

**SECTION E : OPERATING COSTS AND EFFICIENCY**  
**Table E3: PPP Project Analysis**

Line Ref.	Description	Ofwat Ref JR 07	WICS Reference AR 06	Units	Field Type	10	20	30	40	50	60	70	80	90	100	110	120	130
						Highland CG	Highland CG	Tay CG	Aberdeen CG	Aberdeen CG	Aberdeen CG	Aberdeen CG	Moray Coast CG	Moray Coast CG	Moray Coast CG	AVSE CG	AVSE CG	AVSE CG
<b>Project Data</b>						R William	Inverness	Hatton	Nigg	Persley	Peterhead	Fraserburgh	Lossiemouth	Buckie	Banff/Macduff	Seafeld	Newbridge	East Calder
E3.0	Name	-	E3.0		I	8.2	59.7	192.4	210.7	39.9	22.8	17.8	35.4	13.3	10.7	576.4	22.8	71.7
E3.1	Annual average resident connected population	-	E3.1	000	I/C	0.9	1.8	2.0	2.6	0.4	0.5	0.2	0.8	0.3	0.2	7.1	0.2	0.3
E3.2	Annual average non-resident connected population	-	E3.2	000	I/C	15	80	240	279	49	32	27	43	24	12	747	29	112
E3.3	Population equivalent of total load received	-	E3.5	000	I/C													
<b>Scope of Works</b>						1	1	1	1	1	1	1	1	1	1	1	1	1
E3.4	Sewerage	-	E3.7	1/0	I	1	1	1	1	1	1	1	1	1	1	1	1	1
E3.5	Sewage Treatment	-	E3.8	1/0	I	1	1	1	1	1	1	1	1	1	1	1	1	1
E3.6	Sludge Treatment	-	E3.9	1/0	I	0	1	1	1	0	0	0	1	0	0	1	1	0
E3.7	Terminal Pumping Station	-	E3.10	1/0	I	1	1	1	0	0	0	1	1	1	1	1	1	0
E3.8	Other (state details)	-	E3.11	1/0	I	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Sewage Treatment - Effluent Consent Standard</b>						100	100	100	0	100	0	0	100	100	100	375	100	100
E3.9	Suspended solids consent	-	E3.17	mg/l	I	25	25	25	25	25	25	25	25	25	25	25	25	15
E3.10	BOD consent	-	E3.18	mg/l	I	125	125	125	125	125	125	125	125	125	125	125	125	125
E3.11	COD consent	-	E3.19	mg/l	I	0	0	50	0	35	0	0	0	0	0	0	0	7
E3.12	Ammonia consent	-	E3.20	mg/l	I	0	0	0	0	2	0	0	0	0	0	0	0	0.5
E3.13	Phosphate consent	-	E3.21	mg/l	I	100	100	100	100	98	100	100	100	100	100	100	100	100
E3.14	Compliance with effluent consent standard	-	E3.22	%	I													
<b>Treatment Works Category</b>						1	1	1	1	0	1	1	0	0	0	1	1	1
E3.15	Primary	-	E3.25	1/0	I	1	1	1	1	1	1	1	1	1	1	1	1	1
E3.16	Secondary activated sludge	-	E3.26	1/0	I	0	0	0	0	0	0	0	0	0	0	0	0	0
E3.17	Secondary biological	-	E3.27	1/0	I	0	0	0	0	0	0	0	0	0	0	0	0	0
E3.18	Tertiary A1	-	E3.28	1/0	I	0	0	0	0	0	0	0	0	0	0	0	0	0
E3.19	Tertiary A2	-	E3.29	1/0	I	0	1	0	1	1	0	1	0	0	1	1	1	1
E3.20	Tertiary B1	-	E3.30	1/0	I	0	0	0	0	0	0	0	0	0	0	0	0	0
E3.21	Tertiary B2	-	E3.31	1/0	I	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Sewerage Data</b>						4.3	10.7	40.7	35.7	0.4	1.0	1.8	31.6	18.5	9.5	44.0	3.1	0
E3.22	Total length of sewer	-	E3.47	km	I	4.3	10.7	40.7	35.7	0.4	1.0	1.8	31.6	18.5	9.5	44.0	3.1	0
E3.23	Length of critical sewer	-	E3.48	km	I	4	4	16	14	0	0	1	7	12	10	7	2	0
E3.24	Number of pumping stations	-	E3.49	nr	I	65992	247622	2480129	192871	0	0	16848	236563	44240	239242	238723	27043	0
E3.25	Capacity of pumping stations (m <sup>3</sup> /d)	-	E3.50	m <sup>3</sup> /day	I	59	806	6623	2103	0	0	0	325	525	625	713	26	0
E3.26	Capacity of pumping stations (kw)	-	E3.51	kw	I	2	1	7	12	0	0	0	4	8	7	6	1	0
E3.27	Number of combined pumping stations	-	E3.52	nr	I	4821	34214	209002	96362	0	0	0	65232	23599	115949	116035	10109	0
E3.28	Capacity of combined pumping stations (m <sup>3</sup> /d)	-	E3.53	m <sup>3</sup> /day	I	0	2	6	2	0	0	0	1	1	1	0	0	0
E3.29	Number of stormwater pumping stations	-	E3.54	nr	I	0	209088	2105741	96509	0	0	0	142560	6394	56419	0	0	0
E3.30	Capacity of stormwater pumping stations (m <sup>3</sup> /d)	-	E3.55	m <sup>3</sup> /day	I	2	1	9	8	0	0	1	4	10	8	9	1	0
E3.31	Number of combined sewer overflows	-	E3.56	nr	I	2	1	9	8	0	0	1	4	10	8	9	1	0
E3.32	Number of combined sewer overflows (screened)	-	E3.57	nr	I	2	1	9	8	0	0	1	4	10	8	9	1	0
<b>Sludge Treatment and Disposal Data</b>						0	0	0	0	0	0	0	0	0	0	0	0	0
E3.33	Farmland Untreated	-	E3.58	ttds	I/C	0	2.525	0.485	0	0	0	0	0	0	0	0	0	0
E3.34	Farmland Conventional	-	E3.59	ttds	I/C	0	0	0	0	0	0	0	0	0	0	0	0	0
E3.35	Farmland Advanced	-	E3.60	ttds	I/C	0	0	4.522	11.122	0	0	0	2.718	0	0	1.042	0.177	0
E3.36	Incineration	-	E3.62	ttds	I/C	0	0	0	0	0	0	0	0	0	0	0	0	0
E3.37	Landfill	-	E3.61	ttds	I/C	0	0	0	0	0	0	0	0	0	0	0	0	0
E3.38	Composted	-	E3.63	ttds	I/C	0	0	0	0	0	0	0	0	0	0	0	0	0
E3.39	Land Reclamation	-	E3.64	ttds	I/C	0	0	0	0	0	0	0	0	0	0	14.028	2.200	0
E3.40	Other	-	E3.65	ttds	I/C	0	0	0	0	0	0	0	0	0	0	0	0	0

Prepared by: ..... Date: .....  
 Checked by: ..... Date: .....  
 Authorised by: Alan P Scott Date: 12th June 2015

140	150	160	170	180	190	200	210	199
AVSE	AVSE	Levenmouth	Dalmuir	Daldowie	MS	MS	MS	Total
CG	CG	CG	CG	CG	CG	CG	CG	CG

Blackburn	Whitburn	Levenmouth	Dalmuir	Daldowie	Meadowhead	Sevenston	Inverclyde										
18.0	B3	11.7	B3	116.8	B3	414.3	B3	0.0	A1	191.6	B3	70.5	B3	76.2	B3	2180.8	B3
0.1	B3	0.1	B3	0.8	B3	3.1	B3	0.0	A1	1.8	B3	0.2	B3	0.2	B3	23.5	B3
23	B3	13	B3	195	B3	544	B3	0	A1	335	B3	85	B3	91	B3	2973.2	B3

0	A1	1	A1	1	A1	0	A1	1	A1	0	A1	0	A1	1	A1
1	A1	1	A1	1	A1	1	A1	0	A1	1	A1	1	A1	1	A1
0	A1	0	A1	1	A1	1	A1	1	A1	1	A1	0	A1	0	A1
0	A1	1	A1	1	A1	0	A1	0	A1	0	A1	0	A1	0	A1
0	A1	0	A1	0	A1	0	A1	0	A1	0	A1	0	A1	0	A1

100	A1	100	A1	100	A1	135	A1	0	N	500	A1	0	N	100	A1
10	A1	10	A1	25	A1	25	A1	0	N	25	A1	25	A1	25	A1
125	A1	125	A1	125	A1	125	A1	0	N	125	A1	125	A1	125	A1
2	A1	1	A1	0	N	20	A1	0	N	50	A1	50	A1	0	N
0.5	A1	0.5	A1	0	N	0	N	0	N	0	N	0	N	0	N
100	A1	100	A1	100	A1	100	A1	0	N	99	A1	100	A1	98	A1

1	A1	1	A1	0	A1	1	A1	0	N	0	A1	1	A1	1	A1
0	A1	1	A1	1	A1	1	A1	0	N	1	A1	1	A1	1	A1
1	A1	0	A1	0	A1	0	A1	0	N	0	A1	0	A1	0	A1
0	A1	1	A1	0	A1	0	A1	0	N	0	A1	0	A1	0	A1
0	A1	1	A1	1	A1	0	A1	0	N	1	A1	0	A1	0	A1
0	A1	0	A1	0	A1	0	A1	0	N	0	A1	0	A1	0	A1
1	A1	0	A1	0	A1	0	A1	0	N	0	A1	0	A1	0	A1

0	N	0	N	8.0	B3	0	N	11.8	B3	0	N	0	N	0.9	B3	222.0	B3
0	N	0	N	8.0	B3	0	N	11.8	B3	0	N	0	N	0.9	B3	222.0	B3
0	N	1	A1	8	A1	0	N	1	A1	0	N	0	N	0	N		
0	N	3888	B3	503453	B3	0	N	10320	B3	0	N	0	N	0	N		
0	N	0	N	134	B3	0	N	660	B3	0	N	0	N	0	N		
0	N	0	N	1	A1	0	N	0	N	0	N	0	N	0	N		
0	N	0	N	23328	B3	0	N	0	N	0	N	0	N	0	N		
0	N	0	N	2	A1	0	N	0	N	0	N	0	N	0	N		
0	N	0	N	94176	B3	0	N	0	N	0	N	0	N	0	N		
0	N	0	N	5	A1	0	N	0	N	0	N	0	N	0	N		
0	N	0	N	5	A1	0	N	0	N	0	N	0	N	0	N		

0	N	0	N	0	N	0	N	0	N	0	N	0	N	0	N	0.000	B4
0	N	0	N	0	N	0	N	0.782	B4	0	N	0	N	0	N	3.792	B4
0	N	0	N	3,249	B4	0.169	B4	12,555	B3	6,588	B4	0	N	0	N	42,142	B4
0	N	0	N	0.314	B4	0	N	34,497	B3	1,636	B4	0	N	0	N	36,447	B3
0	N	0	N	0	N	0	N	0	N	0	N	0	N	0	N	0.000	B4
0	N	0	N	0	N	0	N	0	N	0	N	0	N	0	N	0.000	B4
0	N	0	N	0.214	B4	1.254	B4	0	N	1,236	B4	0	N	0	N	18,932	B4
0	N	0	N	0	N	0.630	B4	0	N	0	N	0	N	0	N	1,075	B4

**SECTION E : OPERATING COSTS AND EFFICIENCY**

**Table E3a: PPP Cost Analysis**

Line Ref.	Description	Ofwat Ref JR 07	WICS Reference AR 06	Units	Field Type	10		20		30		40		50		60		70		80		90		100		110		120		
						Highland	CG	Highland	CG	Tay	CG	Aberdeen	CG	Aberdeen	CG	Aberdeen	CG	Aberdeen	CG	Aberdeen	CG	Moray Coast	CG	Moray Coast	CG	Moray Coast	CG	Moray Coast	CG	AVSE
E3a.0	Name	-	E3a.0			Rt William	Inverness	Hatton	Nigg	Persley	Peterhead	Fraserburgh	Lossie Mouth	Buckie	Banff/Macduff	Seafield	Newbridge													
<b>Sewerage Costs</b>																														
E3a.1	Estimated direct operating cost	-	E3a.1	£m	I/C	0.041	D6	0.139	D6	2.318	D6	1.936	D6	0.005	D6	0.052	D6	0.043	D6	0.516	D6	0.405	D6	0.296	D6	0.368	D6	0.001		
E3a.2	Rates paid by the PPP contractor	-	E3a.2	£m	I/C	-	N	-	N	-	N	-	N	-	N	-	N	-	N	-	N	-	N	-	N	-	N	-		
E3a.3	SEPA charges paid by the PPP contractor	-	E3a.3	£m	I/C	0.001	A2	-	N	0.010	A2	-	A2	-	N	-	N	-	N	0.002	A2	0.006	A2	0.009	A2	0.007	A2	0.001		
E3a.4	Total direct cost	-	E3a.4	£m	C	0.042	D6	0.139	D6	2.328	D6	1.936	D6	0.005	D6	0.052	D6	0.043	D6	0.518	D6	0.411	D6	0.305	D6	0.375	D6	0.002		
E3a.5	Scottish Water general & support expenditure	-	E3a.5	£m	I/C	-	CX	0.004	C4	0.041	C4	0.130	C4	-	CX	-	CX	-	CX	0.010	C4	0.004	C4	0.006	C4	0.004	C4	-		
E3a.6	Scottish Water SEPA charges	-	E3a.6	£m	I/C	-	N	-	N	-	N	-	N	-	N	-	N	-	N	-	N	-	N	-	N	-	N	-		
E3a.7	Total sewerage cost	-	E3a.7	£m	C	0.042	D6	0.143	D6	2.369	D6	2.066	D6	0.005	D6	0.052	D6	0.043	D6	0.528	D6	0.415	D6	0.311	D6	0.379	D6	0.002		
<b>Sewage Treatment Costs</b>																														
E3a.8	Estimated direct operating cost	-	E3a.8	£m	I/C	0.661	D6	1.413	D6	1.847	D6	1.292	D6	1.263	D6	0.569	D6	0.573	D6	0.485	D6	0.374	D6	0.422	D6	8.961	D6	1.356		
E3a.9	Rates paid by the PPP contractor	-	E3a.9	£m	I/C	0.051	B3	0.179	B3	0.262	B3	0.415	B3	0.153	B3	0.064	B3	0.082	B3	0.039	B3	0.040	B3	0.057	B3	1.076	B3	0.117		
E3a.10	SEPA charges paid by the PPP contractor	-	E3a.10	£m	I/C	0.018	A2	0.239	A2	0.119	A2	0.144	A2	0.014	A2	0.036	A2	0.036	A2	0.033	A2	0.033	A2	0.033	A2	0.144	A2	0.014		
E3a.11	Total direct cost	-	E3a.11	£m	C	0.730	D6	1.831	D6	2.228	D6	1.851	D6	1.430	D6	0.669	D6	0.691	D6	0.557	D6	0.447	D6	0.512	D6	10.181	D6	1.487		
E3a.12	Scottish Water general & support expenditure	-	E3a.12	£m	I/C	0.009	C4	0.078	C4	0.065	C4	0.144	C4	0.017	C4	0.008	C4	0.008	C4	0.014	C4	0.005	C4	0.010	C4	0.128	C4	0.018		
E3a.13	Scottish Water SEPA charges	-	E3a.13	£m	I/C	-	N	-	N	-	N	-	N	-	N	-	N	-	N	-	N	-	N	-	N	-	N	-		
E3a.14	Total sewage treatment cost	-	E3a.14	£m	C	0.739	D6	1.909	D6	2.293	D6	1.995	D6	1.447	D6	0.677	D6	0.699	D6	0.571	D6	0.452	D6	0.522	D6	10.309	D6	1.505		
E3a.15	Estimated terminal pumping cost	-	E3a.15	£m	I/C	0	M	0.006	A3	0.018	M	0	N	0	N	0	A3	0	M	0.001	A3	0	M	0	M	0	M	0		
<b>Sludge Treatment and Disposal Costs</b>																														
E3a.16	Estimated direct operating cost	-	E3a.16	£m	I/C	-	N	0.877	D6	2.626	D6	1.672	D6	-	N	-	N	-	N	1.744	D6	-	N	-	N	2.615	D6	0.827		
E3a.17	Rates paid by the PPP contractor	-	E3a.17	£m	I/C	-	N	0.089	B3	0.296	B3	0.380	B3	-	N	-	N	-	N	0.160	B3	-	N	-	N	0.297	B3	0.104		
E3a.18	SEPA charges paid by the PPP contractor	-	E3a.18	£m	I/C	-	N	0.009	A2	0.003	A2	0.001	A2	-	N	-	N	-	N	-	N	-	N	-	N	0.003	A2	-		
E3a.19	Total direct cost	-	E3a.19	£m	C	-	N	0.975	D6	2.925	D6	2.053	D6	-	N	-	N	-	N	1.904	D6	-	N	-	N	2.915	D6	0.931		
E3a.20	Scottish Water general & support expenditure	-	E3a.20	£m	I/C	-	N	0.579	C4	0.192	C4	0.842	C4	-	N	-	N	-	N	0.233	C4	-	N	-	N	0.118	C4	0.010		
E3a.21	Scottish Water SEPA charges	-	E3a.21	£m	I/C	-	N	-	N	-	N	-	N	-	N	-	N	-	N	-	N	-	N	-	N	-	N	-		
E3a.22	Total sludge treatment & disposal cost	-	E3a.22	£m	C	-	N	1.554	D6	3.117	D6	2.895	D6	-	N	-	N	-	N	2.137	D6	-	N	-	N	3.033	D6	0.941		
<b>Total Cost Analysis</b>																														
E3a.23	Total direct cost	-	E3a.23	£m	C	0.772	D6	2.945	D6	7.481	D6	5.840	D6	1.435	D6	0.721	D6	0.734	D6	2.979	D6	0.858	D6	0.817	D6	13.471	D6	2.420		
E3a.24	Total Scottish Water cost	-	E3a.24	£m	C	0.009	C4	0.661	C4	0.298	C4	1.116	C4	0.017	C4	0.008	C4	0.008	C4	0.257	C4	0.009	C4	0.016	C4	0.250	C4	0.028		
E3a.25	Total operating cost	-	E3a.25	£m	C	0.781	D6	3.606	D6	7.779	D6	6.956	D6	1.452	D6	0.729	D6	0.742	D6	3.236	D6	0.867	D6	0.833	D6	13.721	D6	2.448		
E3a.26	Annual charge	-	E3a.26	£m	I/C	4.103	A1	7.725	A1	21.943	A1	13.063	A1	2.348	A1	1.944	A1	1.899	A1	4.613	A1	2.734	A1	3.148	A1	20.563	B3	2.977		
E3a.27	Public sector capital equivalent value	-	E3a.27	£m	I	22.238	B3	71.794	B3	192.773	B3	106.289	B3	25.813	B3	21.258	B3	25.813	B3	47.196	B3	34.835	B3	30.341	B3	82.836	B3	11.989		
<b>Contract Information</b>																														
E3a.28	Contract period	-	E3a.28	years	I	25	A1	25	A1	30	A1	30	A1	30	A1	30	A1	30	A1	30	A1	30	A1	30	A1	30	A1	30		
E3a.29	Contract end date	-	E3a.29	dd/mm/yy	I	12/12/21	A1	12/12/21	A1	16/12/29	A1	04/05/30	A1	04/05/30	A1	04/05/30	A1	04/05/30	A1	25/06/31	A1	25/06/31	A1	25/06/31	A1	30/11/29	A1	30/11/29		

Prepared by: ..... Date: .....  
 Checked by: ..... Date: .....  
 Authorised by: Alan P Scott Date: 12th June 2015



**SECTION E: OPERATING COSTS AND EFFICIENCY**  
**Table E4: Water Resources and Treatment**

Line Ref.	Description	Ofwat Ref JR 07	WICS Reference AR 06	Units	Field Type
<b>Source Types</b>					
E4.0	Area Name	-	E4.0	-	I
E4.1	Impounding reservoirs	T12, L1	E4.1	nr, MI/d	I/C
E4.2	Lochs	-	E4.2	nr, MI/d	I/C
E4.3	River and burn abstractions	T12, L2	E4.3	nr, MI/d	I/C
E4.4	Boreholes	T12, L3	E4.4	nr, MI/d	I/C
E4.5	Total	-	E4.5	nr, MI/d	C
E4.6	Bulk water exports	-	E4.6	nr, MI/d	I/C
E4.7	Bulk water imports	-	E4.7	nr, MI/d	I/C

E4.8	Impounding reservoirs	-	E4.8	nr	C
E4.9	Lochs	-	E4.9	nr	C
E4.10	River and burn abstractions	-	E4.10	nr	C
E4.11	Boreholes	-	E4.11	nr	C
E4.12	Total	-	E4.12	nr	C

<b>Peak demand and Pumping Head</b>					
E4.13	Peak demand - peak to average ratio	-	E4.13	nr	I
E4.14	Average pumping head - resources and treatment	T12, L5	E4.14	m	I

<b>Resources and Treatment costs (operational area)</b>					
E4.15	Power	T21, L2	E1.2	£m	I/C
E4.16	Service charges by SEPA	T21, L7	E1.6	£m	I/C
E4.17	Total direct costs	T21, L10	E1.9	£m	I/C
E4.18	General and support costs	T21, L11	E1.10 + E1.11	£m	I/C
E4.19	Functional expenditure	T21, L12	E1.12	£m	C

<b>Water Treatment Works by Process Type</b>					
E4.20	Simple Disinfection	T12, L6	E4.17	nr, MI/d, £m	I/C
E4.21	W1	T12, L7	E4.18	nr, MI/d, £m	I/C
E4.22	W2	T12, L8	E4.19	nr, MI/d, £m	I/C
E4.23	W3	T12, L9	E4.20	nr, MI/d, £m	I/C
E4.24	W4	T12, L10	E4.21	nr, MI/d, £m	I/C
E4.25	Total numbers of works	T12, L12	E4.22	nr	C
E4.26	Total distribution input	T12, L11	E4.23	MI/d	C
E4.27	Total Operating costs	-	-	£m	C

<b>Water Treatment Works by Size Band</b>					
E4.28	Size band < = 1 MI/d	-	E4.30, E4.47	nr, £m	I/C
E4.29	Size band > 1 - < = 2.5 MI/d	-	E4.31, E4.48	nr, £m	I/C
E4.30	Size band > 2.5 - < = 5 MI/d	-	E4.32, E4.49	nr, £m	I/C
E4.31	Size band > 5 - < = 10 MI/d	-	E4.33, E4.50	nr, £m	I/C
E4.32	Size band > 10 - < = 25 MI/d	-	E4.34, E4.51	nr, £m	I/C
E4.33	Size band > 25 - < = 50 MI/d	-	E4.35, E4.53	nr, £m	I/C
E4.34	Size band > 50 - < = 100 MI/d	-	E4.36, E4.54	nr, £m	I/C
E4.35	Size band > 100 - < = 175 MI/d	-	E4.37, E4.55	nr, £m	I/C
E4.36	Size band > 175 MI/d	-	E4.38, E4.56	nr, £m	I/C
E4.37	Total number of works	-	E4.39	nr	C
E4.38	Proportion of distribution input - total	-	E4.40	nr	C
E4.39	Total operating costs	-	E4.57	£m	C

Prepared by: ..... Date: .....  
Checked by: ..... Date: .....  
Authorised by: Simon Parsons Date: 12th June 2015

10	20	30	40	50	60	70	80	100	110	120	130	140	200	299
<b>Number of Own Sources</b>														CG
Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8	Total Sources	Area 1	Area 2	Area 3	Area 4	Total Source Outputs	

number								average daily output (MI/d)				MI/d	
North	East	South	West					North	East	South	West		
33	19	26	29					107	77.680	303.884	420.190	540.928	1342.682
29	9	0	1					39	10.513	8.854	0.000	0.000	19.367
47	15	1	14					77	11.588	152.788	0.019	209.636	374.031
21	26	11	1					59	16.811	26.293	24.201	3.289	70.595
130	69	38	45	0	0	0	0	282	116.592	491.820	444.409	753.853	1806.674
								0					0.000
								0					0.000

10	20	30	40	100
<b>Proportional Breakdown of Source output produced</b>				
Area 1	Area 2	Area 3	Area 4	Proportion of Own Source Output
0.043	0.168	0.233	0.299	0.743
0.006	0.005	0.000	0.000	0.011
0.006	0.085	0.000	0.116	0.207
0.009	0.015	0.013	0.002	0.039
0.065	0.272	0.246	0.417	1.000

10	20
Total	CG
1.047	C3
27.7	C4

10	20	30	40	50	60	70	80	100	120
<b>Resource and treatment - Costs</b>									
Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8	Total	CG
2.613	3.755	1.820	2.873					11.061	A2
0.571	0.611	0.688	0.844					2.714	A2
9.867	11.273	7.543	12.168					40.851	A2
4.413	3.870	3.095	3.817					15.195	A2
14.280	15.143	10.638	15.995	0.000	0.000	0.000	0.000	56.046	A2

10	20	30	40	50	60	70
<b>Total Nr of Works</b>		<b>Total volume Dist'n input</b>		<b>Tot. prop'n of D.I.</b>	<b>Operating Costs</b>	
nr	CG	MI/d	CG	Prop'n (0-1)	£m	CG
29	B2	30.594	B3	0.017	2.187	A2
10	B2	1.817	B3	0.001	0.464	A2
30	B2	643.400	B3	0.356	11.607	A2
154	B2	1045.527	B3	0.579	36.484	A2
26	B2	85.337	B3	0.047	5.304	A2
249	B2					
		1806.674	B3	1.000		
					56.046	A2

10	20	30	40	50	60
<b>Nr of Works</b>		<b>Prop'n of D.I.</b>		<b>Operating Costs</b>	
nr	CG	Prop'n (0-1)	CG	£m	CG
134	B2	0.011	C3	9.346	A2
27	B2	0.014	C3	3.621	A2
25	B2	0.030	C3	5.229	A2
17	B2	0.046	C3	6.099	A2
19	B2	0.106	C3	8.717	A2
12	B2	0.147	C3	8.069	A2
9	B2	0.233	C3	6.315	A2
4	B2	0.211	C3	4.281	A2
2	B2	0.202	C3	4.369	A2
249	B2				
		1	C3		
				56.046	A2



**SECTION E: OPERATING COSTS AND EFFICIENCY**

**Table E6: Water Distribution**

Line Ref.	Description	Ofwat Ref	WICS Reference	Units	Field Type
		CMR 02, J07	AR 06		

Area Data					
E6.0	Name	-	E6.0	Name	I
E6.1	Annual average resident connected population	-	E6.1	000	I/C
E6.2	Total connected properties	-	E6.2	000	I/C
E6.3	Volume of water delivered to households	-	E6.3	MI/d	I/C
E6.4	Volume of water delivered to non-households	-	E6.4	MI/d	I/C
E6.5	Area	-	E6.5	km <sup>2</sup>	I/C
E6.6	Number of supply zones	-	E6.7	nr	I/C

Distribution costs					
E6.7	Power	T21, L2	E1.2	£m	I/C
E6.8	Service charges by SEPA	T21, L7	E1.6	£m	I/C
E6.9	Total direct costs	T21, L10	E1.9	£m	I/C
E6.10	General and support costs	T21, L11	E1.10 + E1.11	£m	I/C
E6.11	Functional expenditure	T21, L12	E1.12	£m	C

Water main data					
E6.12	Potable mains: Band 1 (<= 165mm)	T12, L13 C1	-	km	I
E6.13	Potable mains: Band 2 (166 - 320mm)	T12, L13 C2	-	km	I
E6.14	Potable mains: Band 3 (321 - 625mm)	T12, L13 C3	-	km	I
E6.15	Potable mains: Band 4 (> 625mm)	T12, L13 C4	-	km	I
E6.16	Total length of mains	-	E6.8	km	C
E6.17	Total length of unlined iron mains	-	E6.9	km	I
E6.18	Total length of mains > 320mm diameter	-	E6.10	km	C
E6.19	Water mains bursts	-	E6.11	nr	I
E6.20	Leakage level	-	E6.12	MI/d	I
E6.21	Properties reported for low pressure	-	E6.13	nr	I/C

Pumping Stations					
E6.22	Total number of pumping stations	-	E6.14	nr	I/C
E6.23	Total capacity of pumping stations	-	E6.15	m <sup>3</sup> /d	I/C
E6.24	Total capacity of booster pumping stations	CM3, L18	E6.15a	Kw	I/C
E6.25	Average pumping head	-	E6.16	m	I

Service Reservoirs					
E6.26	Total number of service reservoirs	CM3, L13	E6.17	nr	I/C
E6.27	Total capacity of service reservoirs	CM3, L14	E6.18	MI	I/C

Water Towers					
E6.28	Total number of water towers	CM3, L15	E6.19	nr	I/C
E6.29	Total capacity of tower towers	CM3, L16	E6.20	MI	I/C

Prepared by: ..... Date: .....

Checked by: ..... Date: .....

Authorised by: Simon Parsons Date: 12th June 2015

Report Year 2014-15									
Area 1		Area 2		Area 3		Area 4		Total	
CG		CG		CG		CG		CG	

North		East		South		West			
279.55	A2	1339.92	A2	1754.69	A2	1817.65	A2	5191.8	A2
154.04	B4	671.67	B4	864.32	B4	924.15	B4	2614.180	B4
51.88	B2	225.34	B2	291.42	B2	307.37	B2	876.016	B2
20.18	B4	108.11	B4	99.76	B4	174.98	B4	403.033	B4
35208.130	A1	20371.058	A1	15475.460	A1	8744.388	A1	79799.036	A1
120	A1	58	A1	51	A1	61	A1	290	A1

0.770	A2	3.383	A2	1.619	A2	3.097	A2	8.869	A2
0.000	A2	0.000	A2	0.000	A2	0.000	A2	0.000	A2
5.763	A2	12.412	A2	11.621	A2	15.902	A2	45.698	A2
2.897	A2	4.449	A2	4.859	A2	5.394	A2	17.599	A2
8.660	A2	16.861	A2	16.480	A2	21.296	A2	63.297	A2

6260.35	B2	11548.38	B2	9977.71	B2	7886.68	B2	35673.12	B2
1208.03	B2	2392.24	B2	2769.19	B2	2302.68	B2	8672.15	B2
176.56	B2	974.63	B2	1156.32	B2	773.53	B2	3081.04	B2
7.96	B2	138.60	B2	310.31	B2	373.91	B2	830.78	B2
7652.90	B2	15053.85	B2	14213.53	B2	11336.80	B2	48257.08	B2
830.39	B2	2636.41	B2	4994.38	B2	4244.13	B2	12705.30	B2
184.52	B2	1113.23	B2	1466.63	B2	1147.44	B2	3911.81	B2
1104	B3	1534	B3	2386	B3	2721	B3	7745	B3
48.20	B3	115.31	B3	185.18	B3	241.64	B3	590.339	B3
44	B2	312	B2	37	B2	22	B2	415	B2

178	B2	181	B2	131	B2	114	B2	604	B2
156899	C4	705892	C4	584721	C4	990075	C4	2437588	C4
2883.2	C3	13527.2	C3	10159.5	C3	16395.4	C3	42965.4	C3
22.48	C4	30.36	C4	41.68	C4	29.02	C4	32.02	C4

411	B2	461	B2	251	B2	225	B2	1348	B2
217.054	B2	1192.827	B2	1132.568	B2	1495.373	B2	4037.822	B2

3	B2	6	B2	6	B2	4	B2	19	B2
0.532	B2	4.067	B2	12.544	B2	12.577	B2	29.720	B2

**SECTION E : OPERATING COSTS AND EFFICIENCY**  
**Table E7: Wastewater Explanatory Factors - Sewerage & Sewage treatment by area**

Line Ref.	Description	Ofwat Ref JR 07	WICS Reference AR 10	Units	Field Type
-----------	-------------	--------------------	-------------------------	-------	------------

Area Data					
E7.0	Name	-	E7.0	Name	I
E7.1	Annual average resident connected population	T17a. L1	E7.1	000	I/C
E7.2	Annual average non- resident connected population	T17a. L2	E7.2	000	I/C
E7.3	Volume of sewage collected (daily average)	T17a. L3	E7.3	MI/d	I/C
E7.4	Total connected properties	T17a. L4	E7.4	nr	I/C
E7.5	Area of Sewerage District	T17a. L5	E7.5	km 2	I/C
E7.6	Drained Area	-	E7.6	km2	I/C
E7.7	Annual Precipitation	-	E7.7	mm	I

Sewerage Data					
E7.8	Total length of sewer	T17a. L6	E7.8	km	I/C
E7.9	Total length of lateral sewer	-	E7.9	km	I/C
E7.10	Length of combined sewer	-	E7.10	km	I/C
E7.11	Length of separate stormwater sewer	-	E7.11	km	I/C
E7.12	Length of sewer > 1000 mm diameter	-	E7.12	km	I/C
E7.13	Length of Critical Sewer	-	E7.13	km	I/C
E7.14	Sewer Collapses	-	E7.14	nr	I/C

Sewerage costs					
E7.15	Power	T22. L2	E2.2	£m	I/C
E7.16	Service charges by SEPA	T22. L7 <td>E2.5 <td>£m <td>I/C</td> </td></td>	E2.5 <td>£m <td>I/C</td> </td>	£m <td>I/C</td>	I/C
E7.17	Total direct costs	T22. L9 <td>E2.7 <td>£m <td>C</td> </td></td>	E2.7 <td>£m <td>C</td> </td>	£m <td>C</td>	C
E7.18	General and support costs	T22. L10 <td>E2.8 <td>£m <td>I/C</td> </td></td>	E2.8 <td>£m <td>I/C</td> </td>	£m <td>I/C</td>	I/C
E7.19	Functional expenditure	T22. L11 <td>E2.9 <td>£m <td>C</td> </td></td>	E2.9 <td>£m <td>C</td> </td>	£m <td>C</td>	C

Pumping Stations					
E7.20	Total number of pumping stations	-	E7.15	nr	I/C
E7.21	Total capacity of pumping stations (m <sup>3</sup> /d)	-	E7.16	m <sup>3</sup> /d	I/C
E7.22	Total capacity of pumping stations (kw)	-	E7.16a	Kw	I/C
E7.23	Average pumping head	-	E7.17	m	I
E7.24	Total number of combined pumping stations	-	E7.18	nr	I/C
E7.25	Total capacity of combined pumping stations	-	E7.19	m3/d	I/C
E7.26	Total number of stormwater pumping stations	-	E7.20	nr	I/C
E7.27	Total capacity of stormwater pumping stations	-	E7.21	m3/d	I/C
E7.28	Number of combined sewer overflows	-	E7.22	nr	I/C
E7.29	Number of combined sewer overflows (screened)	-	E7.23	nr	I/C

Sewage treatment works					
E7.30	Number of sewage treatment works	-	-	nr	I/C
E7.31	Total Load	-	-	kg BOD/day	I/C

Sewage treatment costs					
E7.32	Power	T22. L2	E2.2	£m	I/C
E7.33	Service charges by SEPA	T22. L7 <td>E2.5 <td>£m <td>I/C</td> </td></td>	E2.5 <td>£m <td>I/C</td> </td>	£m <td>I/C</td>	I/C
E7.34	Total direct costs	T22. L9 <td>E2.7 <td>£m <td>I/C</td> </td></td>	E2.7 <td>£m <td>I/C</td> </td>	£m <td>I/C</td>	I/C
E7.35	General and support costs	T22. L10 <td>E2.8 <td>£m <td>I/C</td> </td></td>	E2.8 <td>£m <td>I/C</td> </td>	£m <td>I/C</td>	I/C
E7.36	Functional expenditure	T22. L11 <td>E2.9 <td>£m <td>I/C</td> </td></td>	E2.9 <td>£m <td>I/C</td> </td>	£m <td>I/C</td>	I/C

Prepared by: ..... Date: .....  
 Checked by: ..... Date: .....  
 Authorised by: Simon Parsons Date: 12th June 2015

10		20		30		40		199	
Report Year 2014-15									
Area 1		Area 2		Area 3		Area 4		Total	
CG		CG		CG		CG		CG	

North		East		South		West			
219.1	B2	1230.8	B2	1634.1	B2	1802.1	B2	4886.2	B2
15.4	C4	21.2	C4	20.1	C4	13.8	C4	70.5	C4
206.8	C3	684.9	C3	966.7	C3	1144.9	C3	3003.2	C3
123303.3	B4	637871.9	B4	830671.2	B4	897461.6	B4	2489308	B4
35208.1	A1	20371.1	A1	15475.5	A1	8744.4	A1	79799	A1
152.0	A1	515.0	A1	609.0	A1	641.0	A1	1917	B2
1365	A2	1303	A2	1270	A2	1277	A2	1229	A2

3885	C4	13488	C4	17285	C4	16852	C4	51510	C4
863	C4	4232	C4	5735	C4	6606	C4	17436	C4
1445	B2	4371	B2	5459	B2	6174	B2	17449	B2
553	B2	2322	B2	3178	B2	2131	B2	8184	B2
15	B2	151	B2	255	B2	364	B2	785	B2
828	B2	2820	B2	3693	B2	3544	B2	10885	B3
47	B4	586	B4	681	B4	932	B4	2246	B4

0.85	A2	2.03	A2	1.49	A2	3.01	A2	7.37	A2
0.27	A2	0.50	A2	0.42	A2	0.66	A2	1.86	A2
3.37	A2	7.52	A2	7.28	A2	9.79	A2	27.97	A2
2.02	A2	3.62	A2	3.98	A2	3.54	A2	13.17	A2
5.39	A2	11.15	A2	11.26	A2	13.34	A2	41.13	A2

526	B3	793	B3	454	B3	428	B3	2201	B3
1652515	C4	3205176	C4	3198594	C4	5014213	C4	13070499	C4
9843	C4	24581	C4	15217	C4	31143	C4	80785	C4
43.2	C5	26.1	C5	17.9	C5	28.4	C5	32.1	C5
295	B3	502	B3	278	B3	283	B3	1358	B3
1157861	C4	2477330	C4	2586043	C4	4233527	C4	10454760	C4
13	B3	14	B3	3	B3	6	B3	36	B3
73532	C4	167825	C4	8747	C4	24343	C4	274447	C4
341	A3	751	A3	888	A3	957	A3	2937	A3
132	A3	172	A3	282	A3	334	A3	920	A3

568	A3	593	A3	491	A3	202	A3	1854	A3
11991	B3	43786	B3	76859	B3	89890	B3	222527	B3

1.77	A2	3.46	A2	5.57	A2	5.19	A2	15.98	A2
1.28	A2	1.78	A2	2.11	A2	1.69	A2	6.85	A2
6.18	A2	9.00	A2	13.04	A2	11.40	A2	39.62	A2
2.27	A2	2.59	A2	3.71	A2	2.68	A2	11.25	A2
8.45	A2	11.58	A2	16.74	A2	14.08	A2	50.86	A2



**SECTION E: OPERATING COSTS AND EFFICIENCY**  
**Table EB: Wastewater Explanatory Factors - Sewage Treatment Works**

Line Ref.	Description	Ofwat Ref	WICS Reference	Units	Field Type	Treatment Category																	Total					
						Septic Tanks		Primary		Sec Activated Sludge		Sec biological		Tertiary A1		Tertiary A2		Tertiary B1		Tertiary B2		Sea Preliminary		Sea Screened		Sea Unscreened		
						CG	CG	CG	CG	CG	CG	CG	CG	CG	CG	CG	CG	CG	CG	CG	CG	CG		CG	CG	CG	CG	CG
<b>Numbers</b>																												
EB.1	Size Band 0	-	EB.1	nr	I/C	967	5	12	101	7	1	9	2	0	1	21	1126											
EB.2	Size Band 1	T17c. L1	EB.2	nr	I/C	122	8	23	48	5	4	13	2	0	2	227												
EB.3	Size Band 2	T17c. L2	EB.3	nr	I/C	56	8	16	44	2	3	7	3	0	0	139												
EB.4	Size Band 3	T17c. L3	EB.4	nr	I/C	28	12	43	62	8	3	18	4	0	2	180												
EB.5	Size Band 4	T17c. L4	EB.5	nr	I/C	0	9	45	37	7	4	9	2	8	1	123												
EB.6	Size Band 5	T17c. L5	EB.6	nr	I/C	0	1	21	3	5	3	3	1	0	0	37												
EB.7	Size Band 6 (Large Works)	T17c. L6	EB.7	nr	I/C	0	0	19	1	1	0	1	0	0	0	22												
EB.8	Total Sewage Treatment Works	T17c. L7	EB.8	nr	C	1173	43	179	296	35	18	60	14	8	4	1854												
EB.9	Small Sewage treatment works with ammonia consent 5 - 10 mg/l	T17c. L8	EB.9	nr	I/C	0	0	12	23	4	4	2	0	0	45													
EB.10	Small Sewage treatment works with ammonia consent <= 5 mg/l	T17c. L9	EB.10	nr	I/C	0	0	18	13	12	3	13	3	0	62													

Line Ref.	Description	Ofwat Ref	WICS Reference	Units	Field Type	Treatment Category																	Total	Total excluding Septic Tanks					
						Septic Tanks		Primary		Sec Activated Sludge		Sec biological		Tertiary A1		Tertiary A2		Tertiary B1		Tertiary B2		Sea Preliminary			Sea Screened		Sea Unscreened		
						CG	CG	CG	CG	CG	CG	CG	CG	CG	CG	CG	CG	CG	CG	CG	CG	CG			CG	CG	CG	CG	CG
<b>Loading (average daily load)</b>																													
EB.11	Size Band 0	-	EB.11	kg BOD/day	I/C	1513	19	54	256	30	3	26	5	0	2	437													
EB.12	Size Band 1	T17d. L1	EB.12	kg BOD/day	I/C	1285	77	248	499	48	49	149	15	0	0	1104													
EB.13	Size Band 2	T17d. L2	EB.13	kg BOD/day	I/C	1230	188	357	1005	49	59	171	69	0	0	1898													
EB.14	Size Band 3	T17d. L3	EB.14	kg BOD/day	I/C	1591	714	3043	4180	591	215	1014	336	0	0	10225													
EB.15	Size Band 4	T17d. L4	EB.15	kg BOD/day	I/C	0	2337	14924	10082	2204	1320	2529	360	1717	266	351	36089												
EB.16	Size Band 5	T17d. L5	EB.16	kg BOD/day	I/C	0	724	18028	2378	4563	2923	2632	760	0	0	32008													
EB.17	Size Band 6 (Large Works)	T17d. L6	EB.17	kg BOD/day	I/C	0	0	113604	3674	16181	0	1689	0	0	0	135147													
EB.18	Total Load Received	T17d. L7	EB.18	kg BOD/day	C	5619	4059	150256	22074	23666	4568	8209	1547	1717	400	412	216908												
EB.19	Small Sewage treatment works with ammonia consent 5 - 10 mg/l	T17d. L8	EB.19	kg BOD/day	I/C	0	0	3762	1717	1985	232	932	0	0	0	8628													
EB.20	Small Sewage treatment works with ammonia consent <= 5 mg/l	T17d. L9	EB.20	kg BOD/day	I/C	0	0	15495	1549	17690	2744	2508	351	0	0	40339													

Line Ref.	Description	Ofwat Ref	WICS Reference	Units	Field Type	Treatment Category																	Total					
						Septic Tanks		Primary		Sec Activated Sludge		Sec biological		Tertiary A1		Tertiary A2		Tertiary B1		Tertiary B2		Sea Preliminary		Sea Screened		Sea Unscreened		
						B2	B2	B2	B2	B2	B2	B2	B2	B2	B2	B2	B2	B2	B2	B2	B2	B2		B2	B2	B2	B2	B2
<b>Compliance</b>																												
EB.21	Size Band 0	-	EB.21	%	I	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0												
EB.22	Size Band 1	-	EB.22	%	I/C	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	0.0	100.0												
EB.23	Size Band 2	-	EB.23	%	I/C	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	0.0	100.0												
EB.24	Size Band 3	-	EB.24	%	I/C	100.0	100.0	98.4	100.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0												
EB.25	Size Band 4	-	EB.25	%	I/C	100.0	100.0	97.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0												
EB.26	Size Band 5	-	EB.26	%	I/C	100.0	100.0	95.2	100.0	100.0	100.0	100.0	100.0	0.0	0.0	100.0												
EB.27	Size Band 6 (Large Works)	-	EB.27	%	I/C	0.0	100.0	100.0	100.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0												
EB.28	Average compliance by works - all sizes	-	EB.28	%	I/C	100.0	99.4	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0												
EB.29	Small Sewage treatment works with ammonia consent 5 - 10 mg/l	-	EB.29	%	I/C	0.0	100.0	100.0	100.0	0.0	100.0	100.0	100.0	0.0	0.0	0.0												
EB.30	Small Sewage treatment works with ammonia consent <= 5 mg/l	-	EB.30	%	I/C	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	0.0	0.0												

Line Ref.	Description	Ofwat Ref	WICS Reference	Units	Field Type	Treatment Category																	Total					
						Septic Tanks		Primary		Sec Activated Sludge		Sec biological		Tertiary A1		Tertiary A2		Tertiary B1		Tertiary B2		Sea Preliminary		Sea Screened		Sea Unscreened		
						A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2	A2		A2	A2	A2	A2	A2
<b>Costs</b>																												
EB.31	Direct costs for works in size band 0	-	EB.31	£000	I/C	865.613	12.216	172.155	480.765	60.368	0.629	51.254	20.090	0.000	0.387	15.456	1678.933											
EB.32	Direct costs for works in size band 1	T17f. L1	EB.32	£000	I/C	719.671	49.112	437.355	584.631	57.861	55.927	190.170	22.841	0.000	0.000	8.826	2126.394											
EB.33	Direct costs for works in size band 2	T17f. L2	EB.33	£000	I/C	609.879	105.590	447.114	743.149	55.934	124.913	129.563	67.431	0.000	0.000	2283.573												
EB.34	Direct costs for works in size band 3	T17f. L3	EB.34	£000	I/C	729.849	265.158	1856.754	1723.362	395.691	237.465	574.064	135.259	0.000	3.560	0.000	5921.162											
EB.35	Direct costs for works in size band 4	T17f. L4	EB.35	£000	I/C	0.000	615.060	4414.453	2141.524	566.731	579.443	645.187	136.379	146.035	18.935	49.782	9313.529											
EB.36	Direct costs for works in size band 5	T17f. L5	EB.36	£000	I/C	0.000	19.829	3663.011	266.609	1119.642	749.771	437.436	238.257	0.000	0.000	6494.555												
EB.37	Direct costs for works in size band 6 (Large Works)	T17f. L6	EB.37	£000	I/C	0.000	0.000	10312.807	486.756	914.810	0.000	85.767	0.000	0.000	0.000	11800.140												
EB.38	Direct costs for all sewage treatment works	T17f. L7	EB.38	£000	C	2925.012	1066.965	21309.649	6426.796	3171.037	1748.148	2113.441	620.257	146.035	22.882	74.064	39618.286											
EB.39	General and support expenditure	T17f. L12	EB.39	£000	I/C	705.740	352.778	5269.185	2585.134	642.507	572.517	842.828	225.236	34.427	6.067	8.695	11245.114											
EB.40	Functional expenditure	T17f. L13	EB.40	£000	C	3630.752	1419.743	26572.834	9011.930	3813.544	2320.665	2956.269	845.493	180.462	28.949	82.759	50863.400											
EB.41	Power costs	T17f. L10	EB.41	£000	I/C	403.460	287.636	10319.484	1661.681	1800.899	775.466	551.899	162.020	4.686	-0.236	11.225	15978.220											
EB.42	Service charges SEPA	T17f. L11	EB.42	£000	I/C	1628.884	253.495	2549.193	1297.203	308.420	183.911	408.934	88.462	68.859	17.211	48.534	6853.106											

Prepared by: ..... Date: .....  
Checked by: ..... Date: .....  
Authorised by: Simon Parsons Date: 12th June 2015

ANNUAL RETURN INFORMATION REQUIREMENT

**SECTION E : OPERATING COSTS AND EFFICIENCY**  
**Table E9: Large Sewage Treatment Works Information Database**

Line Ref.	Description	Ofwat Ref JR 07	WICS Reference AR 06	Units	Field Type	10	20	30	40	50	60	70	80	90
						1	2	3	4	5	6	7	8	9
<b>Works Size</b>						CG	CG	CG	CG	CG	CG	CG	CG	CG
E9.0	Name	T17b. L1	E9.0	Name	I	STW000011	STW001979	STW000033	STW000085	STW000125	STW001975	STW000218	STW000222	STW001984
E9.0a	Name of operational area	-	-	Name	I	Allers South	Alloa West	Ardoch West	Bothwellbank South	Carbarns South	Dalderse West	Daldowie South	Dalmarnock West	Dunfermline East
E9.1	Population equivalent of total load received	T17b. L2	E9.5	000	I	41 B3	45 B3	66 B3	25 B3	48 B3	93 B3	270 B3	231 B3	78 B3
<b>Compliance</b>														
E9.2	Suspended solids consent	T17b. L3	E9.11	mg/l	I	100 A1	100 A1	100 A1	100 A1	100 A1	100 A1	100 A1	100 A1	100 A1
E9.3	BOD consent	T17b. L4	E9.12	mg/l	I	20 A1	75 A1	75 A1	8 A1	15 A1	75 A1	15 A1	25 A1	75 A1
E9.4	COD consent	T17b. L5	E9.13	mg/l	I	125 A1	125 A1	125 A1	125 A1	125 A1	125 A1	125 A1	125 A1	125 A1
E9.5	Ammonia consent	T17b. L6	E9.14	mg/l	I	5 A1	30 A1	0 A1	12 A1	2 A1	25 A1	5 A1	11 A1	0 A1
E9.6	Phosphate consent	T17b. L7	E9.15	mg/l	I	0 N	0 N	0 N	0 N	0 N	0 N	0 N	0 N	0 N
E9.7	Compliance with effluent consent standard	-	E9.16	%	I	100 A1	100 A1	99 A1	100 A1	100 A1	100 A1	98 A1	100 A1	98 A1
<b>Treatment Works Category</b>														
E9.8	Primary	T17b. L8	E9.19	1/0	I	1 A1	1 A1	1 A1	1 A1	1 A1	1 A1	1 A1	1 A1	1 A1
E9.9	Secondary activated sludge	T17b. L8	E9.20	1/0	I	1 A1	1 A1	1 A1	1 A1	1 A1	1 A1	1 A1	1 A1	1 A1
E9.10	Secondary biological	T17b. L8	E9.21	1/0	I	1 A1	0 N	0 N	0 N	0 N	0 N	0 N	0 N	0 N
E9.11	Tertiary A1	T17b. L8	E9.22	1/0	I	0 N	0 N	0 N	0 N	0 N	0 N	1 A1	0 N	0 N
E9.12	Tertiary A2	T17b. L8	E9.23	1/0	I	0 N	0 N	0 N	0 N	0 N	0 N	0 N	0 N	0 N
E9.13	Tertiary B1	T17b. L8	E9.24	1/0	I	0 N	0 N	0 N	0 N	0 N	0 N	0 N	0 N	0 N
E9.14	Tertiary B2	T17b. L8	E9.25	1/0	I	0 N	0 N	0 N	0 N	0 N	0 N	0 N	0 N	0 N
<b>Works Cost</b>														
E9.15	Power costs	T17b. L10	E9.34	£'000	I	156 A2	200 A2	123 A2	105 A2	180 A2	63 A2	693 A2	832 A2	28 A2
E9.16	Service charges SEPA	T17b. L11	E9.37	£'000	I	23 A2	22 A2	37 A2	12 A2	46 A2	200 A2	55 A2	58 A2	41 A2
E9.17	Total direct costs	T17b. L9	E9.39	£'000	I	279.7 A2	381.5 A2	313.6 A2	192.1 A2	300.9 A2	433.4 A2	914.8 A2	1168.8 A2	215.1 A2
E9.18	General and support expenditure	T17b. L12	E9.40	£'000	I	79 A2	79 A2	102 A2	50 A2	39 A2	89 A2	81 A2	149 A2	85 A2
E9.19	Functional Expenditure	T17b. L13	E9.41	£'000	C	359 A2	460 A2	416 A2	242 A2	340 A2	522 A2	996 A2	1318 A2	300 A2
E9.20	Estimated terminal pumping station costs	T17b. L14	E9.42	£'000	I	0 N	1 A2	99 A2	31 A2	0 N	0 N	0 N	250 A2	8 A2
E9.21	Estimated sludge costs	T17b. L15	E9.43	£'000	I	0 N	0 N	0 N	0 N	0 N	0 N	0 N	0 N	0 N

Prepared by: ..... Date: .....  
 Checked by: ..... Date: .....  
 Authorised by: Simon Parsons Date: 12th June 2015



**SECTION E: OPERATING COSTS AND EFFICIENCY**  
**Table E10: Sludge Treatment and Disposal**

Line Ref.	Description	Ofwat Ref JR 07	WICS Reference AR 06	Units	Field Type	10	11	12	20	30	31	32	50	199		
						Disposal category										Total
						Farmland Untreated	Farmland Conventional	Farmland Advanced	Incineration	Landfill	Composted	Land Reclamation	Other	CG		
<b>Sludge volumes</b>																
E10.1	Resident population served	T17g, L1	E10.1	000	I	0.0	459.5	1129.9	946.4	16.4	0.0	98.4	0.7	2651.302		
E10.2	Amount of sewage sludge	T17g, L2	E10.2	ttds	I	0.0	4.8	13.8	0.0	0.4	0.0	1.2	0.0	20.2		
<b>Sludge Treatment and Disposal costs</b>																
E10.3	Sludge Treatment direct costs	T17g, L3	-	£000	I	0.000	2810.812	5456.815	0.000	282.710	0.000	350.655	0.000	8900.992		
E10.4	Sludge disposal direct costs	T17g, L4	-	£000	I	0.000	338.486	1570.350	0.000	338.257	0.000	172.566	0.000	2419.659		
E10.5	Sludge treatment & disposal: Power costs	T17g, L6	E10.4	£000	I	0.000	971.698	909.957	0.000	41.867	0.000	103.758	0.000	2027.280		
E10.6	Sludge treatment & disposal: Service charges SEPA	T17g, L7	E10.7	£000	I	0.000	19.801	27.129	0.000	5.559	0.000	3.859	0.000	56.348		
E10.7	Sludge treatment & disposal: Total direct costs	T17g, L5	E10.9	£000	C	0.000	3149.298	7027.165	0.000	620.967	0.000	523.221	0.000	11320.651		
E10.8	Sludge treatment and disposal: General and support expenditure	T17g, L8	E10.10	£000	I	0.000	613.903	1607.594	0.000	245.797	0.000	132.150	0.000	2599.444		
E10.9	Sludge Treatment and disposal: Functional Expenditure	T17g, L9	E10.11	£000	C	0.000	3763.201	8634.759	0.000	866.764	0.000	655.371	0.000	13920.095		

Prepared by: ..... Date: .....

Checked by: ..... Date: .....

Authorised by: Simon Parsons Date: 12th June 2015