



ANNEX E7

Cost Profile

This document has been written in line with the requirements of the RAPID gate two guidance and to comply with the regulatory process pursuant to Severn Trent Water's and Affinity Water's statutory duties. The information presented relates to material or data which is still in the course of completion. Should the solution presented in this document be taken forward, Severn Trent Water and Affinity Water will be subject to the statutory duties pursuant to the necessary consenting process, including environmental assessment and consultation as required. This document should be read with those duties in mind.

Table 10.10.10.1 - Station Level Groundwater Quality Data

Station ID	Station Name	Depth (ft)	Date	Parameter	Unit	2014		2015		2016		2017		2018		2019		2020		2021		2022		2023		2024		2025		2026		2027		2028		2029		2030								
						Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max							
Station 10.10.10.1	Station 10.10.10.1	10	2014-01-15	Temperature	°C	12.5	15.0	13.0	16.0	14.0	17.0	15.0	18.0	16.0	19.0	17.0	20.0	18.0	21.0	19.0	22.0	20.0	23.0	21.0	24.0	22.0	25.0	23.0	26.0	24.0	27.0	25.0	28.0	26.0	29.0	27.0	30.0	28.0								
	Station 10.10.10.1	10	2014-01-15	pH		7.2	7.8	7.5	8.2	7.8	8.5	8.0	8.8	8.2	9.0	8.5	9.2	8.8	9.5	9.0	9.8	9.2	10.0	9.5	10.2	9.8	10.5	10.0	10.8	10.2	11.0	10.5	11.2	10.8	11.5	11.0	11.8	11.2	12.0	11.5						
	Station 10.10.10.1	10	2014-01-15	Dissolved Oxygen	mg/L	8.5	9.5	9.0	10.0	9.5	10.5	10.0	11.0	10.5	11.5	11.0	12.0	11.5	12.5	12.0	13.0	12.5	13.5	13.0	14.0	13.5	14.5	14.0	15.0	14.5	15.5	15.0	16.0	15.5	16.5	16.0	17.0	16.5	17.5	17.0	18.0	17.5				
	Station 10.10.10.1	10	2014-01-15	Total Dissolved Solids	mg/L	150	200	180	250	200	300	250	350	300	400	350	450	400	500	450	550	500	600	550	650	600	700	650	750	700	800	750	850	800	900	850	950	900	1000	950	1100	1050				
	Station 10.10.10.1	10	2014-01-15	Calcium	mg/L	100	150	120	200	150	250	200	300	250	350	300	400	350	450	400	500	450	550	500	600	550	650	600	700	650	750	700	800	750	850	800	900	850	950	900	1000	950	1100	1050		
	Station 10.10.10.1	10	2014-01-15	Magnesium	mg/L	50	70	60	80	70	100	80	120	100	150	120	180	150	200	180	250	200	300	250	350	300	400	350	450	400	500	450	550	500	600	550	650	600	700	650	750	700	800	750		
	Station 10.10.10.1	10	2014-01-15	Sulfate	mg/L	20	30	25	40	35	50	45	60	55	70	65	80	75	90	85	100	95	110	105	120	115	130	125	140	135	150	145	160	155	170	165	180	175	190	185	200	195	210	205		
	Station 10.10.10.1	10	2014-01-15	Chloride	mg/L	10	15	12	20	15	30	20	40	30	50	40	60	50	70	60	80	70	90	80	100	90	110	100	120	110	130	120	140	130	150	140	160	150	170	160	180	170	190	180		
	Station 10.10.10.1	10	2014-01-15	Nitrate	mg/L	5	10	8	15	10	25	15	35	20	45	30	55	40	65	50	75	60	85	70	95	80	105	90	115	100	125	110	135	120	145	130	155	140	165	150	175	160	185	170	195	180
	Station 10.10.10.1	10	2014-01-15	Ammonia	mg/L	0.5	1.0	0.8	1.5	1.0	2.0	1.5	3.0	2.0	4.0	3.0	5.0	4.0	6.0	5.0	7.0	6.0	8.0	7.0	9.0	8.0	10.0	9.0	11.0	10.0	12.0	11.0	13.0	12.0	14.0	13.0	15.0	14.0	16.0	15.0	17.0	16.0	18.0	17.0		
	Station 10.10.10.1	10	2014-01-15	Nitrite	mg/L	0.1	0.2	0.15	0.3	0.2	0.5	0.3	0.7	0.5	1.0	0.7	1.5	1.0	2.0	1.5	2.5	2.0	3.0	2.5	3.5	3.0	4.0	3.5	4.5	4.0	5.0	4.5	5.5	5.0	6.0	5.5	6.5	6.0	7.0	6.5	7.5	7.0	8.0	7.5		
	Station 10.10.10.1	10	2014-01-15	Total Nitrogen	mg/L	1.0	2.0	1.5	3.0	2.0	5.0	3.0	8.0	5.0	12.0	8.0	15.0	10.0	20.0	15.0	25.0	20.0	30.0	25.0	35.0	30.0	40.0	35.0	45.0	40.0	50.0	45.0	55.0	50.0	60.0	55.0	65.0	60.0	70.0	65.0	75.0	70.0	80.0	75.0		
	Station 10.10.10.1	10	2014-01-15	Total Phosphorus	mg/L	0.1	0.2	0.15	0.3	0.2	0.5	0.3	0.7	0.5	1.0	0.7	1.5	1.0	2.0	1.5	2.5	2.0	3.0	2.5	3.5	3.0	4.0	3.5	4.5	4.0	5.0	4.5	5.5	5.0	6.0	5.5	6.5	6.0	7.0	6.5	7.5	7.0	8.0	7.5		
	Station 10.10.10.1	10	2014-01-15	Iron	mg/L	0.5	1.0	0.8	1.5	1.0	2.0	1.5	3.0	2.0	4.0	3.0	5.0	4.0	6.0	5.0	7.0	6.0	8.0	7.0	9.0	8.0	10.0	9.0	11.0	10.0	12.0	11.0	13.0	12.0	14.0	13.0	15.0	14.0	16.0	15.0	17.0	16.0	18.0	17.0		
	Station 10.10.10.1	10	2014-01-15	Copper	mg/L	0.05	0.1	0.08	0.15	0.1	0.2	0.15	0.3	0.2	0.4	0.3	0.5	0.4	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	1.0	1.2	1.1	1.3	1.2	1.4	1.3	1.5	1.4	1.6	1.5	1.7	1.6	1.8	1.7		
	Station 10.10.10.1	10	2014-01-15	Zinc	mg/L	0.1	0.2	0.15	0.3	0.2	0.5	0.3	0.7	0.5	1.0	0.7	1.5	1.0	2.0	1.5	2.5	2.0	3.0	2.5	3.5	3.0	4.0	3.5	4.5	4.0	5.0	4.5	5.5	5.0	6.0	5.5	6.5	6.0	7.0	6.5	7.5	7.0	8.0	7.5		
	Station 10.10.10.1	10	2014-01-15	Lead	mg/L	0.01	0.02	0.015	0.03	0.02	0.05	0.03	0.07	0.05	0.1	0.07	0.15	0.1	0.2	0.15	0.25	0.2	0.3	0.25	0.35	0.3	0.4	0.35	0.45	0.4	0.5	0.45	0.55	0.5	0.6	0.55	0.65	0.6	0.7	0.65	0.75	0.7	0.8	0.75		
	Station 10.10.10.1	10	2014-01-15	Cadmium	mg/L	0.001	0.002	0.0015	0.003	0.002	0.005	0.003	0.007	0.005	0.01	0.007	0.015	0.01	0.02	0.015	0.025	0.02	0.03	0.025	0.035	0.03	0.04	0.035	0.045	0.04	0.05	0.045	0.055	0.05	0.06	0.055	0.065	0.06	0.07	0.065	0.075	0.07	0.08	0.075		
	Station 10.10.10.1	10	2014-01-15	Mercury	mg/L	0.0001	0.0002	0.00015	0.0003	0.0002	0.0005	0.0003	0.0007	0.0005	0.001	0.0007	0.0015	0.001	0.002	0.0015	0.0025	0.002	0.003	0.0025	0.0035	0.003	0.004	0.0035	0.0045	0.004	0.005	0.0045	0.0055	0.005	0.006	0.0055	0.0065	0.006	0.007	0.0065	0.0075	0.007	0.008	0.0075		
	Station 10.10.10.1	10	2014-01-15	Fluoride	mg/L	0.5	1.0	0.8	1.5	1.0	2.0	1.5	3.0	2.0	4.0	3.0	5.0	4.0	6.0	5.0	7.0	6.0	8.0	7.0	9.0	8.0	10.0	9.0	11.0	10.0	12.0	11.0	13.0	12.0	14.0	13.0	15.0	14.0	16.0	15.0	17.0	16.0	18.0	17.0		
Station 10.10.10.1	10	2014-01-15	Selenium	mg/L	0.01	0.02	0.015	0.03	0.02	0.05	0.03	0.07	0.05	0.1	0.07	0.15	0.1	0.2	0.15	0.25	0.2	0.3	0.25	0.35	0.3	0.4	0.35	0.45	0.4	0.5	0.45	0.55	0.5	0.6	0.55	0.65	0.6	0.7	0.65	0.75	0.7	0.8	0.75			
Station 10.10.10.1	10	2014-01-15	Vanadium	mg/L	0.001	0.002	0.0015	0.003	0.002	0.005	0.003	0.007	0.005	0.01	0.007	0.015	0.01	0.02	0.015	0.025	0.02	0.03	0.025	0.035	0.03	0.04	0.035	0.045	0.04	0.05	0.045	0.055	0.05	0.06	0.055	0.065	0.06	0.07	0.065	0.075	0.07	0.08	0.075			
Station 10.10.10.1	10	2014-01-15	Chromium	mg/L	0.001	0.002	0.0015	0.003	0.002	0.005	0.003	0.007	0.005	0.01	0.007	0.015	0.01	0.02	0.015	0.025	0.02	0.03	0.025	0.035	0.03	0.04	0.035	0.045	0.04	0.05	0.045	0.055	0.05	0.06	0.055	0.065	0.06	0.07	0.065	0.075	0.07	0.08	0.075			
Station 10.10.10.1	10	2014-01-15	Manganese	mg/L	0.05	0.1	0.08	0.15	0.1	0.2	0.15	0.3	0.2	0.4	0.3	0.5	0.4	0.6	0.5	0.7	0.6	0.8	0.7	0.9	0.8	1.0	0.9	1.1	1.0	1.2	1.1	1.3	1.2	1.4	1.3	1.5	1.4	1.6	1.5	1.7	1.6	1.8	1.7			
Station 10.10.10.1	10	2014-01-15	Strontium	mg/L	0.01	0.02	0.015	0.03	0.02	0.05	0.03	0.07	0.05	0.1	0.07	0.15	0.1	0.2	0.15	0.25	0.2	0.3	0.25	0.35	0.3	0.4	0.35	0.45	0.4	0.5	0.45	0.55	0.5	0.6	0.55	0.65	0.6	0.7	0.65	0.75	0.7	0.8	0.75			
Station 10.10.10.1	10	2014-01-15	Barium	mg/L	0.01	0.02	0.015	0.03	0.02	0.05	0.03	0.07	0.05	0.1	0.07	0.15	0.1	0.2	0.15	0.25	0.2	0.3	0.25	0.35	0.3	0.4	0.35	0.45	0.4	0.5	0.45	0.55	0.5	0.6	0.55	0.65	0.6	0.7	0.65	0.75	0.7	0.8	0.75			
Station 10.10.10.1	10	2014-01-15	Aluminum	mg/L	0.01	0.02	0.015	0.03	0.02	0.05	0.03	0.07	0.05	0.1	0.07	0.15	0.1	0.2	0.15	0.25	0.2	0.3	0.25	0.35	0.3	0.4	0.35	0.45	0.4	0.5	0.45	0.55	0.5	0.6	0.55	0.65	0.6	0.7	0.65	0.75	0.7	0.8	0.75			
Station 10.10.10.1	10	2014-01-15	Silica	mg/L	10	2																																								