2025-2030; BVA SDB totex | |

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| 68 | Leakage improvements delivering benefits in 2025-2030; BVA SDB third party contributions | |
| 69 | Internal interconnectors delivering benefits in 2025-2030; BVA SDB capex | <p>See enhancement Business Case SRN26 – Water Resources – Supply and SRN-DDR-028 – Water Resources – Supply Enhancement Cost Evidence Case</p> <p>CW14.73 was revised for the 25th Jan 2024 submission due to the Site 72 adjustment.</p> |
| 70 | Internal interconnectors delivering benefits in 2025-2030; BVA SDB opex | |
| 71 | Internal interconnectors delivering benefits in 2025-2030; BVA SDB totex | |
| 72 | Internal interconnectors delivering benefits in 2025-2030; BVA SDB third party contributions | |
| 73 | Supply demand balance improvements delivering benefits starting from 2031; BVA SDB capex | |
| 74 | Supply demand balance improvements delivering benefits starting from 2031; BVA SDB opex | |
| 75 | Supply demand balance improvements delivering benefits starting from 2031; BVA SDB totex | |
| 76 | Supply demand balance improvements delivering benefits starting from 2031; BVA SDB third party contributions | |
| 77 | Total supply demand expenditure; BVA SDB capex | |
| 78 | Total supply demand expenditure; BVA SDB opex | |
| 79 | Total supply demand expenditure; BVA SDB totex | |
| 80 | Total supply demand expenditure; BVA SDB third party contributions | |
| | Metering | |
| 81 | New meters requested by existing customers (optants); BVA metering capex | <p>For details, see enhancement Business Case SRN24 – Meter replacement and Technical annex SRN17 Direct procurement for Customers and Alternative deliver Model</p> |
| 82 | New meters requested by existing customers (optants); BVA metering opex | |
| 83 | New meters requested by existing customers (optants); BVA metering totex | |
| 84 | New meters requested by existing customers (optants); BVA metering third party contributions | |
| 85 | New meters introduced by companies for existing customers; BVA metering capex | |
| 86 | New meters introduced by companies for existing customers; BVA metering opex | |
| 87 | New meters introduced by companies for existing customers; BVA metering totex | <p>For details, see enhancement Business Case SRN24 – Meter replacement and Technical annex SRN17 Direct procurement for Customers and Alternative deliver Model</p> |
| 88 | New meters introduced by companies for existing customers; BVA metering third party contributions | |

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| 89 | New meters for existing customers - business; BVA metering capex | |
| 90 | New meters for existing customers - business; BVA metering opex | |
| 91 | New meters for existing customers - business; BVA metering totex | |
| 92 | New meters for existing customers - business; BVA metering third party contributions | |
| 93 | Replacement of existing basic meters with AMR meters for residential customers; BVA metering capex | |
| 94 | Replacement of existing basic meters with AMR meters for residential customers; BVA metering opex | |
| 95 | Replacement of existing basic meters with AMR meters for residential customers; BVA metering totex | |
| 96 | Replacement of existing basic meters with AMR meters for residential customers; BVA metering third party contributions | |
| 97 | Replacement of existing basic meters with AMI meters for residential customers; BVA metering capex | |
| 98 | Replacement of existing basic meters with AMI meters for residential customers; BVA metering opex | |
| 99 | Replacement of existing basic meters with AMI meters for residential customers; BVA metering totex | <p>For details, see enhancement Business Case SRN24 – Meter replacement and Technical annex SRN17 Direct procurement for Customers and Alternative deliver Model</p> |
| 100 | Replacement of existing basic meters with AMI meters for residential customers; BVA metering third party contributions | |
| 101 | Replacement of existing AMR meters with AMI meters for residential customers; BVA metering capex | |
| 102 | Replacement of existing AMR meters with AMI meters for residential customers; BVA metering opex | |
| 103 | Replacement of existing AMR meters with AMI meters for residential customers; BVA metering totex | |
| 104 | Replacement of existing AMR meters with AMI meters for residential customers; BVA metering third party contributions | |
| 105 | Replacement of existing basic meters with AMR meters for business customers; BVA metering capex | |
| 106 | Replacement of existing basic meters with AMR meters for business customers; BVA metering opex | |
| 107 | Replacement of existing basic meters with AMR meters for business customers; BVA metering totex | |
| 108 | Replacement of existing basic meters with AMR meters for business customers; BVA metering third party contributions | |

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| 109 | Replacement of existing basic meters with AMI meters for business customers; BVA metering capex | For details, see enhancement Business Case SRN24 – Meter replacement and Technical annex SRN17 Direct procurement for Customers and Alternative deliver Model |
| 110 | Replacement of existing basic meters with AMI meters for business customers; BVA metering opex | |
| 111 | Replacement of existing basic meters with AMI meters for business customers; BVA metering totex | |
| 112 | Replacement of existing basic meters with AMI meters for business customers; BVA metering third party contributions | |
| 113 | Replacement of existing AMR meters with AMI meters for business customers; BVA metering capex | |
| 114 | Replacement of existing AMR meters with AMI meters for business customers; BVA metering opex | |
| 115 | Replacement of existing AMR meters with AMI meters for business customers; BVA metering totex | |
| 116 | Replacement of existing AMR meters with AMI meters for business customers; BVA metering third party contributions | |
| 117 | Smart meter infrastructure; BVA metering capex | |
| 118 | Smart meter infrastructure; BVA metering opex | |
| 119 | Smart meter infrastructure; BVA metering totex | |
| 120 | Smart meter infrastructure; BVA metering third party contributions | |
| 121 | Total metering expenditure; BVA metering capex | |
| 122 | Total metering expenditure; BVA metering opex | |
| 123 | Total metering expenditure; BVA metering totex | |
| 124 | Total metering expenditure; BVA metering third party contributions | |
| Water quality improvements | | |
| 125 | Improvements to taste, odour and colour (grey solutions); BVA enhancement capex | |
| 126 | Improvements to taste, odour and colour (grey solutions); BVA enhancement opex | |
| 127 | Improvements to taste, odour and colour (grey solutions); BVA enhancement totex | |
| 128 | Improvements to taste, odour and colour (grey solutions); BVA enhancement totex | |
| 129 | Improvements to taste, odour and colour (green solutions); BVA enhancement capex | |
| 130 | Improvements to taste, odour and colour (green solutions); BVA enhancement opex | |

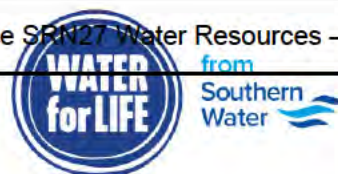
| | | |
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| 131 | Improvements to taste, odour and colour (green solutions); BVA enhancement totex | |
| 132 | Improvements to taste, odour and colour (green solutions); BVA enhancement totex | |
| 133 | Conditioning water to reduce plumbosolvency; BVA enhancement capex | As per core plan, no plumbosolvency enhancement spend. |
| 134 | Conditioning water to reduce plumbosolvency; BVA enhancement opex | |
| 135 | Conditioning water to reduce plumbosolvency; BVA enhancement totex | |
| 136 | Conditioning water to reduce plumbosolvency; BVA enhancement third party contributions | As per core plan, see LS3, SRN31 Lead Enhancement Business Case and SRN-DDR-038 Lead Enhancement Cost Evidence Case, for further details. NPV based on AMP8 spend. |
| 137 | Lead communication pipes replaced or relined; BVA enhancement capex | |
| 138 | Lead communication pipes replaced or relined; BVA enhancement opex | |
| 139 | Lead communication pipes replaced or relined; BVA enhancement totex | |
| 140 | Lead communication pipes replaced or relined; BVA enhancement third party contributions | |
| 141 | External lead supply pipes replaced or relined; BVA enhancement capex | |
| 142 | External lead supply pipes replaced or relined; BVA enhancement opex | |
| 143 | External lead supply pipes replaced or relined; BVA enhancement totex | |
| 144 | External lead supply pipes replaced or relined; BVA enhancement third party contributions | |
| 145 | Internal lead supply pipes replaced or relined; BVA enhancement capex | |
| 146 | Internal lead supply pipes replaced or relined; BVA enhancement opex | |
| 147 | Internal lead supply pipes replaced or relined; BVA enhancement totex | |
| 148 | Internal lead supply pipes replaced or relined; BVA enhancement third party contributions | |
| 149 | Other lead reduction related activity; BVA enhancement capex | As per core plan, see LS3, SRN31 Lead Enhancement Business Case and SRN-DDR-038 Lead Enhancement Cost Evidence Case, for further details. NPV based on AMP8 spend. |
| 150 | Other lead reduction related activity; BVA enhancement opex | |
| 151 | Other lead reduction related activity; BVA enhancement totex | |
| 152 | Other lead reduction related activity; BVA enhancement third party contributions | |

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| 153 | Addressing raw water quality deterioration (grey solutions); BVA enhancement capex | As per core plan, see LS3 and enhancement business case SRN30 Raw Water Deterioration, for further details |
| 154 | Addressing raw water quality deterioration (grey solutions); BVA enhancement opex | |
| 155 | Addressing raw water quality deterioration (grey solutions); BVA enhancement totex | |
| 156 | Addressing raw water quality deterioration (grey solutions); BVA enhancement third party contributions | |
| 157 | Addressing raw water quality deterioration (green solutions); BVA enhancement capex | As per core plan, Green solutions such as catchment management are funded through WINEP |
| 158 | Addressing raw water quality deterioration (green solutions); BVA enhancement opex | |
| 159 | Addressing raw water quality deterioration (green solutions); BVA enhancement totex | |
| 160 | Addressing raw water quality deterioration (green solutions); BVA enhancement third party contributions | |
| 161 | Total water quality enhancement expenditure; BVA enhancement capex | Line calculated from above investment |
| 162 | Total water quality enhancement expenditure; BVA enhancement opex | |
| 163 | Total water quality enhancement expenditure; BVA enhancement totex | |
| 164 | Total water quality enhancement expenditure; BVA enhancement third party contributions | |
| Water resilience and security | | |
| 165 | Resilience; BVA enhancement water capex | As per core plan, see LS3 and enhancement business cases SRN25 Supply Resilience Enhancement Programme, SRN30 Raw Water Deterioration, SRN51 Resilience - Heat and SRN49 Resilience - Power for further details |
| 166 | Resilience; BVA enhancement water opex | |
| 167 | Resilience; BVA enhancement water totex | |
| 168 | Resilience; BVA enhancement water third party contributions | |
| 169 | Security - SEMD; BVA enhancement water capex | As per core plan, see LS3 and enhancement business case SRN35 Security and Emergency Measures Direction, for further details |
| 170 | Security - SEMD; BVA enhancement water opex | |
| 171 | Security - SEMD; BVA enhancement water totex | |
| 172 | Security - SEMD; BVA enhancement water third party contributions | |
| 173 | Security - cyber; BVA enhancement water capex | As per core plan, see LS3 and enhancement business case SRN34 Network & Information Systems, for further details |
| 174 | Security - cyber; BVA enhancement water opex | |
| 175 | Security - cyber; BVA enhancement water totex | |
| 176 | Security - cyber; BVA enhancement water third party contributions | |

CW14.73 was revised for the 25th Jan 2024 submission due to the eNIS adjustment.



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| 177 | Total resilience enhancement expenditure; BVA enhancement water capex | Line calculated from above investment |
| 178 | Total resilience enhancement expenditure; BVA enhancement water opex | |
| 179 | Total resilience enhancement expenditure; BVA enhancement water totex | |
| 180 | Total resilience enhancement expenditure; BVA enhancement water third party contributions | |
| | Net zero | |
| 181 | Greenhouse gas reduction (net zero); BVA enhancement water capex | As per core plan, no expenditure against these lines |
| 182 | Greenhouse gas reduction (net zero); BVA enhancement water opex | |
| 183 | Greenhouse gas reduction (net zero); BVA enhancement water totex | |
| 184 | Greenhouse gas reduction (net zero); BVA enhancement water third party contributions | |
| | Additional - freeform enhancement lines | |
| 185 | Additional line 2 - Corporate overheads for Alternative delivery; BVA enhancement water capex | For details, see SRN-DDR-039 – Market Based Delivery I |
| 186 | Additional line 2 - Corporate overheads for Alternative delivery; BVA enhancement water opex | |
| 187 | Additional line 2 - Corporate overheads for Alternative delivery; BVA enhancement water totex | |
| 188 | Additional line 2 - Corporate overheads for Alternative delivery; BVA enhancement water third party contributionsx | |
| 189 | Additional line 3 - Reservoir safety, BVA enhancement water capex | See SRN32 Reservoir Safety Enhancement Business Case, and SRN-DDR-035 Reservoir Safety Enhancement Cost Evidence Case |
| 190 | Additional line 3 - Reservoir safety, BVA enhancement water opex | |
| 191 | Additional line 3 - Reservoir safety, ; BVA enhancement water totex | |
| 192 | Additional line 3 - Reservoir safety, BVA enhancement water third party contributions | |
| 193 | Additional line - Mains replacement; BVA enhancement water capex | See SRN27 Water Resources – Demand for details |



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| 194 | Additional line - Mains replacement; BVA enhancement water opex | |
| 195 | Additional line - Mains replacement; BVA enhancement water totex | |
| 196 | Additional line - Mains replacement; BVA enhancement water third party contributionsx | |
| 197 | Additional line - WRMP mitigation; BVA enhancement water capex | |
| 198 | Additional line - WRMP mitigation; BVA enhancement water opex | Line no longer used |
| 199 | Additional line - WRMP mitigation; BVA enhancement water totex | |
| 200 | Additional line - WRMP mitigation; BVA enhancement water third party contributionsx | |
| 201 | Additional line 3 - Havant Thicket - payments to Portsmouth water; BVA enhancement water capex | |
| 202 | Additional line 3 - Havant Thicket - payments to Portsmouth water; BVA enhancement water opex | See SRN04 Costs and Outcomes approach and SRN-DDR-032 Strategic Resource Option Enhancement Cost Evidence Case for details |
| 203 | Additional line 3 - Havant Thicket - payments to Portsmouth water; BVA enhancement water totex | |
| 204 | Additional line 3 - Havant Thicket - payments to Portsmouth water; BVA enhancement water third party contributionsx | |
| 205 | Total other enhancement expenditure; BVA enhancement water capex | |
| 206 | Total other enhancement expenditure; BVA enhancement water opex | Line calculated from above investment |
| 207 | Total other enhancement expenditure; BVA enhancement water totex | Line calculated from above investment |
| 208 | Total other enhancement expenditure; BVA enhancement water third party contributions | Line calculated from above investment |
| | Total enhancement | |
| 209 | Total enhancement water expenditure; BVA capex | Line calculated from above investment |
| 210 | Total enhancement water expenditure; BVA opex | Line calculated from above investment |
| 211 | Total enhancement water expenditure; BVA totex | Line calculated from above investment |

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| 212 | Total enhancement water expenditure; BVA third party contributions | Line calculated from above investment |
|-----|--|---------------------------------------|



| CW15 - Best value analysis (benefits) - water resources and water network+ and CW16 - Best value analysis of alternative option (benefits) - water resources and water network+ | | | | | | | | | | | | | | | |
|---|--|------|-------|-------|-------|-------|-------|-------|------------------------------------|-----|-----|-------|-------|-------|-------|
| Benefit Type | Commentary | | | | | | | | | | | | | | |
| Biodiversity | <p>Quantification of year-on-year Biodiversity benefits from WINEP was done through a SWS desktop exercise to quantify the baseline and the biodiversity uplift on SWS's own estate.</p> <p>Profile of Benefits for AMP8 is as per table below, due to the first 2 years</p> <ul style="list-style-type: none"> Ofwat has not shared an indicative ODI rate for this PC. We monetise these benefits at 0.015£m per BDU, in 2022-23 prices. <p>Annual benefits refer to projects started in AMP8 funded through both enhancement allowances (table CW3) and Direct Procurement for Customers (SUP12).</p> <p>Annual benefits are monetised at £15k per BDU in 2022-23 prices. The cost of £15k per Biodiversity Unit is an estimate based on information currently available from open sources.</p> <p>Please see Performance commitments methodologies Technical Annex for detailed methodology and assumptions.</p> <p>Annual benefits are point estimates meaning that uncertainty and sensitivity of benefits are not available.</p> <p>Present value of benefits is calculated using the HMRC's Green Book discount rate of 3.5%.</p> | | | | | | | | | | | | | | |
| Demand side improvements | <p>PCC, Business Consumption, leakage: annual benefits measured in water demand reduction. These were estimated as part of the modelling of demand inputs to feed into the WRSE model for WRMP.</p> <p>Annual benefits measured in mains bursts avoided per 1,000 of mains. These were estimated as part of the modelling of demand inputs to feed into the WRSE model for WRMP.</p> <p>Leakage annual benefits related to enhanced mains replacement refer to the benefits from mains replacement above and beyond the mains replacement programme needed to accommodate the leakage's natural rate of rise (which is funded through base costs). The programme of enhancement mains replacement underpinning these benefits is the following:</p> <table border="1"> <thead> <tr> <th></th> <th>AMP8</th> <th>AMP9</th> <th>AMP10</th> <th>AMP11</th> <th>AMP12</th> <th>AMP13</th> </tr> </thead> <tbody> <tr> <td>Mains replacement enhancement (km)</td> <td>300</td> <td>800</td> <td>1,000</td> <td>1,000</td> <td>1,000</td> <td>1,000</td> </tr> </tbody> </table> <p>Annual benefits monetised using Ofwat indicative ODI rates for each PC.</p> <p>Annual benefits refer to projects started in AMP8 funded through both enhancement allowances (table CW3) and Direct Procurement for Customers (SUP12).</p> | | AMP8 | AMP9 | AMP10 | AMP11 | AMP12 | AMP13 | Mains replacement enhancement (km) | 300 | 800 | 1,000 | 1,000 | 1,000 | 1,000 |
| | AMP8 | AMP9 | AMP10 | AMP11 | AMP12 | AMP13 | | | | | | | | | |
| Mains replacement enhancement (km) | 300 | 800 | 1,000 | 1,000 | 1,000 | 1,000 | | | | | | | | | |



| | |
|--------------------------|---|
| | <p>For details on methodology and assumptions, see Performance commitments methodologies Technical Annex.</p> <p>Annual benefits are monetised using Ofwat's indicative ODI rates, except for operational carbon where we use the UK's Department for Business, Energy and Industrial Strategy's £175 per tonne of CO2e. Source: Updated short-term traded carbon values used for UK public policy appraisal: 2018, (publishing.service.gov.uk).</p> <p>Monetised annual benefits of PCC relate to performance change expressed in l/p/d.</p> <p>Monetised annual benefits of business demand relate to performance change expressed in MI/d.</p> <p>Monetised annual benefits of leakage relate to performance change expressed in MI/d.</p> <p>Benefits are point estimates meaning that uncertainty and sensitivity of benefits are not available.</p> <p>Present value of annual benefits is calculated using the HMRC's Green Book discount rate of 3.5%.</p> |
| Supply side improvements | <p>Forecast annual service levels in the 'do nothing / pre-investment' scenario, i.e. without any interventions. This was done by SWS Asset system team using SWS [REDACTED] asset deterioration model. Results available in the Source data with link to the original input.</p> <p>Forecast annual service levels in the 'post-investment' scenario. The team identified the list of assets that will be replaced and forecasted the service levels that will result if these assets are replaced like-for-like using SWS [REDACTED] asset deterioration model. This gives an estimated quantification of the service level with new assets assuming like-for-like asset replacement. Actual benefits are likely to be larger as some assets are being replaced with superior solutions that will deliver greater benefits than the like-for-like replacement.</p> <p>Determine the annual benefits = delta in service levels = service level pre-investment – service level post-investment</p> <p>Benefits materialise in Y5 of each AMP</p> <p>Annual benefits monetised using Ofwat indicative ODI rates for each PC.</p> <p>Annual benefits refer to projects started in AMP8 funded through both enhancement allowances (table CWW3) and Direct Procurement for Customers (SUP12).</p> <p>For detailed methodology and assumptions, please see Performance commitments methodologies Technical annex.</p> <p>Annual benefits are point estimates meaning that uncertainty and sensitivity of benefits are not available.</p> <p>Present value of annual benefits is calculated using the HMRC's Green Book discount rate of 3.5%.</p> |
| Mains Repairs | <p>See also above demand side improvements</p> <p>Annual benefits refer to the enhanced mains replacement programme above and beyond the mains replacement programme needed to accommodate the leakage's natural rate of rise (which is funded through base costs) as considered in the WRMP.</p> <p>Annual benefits were estimated as part of the modelling of demand inputs to feed into the WRSE model for WRMP.</p> <p>Annual benefits refer to projects started in AMP8 funded through both enhancement allowances (table CW3) and Direct Procurement for Customers (SUP12).</p> |

| | |
|----------------------------|---|
| | <p>Annual benefits are monetised using Ofwat's indicative ODI rate.</p> <p>Annual benefits are point estimates meaning that uncertainty and sensitivity of benefits are not available.</p> <p>Present value of benefits is calculated using the HMRC's Green Book discount rate of 3.5%.</p> |
| Operational Carbon – water | <p>Annual benefits are in tonnes of CO₂e</p> <p>Carbon data quantified by engineering consultants using standard assumptions in the industry.</p> <p>Ofwat has not shared an indicative ODI rate for this PC.</p> <p>We monetise these annual benefits using the UK's Department for Business, Energy and Industrial Strategy's £175 per tonne of CO₂e. Source: Updated short-term traded carbon values used for UK public policy appraisal: 2018, (publishing.service.gov.uk)</p> <p>Annual benefits refer to projects started in AMP8 funded through both enhancement allowances (table CWW3) and Direct Procurement for Customers (SUP12).</p> <p>Carbon annual emissions / benefits quantified by engineering consultants using standard assumptions in the industry.</p> <p>Ofwat has not shared an indicative ODI rate for this PC. Benefits are monetised using the UK's Department for Business, Energy and Industrial Strategy's £175 per tonne of CO₂e. Source: Updated short-term traded carbon values used for UK public policy appraisal: 2018, (publishing.service.gov.uk).</p> <p>Annual benefits are point estimates meaning that uncertainty and sensitivity of benefits are not available.</p> <p>Present value of benefits is calculated using the HMRC's Green Book discount rate of 3.5%.</p> |
| Smart Metering | <p>PCC and Business Consumption: annual benefits measured in water demand reduction. These were estimated as part of the modelling of demand inputs to feed into the WRSE model for WRMP.</p> <p>Annual benefits monetised using Ofwat indicative ODI rates for each PC.</p> <p>Annual benefits refer to projects started in AMP8 funded through both enhancement allowances (table CW3) and Direct Procurement for Customers (SUP12).</p> <p>Annual benefits are monetised using Ofwat's indicative ODI rates.</p> <p>Monetised annual benefits of PCC relate to performance change expressed in l/p/d.</p> <p>Monetised annual benefits of business demand relate to performance change expressed in Ml/d.</p> <p>Annual benefits are point estimates meaning that uncertainty and sensitivity of benefits are not available.</p> <p>Present value of benefits is calculated using the HMRC's Green Book discount rate of 3.5%.</p> |

| CW17 - Accelerated programme expenditure - water resources and water network plus | |
|---|---|
| Line description | Commentary |
| General comment | There is no accelerated expenditure in water resources and water network plus |

| CW18 - Cost adjustment claims - base expenditure: water resources and water network+ | |
|--|------------|
| Line description | Commentary |
| Please see cost adjustment claims submitted: Meter Replacement (the net value of the claim has been updated to reflect to sector wide adjustment applied to SW in the draft determination) Regional Labour costs and new claim for Water Economies of Scale | |

| CW19 - Demand management - Leakage expenditure and activities | | |
|---|--|--|
| Line description | Commentary | |
| | Leakage expenditure - company level | |
| 1 | Maintain expenditure | For leakage opex costs our 24-25 budget has been rolled forward into AMP8 as a baseline. |
| 2 | Reduce expenditure | <p>£144m of our leakage capex costs included within this table are broken down within our Botex technical annex – part B, Treated Water Distribution.</p> <p>£41m of leakage enhancement expenditure is also included within this table, split as below:- £9.8m Find and Fix £1.8m Advanced Pressure Management £10.8m Digitalisation/Smart networks £13.6m Communication pipe replacements £5m Fibre Optic Networks</p> <p>We have also included £124.8m of mains replacement enhancement activity where we are replacing circa 300km of mains in order to reduce leakage.</p> <p>In splitting costs between maintain and reduce we have used our usual split for AMP7. For AMP8 we have put all base costs in maintain, and split enhancement costs 11/21.2 to maintain leakage and 10.2/21.2 to reduce leakage. This reflects our 21.2 megalitres a day of leakage benefits, of which 11 megalitres are offsetting deterioration and 10.2 are reduction.</p> |
| 3 | Total leakage expenditure | |
| | | |
| | Leakage expenditure - region 1 | |
| 4 | Maintain expenditure | Not applicable |
| 5 | Reduce expenditure | |
| 6 | Total leakage expenditure | |
| | Leakage expenditure - region 2 | |
| 7 | Maintain expenditure | Not applicable |
| 8 | Reduce expenditure | |
| 9 | Total leakage expenditure | |
| | Leakage expenditure - company level | |
| 10 | Mend supply pipe cost | Based on forecast for March 2025 |
| | Leakage expenditure - region 1 | |

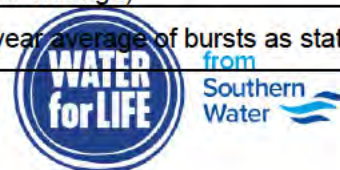
| | | |
|----|---|--|
| 11 | Mend supply pipe cost | Not applicable |
| | Leakage expenditure - region 2 | |
| 12 | Mend supply pipe cost | Not applicable |
| | Prevent activities and attributes - company level | |
| 13 | Number of properties covered by PMAs with fixed outlet pressure control | Flat phase as all new PMA's likely to be under active pressure control. |
| 14 | Number of properties covered by PMAs with active pressure control | Increase for Year 4 and in Year 5 and pro-rata (based on AMP7 Year 5) increase pa in Y1-Y3 of AMP8 and flat for Y4&5. Not included those with change to booster control. |
| 15 | Number of new PMAs | Increase by 35 in Year 4, 60 in 5 and 25 increase annually in Y1-Y3 of AMP8 and flat for Y4&5. Not included those with change to booster control. |
| 16 | Number of properties covered by new PMAs | Increase for Year 4 and in Year 5 and then pro-rata annual increase in Y1-Y3 of AMP8 and flat for Y4&5. |
| | Prevent activities and attributes - region 1 & 2 | No separate regional activity – company level only |
| | DMA characteristics - company level | |
| 25 | Number of fully operating DMAs | Increase on 2022/23 by 5% in Year 4 and 10% in Year 5 then increase by 1% per annum in AMP8. Combination of attack on DMA Operability this AMP and then new DMA's due to growth and sub-division of existing DMA's to improve targeting efficiency in AMP8. |
| 26 | 25th percentile DMA size | Use same ratio as existing data |
| 27 | Mean DMA size | |
| 28 | 75th percentile DMA size | |
| 29 | DMA Availability | Small annual improvement for AMP7, flat for AMP8. |
| | DMA characteristics - region 1 & 2 | No separate regional activity – company level only |
| | Trunk main balances - company level | |
| 40 | Length of trunk mains and upstream network in trunk mains balances | Plan to undertake work on TM flow balances so should see this increase by 10% in Y5 of AMP7 and 50% across AMP8. |
| 41 | Length of trunk mains | Likely to reduce given drive to get more Trunk Main Areas into DMA's – suggest 3 TMA's to DMA's per annum – say reduction of 6km (2km per TMA) per annum |
| 42 | Proportion of trunk mains and upstream network in trunk mains balances. | Calculation based on CW19.40 and CW19.41 |
| | Trunk main balances - region 1 & 2 | No separate regional activity – company level only |
| | Smart networks - company level | |

| | | |
|----|---|--|
| 49 | Smart networks coverage - permanent acoustic/noise loggers | Planned increase in investment in acoustic loggers, aligned with PR24 Smart Networks plan of installing 6 pressure/acoustic loggers in each DMA by the end of AMP8. Installation phased across the AMP8 period. |
| | Smart networks - region 1 & 2 | No separate regional activity – company level only |
| | Active leakage control - company level | |
| 52 | Hours on ALC activity per annum | This is part of our Leakage recovery plan - increase in 2023/24 to 185 FTE (current level) on leak detection from Leakage partner. This will be reduced in Q4 to 150 and likely to remain stable thereafter so reduction of 18.9% on 23/24 value as forward plan. |
| | Active leakage control - region 1 & 2 | No separate regional activity – company level only |
| | Mains repairs - company level | |
| 55 | Number of mains repairs – customer reported | Data taken from OUT4 |
| 56 | Number of mains repairs – company detected | Data taken from OUT4 |
| 57 | Average run time for customer reported mains repairs | Already overall decent performance – small improvement in Year 4 and 5 of AMP7 of 2% per annum. Additional technology and systems likely to improve AMP8 performance and reduce run time by 5% year on year. |
| 58 | Average run time for company detected mains repairs. | Already overall decent performance – small improvement in Year 4 and 5 of AMP7 of 2% per annum. Additional technology and systems likely to improve AMP8 performance and reduce run time by 5% year on year. |
| | Mains repairs - region 1 & 2 | No separate regional activity – company level only |
| | Mains fittings repairs - company level | |
| 67 | Number of mains fittings repairs – customer reported | No change to plan for AMP7/AMP8 |
| 68 | Number of mains fittings repairs – company detected. | |
| 69 | Average run time for customer reported mains fittings repairs | No change in run time for AMP7 / AMP8 – use 22/23 data. Any process improvements offset by tougher Streetworks regulations. |
| 70 | Average run time for company detected mains fittings repairs | |
| | Mains fittings repairs - region 1 & 2 | No separate regional activity – company level only |
| | Communication pipe repairs - company level | |
| 79 | Number of communication pipe repairs – customer reported | No change in AMP7 but increase volume of repairs by 1% (Y1), 2%(Y2), 5%(Y3), 10%(Y4), 5% (Y5) in AMP8 in line with Smart metering programme phased roll-out. Customers more aware. |
| 80 | Number of communication pipe repairs – company detected | No change in AMP7 but increase volume of repairs by 1% (Y1), 2%(Y2), 5%(Y3), 10%(Y4), 5% (Y5) in AMP8 in line with Smart metering programme phased roll-out. Leakage partner using data to improve detection. AMP8 comm pipe renewal policy will take a number of AMP's to wash through with leakage benefits, will mainly be customer repeat benefit. |
| 81 | Average run time for customer reported communication pipe repairs | No change in AMP7 but reduce run time by 1% (Y1), 2%(Y2), 5%(Y3), 10%(Y4), 5% (Y5) in AMP8 in line with Smart metering programme phased roll-out. Customers more aware. |



| | | |
|-----|--|--|
| 82 | Average run time for company detected communication pipe repairs | No change in AMP7 but reduce run time by 1% (Y1), 2%(Y2), 5%(Y3), 10%(Y4), 5% (Y5) in AMP8 in line with Smart metering programme phased roll-out. Leakage partner using data to improve detection. |
| | Communication pipe repairs - region 1 & 2 | No separate regional activity – company level only |
| | Supply pipes repairs - company level | |
| 91 | Number of supply pipe repairs – customer reported | No change to plan for AMP7. Reduction in customer reported leaks in AMP8 to reflect availability of proactive leak alarms via smart metering. |
| 92 | Number of supply pipe repairs – company detected | Drive with Leakage partner to increase CSL detection activity. Increase on 2022/23 of 5% for Years 4 and 5. AMP8 repairs aligned to proactive leakage reduction activity and impact of additional repairs required to deliver Smart Metering leakage benefits. |
| 93 | Average run time for customer reported supply pipe repairs | No change in AMP7. AMP8 run-times reflect all repairs and reduce over the AMP to reflect increased awareness and customer engagement through Smart Metering. Run-times reduce by 4 days (Yr4) and 5 days (Yr5) in AMP8 following Smart metering programme phased roll-out. |
| 94 | Average run time for company detected supply pipe repairs | No change in AMP7. AMP8 run-times reflect all repairs and reduce over the AMP to reflect increased awareness and customer engagement through Smart Metering. Run-times reduce by 4 days (Yr4) and 5 days (Yr5) in AMP8 following Smart metering programme phased roll-out. |
| 95 | Number of free supply pipe repairs undertaken | No change to plan in AMP7. Free repair policy not planned to change in AMP8. AMP7 ratio of free supply pipe repairs applied to AMP8 repair numbers. |
| 96 | Number of supply pipe repairs where financial assistance provided | None |
| 97 | Number of supply pipe repairs where other support provided | Being calculated as the difference between total repairs and free repairs. |
| | Supply pipes repairs - region 1 & 2 | No separate regional activity – company level only |
| | Leakage levels - company level | |
| 112 | Historical minimum achieved level of leakage | This is the “bottom-up” pre-MLE leakage for each year. This has been calculated based on the figures in CW5, reducing by 4.8% based on the MLE gap for 2021/22 and 2022/23 |
| 113 | Volume of leakage that needs to be saved to maintain current level | As per the RPS report provided to Ofwat in 2021/22, NRR was 120.11. Natural Rate of Rise is increased 2.2 MI/d per annum and therefore this is built into future planning |
| | Leakage levels - region 1 & 2 | No separate regional activity – company level only |

| CW20 - Water mains; asset condition | | |
|-------------------------------------|--|--|
| Line description | | Commentary |
| | Length of potable mains by Condition Grade | |
| 1 | Potable mains (up to 320mm) | Split by diameter group – total length of master data per grade, length of mains not in cohort analysis assumed grade 1. The total length of mains reported is from the [REDACTED] dataset as at last extract from the corporate GIS system at April 2022. This length of total mains will not align to APR values and so the confidence grade for CW20.1 & 20.2 data is C4. |
| 2 | Potable mains (greater than 320mm) | |
| | Analysed burst rate comparison | |
| 3 | Analysed cohort potable mains (up to 320mm) | SWS Cohorts created as per guidance using Material (Primary variable), Age1 (Primary variable), Age2 (Secondary variable), Diameter1 (Primary variable), Diameter2 (Secondary variable), Shrink Swell (Secondary variable), DMA groupings (Secondary variable). Shrink Swell Secondary variable used as this is included in the SWS water main deterioration model lengths by grade by diameter per cohort analysis. Lengths by grade by diameter per cohort analysis |
| 4 | Annual average bursts from cohort analysis (5 year average) potable mains (up to 320mm) | SWS Cohorts created as per guidance using Material (Primary variable), Age1 (Primary variable), Age2 (Secondary variable), Diameter1 (Primary variable), Diameter2 (Secondary variable), Shrink Swell (Secondary variable), DMA groupings (Secondary variable). Shrink Swell Secondary variable used as this is included in the SWS water main deterioration model lengths by grade by diameter per cohort analysis. Lengths by grade by diameter per cohort analysis |
| 5 | Annual average bursts on analysed cohorts potable mains (up to 320mm) | N/A – Calculated line |
| 6 | Replaced and/or relined mains length | Last 5 years replaced mains as per APR reporting |
| 7 | Annual average bursts on replaced potable mains (5 year average) up to 320mm | Last year of actuals for cohort analysis by grade number of bursts |
| 8 | Annual average bursts (5 year average) on potable mains up to 320mm | N/A |
| 9 | Current annual bursts on potable mains (up to 320mm) | Calculated from total Annual bursts number / 000km |
| 10 | Current annual bursts on potable mains (up to 320mm) | Balancing value of bursts being the difference between matched cohort analysis bursts and RCF reported number of bursts. |
| 11 | Annual bursts on mains (5 year average) greater than 320mm and other mains | 5 year average of bursts on mains greater than 320mm and other mains – taken from the balance of the APR 5 year average minus the Annual average bursts from cohort analysis (5 year average) |
| 12 | Annual bursts on mains (5 year average) on potable and other mains reported in APR 2019-2023 | 5 year average of bursts as stated in APR |



Ofwat guidance to assure cohort via spatial mapping of distance between bursts not undertaken as capability not available.

There is a discrepancy between the number of bursts in our spatially mapped data and our historic APR data. This discrepancy is c10% and is due to historic APR data not being linked to assets, which is required in order to complete this analysis. We therefore had to use our spatially mapped data.

GIS Age data is limited with only 25% of year laid data populated. An exercise of infilling this age data by overlaying historic maps was undertaken in 2012. This age data resides in the [redacted] system as age is a key attribute utilised in the [redacted] deterioration models for water main bursts. Therefore the overall quality of the data is currently low.

Over the reporting period Southern Water has not carried out any relining work.

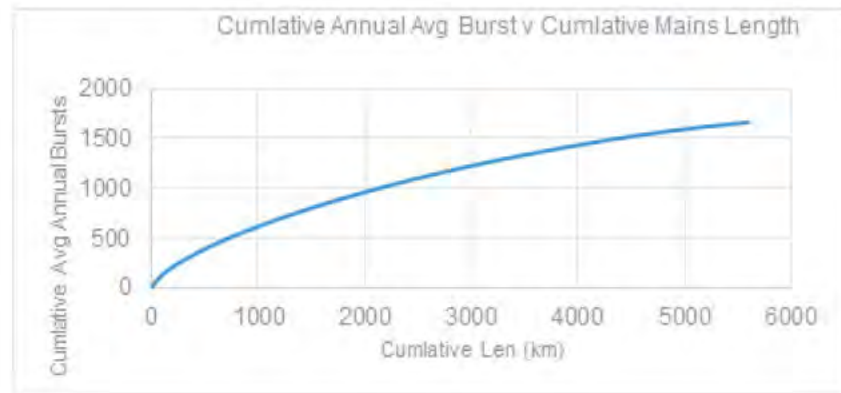
SWS Cohorts created as per guidance using Material (Primary variable), Age1 (Primary variable), Age2 (Secondary variable), Diameter1 (Primary variable), Diameter2 (Secondary variable), Shrink Swell (Secondary variable), DMA groupings (Secondary variable).

Shrink Swell Secondary variable used as this is included in the SWS water main deterioration model. Details of this classification is as follows:-

| | | |
|---|-----------|--|
| 1 | very low | Hard rock, gravel, or sandy or coarse loamy soil |
| 2 | low | Heavy loam textures |
| 3 | moderate | Clayey overlying non-swelling slay, shale or marl |
| 4 | high | Clayey overlying swelling or lake clay |
| 5 | very high | Clayey overlying brownish swelling clay |
| 6 | high* | Alluvial clay or peat with very high shrink-swell potential that is realised with drainage to > 2m |

Each cohort is within the guidance tolerance of 2.5 bursts per year +/-50% for diameter of <320mm and 1.0 bursts per year for diameter >320mm. Overall average yearly bursts is 2.47 which is +/- 10% of the 2.5 nominal size as per the Ofwat guidance.

Cohorts ranked and cumulative length and bursts graph produced as per guidance. Our worst performing cohort (highest burst rate) is fibre reinforced cement (1940 to 1960). The cohort with the most bursts over five years is cast iron 1920 to 1940 (<320mm dia).



| CW21 - Water - net zero enhancement schemes | |
|---|---|
| Line description | Commentary |
| | Not applicable to Southern – no schemes to report |

