

Option ID	Option Name	Environmental: Environmental Benefit	Environmental: Disbenefit	Environmental: Natural Capital	Environmental: Biodiversity Net Gain	Environmental: Biodiversity Net Gain above target	Social: Customer Preference	Resilience: Reliability R1 - Uncertainty of option supply/demand benefit	Resilience: Reliability R3 - Risk of failure of planned service due to other physical vulnerability	Resilience: Reliability R5 - Attachment/raw water quality risks (inc. climate change)	Resilience: Reliability R6 - Capacity of catchment services	Resilience: Reliability R7 - Risk of failure of planned service due to exceptional events	Resilience: Reliability R8 - Improvements to soil health	Resilience: Adaptability A3 - Operational adaptability and complexity	Resilience: Adaptability A7 - Customer engagement with demand restrictions	Resilience: Evolvability E1 - Scalability and modularity of proposed changes	Resilience: Evolvability E2 - Intervention Lead Times	Resilience: Evolvability E3 - Reliance on external bodies to deliver changes	
DESALINATION																			
TWU_LON_HI-DES_ALL_CNO_beckton desal 150	Beckton Desalination - 150 MI/d - Construction	8.00	- 24.00				1.01	4.00	2.00	3.00		1.00		1.00		3.00	1.00	2.00	
TWU_LON_HI-DES_ALL_CNO_beckton desal 100p1	Beckton Desalination - Phase 1: 100 MI/d - Construction	8.00	- 24.00				1.01	4.00	2.00	3.00		1.00		1.00		3.00	1.00	2.00	
TWU_LON_HI-DES_ALL_CNO_beckton desal 50 p1	Beckton Desalination - Phase 1: 50 MI/d - Construction	4.00	- 24.00				1.01	4.00	2.00	3.00		1.00		1.00		3.00	1.00	2.00	
TWU_LON_HI-DES_ALL_ALL_beckton desal 50p2a	Beckton Desalination - Phase 2a: 50 MI/d Enhanced	4.00	- 24.00				1.01	4.00	2.00	3.00		1.00		1.00		3.00	1.00	2.00	
TWU_LON_HI-DES_ALL_ALL_beckton desal 50p2b	Beckton Desalination - Phase 2b: 50 MI/d Enhanced	4.00	- 24.00				1.01	4.00	2.00	3.00		1.00		1.00		3.00	1.00	2.00	
TWU_LON_HI-DES_ALL_ALL_crossnessdesal100p2	Crossness Desalination (Blended) - 100MI/d Enhanced	8.00	- 22.00	- 139.66	- 126.10	- 141.19	1.01	4.00	2.00	3.00		1.00		1.00		3.00	1.00	2.00	
TWU_LON_HI-DES_ALL_ALL_crossnessdesal50p2	Crossness Desalination (Blended) - 50MI/d Enhanced	4.00	- 23.00	- 139.66	- 126.10	- 141.19	1.01	4.00	2.00	3.00		1.00		1.00		3.00	1.00	2.00	
TWU_LON_HI-DES_ALL_CNO_crossnessdesal100p1	Crossness Desalination (Blended) - Phase 1: 100 MI/d - Construction	8.00	- 24.00	- 139.66	- 126.10	- 141.19	1.01	4.00	2.00	3.00		1.00		1.00		3.00	1.00	2.00	
TWU_LON_HI-DES_ALL_CNO_crossnessdesal50p1	Crossness Desalination (Blended) - Phase 1: 50 MI/d - Construction	4.00	- 24.00	- 139.66	- 126.10	- 141.19	1.01	4.00	2.00	3.00		1.00		1.00		3.00	1.00	2.00	
DIRECT RIVER ABSTRACTION																			
TWU_STT_HI-RAB_RE1_ALL_p3-300-vyrnwy_50	300: Lake Vyrnwy stage 1 (25Mld - 0-25)	-	-	-	-	-	1.12	3.00	3.00	2.71		3.00		2.00		2.00	1.00	3.00	
TWU_STT_HI-RAB_RE1_ALL_p4-300-vyrnwy_75	300: Lake Vyrnwy stage 2 (25Mld - 26-50)	1.00	- 4.00	- 4,109.25	17.21	0.31	1.12	3.00	3.00	2.71		3.00		2.00		2.00	1.00	3.00	
TWU_STT_HI-RAB_RE1_ALL_p7-300-vyrnwy_135_b	300: Lake Vyrnwy stage 4 (30Mld - 81-110)	-	-	-	-	-	1.12	3.00	3.00	2.71		3.00		2.00		2.00	1.00	3.00	
TWU_STT_HI-RAB_RE1_ALL_p8-300-vyrnwy_155_b	300: Lake Vyrnwy stage 5 (30Mld - 111-140)	-	-	-	-	-	1.12	3.00	3.00	2.71		3.00		2.00		2.00	1.00	3.00	
TWU_STT_HI-RAB_RE1_ALL_p6-300-shrewsbury_25	300: Lake Vyrnwy stage 7 (20Mld - 161-180)	-	-	-	-	-	1.12	3.00	3.00	2.71		3.00		2.00		2.00	1.00	3.00	
TWU_U7T_HI-RAB_RE1_ALL_p1-300-unsupported	300: Unsupported flow	21.00	- 55.00	- 72,907.97	112.99	5.82	1.12	3.00	3.00	2.71		3.00		2.00		2.00	5.00	3.00	
TWU_STT_HI-RAB_RE1_ALL_p3-400-vyrnwy_50	400: Lake Vyrnwy stage 1 (25Mld - 0-25)	-	-	-	-	-	1.12	3.00	3.00	2.71		3.00		2.00		3.00	1.00	3.00	
TWU_STT_HI-RAB_RE1_ALL_p4-400-vyrnwy_75	400: Lake Vyrnwy stage 2 (25Mld - 26-50)	1.00	- 4.00	- 4,109.25	17.21	0.31	1.12	3.00	3.00	2.71		3.00		2.00		3.00	1.00	3.00	
TWU_STT_HI-RAB_RE1_ALL_p7-400-vyrnwy_135_b	400: Lake Vyrnwy stage 4 (30Mld - 81-110)	-	-	-	-	-	1.12	3.00	3.00	2.71		3.00		2.00		3.00	1.00	3.00	
TWU_STT_HI-RAB_RE1_ALL_p8-400-vyrnwy_155_b	400: Lake Vyrnwy stage 5 (30Mld - 111-140)	-	-	-	-	-	1.12	3.00	3.00	2.71		3.00		2.00		3.00	1.00	3.00	
TWU_STT_HI-RAB_RE1_ALL_p6-400-shrewsbury_25	400: Lake Vyrnwy stage 7 (20Mld - 161-180)	-	-	-	-	-	1.12	3.00	3.00	2.71		3.00		2.00		3.00	1.00	3.00	
TWU_U7T_HI-RAB_RE1_ALL_p1-400-unsupported	400: Unsupported flow	21.00	- 55.00	- 72,907.97	112.99	5.82	1.12	3.00	3.00	2.71		3.00		2.00		3.00	5.00	3.00	
TWU_STT_HI-RAB_RE1_ALL_p3-500-vyrnwy_50	500: Lake Vyrnwy stage 1 (25Mld - 0-25)	-	-	-	-	-	1.12	3.00	3.00	2.71		3.00		2.00		4.00	1.00	3.00	
TWU_STT_HI-RAB_RE1_ALL_p4-500-vyrnwy_75	500: Lake Vyrnwy stage 2 (25Mld - 26-50)	1.00	- 4.00	- 4,109.25	17.21	0.31	1.12	3.00	3.00	2.71		3.00		2.00		4.00	1.00	3.00	
TWU_STT_HI-RAB_RE1_ALL_p7-500-vyrnwy_135_b	500: Lake Vyrnwy stage 4 (30Mld - 81-110)	-	-	-	-	-	1.12	3.00	3.00	2.71		3.00		2.00		4.00	1.00	3.00	
TWU_STT_HI-RAB_RE1_ALL_p8-500-vyrnwy_155_b	500: Lake Vyrnwy stage 5 (30Mld - 111-140)	-	-	-	-	-	1.12	3.00	3.00	2.71		3.00		2.00		4.00	1.00	3.00	
TWU_STT_HI-RAB_RE1_ALL_p6-500-shrewsbury_25	500: Lake Vyrnwy stage 7 (20Mld - 161-180)	-	-	-	-	-	1.12	3.00	3.00	2.71		3.00		2.00		4.00	1.00	3.00	
TWU_U7T_HI-RAB_RE1_ALL_p1-500-unsupported	500: Unsupported flow	21.00	- 55.00	- 72,907.97	112.99	5.82	1.12	3.00	3.00	2.71		3.00		2.00		4.00	5.00	3.00	
TWU_TED_HI-RAB_RE1_CNO_teddington dra 100	Teddington DRA 100 MLD - Construction	7.00	- 17.00				1.12	2.00	3.00	2.71		3.00		2.00		3.00	2.00	1.00	
TWU_TED_HI-RAB_RE1_CNO_teddington dra 50	Teddington DRA 50 MLD - Construction	7.00	- 17.00				1.12	2.00	3.00	2.71		3.00		2.00		3.00	2.00	1.00	
TWU_TED_HI-RAB_RE2_ALL_teddington dra 50 p2	Teddington DRA 50 MLD Phase 2						1.12	2.00	3.00	1.71		3.00		3.00		3.00	3.00	3.00	
GROUNDWATER																			
TWU_SWX_HI-GRW_ALL_ALL_ashton keynes roc	Ashton Keynes borehole pumps - Removal of Constraints to DO	1.00	- 19.00				1.17	2.00	3.00	3.00		3.00		3.00		3.00	5.00	3.00	
TWU_LON_HI-GRW_RE1_ALL_asrhortonkirby	ASR Horton Kirby	3.00	- 15.00	- 38.66	- 6.94	- 8.45	1.17	1.00	2.00	3.00		3.00		3.00		4.00	3.00	3.00	
TWU_GUI_HI-GRW_ALL_ALL_dapdune lic disagg	Dapdune Licence Disaggregation	1.00	- 2.00				1.17	2.00	3.00	3.00		3.00		3.00		3.00	5.00	3.00	
TWU_GUI_HI-GRW_ALL_ALL_dapdune roc	Dapdune Licence Disaggregation	2.00	- 12.00				1.17	2.00	3.00	3.00		3.00		3.00		3.00	4.00	3.00	
TWU_SWA_HI-GRW_ALL_ALL_datchet do	Datchet Increase DO	1.00	- 14.00				1.17	2.00	3.00	3.00		3.00		3.00		3.00	3.00	3.00	
TWU_SWA_HI-GRW_ALL_ALL_dorney do	Dorney Increase DO	2.00	- 14.00				1.17	2.00	3.00	3.00		3.00		3.00		3.00	3.00	3.00	
TWU_KVZ_HI-GRW_ALL_ALL_east woodhay roc	East Woodhay borehole pumps Removal of Constraints to DO	1.00	- 5.00				1.17	2.00	3.00	3.00		3.00		3.00		3.00	4.00	3.00	
TWU_LON_HI-GRW_ALL_ALL_addington gw	Groundwater Addington	2.00	- 15.00				1.17	2.00	3.00	3.00		3.00		3.00		3.00	4.00	3.00	
TWU_LON_HI-GRW_ALL_ALL_honor oak gw	GW – Honor Oak	1.00	- 14.00				1.17	2.00	3.00	3.00		3.00		3.00		3.00	4.00	3.00	
TWU_LON_HI-GRW_ALL_ALL_honoroak do	Honor Oak Increase DO	2.00	- 12.00				1.17	2.00	3.00	3.00		3.00		3.00		3.00	3.00	3.00	
TWU_LON_HI-GRW_ALL_CNO_kidbrooke slars	Kidbrooke Aquifer Recharge/Aquifer Storage and Recovery (SLARS1) - Construction	2.00	- 19.00				1.17	1.00	2.00	3.00		3.00		3.00		4.00	2.00	3.00	
TWU_LON_HI-GRW_ALL_ALL_london conchalk	London Confined Chalk (north)	2.00	- 14.00				1.17	2.00	3.00	3.00		3.00		3.00		3.00	3.00	3.00	
TWU_LON_HI-GRW_ALL_CNO_merton ar	Merton Aquifer Recharge (SLARS3) - Construction	1.00	- 15.00				1.17	1.00	2.00	3.00		3.00		3.00		4.00	2.00	3.00	
TWU_LON_HI-GRW_ALL_ALL_merton recommission	Merton Recommissioning	2.00	- 12.00				1.17	2.00	3.00	3.00		3.00		3.00		3.00	4.00	3.00	
TWU_KVZ_HI-GRW_ALL_ALL_mortimer recomm	Mortimer Disused Source (Recommission)	1.00	- 4.00				1.17	2.00	3.00	3.00		3.00		3.00		3.00	4.00	3.00	
TWU_SWX_HI-GRW_ALL_ALL_moulsford gw	Moulsford 1	1.00	- 17.00				1.17	2.00	3.00	3.00		3.00		3.00		3.00	4.00	3.00	
TWU_LON_HI-GRW_ALL_ALL_addington asr	South East London (Addington) Aquifer Storage and Recovery	1.00	- 10.00				1.17	1.00	2.00	3.00		3.00		2.00		4.00	1.00	2.00	
TWU_LON_HI-GRW_ALL_ALL_s'fleet lic disagg	Southfleet/Greenhithe (new WTW)	1.00	- 12.00	- 35.71	- 15.92	- 19.64	1.17	2.00	3.00	3.00		3.00		3.00		3.00	3.00	3.00	
TWU_LON_HI-GRW_ALL_ALL_streatham ar	Streatham Aquifer Recharge (SLARS2)	1.00	- 9.00				1.17	1.00	2.00	3.00		3.00		3.00		4.00	3.00	3.00	
TWU_SWA_HI-GRW_ALL_ALL_taplowincreasedo	Taplow Increase DO	1.00	- 17.00				1.17	1.00	3.00	3.00		3.00		3.00		3.00	3.00	3.00	

TWU_WU_HI-TFR_WUJ_ALL_reuse mogden/walton	Reuse Mogden to Walton 150 MLD			-	5,055.90	-	95.63	-	107.25	1.17	-	-	-	-	-	-	-	-
WATER TREATMENT WORKS																		
TWU_SWX_HI-ROC_WT2_ALL_abingdon wtw ph2	Abingdon WTW Enhanced	1.00	-	12.00	-	1,342.59	-	15.30	-	17.52	1.46	5.00	3.00	-	3.00	3.00	3.00	3.00
TWU_SWX_HI-ROC_WT2_ALL_abingdon wtw ph2_rep_1	Abingdon WTW Enhanced	1.00	-	12.00	-	1,342.59	-	15.30	-	17.52	1.46	5.00	3.00	-	3.00	3.00	3.00	3.00
TWU_SWX_HI-ROC_WT1_CNO_abingdon wtw ph1	Abingdon WTW Ph1 - Construction	1.00	-	12.00	-	1,342.59	-	15.30	-	17.52	1.46	5.00	3.00	-	3.00	3.00	3.00	3.00
TWU_LON_HI-LRE_WT1_ALL_copperwtwecana200	Coppermills WTW - Mecana 200MI/d	1.00	-	27.00	-	-	-	-	0.02	2.00	4.00	3.00	-	2.00	2.00	3.00	2.00	3.00
TWU_LON_HI-LRE_WT1_ALL_copperwtwecana480	Coppermills WTW - Mecana 480MI/d	1.00	-	27.00	-	-	-	-	0.02	2.00	4.00	3.00	-	2.00	2.00	3.00	2.00	3.00
TWU_LON_HI-LRE_WT1_ALL_copperwtwecana680	Coppermills WTW - Mecana 680MI/d	1.00	-	27.00	-	-	-	-	0.02	2.00	4.00	3.00	-	2.00	2.00	3.00	2.00	3.00
TWU_LON_HI-ROC_WT2_ALL_eastlondonwtw100p2	East London WTW - 100 Enhanced	8.00	-	21.00	-	-	-	-	-	1.46	5.00	3.00	-	3.00	3.00	3.00	2.00	3.00
TWU_LON_HI-ROC_WT1_CNO_eastlondonwtw100p1	East London WTW - 100 P1 - Construction	8.00	-	21.00	-	-	-	-	-	1.46	5.00	3.00	-	3.00	3.00	3.00	1.00	3.00
TWU_LON_HI-ROC_WT1_CNO_eastlondonwtw150	East London WTW - 150 - Construction	8.00	-	21.00	-	-	-	-	-	1.46	5.00	3.00	-	3.00	3.00	3.00	1.00	3.00
TWU_LON_HI-ROC_WT1_CNO_eastlondonwtw200	East London WTW - 200 - Construction	8.00	-	21.00	-	-	-	-	-	1.46	5.00	3.00	-	3.00	3.00	3.00	1.00	3.00
TWU_LON_HI-ROC_WT1_CNO_eastlondonwtw300	East London WTW - 300 - Construction	8.00	-	21.00	-	-	-	-	-	1.46	5.00	3.00	-	3.00	3.00	3.00	1.00	3.00
TWU_LON_HI-ROC_WT1_ALL_eastlonwtwexisting	East London WTW - existing drought capacity									1.46	-	-	-	-	-	-	-	-
TWU_LON_HI-ROC_WT2_ALL_kemptonwtw100 p2	Kempton - 100 Enhanced	9.00	-	17.00	-	6,342.68	-	148.17	-	168.63	1.46	5.00	3.00	-	3.00	3.00	3.00	2.00
TWU_LON_HI-ROC_WT1_CNO_kemptonwtw100 p1	Kempton - 100 Phase 1 - Construction	9.00	-	17.00	-	797.13	-	135.77	-	151.51	1.46	5.00	3.00	-	3.00	3.00	3.00	1.00
TWU_LON_HI-ROC_WT1_CNO_kemptonwtw150	Kempton - 150 - Construction	9.00	-	17.00	-	797.13	-	135.77	-	151.51	1.46	5.00	3.00	-	3.00	3.00	3.00	1.00
TWU_LON_HI-ROC_WT1_CNO_kemptonwtw300	Kempton - 300 - Construction	9.00	-	21.00	-	797.13	-	135.77	-	151.51	1.46	5.00	3.00	-	3.00	3.00	3.00	1.00
TWU_SWA_HI-ROC_WT2_ALL_medmenhamwtw ph2	Medmenham WTW Enhanced	3.00	-	30.00	-	2,340.55	-	15.56	-	20.56	1.46	5.00	3.00	-	3.00	3.00	3.00	3.00
TWU_SWA_HI-ROC_WT1_CNO_medmenhamwtw ph1	Medmenham WTW Ph1 - Construction	3.00	-	30.00	-	2,340.55	-	15.56	-	20.56	1.46	5.00	3.00	-	3.00	3.00	3.00	3.00
TWU_SWX_HI-ROC_WT2_ALL_radcotwtwenhanced	Radcot WTW Enhanced Phase	1.00	-	13.00	-	1,143.34	-	48.52	-	62.78	1.46	5.00	3.00	-	3.00	3.00	3.00	3.00
TWU_SWX_HI-ROC_WT1_ALL_radcotwtw	Radcot WTW Phase 1	1.00	-	13.00	-	1,299.91	-	17.67	-	27.93	1.46	5.00	3.00	-	3.00	3.00	3.00	3.00