Gate 3 Interim Update
Preferred Option and Back-up Option SROs

Q2 2023

31st May 2023

Contents

1 Executive Summary

As requested by RAPID in the final decision at Gate 2, this report provides updates on key areas of project delivery.

Since the dWRMP24 was published for consultation (November 2022), updates to Water Resource South East (WRSE) modelling have been retrospectively applied to align the SRO and regional water resource modelling. These updates reflect maturing water quality, design, and engineering requirements such as a revision to sweetening flows within the planned transfer to Otterbourne Water Supply Works (WSW). This better understanding of system performance has resulted in an uplift to the size of the Water Recycling Plant (WRP) from 15Ml/d to 20Ml/d. This remains within the bounds of "*at least 15Ml/d*" and "*up to 60Ml/d*" narrative used in all consultation exercises to date. Concurrent to design development, WRSE confirmed a need for a phased WRP, culminating in a 60Ml/d need by the early 2040's (based on the agreed WRSE situation (situation 4) and environmental destination). Consultation on Southern Water's dWRMP24 closed in February 2023, following which a Statement of Response, containing feedback to the engagement exercise is being prepared for publication.

At RAPID Gate 2, a report on Back-up Option B5 was provided. This alternative strategic solution shares infrastructure and project enabling components with the selected SRO. The fundamental difference between the two projects is the storage solution, Hampshire Water Transfer and Water Recycling (HWTWR) builds on the strategic value of Havant Thicket Reservoir (HTR), whereas the Back-up is dependent on the creation of a new environmental buffer lake near Otterbourne WSW. With HTR fully funded and the construction contract awarded, the risk to deliver HWTWR is reduced and work to develop items unique to the Back-up Option has been suspended meaning we can return £335k of unspent allowance to customers.

Should unforeseen issues result in reservoir construction being abandoned, water proposed for Southern Water customers via bulk transfer would no longer be available, meaning work on the Back-up Option would recommence. This is outlined in the main narrative.

Based on high-level PR19 guidance, our December 2021 RAPID Gate 2 submission forecast Gate 3 to be November 2022. In August 2022, detailed Gate 3 Guidance was published by RAPID, which directed several activities originally planned for Gate 4 being required at Gate 3, these new activities identified for this stage added eleven months to the Gate 3 submission forecast. A further 5 months variance is forecast, due to consenting and planning activities associated with water recycling plant (WRP) size change which WRSE modelling had demonstrated was needed for long-term regional need in the development of dWRMP24. In total, a 16-month prolongation to schedule has resulted taking our Gate 3 submission to March 2024.

On review the Gate 3 cost forecasts supplied within our December 2021 Gate 2 submission could have been clearer. A forecast had been provided to the PR19 assumed Gate 3 date of June 2022, and a second forecast had been provided covering the extended period to November 2022, which was a revised Gate 3 submission date. We now note that we had failed to sum these costs, which would have made clear that the full Gate 3 forecast at that time was £32.8m. The same exercise also uncovered a minor arithmetic error in the same table, which when corrected provided a revised forecast of £32.65m.

From this baseline, we have assessed the cost arising from the necessary 16-month Gate 3 submission prolongation (referenced above). In total, this adds £17.95m to the forecast, resulting in a revised total estimate of £50.6m (2017/18 prices). A breakdown of activities is provided within this document.

Development of HWTWR involves a collaboration with Portsmouth Water to integrate the SRO with HTR. Current financial arrangements are such that Southern Water received 100% of RAPID Gated allowance funding, with Portsmouth Water being recompensed via a Collaboration Agreement. We propose to continue this financial arrangement unless directed to change by RAPID.

Finally, an update is provided outlining progress of various key aspects of the HWTWR project, as well as the status of remaining Priority Actions identified by RAPID in the Gate 2 Final Determination.

2 Introduction

Southern Water's Vision

Southern Water's PR19 business plan set out the vision: *to create a resilient water future for customers in Hampshire*. The draft WRMP24 supports this with updated information on requirements and targets to ensure adequate supply for our customers whilst protecting the environment.

We support the need to protect the environment including the iconic Hampshire chalk streams in ways that meet our customers' needs and expectations. Recent abstraction reductions in the region help to protect these chalk streams and habitats but result in a supply deficit relative to demand in Hampshire during spells of prolonged dry weather.

Southern Water is the first company to address such a need at this scale, committing to progressing a strategic resource option (SRO) to deliver a new water supply as soon as practicable. As an interim measure, there is a Section 20 Agreement (an operating agreement under the Water Resources Act 1991) with the Environment Agency, that details an agreed pathway to meet the supply need in the short-term using a mixture of bulk supplies, demand-side management, drought permits and drought orders. However, this is not a long-term solution.

As the first company to make submissions to RAPID to develop an SRO, Southern Water are a 'pathfinder'. In the interests of customers, we are taking every opportunity to share our experiences with other SROs via the All Company Working Group (ACWG). We also recognise that timescales for the realisation of the environmental and customer benefits are very tight and speed of decision making by Southern Water, RAPID and individual regulators on key aspects of the SRO will be essential to timely benefits realisation.

Having formally replaced Fawley desalination as originally described in WRMP19, our selected SRO, the Hampshire Water Transfer and Water Recycling (HWTWR) project, will deliver these benefits, in line with both the PR19 business plan and Water Resource Management Plan (WRMP). HWTWR is being delivered by the Water for Life Hampshire (WfLH) programme, which is a regionally focused resilience and new water resource major programme established to protect the environment, provide a sufficient and sustainable water supply to customers in times of prolonged dry weather.

Should there be significant delay to delivery, this will be managed through the WRMP process to identify potential alternative solution options to ensure customer demand can be met. Should this scenario materialise, it is recognised that separate environmental mitigation and compensation schemes will also need to be considered.

Gate 2 Final Decision Requirements

In the accelerated Gate 2 final decision, published 17th May 2022, RAPID requested that Southern Water and Portsmouth Water provide an Interim Update to include shared activities relating to both HWTWR (Havant Thicket SRO as it was then referred to) and the Water Recycling SRO (Back-up Option B5). This was requested by the 14th November 2022 to include the following:

- Gate 3 submission date (refer to Section 5);
- Gate 3 forecast cost (refer to Section 6);
- Confirm funding split of Gate 3 combined allocation between HWTWR project and Back-up Option B5 (refer to Section 6); and
- Confirm allocation of funding between Portsmouth and Southern Water for Gate 3 (section 7).

As a consequence of the publication of both RAPID Gate 3 Guidance in August 2022, and draft results from the WRSE regional modelling in Autumn 2022, the proposed submission of the Interim Update had to be postponed. This was necessary to:

- Enable a review of the change in scope / effect on the environmental and planning considerations for the project considering the significant change in need and environmental destination outlined in the regional modelling.
- Consider and incorporate as necessary the impact of scope change on the DPC procurement process and additional complexities of the modelled future destination.

With a change in size and scope of the Water Recycling Plant (WRP) required to balance future supply demand within the WRSE modelling, it was agreed to delay the interim report to allow investigations to complete and the impact on Gate 3 timing and costs to be better understood. Impacts of these changes are presented in this report.

At RAPID's request, we are also providing updates on:

- Alignment between post RAPID Gate 2 HWTWR developments and WRSE regional plans (refer to Section 3);
- An update on the suspension of work on Back-up Option B5 (refer to Section 4); and
- The return of any unspent funding allowance (refer to Section 6).

Next Steps

From the Gate 2 final decision RAPID stated that a "*review (of) the funding of the two solutions for the remainder of gate three at that point*"[1] would take place. As such, we look forward to a continued dialogue with RAPID to ensure sufficient funding is agreed through all remaining RAPID gates.

Following the welcome receipt of RAPID Gate 3 Guidance, we also look forward to timely receipt of guidance for Gate 4 to enable us to provide a well-considered activity, schedule, and cost estimate for Gate 4 within our Gate 3 submission.

[1] From RAPID publication, Accelerated date two final decision for Water Recycling, section 3.3.1 paragraph 2, page 17.

3 Water Resources Update

dWRMP24 submitted 3rd October 2022

Southern Water's draft Water Resources Management Plan 2024 (dWRMP24) was submitted to Defra on 3rd October 2022, published on 14th November 2022 and the subsequent consultation period closed on 20th February 2023. Southern Water is currently in the process of preparing a Statement of Response and a revised draft plan to reflect feedback and engagement.

In the build-up to the October dWRMP24 submission, the Water Resources South East (WRSE) regional plan, which underpins our WRMP, considered the Hampshire Water Transfer and Water Recycling (HWTWR) scheme as two separate components:

- A water recycling plant (WRP) of four different sizes 15Ml/d, 30Ml/d, 45Ml/d and 60Ml/d supplying recycled water to Havant Thicket Reservoir (HTR). Each WRP variant was combined with a conjunctive use benefit of blending recycled water with source water from Bedhampton springs in HTR.
- A pipeline, to transfer up to 90Ml/d from HTR to Otterbourne Water Supply Works (WSW), which is sized to account for regional future needs.

Working collaboratively with WRSE and Portsmouth Water, a baseline understanding of the water resource need was generated. This was used with a suite of proposed water resource solutions and possible futures, which depend on a range of forecasts including population growth, climate change and environmental destination impacts to generate a Regional Best Value Plan (RBVP) within the WRSE investment model.

WRP Size Change

Since our dWRMP24 was submitted in October 2022, modelling and scheme development work with WRSE and Portsmouth Water has continued including flow and transfer time assessment on water quality, and proposal of a design to ensure raw, blended water arriving at Otterbourne WSW can be efficiently treated. As a consequence, we have identified a need to increase the minimum transfer (sweetening) flow to 20Ml/d (from 15Ml/d) and therefore a need to increase the capacity of the WRP to 20Ml/d.

Given the scheme is still in the development phase of the project lifecycle, this change is consistent with and within the bounds of consenting and stakeholder engagement messaging, where the WRP size has consistently been described as "*at least 15Ml/d*" and "*up to 60Ml/d*"[2]. This flexibility was purposefully used in the knowledge that further modelling work was still being undertaken to fully determine size and phasing requirements for the WRP and the approach on environmental destination.

WRSE modelling has been updated to reflect the initial 20Ml/d minimum required flow but with key infrastructure such as pipework, future-proofed to 60Ml/d. To address future regional needs, model sensitivity tests included a phased sizing with an increase to 40Ml/d and/or 60Ml/d. As per previous modelling, conjunctive use benefit of HTR was included. This resulted in the selection of HWTWR with a 20Ml/d WRP at the earliest available date with an increase to 60Ml/d being selected from 2040 onwards. As presented at the 24th April 2023 RAPID Checkpoint meeting, more recent WRSE model runs have selected the second phase of the WRP of 60Ml/d from the earliest date to mitigate the revised proposed environmental destination.

Given these results, it is likely the Development Consent Order (DCO) application will be made for a scheme with two size variants of the WRP, 20Ml/d to 60Ml/d. The scheme is being developed to ensure all technical

[2] See pages 15 and 18 of the HWTWR Project Consultation Brochure 2022 hampshire-wtwrp-2022-consultation-brochure.pdf (southernwater.co.uk) and page 2 of the Section 35 Direction issued by Defra in relation to the HWTWR Project SoS-direction-for-Southern-Hampshire-for-life-220531.pdf (publishing.service.gov.uk)

and environmental assessment activity supporting the application will be undertaken to the maximum size. This will also be reflected in the ongoing engagement activity so that stakeholders are aware of the WRP size plans.

Common Standards Monitoring Guidance (CSMG)

Southern Water, Portsmouth Water and WRSE are currently considering the impact of Natural England's CSMG within the environmental destination aspect of the WRMP programme. RAPID were made aware of these additional activities in April 2023. At the time of writing, modelling work is still ongoing and any resulting potential impacts to HWTWR project scope will be discussed with RAPID at the earliest available time and reflected in revised dWRMP24 development (timing dependent).

Gate 3 Submission and WRMP Alignment

This report reflects changes previously discussed at RAPID Checkpoint meetings, relating to WRSE and revised draft WRMP24 (rdWRMP24) driven changes to our RAPID Gate 2 submission baseline. Our RAPID Gate 3 submission will maintain alignment with WRMP24, referencing it where appropriate to maintain consistency, avoid duplication and to ensure alignment between water resources requirements for the Southern Water and Portsmouth Water supply area and HWTWR project development.

4 Back-up Option B5 (B5)

RAPID Gate 2

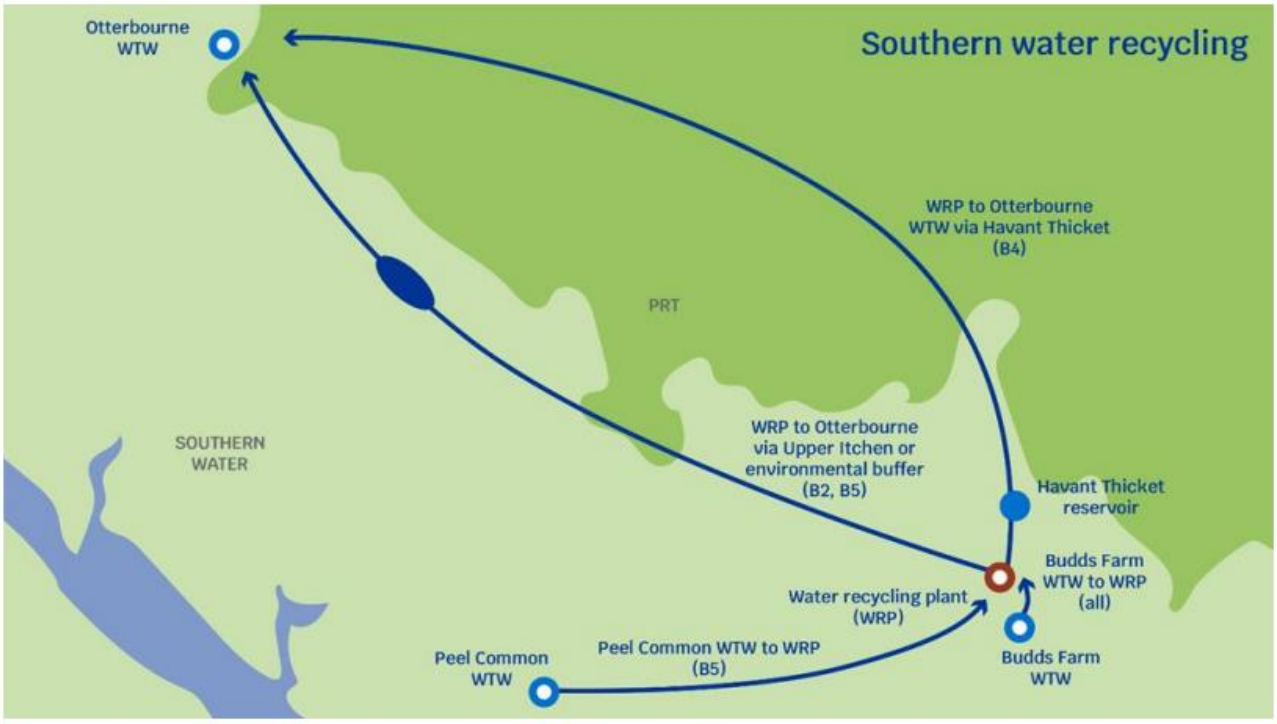
The accelerated RAPID Gate 2 submission (December 2021), reported results from the options appraisal process undertaken to confirm whether plans for Fawley desalination should continue to attract development investment, given other strategic resource options were also available.

The options appraisal process included a thorough evaluation of various options against a number of planning, environmental, socio-economic and cost criteria, as well as legal and policy obligations and wider strategic objectives. This options appraisal process identified HWTWR (known at the time as Option B4) as the new selected Strategic Resource Option (SRO). This was proposed as Southern Water's selected option to be progressed through the remaining RAPID gates and was formalised via the WRMP Annual Review process.

In addition the report also identified a Back-up SRO, known at the time as Option B5 (see Figure 1), which involved:

- Abstraction from both Budds Farm WTW and Peel Common WTW;
- Treatment at a new Water Recycling Plant (WRP) to produce recycled water (75Ml/d);
- Transfer (ca. 35km) to an environmental buffer lake at/near Otterbourne WSW; and
- Abstraction from the environmental buffer lake (75Ml/d) and treatment at Otterbourne WSW.

Figure 1 Schematic of Back-up Option B5



Both HWTWR and B5 were able to meet the requirement identified at Gate 2 of being able to supply 75Ml/d to the Western Area as required in Southern Water's WRMP19. Furthermore, through the SRO Options Appraisal Process and SRO Future Needs Assessment carried out for RAPID Gate 2, both solutions could be scaled-up to approximately 90Ml/d into Otterbourne WSW in drought conditions.

However, HWTWR presented significantly better value for customers as it has a shorter delivery schedule and was better able to meet long-term regional supply requirements due to improved adaptability.

The RAPID Gate 2 submission confirmed that future work on B5 was to be progressed to a lower level of refinement relative to the selected option, but we would continue to investigate and develop it to mitigate

selected option delivery risk should it become apparent (post-Gate 2) that HWTWR could not be delivered or ceased to be feasible.

We also stated in our Gate 2 submission[3] that should it become apparent that efforts to continue B5 development no longer reduced delivery risk, then we would communicate this with RAPID. We did this at the Checkpoint meeting on 24th August 2022.

In the published Gate 2 final decision (dated 17th May 2022), RAPID confirmed that further funding should be allowed for the Back-up solution to progress to accelerated Gate 3, compared with HWTWR [4]. The final decision also stated:

> *"Southern Water should continue with gate three activities for this solution pending the outcome of WRMP24, which will confirm which of Hampshire Water Transfer and Water Recycling or this Water Recycling solution is the preferred solution."*

Post RAPID Gate 2 Submission

Since the Gate 2 submission there has been further development and investigation of both HWTWR and B5. There has also been significant additional regional water resources modelling work undertaken with WRSE which continued to select B5 as the adaptive plan for HWTWR, as reported in our dWRMP24.

Developmental work undertaken post-Gate 2 indicates that B5 remains feasible. However current knowledge and understanding of this option suggests that its delivery is likely to be significantly more challenging relative to HWTWR. It is also predicted to carry a higher Capex burden, a longer delivery schedule and result in a solution with less flexibility to meet both Portsmouth Water and Southern Water future needs. Replacing HWTWR with B5 will be considered if:

- HTR is not constructed, which could be driven by commercial, consenting or political issues,
- Portsmouth Water and Southern Water fail to reach agreement for the bulk transfer of raw water in excess of the existing Bulk Supply Agreement for 21Ml/d of treated water,
- HWTWR ceases to be technically feasible or deliverable, for example if major project risks (e.g. crossing of the Portsmouth Water Havant Source Protection Zone) materialise.

Most elements of HWTWR and B5 (notably pipelines and WRP) are common to both schemes (albeit delivering different capacities). As well as B5 using a second final effluent source at Peel Common WTW to provide raw water volumes, a core difference between the two schemes is the environmental buffer lake. For HWTWR, this is known and under construction, but a suitable location for a buffer lake has not been identified for B5. Therefore, except for the scenarios outlined above it is considered as low likelihood that a 'High or Very high' issue could halt the development of HWTWR without having a similar impact on B5.

Given this position, and as communicated to RAPID (Checkpoint meeting, August 2022), all effort has been focussed on progressing the selected option, therefore work on B5 has been suspended to ensure efficiency of spend.

Unsuspending Back-up Option B5 (B5)

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[3] See p.12 of the Gate 2 submission summary: https://www.southernwater.co.uk/media/5436/gate-2-submission-summary_redacted.pdf

[4] See p.20 of RAPID's final decision on Option B5: https://www.ofwat.gov.uk/wp-content/uploads/2022/03/Strategic-regional-water-resource-solutions-accelerated-gate-two-final-decision-for-Water-Recycling.pdf

Should HWTWR prove undeliverable, efforts on B5 will need to be resumed, meaning a number of unique aspects of the scheme would need to be fully investigated/developed to create a design and construction activity schedule. including:

- *Consenting* - The current Section 35 Direction made by the Secretary of State (Defra), directs the DCO regime specifically to the HWTWR project. In order to progress Southern Water would need to request a new Section 35 direction.
- *Environmental buffer lake* - the size, location and design for the buffer lake would need to be investigated and developed.
- *WRP size* - B5 has a 75Ml/d transfer requirement, which would require a larger WRP, re-design would be required which may include a supplementary WRP site at or near Peel Common WTW. However, some aspects have been accounted for during Gate 2 activities:
    - the site identified for building the WRP is capable of a WRP of 75Ml/d
    - the research on water recycling technology and modular installation is transferable to a different size plant at the same location.
    - pilot work has already been completed on the Peel Common final treated effluent.
- *Pipework route* – the Peel Common WTW to Budds Farm WTW (pipework and final effluent transfer) whilst suitable for Gate 2 would need to be reviewed to ensure alignment with the environmental buffer lake interface and the Environment Agency's views on long-distance transfers of treated wastewater in this area. This may result in some connectivity re-work.
- *Consultation* - to date, consultations have covered both the WRP and the proposed HWTWR pipeline routes (common to both), including to/from HTR. If B5 is to be further developed and progressed, additional consultation and engagement with customers, regulators and other key stakeholders will be required as part of the pre-application process for consenting.
- *Scoping for the Environmental Statement* - this will need to be redrafted and submitted to the planning inspectorate due to the increased scoping area covered.
- *Intrusive and non-intrusive surveys* - these would need to be identified and carried out following environmental buffer lake site selection and specific route selection work.

There may also need to be significant additional re-work undertaken in relation to those aspects which are currently common with the HWTWR project. In all, rescheduling could be expected to take up to four to six months, at which point we would be able to share a new schedule and cost profile, including any revision to Gate 3 dates with RAPID.

5 Gate 3 Submission Date

Gate 3 Guidance - Activities

At RAPID Gate 2 submission (December 2021) accelerated Gate 3 was forecast to be November 2022. This was derived using the high-level template provided as part of the *PR19 Final Determinations: Strategic water resource solutions* document. The template was populated based on the understanding of gate requirements (at the time) following discussions with RAPID and other SRO teams through the All Company Working Group (ACWG).

In June 2022 RAPID shared detailed draft Gate 3 Guidance with water companies. Southern Water submitted review comments on this jointly with Thames Water on behalf of the ACWG. Having considered all feedback received, in August 2022, RAPID published final *Strategic regional water resource solutions guidance for gate three* (Gate 3 Guidance).

Southern Waters analysis of this guidance concluded that several activities previously understood to be required in Gate 4, were now expected by RAPID in Gate 3. These activities included:

- Further field studies, such as additional ground investigations, site surveys, archaeological and environmental studies;
- Further DCO consultation and planning activities, including local authority engagement, and
- Early contract engagement works.

Additionally, several new activities, previously not incorporated in Gate 3 were also identified. These were predominantly driven by further work to integrate outline designs of HWTWR and Havant Thicket Reservoir (HTR). Overall, reprofiled and new activities, resulting from retrofitting Gate 3 Guidance to the previous baseline scope, impacted the submission forecast by 11 months.

Following this analysis, RAPID were informed that the Gate 3 submission date had been re-forecast to October 2023. It was also stated that a further date change was likely once a full review related to the change in WRP size (referred to in Section 3) was completed. This was again confirmed within an information request made by RAPID to all SROs in December 2022 and January 2023.

Gate 3 Guidance – Milestone

Given the accelerated nature of the HWTWR SRO, the aim is to complete activities as early as possible. On receipt of Gate 3 Guidance it was noted that it was for companies to decide the most appropriate point to submit a Gate 3 submission.

Whilst other SRO's on the non-accelerated RAPID programme use EIA scoping submission as the Gate 3 milestone, having discussed with RAPID and to minimise additional effort, HWTWR uses DCO statutory consultation as our submission 'milestone'. This slightly later point in the schedule aligns well to the accelerated approach and should lead to a Gate 4 involving fewer activities.

WRSE Regional Modelling Alignment

In preparation for dWRMP24 consultation, in August 2022, WRSE produced the RBVP output which was approved by WRSE's constituent companies. Given the requirement for all SRO outcomes to align with WRMPs, this endorsed plan meant an adjustment was required to both HWTWR's scope and programme in order to maintain consenting confidence.

The modelling (aligned to situation 4) driven by a change in the water resource future, indicated that the WRP initially planned for C.15 - 20Ml/d prior to a phased increase to 60Ml/d, was now being selected by the model at 60Ml/d at the earliest opportunity. To ensure HWTWR development was aligned with this regional need, a change in approach was required. Further detail of WRP size change is outlined in Section 3 of this report.

Following discussion of these changes at the August 2022 RAPID Checkpoint, a route map outlining steps for further WRSE modelling was prepared, shared with RAPID and then progressed. The route map exercise aimed to understand impacts to HWTWR activity and schedule (including Gate 3 submission date), together with financial and stakeholder impacts.

In February 2023 at a meeting with RAPID the route map conclusions were discussed, as well as the impact on the SRO cost forecast and timeline, including a revision to the accelerated Gate 3 submission date.

The impact of ensuring alignment to updated regional plans added a further 5 months to the HWTWR schedule. This was predominantly driven by additional activities related to consent for the long-term scheme (60Ml/d WRP) which is the most cost-efficient approach for customers. It also manages delivery risk, as by acknowledging and gathering data for the full scheme, public and planning expectations are clear and transparent.

For the avoidance of doubt, gaining consent for the full scheme in a single application should not be interpreted as an intent to construct the larger scheme. As stated above, WRSE modelling outputs have identified a modular build for the WRP, however connecting infrastructure such as underground pipework is intended to be designed and constructed for the larger capacity, to minimise future cost and disruption to customers.

The above changes have resulted in a Gate 3 submission date of March 2024.

N/B this date excludes any impact that may arise on the current schedule resulting from progressing a combined tunnel opportunity with Portsmouth Water

Shared Tunnel Opportunity

There is an opportunity to combine the pipeline infrastructure required by Portsmouth Water between Bedhampton Springs and HTR and Southern Water between the WRP and HTR into a single tunnel. This opportunity has significant benefit in terms of cost saving, customer disruption and carbon reduction. Technical feasibility has concluded a solution is deliverable, however complexities around funding this change of scope are (at the time of writing) to be concluded.

As consideration of this opportunity is ongoing, it has not yet been formally implemented as a HWTWR change control and is not reflected in schedule or cost forecasts. We are confident that a timely, funding solution can be agreed for this beneficial scope change, which will minimise consequential impact on other milestones, and hence on the Gate 3 submission date.

6 Gate 3 Expenditure Update

Gate 3 Forecast Correction

The Gate 2 submission (December 2021) included a table, which regrettably contained some summation errors.

The original intention for Gate 2 was a September 2021 submission. However, rather than a submission in September 2021 we agreed with RAPID to a 3 month postponement in order to include additional work on Future Needs Assessments (FNA).

In addition, it was outlined to RAPID in the November 2021 checkpoint the intention to alter the Gate 3 submission date to November 2022, in line with guidance at the time.

Table 14 within Annex 6 (see Table 1 below) of the submission was then prepared to illustrate costs to the original (June 2022) and extended (November 2022) Gate 3 dates. It has since been recognised that these expenditure forecasts should have been clearly summed to provide to an overall cost forecast to November 2022.

The column '*Total Gate 3 expenditure*' of £22,284k was cumulative to June 2022, whereas '*Forecast costs to November 2022*' of £10,516k covered the prolongation period. To get a sub-total these need to be combined to give a cost to gate 3 of £32,800k (all in 2017/18 prices). It is recognised that this could have been clearer.

Table 1 Annex 6, Table 14 of the Gate 2 Submission

Table 14 – Gate 3 expenditure forecast (2017/18 prices)

Description	Early Gate 3 expenditure	Gate 3 expenditure post Gate 2 submission	Total Gate 3 expenditure	Gate 3 funding allowance	Delta to allowance	Forecast costs to November 2022
Water recycling / Havant Thicket	3,213	15,611	19,022	14,389	+6,630 (+46%)	10,017
Water recycling back up	1,523	613	2,185			498
Desalination	1,177	-	1,177	13,090	-11,883 (-91%)	-
Total	5,913	16,225	22,284	27,479	-5,253 (-19%)	10,516

Within this table, there are some minor summation errors. The '*Total Gate 3 expenditure*' sums for 2 of the individual SROs are incorrect.

- '*Water recycling/Havant Thicket*' should sum to £18,824k (rather than £19,022k), and
- '*Water recycling back-up*' should sum to £2,136k (rather than £2,185k).

When corrected, the total Gate 3 expenditure (to November 2022 Gate 3 submission date), should have been £32.65m, rather than £32.80m, as illustrated below. Note: the minor rounding difference in figures for the post Gate 2 submission to June 2022.

Table 2 Corrected Table

Description	Early Gate 3 incurred expenditure (£k)	Gate 3 forecast Post Gate 2 submission to June 2022 (£k)	Total Gate 3 Expenditure to June 2022 (£k)	Gate 3 forecast July to November 2022 (£k)	Total Gate 3 forecast (£k)
Water Recycling / Havant Thicket (B.4)	3,213	15,611	18,824	10,017	28,841
Water Recycling back-up (B.5)	1,523	613	2,136	498	2,634
Desalination	1,177	0	1,177	0	1,177
Total	**5,913**	**16,224**	**22,137**	**10,515**	**32,652**

Gate 3 Guidance

The accelerated Gate 2 submission (including Gate 3 forecast) was submitted prior to detailed RAPID Gate 3 guidance being made available to the industry in (August 2022). On receipt the guidance provided clear direction that some activities forecast in Gate 4, should be 'reprofiled' into Gate 3, and that there was an expectation for further 'new' activities not previously forecast.

Once received, a full activity review was completed to analyse impacts to HWTWR schedule and cost. As described in Section 5, this was a collaborative analysis conducted in workshops with Portsmouth Water.

The reprofiled activities, bulleted in Section 5 above, generate an increase of £7.8m. Similarly, the 'new' activities, also referred to in Section 5, produce an additional increase of £5.1m. In total, assimilating the Gate 3 guidance resulted in an increase of £12.87m over and above the Gate 3 forecast presented at Gate 2.

When added to the estimate (corrected as above to £32.65m), results in £45.52m, as reported to RAPID in December 2022.

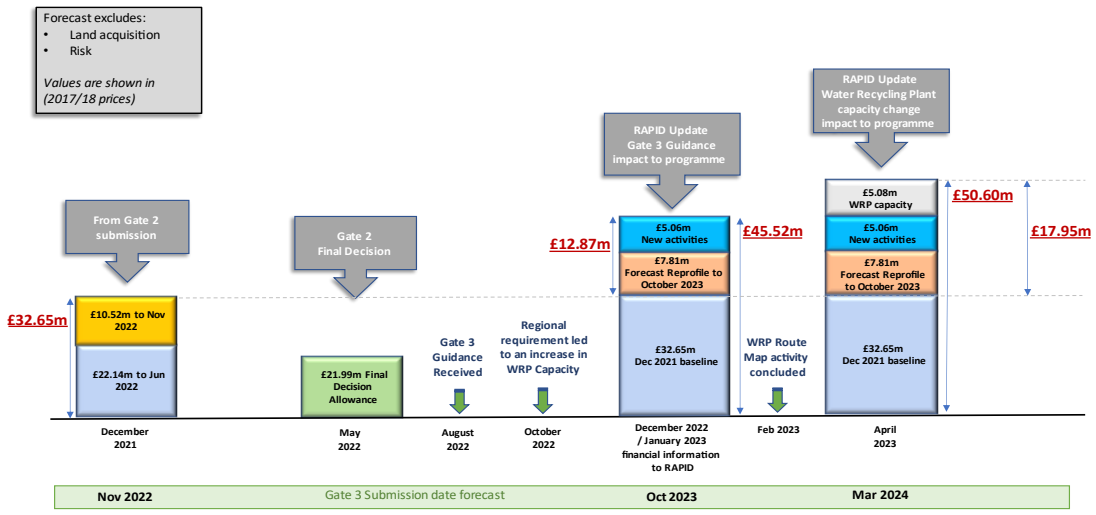
WRP Size Change and WRSE regional modelling alignment

Accelerated Gate 2 was significantly in advance of both dWRMP24 and the regional model. This created challenge as the Gate 2 submission report was created in advance of the outputs of this statutory process and supporting modelling. This in turn has led to unavoidable scope changes related to the Water Recycling Plant, requiring additional work to realign the SRO to the dWRMP as required by RAPID guidance. This is described in Section 3.

The resulting cost impact, following conclusion of the route map activities related to the change in WRP size, was a £5.1m increase to the Gate 3 forecast.

Appendix 1 contains a total Gate 3 breakdown, inclusive of HWTWR and the Back-up Option B5. At a high level, Figure 2 shows the expenditure change timeline since the Gate 2 submission to our current position.

Figure 2 Expenditure timeline showing changes for HWTWR and Back-Up Option B5



Net Effect on HWTWR Gate 3 Expenditure

Overall, £17.95m of additional cost resulting from

- application of Gate 3 guidance mid-gate, and
- work to align the WRP sizing to the regional WRSE modelling outputs (related to dWRMP24), and
- Additional cost captured within a 16-month extension to our Gate 3 submission forecast described earlier.

A breakdown of cost allocation has been provided to RAPID by separate cover (May 2023) as per Figure 3 below.

Figure 3 Activity and cost breakdown update for Gate 3 subsequent to Gate 2 submission

Forecast Expenditure £000's (2017/18 prices)							
Category	Planned Activities to March 2024	Reprofiled Programme Activities	New Activities		WRMP Alignment	Forecast Activities Total	Forecast Category Total
		Gate 3 Guidance Induced	Driven by Gate 3 Guidance	Alignment Works	Impact of WRP Capacity Increase		
Feasibility & design	SSP - Engineering services programme continuation	£382	£583	£0	£3,057	£4,022	£8,693
	Third Party Costs	£0	£0	£0	£313	£313	
	Portsmouth Water: - Outline design of embankment and culvert changes - Develop detailed design and costing of a combined pipeline option - Significant and complex change to HTR and HWTWR projects	£0	£0	£4,358	£0	£4,358	
Field studies (Ground investigation, Archaeology etc.)	Ground investigation, archaeology & environmental studies	£814	£0	£0	£473	£1,287	£1,677
	Site surveys	£390	£0	£0	£0	£390	
Legal	Legal	£1,026	£115	£0	£141	£1,282	£1,282
Other - Information technology services	Information technology services	£182	£0	£0	£0	£182	£182
Planning	DCO Consultation and Planning	£1,513	£0	£0	£299	£1,812	£2,030
	Local authority planning performance agreement	£218	£0	£0	£0	£218	
Procurement	Early contract engagement works	£2,676	£0	£0	£233	£2,909	£2,909
Programme & project management	Strategic Programme Support	£612	£0	£0	£565	£1,177	£1,177
		£7,813	**£699**	**£4,358**	**£5,080**	**£17,950**	
		£7,813	**£5,057**		**£5,080**	**£17,950**	
	Total Impact (16 Months)	11 Months			5 Months		

Appendix 1 includes a full breakdown of the Gate 3 costs for HWTWR Project, inclusive of the information in Figure 3.

Gate 4 Expenditure

Having benefitted from the clarity of RAPID expectation received upon receipt of Gate 3 guidance, we await similar clarity for Gate 4. We envisage that this will enable Southern Water to be in a position aligned to those SRO's progressing a Standard gated programme, in that gate activities, and hence cost and schedule forecasts should be more accurately forecast if guidance is received sufficiently in advance of our Gate 3 submission. This would also aide efficiency of spend.

Back-up Option B5

For the water recycling Back-up Option, a forecast spend of £2.19m to June 2022 (refer to Table 1 above), was reported in the December 2021 Gate 2 submission This consisted of early Gate 3 incurred expenditure of £1.52m, and a forecast 'to go' cost of £0.6m.

As above, we recently identified some minor summation errors in the submitted documentation, which when corrected (refer to Table 2 above), provides a total forecast to June 2022 of £2.14m, a difference of £49k less from that reported.

Evidence of activities for the £1.52m of early Gate 3 activities already expended, (and not awarded in the final decision of May 2022), was provided in the Gate 2 submission, within Annex 6. Given we are on an accelerated RAPID programme, these activities were completed during the Gate 2 window as discussed with RAPID.

Of the £613k 'cost to go' reported, £278k has since been expended with Gate 3 to progress the Back-up Option as follows:

- £246k Completion of a modelling exercise and deep dive cost investigation;
- £23k Review and update of design information with additional information as requested by RAPID/DWI. Previous work on the Back Up Option B5 was reviewed to allow for any learnings from the HWTWR project work, together with confirming a high-level activity plan to reinvigorate Back-up Option B5 if required, as requested by DWI; and
- £9k To carry out an engineering review and risk report.

As described in Section 4, given the high degree of similarity between HWTWR and Back-up Option B5, our focus is on HWTWR, and we are not proposing to carry out any further work on the Back-up. As such, given we have utilised £278k, we propose to return the remainder of the cost 'to go'; forecast, to customers, totalling £335k.

Please see Appendix 1 for these costs provided in the RAPID template.

Funding split of Gate 3 combined allocation between HWTWR and Back-up Option B5

Within the Gate 2 submission, and as detailed above, a spend for the Back-up Option B5 of £2.14m (which is the corrected figure – refer to Table 2) is forecast. As the Gate 2 final decision provided an allowance of £21.99m to develop both the selected and Back-up options, £19.85m of the allowance remains for HWTWR following with the return of £335k to customers.

Changes to HWTWR occurred since the Gate 2 submission are detailed within this report that has driven the total Gate 3 forecast to £50.6m. There is a clear gap between this figure and the Gate 2 final decision allowance of £21.99m.

We welcome discussions with RAPID on the funding gap for Gate 3 (and 4) which is currently posing a real and significant risk to continued delivery of the HWTWR scheme.

We note RAPIDs commitment to reassess the cost challenge adjustments made at accelerated Gate 2 (for desalination, Havant Thicket and water recycling) with the information from the standard gate 2 schemes. We welcome feedback and further guidance to support efficient delivery of a large complex project.

7 Proposed Financial Arrangements

Following the cost estimation exercise completed as part of the Gate 2 submission, where we used PR19 Gate 3 table as guidance, we conducted a detailed review of Gate 3 guidance issued by RAPID in August 2022. Southern Water involved Portsmouth Water in the exercise to ensure a thorough understanding of all required activities, establish agreed accountability split, and subsequently review schedule and milestone impacts. This, in turn facilitated a refresh of assurance requirements and costs.

Approximately 12% of forecast costs associated with delivery of Gate 3 were found to be related to activities agreed to be performed by Portsmouth Water. A total Gate 3 forecast of £45.5m was provided to RAPID in December 2022. A further update to the total forecast to £50.6m followed identification of additional activities associated with WRSE regional modelling outputs (required for dWRMP24) which determined a need to re-size the water recycling plant. This subsequent amendment has not impacted the percentage split between Southern Water and Portsmouth Water.

The current financial arrangements between Southern Water and Portsmouth Water, which have existed since RAPID Gate 1, is for 100% of RAPID funding allocation for SRO development to be awarded to Southern Water. A Collaboration Agreement then facilitates recompense for Portsmouth Water in their discharge of agreed accountabilities. Given agreed activities are mid-Gate, we propose continuing this arrangement until further notice. This would mean RAPID funding continuing to be 100% assigned to Southern Water, with RAPID's evaluation of costs solely being carried out against information provided by Southern Water.

In our Gate 3 submission, Portsmouth Water costs are required to be separately identified, with efficiency of spend evidenced. This is also the case for Southern Water. We are mindful however, that *any* spend considered as not efficient by RAPID, that attracts penalty to the funding allowance, under current arrangements will be borne solely by Southern Water customers.

We do recognise that RAPID and Ofwat have indicated intent to review funding split arrangements between partnering companies as part of Gate 4 guidance, to ensure a share of responsibility for expenditure incurred on activities are appropriate, necessary and is efficient.

8 HWTWR Progress Update

Key Progress Since RAPID Gate 2

Although work to progress the Back-Up Option B5 has paused, HWTWR has continued to be developed, ensuring alignment with WRSE regional modelling and alignment with the HTR delivery programme. Key progress updates related to HWTWR include:

- **WRSE Alignment:** Regional modelling work undertaken since the RAPID Gate 2 submission has identified a regional need that impacts the size of the water recycling plant. This, alongside engineering requirements to maintain water quality, has caused the minimum initial water recycling plant size to be uplifted from 15Ml/d to 20Ml/d, and that it will potentially need to be increased in size to 60Ml/d earlier than previously identified. This supports regional supply-demand-balance predictions, which include proposed Environmental Destinations, from WRSE. The implications of this modelling work and engineering investigations have been discussed extensively with Ofwat and RAPID since Q4 2022, and stakeholders and the public will be consulted on any change from the previously identified position through the WRMP24 consultation process.
- **SRO Consenting Strategy:** In April 2022, in line with the HWTWR consenting strategy to progress the project through the Development Consent Order (DCO) regime, we submitted a request for a s.35 Direction to the Secretary of State. On 31 May 2022 the Secretary of State gave a s.35 Direction, meaning the selected option will now be consented under the DCO process[5].
- **HTR Alignment Works:** Significant collaboration with Portsmouth Water has been undertaken to integrate the development stages of HWTWR with HTR which is now in construction. Key activities through 2022 continuing into 2023 relate to incorporation of Southern Water pipework with Portsmouth Water pipework in a combined tunnel. This collaboration has produced a significant opportunity for customers, whereby benefits include a c£150m net financial reduction to the SRO final estimate, less disruption to residents from progressing a single tunnel containing both sets of pipework, as well as carbon benefits. Other alignment work investigated and progressed through 2022 and into 2023 includes design alterations to the HTR 'embankment' to accommodate the additional pipework, and work on assessing quality of spring and recycled 'blended' water.
- **Stakeholder engagement:** Given the novel nature of recycled water in the UK, significant efforts have been made to engage with stakeholders on what recycled water is, and what it isn't. Joint activities between Portsmouth Water and Southern Water have been progressed with events on-line, in public spaces and with audiences at council events during the past 12 months. It is fair to say that there remains much to do in this area to bring customers along on the journey. Separately, during Summer 2022, HWTWR undertook a non-statutory consultation exercise along the c40km pipeline corridor between Havant and Otterbourne. This exercise was to inform customers and residents of proposed plans for the scheme and seek feedback that may influence plans and/or design.
- **RAPID Gate 3 Guidance:** This was received in August 2022 following a review period of a draft set of guidance in late Spring. Whilst the guidance was extremely welcome, the impacts of receiving this when part way through delivery of what was previously understood to be required Gate 3 activities have been that some activities have had to be re-profiled (previously accounted for in Gate 4), other activities are 'new' and some activities have had to be revisited. Inevitably, this has come at a cost to HWTWR and has contributed to a delay to the forecast Gate 3 RAPID submission date as described in Section 5 of this report. Cost impacts have been such that further RAPID allowance is required to be agreed with RAPID

[5] https://www.gov.uk/government/publications/hampshire-water-transfer-and-water-recycling-project-section-35-direction-planning-act-2008

within the gated period. This experience is unique to Southern Water given HWTWR is on an accelerated path (other SRO's being developed by other water companies will have received this guidance in advance of their Gate 2 submission). In addition, our Gate 3 date, March 2024, is currently forecast to fall later in the schedule and project lifecycle than for other SROs, meaning that more scheme development activities will have been undertaken by Gate 3 which also has an impact on costs.

- **Direct Procurement for Customers:** Following approval of DPC Control Points A and B from Ofwat in April 2022, progress towards a Control Point C submission continued. Within this period, Ofwat guidance emerged that moves from a Control Point to a staged process; the impacts of this are considered negligible to HWTWR. We conducted a successful second market engagement event in December 2022 involving 51 companies and potential joint ventures. This was followed up with 30 separate Q&A sessions through January 2023, where requested by the market. Working towards our Stage 2 submission, we began an exercise to assess DPC scope and operational model options with the aim to ensure best value for both Southern Water and customers whilst also considering potential operational risk impacts and interfaces between Portsmouth Water, Southern Water and the DPC CAP (Competitively Appointed Provider).
- **Schedule Risk Analysis:** As the scope of the HWTWR project has matured, testing of the delivery schedule has been conducted, including a Quantitative Risk Analysis (QSRA) which has enabled a greater understanding of the project. This analysis has concluded that a 2030 delivery date is not achievable given the level of risk now understood in key areas of the programme. The analysis has indicated greater confidence in delivering the HWTWR project by water resource year 2035. This is reflected in our revised dWRMP24.

  This assessment is based on some key assumptions (i.e. that the preferred water recycling plant location can be secured and customers have greater acceptance of recycled water challenges). A small number of significant factors influence this assessment, which in combination result in the extension of forecast delivery timescales, these being:

  - WRP sizing requirement: because of the impact of further supply-demand investment modelling and an updated forecast of future environmental destination needs.
  - Development Consent Order: the potential risks relating to submission, decision, or legal challenge.
  - Direct Procurement for Customers: the potential risks to complete an agreement.
  - Interface and consenting risks due to combination of the HTR project and HWTWR project.

  Stakeholder and public engagement on this change of scheduled date for delivery of the HWTWR project, and how we are planning to meet our supply need in Hampshire while protecting the environment until the project can be delivered, will take place through consultation on our WRMP24 in accordance with our statutory obligations.

Priority Actions from Gate 2 Final Decision

In the August 2022 RAPID Checkpoint, RAPID confirmed the closure of Priority Actions identified in the Gate 2 Final Decision, leaving 10 outstanding. These spanned both HWTWR and the Back-up Option B5.

In August 2022, these were confirmed as being impacted by the dWRMP24 change in WRP size and would require date extensions to understand the impact, and in some instances further investigation for the 20Ml/d WRP that had been originally completed for 15Ml/d plant.

As the remaining Priority Actions relate to environmental aspects of the scheme, we have been working with the Environment Agency and Natural England to understand the root cause of any concerns to develop and agree an approach to discharge the action.

Some actions have since been superseded with other requests from the Environment Agency or Natural England since RAPID Gate 2, relating to modelling outputs and field investigations which have matured output relative to that provided at Gate 2.

Appendix 2 holds a status update for the 10 Priority Actions with 1 completed and 9 superseded by subsequent activity for the new WRP size.

Appendix 1 Gate 3 Cost breakdowns

Total Gate 3 costs for both SROs

Using the RAPID templated categories, the below Table 3 table provides a breakdown of total Gate 3 related costs (all in 2017/18 prices) for both of the SROs. It shows:

- Early Gate 3 expenditure (£4,736k) as reported in Table 14, Annex 6 of the Gate 2 submission.
- Gate 3 expenditure since the Gate 2 submission (£27,914k).
- Newly identified expenditure (£17,950k) resulting from Gate 3 guidance, Alignment activities and WRP activities.

Table 3 Total Gate 3 expenditure for HWTWR and Back-up Option B5

SRO	Early Gate 3 expenditure £000's	Gate 3 expenditure post Gate 2 submission £000's	New expenditure £000's	Total Gate 3 expenditure £000's
Water recycling / Havant Thicket (B4)	£3,213	£27,636	£17,950	£48,799
Water recycling back up (B5)	£1,523	£278	-	£1,801
Total	**£4,736**	**£27,914**	**£17,950**	**£50,600**

Gate 3 costs for HWTWR

Using the RAPID templated categories, Table 4 provides a breakdown of Gate 3 related costs (in 2017/18 prices) for the HWTWR project. It shows:

- Early Gate 3 expenditure (£3.21m) as reported in Table 14, Annex 6 of the Gate 2 submission.
- Gate 3 expenditure since the Gate 2 submission (£27.64m).
- Newly identified expenditure (£17.95m) resulting from Gate 3 guidance, Alignment activities and WRP activities.

Table 4 Gate 3 expenditure for HWTWR Project

Category	Early Gate 3 expenditure £000's	Gate 3 expenditure post Gate 2 submission £000's	New expenditure £000's	Total Gate 3 expenditure £000's
Programme & project management	£460	£5,422	£1,177	£7,059
Feasibility & design	£602	£5,505	£8,693	£14,800
Option appraisal	£-	£26	£-	£26
Environmental assessment	£49	£9,971	£-	£10,020
Field studies (Ground investigation, Archaeology etc.)	£1,835	£2,040	£1,677	£5,552
Stakeholder engagement	£4	£1,927	£-	£1,931
Planning	£38	£441	£2,030	£2,509
Procurement	£150	£740	£2,909	£3,799
Legal	£70	£1,564	£1,282	£2,916
Other (Information technology services)	£5	£-	£182	£187
Total	**£3,213**	**£27,636**	**£17,950**	**£48,799**

Gate 3 costs for Back-up Option B5

Using the RAPID templated categories, Table 55
Table 55 provides a breakdown of Gate 3 related costs in 2017/18 prices for the Back-up Option B5. It shows:

- Early Gate 3 expenditure (£1.52m) as reported in Table 14, Annex 6 of the Gate 2 submission.
- Gate 3 expenditure since the Gate 2 submission (£278k, as reported in Section 6).

Note: In addition to the below figures, we proposed to return a further £335k of unspent funding. Refer to Section 6 for details.

Table 55 Gate 3 expenditure for Back-up Option B5

Category	Early Gate 3 expenditure £000's	Gate 3 expenditure post Gate 2 submission £000's	New expenditure £000's	Total Gate 3 expenditure £000's
Programme & project management	£76	£246	£-	£322
Feasibility & design	£516	£32	£-	£548
Option appraisal	£-	£-	£-	£-
Environmental assessment	£139	£-	£-	£139
Field studies (Ground investigation, Archaeology etc.)	£744	£-	£-	£744
Stakeholder engagement	£1	£-	£-	£1
Planning	£7	£-	£-	£7
Procurement	£25	£-	£-	£25
Legal	£14	£-	£-	£14
Other (Information technology services)	£1	£-	£-	£1
Total	**£1,523**	**£278**	**£-**	**£1,801**

Please note that we have included the cost data for Gate 3 in the RAPID template as requested, however, not to the granularity of £250k as per Gate 3 guidance. We are mid way through a baseline exercise across the Water for Life Programme (inclusive of RAPID and non RAPID projects) which is resulting in some cost structure improvements. We have taken on board the requirement to provide breakdowns for the RAPID projects to £250k as part of this exercise.

Appendix 2 Gate 2 Priority Actions

Priority Actions from Gate 2 final decision

Section	Detail	Gate 2 Date Due	Water Recycling	Havant Thicket	Engagement	Status
Solution Design, Programme & planning	Engage regularly with environmental regulators to deliver a "no surprises" approach and to access their site specific knowledge of constraints, risks, avoidance and mitigation measures and opportunities for delivery of net gain to help identify deliverable options. As part of this regular engagement, progress Method Statements for environmental assessments rapidly to include specific detail needed to undertake site specific work and detailed assessment to provide a sufficiently robust evidence base.	30th Aug 2022	9	2	Plan to complete discussed with EA Environmental teams in workshops, Ongoing Since Gate 2 we have had regular discussions with EA, NE and NAU to share our findings and access their site specific info. Following the change in the WRP size and as agreed with Environment regulators we are carrying out further works on discharge modelling in the Solent and the discharge into the Havant Thicket Reservoir and the WQ impact thereof. This forms part of our DCO adaptability approach to cover the WRP at 60 Ml/d. Meeting minutes are available for each meeting.	Superseded
Evaluation of Costs & Benefits	Provide the water resource benefit (peak and average deployable output) available from the solution under 1 in 500 drought resilience and clear evidence of this. Provide the water resource benefit which has been included within initial regional model runs. Explain how the non-SRO 21Ml/d transfer from Portsmouth Water has been accounted for within the supply demand balance and that this has not been double counted as supporting the SRO water resources benefit to meet the need.	30th Sept 2022		3	Joint Pywr modelling between PW and SW has been conducted over the last year (since Gate 2) to better understand the system relationships between the 2 companies and the proposed environmental destination. The results of these findings were discussed with EA on 18th April and included a high level Environmental destination impact that resulted in the larger WRP being selected sooner. This action is being developed further within the WRSE space which supersedes the Gate 2 Priority Action detailed here. We confirm that the non SRO 21 Ml/d transfer is included as a separate element within the modelling (confirmed in April 2023 to EA).	Superseded
Evaluation of Costs & Benefits	Confirm resilience benefits for consumers able to be supplied by the options in 1 in 500 year scenario to help inform the viability of options.	30th Sept 2022	5	4	See above. Discussed on 18th April following WRP investigation work.	Superseded
Evaluation of Costs & Benefits	Undertake sensitivity testing around selected future needs horizon of 2040 to demonstrate best value option is being taken forward.	30th Sept 2022		5	The 2040 date is the date by which the 1 in 500 drought resilience needs to be met by (WRMP24 guidance) and therefore was used in the WRSE and Pywr modelling work completed by Southern and Portsmouth Water. The best value outputs are done within the WRSE investment model. We have provided current information to WRSE and maintain regular dialogue to ensure our WRMP24 is aligned to the WRSE plans.	Completed

					Continuing further work allows sensitivity at local and regional level to confirm the best route for the regional water resource requirements to be met.	
Environment	Characterise the impacts of the eventual discharge of water derived from Water Recycling Plant and spring sources mixed within Havant Thicket Reservoir post supply and use on the highly designated chalk catchments and their ecology where they may be the receiving water.	30th Nov 2022		9	PW are modelling, in conjunction with SW, the water quality interactions within Havant Thicket Reservoir between recycled water, spring water, rain water and the smaller streams. This WQ information will then be used within the EIA assessment on understand the impact on the various catchments across the supply system from Langston Harbour to the connection at Otterbourne on the river Itchen, including the key sites that the pipe passes. This will be developed as part of the PEIR and Environmental Statement as part of the Gate 3 preparation.	Superseded
Environment	Provide an appropriate level of supporting evidence for the conclusion that Likely Significant Effects on Marine Conservation Zones can be scoped out at this stage.	30th August 2022		14	We had completed this work for 15 Ml/d but as a result of the change to consent to 60 Ml/d the conclusion within Gate 2 is no longer valid. We have been working with NE to review the impact on the Marine Conservation Zones against the WRP of 60Ml/d scope. All likely significant effects arising from the project will be considered through the environmental impact assessment being undertaken to support the DCO consent process.	Superseded
Environment	Review with environmental regulators whether currently planned assessments adequately cover potential in-combination effects.	30th August 2022	14	16	The change in the WRP size has led to further work to ensure the scope of the environmental impact assessment is relevant. This is subject to ongoing discussions with environmental stakeholders as part of the DCO consent process. In-Combination effects, specifically with Sandown WTW, are being addressed as part of the ongoing Environmental Studies including the Habitats Regulation Assessment (HRA) NB: this is a standard requirement for an HRA. The scope of this is based on the current project (60Ml/d). Engagement will be undertaken with the relevant stakeholders via the Technical Working Groups, with the EA, NE and MMO every month, and EIA Working Groups, wider stakeholder group regularly though the EIA process.	Superseded