

Table 11 – Desalination and 1/3 Common Activities (2017/18 prices)

Description	Summary G2	Summary G3	Gate 2 (£k)	Early Gate 3 (£k)	G2 % of Total Expenditure	Early G3 % of Total Expenditure	Description of Activity
Programme & Project Management	727	309	93	0	1.8%	0.0%	Project Management to lead and manage the projects.
			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.
			266	128	5.1%	10.9%	Southern Water senior delivery management of both projects and programme
			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.
Feasibility Assessment and Concept Design	796	609	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.
Option benefits development and appraisal	580	4	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.
			81	0	1.6%	0.0%	Cost estimation and embedded carbon calculation
			197	0	3.8%	0.0%	Option Appraisal Framework consistent with Green book and consenting requirements
			216	4	4.1%	0.4%	Hydraulic modelling - analysis and software licences
Environmental Assessment	1342	34	142	21	2.7%	1.8%	Includes site selection, habitat phase 1 assessment. Land referencing and negotiating access.
			1,059	0	20.2%	0.0%	Environmental, Ecological, Terrestrial and Marine Surveys
			141	13	2.7%	1.1%	Work undertaken by Environment Agency and Natural England
Data Collection, Sampling, and Pilot Trials	589	0	589	0	11.2%	0.0%	Data collection for desalination to understand water quality which informed concept design.
Procurement Strategy	487	121	211	81	4.0%	6.9%	Southern Water resources to provide procurement and commercial management of External Supply Chain required for Gate 2.
			276	40	5.3%	3.4%	Value for money analysis, Commercial model development, Late Tender model development, Market Engagement, Development of Implementation Plan. Development SOC, Development of Procurement Plan, Development of Gate 2 submission, Senior management and board sessions
Planning Strategy	215	31	159	25	3.0%	2.1%	Specialist planning resource to advise on the consenting on the DCO process
			0	0	0.0%	0.0%	Airborne ground facing LIDAR survey confirming topography and sensitive receptors
			56	6	1.1%	0.5%	Ricardo commission on Natural Capital & Biodiversity gain

Stakeholder Engagement	229	3	142	3	2.7%	0.3%	Formally conducted research into stakeholder and customer views and preferences
			87	0	1.7%	0.0%	Non-statutory consultation
Legal	289	66	167	30	3.2%	2.5%	Legal advice – regulatory
			36	30	0.7%	2.5%	Legal advice – consenting
			86	6	1.6%	0.5%	Legal advice - procurement, strategy and Secondment
Other	0	0	0	0	0.0%	0.0%	
Total	5,251	1,177	5,251	1,177	100.0%	100.0%	
Gate Allowance			5,610	13,090			
Gate under/overspend			-359	-11,913			

Table 12 – Water Recycling and 1/3 Common Activities (2017/18 prices)

Description	Summary G2	Summary G3	Gate 2 (£k)	Early Gate 3 (£k)	G2 % of Total Expenditure	Early G3 % of Total Expenditure	Description of Activity
Programme & Project Management	726	309	92	0	1.9%	0.0%	Project Management to lead and manage the projects.
			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.
			266	128	5.6%	4.2%	Southern Water senior delivery management of both projects and programme
			105	0	2.2%	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.
Feasibility Assessment and Concept Design	607	479	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.
Option benefits development and appraisal	494	4	81	0	1.7%	0.0%	Cost estimation and embedded carbon calculation
			197	0	4.1%	0.0%	Option Appraisal Framework consistent with Green book and consenting requirements
			216	4	4.5%	0.1%	Hydraulic modelling - analysis and software licences
Environmental Assessment	294	47	118	34	2.5%	1.1%	Includes site selection, habitat phase 1 assessment. Land referencing and negotiating access.
			35	0	0.7%	0.0%	Environmental, Ecological, Terrestrial and Marine Surveys
			141	13	3.0%	0.4%	Work undertaken by Environment Agency and Natural England
	1514	1985	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

Data Collection, Sampling, and Pilot Trials			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.
			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.
Procurement Strategy	487	121	211	81	4.4%	2.7%	Southern Water resources to provide procurement and commercial management of External Supply Chain required for Gate 2.
			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 Procurement Plan, Development of Gate 2 submission, Senior management and board sessions
Planning Strategy	215	31	159	25	3.3%	0.8%	Specialist planning resource to advise on the consenting on the DCO process
			0	0	0.0%	0.0%	Airborne ground facing LIDAR survey confirming topography and sensitive receptors
			56	6	1.2%	0.2%	Ricardo commission on Natural Capital & Biodiversity gain
Stakeholder Engagement	142	3	142	3	3.0%	0.1%	Formally conducted research into stakeholder and customer views and preferences
Legal	289	66	167	30	3.5%	1.0%	Legal advice – regulatory
			36	30	0.8%	1.0%	Legal advice – consenting
			86	6	1.8%	0.2%	Legal advice - procurement, strategy and Secondment
Other	0	0	0	0	0.0%	0.0%	
Total	4,766	3,046	4,766	3,046	100.0%	100.0%	
Gate Allowance			5,370	12,530			
Gate under/overspend			-604	-9,484			

Table 13 – Havant Thicket Raw and 1/3 Common Activities (2017/18 prices)

Description	Summary G2	Summary G3	Gate 2 (£k)	Early Gate 3 (£k)	G2 % of Total Expenditure	Early G3 % of Total Expenditure	Description of Activity
Programme & Project Management	747	309	113	0	4.1%	0.0%	Project Management to lead and manage the projects.
			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.
			266	128	9.7%	7.6%	Southern Water senior delivery management of both projects and programme
			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.
Feasibility Assessment and Concept Design	109	422	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.
Option benefits development and appraisal	494	4	81	0	3.0%	0.0%	Cost estimation and embedded carbon calculation
			197	0	7.2%	0.0%	Option Appraisal Framework consistent with Green book and consenting requirements
			216	4	7.9%	0.3%	Hydraulic modelling - analysis and software licences
Environmental Assessment	250	125	71	21	2.6%	1.2%	Includes site selection, habitat phase 1 assessment. Land referencing and negotiating access.
			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.
			141	13	5.2%	0.8%	Option Appraisal Framework consistent with Green book and consenting requirements
			38	8	1.4%	0.5%	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.

Data Collection, Sampling, and Pilot Trials	0	609	0	609	0.0%	36.0%	Value for money analysis, Commercial model development, Late Tender model development, Market Engagement, Development of Implementation Plan
Procurement Strategy	487	121	211	81	7.7%	4.8%	Southern Water resources to provide procurement and commercial management of External Supply Chain required for Gate 2.
			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, Development of Procurement Plan, Development of Gate 2 submission, Senior management and board sessions
Planning Strategy	215	31	159	25	5.8%	1.5%	Specialist planning resource to advise on the consenting on the DCO process
			0	0	0.0%	0.0%	Airborne ground facing LIDAR survey confirming topography and sensitive receptors
			56	6	2.0%	0.4%	Ricardo commission on Natural Capital & Biodiversity gain
Stakeholder Engagement	142	3	142	3	5.2%	0.2%	Formally conducted research into stakeholder and customer views and preferences
Legal	289	66	167	30	6.1%	1.8%	Legal advice - regulatory
			36	30	1.3%	1.8%	Legal advice - consenting
			86	6	3.1%	0.4%	Legal advice - procurement, strategy and Secondment
Other	0	0	0	0	0.0%	0.0%	
Total	2,733	1,690	2,733	1,690	100.0%	100.0%	
Gate Allowance			1,128	1,859			
Gate under/overspend			1,602	-169			