

April 2023

Accelerated infrastructure delivery project

**Appendix 1: draft detailed
assessment of company
submissions**

About this document

This appendix provides our detailed scheme-by-scheme assessment of company submissions to the acceleration process. It also sets out the criteria that we have used for our assessment.

Responding to this consultation

We welcome any comments on this document. Please email them to ofwat-defraacceleratedprocess@ofwat.gov.uk. The closing date for this consultation is midday on Monday 24th April.

We will publish responses to this consultation on our website at www.ofwat.gov.uk, unless you indicate that you would like your response to remain unpublished. Information provided in response to this consultation, including personal information, may be published or disclosed in accordance with access to information legislation – primarily the Freedom of Information Act 2000 (FoIA), the General Data Protection Regulation 2016, the Data Protection Act 2018, and the Environmental Information Regulations 2004. For further information on how we process personal data please see our [privacy policy](#).

If you would like the information that you provide to be treated as confidential, please be aware that under the FoIA there is a statutory Code of practice which deals, among other things, with obligations of confidence. In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information, we will take full account of your explanation, but we cannot give an assurance that we can maintain confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on Ofwat.

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1. Our assessment approach

We have assessed water company submissions for acceleration against our assessment criteria as set out in Table 1.1.

Our assessment of each scheme is made 'in the round' (if schemes are in scope). We have considered the views of other regulators including the Environment Agency, Drinking Water Inspectorate (DWI), Natural England (NE) and the Consumer Council for Water (CCW).

We are grateful for the input of these organisations. We have not progressed schemes where the environmental or quality regulators have raised concerns. We have only accelerated schemes that would otherwise meet the enhancement criteria in our PR2 price review.¹ We have included price control deliverables to ensure that customers interests are protected.

Table 1.1: Our assessment criteria

Criteria	Explanation
Scope	Proposals must increase water resilience (supply and demand), reduce the use of storm overflows and or address nutrient neutrality (in those sites that need it to progress development). Projects must be new, align with UK government's environmental ambitions, provide customer value and can be delivered to schedule, without impacting on the delivery of existing regulatory obligations.
Timelines	Projects must be started in 2020-2025 (AMP7) and finalised by the end of 2025-2030 (AMP 8).
Need for investment	Is the need for the schemes clear and uncontroversial? Is there a clear link to a specific statutory driver and/or part of existing or draft programmes such as WRMP/DWMP/WINEP? Does the investment deliver additional benefits, above those that companies have already committed to delivering in this period, including any Green Recovery projects? Does the proposed investment overlap with activities funded through base expenditure allowances? Is the need for the scheme uncertain, for example, projects that are dependent on changes in government or regulatory policy?
Best option	Has the company considered an appropriate range of options to meet the need? Is there evidence that the proposed solution represents best value for customers, communities and the environment for the long term?
Certainty of delivery	Is the company underspending on associated enhancement activities? Has the company provided assurances that new projects will not distract or impact on the delivery of existing plans? Has the company set out where they are accelerating existing schemes in period, and if not the reasons why? Are projects deliverable?
Clear outputs and price control deliverables	Has the company clearly set out the expected outputs (e.g. number of smart meters delivered) and outcomes (reduction in leakage and per capita consumption)? Are these outputs and outcomes additional to those delivered by the PR19 programme? Has the company committed to clear price control deliverables (for 2023-24 and 2024-25), which allow funding provided to be adjusted if these deliverables are not achieved.

¹ Ofwat, [PR24 final methodology – appendix 9 setting expenditure allowances](#), December 2022, p154-159.

Criteria	Explanation
	For schemes that span more than one control period, has the company clearly set out the outputs that will be delivered this period, and the overall deliverables that will be delivered by the project?
Commitments by companies	Has the company shown commitment that they are willing to deliver more themselves as part of the process (in addition to those that they are funded for), whether that is going beyond their existing leakage or PCC targets, or committing to greater storm overflow or nutrient reductions this period than previously envisaged? Has the company reflected the benefits from inflation on their RCV (Regulatory Capital Value) when making their proposals?
Funding	Is the company proposing that funding is provided through transition funding for 2023-24 and 2024-25, with funding provided as part of the PR24 price review process?

Our 'in the round' assessment resulted in each scheme being put into one of four categories.

Category	Definition	Description
	Criteria met	Meets criteria set out
	Some concerns	Some concerns that criteria not met
	Significant concerns	Significant concerns that criteria not met
	Criteria not met	Criteria not met

2. Our proposed schemes for acceleration

We are proposing to approve schemes for the accelerated scheme process that 'in the round' meet our criteria. This gives companies certainty that these schemes will qualify for funding through the transition expenditure programme as part of PR24. Funding through the transition expenditure programme for enhancement expenditure only and not for base expenditure. We are not providing enhancement expenditure allowances for accelerated schemes at this stage.

This is consistent with our approach to other transition expenditure, where we will assess the efficiency of expenditure allowances as part of the overall totex assessment at PR24. This assessment will be undertaken through the draft and final determination process and the costs associated with these schemes will be subject to the same scrutiny and challenge as all other enhancement costs.

We have included proposed price control deliverables for each of these schemes in Appendix 2. Companies will need to agree to these price control deliverables to safeguard the outcomes and outputs their proposals have promised.

The accelerated process covers schemes in three areas: water resilience (supply and demand), storm overflows and nutrient neutrality. The considerations in assessing schemes and price control deliverables are different for each.

On **water resilience (supply and demand)** we have 'green lit' schemes in three areas: schemes to improve water supply, schemes to reduce demand, in particular smart metering, and schemes to protect future supply. For water supply schemes we expect schemes to provide a quantifiable water supply benefit at a water resource zone level, consistent with the requirements of WRMPs. Consistent with the assessment criteria, we also expect schemes to start to provide water supply benefits before the end of 2029-30. For smart metering proposals we expect proposals to be the best option, for example if they are included in a companies preferred best value plan in draft WRMPs. For schemes which reduce water quality constraints on water supply, we expect schemes companies to demonstrate a new need for investment to tackle water quality that risks supply output.

For **storm overflow** schemes we need to ensure that additional funding is provided for additional enhancement works, and not to meet needs already provided for through base expenditure allowances. We therefore expect companies to demonstrate that spills are not due to maintenance issues. We are therefore including a condition that to retain funding (and avoid a clawback), companies need to demonstrate that they are operating assets in compliance with their permits. Companies must have third party assurance around the demonstration of compliance. We will take account of the impact of storm overflow schemes on spill frequency when setting the PR24 storm overflow spill performance commitment.

Where not defined in the scheme we have estimated the impact on storm overflow spills by comparing 2021 spill frequency (as a recent year with typical rainfall) with the spill requirements defined in the scheme outputs.

One of the aims of the accelerated infrastructure delivery project is to bring forward schemes on **nutrient neutrality**, a term given to an approach developed by Natural England in England (and Natural Resources Wales (in Wales)) as part of their roles as statutory consultees in the local planning and environmental assessment process.

The Levelling-up and Regeneration Bill, currently before Parliament, includes provisions in relation to nutrient pollution standards that would allow the Secretary of State to designate catchment areas for certain habitats sites polluted by nitrogen and/or phosphorus. The effect of designation would be to require English water companies to ensure that treated effluent from wastewater treatment works that discharge into the designated catchments will, unless exempted, meet specified standards for the removal of nitrogen and/or phosphorus from wastewater by the applicable upgrade date. Wastewater treatment works that have a capacity of less than a population equivalent of 2000 would normally be exempt.

Our draft decisions to accelerate nutrient neutrality schemes will be conditional on the relevant legislation being enacted, the nutrient neutrality designation being made, and sites are above the 2000 population equivalent threshold.

3. Taking other schemes through the PR24 transition expenditure programme

Our criteria for the transition expenditure are set out in the PR24 final methodology.² For schemes to be eligible for the transition expenditure programme for 2023–24 (which is a year earlier than previous price reviews) they need to be included in final water resource management plans (WRMPs) or statutory schemes in final water industry national environment programme (WINEP), address any concerns we have identified and meet certain other criteria.

3.1 Categorisation of schemes

For potential WRMP schemes we have indicated schemes with a 'W' which are schemes that are currently in a water company's draft WRMP in the preferred path (and so have a higher likelihood of proceeding if concerns are addressed).

For potential WINEP schemes we have indicated schemes with an 'E' where companies have included them in their WINEP submissions but where we either have identified concerns with the schemes as part of our acceleration assessment process or they do not meet the criteria for acceleration (e.g. they are not related to water resilience, storm overflows or nutrient neutrality).

Companies can accelerate these schemes in 2023–24 and 2024–25 at their own risk. Overall, there are 24 schemes in this category (which we have not 'green lit' at this stage) at a total value of £280 million in 2023–25 and £1.5 billion in total.

We have also identified water supply and demand schemes which although not in the preferred path in the draft WRMP could be accelerated if companies include these in the preferred path of their final WRMP. We have indicated these schemes with a 'V'. There are 15 schemes in this category with a total value of £75 million between 2023–2025 and £242 million in total.

² Ofwat, [PR24 final methodology – appendix 9 setting expenditure allowances](#), December 2022, p115–118.

A1 Water

A1.1 Water: Anglian Water

Scheme	Cost 2022-25 (£m)	Total cost (£m)	Assessment	Overall	WRMP/ WINEP
Scheme 1 – Grafham to Bury St Edmunds transfer	26.12	160.41	Some concerns. This scheme proposes to bring forward a 50 MI/d dWRMP transfer scheme in the preferred plan by two years to 2027. Scheme costs are high and accelerating at this stage could pre-empt decisions on larger enhancement spend on interdependent schemes. While this option is selected in the dWRMP preferred plan our review of the options available in that plan and the approach it takes to decision making raises concerns around the justification of need for investment and whether this presents the best option. The Environment Agency has concerns about the scheme's reliance on a drought permit and the feasibility of options to generate the water needed to maximise the transfer which also raises some concerns on deliverability. This scheme has a high overall cost and unit cost. It therefore requires a high level of confidence that it is needed and represents the best option which is currently not evidenced.		W
Scheme 3 – Colchester re-use	1.84	15.33	Meets criteria. Acceleration of the detailed design (including appropriate monitoring and assessments) and planning of a water re-use scheme, plus the construction of a re-use pilot plant and transfer main by March 2028. These deliverables will be reflected in the price control deliverable set out in Appendix 2. This is a scheme in the company's dWRMP preferred programme, and the full re-use scheme could be delivered two years earlier by March 2030 as a result of acceleration. This is a high-cost scheme overall with cost efficiency to be reviewed through PR24 business plan submissions. Despite this, as several re-use schemes could be required going forward, we consider that the pilot re-use plant will provide wider learning and should be accelerated.		W
Scheme 6 – Drought resilience	8.67	19.68	Significant concerns. This option includes three schemes to increase water supply capacity. These are, Clay Hill, Ipswich and Covenham invasive species screen. These schemes are proposed to allow sustainability reductions in East Suffolk Groundwater to be delivered earlier. The Environment Agency has concerns about the feasibility of the Clay Hill component given 'no deterioration' requirements which raises some concerns on deliverability. The proposal does not		E

Scheme	Cost 2022-25 (£m)	Total cost (£m)	Assessment	Overall	WRMP/ WINEP
			include a robust justification for why they are needed earlier than planned or provide sufficient evidence that an appropriate range of options has been considered and assessed on an equal basis to arrive at the best value solution.		
Scheme 7 – smart metering	9.09	27.26	Meets criteria. Installation of 60,000 smart meters in customer properties to deliver 1.3 Ml/d in water savings by 2024-25 in an area identified as water stressed. This is an acceleration of a scheme that is a preferred best value option in the company’s dWRMP. The need for the scheme has been clearly identified. It will help the company address the supply and demand balance deficit during the 2025-30 price control period and meet the per capita consumption target of 110 l/h/d by 2050. The scheme will build on the company's existing smart metering programme. Company has set out clear outputs and deliverables. We are proposing to impose a price control deliverable that reflects these outputs, ie. 60,000 smart meters installed by 2024-25. To ensure that the scheme is additional to the company's existing PR19 commitments, we are proposing a condition on transition expenditure funding for this investment on the company delivering its PR19 metering programme by 31 March 2025. To ensure that the scheme does not impact on existing performance commitments, the company should exclude the impact of the scheme on leakage and per capita consumption from performance reporting in relation to PR19 performance commitments covering the period from 1 April 2020 to 31 March 2025.		W

A1.2 Water: Northumbrian Water (Essex and Suffolk)

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 1 – New Linford WTWs and Borehole	1.50	12.74	Meets criteria. Detailed design of a 7Ml/d scheme in company's dWRMP preferred programme to be construction ready by 2025. This brings forward delivery by two years to 2027. Essex and Suffolk Water is currently operating a moratorium on accepting applications for new supplies for new manufacturing and processing purposes in its Hartismere zone due to a lack of water availability. This option could provide additional water earlier than planned which would help alleviate the pressure in the area. While we have some concerns about the limited range of alternative options in Essex and Suffolk's dWRMP and whether, in that context, this option represents best value, it has a relatively low unit cost and is therefore likely to be selected against other alternatives. Our price control deliverable requires the company to secure land lease agreements, complete detailed design for a pilot borehole and new treatment works, drill and test a pilot borehole and prepare a groundwater investigation report by December 2024. We provide further details of this in appendix 2.		W
Scheme 2 – Suffolk Strategic Network and Storage	5.00	5.00	Meets criteria. Detailed design and planning, ahead of construction of the Suffolk Strategic Network and Storage pipelines. Brings forward the delivery date of this dWRMP preferred option, which will increase available water supplies in Suffolk. Essex and Suffolk Water currently has a moratorium on new supplies for new manufacturing and processing purposes in its Hartismere Water Resource Zone (WRZ) because it is forecasting a significant increase in new non-domestic demand but new supply schemes will not be developed until 2032. The strategic pipeline allows a transfer of water from the Northern Central WRZ to Blyth WRZ and Hartismere WRZ. Initially, this uses the baseline surplus in that zone ahead of new supply schemes being ready. Price control deliverable is detailed design and planning by March 2025. We provide further detail on this in Appendix 2.		W
Scheme 3 – North Suffolk Winter Storage Reservoir Detailed	3.00	158.80	Significant concerns. Detailed design of North Suffolk Winter Storage Reservoir. Scheme would bring forward the reservoir by two years. This option does not meet the timing criteria to deliver water prior to 2030. The lack of options in Essex and Suffolk's plan as well as the high total cost and unit costs also raises concerns about whether it represents the best value option.		W

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 4 – Lowestoft Reuse Detailed Design	2.00	71.62	Significant concerns. Detailed design of Lowestoft Reuse which is a scheme in the dWRMP24 preferred plan (to be construction ready by 2025). This option does not meet the timing criteria to deliver water prior to 2030. The lack of options in Essex and Suffolk Water's plan as well as the high unit cost also raises concerns about whether it represents the best value option.		W
Scheme 5 – Southend Reuse Detailed Design	2.30	104.99	Significant concerns. Detailed design of Southend Reuse scheme. This option does not meet the timing criteria to deliver water prior to 2030. The option is selected in the high per capita consumption (PCC) adaptive pathway of the company's dWRMP24 to be construction ready by 2025. The selection of the option in the high PCC adaptive pathway and the lack of options in Essex and Suffolk Water's plan also raises concerns about whether it represents the best value option for customers.		V

A1.3 Water: Severn Trent Water

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 1 – Smart metering acceleration	40.66	67.73	Meets criteria. Installation of 250,000 smart meters in customer properties to deliver 11.3 Ml/d in water savings by 2025-26 in an area identified as water stressed. This is an acceleration of a scheme that is a preferred best value option in the company's dWRMP24. The need for the scheme has been clearly identified. It will help the company address the supply and demand balance deficit in future years and meet the per capita consumption target of 110 l/h/d by 2050. The scheme will build on the company's existing smart metering programme. Company has set out clear outputs and deliverables. We are proposing to impose a price control deliverable that reflects these outputs, ie. 250,000 smart meters installed by 2024-25. To ensure that the scheme is additional to the company's existing PR19 and Green Recovery commitments, we are proposing a condition on transition expenditure funding for this investment to the company delivering its PR19 and Green Recovery metering programmes by 31 March 2025. To ensure that the scheme does not impact on existing performance commitments, the company should exclude the impact of the scheme on leakage and per capita consumption from performance reporting in relation to PR19 performance commitments covering the period from 1 April 2020 to 31 March 2025.		W
Scheme 2 - Draycote raise	1.31	2.62	Meets criteria. Accelerated 9 Ml/d dWRMP24 option to raise the level of Draycote reservoir. The scheme is selected across a wide range of pathways in dWRMP24 which gives confidence on the need for investment. The project starts 2023-24 and completes 2025-26 so is within the required timescales for acceleration. The option has a low total cost and unit cost giving confidence that it is a low regrets option. Our price control deliverable requires the company to complete 90% of the feasibility and detailed design work, equivalent to around 50% of the total scheme cost, by 2024-25. We provide further details of this in appendix 2.		W
Scheme 3- Little Eaton	2.26	7.54	Some concerns. Accelerated preferred option from the company's dWRMP24 to increase sustainable output by 5 Ml/d. The scheme is selected across a wide range of pathways in dWRMP24 which gives confidence in the need for investment. The project would start 2023-24 and be in place by 2026-27 which is within the required timescales for acceleration and		W

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
			four years earlier than in the dWRMP24. The option is low cost and relatively low unit cost giving confidence that it is likely to be low regrets. However, the Environment Agency has raised environmental concerns regarding the sustainability of the source water supplying the works resulting in some concerns over the deliverability of the scheme.		
Scheme 4 - Rudyard reservoir	20.40	34.00	Does not meet criteria. Proposed option to link two reservoirs with a raw water pipeline providing 6 MI/d of benefit. The option is outside the current list of options considered in the company's dWRMP24. The lack of comparison against other options, in particular the development outside the dWRMP24, raises significant concerns as to the need for investment and whether it is the best option. Initial options development funding should be delivered through base expenditure and therefore is already funded by customers. The early stage of development of this project raises deliverability and yield risks. The Environment Agency also requires further engagement on potential environmental impacts, and a full assessment of the yield of Rudyard reservoir, adding to deliverability risks.		
Scheme 6 - Rothley reuse	14.25	99.00	Does not meet criteria. Proposed trial/study of an option to transfer 15MI/d of treated effluent into Cropston reservoir. No clear improvement to water resilience in short term to align with accelerated process scope criteria. No quantified need for investment (ie supply risk to customers to be addressed) nor evidence why this is the best option to address it. The dWRMP post intervention supply-demand balance forecast shows moderate surplus so unclear why there is a need for additional investment. The option is taken from the dWRMP24 unconstrained option ahead of significant numbers of better value options. Company presents insufficient evidence why this type of scheme requires a detailed trial when reuse is being developed by other companies.		

A1.4 Water: South West Water

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 2 – Learning from nature	5.00	20.57	Significant concerns. Proposed programme of pond creation and catchment management to address water quality and quantity issues. No quantified need for investment (ie supply risk to customers to be addressed) nor evidence why this is the best option to address it. The proposal is in very early stages of development with the company stating that there will ultimately be links to its WRMP, DWMP and WINEP programmes once further work has been completed. However, no further details or identification of specific schemes that overlap with these programmes was provided.		E
Scheme 4 Colliford Reservoir Storage	9.23	34.60	Some concerns. Proposed option to increase the yield of Colliford Reservoir by 5Ml/d. The option is in the preferred and least cost programme of the company's dWRMP24 with the proposal to accelerate it by one year. However, we have concerns around whether it is the best option. This is because, while it is in South West Water's dWRMP, the plan is poor quality requiring re-submission and the unit cost is relatively high. The Environment Agency has significant concerns about whether the required abstraction from the River Camel, which is a Special Area of Conservation (SAC), would be available as well as a range of environmental risks and likely impacts which adds to our concerns.		W
Scheme 10 – Reuse & desal investigation	1.35	1.35	Does not meet criteria. Proposal to undertake feasibility study for future use of desalination and reuse schemes. No identified improvement to short- or medium-term resilience meaning it fails the scope criteria, nor does the company quantify the need for investment (ie problem to be addressed) nor provide evidence why this is the best option to address it. This would have significant overlap with base funded activities with learning possible from other companies already developing these types of solutions.		
Scheme 11 – Colliford smart metering	5.65	20.99	Meets criteria. Installation of 40,116 smart meters in customer properties to deliver 1.2 Ml/d in water savings by 2025-26 in an area identified as water stressed. This is an acceleration of a scheme that is a preferred best value option in the company's dWRMP24. The need for the scheme has been clearly identified. It will help company address the supply and demand balance deficit in future years and meet the per capita consumption target of 110 l/h/d by 2050. The scheme will build on the company's existing smart metering programme. Company has set out clear outputs and deliverables. We are proposing to impose a price control deliverable that reflects these outputs, ie. 40,116 smart meters installed by 2024-25. To ensure that the scheme is additional to the company's existing PR19 and Green Recovery commitments, we are proposing a condition on transition expenditure funding for this investment on the company delivering its PR19 and Green Recovery metering programmes and obtaining confirmation from Ofwat that the company is on track to deliver		W

			most of its wastewater enhancement programme by 31 March 2025. To ensure that the scheme does not impact on existing performance commitments, the company should exclude the impact of the scheme on leakage and per capita consumption from performance reporting in relation to PR19 performance commitments covering the period from 1 April 2020 to 31 March 2025.		
Scheme 12 – supply pipe leakage	8.51	8.51	Meets criteria. Proposed scheme is to replace 9,670 supply pipes. This is proposed at a slightly higher unit cost than allowed at green recovery (after accounting for different price bases). Proposal has a clearly defined need for investment and deliverables, with a leakage reduction of 1.6Ml/d by end of 2024–25. The similar green recovery scheme assumed ~160 l/d per pipe whilst this proposal is 165 l/d. Not part of current dWRMP24 so has not been compared against alternative options but this was an approved scheme in the green recovery process where we accepted the potential for multiple benefits, especially if synergies explored with lead reduction/metering. To ensure that the scheme does not impact on existing performance commitments, the company should exclude the impact of the scheme on leakage and per capita consumption from performance reporting in relation to PR19 performance commitments covering the period from 1 April 2020 to 31 March 2025. The number of leaking supply pipes replaced and leakage reduction are reflected in the scheme price control deliverables.		V

A1.5 Water: Southern Water

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 1 – Smart/AMI rollout	40.93	160.11	Does not meet criteria. Installation of 175,000 smart meters in customer properties to deliver 4.75 Ml/d in water savings by 2025-26 in an area identified as water stressed. This is an acceleration of a scheme that is a preferred best value option in the company's dWRMP24. Company has spent 31% of its forecast PR19 metering allowance over 2020-22. In response to a query, company confirmed that they are on track to deliver PR19 metering programme albeit with significant complexity and budget risks which are currently being evaluated. Company confirmed that it would require in period funding to take scheme forward. Therefore, scheme does not meet our criteria.		
Scheme 2 Sandown water recycling scheme	35.00	40.50	Does not meet criteria. A PR19 water recycling scheme in the Isle of Wight WRZ. It already has a PR19 funding allocation of £4.47 million. The proposal is to enable the 8.05 Ml/d scheme to be delivered at the end of 2026 only 3 months earlier than currently planned. We have significant concerns about delivery which are shared by the Environment Agency and DWI. Southern Water confirmed that it would require in period funding to take scheme forward. For this reason, it does not meet the criteria.		
Scheme 3 Ford water recycling scheme	66.22	77.00	Does not meet criteria. A PR19 scheme within the Sussex North WRZ. It already has a PR19 funding allocation of £8.82 million. The proposal is to enable the 14.96 Ml/d scheme to be delivered at the end of 2026 only 3 months earlier than currently planned. We have significant concerns about delivery which are shared by the Environment Agency and DWI. Southern Water confirmed that it would require in period funding to take scheme forward. For this reason, it does not meet the criteria.		

A1.6 Water: Thames Water

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 1- Chingford and KGV Pumping Enhancements	1.00	1.00	Significant concerns. Limited information was submitted on how much water would be provided, what the outputs would be and how much it would cost. Querying the company did not resolve this. The lack of detailed information meant that the schemes could not be fully assessed. The Environment Agency has flagged the need for investigation into potential 'no deterioration' risks from abstraction at low flows which raises some concerns around delivery.		
Scheme 2 New River Losses	2.50	2.50	Significant concerns. Limited information was submitted on how much water would be provided, what the outputs would be and how much it would cost. Querying the company did not resolve this. The lack of detailed information meant that the schemes could not be fully assessed. The Environment Agency has flagged the need for assessment and further engagement on in-river improvements and feasibility which raises some concerns around delivery.		
Scheme 3 New river capacity	0.50	0.50	Significant concerns. Limited information was submitted on how much water would be provided, what the outputs would be and how much it would cost. Querying the company did not resolve this. The lack of detailed information meant that the schemes could not be fully assessed. The Environment Agency has flagged the need for assessment and engagement on the impacts of increased dredging required which raises some concerns around delivery.		
Scheme 4 Littleton Permanent Pumps	2.70	2.70	Significant concerns. Limited information was submitted on how much water would be provided, what the outputs would be and how much it would cost. Querying the company did not resolve this. The lack of detailed information meant that the schemes could not be fully assessed. The Environment Agency has flagged the need for assessment and further engagement regarding the impact of increased abstraction at low flows and deterioration risks which raises some concerns around delivery.		

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 5 QE2 Reservoir Low Level Pumps	1.50	1.50	Significant concerns. Limited information was submitted on how much water would be provided, what the outputs would be and how much it would cost. Querying the company did not resolve this. The lack of detailed information meant that the schemes could not be fully assessed. The Environment Agency has flagged the need for assessment and engagement on the potential water quality impact from abstraction of lower levels of reservoir water which raises some concerns around delivery.		
Scheme 6 Teddington Weir Backpumping	3.00	3.00	Significant concerns. This scheme is not part of Teddington DRA (RAPID solution London Reuse). Limited information was submitted on how much water would be provided, what the outputs would be and how much it would cost. Querying the company did not resolve this. The lack of detailed information meant that the schemes could not be fully assessed. The Environment Agency has significant concerns regarding depleted dilution of Mogden STW and reduced fresh water flow into the tidal Thames and raises potential issues from a depleted reach and questions around yield which raises significant concerns around delivery.		
Scheme 7 Hoddeston Transfer scheme	5.00	5.00	Significant concerns. Limited information was submitted on how much water would be provided, what the outputs would be and how much it would cost. Querying the company did not resolve this. The lack of detailed information meant that the schemes could not be fully assessed. The Environment Agency raises the need for assessment and engagement regarding environmental concerns which raises some concerns around delivery.		
Scheme 8 Deephams Reuse (Drought Scheme)	3.00	3.00	Significant concerns. Limited information was submitted on how much water would be provided, what the outputs would be and how much it would cost. Querying the company did not resolve this. The lack of detailed information meant that the schemes could not be fully assessed. The Environment Agency raises concerns around the impact of the scheme on the lower Lee which raises some concerns around delivery.		
Scheme 15 – Transfer raw water from Hampton AWTW to King George RWSTR (Via Thames Lee Tunnel)	Not provided	Not provided	Does not meet criteria. Lack of scheme details to make an assessment, even after querying. Information provided demonstrates scheme is in early-stage development with Thames Water commenting that it is ‘to be developed as part of the next phase of the solution development’ across all criteria.		

A1.7 Water: United Utilities

Scheme	Cost 2022-25 (£m)	Total cost (£m)	Assessment	Overall	WRMP/ WINEP
Scheme 1 – HH Smart metering	39.60	39.60	Some concerns. Installation of 100,000 smart meters in household properties to deliver 6.9 Ml/d in water savings by 2025-26. This is an acceleration of a scheme that is a preferred best value option in the company's dWRMP24. The company has identified AMI metering as the optimal metering technology. This represents a change in position with respect to United Utilities' Green Recovery proposals (submitted in 2020) where company identified AMR metering as optimal technology. Company presented evidence on the costs and benefits of AMI relative to AMR which informed its choice of meter technology. The evidence however suggests that the AMI metering proposal would not deliver benefits that outweigh the incremental costs of the investment. Company also presented unit costs which are materially higher than those presented by other companies as well as those allowed for at PR19 and Green Recovery. We are therefore not confident that the scheme submitted by the company is the best option. The company should further develop its analysis of the costs and benefits of AMI metering in time to inform its final WRMP. The company can accelerate scheme at its own risk and get transition funding if scheme is included in final WRMP24.		W
Scheme 2 – NHH Smart metering	11.17	11.17	Significant concerns. Installation of 50,000 smart meters in non-household properties to deliver 2.1 Ml/d in water savings by 2025-26. This is an acceleration of a scheme that is not a preferred option in the company's dWRMP24. Company explained that this scheme is not included in dWRMP24 best value plan because their planning process for dWRMP24 did not consider wider customer-related benefits associated with non-household smart metering. It also explained that it is currently working in incorporating these wider benefits into its final WRMP24. This suggests that company is still developing its options and firming up its view about what the best option for final WRMP24 is. We therefore have significant concerns about whether the scheme submitted by the company is the best option.		V
Scheme 6 New Water Sources	9.50	65.92	Significant concerns. Proposed accelerated delivery of four new groundwater source options identified in the dWRMP, two of which are part of the North West transfer RAPID solution. Does not meet criteria on deliverability as accelerating the timeline is dependent on an assumption that an Environmental Impact Assessment (EIA) would not be required and discussion with the Environment Agency indicates this is not the case. The Environment Agency would require full environmental assessment (SEA, HRA and WFD) alongside further engagement across environmental regulators as well as significant monitoring and modelling to confirm the option is feasible, particularly focused on deterioration risk. We have concerns around the justification for moving Aughton Park borehole forward from 2060 (which is when it is		W

Scheme	Cost 2022-25 (£m)	Total cost (£m)	Assessment	Overall	WRMP/ WINEP
			<p>selected in the dWRMP) to 2028-29 and whether this is the best option in that context. The total cost is high so it needs a high level of confidence it is the right investment and the information provided by United Utilities to date does not provide that level of confidence.</p>		

A1.8 Water: Wessex Water

Scheme	Cost 2022-25 (£m)	Total cost (£m)	Assessment	Overall	WRMP/ WINEP
Scheme 1 - Corfe Mullen Yield	3.00	3.00	Significant concerns. Proposed 3Ml/d peak output increase through removal of asset constraints to utilise full abstraction licence. No quantified need for investment (ie supply risk to customers to be addressed) nor evidence why this is the best option to address it. The scheme does not feature in the current dWRMP meaning no comparable alternative options are presented and appraised. Potential for proposed work to be part of currently funded base maintenance activities to enable assets to be available and reliable as required.		V
Scheme 2 – Dewlish turbidity	1.50	1.50	Significant concerns. Proposed new filtration process to avoid 1.5Ml/d peak supply restriction during drought. Company confirmed that studies are currently being undertaken to identify the optimal turbidity removal technology. No quantified need for investment (ie supply risk to customers to be addressed) nor evidence why this is the best way of addressing it (the scheme does not feature in the current dWRMP24). Potential for proposed work to be part of currently funded base maintenance activities to enable assets to be reliable as required. Scheme withdrawn by Wessex Water February 2023 and the company is considering including it as part of its DWI PR24 programme.		V
Scheme 3 – Oakford Fitzpaine Resurrection of Source	0.60	1.50	Significant concerns. Proposed 1.3Ml/d peak output increase by reinstating source through installation of abstraction and treatment assets. This proposal is a cheaper and faster temporary solution (delivering in five years rather than ten) than the permanent option rejected in the dWRMP. No quantified need for investment (ie supply risk to customers to be addressed) nor evidence why this is the best option to address it.		V
Scheme 4 – Wellhead Resurrection of Source	0.80	2.00	Does not meet criteria. Proposed 1.5 Ml/d peak output increase by reinstating source through installation of abstraction and treatment assets. This is a rejected dWRMP scheme primarily due to environmental concerns confirmed by the Environment Agency, raising concerns about it meeting the scope and being clearly uncontroversial. No quantified need for investment (ie supply risk to be addressed) nor evidence why this is the best option to address it. The scheme does not feature in the current dWRMP meaning no comparable alternative options are presented and appraised.		

Scheme	Cost 2022-25 (£m)	Total cost (£m)	Assessment	Overall	WRMP/ WINEP
Scheme 5 - Bowden to Devizes Transfer	5.52	13.80	<p>Significant concerns. Proposed 8Ml/d transfer provided through installation of new main to increase capability to transfer by 5Ml/d. Current preferred dWRMP option with acceleration aiming to deliver in 2028 (seven years earlier). Within the dWRMP the option does not provide water available for use (WAFU) benefit to the supply-demand balance meaning the dWRMP process cannot be relied on for justification of need or best option assessment. Therefore, there is no quantified need for investment (ie supply risk to customers to be addressed) nor evidence why this is the best option to address it. This option aims to replace a current transfer main in a deteriorated condition meaning the proposal would be expected to include significant overlap with currently funded base maintenance activities to enable assets to be available and reliable as required. For its final WRMP the company should provide sufficient and convincing evidence of additionality eg. why the issues being highlighted should not already have been addressed through historical expenditure allowances (both enhancement and base).</p>		W
Scheme 6 - Pewsey Resilience Figcheldean	0.83	2.50	<p>Significant concerns. Proposed new pipeline alongside the routing of an existing pipeline with new valve complex to increase capability to transfer water by 2 Ml/d. Current preferred dWRMP option to be implemented seven years ahead of the proposed delivery time in dWRMP24. Within the dWRMP the option does not provide water available for use (WAFU) benefit to the supply-demand balance meaning the dWRMP process cannot be relied on for justification of need or best option assessment. Therefore, there is no quantified need for investment (ie supply risk to customers to be addressed) nor evidence why this is the best option to address it. For its final WRMP the company should provide sufficient and convincing evidence of additionality eg. why the issues being highlighted should not already have been addressed through historic allowances (both enhancement and base).</p>		W
Scheme 7 - Bristol to North Bath Transfer	0.64	1.60	<p>Significant concerns. Bristol to North Bath Transfer consisting of three new pumps and a valve complex able to improve the Bath distribution system and transfer 2.5 Ml/d between the North Grid zone and North zone by 2028. Current preferred dWRMP option, to be implemented seven years ahead of the proposed delivery time in dWRMP24. Within the dWRMP the option does not provide water available for use (WAFU) benefit to the supply-demand balance meaning the dWRMP process cannot be relied on for justification of need or best option assessment. Therefore, there is no quantified need for investment (ie supply risk to customers to be addressed) nor evidence why this is the best option to address it. For its final WRMP the company should provide sufficient and convincing evidence of additionality eg. why the issues being highlighted should not already have been addressed through historic allowances (both enhancement and base).</p>		W

Scheme	Cost 2022-25 (£m)	Total cost (£m)	Assessment	Overall	WRMP/ WINEP
Scheme 8 – smart metering	49.28	165.82	<p>Significant concerns. Installation of 181,986 smart meters in customer properties to deliver 7.5 MI/d in water savings by 2024-25 in an area identified as water stressed. This is an acceleration of a scheme that is not included in the company's preferred plan in the dWRMP. The preferred metering option in the company's dWRMP is to implement a smart metering trial which involves the installation of 27,000 smart meters. The scheme submitted by the company proposes to implement universal smart metering, with 600,000 AMI smart meters to be installed by 2030. The company's dWRMP24 does consider a larger scale smart metering rollout option but this identifies AMR as the optimal meter technology. The company accepted that it has not conducted a full cost-benefit analysis of the acceleration scheme. We therefore have significant concerns that the proposed scheme is not the best option. Company should further develop its analysis of the costs and benefits of smart metering and the different smart metering technologies in time to inform its final WRMP. Company will be able to accelerate scheme at its own risk and get transition funding if scheme is included in final WRMP.</p>		V

A1.9 Water: Yorkshire Water

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 1 - New groundwater supply and water treatment works - Brayton borehole	4.53	23.87	Some concerns. Proposed new groundwater supply and water treatment works. Work would start in 2023 and would complete in 2024-25. Company provides insufficient evidence of additionality raising some concerns that the proposed work, or part of the proposed work, should have been taken forward using funding provided previously. Yorkshire Water has not provided sufficient and convincing evidence that it has considered a large enough number or wide enough range of feasible options in its dWRMP. We therefore have some concerns about whether this scheme is the best value option for customers. We also have some concerns around certainty of delivery because of risks including potential delays or objections to licence application and planning permissions. The scheme would also require groundwater investigation consents and test pumping which increases the uncertainty around delivery.		W
Scheme 2 - magnesium limestone near Doncaster	2.61	37.69	Some concerns. Proposed new groundwater abstraction near Doncaster. Work would start in 2023 and would complete in 2027-28. This scheme is selected in Yorkshire Water's preferred dWRMP. However, we have some concerns about whether this scheme is the best value option for customers because Yorkshire Water has not provided sufficient and convincing evidence that it has considered a large enough number or wide enough range of feasible options in its dWRMP. We also have some concerns around certainty of delivery because of risks including potential delays or objections to licence application and planning permissions. The Environment Agency raises uncertainty around environmental impacts and links with nearby surface waters that will require investigation and could lead to additional constraints on the scheme which increases the uncertainty around delivery.		W
Scheme 3 - New groundwater supply and water treatment works - Marton-cum-Grafton SRE	11.00	56.73	Some concerns. New groundwater supply and treatment works. This option has a minimum three year lead time that is dependent on a new abstraction licence being granted and the deployable output benefit is available from 2027-28. This option includes water treatment works so the unit cost is higher than other Yorkshire Water schemes. This scheme is selected as an option in Yorkshire Water's preferred plan and highlighted in the dWRMP. However, we have some concerns about whether this scheme is the best value option for customers because Yorkshire Water has not provided sufficient and convincing evidence that it has considered a large enough number or wide enough range of feasible options in its dWRMP. We also have some concerns around certainty of delivery because of risks including potential		W

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
			delays or objections to licence application and planning permissions. The scheme would also require groundwater investigation consents and test pumping and the Environment Agency raises uncertainty around environmental impacts which increases the uncertainty around delivery.		
Scheme 4 New groundwater supply and water treatment works - Sherwood Sandstone support to grid	21.86	211.48	Some concerns. New groundwater supply and treatment works. This option has a minimum 4-year lead time that is dependent on a new abstraction licence being granted. It would be started in 2023-4 and the DO benefit would be available from 2028-29. This scheme is selected as an option in Yorkshire Water's preferred plan and highlighted in the draft WRMP as an option that can be started in AMP7 to resolve a near-term deficit. However, we have some concerns about whether this scheme is the best value option for customers because Yorkshire Water has not provided sufficient and convincing evidence that it has considered a large enough number or wide enough range of feasible options in its draft WRMP. We also have some concerns around certainty of delivery because of risks including potential delays or objections to licence application and planning permissions. The scheme would also require groundwater investigation consents and test pumping, and the Environment Agency cites past issues with abstraction proposals from the Sherwood Sandstone, which increases the uncertainty around delivery.		W
Scheme 5 – Smart metering	42.46	43.34	Some concerns. Installation of 186,116 smart meters in customer properties to deliver 6.0 Ml/d in water savings by 2025-26 and 7.2 Ml/d by 2028/29. This is an acceleration of a scheme that is a preferred best value option in the company's dWRMP. The company resubmitted its acceleration proposal. Company expects to reduce water demand by 7.2 Ml/d at a cost of £5.9 million per Ml/d. By contrast, the original proposal expected water savings of 20.3 Ml/d at a cost of £2.8 million per Ml/d. This is less than half the unit cost presented in the revised proposal. In addition, we have concerns that the company has not yet fully exhausted all lower cost options (such as pressure management) to address its supply-demand balance deficit and leakage target. The company confirmed that it is still developing its leakage plan for PR24 and that it cannot provide details of the costs and benefits of the leakage options included in its dWRMP24. We are therefore not confident that the proposed smart metering scheme is the best option. Company should further develop its demand management strategy (including the costs and benefits of its leakage and metering options) for final WRMP24. Company will be able to accelerate proposed smart metering scheme at its own risk and get transition funding if scheme included in final WRMP.		W

A1.10 Water: Affinity Water

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 1 – Hatton Cross 2 Booster pumping station	2.27	6.80	Some concerns. Scheme including 3.3 km of trunk main and a 13 Ml/d booster pumping station. The delivery of this scheme is proposed to be brought forward by two years compared to initial plans set out in dWRMP24 (2026 instead of 2028). The scheme is a preferred solution in dWRMP24 however we have raised concerns about Affinity Water's dWRMP in our consultation response including concerns relating to options sufficiency meaning we do not have full confidence it represents the best option. There are complex dependencies between Affinity Water schemes 1-5 which raise some concerns about the outputs each would achieve. Although this option appears to have a low unit cost it is unlikely that this can be realised independently of the other schemes proposed. Supporting schemes AFW 1-5 would significantly raise the unit cost which does not give us confidence to support this option for acceleration.		W
Scheme 2 – Connect 2050 – Ickenham to Harrow TM and New BPS	6.35	27.00	Some concerns. Proposed scheme delivering 9km of trunk main and a 21Ml/d booster pumping station plus civils, power and surge protection to allow for 30Ml/d (required by 2050). The delivery of this scheme is brought forward by two years to 2028 from dWRMP24. The scheme is a preferred solution in dWRMP however we have raised concerns about Affinity Water's dWRMP in our consultation response including concerns relating to options sufficiency meaning we do not have full confidence it represents the best option. There are also complex dependencies between Affinity Water schemes 1-5 which raises some concerns about the outputs each would achieve. Although this option appears to have a low unit cost it is unlikely that this can be realised independently of the other schemes proposed. Supporting schemes AFW 1-5 would significantly raise the unit cost which does not give us confidence to support this option for acceleration.		W

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 3 – Increase DO Chertsey/Walton	0.40	4.50	Some concerns. Scheme to provide an additional 40MI/d treatment capacity provided across two sites (Chertsey and Walton) by 2027. The proposal is to bring forward the delivery of this scheme by 2 years (2027 instead of 2029). This is based on a 5-year delivery programme. The scheme is a preferred solution in dWRMP24 however we have raised concerns about Affinity Water's WRMP in our consultation response including concerns relating to options sufficiency meaning we do not have full confidence it represents the best option. There are also complex dependencies between Affinity Water schemes 1-5 which raises some concerns about the outputs each would achieve. Although this option appears to have a low unit cost it is unlikely that this can be realised independently of the other schemes proposed. Supporting schemes AFW 1-5 would significantly raise the unit cost which does not give us confidence to support this option for acceleration.		W
Scheme 4 – Midway North BPS upgrade	0.85	1.00	Some concerns. Midway North Booster Pumping Station upgrade is a PR19 scheme still on track to deliver 17MI/d transfer capacity by 2025 that could be enhanced to deliver an additional 8 MI/d transfer capacity by 2026 (totalling 25 MI/d). The additional £0.85 million is to cover the net cost difference between the two schemes (17MI/d at Midway North vs. 25MI/d at Stanwell Moor (new booster location)). We have some concerns about timing as there is not an acceleration from the original PR19 delivery date, however an additional 8MI/d would follow a year after the PR19 planned output. In the dWRMP24 this scheme is part of the preferred 50MI/d Egham to Iver Transfer scheme delivering 38 MI/d by 2029. There are complex dependencies between Affinity Water schemes 1-5 which raises some concerns about the outputs each would achieve. Although this option appears to have a low unit cost it is unlikely that this can be fully realised independently of the other schemes proposed. Supporting schemes AFW 1-5 would significantly raise the unit cost which does not give us confidence to support this option for acceleration.		W
Scheme 5 – Transfer water from Egham to Harefield including BPS upgrade	5.09	52.31	Some concerns. Transfer from Egham to Harefield including booster pumping station upgrade that is in the dWRMP24 as part of the preferred 50MI/d Egham to Iver Transfer scheme planned to deliver 38 MI/d by 2029. The planned acceleration will bring the delivery of the scheme forward by one year to 2028 which is only a modest acceleration that could be lost through slippage raising some concerns on timing. The dWRMP24 scheme builds on the WRMP19/PR19 17MI/d Egham to Iver scheme by 2025 which Affinity is still planning to deliver so net DO benefit is 21MI/d. Unit cost is relatively low, however it is a high overall cost and dependencies on AFW 1-4 could increase the unit cost further and raise some concerns about outputs. Given concerns we have expressed about Affinity Water's dWRMP, including concerns about options sufficiency, we are not confident it is the best option and do not support it for acceleration.		W

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 6 – Harefield to Oxhey and Oxhey to Bushey	1.38	1.38	Some concerns. Scheme is to increase strategic transfer capacity and was selected for AMP11 in the dWRMP24 as part of Affinity’s Connect 2050 plan, brought forward to 2024. There is some uncertainty over water resource benefit to Colne WRZ to meet 2029 demand and inconsistency between the submission and the query response. This suggests there is uncertainty around water resources benefit / outputs. The unit cost is relatively low, however this is based on uncertain outputs and is likely to be dependent on other Connect 2050 schemes. Given the information provided and the concerns we have expressed relating to Affinity Water’s WRMP, we are not confident it is the best option. This concern is exacerbated by the significant acceleration, which raises questions whether it is the best option at this time, and the ambiguity around outputs.		W
Scheme 7 – Smart metering	9.00	9.00	Meets criteria. Installation of 20,000 smart meters in customer properties to deliver 1.5 Ml/d in water savings by 2025-26 in an area identified as water stressed. This is an acceleration of a scheme that is a preferred best value option in the company’s dWRMP24. The need for the scheme has been clearly identified. It will help company address the supply and demand balance deficit in future years and meet the per capita consumption target of 110 l/h/d by 2050. Company has set out clear outputs and deliverables. We are proposing to impose a price control deliverable that reflects these outputs, ie. 20,000 smart meters installed by 2024-25. To ensure that the scheme is additional to the company’s existing PR19 commitments, we are proposing a condition on transition expenditure funding for this investment on the company delivering its PR19 metering programme and obtaining confirmation from Ofwat that the company is on track to deliver most of its waster enhancement programme by 31 March 2025. To ensure that the scheme does not impact on existing performance commitments, the company should exclude the impact of the scheme on leakage and per capita consumption from performance reporting in relation to PR19 performance commitments covering the period from 1 April 2020 to 31 March 2025.		W
Scheme 8 – Broome (NO₃)	0.40	5.00	Meets criteria. Delivery of accelerated detailed design and planning permissions by end of 2024-25, leading to construction of nitrate (NO ₃) treatment plant delivering in 2027-28. Clear need for investment to meet water quality risks with the DWI to support with a legal instrument. Although there is only limited evidence of option appraisal it is considered low risk/regret especially given relatively low unit costs to secure 2.5 Ml/d of annual average deployable output and 4.5 Ml/d peak week output. The price control deliverables reflect the peak and annual average outputs from the delivery of the overall scheme and the proportion of scheme delivery that the design and planning activity during this price review period.		

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 9 – Kingsdown (NO₃)	0.40	5.00	Meets criteria. Delivery of accelerated detailed design and planning permissions by end of 2024-25, leading to construction of nitrate (NO ₃) treatment plant delivering in 2026-27. Clear need for investment to meet water quality risks with the DWI to support with legal a instrument. Although there is only limited evidence of option appraisal it is considered low risk/regret especially given relatively low unit costs to secure 3.17 Ml/d of annual average deployable output and 3.7 Ml/d peak week output. The price control deliverables reflect the peak and annual average outputs from the delivery of the overall scheme and the proportion of the scheme delivery that the design and planning activity during this price review Period.		
Scheme 10 – Holywell (PFOS)	0.25	0.45	Meets criteria. Replacement and reinstatement of granular activated carbon filter media treatment process to meet rising PFOS challenge by the end of 2025-26. Clear need for investment to meet water quality risks with the DWI to support with a legal instrument. Although there is only limited evidence of option appraisal it is considered low risk/regret especially given low unit costs to secure 20.46 Ml/d peak week output. The price control deliverables reflect the filter replacement profile and peak outputs.		
Scheme 11 – Egham WTW	4.00	24.00	Does not meet criteria. Existing DWI legal instrument for improvement is in-place (post PR19) and work has commenced in AMP7 that will continue into AMP8 at this major surface water treatment works. AMP7 costs are covered as part of PR19 settlement and not an acceleration in AMP7. Any proposals for possible enhancement expenditure may be part of DWI PR24 programme.		
Scheme 12 – Iver WTW	6.00	40.00	Does not meet criteria. Existing DWI legal instrument for improvement is in-place (post PR19) and work has commenced in AMP7 that will continue into AMP8 at this major surface water treatment works. AMP7 costs are covered as part of PR19 settlement and not an acceleration in AMP7. Any proposals for possible enhancement expenditure may be part of DWI PR24 programme.		
Scheme 13 – Network calming	5.02	55.00	Some concerns. Proposal to install 662 new pressure reducing valve (PRV) controllers and 37 new PRVs (with intelligent controllers). Company states that this will deliver 238 less main repairs and 0.5Ml/d leakage saving by 2025-26. Proposed scheme only has partial alignment with the company's dWRMP24 demand management option. The leakage unit costs are very high so some concerns as to whether this is the best option. The company outperforming on its PR19 mains repairs performance commitment, meaning some concerns about need for investment requiring additional funding from customers to do more.		V

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 14- Uttlesford Bridge	8.27	61.70	Some concerns. Uttlesford Bridge is part of Affinity Water’s Connect 2050 plan and was selected for AMP11 in the dWRMP24. The proposal is to bring it forward to deliver 16Ml/d benefit in 2029 to increase water resilience in the Stort WRZ when the Uttlesford Bridge pumping station is turned off due to AMP8 sustainability reductions. This scheme will produce an additional WAFU of 16Ml/day and storage of 20MI for WRZ5 (Stort). There is no additional DO as this is an internal transfer scheme. The unit cost is not unusually high, however, it has a high overall cost. Given the concerns we have raised on Affinity Water’s WRMP, we are not sufficiently confident that this is the best option. This concern is exacerbated by the significant acceleration which raises some concerns about whether it is the best option at this time.		
Scheme 15 – Biodiversity	0.50	1.01	Significant concerns. Proposed implementation of approved land management plans developed as part of PR19 WINEP. Without acceleration delivery likely to be through PR24 WINEP. Company states the benefits will be to improve raw water quality and water resource yields but without quantifying these (ie no quantified benefit to water resilience). Provided biodiversity metric benefits using old Defra tool that will be updated, but at present would be unable to track outputs consistently for PR24.		E
Scheme 16 – Borehamwood Transfer	2.00	2.00	Significant concerns. Proposal to improve resilience if Anglian Water and/or Thames Water imports are reduced. However, the risk associated with these imports is not quantified, and therefore the need for investment is not clear. There is no clear optioneering to identify whether this is the best option. The scheme provides cost savings to Affinity Water so could be progressed through base as spend to save.		W
Scheme 17 – Temple End Turbidity	0.75	0.75	Some concerns. New filtration to avoid prolonged run to waste. 0.67 Ml/d water available for use increase from 2024-25, minimises Anglian Water import and therefore Affinity Water opex costs. No clear or quantified need assessment or why this is best option for addressing these needs. DWI to support with revision to existing legal instrument with delivery in AMP7. AMP7 costs are covered as part of PR19 settlement and not an acceleration in AMP7.		V
Scheme 18 – Stortford WQ (NO₃)	1.94	1.94	Meets criteria. Delivery of blending solution in AMP7 to safeguard 2.69 Ml/d annual average deployable output by the end of 2024-25. Clear need for investment to meet water quality risks with the DWI to support with a legal instrument. No evidence of alternative options under consideration but blending considered best value industry option when feasible to do so. The price control deliverables reflect the annual average deployable output, resilience need and domestic properties receiving an improved security of supply.		


A1.11 Water: Bristol Water (now a part of South West Water)

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 5 - Honeyhurst Raw Water Transfer	4.79	4.79	Significant concerns. 2.8Ml/d raw water transfer option to start 2023-24 and complete March 2025. Primarily focused on reducing algal bloom risk in Cheddar reservoir. Some concerns about whether it is in scope because it is not needed to address a specific supply-demand balance deficit. Significant concerns about need for investment and whether it is the best option because it is not compared against other similar options for best value analysis.		
Scheme 6 - Sherborne Raw Water Transfer	0.84	0.84	Significant concerns. 3.5Ml/d raw water transfer option to start 2023-24 and complete 2025-26. Primarily focused on reducing algal bloom risk in Chew Valley reservoir. Some concerns about whether it is in scope because it is not needed to address a specific supply / demand deficit. Significant concerns about need and whether it is the best option because it is not compared against other similar options for best value analysis.		
Scheme 7 - Cheddar 2 Reservoir Advance Works	19.80	19.80	Does not meet criteria. Advance works for Cheddar 2 reservoir. This option is purely feasibility and design work – no water would be delivered until 2035 which puts it out of scope. Design work has already been funded at £4.9 million at PR19 and is progressing through the RAPID process. Cheddar 2 has been considered but not selected in relevant WRMPs meaning criteria are not met on need and whether it is the best option. Water companies set to benefit from the water, such as Wessex, are not clear on their need for it adding to concerns on need. Timeline, and Environment Agency concerns including potential impacts on peatlands and reductions to flows, raise issues with deliverability.		
Scheme 8 – WQ monitoring	1.03	1.03	Does not meet criteria. Not a new scheme, expansion of existing small scale innovation scheme. No quantifiable resilience benefits nor alternatives explored.		
Scheme 9 - Resource West	1.45	1.45	Significant concerns. Proposed collaborative water efficiency project with National Grid and Wales and West Utilities. Although company clearly defines scheme outcomes (eg. per capita consumption reduction of 0.35 l/h/d by 2024-25 and 0.7 l/h/d by 2027-28), it is unclear why this scheme was chosen as the best option as it is effectively a large trial and not in the company's dWRMP24. The company is currently off track in its delivery of its PR19 per capita consumption performance commitment meaning this is an activity the company should be considering delivering in period without further customer funding. .		V

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 13 – supply pipe leakage	0.98	0.98	Meets criteria. Proposed scheme to replace 1,000 supply pipes. We note that this a higher cost than South West Water's similar scheme funded at green recovery. Clearly defined need and deliverables in terms of leakage reduction (0.25Ml/d by end of 2024-25). This equates to 250l/d per pipe replaced, better than South West Water's benefit per pipe in green recovery. Scheme is not part of the current dWRMP24 so not compared against alternative options but similar to an approved scheme in South West Water's green recovery process which noted multiple benefits especially if synergies explored with lead reduction. To ensure that the scheme does not impact on existing performance commitments, the company should exclude the impact of the scheme on leakage and per capita consumption from performance reporting in relation to PR19 performance commitments covering the period from 1 April 2020 to 31 March 2025. The number of leaking supply pipes replaced and leakage reduction are reflected in the scheme price control deliverables.		V
Scheme 14 – Bristol smart metering	2.99	2.99	Significant concerns. Installation of 20,000 smart meters in customer properties to deliver 0.5 Ml/d in water savings by 2024-25. This is an acceleration of a scheme that is <u>not</u> a preferred best option in the company's dWRMP24. Company is proposing to install AMI meters to mirror South West Water's metering strategy. Company however identified the installation of AMR meters (which are less smart and cheaper than AMI) as preferred option in dWRMP24. Therefore, we have significant concerns that the scheme submitted by the company is not the best option. Company will be able to accelerate scheme if included in final WRMP24.		V
Scheme 15 – Lead supply pipes	1.72	1.72	Meets criteria. Extension of South West Water's green recovery lead supply pipe replacement trial to Bristol Water's area by end of 2024-25. DWI to support with a legal instrument. No quantifiable resilience benefits but likely to have associated benefits when combined with scheme 13 (see further comments above). The number of external and internal lead supply pipes replaced are reflected in the scheme price control deliverables.		

A1.12 Water: Portsmouth Water

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 1 - Universal smart metering	11.55	119.81	Meets criteria. Installation of supporting smart infrastructure and the running of a smart trial involving the installation of 500 smart meters in Hampshire and West Sussex. This is an acceleration of a scheme that is a preferred best value option in the company's dWRMP24. The scheme will initially focus on accelerating investment on supporting infrastructure which will enable the use of smart meters early in the 2025-30 period. This supporting infrastructure includes meter data management system, cloud storage infrastructure, software purchasing and system implementation and integration. The scheme will allow company to bring forward 2.5 Ml/d in water savings by the end of 31 March 2030 in an area identified as water stressed. The need for the scheme has been clearly identified. It will help company address the supply and demand balance deficit in future years and meet the per capita consumption target of 110 l/h/d by 2050. Company has set out clear outputs and deliverables. We are proposing to impose a price control deliverable that reflects these outputs, ie. installation of supporting smart infrastructure and 500 smart meters by 2024-25. To ensure that the scheme is additional to the company's existing PR19 commitments, we are proposing a condition on transition expenditure funding for this investment on the company delivering its PR19 metering programme by 31 March 2025. We do not expect scheme to have a material impact on the company's leakage and per capita consumption performance in relation to PR19 performance commitments covering the period from 1 April 2020 to 31 March 2025. The efficiency of costs of the scheme will be assessed as part of our PR24 review process and will consider the costs proposed by other companies for similar activities, amongst other factors.		W
Scheme 2 - Change of occupancy metering	1.82	1.82	Does not meet criteria. Installation of 5,600 basic meters to deliver water savings of 0.3 Ml/d by 2024-25. This is a scheme that is not part of the company's dWRMP24. It is an extension of the company's PR19 metering programme which the company is proposing to discontinue in its dWRMP24. Company is now moving towards a smart metering strategy as set out in its dWRMP24. The company's dWRMP24 therefore suggests that the acceleration scheme is not the best option. We are also concerned that the scheme has the risk of abortive costs due to the company's plans to replace basic meters with smart meters. Company is also behind on its PR19 metering programme but said it has a plan to deliver it by the end of regulatory period.		

<p>Scheme 3 - Maindell & Slindon drought</p>	<p>2.37</p>	<p>2.37</p>	<p>Some concerns. Proposed installation of mobile ultraviolet unit to address cryptosporidium risks and provides additional water supplies increasing peak capacity. Although the stated benefits are 1.5Ml/d at Maindell and 10 Ml/d at Slindon in terms of peak week 1-in-200 deployable output, there is no quantified need for investment (ie supply risk to customers to be addressed) beyond the schemes in the dWRMP. Although the unit cost of delivery is reasonable, as this is only a temporary solution there are risks that on this basis it is not cost effective. The Environment Agency has concerns about drought permit yield and require further evidence on environmental monitoring and mitigation.</p>		<p>V</p>
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A1.13 Water: South East Water

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 1 - Challock Borehole Resilience	3.50	3.50	Some concerns. Two new boreholes in order to achieve maximum site output. Main PR19 funded schemes will support area by 2025, but this scheme will give maximum supply in the interim (for one year). The risk (likelihood of occurrence) is not quantified and therefore the need for investment is not clear. The scheme was not included in dWRMP so has not been included in WRMP options appraisal or best value plan assessment and therefore it is not clear that this is the best option.		
Scheme 2 - Faversham Resilience Main	4.50	4.50	Some concerns. Sub-zonal scheme not providing a benefit to zonal supply-demand balance. Company should provide sufficient and convincing evidence that none of the issues being highlighted should already have been addressed through historic allowances (both enhancement and base). To support the company in making its case for additional investment, if this is a supply demand balance enhancement issue, the water resource zone integrity should be reassessed and re-zoned and then the scheme assessed as part of the WRMP24 with full options appraisal. If not, it may be a scheme to address interruptions to supply risk, and given South East Water's poor performance against target (expected to be delivered through base) it would require further justification to be considered as a resilience enhancement scheme at PR24.		V
Scheme 3 – Barcombe WTW	7.07	9.07	Does not meet criteria. Existing DWI legal instrument for improvement is in-place (post PR19) and work has commenced in AMP7 that will continue into AMP8 at this major surface water treatment works. AMP7 costs are covered as part of PR19 settlement and not an acceleration in AMP7. Any proposals for possible enhancement expenditure may be part of DWI PR24 programme.		

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 4 - Tonbridge Flood Defence	0.65	0.65	<p>Some concerns. The scheme addresses flood resilience, as opposed to contributing directly to the supply-demand balance as defined by the WRMP which the Defra criteria on scope focussed on. We therefore assessed the scheme against the PR24 requirements for enhancement.</p> <p>While there is evidence of site flooding, the impact on customers is not defined (e.g. interruptions to supply), therefore the need for investment is not clear. In addition, there is no assessment of cost/benefit or best value assessment, so there are some concerns as to whether this is the best option.</p>		
Scheme 5 – Detling Resilience Main	4.40	4.40	<p>Some concerns. Sub-zonal scheme not providing a benefit to zonal supply-demand balance. Company should provide sufficient and convincing evidence of additionality e.g. that none of the issues being highlighted should already have been addressed through historic allowances (both enhancement and base). To support the company in making its case for additional investment, if this is a supply demand balance enhancement issue, the water resource zone integrity should be reassessed and re-zoned and then the scheme assessed as part of the WRMP24 with full options appraisal. If not, it may be a scheme to address interruptions to supply risk, and given South East Water's poor performance against target (expected to be delivered through base) it would require further justification to be considered as a resilience enhancement scheme at PR24.</p>		W
Scheme 6 – Accelerated NO₃ plant designs	1.70	1.70	<p>Significant concerns. Delivery of three outline designs/feasibility for nitrate treatment with planning and land issues identified by end of AMP7 to allow construction to commence earlier in AMP8. Need for investment and best option is not clearly quantified or defined (blend or treatment). Query asked company to commit to detailed design and planning by 2024-25 but response is vague and non-committal. Unclear what the outputs from the investment will be. Any proposals for possible enhancement expenditure may be part of DWI PR24 programme.</p>		
Scheme 7 - Sub-zonal (7 schemes) accelerated design	2.60	Excl.	<p>Significant concerns. Sub-zonal schemes not providing a benefit to zonal supply-demand balance. Company should provide sufficient and convincing evidence of additionality e.g. that none of the issues being highlighted should already have been addressed through historic allowances (both enhancement and base). To support the company in making its case for additional investment, if these are supply demand balance enhancement issues, the water resource zone integrity should be reassessed and re-zoned and then the schemes assessed as part of the WRMP24 with full options appraisal. If not, they may be schemes to address interruptions to supply risk, and given South East Water's poor performance against target (expected to be delivered through base) they would require further justification to be considered as a resilience enhancement scheme at PR24. The best option is not clearly defined, and further design work is required, and the proposal is to accelerate the design stage with delivery coming later.</p>		W

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 8 - Cattle troughs	1.50	1.50	Does not meet criteria. Proposal for identification, repair or replacement of leaking cattle troughs. Insufficient evidence that this meets acceleration process scope. No quantified need for investment (ie supply risk to customers to be addressed) nor quantified benefit of the investment (eg leakage volume to be saved). Unclear if the scheme and activity will be undertaken on South East Water's supply network with potential issues around asset ownership and responsibility not explored. Metering of supplies would enable a quantification of the problem and likely benefits to be calculated.		
Scheme 9 - Early start on design and planning of Broadoak Reservoir	5.00	5.00	Significant concerns. Early start planning Broadoak Reservoir. This scheme delivers after 2030 so is outside the timing criteria of the acceleration process. The scheme is designed to achieve planning application and an Environmental Impact Assessment (EIA) one year earlier than the latest dWRMP to de-risk delivery of the reservoir, and to bring flexibility to the 2033 delivery date. The ask is for an additional £2 million to support accelerated planning and EIA plus £3 million to support Direct Procurement for Customers (DPC) activities. The need for the scheme is confirmed in the dWRMP24 as 2036-37 instead of 2033 in WRMP19/PR19, meaning that the company has already delayed its delivery since receiving funding at PR19. South East Water reference the WRMP19 selection date and do not describe acceleration from dWRMP24 which raises questions about need since the date it is required has already slipped back between planning rounds.		W
Scheme 10 – smart network	3.15	7.00	Significant concerns. Proposed installation of service reservoir inlet/outlet meters and 1445 pressure sensors. Company states benefits to leakage (0.5MI/d) and supply interruptions (3 minutes from underlying performance), although no benefits are due to be delivered until 2026-27. Scheme is not part of company's dWRMP24, there is limited evidence of optioneering to meet the multiple drivers, and the leakage unit cost is very high raising significant concerns about whether the scheme is best option. South East Water currently has very poor interruptions to supply performance and needs to be meeting this in period from base expenditure of which this scheme could form part.		V
Scheme 11 - Alternative power supply	17.00	28.00	Does not meet criteria. Battery storage and uninterruptible power supplies (UPS's) to prevent trips due to by grid outages for eight sites by 2025. Need for investment is not clear as there is no risk quantification and no options appraisal. There is also no evidence of discussions with power provider about who is best placed to address issues with power outages, which is required under the PR24 resilience enhancement methodology. Does not meet additionality as the scheme addresses high frequency issues, as opposed to extreme events causing major power outages, and therefore is aligned to base expenditure unless it can be evidenced that the risk is increasing.		

A1.14 Water: South Staffs Water (including Cambridge Water)

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 1 – HH New Meters	17.71	88.56	Meets criteria. Installation of 82,000 smart meters in household properties to deliver 2.5 Ml/d in water savings by 2024-25 in an area identified as water stressed. This is an acceleration of a scheme that is a preferred best value option in the company's dWRMP24. The need for the scheme has been clearly identified. It will help company address the supply and demand balance deficit during the 2025-30 price control period and meet the per capita consumption target of 110 l/h/d by 2050. Company has set out clear outputs and deliverables. Company is behind on its PR19 metering programme but said that it has plan to deliver it by the end of the regulatory period. We are proposing to impose a price control deliverable that reflects these outputs, ie. 82,000 smart meters installed by 2024-25. To ensure that the scheme is additional to the company's existing PR19 commitments, we are proposing a condition on transition expenditure funding for this investment on the company delivering its PR19 metering programme by 31 March 2025. To ensure that the scheme does not impact on existing performance commitments, the company should exclude the impact of the scheme on leakage and per capita consumption from performance reporting in relation to PR19 performance commitments covering the period from 1 April 2020 to 31 March 2025.		W
Scheme 2 – NHH New Meters	2.18	10.90	Meets criteria. Installation of 9,400 smart meters in non-household properties to deliver 2.9 Ml/d in water savings by 2024-25 in an area identified as water stressed. This is an acceleration of a scheme that is a preferred best value option in the company's dWRMP24. The need for the scheme has been clearly identified. It will help company address the supply and demand balance deficit during the 2025-30 price control period and meet the per capita consumption target of 110 l/h/d by 2050. Company has set out clear outputs and deliverables. Company is behind on its PR19 metering programme but said that it has a plan to deliver it by the end of the regulatory period. We are proposing to impose a price control deliverable that reflects these outputs, ie. 9,400 smart meters installed by 2024-25. To ensure that the scheme is additional to the company's existing PR19 commitments, we are proposing a condition on transition expenditure funding for this investment on the company delivering its PR19 metering programme by 31 March 2025. To ensure that the scheme does not impact on existing performance commitments, the company should exclude the impact of the scheme on leakage and per capita consumption from performance reporting in relation to PR19 performance commitments covering the period from 1 April 2020 to 31 March 2025.		W

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 3 – Chalk-stream restoration	4.50	7.50	Some concerns. Proposes a range of river restoration type activities to improve 12.8km of river. Company states this is needed due to dWRMP24 schemes not delivering in time meaning there is an increased risk to the environment. Unclear if scheme aligns with accelerated process scope criteria (ie water resilience). There is limited discussion of alternatives including to accelerate dWRMP delivery and to mitigate environmental harm but insufficient evidence provided why this is the best option to address issues. However, the programme is likely to feature in PR24 WINEP.		E
Scheme 4 – Borehole upgrades	9.80	9.80	Significant concerns. Four borehole upgrades proposed to achieve peak abstraction licence output (presented as up to 7.6 Ml/d additional output). Company states that this would reduce impact of supply reductions because of high demand or outage but provides no quantification. The scheme does not feature in the current dWRMP meaning no comparable alternative options are presented and appraised. Therefore, there is no quantified need for investment (ie supply risk to customers to be addressed) nor evidence why this is the best option to address it. Potential for proposed work to be part of currently funded base maintenance activities to enable assets to be available and reliable as required.		V
Scheme 5 – Reuse to Blithfield Res	18.00	18.00	Significant concerns. Proposed effluent reuse transfer to Blithfield reservoir providing a 26Ml/d dry year annual average deployable output benefit. There is no quantified need for investment (ie supply risk to customers to be addressed) nor evidence why this is the best option to address it. The company's dWRMP has a planning period surplus and therefore this option is not selected. Potential operational cost savings by utilising joint assets less which the company does not explore in detail.		V
Scheme 6 - Grafham Transfer pipe of potable water	6.60	9.90	Some concerns. This is an accelerated preferred dWRMP potable water transfer option. In its dWRMP, Cambridge Water considers it needs all its options as well as full demand management to address abstraction pressures. However, the company has developed limited options as part of its plan development, and we want to see consideration of a wider range of alternatives. Publication of Cambridge Water's dWRMP has been delayed and, at the time of writing, is still being assessed reducing our confidence in the need for investment and whether the proposal represents the best option. Grafham transfer is dependent on Anglian Water's Bury St Edmunds transfer which increases the package cost. There are some water quality / acceptability risks from mixing water chemistries that would need to be managed. The Environment Agency is also concerned about potential reliance on drought permits at the Anglian Water end of the transfer. Together, these present concerns relating to deliverability. Due to the concerns around whether this provides best value and potential delivery risks this requires further work to demonstrate it is the best option, and deliverable.		W

A2 Wastewater

A2.1 Wastewater: Anglian Water

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 2 - Grid decarbonisation	2.73	27.25	Does not meet criteria. The scheme is for bioresources improvements and so does not fit the scope criteria for this accelerated programme or even broader transition funding (which does not cover bioresources or retail expenditure). The company accepts that optioneering and option appraisal has not been fully undertaken and does not provide clear deliverable outcomes (only the sites to be improved). Company states that the scheme would be self-financing in 2.5 to 3.5 years, therefore, our view would be that this is covered by base funding and additional customer funding is not required.		
Scheme 4 – Nutrient Neutrality	9.04	10.31	Meets criteria. The scheme is to deliver nutrient removal at three of the sites identified as discharging into Special Areas of Conservation (SAC) rivers. The sites are Fakenham and Dereham on the River Wensum, and Whitlingham on the River Yare (Norwich). All three sites are in a nutrient neutrality designated area and the population equivalent for all three sites are above the 2000 threshold. By no later than 31st March 2025, Fakenham WwTW and Dereham should be commissioned and optimised to ensure the final effluent total phosphorus is compliant with the 0.25 mg/L-permit. By no later than 31st March 2027, Whitlingham should be commissioned and optimised to ensure the final effluent total phosphorus is compliant with the 0.25 mg/L-permit. The Environment Agency supported the acceleration of this scheme as it will deliver environmental benefit. The scheme meets requirements on need, timing, and scope. Anglian Water states that the three sites will be designed to reach a phosphorus standard with around a 75% improvement on current performance and has set out clear outputs and outcomes. Upon querying, the company also proposed to accelerate three Nitrogen schemes. However, having liaised with the Environment Agency, there is currently no environmental need for nitrogen removal at the wastewater treatment works. As such, we are proposing to only accelerate these phosphorus schemes.		E

			This scheme is proposed for acceleration contingent on relevant legislation being enacted and the nutrient neutrality designation being made.		
Scheme 5 - Regional overflow reduction plan	9.99	26.84	<p>Meets criteria. The scheme is to undertake 21 storm overflow improvements to Storm Overflow Discharge Reduction Plan Act target levels and accelerate of 143 investigations (under WINEP driver code INV2) to confirm the root cause of high overflow spills. The delivery profile has been provided for all accelerated schemes to be completed by April 2028, earlier than the 2030 WINEP target date. The profile indicates that no scheme will be completed within AMP7.</p> <p>Environmental need for these schemes has been confirmed by the Environment Agency, however there are a number of sites which are not high priority under Defra's storm overflow reduction plan which could be replaced with other high priority sites. Any of these schemes that are found not to be required can be replaced like for like with Environment Agency and Ofwat approval up to the submission date for the PR24 business plan.</p> <p>Anglian Water aims to reduce the spills at the 21 overflows down to Defra's sewer overflow reduction plan targets and specific spill reductions have been provided for each overflow in this proposal. The company has indicated that 188 of the total 459 spills to be reduced through the accelerated programme will be delivered by 'smart controls', i.e. controlling flow in the sewer to maximise the storage potential of the system. The outputs of which it plans to share with the wider industry. The remaining spills will be remediated through traditional solutions. Individual solutions per overflow have not yet been provided, but there is commitment to use blended catchment solutions alongside smart controls. The spill frequency reductions stated in the accelerated programme are above the required spill reductions expected from existing base and enhancement allowances in 2025-2030.</p> <p>Not all overflows have an event duration monitor (EDM) installed, so historic spill frequency is not fully understood across all 21 overflows. SOAF assessments have only been completed on three overflows. All other overflows have been identified as high spillers via hydraulic model assessment only. The company indicates that the discharges at these overflows are therefore not maintenance related. The modelled and EDM data varies significantly, and we have some outstanding concerns about root cause and the required solutions.</p> <p>Anglian Water has proposed a price control deliverable of “£’000 per modelled spill per year reduced”, which will require analysis through hydraulic models to assess the specific impact of the digital element to the solution. Therefore the company must provide sufficient evidence that its models are of high confidence and are fit for use.</p> <p>We will require the company to confirm, via third party assurance, if interventions to reduce spills are required to restore compliance or if solutions are related to base-maintenance issues, so that only the relevant costs are funded through the enhancement programme. We will assess scheme costs as part of the PR24 business plan assessments.</p> <p>There is adequate information to propose this scheme for acceleration but with the inclusion of specific, time-bound conditions in the price control deliverable, including providing assurance on the modelling results.</p>		E

A2.2 Wastewater: Northumbrian Water

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 6 – Low Wadsworth STW IC Wetland	3.45	3.45	Does not meet criteria. This scheme involves the construction of a 2.1 ha integrated constructed wetland (ICW) as a demonstration of a nature-based solution for tertiary treatment at Low Wadsworth sewage treatment works near Crook, County Durham. However, the site is not in a nutrient neutrality catchment and therefore is out of scope for this acceleration process. Although the scheme does have a WINEP Water Framework Directive Phosphorus driver, it is not trying to meet P-TAL limits. Moreover, there are risks that the solution may not reach the required P-permit so there are concerns whether the proposed solution is the best option. The timeline provided seems ambitious for constructing and commissioning a wetland. We are content for this scheme to be a potential candidate for transition funding to start early under WINEP when additional information on other options considered is provided.		E
Scheme 7 – Berwick upon Tweed Storm Overflows	1.85	51.00	Meets criteria. The proposal is to deliver an initial ‘Concept and Definition’ phase to identify how to reduce environmental impact by reducing storm overflow spills in the Berwick catchment. The company has provided additional optioneering evidence and has revised its proposal from £2m to £1.85m for this accelerated element. The total estimated cost to fully address overflow spills in Berwick is estimated at £51m but the company has stated that this could increase to £64m with further clarity on the scope of works identified through this investigatory stage. The Environment Agency has confirmed the environmental need for Berwick storm overflows to reduce spills at up to 42 overflows, 17 of which discharge into bathing waters (average of <=2 spills per bathing season) and the remainder discharging into inland waterbodies, including SSSIs (average of <= 10 spills per year). The £1.85m will fund model verification and feasibility work on proposed options and costs to determine how best to reduce overflow spills. However, the root cause of spills is not yet clear. Some additional modelling work has already looked at the contributing role of routine maintenance (sewer cleansing) in reducing spills and indicated that more cleansing will have a relatively small impact on spills. Part of the £1.85m investment is to further explore maintenance interventions alongside a wider range of cost-beneficial options to reduce spills in the catchment. There is a concern that underperforming pumping stations could be due to maintenance issues which will also need to be confirmed by the company. Potential options include providing storage (grey or green), maximising use of existing sewer capacity (through flow optimisation and improved pumping), disconnecting surface water systems, separating surface water from large impermeable areas, and provide water butts to residents. These will be further explored through this proposal.		E

		<p>We will require the company to confirm, via third party assurance, if any of the storm overflows in the catchment will require interventions to restore compliance or if proposed solutions identified through this feasibility stage are related to base-maintenance issues, so that only the relevant costs are funded through the enhancement programme. We will assess scheme costs as part of the PR24 business plan assessments.</p> <p>There is adequate information to propose this scheme for acceleration to enable Northumbrian Water to better understand the most effective ways of addressing storm overflow spills in Berwick ahead of AMP8, but we will include specific, time-bound conditions in the price control deliverable.</p>	
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A2.3 Wastewater: Severn Trent Water

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
5 – Packington Effluent Transfer	13.40	74.60	Significant concerns. This scheme aims to combine two wastewater treatment works and treat flows through enhanced treatment (granular activated carbon, ozone, and membrane ultra-filtration) to meet tight standards & transfer effluent to a reservoir (8.5ML/d average flow & 22.2ML/d full flow). The River Mease is in a designated Phosphorus nutrient neutrality watercourse and the population equivalent is above the 2000 threshold. However, the Environment Agency is awaiting outcomes on flow balancing and quality investigations, and these need to be resolved before the solution is progressed. The Drinking Water Inspectorate (DWI) have not confirmed that this solution is acceptable at this stage. We require further evidence to prove that this is the best option. This scheme is potentially suitable for transition funding programme for PR24 if investigations are successfully concluded and evidence this option is best value are provided, the scheme is included in the final WINEP and both the Environment Agency and Drinking Water Inspectorate approve.		E
7 – Barston N-TAL	9.80	19.50	Does not meet criteria. This scheme aims to investigate what level could be robustly achieved for Total Nitrogen as part of a Defra mandated trial and is proposed under the WINEP N-TAL_Inv driver to carry out trials to establish what Total Nitrogen limits can be met at different sizes of site (Severn Trent proposed this site but it does not have another WINEP driver), to inform future Total Nitrogen Technically achievable limits (TAL). However, this is not in a nutrient neutrality designated catchment area and as such the need for the scheme is not clear and uncontroversial. The Environment Agency has confirmed N-TAL trials to be undertaken by other companies under the WINEP driver would need to be accelerated for this to be beneficial, so there is no benefit accelerating just the Severn Trent sites proposed under this process. The company can accelerate this scheme at PR24, at their own risk if the scheme is in their final WINEP.		E
8 – River Clun Catchment	8.40	41.90	Significant concerns. The proposal is to up-rate three wastewater treatment works (WWTWs) to meet P-TAL and N-TAL. It is a confirmed nutrient neutrality (Special Area of Conservation) watercourse for Nitrogen & Phosphorus. The solution is a denitrifying oxidation ditch for each site. However, the three sites proposed are all below the 2000 population equivalent threshold as such the need for the schemes is not clear and uncontroversial. There are also significant concerns that solutions presented for the three sites may not be best value as no information is given on alternatives considered. Moreover, the Environment Agency is awaiting river flow investigation outcome as such the		

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
			schemes should not progress until investigations complete. In summary, the proposal fails on several criteria for this acceleration process, however the company can accelerate this scheme at PR24 under transition funding, at their own risk if the scheme is included in their final WINEP.		
9 - River water monitoring	24.50	24.50	Meets criteria. Installation of 80 no. flow to full treatment monitors at wastewater treatment works to ensure that the company is able to monitor compliance with permit conditions and avoid non-permitted storm overflow spills. These monitors are a statutory requirement under WINEP for installation by December 2026. The scope of work is to install a meter to the necessary standard hence limited optioneering is necessary. A price control deliverable is proposed with under and out-performance incentives.		E
10 - Blymhill N-TAL	2.70	6.80	Does not meet criteria. The criteria for scope have not been met as currently the site is not located in a nutrient neutrality designated catchment. However, Severn Trent have recently been advised by Natural England that it is likely to be designated soon. But, Blymhill is serving a population equivalent > 250 but <2000, as such does not meet the population equivalent threshold and therefore is out of scope. In addition to this, the Environment Agency confirmed all N-TAL trials would need to be accelerated to be beneficial so, there is no benefit on promoting just the SVE sites.		E

A2.4 Wastewater: South West Water

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 1 – DWMP Delivery Acceleration Storm Overflows	23.00	70.05	<p>Meets criteria. The company's proposal consists of 14 schemes in total in Falmouth and Sidmouth to improve storm overflows. For the Falmouth system, six overflows are required to address the shellfish statutory WINEP driver (EnvAct_IMP2) and two are associated with the bathing water statutory driver (EnvAct_IMP3). For the Sidmouth system, three overflows are associated with bathing waters and three require spill frequency reductions (driver (EnvAct_IMP4.)). All storm overflows are named and current discharge rates given. The environmental need has been accepted by the Environment Agency and schemes are within the PR24 WINEP. The spill frequency reduction of 330 across the 14 overflows are above the required spill reductions expected from existing base and enhancement allowances in 2025-2030.</p> <p>South West Water has set out its solution development approach, which it states will be further refined for the final drainage and wastewater management plan and has identified a number of sites where surface water separation is a viable option and where opportunities exist for partnership working with the local authority responsible for highways drainage.</p> <p>We will require the company to confirm, via third party assurance, if interventions to reduce spills are required to restore compliance or if solutions are related to base-maintenance issues, so that only the relevant costs are funded through the enhancement programme. We will assess scheme costs as part of the PR24 business plan assessments.</p> <p>There is adequate information to propose this scheme for acceleration but with the inclusion of specific, time-bound conditions in the price control deliverable.</p>		
Scheme 3 – DWMP Delivery Acceleration Nutrient Neutrality	12.01	28.06	<p>Meets criteria. Out of the 22 sites, the company has focussed the early start activity at the seven sites within the catchment which will deliver the most phosphorus load reduction. However, only five out of the seven sites are greater than 2000 PE. As such, given the catchment outlined in the submission falls under a nutrient neutrality designated area, we are proposing to accelerate those five sites. The five sites will be commissioned and optimised no later than 31st March 2025 and all the sites will be compliant with the permit at the technically achievable limit of 0.25mg/L Total Phosphorus. More price control deliverables have been set out in appendix 2.</p>		E

		<p>We are confident that reasonable optioneering process has been outlined alongside benefits which includes a reduction of 82% P load reduction in the Camel and 84% in the Axe catchment. In summary, the proposal meets the criteria for need, scope and timing.</p> <p>This scheme is proposed for acceleration contingent on relevant legislation being enacted and the nutrient neutrality designation being made.</p>	
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A2.5 Wastewater: Southern Water

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 4 – Storm Overflows	Up to 50.0	50.0	<p>Meets Criteria: The proposal is to progress the company’s Pathfinder pilot programme at scale across up to 36 storm overflows in three geographical areas to <i>‘maximise learning to ensure effective and efficient delivery in AMP8’</i>. It will involve exploring innovative approaches at scale to manage spills.</p> <p>Southern Water proposes to spend between £25 million and £50 million capex to improve understanding and /or reduce storm overflow spills in AMP7 by between 300 and 600 per year (compared to 2020-21 average spills) The company has accepted that this proposal will only be funded through the transition expenditure programme and does not require in-period funding. These schemes will help identify the most effective and efficient solutions for the remainder of AMP8 overflow schemes (and beyond), and all 36 overflows are included within the AMP8 WINEP programme (under drivers such as bathing water, shellfish, SSSIs and other designated waters). However, due to the innovative nature of the work Southern Water does not guarantee that spill reductions will necessarily meet statutory requirements and thus follow-on works may be needed.</p> <p>A breakdown of the 36 overflows suggests that 8 overflows require intervention because of groundwater, while the rest are impacted by surface water. The company has confirmed that only 2 of the 36 overflows have SOAF assessments. However, the company says that it has targeted these sites to reduce spills <i>and</i> improve learning for AMP8.</p> <p>The company has identified indicative solutions for each overflow such as implementing SUDs where surface water is the main issue or constructing wetlands and relining predominantly private lateral sewers where groundwater is the problem. Southern Water indicated that for the costs estimated, it will deliver between 40 and 90 hectares of SUDs, 4 to 8 wetlands, and between 5km and 26km of sewer sealing.</p> <p>We propose setting a price control deliverable (PCD) for the company’s estimated £50 million option to deliver a reduction in overflow spills of 600 across 36 overflows. We will require the company to provide regular updates to demonstrate that it has progressed interventions at all 36 sites and where the 600 spill reductions will be achieved. We will require the company to confirm, via third party assurance, if interventions to reduce spills are required to restore compliance or if solutions are related to base-maintenance issues, so that only the relevant costs are funded through the enhancement programme. We will assess scheme costs as part of the PR24 business plan assessments.</p>		E

			There is adequate information to propose this scheme for acceleration but with the inclusion of specific, time-bound conditions in the PCD.		
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A2.6 Wastewater: Thames Water

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 9 - West London Flood Resilience	20.00	20.00	Does not meet criteria. High return period flooding scheme installing 300 flip pumps. No direct impact on storm overflows and so out of scope. Need not quantified and no assessment of best option.		
Scheme 10 – Community focused surface water flood management	10.00	10.00	Does not meet criteria. Creation of an integrated platform for collating of surface water management systems. Enabler for better partnership working. No direct impact on storm overflows and so out of scope. Benefit not quantified and no measurable output provided (e.g. improvement against PCs).		
Scheme 11 - Intelligent Wastewater System Management	2.00	2.00	Does not meet criteria. Install 200 depth monitors in key locations to improve data. Monitors to be linked to system models and penstocks to transition to smart network at a later date. Does not meet additionality criteria, as potential overlap with base and no clear outcomes in terms of storm overflows (e.g. spill reduction) so not considered to meet the main driver, additional concerns include no other options considered so not clear that it is the best option, and the benefits are not quantified.		

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 12 - Safe space for Water	1.00	1.00	Does not meet criteria. Pilot schemes using parks and roads to store exceedance flows (floodwater). Only applicable to high return period storms. The scheme would not impact on storm overflows so out of scope. In addition, the risk being addressed is not quantified and there is no assessment of best option.		
Scheme 13 - What can you do to reduce flood risk?' campaign	1.00	1.00	Does not meet criteria. Pilot of customer driven resolution of misconnections into the waste network (e.g. extensions with roof connected to foul). Impact on storm overflows not quantified so there are significant concerns that it is out of scope. There is no commitment to any firm outputs and no assessment of best option.		
Scheme 14 - Adapting Event Duration Monitors to measure flow.	2.00	2.00	Does not meet criteria. Improved monitoring at 80 sites to measure flow through upgrading existing EDM systems, complementing the transition to a Smart waste network and providing additional data and insight to short and long term decision making. Does not directly reduce storm overflow spills so out of scope. No assessment of best option and benefit not quantified.		

A2.7 Wastewater: United Utilities

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
ENV1 – Reducing P in Manchester Ship Canal	36.20	96.90	Does not meet criteria. The proposal is to install a Phosphorus (struvite) recovery plant on the sludge treatment liquors. However, the site is not in a designated nutrient neutrality catchment area and as such is out of scope for this acceleration process.. This is first part of strategy to get Davyhulme WWTW to 0.25 mg /L Total phosphorus but the need for this scheme is not clear as struvite recovery alone will not have a significant impact on final effluent phosphorus. Davyhulme WWTW discharges to the Manchester Ship Canal. Moreover, timescales appear ambitious as this is only part of solution to meet a low P permit, and struvite recovery is challenging to commission. We would require much more information on other options and the whole strategy would be required, even if there was a link to nutrient neutrality. The Environment Agency also rejected this scheme at there is not a clear link to nutrient neutrality.		E
ENV2- Accelerating habitats improvements in the Eden catchment	18.50	117.60	Meets criteria. United Utilities completed a WINEP AMP7 (2020-2025) investigation which confirmed the need for investment to enhance Phosphorus removal. This scheme refers to improvements to the eight largest wastewater treatment works in the Eden designated nutrient neutrality area. to meet the technically achievable limit of 0.25mg/l Total phosphorus. In the original proposal, the company submitted 8 sites for acceleration, however only 6 of these sites are above the 2000 population equivalent threshold. As such, we are proposing to accelerate the 6 sites that meet the threshold. All six sites will be compliant with a permit at the proposed technical achievable limit of 0.25mg/L for Total phosphorus before March 2029. For all sites, the company will provide us details of the tender and procurement process assured by a third party before March 2025. See more details on deliverables in appendix 2. Reasonable optioneering has been summarised and a delivery programme outlined. In summary, this scheme meets the need, scope, and timing criteria. The company has also proposed price control deliverables in the case of non-delivery for customer protection. As such, we are proposing this scheme for the six eligible sites only for acceleration. This scheme is proposed for acceleration contingent on relevant legislation being enacted and the nutrient neutrality designation being made.		E

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
<p>ENV3 - Accelerating storm overflow improvements to reduce discharges</p>	137.50	699.60	<p>Meets criteria. The scheme is for improvements to 135 storm overflows to reduce storm overflow spills to Environment Act target levels, it meets the accelerated process criteria, however a Price Control Deliverable (PCD) will be required to address ongoing concerns about storm overflow compliance.</p> <p>The environmental need to deliver these schemes has been confirmed by the Environment Agency. A full list of overflows to be addressed has been provided, which includes driver type and costs. Individual solutions have not been specified in detail, however the company has provided indicative sizes of storage and separation required for each solution. Best value has been assessed using a value assessment tool which aligns with the WINEP methodology and includes consideration of wider environmental outcomes. The spills will be reduced to meet Defra's storm overflow reduction plan targets which equate to a reduction of over 7000 spills per year. The spill frequency reductions stated in the accelerated programme are above the required spill reductions expected from existing base and enhancement allowances in 2025-2030.</p> <p>Approximately half of the overflows have had a SOAF stage 1 completed, confirming that the high spill frequency is not related to maintenance. In addition, all other overflows have gone through a hydraulic screening assessment using hydraulic models to confirm that the high spill frequency has a hydraulic root cause. Storm overflow solutions that are found to be not required following further investigation and design work can be swapped with alternative sites with Environment Agency and Ofwat approval up until the submission of the PR24 business plan. Any alternative site must demonstrate to have greater environmental and customer benefit than the scheme it replaced.</p> <p>Due to lack of supporting evidence that the storm overflows meet their current permitted pass forward flow, we will require the company to confirm, via third party assurance, if interventions to reduce spills are required to restore compliance so that only the relevant costs are funded through the enhancement programme. We will assess scheme costs as part of the PR24 business plan assessments.</p> <p>There is adequate information to propose this scheme for acceleration but with the inclusion of specific, time-bound conditions in the price control deliverable.</p>		E
<p>ENV4 - Reducing the frequency of storm overflow discharges in Lake Windermere catchment</p>	9.30	18.60	<p>Meets criteria. The scheme is to accelerate 4 storm overflow improvements in the Windermere catchment to meet Defra's storm overflow reduction plan targets. it meets the accelerated process criteria, however a Price Control Deliverable (PCD) will be required to address ongoing concerns about storm overflow compliance. The delivery profile indicates the schemes will be operational by April 2026.</p> <p>The environmental need to deliver these schemes has been confirmed by the Environment Agency. A full list of overflows to be included has been provided, which includes driver type and costs. Individual solutions have not been</p>		E

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
			<p>specified in detail, however the company has provided indicative sizes of storage and separation required for each solution. Best value has been assessed using a value assessment tool which aligns with the WINEP methodology and includes consideration of wider environmental outcomes. The spills will be reduced to meet Defra's storm overflow reduction plan targets which equate to a reduction of approximately 150 spills per year. The spill frequency reductions stated in the accelerated programme are above the required spill reductions expected from existing base and enhancement allowances in 2025-2030.</p> <p>Two of the storm overflows have had a stage 1 SOAF assessment, which has confirmed that the root cause of the high spill frequency is not maintenance related. The other two storm overflows have gone through a hydraulic screening assessment using hydraulic models to confirm that the high spill frequency has a hydraulic root cause.</p> <p>Due to lack of supporting evidence that the storm overflows meet their current permitted pass forward flow, we will require the company to confirm, via third party assurance, if interventions to reduce spills are required to restore compliance so that only the relevant costs are funded through the enhancement programme. We will assess scheme costs as part of the PR24 business plan assessments.</p> <p>There is adequate information to propose this scheme for acceleration but with the inclusion of specific, time-bound conditions in the price control deliverable.</p>		
<p>ENV5 - Rainwater for climate change</p>	22.00	78.00	<p>Does not meet criteria. Proposal is for works around strategic enterprise zones with business and communities to accelerate investment to look holistically and sustainably at water management to deliver improvements to flood risk resilience and spill frequency reduction at storm overflows. Whilst we support companies considering water management in catchment areas holistically United Utilities has not set out clearly the storm overflows to be improved, the environmental need and expected outcomes, nor outputs. The Environment Agency do not consider that there is a clear environmental need. As a result, the scheme does not meet the criteria.</p>		
<p>ENV8 – Coastal Erosion</p>	2.50	15.00	<p>Does not meet criteria. Scheme to protect a pumping station from falling into the sea due to coastal erosion. It does not meet scope as it does not contribute to storm overflow spill reduction. The company could address potential issues through existing PR19 totex allowance, or consider making a case for PR24 resilience enhancement if the risk is increasing and the wider resilience enhancement requirements can be met.</p>		

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
ENV10 - Reducing the frequency of storm overflow discharges into bathing waters	28.20	78.10	<p>Meets criteria. The company's proposal is to accelerate 15 storm overflow schemes impacting bathing waters that are already at poor status or at risk of deteriorating to poor status. The scheme meets the accelerated process criteria, however a Price Control Deliverable (PCD) will be required to address ongoing concerns about storm overflow compliance. The delivery profile indicated that the schemes will be operational by April 2027.</p> <p>The environmental need to deliver these schemes has been confirmed by the Environment Agency. A full list of overflows to be included has been provided, which includes driver type and costs. Individual solutions have not been specified in detail, however the company has provided indicative sizes of storage and separation required for each solution. Best value has been assessed using a value assessment tool which aligns with the WINEP methodology and includes consideration of wider environmental outcomes. The spills will be reduced to meet Defra's storm overflow reduction plan targets which equate to a reduction of approximately 1000 spills per year. The spill frequency reductions stated in the accelerated programme are above the required spill reductions expected from existing base and enhancement allowances in 2025-2030.</p> <p>Six of the storm overflows have had a stage 1 SOAF assessment, which has confirmed that the root cause of the high spill frequency is not maintenance related. The other nine storm overflows have gone through a hydraulic screening assessment using hydraulic models to confirm that the high spill frequency has a hydraulic root cause.</p> <p>Due to lack of supporting evidence that the storm overflows meet their current permitted pass forward flow, we will require the company to confirm, via third party assurance, if interventions to reduce spills are required to restore compliance so that only the relevant costs are funded through the enhancement programme. We will assess scheme costs as part of the PR24 business plan assessments.</p> <p>There is adequate information to propose this scheme for acceleration but with the inclusion of specific, time-bound conditions in the price control deliverable.</p>		

A2.8 Wastewater: Wessex Water

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
Scheme 9 - Separation of combined drains	1.29	12.00	<p>Does not meet criteria. The rationale of the scheme is to investigate the link between separating surface water, water consumption and storm overflow discharges. These three aspects are predictably related, what is less certain is the customer acceptability aspects, however the proposal does not address in detail how this aspect will be researched.</p> <p>The proposal consists of investment in IT infrastructure to enable smart metering and costs to separate surface water at 3,000 properties by installing water butts and soakaways. The company has confirmed that it plans to complete this scheme in Cirencester. However, the company has not provided information on the storm overflows to be improved and the potential environmental impact. The Environment Agency has not accepted that there is a clear environmental need for the investment.</p> <p>There is little justification for the scope of works. For example, the company states that it needs to complete works at 3,000 properties to gain a measurable impact although there is no supporting evidence for this number. The behavioural change elements of the project have not been clearly set out.</p>		

A2.9 Wastewater: Yorkshire Water

Scheme	Costs 2022-25 (£m)	Total costs (£m)	Assessment	Overall	WRMP/WINEP
YKY-06 Inland Bathing Water Improvement Scheme - Wharfe Ilkley	44.31	62.71	<p>Meets criteria. Scheme to gain compliance at an Inland bathing water with improvements to storm overflows in the network, at sewage pumping stations and wastewater treatment works. Environmental need is confirmed, and works are associated with WINEP drivers. Justification provided for the assets to be remediated, and evidence provided of compliance with flow requirements at Ilkley wastewater treatment works. Some details of the optioneering process have been outlined which the company states has followed Environment Agency guidance and has considered 'green' (nature-based) solutions. In response to a query, Yorkshire Water confirmed that the increase in treatment capacity at Ilkley is due to increased pass forward flow at up-stream CSOs.</p> <p>The company confirmed that the detailed design of the scheme has not been fully completed. It has provided sufficient information on outcomes (achieving bathing water classification) and outputs (requirements for storage and additional tertiary treatment). The company has confirmed that the scope of works being funded does not include that delivered to date relating to disinfection of the wastewater treatment work's effluent and storage at Rivervale CSO. Information submitted is considered sufficient to propose acceleration but with price control deliverable conditions relating to assurance that funding is not being sought for maintenance and regaining compliance for the network CSOs.</p>		
YKY-07 Inland Bathing Water Improvement Scheme - Wharfe Wetherby	41.70	58.82	<p>Does not meet criteria. Inland bathing water improvement scheme. DEFRA announced in March 2023 that the application for the river Wharfe at Wetherby to be designated as a bathing water was not successful. Therefore, although the scheme is related to storm overflows it does not meet the criteria as there is no environmental need arising from a statutory driver. As a result, the scheme does not have the support of the EA. Limited details on the appraisal of solution options were provided beyond proposing conventional engineering solutions.</p>		

Scheme 8- WFD_No Deterioration Improvement schemes	24.86	41.18	Does not meet criteria. The proposal is to maintain river water quality at nine of sites to support regional economic growth. The criterion on scope is not met as the proposed sites are not located in a nutrient neutrality designated catchment. Yorkshire Water confirmed that its proposal does not fall under nutrient neutrality but instead under WFD_ND (no deterioration). Moreover, a number of the nine sites being considered have a population equivalent under 2000 and some under 250. However, if this scheme is included in the final WINEP, the company can potentially proceed with this at their own risk, through the transition funding programme at PR24.		E
YKY-09 Coastal Bathing Water Improvements	3.78	3.86	Meets criteria. Company confirmed that plans to progress the originally submitted scheme are not currently finalised due to a connection to a wider strategic plan involving Scarborough WWTW. As a result, the company has submitted a revised scheme that reduces the scope to works at a single CSO (Wheatcroft CSO) in support of maintaining bathing water classification. Works at Wheatcroft CSO are install a screen and attenuation storage to achieve the requirement for coastal bathing water of an average of two spills per bathing water season. The asset discharged 54 times (using 12/24 count methodology) based on the EDM data set published by the EA in 2022. Information submitted is considered sufficient to propose acceleration of the revised scheme with price control deliverable conditions relating to assurance that funding is not being sought for maintenance and regaining compliance.		

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