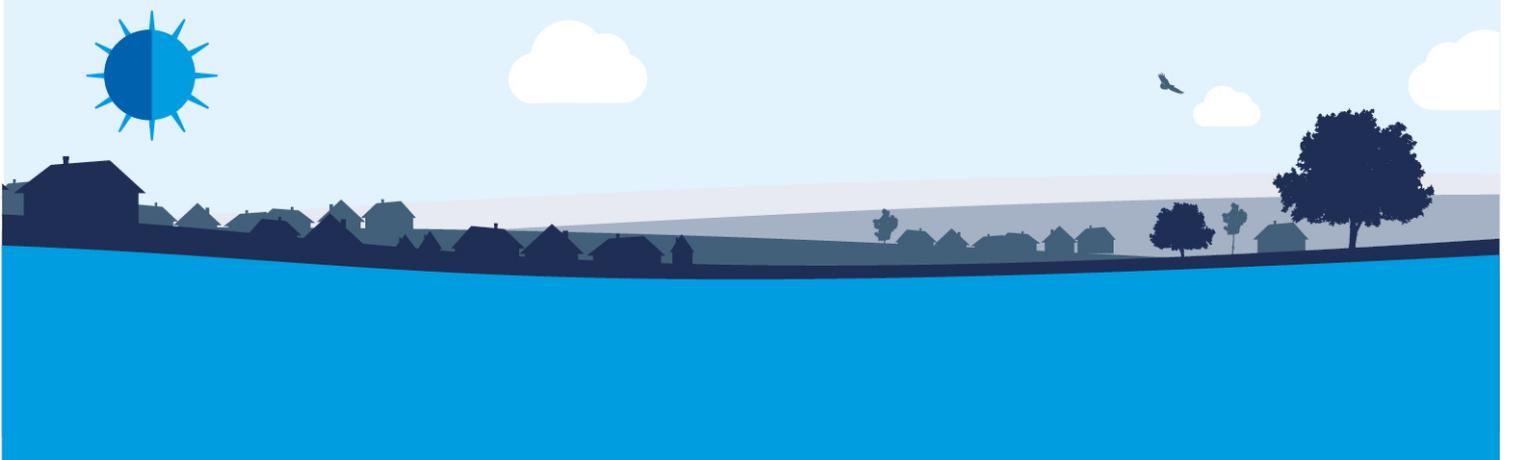


Appendix RA02

Addendum to appendix A29 – wholesale water enhancement cost allowance

1 April 2019



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Introduction

Ofwat have used a combination of methods at PR19 to assess submitted wholesale enhancement costs. This includes both deep and shallow dive assessments as appropriate along with benchmarking business plan and historical data. Subsequent bespoke efficiency challenges have then been made depending upon modelled outputs and/or application of specific company efficiency factors based on the wider plan.

Given the challenges in the IAP driving efficiency reductions across these categories, we use this addendum to our enhancement cost detail held in '[Appendix A29 – Capital investment to deliver class leading service – section 3.2](#)', to provide additional narrative and accompanying evidence where appropriate.

The table below shows a breakdown of those enhancement cost categories we are providing additional information for, in the form of narrative, data and associated third party reports to address specific IAP challenges.

Enhancement cost category	IAP type	SSC submitted gross costs Sep'18 (£m 17/18 CPIH)	Ofwat IAP gross allowance (£m 17/18 CPIH)	Costs not allowed (£m 17/18 CPIH)
1. Improving taste / odour / colour (Cost Adjustment Claim)	Dive	74.35	55.44 (including SVE contribution)	18.91
2. Investment to address raw water deterioration	Dive	13.82	6.49	7.33
3. New Development costs	Model	75.44	41.57	33.87
4. Demand side enhancements to the supply/demand balance (leakage allowance)	Dive	16.09	9.97	6.12
5. WINEP Eels Regulations	Dive	2.92	2.33	0.590
6. Company specific efficiency (inc within Cost Adjustment Claim)	n/a	n/a	n/a	0.980 + (3.35 CAC)
Total		182.62	115.80	67.80

The enhancement cost categories set out in the above table are used to structure our response (section 1-6) in this addendum to our original enhancement cost information in Appendix A29 section 3.2. These will run in the same order as they appear in A29, with the blue box at the beginning of each section referencing where the original information in A29 for each cost category can be found. We also use the final section 7 to provide clarity around the costs we have submitted to address the WINEP3 Water Framework Directive (WFD) requirements.

1. Improving taste/odour/colour

Appendix A29 - Section 3.2.1.1: Major upgrade of surface water treatment works and strategic mains cleaning programme.

We provide additional information around our cost adjustment claim in the appendix '**RA03 – Addendum to appendix A33 Cost Adjustment Claim**'. This addendum addresses a number of challenges within the deep dive assessment of our initial claim, including an implicit allowance representation and a company specific efficiency challenge. Whilst the driver behind the works remains a step change in performance as regards the acceptability to customers of our water, the addendum also provides additional raw water quality data to supplement the need for the investment.

2. Investment to address raw water deterioration

Appendix A29 - Section 3.2.1.2: Additional treatment processes to address raw water deterioration.

We use this section to provide additional evidence in the form of DWI support for treatment of the herbicide chlorthal at Somerford-Slade Heath. In addition, we also provide clarity around the generation, robustness and forecast efficiency of submitted costs for the new treatment across the three sites of Ashwood, Cookley-Kinver and Somerford-Slade Heath in AMP7.

We also restate an error in the original table 7 in section 3.2.1.4 '**Appendix A29 – Capital investment to deliver class leading service**'. This has no bearing on total costs and is presentational only. In this table, the line for 'Catchment Management Blithfield/Severn' should be removed and the costs of £1.4m included within the category of 'investment to address raw water deterioration', as shown in the below table and as was represented in table WS2 in our submission. The updated table for this line of enhancement costs should show the following, aligned with WS2:

Enhancement cost category		Schemes	Capital Expenditure (£) CPIH 17/18
Investment to address raw water deterioration	New treatment at groundwater sources	Ashwood	£3.85m
		Cookley-Kinver	£3.85m
		Somerford-Slade Heath	£4.70m
	Catchment management Blithfield/Severn		£1.42m
Total net			£13.82m

2.1 Somerford-Slade Heath DWI support

In their assessment of our proposed new treatment costs, Ofwat have not allowed the proposed £4.7m required for chlorthal treatment at Somerford-Slade Heath, on the basis that we have not evidenced support for the works from the DWI.

We have now engaged with the DWI regarding the need for mitigation of the pesticide chlorthal. The DWI are familiar with the risk at this site and have agreed to support the case for investment under a quality/resilience driver. We have outlined our position verbally, followed by submission of our evidence to demonstrate the need for investment. **The DWI have considered our evidence and have confirmed their decision to support with a formal notice – this is shown in appendix 'RA02.5 DWI notice for Slade Heath'**. We ask that this support should be reflected in any final assessment of our claim to invest in treatment at these works.

2.2 New treatment costs

Ofwat have identified within their deep dive some confusion around submitted costs for the new treatment to address raw water deterioration at the three sites of Ashwood, Cookley-Kinver and Somerford-Slade Heath in AMP7. Their statement within the 'robust and efficient costs' gateway reads:

'Capex required for the schemes is unclear. £10.6 m after efficiency reduction [App29 P65] or £12.4m [BP] or £13.8m [Table WS2 entry].'

In order to provide clarity – the £13.8m in WS2 is the correct total for the entirety of the investment to address raw water deterioration i.e. including the £1.4m catchment management programme in the Blithfield and Severn catchments. This table is restated in section 2 above. Note the WINEP DWPA catchment management activity at £2.6m is not included in this line as there is a specific enhancement line in WS2 for these costs.

The £12.4m is for the new treatment at the three sites in question i.e. minus the £1.4m catchment management spend in the Blithfield and Severn catchment.

We acknowledge the inconsistency between this £12.4m and the value of £10.6m (given in App29 p65 as a result of our internal application of a 23% efficiency applied to Costain's original costings of £13.7m). We've gone back to the original information provided by Costain and reviewed our assumptions around appropriate efficiency factors. Based on this analysis we wish to restate the assumed efficiency on the Costain pricing as 10%, which, once applied to the £13.7m, results in the £12.4m for the three sites. As additional evidence for the robustness of these costs, we supply the three Costain reports as a sub appendix to this addendum in **'RA02.1 Costain PR19 pricing - new treatment at Kinver, Slade Heath and Ashwood'**. The totals we have based our prices on can be found in cell C99.

2.3 Catchment management in Blithfield and Severn catchments

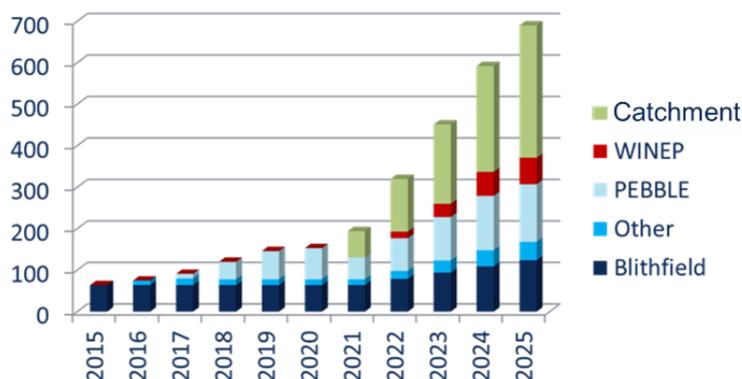
As described in section 2 above, we restate the cost of £1.4m correctly within the ‘investment to address raw water deterioration’ category. This is where the costs have been allocated in table WS2 in both our original September 2018 submission and within our resubmission in April 2019.

We are already undertaking catchment management activities within our Blithfield and River Severn surface water catchments and will continue this in the period 2020-2025 and beyond. This constitutes the best option for our customers because it will help to safeguard raw water quality in the long term. Blithfield (which supplies water to our Seedy Mill treatment works) and the River Severn (which supplies water to our Hampton Loade treatment works) are our largest sources. For this reason, we need to do all we can to ensure these sites remain operational and the treatment that we plan to enhance in the period 2020-2025 and beyond will be as effective as it possibly can be. **And with this in mind, we have identified a step change in activity for our AMP7 catchment management strategy that feeds into a stretching Environment PC.**

To help quantify this step change, we illustrate in the below graph the additional catchment management activity forecast in green and the level of significance this increase has in delivering our AMP7 commitment. The work will be extended from the current AMP6 scope to include options that have a biodiversity benefit in farmland and to improve the river environment - we expect this to include an additional 390 hectares of improvements.

AMP7 Environment PC

AMP6 Biodiversity ODI target- **116** hectares by 2020
 AMP7 Environment PC – **690** hectares improved by 2025



It should be noted that this cost of £1.4m for the increased levels of catchment management activity in the Blithfield and Severn catchments, outlined above, is in addition to the £2.6m specified in the enhancement cost category of ‘**WINEP Drinking Water Protected Areas**’ in section 3.2.1.4 DWPA WINEP of Appendix A29. This new WINEP activity concerns eighteen drinking water protected areas (DWPA) no deterioration schemes - fourteen in South Staffs and four in Cambridge - which are all catchment measures related

to rising nitrates at abstraction sources. **These WINEP driven costs have been allowed within the IAP, subject to a company specific reduction.**

3. New development costs

Appendix A29 - Section 3.2.3.1: Infrastructure to service new customers.

In our September submission we included £74.9m of developer costs which was broken down as follows:

	£m
Network reinforcement	16.259
Connection charges	27.960
Mains requisitions	19.465
Self-Lay asset payments	11.266
Total	74.949

As part of the feedback from our business plan submission, we have reviewed the developer costs included in both WS2 and App 28.

In appendix '**RA06 Growth and new development enhancement modelling**', we have set out our observations on Ofwat's unit cost model and suggestions on how it could be improved.

Recognising that there appears to be data inconsistencies in how companies have completed the data tables, we have set out a summary of all of the components of our developer costs and contributions as shown in table WS2 and table App28.

We recommend assessing Offsite reinforcement separately to assess the robustness of the expenditure. This is because this expenditure is company specific and depends not just on the level of housing growth but the location of the development. We have some significant reinforcement costs projected in AMP7 in relation to some large developments we are expecting. We set this out in detail in section 3.2.3.

We do recognise that even after the suggested modelling revisions that we are likely to be above the median for our connection costs so we have revisited this. We also provide a comparison to Ofwat's 2017 benchmarking report on connection costs to demonstrate that we are efficient. We also note that when reflecting on costs we have considered competition law, recognising that some of these activities are contestable.

In summary our resubmission includes developer costs of £67.3m, a reduction of £7.6m or 10% on our September plan. This is broken down as follows:

	£m
Network reinforcement	14.342
Connection charges	23.334
Mains requisitions	22.648
Self-Lay asset payments	6.934
Total	67.257

3.1 Breakdown of developer costs and contributions

Our analysis of developer costs from company business plan submissions suggests that companies have completed the data tables using different approaches. This is set out in more detail in ‘[RA06 Growth and new development enhancement modelling](#)’. For this reason, we think that Ofwat may need to request more information from companies to ensure that it is consistent.

Therefore, to be transparent, we set out below a reconciliation of our gross developer costs and contributions contained within tables WS2 and App28.

Our forecasts for 2018-19 and 2019-20 are unchanged from our September submission.

Gross Expenditure (£m)	WS2 table reference	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Network reinforcement	Line 11	3.127	2.962	2.828	2.747	2.677	14.342
Connection charges	Line 12	5.106	4.828	4.590	4.464	4.346	23.334
Mains requisitions	Line 11	4.956	4.686	4.455	4.333	4.218	22.648

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Self-Lay asset payments	Line 11	1.499	1.443	1.359	1.332	1.302	6.934
Total Gross Developer costs	Sum of lines 11 and 12	14.688	13.919	13.232	12.876	12.543	67.258
Contributions (£m)	App 28 table reference	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Infrastructure charges before income offset	Line 6	3.127	2.962	2.828	2.747	2.677	14.342
Income offset	Line 14	-3.890	-3.679	-3.497	-3.401	-3.311	-17.778
Infrastructure charges after income offset	Line 8 = Line 6 less line 14	-0.763	-0.716	-0.669	-0.655	-0.634	-3.436
Connection charges	Line 7	5.106	4.828	4.590	4.464	4.346	23.334
Mains requisitions	Line 9	4.956	4.686	4.455	4.333	4.218	22.648
Total developer contributions	Sum of lines 7 to 9	9.299	8.798	8.376	8.142	7.930	42.545

3.2 Updates to WS2 and App28 from our September submission

3.2.1 Connection costs

In our September submission, we included £27.960m for connection costs. Based on the number of company connections, this equated to £947 per connection. We had used the average unit connection cost for the last three years to derive this gross costs.

We used the proportion of types of connection based on a three-year average as set out below:

	2015-16	2016-17	2017-18	Average
Standard unmade ground - short	33%	35%	49%	39%
Standard unmade ground - long	6%	4%	5%	5%
Standard footpath/highway - short	8%	20%	11%	13%
Standard footpath/highway - long	5%	4%	4%	5%
Non-standard connection	48%	37%	31%	38%

This shows that we have undertaken 56% of connections in brownfield sites which includes more expensive non-standard connections.

We have subsequently reviewed this split based on a significant sample contained within local plans as set out in the appendix **'RA02.2 Local Area Greenfield and Brownfield plans'**.

This shows that we are likely to do less brownfield development (c 42%) in AMP7 than in AMP6. Brownfield connections are significantly more expensive than greenfield as they often require additional costs for traffic management. This is also consistent with the split of connections we have experienced so far in 2018-19. We have taken this forecast mix into account in deriving a new unit cost per connection.

Standard unmade ground - short	51%
Standard unmade ground - long	5%
Standard footpath/highway - short	13%
Standard footpath/highway - long	5%
Non-standard connection	26%

The other area we have examined is the level of efficiency that we believe we can drive into the operation. We believe that there are benefits to be made from closer working with our contractors and better ways of operating. We have factored these into our projected unit costs of connections which results in an average connection cost of £790.

This results in a reduction in connection costs of £4.626m (16%) from our September submission to £23.334m.

We have cross referenced this updated unit cost with Ofwat's benchmarking report on connection costs (IN 17/02). Using the split of works as above, a weighted average can be determined:

Updated mix	%	Median from Ofwat report
Verge 2m	51%	£633
Verge 4m	5%	£713
Footway 2m	13%	£774
Footway 4m	5%	£1,009
Footway 9m	26%	£1,597
Weighted average		£925

Note: we have assumed the cost of non-standard connections is equivalent to the cost of footway 9m

Our unit cost of £790 is therefore 15% below the weighted average median set out above.

3.2.2 Mains requisition costs and self-lay asset payments

In our September submission, we included £19.465m for mains requisition costs and £11.266m for self-lay asset payments giving a total gross cost of £30.731m

We have undertaken a review of the unit costs of mains requisitions and asset payments, referencing our 2018-19 developer charges.

We charge for mains requisitions at £779 per plot or £767 in 2017-18 CPIH prices. Our income offset is 78.5% so that we would pay a self-lay provider £602 per plot. Based on our review of other companies' charges schemes, we do not consider that these charges are set at an inefficient level. We are also minded that onsite work is contestable, and that it is important that our charges are compliant with competition law.

Using the number of company connections and self-lay connections gives a total cost of:

	Cost per plot	Connections	Total cost (£m)
Company mains	£ 766.89	29,532	22.648
Self-lay	£ 602.01	11,518	6.934
Total cost			29.582

Overall, we have reduced gross costs from the September submission by £1.149m or 4%.

Self-lay asset payments are shown gross within table WS2 and are not offset against contributions received in table App28.

3.2.3 Off-Site Reinforcement

In this section we set out in detail the major housing developments that we expect to require offsite reinforcement. We have a significant uplift in work compared to the current period.

In our September submission, we included £16.259m for off-site reinforcement. We have undertaken a review of the projected works and challenged ourselves on the forecast costs for all major schemes. This has resulted in a revised cost of £14.342m (a 10% reduction).

Below is a breakdown of the most significant schemes over the period:

New developments	Number of properties	Offsite work	Value
Langley Sue, Sutton Coldfield phase 1	6,000	2910m of offsite 355mm main required to support site	£1.418m
Walton Road, Drakelow	1,637	New 300mm main to be laid off site for approximately 4610m from site entrance at Drakelow Park to 300mm main at the A38 Barton Turn junction.	£1.507m
Chilcote/Stretton-En-Le-Field	Industrial units	New main is required to be laid from the 18" at Chilcote PS. This distance is 1750m of 225mm main.	£0.272m
Coton Lane, Tamworth		Approx. 970m of 315mm main will be required.	£0.195m
Bourn Airfield	3,500	New booster station at Madingley Reservoir (£0.9m), plus £0.6m for the first part of the proposed reinforcement main from Madingley Reservoir to Bourn Airfield to be laid during the period.	£1.500m
Northstowe Phase 2	3,500	Total estimate for reinforcements is £3m for duplicating 450 mm main from Madingley Res to Northstowe. It is assumed that during next five years, half of the total reinforcement is included to cover design costs and initial phase of construction.	£1.500m
Cambourne West (Swansley Wood)	2,356	New 8MI Reservoir at Bourn (see below for more detail)	£2.450m
Cambourne West (Swansley Wood)	As above	New booster station at Bourn Reservoir (£1.4m), plus 3 km 300 mm reinforcement main from booster to site boundary (£1.0m).	£2.381m
Cherry Hinton North	1,800	680 m of 500 mm main (part of "Milton main" duplication) inc railway crossing	£0.710m

Waterbeach phase1	1,615	1200 m of 500 mm main (part of "Milton main" duplication) plus 4000 m of 350 mm NB main from Milton to Waterbeach.	£1.600m
Wing Development Newmarket Road Cambridge	1,313	720 m of 500 mm main (part of "Milton main" duplication).	£0.650m
Other smaller schemes			£0.159m
Total			£14.342m

Bourn Reservoir

Bourn reservoir is a strategically important site consisting of two service reservoirs of total capacity of 6.8 MI within the Cambridge supply network. Reservoir 2 (2.3 MI) is not currently in supply because in 2012 we identified corrosion to the circumferential pre-stressing, which makes the structure unsafe.

We will replace it with a new bigger reservoir to better service the growth within the local area. As part of the driver for this investment is maintenance and part growth, we have proportionally allocated the costs for this investment between base maintenance and enhancement. The total cost of this investment will be £3.5m, with £2.45m being attributable to the increase in capacity of the reservoir. We have included this cost within the network reinforcement costs recovered through the infrastructure charge.

We will commence construction of the new 8 MI reservoir at this site in 2020. We need the new reservoir in supply by summer 2022 to meet projected growth in demand resulting from new developments in the West of Cambridge.

Income offset

In table App28, line 8 (infrastructure charge receipts) we have included the income offset in full. In our September submission, we assumed that some developments would be part of a transitional arrangement between the old charging rules and the new charging rules where the income offset would be against the mains requisition charge. We had assumed a glidepath of 30% of connections in 2020-21, 20% in 2021-22 and 10% in 2022-23. However, in order to avoid this added complexity and make our numbers easier to follow, we have ignored this for our resubmission. This change has no overall net impact.

The income offset is calculated as £602 * 29,532 connections = £17.778m (App28 line 14). Therefore, line 8 is calculated as the total of network reinforcement of £14.342m less £17.778m to give -£3.436m.

3.2.4 Developer costs by band (Block I)

As a result of the changes above, the analysis of developer costs by band have been reviewed and updated.

We have three bands based on the size of development, up to 5 connections, 5-100 connections and greater than 100 connections. This is unchanged from our original submission, although we note that a number of other companies have not separated out costs by size of development.

Below we have summarised the assumptions for each band, although we are keen to work with Ofwat as we consider it is important to have consistency across the sector for reporting purposes.

Line	Band A (Up to and including 5)	Band B (6 to 100)	Band C (Greater than 100)
Grants and contributions received during the year – for non-contestable works	Infrastructure charge less income offset	Infrastructure charge less income offset	Infrastructure charge less income offset
Grants and contributions received during the year – for contestable works	Made ground connection charge plus mains requisition cost per plot	Weighted average of made/unmade ground charge plus mains requisition cost per plot	Unmade ground connection charge plus mains requisition cost per plot
Forecast contestable services expenditure	Equal to grants and contributions received during the year – for contestable works	Equal to grants and contributions received during the year – for contestable works	Equal to grants and contributions received during the year – for contestable works
Infrastructure expenditure forecast	Assumed that small developments do not lead to network reinforcement so this is zero.	Network reinforcement costs pro-rata over the number of connections in band B and band C.	Network reinforcement costs pro-rata over the number of connections in band B and band C.

The unit cost of developer costs falls as developments become larger. This is driven by the type of connection. Small developments are more likely to be infill requiring connections in footpath or carriageway (made ground) with potential traffic management. Larger housing developments are likely to be in greenfield sites requiring cheaper excavation for connections.

3.2.5 Other contributions (non-price control) – Line 12

Other contributions (non-price control) are in relation to HS2. Following further dialogue between our network investment delivery team and HS2, the expected cost of works to divert our mains specifically for HS2 is now estimated to be £11.407m, with the gross change of £5.25m in WS1 illustrated in the below table. HS2 will contribute circa 90% of the costs equating to £10.264m. This revised phasing has been primarily driven by changes in the design and project construction programmes as well as additional diversions identified since our September submission.

This update should supersede our response to Ofwat’s query ‘SSC-DD-CE-001’, sent on 05/03/19.

	BP line title	Table /line	2020-21	2021-22	2022-23	2023-24	2024-25	Total Gross (17/18 CPIH)
Sep-18	Renewals expensed in year (diversions only)	WS1/5	1.779	3.570	2.604	1.920	1.769	11.642
Mar-19	Renewals expensed in year (diversions only)	WS1/5	5.224	5.224	3.992	1.079	1.079	16.598

4. Demand side enhancements to the supply/demand balance (leakage allowance)

Appendix A29 - Section 3.2.4 Growth – demand side enhancements.

Ofwat have not allowed £6.12m of our £9.15m submitted leakage totex, due to a fail against ‘test B’ of their leakage enhancement assessment which is based on a forecast 3-year average leakage position in 2024-25.

NERA Economic Consulting (NERA) was commissioned by 9 companies to review the approach outlined by Ofwat in the IAP regarding proposed targets for leakage reduction and funding arrangements to achieve this reduction. Ofwat requires all companies to have a Performance Commitment (PC) for leakage, and that this is to have a financial Outcome Delivery Incentive (ODI). Ofwat set out in their PR19 methodology that it expected companies to set their PC target at industry upper quartile, together with the expectation that all companies achieve at least a 15% reduction, which is 1% more than the largest reduction commitment at PR14. Ofwat haven’t allowed enhancement expenditure to fund

this 15% reduction for 8 companies, however they have partially allowed some enhancement expenditure for 10 companies who are committing to go beyond a 15% reduction.

This representation, which can be found in appendix **'RA04 NERA Assessing Ofwat's Funding and Incentive Targets for Leakage Reduction'**, outlines why NERA, on behalf of the 9 companies that commissioned the analysis, considers that Ofwat's approach will not result in a level of regulated revenue sufficient enough to deliver the stretching leakage target.

5. WINEP – Eels regulations

Appendix A29 - 3.2.5.1 Water industry national environment programme enhancement expenditure.

Ofwat has applied an efficiency challenge of 20% within the IAP shallow dive, giving an allowance of £2.33m against our submitted £2.92m. The basis for this challenge is centred around a lack of evidence of optioneering, final solution generation and associated cost build up that would give confidence that the option is the best one for customers.

We welcome this challenge and look to address it with the inclusion of a new appendix **'RA02.3 APEM - SSW Eels Regulations Intake Screening and Passage Specification'**. This scoping study report, produced by APEM in April 2018 through our Hydrogeological Framework, outlines locations to be considered, screening specification requirements and potential solution options to ensure compliancy with regulations. There are seven potential options appraised, across the three sites of Hampton Loade intake and the Nethertown intakes at the Blithe and Trent. We also include evidence of APEM supplying initial and then further refined costs associated with potential solutions in appendix **'RA02.4 APEM SSC costing correspondence for AMP7 Eel proposals.'**

To ensure we are able to meet our regulatory deadline of March 2021, we have commenced the procurement process on the back of the work initially done with APEM. This process has employed liaison support with local EA fisheries officers and utilised considerable experience with other water companies and abstractors and the use of national EA guidance.

The specification included the use of in-river passive screens or travelling band screens at the river frontage. Advice from the EA was that regulations were likely to be further tightened beyond AMP7, but within the lifetime of the screens, to include finer screens for the protection of juvenile coarse fish and shad. Accordingly, a "future proofing" option was included within the specification. A number of site factors were also identified as relevant to the specification including low operating depths at the Severn and Blithe, amenity

navigation on the Severn, site criticality of the Severn intake and the potential for further EA changes to the Nethertown licences.

As of March 2019, an optimum least cost solution has been chosen from this process, with the work due to be undertaken within an NEC3 contract under the existing framework agreement.

6. Company Specific Efficiency

Ofwat has applied a company specific efficiency of 7% to a number of enhancement schemes within the IAP, equating to £4.3m including the cost adjustment claim. This efficiency challenge is informed by the cost efficiency of base costs.

In our wholesale base cost allowance representations (detailed in appendix **'RA01 Wholesale water base cost allowance'**, and summarised in our new challenges and representations chapter) we consider that our proposed adjustments would put us ahead of the upper quartile catch up efficiency level. We therefore ask that this company specific efficiency adjustment is reconsidered together with our base cost representation.

7. WINEP Water Framework Directive schemes

Appendix A29 - 3.2.5.1 Water industry national environment programme enhancement expenditure.

We provide clarity in this section around the costs we have submitted to address the WINEP3 Water Framework Directive (WFD) requirements. The costs submitted in our plan address the 'Green' WFD schemes in our WINEP requirements only. These needs have been defined by investigations and are supported by clear WINEP drivers.

To specifically address Ofwat's IAP action item reference SSC.CE.A2 within the cost efficiency test area, we clarify that **we have not made an allowance in our business plan for the Amber WFD water resources schemes**. This is because there is still significant uncertainty on what solutions, if any, will be needed in AMP7. We may fully resolve some of these issues in AMP6 and we will continue to engage with the EA on these schemes. If investigations are necessary in AMP7 we will look to produce these in a proportionate, low cost way. As we are not requesting investment for these schemes, we will not at this time be proposing a cost adjustment mechanism to protect our customers.

However, we will consider our position over the coming months as we gain more certainty around our requirements and any potential cost adjustment mechanism.