

Accelerated gate two queries process

Strategic solution(s)	Havant Thicket	Water Recycling	Fawley Desalination
Query number	HAV003	SWR002	SDE002
Date sent to company	10/12/2021	10/12/2021	10/12/2021
Response due by	14/12/2021	14/12/2021	14/12/2021

Query

1. As per RAPID guidance, please provide a breakdown of all cost line items above £500,000 in Table (11,12,13) of Annex 6: Efficiency of Expenditure in Excel format.
 2. Please reallocate the costs for "development of Gate 2 submission, Senior management and board sessions" to the Programme & Project Management category and provide the updated template in Excel format.
 3. For those line items and activities where both gate two expenditure and early gate three expenditure is listed, please provide a clear delineation of activities for each gate against their costs. For early gate three expenditure, please indicate when these costs were incurred and provide a narrative around the decision to incur these costs early and why the activities were not funded from the gate two allowance.
 4. For those line items where only early gate three expenditure is listed, please explain why the activity was not funded from the gate two allowance.
 5. Was assurance undertaken for the development expenditure? If so, please provide a copy of the report.
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Solution owner response

The queries ask the same questions for tables 11, 12 and 13 for SWR002 and HAV004, with SDE002 not asking for one of the queries (number 4 in the above list). As the queries all relate to the information in Annex 6, which details the three solutions together, we have provided a consolidated response below with an excel attachment for Tables 11, 12 and 13, applicable to all three queries. The original query is in *black italics*, with the SW response in blue below.

1. *As per RAPID guidance, please provide a breakdown of all cost line items above £500,000 in Table 13 of Annex 6: Efficiency of Expenditure in Excel format.*
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We provided a breakdown of cost items above £500,000 in tables 4, 5, 6, and 7 of Annex 6: Efficiency of Expenditure.

A similar breakdown for tables 11, 12, and 13 is provided as an appendix to this response. See excel file: 'SWR002, HAV004, and SDE002 Updated tables 11, 12, and 13.xlsx'.

- 2. Please reallocate the costs for "development of Gate 2 submission, Senior management and board sessions" to the Programme & Project Management category and provide the updated template in Excel format.*

The description of 'development of Gate 2 submission, Senior management and board sessions' was an example of the activities carried out specifically for the procurement strategy. These are not general senior management and board costs – these are specifically in relation to the procurement strategy workstream, and so should be allocated to the procurement strategy category.

- 3. For those line items and activities where both gate two expenditure and early gate three expenditure is listed, please provide a clear delineation of activities for each gate against their costs. For early gate three expenditure, please indicate when these costs were incurred and provide a narrative around the decision to incur these costs early and why the activities were not funded from the gate two allowance.*

Each activity has been individually assessed to confirm where within the Gated process it sits. Due to 'All Best Endeavours' and prior to the optional appraisal process, we were doing work on each of the remaining options as if they were going to be developed as ABE, which caused us to incur costs which would be early start Gate 3, please see Remediation Action Plan (shared with RAPID in July 2021).

Costs have been determined to either be Gate 2 or Gate 3 based on three approaches:

- 1) Specific outputs – Some activities have been identified as delivering outputs for a specific Gate (as measured against the PR19 final determinations: Strategic regional water resource solutions indicative activity tables), and as such all of their costs have been accounted for against that Gate.
- 2) Freeze date – For all engineering activities which span over a longer period of time, the costs for Gate 2 have all been captured up until the design freeze (which precedes both internal and external assurance). Any ongoing costs after this point have been described as Gate 3 because the activities' output would be produced too late for inclusion within the Gate 2 submission. Due to our delivery obligations under 'All Best Endeavors' the engineering teams immediately continue with the design development works. For example, up until 31st May 21 the engineering teams were actively developing the outputs for 'Detailed feasibility and data collection (with

increased certainty) in a concept design report' for Gate 2. From the 1st June 21 the engineering teams were actively developing the outputs for 'Updated finalised feasibility, data collection and developed design' for Gate 3.

- 3) Proportioning – For a limited number of cost items, we have had to apportion the costs between the Gates using selected cost drivers. These are:
- PMO – these costs have been allocated in line with the direct expenditure across the SROs. An additional adjustment has been made for costs relating to the Future Needs Assessment, which solely relate to Gate 2).
 - Programme management – these costs have been allocated in line with the direct expenditure across the SROs. An additional adjustment has been made for costs relating to the management and drafting support associated with the Gate 2 submission – these costs solely relate to Gate 2.

In the updated tables provided as an appendix to this document, we indicate which was the primary method used to determine whether costs are Gate 2 or Gate 3.

If RAPID would like a line-by-line description of the specific outputs considered in allocating costs between Gate 2 and Gate 3, we would be happy to provide a full breakdown. However, this would take more than two days to write up in full.

4. *For those line items where only early gate three expenditure is listed, please explain why the activity was not funded from the gate two allowance.*

(Please note, this question was not asked within query SDE002 but the same response applies to all three solutions).

These categories relate to expenditure that has been incurred after the cut off point for the relevant area for the Gate 2 submission.

In tables 11 to 13, there are three examples of this:

- Data Collection, Sampling, and Pilot Trials for Water Recycling
- Data Collection, Sampling, and Pilot Trials for Havant Thicket
- Environmental, Ecological, Terrestrial and Marine Surveys for Havant Thicket

All three activities were undertaken too late to feed into Gate 2 but were required to maintain project progress as part of the All Best Endeavours requirement.

5. *Was assurance undertaken for the development expenditure? If so, please provide a copy of the report.*

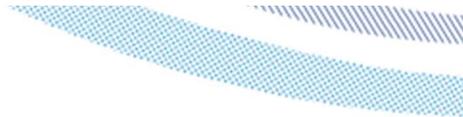
We undertook a number of internal assurance procedures (this is detailed in Annex 7, Assurance process). This included having multiple reviewers who were not involved in the development of the expenditure reports providing second line review. This included an exercise tracing the linkages from the templates back to their inputs for all table items.

Our external assurance partner ██████ reviewed our development expenditure position in detail in August. Since then, we updated our numbers for the additional four months of outturn data.

██████ undertook a high-level review of the updated position in late November and early December. ██████ scope for external assurance is detailed in section 3.1 of Annex 7, Assurance Process as shown below.

An extract from the ██████ report is shown below for Annex 6. The inconsistencies identified (within the C score areas) were resolved prior to submission but SW were unable to obtain from ██████ an updated report due to the proximity to the submission time. We are investigating with ██████ if they will be able to provide an update to their previous report (based on the final submission documents).

Gate 2 Submission: Supporting Technical Report
Annex 7: Assurance Process



3. Assurance Process and Findings

3.1. SW Assurance Process

SW continues to use a "three lines of defence" framework for its reporting governance and assurance activity for all Regulatory submissions. This helps to assure performance information by applying multiple levels of control. The details of the overarching regulatory reporting approach and objectives can be found in its Final Assurance Plan (March 2021) and Data Assurance Summary (July 2021).

Both technical and strategic external assurance was undertaken at accelerated Gate 1, because the RAPID process was new, and the RAPID requirements needed to be balanced with the complexities of delivering SW's WRMP19 and meeting the obligations in the s20 Agreement.

Recognising that Gate 2 required more technical information for the SROs in comparison to Gate 1, the risks relating to the submission were identified and the following changes made to the approach to increase efficiency:

- All technical documents underwent an additional stage of internal assurance, known as a "peer review" whereby:
 - a constructive challenge panel made up of SW and supply chain SME read the draft documents and provided good practice checks using reasonable skill and care and applying their expert knowledge of the subject across technical areas and
 - one to one reviews of the document took place for those unable to attend the group feedback to ensure all SME views were incorporated
 - feedback was then incorporated into the final draft documents
- All submission documents (including supporting documentation) were reviewed by the same external assurers, ██████, that were used for Gate 1 technical assurance

The assurance scope for accelerated Gate 2 is summarised below and applied to all submission documentation (levels 1, 2, 3A and 3B from Figure 5), except for the Legal and Regulatory Annex 8:

- independent review of the submission documents
- critical review of processes and data
- review of assumptions and risk
- review of adherence to reporting requirements (i.e., the RAPID Gate 2 template and Gate 1 determinations) and
- review of evidence of efficient cost expenditure

Legal and Regulatory Annex 8 was drafted by the SW Legal team and signed off by a SW director. This document was deemed low risk for technical assurance and was not subject to external assurance.

D.2 Rationale for Risk Scores – by exception only

Annex	Is the work complete?	Is the evidence sufficient?	Is the work consistent?	Are the risks considered?	Is the document aligned with the RAPID template and Gate 1 determination?
	B	C	C	N/A	B
Annex 6: Efficiency of Expenditure	Text for benchmarking undertaken by PMs before award from direct award frameworks was missing from the annex we reviewed. You have provided draft text by email to address this. We have anticipated the inclusion of this in the final Annex and therefore this score reflects this.	The PMO and PM allocations are based on a general split across base SRO technical work costs. Last minute adjustments to the figures have been presented. These figures do not match the figures audited in August 2021. The nature of the recent changes would warrant a further audit of source numbers but there is insufficient time to undertake this task.	We have not seen the final Annex 6. We identified the following issues in the version we last reviewed: <ul style="list-style-type: none"> The figures for PMO and PM allocation do not match the text. Benchmarking of the costs for the 3 options under the headings used by RAPID showed some inconsistencies in cost allocation. 		Gate 1 feedback was very critical of the benchmarking and RAPID used the SRO submissions as the basis of the benchmark. We have considered benchmarking under the consistency score as it is about consistency of cost allocation.

19

New Gate 2 Assurance Statement

Jacobs

Annex	Is the work complete?	Is the evidence sufficient?	Is the work consistent?	Are the risks considered?	Is the document aligned with the RAPID template and Gate 1 determination?
		Therefore we cannot confirm the evidence is sufficient. The process is manually intensive and improvements for Gate 3 could be implemented.	We understand you are making final changes to the Annex to address these points but we have not seen this.		

Appendix – updated tables 11, 12, and 13 (also provided in Excel format)

Desalination and 1/3 Common Activities (2017/18 prices)

Description	Further breakdown	Gate 2 (£k)	Early Gate 3 (£k)	G2 % of Total Expenditure	Early G3 % of Total Expenditure	Description of Activity	G2/G3 allocation approach
Programme & Project Management	-	93	0	1.8%	0.0%	Project Management to lead and manage the projects.	Freeze date
	-	263	181	5.0%	15.3%	The PMO provides both strategic and tactical oversight of all workstreams and deliverables, whether internal or external. The PMO provides project controls, including tracking delivery of outputs, progress to schedules, costs tracking, resource oversight, monitors the interfaces between the workstreams and with the wider business, provides project management services to projects, as required.	Specific outputs
	-	266	128	5.1%	10.9%	Southern Water senior delivery management of both projects and programme	Proportioning with specific outputs for project-specific delivery
	-	105	0	2.0%	0.0%	External Assurance undertaken by [REDACTED] and with support on data analysis from the SW team, data provided to SW Board prior to Board Assurance statement.	Specific outputs
Feasibility Assessment and Concept Design	See below	796	609	15.2%	51.8%	Specialist Process engineering team using catchment sampling data (sea water) to develop the process design. Multi discipline Engineering team developing the MECH, elect, civil, structural aspects of the concept design.	See below
	<i>Process Design</i>	235	457			The majority of the work at the start of and during Gate two was outlining the process, which develops at a rate relative to the data captured. The output of works is a mass flow calculation and process flow. The related costs are a single output of resource time.	Freeze date
	<i>Mechanical Design</i>	305	0			Mechanical sizing based on flow specific to option and sizing of desalination plant process units.	Specific outputs
	<i>Civil Design</i>	171	63			General plan / sections produced from outline mechanical sizing.	Specific outputs with freeze date for some components

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Description	Further breakdown	Gate 2 (£k)	Early Gate 3 (£k)	G2 % of Total Expenditure	Early G3 % of Total Expenditure	Description of Activity	G2/G3 allocation approach
	<i>Electrical</i>	30	45			Basic electrical designs produced against outline Mechanical design.	Specific outputs with freeze date for some components
	<i>ICA</i>	31	44			Basic Instrument, Control and Automation design produced against overall design.	Specific outputs with freeze date for some components
	<i>Design management</i>	25	0			Coordination and oversight of how the design workstream is delivering to plan.	Specific outputs
Option benefits development and appraisal	-	86	0	1.6%	0.0%	Constructability review undertaken by SW Delivery Partner to take the pipeline corridors to the next level of design development.	Specific outputs
	-	81	0	1.5%	0.0%	Cost estimation and embedded carbon calculation	Specific outputs
	-	197	0	3.8%	0.0%	Option Appraisal Framework consistent with Green book and consenting requirements	Specific outputs
	-	216	4	4.1%	0.4%	Hydraulic modelling - analysis and software licences	Freeze date
Environmental Assessment	-	142	21	2.7%	1.8%	Includes site selection, habitat phase 1 assessment. Land referencing and negotiating access.	Specific outputs
	See below	1,059	0	20.2%	0.0%	Environmental, Ecological, Terrestrial and Marine Surveys	n/a
	<i>Environmental, Ecological, Terrestrial and Marine Surveys</i>	321	0			This includes both hydrodynamic modelling and dispersion plume modelling, topographical surveys, bathymetric surveys, and ground truthing.	n/a
	<i>Aquatic, Terrestrial, and Marine ecology surveys</i>	163	0				n/a
	<i>Boat work</i>	92	0			SW commissioned a commercial diving company to go into the Solent to collect water samples.	n/a
	<i>Preparation for Environmental Impact Assessment with associated surveys</i>	86	0			This included traffic counts, AQ, noise, landscape and visual.	n/a
	<i>Other cost categories</i>	397	0			This includes Land and Marine surveys, and the pipeline corridors.	n/a
	-	141	13	2.7%	1.1%	Work undertaken by Environment Agency and Natural England	Specific outputs

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Description	Further breakdown	Gate 2 (£k)	Early Gate 3 (£k)	G2 % of Total Expenditure	Early G3 % of Total Expenditure	Description of Activity	G2/G3 allocation approach
Data Collection, Sampling, and Pilot Trials	See description	589	0	11.2%	0.0%	Data collection for desalination to understand water quality which informed concept design. Cannot meaningfully break down as it was a single contract. For a large number of samples, SW has had to use a SW-based laboratory, as there are no UK laboratories with the required accreditation. For full details of the sampling activity, please see Concept Design Report section 2.1.1 in the Interim Update submitted 27 September 2021. Sampling points includes 20 coordinates across five different clusters. The sampling programme ran from Jan-Oct 2020. The cost is for the iterative development of testing techniques and parameters, testing and data development.	n/a
Procurement Strategy	-	211	81	4.0%	6.9%	Southern Water resources to provide procurement and commercial management of External Supply Chain required for Gate 2.	Specific outputs
	-	276	40	5.2%	3.4%	Value for money analysis, Commercial model development, Late Tender model development, Market Engagement, Development of Implementation Plan. Development SOC, and Development of Procurement Plan.	Specific outputs
Planning Strategy	-	159	25	3.0%	2.1%	Specialist planning resource to advise on the consenting on the DCO process	Specific outputs
	-	0	0	0.0%	0.0%	Airborne ground facing LIDAR survey confirming topography and sensitive receptors	n/a
	-	56	6	1.1%	0.5%	Ricardo commission on Natural Capital & Biodiversity gain	Specific outputs
Stakeholder Engagement	-	142	3	2.7%	0.3%	Formally conducted research into stakeholder and customer views and preferences	Specific outputs
	-	87	0	1.7%	0.0%	Non-statutory consultation	n/a
Legal	-	167	30	3.2%	2.5%	Legal advice – regulatory	Specific outputs
	-	36	30	0.7%	2.5%	Legal advice – consenting	Specific outputs
	-	86	6	1.6%	0.5%	Legal advice - procurement, strategy and Secondment	Specific outputs
Other	-	0	0	0.0%	0.0%		n/a
Total	-	5,324	1,207				
Gate Allowance	-	5,610	13,090				
Gate under/overspend	-	-286	-11,883				

Water Recycling and 1/3 Common Activities (2017/18 prices)

Description	Further breakdown	Gate 2 (£k)	Early Gate 3 (£k)	G2 % of Total Expenditure	Early G3 % of Total Expenditure	Description of Activity	G2/G3 allocation approach
Programme & Project Management	-	92	0	1.9%	0.0%	Project Management to lead and manage the projects.	Specific outputs
	-	263	181	5.5%	5.9%	The PMO provides both strategic and tactical oversight of all workstreams and deliverables, whether internal or external. The PMO provides project controls, including tracking delivery of outputs, progress to schedules, costs tracking, resource oversight, monitors the interfaces between the workstreams and with the wider business, provides project management services to projects, as required.	Specific outputs
	-	266	128	5.6%	4.2%	Southern Water senior delivery management of both projects and programme	Proportioning with specific outputs for project-specific delivery
	-	105	0	2.2%	0.0%	External Assurance undertaken by ██████ and with support on data analysis from the SW team, data provided to SW Board prior to Board Assurance statement.	Specific outputs
Feasibility Assessment and Concept Design	See below	607	479	12.7%	15.7%	Specialist Process engineering team using catchment sampling data (sea water) to develop the process design. Multi discipline Engineering team developing the MECH, elect, civil, structural aspects of the concept design.	See below
	<i>Process Design</i>	240	230			The majority of the work at the start of and during Gate two was outlining the process, which develops at a relative projector to the data captured.	Freeze date
	<i>Mechanical Design</i>	138	50			Mechanical sizing based on flow specific to option and sizing of recycling plant process units.	Freeze date
	<i>Civil Design</i>	101	87			General plan/ sections produced from outline mechanical sizing.	Freeze date
	<i>Electrical</i>	26	21			Basic electrical designs produced against outline Mechanical design.	Freeze date
	<i>ICA</i>	25	22			Basic Instrument, Control and Automation design produced against overall design.	Freeze date
	<i>Design management</i>	77	69			Coordination and oversight of how the design workstream is delivering to plan and aligns to the broader programme.	Freeze date
Option benefits development and appraisal	-	81	0	1.7%	0.0%	Cost estimation and embedded carbon calculation	Specific outputs
	-	197	0	4.1%	0.0%	Option Appraisal Framework consistent with Green book and consenting requirements	Specific outputs
	-	216	4	4.5%	0.1%	Hydraulic modelling - analysis and software licences	Freeze date
	-	118	34	2.5%	1.1%	Includes site selection, habitat phase 1 assessment. Land referencing and negotiating access.	Specific outputs

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Description	Further breakdown	Gate 2 (£k)	Early Gate 3 (£k)	G2 % of Total Expenditure	Early G3 % of Total Expenditure	Description of Activity	G2/G3 allocation approach
Environmental Assessment	-	35	0	0.7%	0.0%	Environmental, Ecological, Terrestrial and Marine Surveys	Specific outputs
	-	141	13	3.0%	0.4%	Work undertaken by Environment Agency and Natural England	Specific outputs
Data Collection, Sampling, and Pilot Trials	See below	0	609	0.0%	20.0%	The ceramic membrane design is relevant for a number of SRO alternative options (recycled water and raw water transfer) as the technology will be able to treat water from a variety of sources including recycled water. Running a pilot plant now will inform design and operations in the future should the alternative options go ahead	See below
	<i>PWNT membrane</i>	0	292				n/a
	<i>Nanostone membrane</i>	0	317				n/a
	See below	791	770	16.6%	25.3%	Design Consultancy undertaken by Internationally recognised specialist in water recycling design. Input includes engineering, construction best practice, analysis of the sampling data. Being undertaken in Gate 2 period to enable SW to collect sufficient data to support DWI approval of water recycling in the UK.	See below
	<i>Planning, scoping, and initiation</i>	96	93				Freeze date
	<i>Specialised laboratory testing</i>	158	153			Specialised laboratory testing in the USA. As the determinants required for testing are fairly unique and there are not the necessary accredited methods in the UK, SW's consultant arranged for the testing in the early phases of Gate 2.	Freeze date
	<i>Project Management, regulatory support and presentations</i>	55	53				Freeze date
	<i>Data collection and processing</i>	199	195				Freeze date
	<i>Process design support</i>	199	195			Providing preliminary drawings, creating technical reports and developing CDR.	Freeze date
	<i>Design management</i>	84	81			Coordination and oversight of how the design workstream is delivering to plan.	Freeze date
	See below	723	606	15.2%	19.9%	Proving the concept and application of the process design. Collecting data to evidence the process efficacy of the water design. Being undertaken in Gate 2 period to enable SW to collect sufficient data to support DWI approval of water recycling in the UK.	See below

Accelerated gate two query
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Description	Further breakdown	Gate 2 (£k)	Early Gate 3 (£k)	G2 % of Total Expenditure	Early G3 % of Total Expenditure	Description of Activity	G2/G3 allocation approach
	<i>Hiring the Pilot trial equipment and facilities</i>	57	187			The pilot plant Ultra Filtration/ Reverse Osmosis technology and UV AOP process is currently hired on a monthly basis. This includes hire of the site requirements such as offices/ laboratory etc.	Freeze date
	<i>Trialling the design concept, operating and maintaining it</i>	215	55				Freeze date
	<i>Sampling, Sampling Prep and Analysis</i>	193	212			There is daily sampling carried out on the pilot plant which informs SW's consultants and design team, these are sent to SW's framework laboratories. Approximately every quarter, a larger sampling event occurs where a team goes out into the catchment to collect a wide array of samples, so SW can baseline this against the pilot data to look to profile against plant performance.	Freeze date
	<i>University of Brighton Sample Prep and Testing</i>	246	144			Using academic experts to quality assure the pilot suppliers performance testing, prepare exotic samples for transportation to Eurofin's USA, bench scale pilot plant.	Freeze date
	<i>Pilot Consumables/ Sundries</i>	12	8			Pilot plant chemical, office supplies, cleaning, etc.	Freeze date
Procurement Strategy	-	211	81	4.4%	2.7%	Southern Water resources to provide procurement and commercial management of External Supply Chain required for Gate 2.	Specific outputs
	-	276	40	5.8%	1.3%	Value for money analysis, Commercial model development, Late Tender model development, Market Engagement, Development of Implementation Plan. Development SOC, Development of and Procurement Plan.	Specific outputs
Planning Strategy	-	159	25	3.3%	0.8%	Specialist planning resource to advise on the consenting on the DCO process	Specific outputs
	-	0	0	0.0%	0.0%	Airborne ground facing LIDAR survey confirming topography and sensitive receptors	n/a
	-	56	6	1.2%	0.2%	Ricardo commission on Natural Capital & Biodiversity gain	Specific outputs
Stakeholder Engagement	-	142	3	3.0%	0.1%	Formally conducted research into stakeholder and customer views and preferences	Specific outputs
Legal	-	167	30	3.5%	1.0%	Legal advice – regulatory	Specific outputs
	-	36	30	0.8%	1.0%	Legal advice – consenting	Specific outputs
	-	86	6	1.8%	0.2%	Legal advice - procurement, strategy and Secondment	Specific outputs

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Description	Further breakdown	Gate 2 (£k)	Early Gate 3 (£k)	G2 % of Total Expenditure	Early G3 % of Total Expenditure	Description of Activity	G2/G3 allocation approach
Other	-	0	0	0.0%	0.0%		n/a
Total	-	4,766	3,046				
Gate Allowance	-	5,370	12,530				
Gate under/overspend	-	-604	-9,484				

Havant Thicket Raw and 1/3 Common Activities (2017/18 prices)

Description	Further breakdown	Gate 2 (£k)	Early Gate 3 (£k)	G2 % of Total Expenditure	Early G3 % of Total Expenditure	Description of Activity	G2/G3 allocation approach
Programme & Project Management	-	113	0	4.1%	0.0%	Project Management to lead and manage the projects.	Specific outputs
	-	263	181	9.6%	10.7%	The PMO provides both strategic and tactical oversight of all workstreams and deliverables, whether internal or external. The PMO provides project controls, including tracking delivery of outputs, progress to schedules, costs tracking, resource oversight, monitors the interfaces between the workstreams and with the wider business, provides project management services to projects, as required.	Specific outputs
	-	266	128	9.7%	7.6%	Southern Water senior delivery management of both projects and programme	Proportioning with specific outputs for project-specific delivery
	-	105	0	3.8%	0.0%	External Assurance undertaken by ██████ and with support on data analysis from the SW team, data provided to SW Board prior to Board Assurance statement.	Specific outputs
Feasibility Assessment and Concept Design	-	109	422	4.0%	25.0%	Specialist Process engineering team using catchment sampling data (sea water) to develop the process design. Multi discipline Engineering team developing the MECH, elect, civil, structural aspects of the concept design.	Freeze date
Option benefits development and appraisal	-	81	0	3.0%	0.0%	Cost estimation and embedded carbon calculation	Specific outputs
	-	197	0	7.2%	0.0%	Option Appraisal Framework consistent with Green book and consenting requirements	Specific outputs
	-	216	4	7.9%	0.3%	Hydraulic modelling - analysis and software licences	Freeze date
Environmental Assessment	-	71	21	2.6%	1.2%	Includes site selection, habitat phase 1 assessment. Land referencing and negotiating access.	Specific outputs
	-	0	83	0.0%	4.9%	Environmental, Ecological, Terrestrial and Marine Surveys. Too late to feed into Gate 2 but required to maintain project progress.	Specific outputs
	-	141	13	5.2%	0.8%	Option Appraisal Framework consistent with Green book and consenting requirements	Specific outputs
	-	38	8	1.4%	0.4%	Portsmouth Water costs advising on environmental constraints, available pipe routes, location of inlet/ abstraction connections at Havant Thicket, informing the high lift pumping station site location, development of the joint risk and joint stakeholder engagement strategies and performing joint regulator engagement.	Specific outputs
	See below	0	609	0.0%	36.0%	Value for money analysis, Commercial model development, Late Tender model development, Market Engagement, Development of Implementation Plan	See below

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Description	Further breakdown	Gate 2 (£k)	Early Gate 3 (£k)	G2 % of Total Expenditure	Early G3 % of Total Expenditure	Description of Activity	G2/G3 allocation approach
Data Collection, Sampling, and Pilot Trials	<i>PWNT membrane</i>	0	292				n/a
	<i>Nanostone membrane</i>	0	317				n/a
Procurement Strategy	-	211	81	7.7%	4.8%	Southern Water resources to provide procurement and commercial management of External Supply Chain required for Gate 2.	Specific outputs
	-	276	40	10.1%	2.4%	Value for money analysis, Commercial model development, Late Tender model development, Market Engagement, Development of Implementation Plan. Development SOC, and Development of Procurement Plan.	Specific outputs
Planning Strategy	-	159	25	5.8%	1.5%	Specialist planning resource to advise on the consenting on the DCO process	Specific outputs
	-	0	0	0.0%	0.0%	Airborne ground facing LIDAR survey confirming topography and sensitive receptors	n/a
	-	56	6	2.0%	0.4%	Ricardo commission on Natural Capital & Biodiversity gain	Specific outputs
Stakeholder Engagement	-	142	3	5.2%	0.2%	Formally conducted research into stakeholder and customer views and preferences	Specific outputs
Legal	-	167	30	6.1%	1.8%	Legal advice - regulatory	Specific outputs
	-	36	30	1.3%	1.8%	Legal advice - consenting	Specific outputs
	-	86	6	3.1%	0.4%	Legal advice - procurement, strategy and Secondment	Specific outputs
Other	-	0	0	0.0%	0.0%		n/a
Total	-	2,730	1,690				
Gate Allowance	-	1,128	1,859				
Gate under/overspend	-	1,602	-169				

Date of response to RAPID	14/12/21
Strategic solution contact / responsible person	██████████ ████████████████████

