

June 2023

**Strategic regional water
resource solutions:
standard gate two final decision
for Anglian to Affinity Transfer**

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1. Introduction

The purpose of this publication is to set out our final decision about whether the Anglian to Affinity Transfer (A2AT)¹ solution should continue to receive development funding². The solution owners Anglian Water and Affinity Water submitted their standard gate two reports on 14 November 2022 for assessment. Further information concerning the background and context of the Anglian Water and Affinity Water Anglian to Affinity Transfer can be found in the Anglian to Affinity Water Transfer publication document on the Affinity Water website³.

This publication should be read in conjunction with the final decision letter issued to each solution owner. Both this document and final decision letters have been published on our website.

The assessment process is overseen by RAPID, with input from the partner regulators Ofwat, the Environment Agency and the Drinking Water Inspectorate. The Environment Agency together with Natural England and Natural Resources Wales (for solutions involving Wales), have reviewed the environmental sections of the submissions, and provided feedback to RAPID. The Consumer Council for Water provided input to the assessment on customer engagement.

The solution owners and other interested parties had the opportunity to respond to the draft decision during the representation period, which followed the publication of the decisions on 30 March 2023. We have taken all relevant representations into account in making our final decision.

We would like to thank Anglian Water and Affinity Water for the level of engagement, collaboration and innovation that they have exhibited during this stage in the gated process.

¹ Referred to in PR19 final determination as “Anglian Water – Affinity Water transfer”

² [PR19 final determinations: Strategic regional water resource solutions appendix](#)

³ [Anglian to Affinity Transfer](#)

2. Solution Summary

2.1 Solution summary

The full Anglian to Affinity Transfer (A2AT) involves a treated water piped transfer from Anglian Water's network north of Peterborough to the Affinity Water supply area. The four feasible options presented at gate one were further assessed by the solution owners and a preferred option selected for which gate two activities were undertaken. The preferred option, the South Lincolnshire Reservoir (SLR) to Stort Water Resource Zone (WRZ 5) transfer, has been developed for the gate two concept design with two equally feasible routes; the Western route and the Eastern route:

- Eastern route from Anglian Water's service reservoir to WRZ5.
- Western route from Anglian Water's service reservoir to WRZ5 via Grafham Water.

Both routes involve a transfer starting at Anglian Water's service reservoir near Peterborough. The transfer final delivery point for both routes is a service reservoir in Affinity Water's WRZ5. A capacity of 50 megalitres per day (Ml/d) and 100 Ml/d has been assessed for both the Eastern and Western route.

A 150 Ml/d capacity sub-option for the Peterborough to Grafham Water transfer (Northern section) was also presented by the solution owners at gate two to offer greater flexibility in the future development of the transfer and increase resilience within Anglian Water's network. This route has also been considered in the concept design development for gate two.

Figure 1. Anglian to Affinity Transfer Solution Schematic

2.2 Solution update

The solution was not selected as a preferred or alternative option in the regional modelling carried out by Water Resources East (WRE) and Water Resources South East (WRSE) for their respective regional plans. The scheme was therefore not selected in Affinity Water's draft water resources management plan (WRMP), and Affinity Water and Anglian Water propose that no further work is undertaken on this scheme in its current form after gate two. The solution owners recommend that this solution potentially represents a back-up option in the future, but it is currently not being selected as an alternative option in Affinity Water's WRMP or the WRE or WRSE regional plans.

Anglian Water have identified that the Peterborough to Grafham transfer element of the solution, comprising of the Northern section of the Western route, offers options for Anglian Water to serve customers in Ruthamford from SLR and increase resilience. A 150 Ml/d transfer has been assessed and Anglian Water recommended that a transfer from Peterborough to Grafham is taken forward for further investigation as part of the SLR solution, with further work required at gate three in line with Anglian Water's WRMP to determine the required capacity. The Peterborough to Grafham transfer element is included in Anglian Water's draft WRMP.

3. Summary of representations

3.1 Representations received

We have received the following representations relevant to the Anglian to Affinity Transfer.

Table 1. Summary of representations

Representation from	Summary of representation
Water Resources East (WRE)	<p>Solution progression</p> <ul style="list-style-type: none"> • WRE note that the full Anglian to Affinity Transfer was not selected in the WRE draft plan as the reconciliation process between regional groups' plans demonstrated the advantage of options that would supply Affinity Water from the west of England rather than the east. • WRE note that this is a good example of the value of regional planning backed by inter-regional reconciliation, and WRE support the scaled-down transfer to move water between zones within the WRE region.
Group Against Reservoir Development (GARD)	<p>Solution progression</p> <ul style="list-style-type: none"> • GARD believe that Ofwat and RAPID need to take more control of decisions about the discarding of schemes, and that the Anglian to Affinity Transfer would have been a highly drought resilient and forward-looking scheme. <p>Solution costs</p> <ul style="list-style-type: none"> • Although there is now a fair amount of cost detail available in the gate two reports for the strategic options, there are no option cost comparisons to justify the selection of options and their sequence of development. These comparisons might be expected to be prominently available in regional plans and the WRMPs, but there are none to be seen. This is a major failing in transparency which needs to be addressed in gate three.
Oxfordshire County Council	<p>Stakeholder engagement</p> <ul style="list-style-type: none"> • The Council note that the RAPID schemes should be informed by consultation with people that live close to where the schemes are constructed, and that RAPID should highlight in its decisions the importance of working with local councils and communities. <p>Water resource planning</p> <ul style="list-style-type: none"> • Oxfordshire County Council are concerned that additional water supply needed in the South East has been seriously overestimated because of incorrect population growth models and poorly evidenced environmental targets.

	<ul style="list-style-type: none"> • They assert that water companies should do more to reduce leakage and reduce demand and then the need for building new items of strategic infrastructure will be reduced. • There are other options which could provide water supply which are not included in the RAPID gated process. The regulators’ funding should also support the development of a wide range of options including smaller, more innovative and less environmentally damaging solutions. They state that resilient schemes such as water recycling, water transfers, and desalination should be prioritised so that other options such as the South East Strategic Reservoir Option (SESRO) are not needed. • Highlight that there are other options which could provide water supply which are not included in the RAPID gated process. The regulators’ funding should also support the development of a wide range of options including smaller, more innovative and less environmentally damaging solutions. They would like to see funding, for example, of nature-based catchment management schemes where projects are developed to retain water, manage flood risk and create new nature reserves, alongside a much greater focus on aquifer recharging. • RAPID needs to focus much harder on building early resilience to the accelerating, increasingly malign and radically uncertain impacts of climate change. Radical uncertainty in the face of existential threats requires a “least risk” approach. <p>Decision making</p> <ul style="list-style-type: none"> • The Council expect RAPID will need to review its draft decisions to make sure that the final decisions are consistent with the recently published National Policy Statement (NPS). <p>Carbon costs</p> <ul style="list-style-type: none"> • The Council believe that RAPID should continue to seek evidence that solution partners are embracing innovative designs and opportunities to generate or be powered by renewable energy and/or sequester carbon. • The Council believe that a comparable carbon assessment should be undertaken for each solution and that solutions should set out net zero carbon commitments. • Believe that RAPID should be clear in their decisions that gate submissions will require solution partners to set out the carbon costs of their proposals in relation to the government’s commitments to reduce carbon emissions, and that the carbon footprint of solutions could be compared when choosing between options. • Believe that RAPID should compare each of the draft decisions to consistently seek evidence about carbon costs.
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	<ul style="list-style-type: none"> • Believe that there should be an account provided of the amount of renewable energy entered into the national grid from the solution once constructed, and whether low carbon hydrogen will be available and will be used by the solution. • Note that low energy demand from the solutions once in use will not be an effective mitigation for high energy use in construction. <p>Solution progression</p> <ul style="list-style-type: none"> • The Council suggest that the full transfer should be progressed to gate three to provide resilience to Affinity Water's supply network and consider that RAPID should push back on the proposal by Anglian Water and Affinity Water for the full transfer to be stopped at gate two. • Consider that cost and technical feasibility were not the reasons for the full transfer being stopped, rather Affinity Water selected the SESRO and the Severn Thames Transfer to provide water. • Suggest that the full transfer route continues to be investigated and evaluated so that a pipeline could be built swiftly.
<p>Anglian Water and Affinity Water</p>	<p>Gated allowance</p> <ul style="list-style-type: none"> • Accept the funding change that Anglian Water will be the only solution partner and will keep a 59% share of the scheme funding allocation. • Affinity Water and Anglian Water note that withholding 35% of the funding forecast is constraining certain necessary development activities over the next 18 months. To accommodate for the impact, a revised gate four submission will be proposed at gate three to align with the Lincolnshire Reservoir Strategic Resource Option (SRO). • State that their SROs remain well below Ofwat's nominal 6% metric of 'development budget against total scheme budget'. Affinity Water and Anglian Water are concerned that there is a high risk that project delivery success may be compromised which will not serve the interests of customers in the long term. <p>Cost sharing</p> <ul style="list-style-type: none"> • Affinity Water and Anglian Water question the change in cost sharing rate proposed for gate three. They make a recommendation that instead of introducing a new proposed 'pain/gain' mechanism between companies and customers, existing customer protections are further enhanced instead. <p>Gate three timing</p> <ul style="list-style-type: none"> • Support the moving of gate three date. Recognise the benefit it brings to delivery and assessment, however note that the additional 6-month period will require funding. Suggest that key gate four activities will need to be started

	<p>during the gate three period between March 2024 and September 2024.</p> <p>Environmental assessments and water quality monitoring</p> <ul style="list-style-type: none"> • Robust environmental assessments, comprehensive water quality monitoring and refined routing is planned prior to gate three and an environmental team has been established. Updates will be provided as part of monthly checkpoint meetings. <p>Efficient spend</p> <ul style="list-style-type: none"> • Affinity Water and Anglian Water note RAPID’s position that expenditure was deemed to be efficient. Final accounts for gate two have been submitted separately. • State that the reason for any difference in spend is a result of resolving any difference between accruals and final accounts with suppliers, and ongoing project management and consultancy support during RAPID query process. • Support the change of moving to look at cumulative gate spend against cumulative total allowance. Acknowledge that it provides flexibility in enabling spending of gate four allowance early for gate four activities. <p>Name change</p> <ul style="list-style-type: none"> • To reflect the change in scope for this SRO, Affinity Water and Anglian Water request the name is changed to ‘Peterborough to Grafham Strategic Transfer’ (P2G). <p>Actions and recommendations</p> <ul style="list-style-type: none"> • The water quality monitoring programme is regularly reviewed and routine sampling carried out for the specific considerations as set out in the Drinking Water Inspectorate (DWI) long term planning guidance. • Currently in consultation with external laboratories to understand the available analytical capability for Endocrine Disrupting Chemicals and trace chemical. • Full update of monitoring programme will be provided by 30 June 2023 as requested. <p>Gate four timing</p> <ul style="list-style-type: none"> • Propose a Development Consent Order (DCO) submission date on the linked Lincolnshire Reservoir SRO between spring 2026 and autumn 2026, which accommodates for the revised gate three delivery programme and budget, and which allows for the time required to deliver on the DCO requirements. • Propose to align the timing with the Lincolnshire Reservoir timing. Revised gate four date will be offered within gate three submission, likely three months after proposed DCO submission for Lincolnshire Reservoir.
<p>Historic England</p>	<p>Historic environment</p>

	<ul style="list-style-type: none"> • Historic England note that there has been no engagement from the solution team to date. • Recommend that Anglian Water contact Historic England for early pre-application advice.
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3.2 Our response

We have taken the representations into account in our final decisions and set out below our response to the key points and issues raised. For the representations or parts of representations which indicate support, provide information or give an update without raising key points and issues, we do not provide a response below but are grateful for the comments provided and confirm that we have also taken these into account.

3.2.1 Water resources planning

Reducing leakage and being more efficient in using water both have a significant role to play but will not be sufficient alone to ensure security of water supplies in the future.

Water resources infrastructure options are considered and selected as part of regional plans and WRMPs. These plans consider both demand side measures and supply side measures as part of a twin track approach to water resources and determine the need for new water resource infrastructure. Neither Ofwat nor RAPID has a decision-making role in regional plans or WRMPs.

The anticipated effects from industry measures to reduce leakage and reduce demand are taken into account in water resource planning as part of the assessment of whether new water resource infrastructure is required. The national framework for water resources⁴ set out expectations that the industry reduces demand to around 110 litres per person per day and reduces leakage by 50% both by 2050. The conclusion of the water resource management planning process is that, even with these reductions, new water resource infrastructure will be needed to improve drought resilience, reduce the impact of abstraction on the environment, supply a growing population and adapt to climate impacts.

The water resources planning process assesses the need for these solutions and the socioeconomic assumptions such as those around growth underpinning the modelling for these processes.

Company WRMPs and regional plans develop their demand forecasts in line with Water Resource Planning Guidelines, which sets out requirements for using Local Plan and Office for National Statistics population growth projections. Ofwat's long term delivery strategies guidance also defines using two population forecasts in low and high population scenarios.

⁴ [Meeting our future water needs: a national framework for water resources](#), published March 2020

We have assessed where companies have adhered to these methods in order to set out the needs case for the RAPID solutions.

3.2.2 Solution progression

Water resources planning at a regional and company level is following a best value approach. This allows consideration of how new water sources can be used to bring about best value at a regional and national scale, therefore going beyond the local area. We expect the water resources planning process to assess the need for these solutions and the socioeconomic assumptions such as those around growth underpinning the modelling for these processes.

The need for solutions and the decisions on whether or not solutions ultimately go ahead will be made through water resources planning processes and subsequent applications for planning and environmental consents. Neither Ofwat nor RAPID has a decision-making role in regional plans or WRMPs.

The Anglian to Affinity Transfer scheme was not selected in a preferred or alternative pathway in relevant regional plans or WRMPs. RAPID therefore agreed that the full transfer should not be funded to further progress its investigation and development at this time.

3.2.3 Solution costs

Water resources infrastructure options are considered and selected as part of regional plans and WRMPs not the gated process. The gated process provides cost information for other purposes.

3.2.4 Decision making

The NPS for Water Resources Infrastructure will be used as the primary basis for examination by the Examining Authority of DCO applications for water resources nationally significant infrastructure projects. It will also be used by the Secretary of State in making decisions on those applications and may be a material consideration in making decisions on water resources infrastructure development that falls within the local authority planning regimes. As such, the solution owners will need to address the NPS for Water Resources Infrastructure in the applications that they make at a later stage for development consent orders or planning consents. However, it is not a relevant consideration for Ofwat's earlier decisions at gate two on the continuation of funding for progressing the solutions to gate three.

3.2.5 Carbon costs

Solution development to gate three should continue to build from the gate two submissions. As set out in the RAPID gate three guidance⁵, in particular, we are asking solutions to continue to follow the Water Resources Planning Guidelines⁶ (section 8.3.2), which states expectations for accounting for and reducing greenhouse gas (GHG) emissions. We are asking companies to reduce and mitigate embodied carbon as much as possible using standard approaches and appropriate frameworks. On 6 January 2022, Ofwat published its net zero principles position paper.⁷

Solutions should be designed in line with these principles. In particular, companies are encouraged to ensure solutions:

- are reflective of national government targets on net zero
- prioritise the reduction of GHG emissions before the use of offsets, doing so in line with the IEMA GHG Management Hierarchy⁸ and;
- clearly address both operation and embedded emissions.

3.2.6 Historic environment

During further progress through the gated process, solution owners will continue to develop their environmental assessments, including consideration of the historic environment. A DCO application or an application for local planning permission for the solution will need to be supported by an Environmental Impact Assessment in which the effects of the solution on the historic environment will be assessed and proposals for mitigating any adverse effects will be included. The acceptability of the effects and mitigation will be a matter for the authorities determining those applications and will not be a decision reached by the gated process.

We agree that the solution would benefit by an earlier engagement with Historic England and have added a recommendation in Appendix A.

3.2.7 Stakeholder engagement

We agree that stakeholder engagement is important. Engagement with stakeholders as identified in the solution owners gate two submission is expected to be an integral part of the solution evidence base.

⁵ [Strategic regional water resource solutions guidance for gate three](#), RAPID, August 2022

⁶ [Water resources planning guidelines](#), updated 14 April 2023

⁷ [Net zero principles position paper](#)

⁸ The GHG Management Hierarchy, as detailed by the Institute of Environmental Management and Assessment (2020 version), is a framework organisations can use to guide the scoping and strategic planning of their energy and carbon management activities.

Solutions will need to follow gate three engagement guidance which include:

- Pre-planning statutory consultation as described in The Planning Inspectorate Advice note 11 and Annexes A-H.⁹
- Plans showing ongoing and continued engagement, that have been shared with public and statutory bodies, including any required enhanced advisory services.
- Customer engagement, particularly on changes of source where relevant.
- Engagement with all stakeholders affected by the solution's development.

3.2.8 Gated allowance

We have considered the representations made on the gate three allowance and have considered further the interests of customers over the lifecycle of the solution's development and delivery. As a consequence, we have decided to increase funding for gate three. We will consider gate four expenditure either as part of the gate three decision or price review 2024 (PR24), as appropriate.

We have adjusted Table 4 of the final decision to reflect these changes and have added some explanatory text to section 4.2.

3.2.9 Cost sharing

We have considered the representations made on the appropriateness of the cost-sharing mechanism which appeared in the draft decision and have considered further the interests of customers over the lifecycle of the solution's development and delivery. As a consequence, we have decided to remove the cost sharing arrangements for gate three and are instead capping the gate three allowance at a higher level. This means that the solution may pass on to customers the costs of gate three activities but only up to the higher cap. The solution will be allowed to use its previous underspends to offset expenditure above the cap to provide some flexibility against cost uncertainty.

We have added some explanatory text to section 4.2 to reflect these changes.

3.2.10 Efficient spend

We acknowledge the representations raised on efficient spend. We have updated the text in section 4.3 to reflect the change in final gate two expenditure derived from the final gate two accounts.

⁹ [National Infrastructure Planning. Advice Notes](#)

3.2.11 Gate three and four timing

Anglian Water recognise the benefit of gate three being moved back from March 2024 to September 2024. We will therefore retain September 2024 as the timing for gate three.

Anglian Water suggest that as a result of the gate three timing, that some gate four activities will need to be started during the gate four period. In principle this is acceptable and should be discussed with us before expenditure is incurred. Such expenditure should be clearly delineated as gate four spend when completing the efficiency of expenditure annex and in gate accounts. We refer Anglian Water to the RAPID gate three guidance¹⁰, section 1.1.7 on 'Early Gate Four Spend'.

Anglian Water propose that a revised gate four date will be offered within the gate three submission. The need for flexibility and bespoke solution gate timings will be reflected in future decisions.

3.2.12 Name change

We accept Anglian Water's proposal of 17th May 2023 regarding the solution name. We are changing the solution name to Peterborough to Grafham Strategic Transfer (P2G) from gate two onwards.

¹⁰ [Strategic regional water resource solutions guidance for gate three](#), RAPID, August 2022

4. Solution assessment summary

Table 2. Final decision summary

Recommendation item	Anglian to Affinity Transfer
Solution owners	Anglian Water and Affinity Water
Should further funding be allowed for the solution to progress to gate three?	Yes, for the Peterborough to Grafham transfer element only.
Is there evidence all expenditure is efficient and should be allowed?	Yes
Delivery incentive penalty?	No
Is there any change to partner arrangements?	Yes, Affinity Water will cease to be a solution owner
Are there priority actions for urgent completion?	Yes, refer to section 5.1.
Are all priority actions and actions from previous gates addressed?	Yes
Suitable timing for gate three has been proposed	No, RAPID have suggested a gate three of September 2024 to align with other solutions.

4.1 Solution progression to standard gate three

The solution owners suggest that the solution, except for the Peterborough to Grafham transfer element, is not a potentially valuable way of supplying water to customers. RAPID agree with the proposal presented by Anglian Water and Affinity Water that the solution, except for the Peterborough to Grafham transfer element, should not be funded to further progress its investigations and development at this time.

Anglian Water have identified that the Peterborough to Grafham transfer element of the solution, comprising of the Northern section of the Western route, offers options for Anglian Water to serve customers in Ruthamford from the SLR solution and increase resilience. Based on our assessment of a wide range of areas that could concern the progression of this section of the solution, we have concluded that the Peterborough to Grafham transfer element should progress through the gated process to gate three.

Anglian Water have proposed that the Peterborough to Grafham transfer element of A2AT is merged with the SLR solution following gate two. While RAPID see merit in managing SLR and associated infrastructure together, there are aspects where separability is needed. This includes the ways that costs associated with the Peterborough to Grafham transfer element are reported and recorded. Consequently, we consider that the remaining Peterborough to Grafham element should be accounted for in the gated process beyond gate two as a solution separate to the SLR solution. However, we are willing to discuss with the solution teams the parts of the solutions that can be developed together and the parts where they must continue to be separated.

Figure 2 below summarises the area of any progression concerns for the Peterborough to Grafham transfer element, including indication of the significance. The reasons for this assessment conclusion are set out in table 3 below.

Decisions on funding as a result of this progression decision, are set out in section 4.2.

Figure 2. Assessment of solution's progression concerns

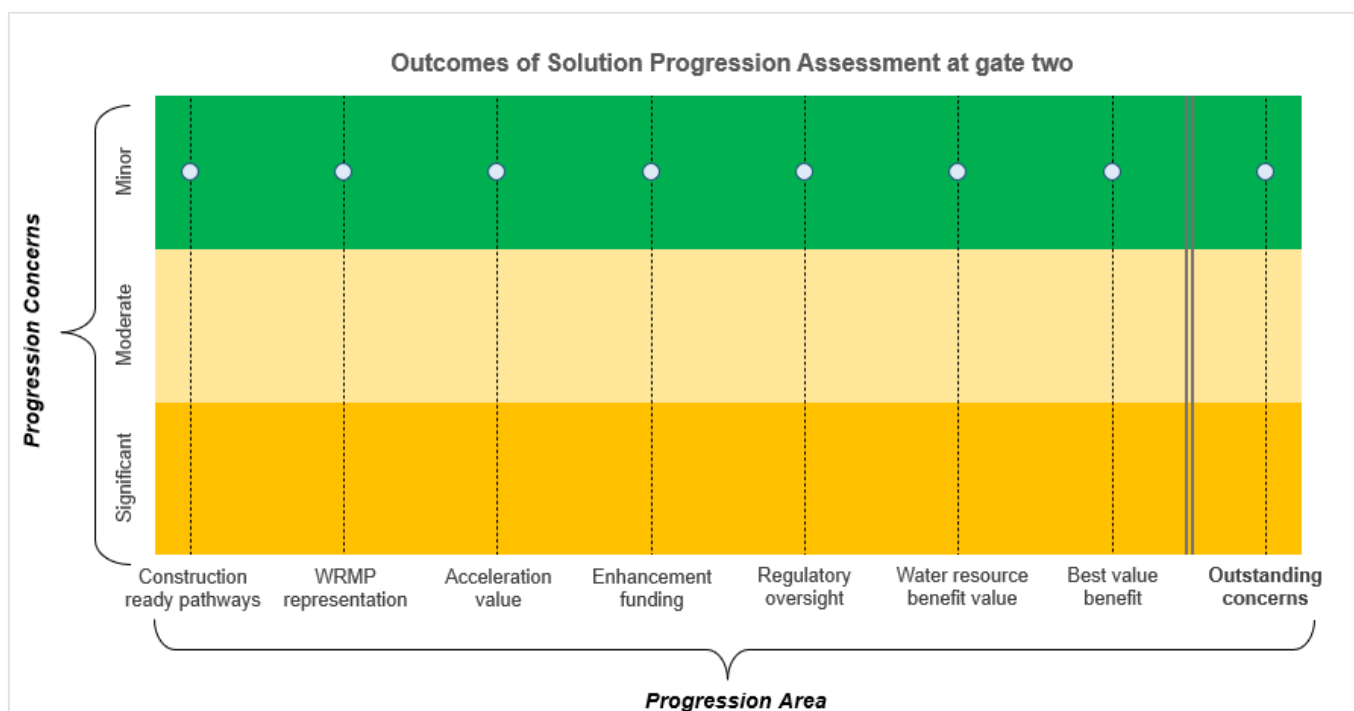


Table 3. Final decision progression criteria

Progression criteria	Anglian to Affinity Transfer
Solution owners	Anglian Water and Affinity Water
Is the solution in a preferred or alternative pathway in relevant regional plan or WRMP (where applicable) to be construction ready by 2030?	Yes, the Peterborough to Grafham transfer is chosen in Anglian Water's draft WRMP24, as a potable transfer option in its preferred plan, which is the relevant plan for the standard track. The solution will be construction ready by 2029.
	No further action is required on this progression criteria.
Do regulators have any significant concerns with the solution's inclusion or non-inclusion in a WRMP or regional plan or with any aspects that may impact its selection, to a level that they have (or intend to) represent on it when consulted?	No, the regulators do not have concerns on how the Peterborough to Grafham transfer is represented, or the information about it, in Anglian Water's draft WRMP24.
	No further action is required on this progression criteria.
Is there value in accelerating the solution's development to meet a	Yes. The Peterborough to Grafham transfer is required with the SLR to address Anglian Water's forecast deficit.

company's or region's forecast supply deficit?	
	No further action is required on this progression criteria.
Does the solution need continued enhancement funding for investigations and development to progress?	Yes. Continued funding is required to develop a solution to be delivered in time for the planned construction ready date.
	No further action is required on this progression criteria.
Does the solution need the continued regulatory support and oversight provided by the Ofwat gated process and RAPID?	Yes. The Peterborough to Grafham transfer will continue to benefit from the regulatory support and oversight provided by being included in the RAPID programme.
	No further action is required on this progression criteria.
Does the solution provide a similar or better cost / water resource benefit ratio compared to other solutions?	Yes. This solution does provide a similar or better cost / water resource benefit ratio compared to other solutions.
	No further action is required on this progression criteria.
Does the solution have the potential to provide similar or better value (environmental, social and economic value – aligned with the Water Resources Planning Guideline) compared to other solutions?	Yes. This solution has the potential to provide similar or better value (environmental, social and economic value – aligned with the Water Resources Planning Guideline) compared to other solutions.
	No further action is required on this progression criteria.
Does a regulator or regulators have outstanding concerns that have not been addressed through the strategic planning processes taking into account proposed mitigation?	Yes. The solution owner should develop robust environmental assessments, comprehensive water quality monitoring and refine the routing to minimise environmental impacts.
	This progression concern is addressed in section 4.1, Priority action 1 and Actions 1 and 4 in Appendix A of this document.

4.2 Solution funding to standard gate three

We are changing the funding of this solution to reflect the change in scope described in section 4.1. Anglian Water will receive 59% of the total A2AT funding allowance and Affinity Water will receive 0%. The revised funding will facilitate the continued development of the proposed Peterborough to Grafham transfer element only. This solution's total allowance and gate allowances has been amended from the final determination. The details of this funding decision are set out in Table 4 below.

Affinity Water will formally cease to be a solution partner on A2AT from gate two onwards. Anglian Water will progress A2AT (Peterborough to Grafham element of the transfer only) and will take full responsibility for the development costs associated with this solution. Affinity

Water's unspent share of the development allowance for A2AT will be reconciled through the revenue reconciliation that will take place at PR24.

This funding has been further revised to account for forecast costs at gate three. We have determined that across all solutions, gate three costs have risen due to factors such as increases in solution design costs, changes in scope and additional funding required to develop the environmental impact assessment (EIA), water quality assessments, ground investigations and other environmental field studies and assessments.

Anglian to Affinity Transfer will be allowed to spend up to £3.47 million to undertake gate three activities, representing an increase of £0.39 million from our draft decision. This figure has been reached based on funding 100% of the forecast costs for gate three. We are not amending gate four allowances at this point.

We are removing the cost sharing arrangements for gate three which were in our draft decision and are instead capping the allowance at a higher level. This means that the solution may pass on the costs of gate three development but only up to the higher cap. The solution will be allowed to use its previous underspends to offset expenditure above the cap to provide some flexibility against cost uncertainty.

These arrangements will be implemented through the price review 2019 (PR19) reconciliation mechanism. The impact on the solution owner(s) of any expenditure above or below the cap will depend on the extent to which the solution was already funded at PR19.

The solution may bring forward some gate four activities, which can be funded from the gate four allowance. There must be a clear rationale for undertaking the expenditure early, including evidence of the benefits of doing so instead of waiting for greater solution certainty.

Table 4. Anglian to Affinity Transfer funding allowances (2017/18 prices)

	Gate one	Gate two	Gate three	Gate four	Total
Anglian to Affinity Transfer gated allowance	£1.15m	£1.72m	£3.47m	£2.71m	£9.04m
Comment	10% of development allowance calculated as 6% of total solution costs.	15% of development allowance calculated as 6% of total solution costs.	Allowance has been changed to reflect that Anglian will be the only solution partner at gate three and will keep a 59% share of the scheme to reflect the revised scope. The allowance has then been further revised and recapped.	Allowance has been changed to reflect that Anglian will be the only solution partner at gate four and will keep a 59% share of the scheme to reflect the revised scope. We will further review gate four expenditure as part of gate three assessment or PR24.	Updated to reflect revised expenditure cap.
Previous Allowance	£1.15m	£1.72m	£4.01m	£4.59m	£11.47m
Change from Previous Allowance	£0.00m	£0.00m	-£0.54m	-£1.88m	-£2.42m

4.3 Evidence of efficient expenditure

The PR19 final determination specified that any expenditure on activities outside the gate activities for the identified solutions (or solutions that transfer in) will be considered as inefficient and be returned to customers. We will consider whether gate activity is efficient by considering the relevance, timeliness, completeness, and quality of the submission which should be supported by benchmarking and assurance.

A2AT has carried forward £0.57m underspend from gate one, increasing the allowance available to them at gate two to £2.29m.

Our assessment of the efficient costs as spent on standard gate two activities results in an allowance for this solution of £0.94m (of £0.94m claimed). A2AT has therefore underspent its combined gates one and two allowance by £1.35m and may take a 59% share of underspend forward to gate three, increasing the allowance available to them at gate three to £4.23m.

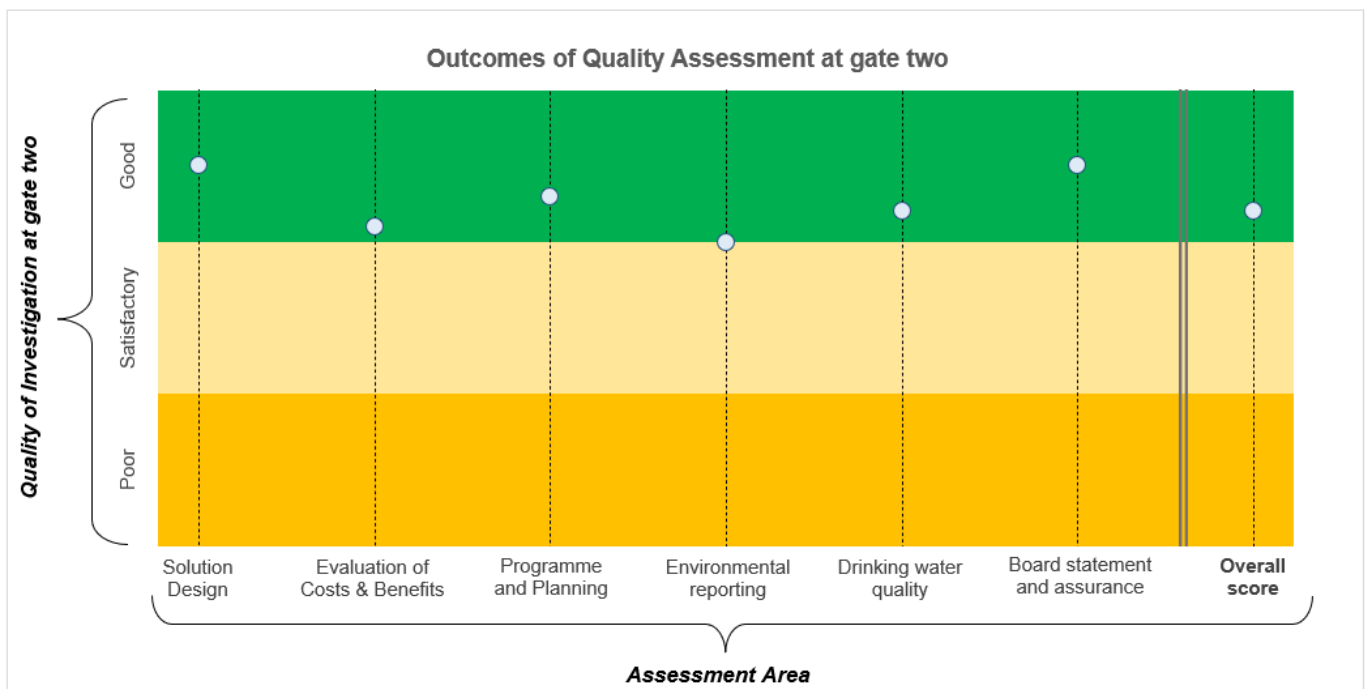
From gate two, we will move to look at the cumulative gate spend against the cumulative total allowance, across all gates consistent with the activities being undertaken. For example, any gate four allowance that is brought forward towards gate three should be for the purpose of early gate four activities. As A2AT is progressing to gate three, this will apply here.

4.4 Quality of solution development and investigation

The aim of the assessment was to determine whether gate two activities have been progressed to the completion and quality expected.

Figure 3 shows our assessment of the work completed on the solution, which was presented in the gate two submission. Our assessment was made against the criteria of robustness, consistency, and uncertainty to grade each area of the submission as good, satisfactory, or poor in accordance with the [standard gate two guidance](#), (updated version published on 12 April 2022). We also assessed the Board assurance provided.

Figure 3. Assessment of quality of investigation



Our overall assessment for the solution submission is that it is a good submission that meets the expectations of gate two.

In addition to the overall assessment score, there is some variance in expectations being met across the submission, with environmental reporting falling short of expectations and not as developed as would be expected at gate two.

We explain our assessment of each individual area, including any shortfalls in expectations, in the sections below. We have not applied any delivery incentive penalties as a result of this assessment of quality, as further detailed in section 6.

4.4.1 Solution Design

Our assessment of the Solution Design considered the quality of the evidence provided on the initial solution and sub-options; the anticipated operational utilisation of solutions; the interaction of the solution with other proposed water resource solutions and stakeholder and customer engagement. The assessment also considered whether information was provided on the context of the solution's place within company, regional and national plans.

We consider Anglian Water and Affinity Water have provided sufficient evidence of progress in developing the solution design for gate two.

At gate three we would like to see further detail on the exact route of the Peterborough to Grafham element of the transfer and location of associated assets.

4.4.2 Solution costs

Our assessment of the unit costs of delivering the Peterborough to Grafham element of the Anglian to Affinity Transfer finds that the costs presented are reasonable at this stage. The assessment also considers the use of the solution as a drought resilience asset, and therefore cost per capacity is often a more appropriate metric than cost per projected utilisation. We will continue to scrutinise cost estimate changes from gate two to gate three.

4.4.3 Evaluation of Costs and Benefits

Our assessment of the evaluation of costs and benefits considered the quality of the information provided on initial solution costs; the social, environmental and economic cost and benefits, water resource benefits and wider resilience benefits. The assessment also considered whether evidence was provided on how the solution delivers a best value outcome for customers and the environment.

We consider that Anglian Water and Affinity Water have provided sufficient evidence of evaluating the costs and benefits of the solution to an appropriate standard for gate two.

At gate three, Anglian Water will need to provide more detailed information on the Peterborough to Grafham transfer element, including infrastructure capacity and transfer losses, and the Natural Capital Approach (NCA).

4.4.4 Programme and Planning

Our assessment of the Programme and Planning considered whether Anglian Water and Affinity Water presented a programme with key milestones and whether its delivery is on track. The assessment also considered the quality of the information provided on risks and issues to solution progression, the procurement and planning route strategy and subsequent gate activities with outcomes, penalty assessment criteria and incentives.

We consider the evidence provided by Anglian Water and Affinity Water regarding the programme and planning, risks and issues and the procurement and planning route strategy for this solution to be of sufficient detail and quality for gate two.

It is important that future risk registers clearly identify the risks and proposed mitigation for the Peterborough to Grafham transfer element. Anglian Water should ensure that the proposed gate three activities are appropriate to address risks for the Peterborough to Grafham transfer element.

4.4.5 Environment

Our assessment of Environment considered the initial option-level environmental assessment; the identification of environmental risks and an outline of potential mitigation measures; the detailed programme of work used to address environmental assessment requirements and the initial outline of how the solution will take into account the carbon commitments.

We consider Anglian Water and Affinity Water to have provided sufficient progress in the environmental assessment, potential mitigations, future work programmes and embodied and operational carbon commitments for gate two.

The solution falls short in some areas relating to robustness of environmental assessment requirements. At gate three, Anglian Water will need to include detailed assessment of the environmental impacts and mitigation for the transfer/pipeline infrastructure from Peterborough to Grafham.

4.4.6 Drinking water quality

Our assessment of Drinking Water Quality considered drinking water quality and risk assessments; evidence that the solution has been presented to the drinking water quality team and a plan for future work to develop Drinking Water Safety Plans.

We consider Anglian Water and Affinity Water to have provided sufficient evidence of progress in the drinking water quality and risk assessment, and future work around Drinking Water Safety Plans for gate two.

We expect Anglian Water to continue to engage with the Drinking Water Inspectorate as the transfer design progresses and include emerging contaminants in the water quality monitoring programme.

4.4.7 Board Statement and assurance

The evidence provided relating to assurance is good for this stage of the gated process.

We consider that the Boards of Anglian Water and Affinity Water have provided a comprehensive assurance statement and have clearly explained the evidence, information and external/internal assurance that they have relied on in giving the statement.

5. Actions and recommendations

Where the submission has not been assessed as ‘meeting expectations’ in the quality assessment, or progression concerns have been raised, we have provided feedback on where we will seek remediation of the issues. We have also identified specific steps that Anglian Water should take in preparing for standard gate three.

We have categorised these remediation issues and steps into priority actions, actions and recommendations.

Priority actions are those that should have been completed at gate two and must now be addressed on a short timescale in order to make sure the solutions stay on track. They require urgent remediation in full.

Actions are those that should be addressed in full in the standard gate three submission. The response to these actions will influence the assessment of the gate three submission.

Recommendations are issues where additional information or clarification could improve the quality of future submissions.

We have also assessed progress on actions and recommendations from gate one.

5.1 Actions and recommendations from gate two assessment

One priority action has been identified for the Peterborough to Grafham transfer element, which should be delivered no later than 30 June 2023.

16 actions and recommendations have been identified for the Peterborough to Grafham transfer, which should be fully addressed at the gate three submission. Progress against actions will be tracked as part of regular checkpoints the solution holds with us whilst undertaking gate three activities.

The full list of priority actions, actions and recommendation for the Peterborough to Grafham transfer can be found in Appendix A.

5.2 Actions and recommendations from gate one assessment

We have assessed whether A2AT has met actions that were set out as a result of our gate one assessment.

There were no priority actions associated with this solution from gate one.

Five actions and recommendations were identified for A2AT, which were expected to be fully addressed at the gate two submission.

Further detail of our conclusion against each individual action is shown in Appendix B.

6. Delivery Incentive Penalty

We have not applied delivery incentive penalties to this solution, as a result of the assessment carried out on the gate two submission.

7. Proposed changes to partner arrangements

There are the following changes proposed to partner arrangements from gate two.

Anglian Water and Affinity Water propose that Affinity Water formally cease to be a partner on A2AT beyond gate two. This is due to the proposed transfer no longer transferring water to the Affinity Water network, and instead being progressed as an in-region transfer.

We agree with the proposed changes to partnership arrangements. The implications of this and the change in scope of this solution on the funding allocation is set out in section 4.2 above.

As this solution will progress as a single company solution with a reduced scope, as set out in section 4.1, we will refer to this solution as the 'Peterborough to Grafham transfer' from gate two onwards.

8. Gate three activities and timing

The Peterborough to Grafham transfer element of the solution will continue to be funded to gate three as part of the standard gate track.

For its gate three submission, we expect Anglian Water to complete the activities listed in [PR19 final determinations: strategic regional water resources solutions appendix](#), as expanded on in section 7.4 of the solutions gate two submission. Activities are expected to be completed in line with delivery incentives and expectations set out in [RAPID's gate three guidance](#). We also expect the actions listed in appendix A to be addressed.

8.1 Gate three timing

Anglian Water have proposed a date for gate three of March 2024. This is proposed alongside a forward programme of gate four in 2025, proposed planning application submitted in 2025, solution construction ready in 2029, and solution operational 2039-41.

We have decided that A2AT gate three should be September 2024. This is to align gate three with solutions on a similar programme, and for RAPID to efficiently assess progress of activities, ahead of the solutions proposed planning application.

We agree with your forward programme for gate four.

The forward programme proposed by the solution is in line with the principles of RAPID's standard programme. Funding arrangements are set out in section 4.2 of this document.

Appendix A: Gate two actions and recommendations

Priority Actions – to be addressed by June 2023		
Number	Area	Detail
1	Drinking Water Quality	Emerging contaminants are to be included in the water quality monitoring programme from gate two onwards. Provide a water quality monitoring programme including emerging contaminants to RAPID by 30 June 2023.
Actions – to be addressed in standard gate three submission		
Number	Area	Detail
1	Solution Design	Confirm to RAPID that the Peterborough to Grafham transfer element of the solution aligns with Anglian Water's Water Resource Management Plans (WRMP) and relevant Regional Plans at the next available regular checkpoint meeting after the publication of the WRMPs and Regional Plans.
2	Evaluation of Costs and Benefits	Improve reporting in the Natural Capital Assessment through inclusion of quantitative results, such as the tCO ₂ e sequestered for climate regulation, and the expected change in area of each habitat type. Water purification should be fully assessed, not only qualitatively. Provide in addition a rationale that explains why the ecosystem service was monetised.
3	Evaluation of Costs and Benefits	Provide evidence to support estimates for transfer losses and an explanation for how the losses have been calculated. Provide infrastructure capacity and justification required to facilitate the 150Ml/d transfer option.
4	Programme and Planning	Ensure that gate three activities for the Peterborough to Grafham transfer element of the solution align with the RAPID gate three guidance and address the key risks and mitigations identified in the risk register.
5	Environment	Develop and present a plan to address environmental impacts of the Peterborough to Grafham transfer element of the solution including an 'in combination' assessment of potential impacts. The plan should also set out how archaeological issues will be managed.
Recommendations		
Number	Area	Detail
1	Solution Design	Provide specific options for the Peterborough to Grafham transfer element of the solution at gate three.
2	Solution Design	Provide further detail on the exact route and location of the pipeline, the locations of pumping stations and any new break pressure tanks which are proposed.

3	Solution Design	Begin to engage with local customers and stakeholders who will be receiving a new source of water.
4	Evaluation of Costs and Benefits	Reference Ofwat's Public Value principles in the gate three submission and provide narrative on how the principles have been followed during solution development.
5	Evaluation of Costs and Benefits	Include descriptions and tables to show how cost estimates, including total planning period indicative option cost (net present value), for the preferred option, have changed between each gate.
6	Evaluation of Costs and Benefits	Provide specific benefits for the Peterborough to Grafham transfer element of the solution at gate three.
7	Programme and Planning	In future gated submissions explain where the project risks presented in the submission vary from the quarterly risk reporting to RAPID.
8	Programme and Planning	Risks associated with the Peterborough to Grafham transfer element infrastructure should be clearly presented.
9	Programme and Planning	Provide at gate three for the Peterborough to Grafham transfer element, a timeline of planning and delivery to show exactly how each stage of the pipeline will be constructed, completed and delivered for commissioning.
10	Environment	Clearly present how scope 1, 2 and 3 emissions have been considered. The methodology used to determine carbon emissions should be presented in such a way that it can be easily understood and repeated. Provide further evidence to show how uncertainties within the carbon assessment have been appropriately considered.
11	Environment	We recommend that the solution owner continues to engage with Historic England on the work required to consider the historic environment. We recommend that the programme of planned investigations and assessments is reviewed regularly with Historic England.

Appendix B: Gate one actions and recommendations

Actions – addressed in standard gate two submission			
Number	Area	Detail	RAPID assessment outcome
1	Solution Design	Ensure utilisation is refined as part of gate two, including uncertainty and sensitivity, at least to the standard described in response to query AAT003 Q3.	Complete
2	Solution Design	Assess how any new transfer infrastructure will connect with existing infrastructure, particularly how the operations at Rutland/Grafham may have to change to connect the transfer.	Complete
3	Solution Design and Environment	<p>In-combination assessment must include all relevant interactions between options. We expect robust assessment for any options that are screened out as part of in combination assessment.</p> <p>You should consider the potential competing resources from the energy sector.</p> <p>You should consider the impact on Rutland Water.</p>	Complete
Recommendations			
Number	Area	Detail	RAPID assessment outcome
1	Evaluation of Costs and Benefits	You should explain how the chalk streams will benefit as part of the 'need' case for gate two when the route and deployable output is known.	Complete
2	Evaluation of Costs and Benefits	You should explain which option is considered best value (rather than just least cost) for customers and the environment and the criteria and method used for best value ahead of gate two.	Complete

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