

Sophie Broadfield Deputy Director – Water Services Department for Environment, Food and Rural Affairs

6 December 2019

Thames Water draft WRMP19: Further information

Dear Sophie,

Thank you for your letter of 10 October 2019 requesting further information in support of the Statement of Response (SoR) on our revised draft WRMP19.

In response to the request we have reviewed our revised draft WRMP19 and revised Sections 10 and 11 to incorporate additional information. For ease, we have extracted the revised text and provided this as an Annex to this letter. We have also provided the revised Sections 10 and 11 of our revised draft WRMP19. We have engaged with Affinity Water in preparing these revisions to ensure our plans are aligned on relevant matters.

In your letter you request that the further information is published on our website and a copy sent to those who made representations on our draft (and revised draft) plan, we are happy to comply with this request. We have proposed to Adrian Brookes that we wait to publish the information on our website and notify all respondents (>750 consultees) following our meeting in January 2020, once you have confirmed that you are satisfied with the information provided. This approach will ensure we can provide a single, comprehensive overview to consultees on the plan and avoid the need for multiple communications should you require any amendments or further information.

If you have any questions, please do not hesitate to contact me.

Yours sincerely

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Annex 1 - Thames Water's response to Annex A - further information required from Thames Water to support a decision on the Water Resources Management Plan 2019

Please note there may be some changes to paragraph and table numbers when the text is inserted into Sections 10 and 11.

1. Ensure the plan clearly sets out how the decision on strategic options will be made in time for 2022/2023 and your next WRMP can withstand scrutiny, such as through a public inquiry.

- We commit to provide a 6-monthly update to government and regulators which will set out progress in delivering the programme of work and provide visibility of whether we are on track to enable timely investment decisions on new strategic water resource infrastructure.
- In the "Monitoring and Reporting" section of Section 11 of the updated revised draft WRMP19 the text has been updated to include a timetable which sets out potential dates for a public hearing or inquiry and the implications for delivery of strategic water resource options.
- In the "Monitoring and Reporting" section of Section 11 of the updated revised draft WRMP19 we have also included the main outputs of these studies in the timetable to ensure regulators and stakeholders have full visibility of the outputs and the timing of these. The timeline has been prepared in consultation with Affinity Water to ensure there is consistency in the approach and information published. We will provide further details of the timetable of investigations for the Strategic Regional Options (SROs) once this has been agreed with other water companies and RAPID.

The following text is extracted from Section 11 with new or amended text highlighted in yellow.

Updated revised draft WRMP19, Section 11: Preferred Plan

Monitoring and reporting

- 11.245 In the period to 2022/23 we will put in place a system of monitoring and reporting to give regulators and stakeholders visibility of our progress delivering the programme of studies for WRMP24. This will facilitate stakeholder input and engagement to the overall work programme. We will continue to report progress through our quarterly Water Resources Forum, which we will run jointly with both WRSE and Affinity Water where appropriate, and the associated technical stakeholder meetings. We will provide 6-monthly updates on progress to government and regulators in addition to the submission of quarterly progress reports to the Regulators' Alliance for Progressing Infrastructure Development (RAPID) relating to the work programme associated with investigations of the strategic regional options (SROs). These reports will use the template prescribed by RAPID. Our proactive work with WRSE, as well as RAPID, will ensure our work programme is aligned with neighbouring water companies as well as those further afield who are working with us to investigate the SROs. An annual update of progress will be reported through the Environment Agency's June Annual Review of the water resources programme. Full details of the outputs and monitoring plan which will be reported are given in Table 11-47. This includes:
 - Progress against target with the demand management programme (water efficiency savings, reduction in pcc, progressive metering programme installations, leakage reduction);
 - Population growth against forecast;
 - Reporting progress on industry workstreams, coordinated through Water UK and Waterwise, to facilitate mandatory water labelling on water using products, changes to fitting standards and building regulations;

- Delivery of water supply schemes, including several groundwater schemes against the investment programme (scheme milestones, associated yield and quality against expectations), and;
- Ongoing results of options studies and SROs against the programme of investigations.

Assessment Area	Monitoring Activity	Metric	Purpose and relationship with decision point					
Water balance	SDB DI	MI/d	Actual vs predicted – Confirm if movement is within Headroom					
Summary	WAFU	-	expectations					
Growth	Population Properties	000s	Actual vs predicted and updates to projections					
	PCC	l/hd/d						
	Leakage	MI/d	Actual vs predicted – assumptions and impact assessment					
AMP7 Delivery - Demand options	Metering	Activity	Meters installed – assumptions and impact assessment					
	Water Efficiency		Activity delivered – assumptions and impact assessment					
	New River Head							
AMP7 Dolivory	Horton Kirby	Delivery						
AMP7 Delivery – Supply options	Southfleet & Greenhithe	progress update	Delivery vs WRMP19					
	Didcot	_						
	Ladymead							
	IPR Deephams	_						
	IPR Beckton	Progress	Readiness for 2022/23 decision point (2030 scheme delivery)					
Strategic option studies	West London reuse options	update (see App XX						
	Oxford Canal	for details)						
	STT		Readiness for 2022/23 decision point (2037/38 scheme					
	SESRO		delivery)					
	Affinity Water	Update						
Regional need	Southern Water		Updated need position					
	Sutton and East Surrey							

Table 11-47: The adaptive plan monitoring programme

Assessment Area	Monitoring Activity	Metric	Purpose and relationship with decision point				
	South East Water						
	WRSE	-	Regional modelling update				
Environmental need	Water Industry National Environment Programme (WINEP)	Update	 Progress with current investigations / delivery Likelihood and magnitude of further sustainability reductions in the future West Berkshire Groundwater Scheme 				
Resilience required	Regulators	Design drought	Update return period and DO				

11.246 Our WRMP19 stakeholder engagement programme, which has been commended by our Customer Challenge Group (CCG), will continue as an effective means of securing stakeholder input to the ongoing programme of work.

Alternative options plan 2022/23 decision point and regulatory governance

- 11.247 As set out in subsection 11-B, our updated revised draft WRMP19 is adaptive and allows for results of the ongoing programme of studies to continue to inform the selection of strategic options that will be promoted as part of the best value investment programme. In order to enable the schemes to be delivered within their respective lead times without risk to the overall robustness of the plan, a decision will need to be made in 2022/23 which finalises the strategic water supply schemes for promotion and delivery. This decision point relates to both the resource options being promoted to secure resilience to a severe 1 in 200 drought event by 2030 as well as the strategic regional resource options to maintain ongoing security of supply resilience in the medium and long-term (Figure 11-18) across the South East.
- 11.248 The timing of this decision point in 2022/23 aligns with one chosen by Affinity Water to confirm the strategic options that it will promote as part of its own WRMP. This allows for the completion of investigations that Affinity Water is undertaking on a number of strategic water supply options for its plan, as well as the success of its demand management programme.
- 11.249 There is no requirement for construction work on the large regional strategic resource options to begin in the AMP7 period (2020-2024); only further detailed site investigations are required in order to facilitate the completion of detailed scheme design which would subsequently enable the schemes to be progressed to planning application stage.
- 11.250 The 2022/23 date aligns extremely well with the regulatory timetable for the next WRMP, i.e. WRMP24, both at regional and individual company plan level and as such it will facilitate stakeholder and customer engagement and input to the decision making process through the statutory consultation process associated with the next set of WRMPs. A sophisticated programme appraisal process will be used to inform the selection of the options that will comprise the best value investment programme.
- 11.251 The timeline allows for programme appraisal at WRSE regional level, as well as at the individual water company plan level for both Affinity Water and Thames Water. WRSE acknowledges that its existing EBSD single objective modelling approach is too simplistic to reliably determine the timing and order of strategic regional resource developments and it is currently developing much more sophisticated and appropriate regional system simulation models and investment decision

support tools to facilitate development of a robust regional water resources strategy in time for WRMP24.

- 11.252 The timetable aligns with the process set out in Ofwat's July 2019 Draft Determinations¹ which has confirmed development to planning application stage of regional strategic water resource schemes for the South East and East. Ofwat's investment requirements have been reviewed with the other seven water companies² who have included the promotion of the strategic water resource options within their WRMP19 plans. The proposed timing for the gateways that Ofwat has indicated should be used to monitor progress and control investment is shown in the WRMP24 timetable listed below.
- 11.253 The expected WRMP24 statutory timescale and Ofwat's gated process³, and the main outputs, is as follows:

National Framework Guidance to regions	December 2019
Statement of need (SON) for the South East	February 2020
Water Resources Planning Guideline	Autumn 2020
Updated SON for the SE	February 2021
SRO Gate 1 investigation activities	<mark>June 2021</mark>
Initial WRSE Regional Plan	August 2021
Draft WRSE Regional Plan for consultation	January 2022
Draft WRSE regional plan to inform company WRMP24	April 2022
Draft WRMP24 and revised WRSE Regional Plan	August 2022
Draft WRMP24 publication for consultation	September 2022
SRO Gate 2 investigation activities	September 2022
Statement of Response and revised draft WRMP24	March 2023
WRMP24 submission to Secretary of State (SoS)	Spring 2023
Commencement of pre-application work re DCO for SESRO	July 2023
Final Draft WRSE Regional Plan	September 2023
SRO Gate 3 activities	September 2023
Hearing/Inquiry into WRMP24	Autumn 2024
Secretary of State approval of WRMP24 (SRO needs case)	March 2025
Pre-application work for SESRO DCO	March 2025 – February 2026
Statutory consultation on SESRO DCO	March 2025

¹ Ofwat PR19 Draft Determinations 18 July 2019

² Affinity Water, Anglian Water, Severn Trent Water, South West Water, Southern Water, United Utilities and Wessex Water

³ Understanding as at November 2019 – Ofwat's gated process still evolving and the statutory timetable for WRMP24 is still to be confirmed

Application for SESRO DCO

April 2026

- 11.254 The WRMP19 recognises that following further studies a decision will be made in 2023 as to whether it is necessary to proceed with the SESRO to ensure the security of water supply in the South East generally and for Affinity Water and Thames Water specifically.
- 11.255 If the decision taken in 2023 is that the SESRO is necessary, it is imperative that the future timetable for the next round of WRMPs and for the required development consent order ("DCO") leaves enough time for the SESRO to be developed by the time it is needed ie by summer 2038.
- 11.256 This means that any application for a DCO for the SESRO will need to be made by April 2026 if the SESRO is to be available for use by summer 2038.
- 11.257 Therefore, if the decision taken in 2023 is to proceed with the SESRO then it is vital the promotion of the subsequent WRMP24 proceeds in parallel with the promotion of a DCO for the SESRO. Specifically, the timetable must allow for the need for the SESRO to be established through the WRMP process as is anticipated by the proposed Water Resources National Policy Statement (NPS) with pre-application investigations, activities and assessments related to the DCO process for the SESRO (and which are unrelated to the need for the SESRO) being carried out in parallel to the WRMP process. The pre-application work for the SESRO DCO will need to commence in July 2023 to facilitate the application in April 2026.
- 11.258 To enable the above, it has been agreed that if a decision is made in 2023 to proceed with the currently preferred option of the SESRO the timetable set out above will be adhered to by Thames Water and Affinity Water and will be required to be facilitated by the Secretary of State and the Environment Agency.
- 11.259 Figure 11-18 shows the 2022/23 decision point in relation to both delivery of Thames Water's own resilience to a severe 1 in 200 year drought event as well as supporting medium and long-term maintenance of security of supply resilience in the wider regional WRSE context. The central Expected: future 2 represents the WRMP19 preferred plan and requires delivery of the first strategic regional resource (SESRO) in 2037/38. The more Challenging: future 1 with higher growth, earlier climate change impacts and greater resilience requirements⁴ would bring forward development of the second strategic regional resource option (Severn Thames Transfer) to the 2040s. The Optimistic: future 3 and Aspirational: future 4 would see the strategic regional resource delayed until the mid-2040s or later. The drivers for the different futures are shown in Table 11-48 and are taken from the Adaptability analysis previously set out in Section 10.

Driver	Aspirational	Optimistic	Expected	Challenging		
Deficit change	~150Mld less	~100Mld less	-	~150Mld more		
Timing of change	2055	2045	-	2050		
Population	ONS16 Low ¹	ONS16 Low ¹	Most likely	СаМКОх		
PCC	105lhd by 2065 ¹	110lhd by 2065 ¹	121lhd by 2045	No reduction ¹		

Table 11-48: Single ¹ and in-combination drivers for different fu	utures
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⁴ Main drivers for different futures taken from the Adaptability drivers in Figures W-34 to W-38, Appendix W

Driver	Aspirational	Optimistic	Expected	Challenging
Leakage	Half leakage	Half leakage	Half leakage	Reduce by ¹ ⁄₃ ¹
Climate Change	Impact 2080s	Impact 2080s	Impact 2080s	Impact 2050s
Resilience	1:200	1:200	1:200	1:500 ¹
Regional need	Delayed 2055 ¹	Delayed 2045 ¹	100Mld 2037/8	Increased 2050 ¹

1 Single driver which on its own would be sufficient to trigger a different future to that in the Preferred Plan

- 11.260 At this early stage in the planning process it is not possible to definitively determine what the precise thresholds are which would define that there has been movement away from the Expected future to one of the alternatives since this would be the subject of a detailed planning and modelling exercise itself. This is why delivery of the Plan in the period to 2022/23 will be carefully monitored, which, together with the development of more sophisticated regional planning decision support tools, will enable an informed decision to be made as part of the next Water Resources Planning exercise i.e. WRMP24.
- 11.261 In 2022/23, the findings of the supply option studies detailed earlier together with the findings of the wider monitoring activities in Table 11-47 will be evaluated as part of the development of WRSE's regional plan. This information will provide confirmation of the path to be taken at the decision point for Thames Water's resilience to drought and the region's security of supply as shown in Figure 11-18.
- 11.262 The timing of the decision point aligns with the gated process in the evolving collaborative process outlined within Ofwat's Draft Determinations for the regional strategic schemes. The recommendation that Thames Water sets out for development will be aligned as appropriate with other water companies' plans.
- 11.263 It is expected that this recommendation will be provided to RAPID. This group includes representatives of the EA, Ofwat, and DWI to ensure regulatory alignment and robust decision making to assist Defra and the SoS, (and the Welsh Assembly Government).
- 11.264 This decision point in 2022/23 allows the required options to continue into planning phases without compromising the need for the resource to be available by summer 2038. Further gates are expected to apply, along with WRMP24 and PR24, which allow further tests to confirm the continuation of the chosen options. For the regional strategic options in our plan, actual construction will not start until AMP8 (2025-2030).

2. Demonstrate that you can manage the risk from leakage reduction shortfall

- We have committed to achieve leakage reduction targets in 2019/20 and 2024/25 and have an extensive programme of work underway to meet these targets. We provide updates on our performance on our website each month and this will continue in the next AMP period. We report on compliance with our Section 19 Undertaking in a 6-monthly report to Ofwat.
- We have included additional information in Section 10 (inserted prior to the existing paragraph 10.488) of our updated revised draft WRMP19 which sets out how we can manage the risk to security of water supply if we do not achieve our proposed leakage reduction targets.
- We have included additional information on the effect of the decision point for investment in strategic resource options if we do not meet our planned leakage reduction target.

The following text is the relevant paragraphs from Section 10 with new or amended text highlighted in yellow.

Updated revised draft WRMP19, Section 10

Impact of lower than expected leakage savings between 2020-25

- 10.488 We recognise that leakage reduction is a large and potentially challenging component in the first five years of our preferred plan.
- 10.489 Further developing the understanding gained from the range of alternative supply and demand scenarios assessed as part of the performance testing step of programme appraisal (Step 4), in this sub-section we consider how the preferred programme would change if the leakage reduction component of our integrated demand management programme is less effective than forecast over the first five years of the plan.
- 10.490 We are not able to define a single, realistic worst case for leakage reduction as this is dependent on a whole range of factors that are outside of the company's control, e.g. the severity and extent of an extreme weather event. However, we can take the leakage reduction component of the preferred plan and reduce its impact. We have considered the following scenarios:
 - 25% underperformance, 2020-25
 - 50% underperformance, 2020-25
 - 75% underperformance, 2020-25
- 10.491 In each case we have assumed that the deficit is not recovered in later years. Also, all other components of the supply demand balance remain unchanged, including the 5% target headroom allowance.
- 10.492 Note that the preferred plan includes providing an increasing surplus over 2020-25, to mitigate some of the risk associated with underperformance. By 2025 this is equivalent to nearly half of the size of the forecast leakage reduction.
- 10.493 Table 10-31 below sets out how the supply demand balance in the London WRZ is impacted by the three alternative leakage reduction scenarios.

	AMP7					AMP8				AMP9					
Leaka ge Under -Perf.	<mark>2020</mark>	<mark>2021</mark>	<mark>2022</mark>	<mark>2023</mark>	<mark>2024</mark>	<mark>2025</mark>	<mark>2026</mark>	<mark>2027</mark>	<mark>2028</mark>	<mark>2029</mark>	<mark>2030</mark>	<mark>2031</mark>	<mark>2032</mark>	<mark>2033</mark>	<mark>2034</mark>
Pref. Plan	2	<mark>14</mark>	<mark>15</mark>	<mark>43</mark>	<mark>61</mark>	<mark>51</mark>	<mark>62</mark>	<mark>70</mark>	<mark>76</mark>	<mark>80</mark>	<mark>9</mark>	7	<mark>9</mark>	<mark>16</mark>	<mark>19</mark>
<mark>25%</mark>	<mark>-8</mark>	<mark>-1</mark>	<mark>-6</mark>	<mark>14</mark>	<mark>31</mark>	<mark>21</mark>	<mark>32</mark>	<mark>39</mark>	<mark>46</mark>	<mark>49</mark>	<mark>-21</mark>	<mark>-23</mark>	<mark>-21</mark>	<mark>-14</mark>	<mark>-12</mark>
<mark>50%</mark>	<mark>-20</mark>	<mark>-18</mark>	<mark>-28</mark>	<mark>-12</mark>	<mark>0</mark>	<mark>-10</mark>	1	<mark>9</mark>	<mark>15</mark>	<mark>19</mark>	<mark>-52</mark>	<mark>-54</mark>	<mark>-52</mark>	<mark>-45</mark>	<mark>-43</mark>
<mark>75%</mark>	<mark>-33</mark>	<mark>-34</mark>	<mark>-49</mark>	<mark>-38</mark>	<mark>-30</mark>	<mark>-41</mark>	<mark>-30</mark>	<mark>-22</mark>	<mark>-16</mark>	<mark>-12</mark>	<mark>-83</mark>	<mark>-84</mark>	<mark>-83</mark>	<mark>-76</mark>	<mark>-73</mark>

Table 10-31 Impact on the London WRZ supply demand balance of alternative leakage scenarios

10.494 Observations:

- A 25% underperformance would put Years 1-3 into deficit (an underperformance >5% would be enough for a deficit in Year 1). Deficits also appear in AMP9 as the schemes chosen to deliver 1:200 resilience would not also cover underperformance.
- A 50% underperformance brings further deficits in year 4 and 6 and increases the AMP9 deficit.
- A 75% underperformance would see deficits throughout AMPs 7-9.

10.495 Plan response:

- There are limited options to manage deficits that appear in Years 1-3 because of the lead times to deliver resource options. For the 25% underperformance scenario, we may be able to re-profile some the demand management to bring forward savings from later in the programme, however this would be unlikely to be enough to balance the 50% and 75% scenarios. As part of WRSE's development of a regional resilience plan for the South East we are examining opportunities for further conjunctive use of water resources between Thames Water and Affinity Water and it may be that this work delivers additional water resources from the enhanced conjunctive use of existing available water resources. WRSE's development of a regional water resources at this stage to indicate the potential magnitude of such a gain, but it offers further opportunities to mitigate any short-term underperformance in leakage control.
- Deficits in AMP8 could be mitigated by bringing forward groundwater (GW) options or the Oxford Canal from 2030. We could also seek to extend the RWE Didcot raw water bulk supply agreement.
- All underperformance can be mitigated in full in 2030 by building different and/or larger schemes than those currently selected in the preferred plan.

25% underperformance – additional GW options and Didcot

- 50% underperformance replace Deephams with Beckton 100
- 75% underperformance replace Deephams with Beckton 150 (or Deephams + Beckton 100)
- Because of the ability to change the options developed for 2030 at the 2022/23 decision point, the remainder of the programme, such as the SESRO development in 2037/38, would remain unchanged.
- The Severn Thames Transfer would likely remain in the 2080s, the precise date depending on which set of options are developed in 2030 and 2037.
- In the event of a significant drought occurring under any of the three scenarios in AMP7
 Thames Water would ensure early enactment of its Drought Plan measures in order to
 ensure maintenance of security of supply at all times. Customer water use restrictions
 would be implemented (e.g. TUBs), in addition to enhanced demand management measures
 undertaken by the company, followed by the implementation of drought permits, if
 appropriate.

10.496 Summary:

- Leakage underperformance would put pressure on the supply demand balance particularly in the early years of AMP7. Supply demand deficits could be expected although it should be noted that our plan already includes a headroom allowance to allow for such uncertainty.
- AMP8 deficits can be mitigated by bringing forward options from 2030 once deficits are identified by the monitoring plan in AMP7. As these are likely to be smaller non-strategic options, they are not bound to the 2022/23 decision point.
- AMP9 deficits would be mitigated by selecting different/larger reuse options for delivery in the early 2030s at the 2022/23 decision point.
- We consider that the 2022/23 decision point would not need to be brought forward due to leakage underperformance alone.

- **3.** Ensure alignment with Affinity Water's plan and set out how it will work with other companies in the South East
 - We have also included information in the revised Section 11 to explain how we will work with
 other companies in the South East through Water Resources South East (WRSE) to develop a
 multi-sector, resilient regional plan. We have also included information on how we will work
 collaboratively to complete the work to investigate the Strategic Resource Options and report
 progress through the new "gated" regulatory process, overseen by RAPID. (Please see the more
 detailed response to point 1 above). We will continue to engage with stakeholders as work is
 undertaken to inform the regional plan and our WRMP24 to ensure stakeholders understand the
 process and have an opportunity to comment and input to its development.
 - We will ensure that information included in companies' final plans are fully aligned and consistent. We have worked with Affinity Water to ensure planned transfers including volume and timing from the South East Strategic Reservoir Option (SESRO) are fully aligned in both companies' final plans and shows how this affects the preferred options. In Section 11 of our updated revised draft WRMP19 we have included additional information on the programme of work (paragraph number 11.253), which was prepared in consultation with Affinity Water and we can therefore confirm that it is consistent with information which will be included in Affinity Water's final plan.

The following text is the relevant paragraphs from Section 11 with new or amended text highlighted in yellow.

Updated revised draft WRMP19, Section 11 Preferred plan

Table 11-2: London preferred plan – Overall plan (DYAA) for resource management

The following text is included in the footnote to Table 11-2.

In its preferred plan, Affinity Water has requested a 100 MI/d supply from the SESRO to be available by summer 2038. The transfer and treatment elements of the scheme are then developed in two 50 MI/d stages by Affinity Water, in 2038 and 2053, respectively. Under an alternative scenario where the 100 MI/d supply is considered as two separate 50 MI/d supply requirements in 2038 and 2053, respectively, the SESRO is still selected in 2038 in the EBSD+ modelling (see Appendix X, Table x-29). This scenario allowed sensitivity checking of how sensitive the revised draft plan is to different year 1 requirements from Affinity Water. In both sets of requirements the SESRO is still selected in the first instance by 2038.

Paragraph 11.33 has been amended and paragraphs 11.34 – 11.37 inserted as follows:

11.33 As discussed above, the long-term leading strategic option selected through the programme appraisal process for supply to the London WRZ is the SESRO in south west Oxfordshire. The option is located to the west of London and therefore is able to supply the SWOX and SWA WRZs as well as use the River Thames as a natural conveyance route to transfer raw water to London. The option is also able to supply the WRSE raw water needs of Affinity Water (100 MI/d required by summer 2038) and potentially South East Water if required in the future; both companies having existing intakes on the River Thames. The SESRO has been selected in Affinity Water's revised draft WRMP19 separate programme appraisal process as the best value long-term

strategic option for its customers, assuming a joint promotion with Thames Water. The SESRO also has potential to supply Southern Water via a transfer pipeline to its Hampshire South zone.

- 11.34 Affinity Water has identified the SESRO as its preferred best value long-term strategic supply option which it intends to develop jointly with Thames Water and it will contribute sufficient investment to reserve 100Ml/d out of the full 294Ml/d yield of the scheme (Table 11-2). It requires the reservoir by summer 2038 under its 'Challenging' Future and proposes to develop the associated transfer and treatment elements of the scheme in two 50Ml/d stages. In the first stage Affinity Water will develop an abstraction on the River Thames and transfer the new supply to a new treatment works located near its existing lver works. In the second stage it will extend the transfer through to Harefield and a second 50Ml/d works in that location. This is set out in paragraphs 6.3.6 and 6.3.7 of its main WRMP19 (page 109).
- 11.35 Affinity Water has included two 50MI/d stages for the scheme within its WRMP tables, as this represents the timing when it would use the water for supply purposes (i.e. the 'deployable output' becomes available). However, it plans to contribute to the development of the reservoir itself to reserve raw water availability of 100MI/d at the time of construction i.e. by summer 2038, which is entirely consistent with our understanding.
- 11.36 Affinity Water considers that developing the SESRO scheme in two phases represents 'best value' for its customers as the staged development is preferred in terms of economics and flexibility. It checked that the solution (100MI/d reservoir followed by two 50MI/d transfer and treatment developments) is economic, by constraining its EBSD model so that it could only chose either one 50MI/d option or the full 100MI/d option – in that case it selected the 100MI/d option as the preferred development. This is consistent with the separate EBSD+ modelling we undertook whereby we tested the reverse of the position, with Affinity Water's requirement being introduced in two separate 50MI/d stages (Table 11-2). The 150 Mm3 SESRO was again selected as the preferred option to be available by summer 2038.
- 11.37 Based on the collaborative modelling between our two companies' plans it is clear that the proposed approach, where the full 294MI/d capacity reservoir is developed in 2038, and Affinity Water constructs the treatment and transfer elements in two 50MI/d stages, represents a common 'best value' approach. Our two companies' plans are fully aligned with regard to the timing and development of the SESRO.

END, 06/12/19