

**Design Settings**

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	100	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	19.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.346	Preferred Cover Depth (m)	1.200
CV	1.000	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	✓

**Nodes**

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
1	0.013	5.00	140.430	1350	418357.699	418047.582	1.380
2	0.015	5.00	139.683	1350	418345.815	418036.497	1.407
3	0.000	5.00	138.728	1350	418338.413	418023.852	1.397
4	0.164	5.00	136.211	1350	418348.295	417958.518	1.561
5	0.074	5.00	137.593	1500	418337.344	418006.989	3.349
6	0.013	5.00	136.945	1200	418319.039	418005.682	2.823
7	0.048	5.00	136.053	1350	418303.968	418011.229	2.038
8	0.058	5.00	135.147	1350	418294.867	418021.862	1.910
9	0.130	5.00	132.945	1500	418277.863	418050.145	2.458
10	0.079	5.00	131.446	1350	418259.098	418069.300	2.999
11	0.114	5.00	129.363	1500	418231.071	418040.941	2.890
12	0.050	5.00	128.306	1500	418226.317	418026.385	2.790
13	0.046	5.00	127.316	1500	418229.110	418012.252	3.241
14	0.140	5.00	127.337	1500	418248.171	417980.119	3.387
15	0.015	5.00	127.883	1500	418274.589	417960.968	4.042
16	0.121	5.00	127.901	1500	418282.527	417947.976	4.111
17	0.030	5.00	124.399	1500	418287.966	417891.361	1.703
18	0.000	5.00	123.922	1500	418285.689	417884.067	1.726
19	0.074	5.00	123.289	1500	418278.970	417876.700	1.680
20	0.029	5.00	122.215	1500	418261.199	417870.189	1.868
21	0.000	5.00	119.382	1800	418275.728	417827.501	1.482
22	0.000		121.638	1800	418252.657	417852.477	3.965
23	0.107	5.00	121.516	2100	418246.665	417860.014	3.957
24	0.000		115.329	1350	418183.919	417832.642	1.529
25	0.000		112.266	1200	418151.838	417848.151	2.029
26	0.000		107.770	1200	418113.264	417821.459	2.224
27	0.000		106.583	1200	418095.712	417823.236	2.801
28	0.000		100.650	1350	418066.298	417780.115	1.350
S29	0.000		100.850	2100	418057.272	417783.050	2.600
S30	0.000	5.00	101.550	1800	418038.802	417791.332	3.400
S31			101.900	2100	418035.109	417794.844	4.410
S32			99.650	2400	418014.247	417778.802	2.274

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.000	1	2	16.251	0.600	139.050	138.276	0.774	21.0	150	5.12	50.0
1.001	2	3	14.652	0.600	138.276	137.331	0.945	15.5	150	5.22	50.0
1.002	3	5	16.897	0.600	137.331	135.744	1.587	10.6	150	5.31	50.0
2.000	4	5	49.693	0.600	134.650	134.319	0.331	150.0	225	5.78	50.0
1.003	5	6	18.352	0.600	134.244	134.122	0.122	150.0	300	6.02	50.0
1.004	6	7	16.059	0.600	134.122	134.015	0.107	150.0	300	6.23	50.0
1.005	7	8	13.996	0.600	134.015	133.237	0.778	18.0	300	6.29	50.0
1.006	8	9	33.001	0.600	133.237	130.487	2.750	12.0	300	6.41	50.0
1.007	9	10	26.815	0.600	130.487	128.457	2.030	13.2	300	6.51	50.0
1.008	10	11	39.872	0.600	128.447	126.548	1.899	21.0	300	6.70	50.0
1.009	11	12	15.313	0.600	126.473	125.516	0.957	16.0	375	6.76	50.0
1.010	12	13	14.406	0.600	125.516	124.150	1.366	10.5	375	6.80	50.0
1.011	13	14	37.361	0.600	124.075	123.950	0.125	300.0	450	7.34	50.0
1.012	14	15	32.629	0.600	123.950	123.841	0.109	300.0	450	7.80	50.0
1.013	15	16	15.225	0.600	123.841	123.790	0.051	300.0	450	8.02	50.0
1.014	16	17	56.876	0.600	123.790	122.696	1.094	52.0	450	8.35	50.0
1.015	17	18	7.641	0.600	122.696	122.196	0.500	15.3	450	8.38	50.0
1.016	18	19	9.971	0.600	122.196	121.609	0.587	17.0	450	8.41	50.0
1.017	19	20	18.926	0.600	121.609	120.347	1.262	15.0	450	8.47	50.0
1.018	20	23	17.742	0.600	120.347	119.059	1.288	13.8	450	8.53	50.0
3.000	21	22	34.001	0.600	117.900	117.673	0.227	150.0	750	5.25	50.0
3.001	22	23	9.629	0.600	117.673	117.609	0.064	150.0	750	5.32	50.0
1.019	23	24	68.456	0.600	117.559	113.800	3.759	18.2	225	8.90	50.0
1.020	24	25	35.633	0.600	113.800	110.237	3.563	10.0	225	9.04	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)
1.000	2.207	39.0	2.3	1.230	1.257	0.013	0.0
1.001	2.571	45.4	5.1	1.257	1.247	0.028	0.0
1.002	3.105	54.9	5.1	1.247	1.699	0.028	0.0
2.000	1.065	42.3	29.6	1.336	3.049	0.164	0.0
1.003	1.281	90.6	48.1	3.049	2.523	0.266	0.0
1.004	1.281	90.6	50.4	2.523	1.738	0.279	0.0
1.005	3.723	263.1	59.1	1.738	1.610	0.327	0.0
1.006	4.562	322.5	69.6	1.610	2.158	0.385	0.0
1.007	4.348	307.3	93.1	2.158	2.689	0.515	0.0
1.008	3.446	243.5	107.3	2.699	2.515	0.594	0.0
1.009	4.548	502.4	127.9	2.515	2.415	0.708	0.0
1.010	5.605	619.1	137.0	2.415	2.791	0.758	0.0
1.011	1.168	185.8	145.3	2.791	2.937	0.804	0.0
1.012	1.168	185.8	170.6	2.937	3.592	0.944	0.0
1.013	1.168	185.8	173.3	3.592	3.661	0.959	0.0
1.014	2.824	449.1	195.2	3.661	1.253	1.080	0.0
1.015	5.220	830.2	200.6	1.253	1.276	1.110	0.0
1.016	4.949	787.0	200.6	1.276	1.230	1.110	0.0
1.017	5.269	838.0	213.9	1.230	1.418	1.184	0.0
1.018	5.499	874.6	219.2	1.418	2.007	1.213	0.0
3.000	2.282	1008.3	0.0	0.732	3.215	0.000	0.0
3.001	2.282	1008.3	0.0	3.215	3.157	0.000	0.0
1.019	3.080	122.5	238.5	3.732	1.304	1.320	0.0
1.020	4.161	165.5	238.5	1.304	1.804	1.320	0.0

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.021	25	26	46.909	0.600	110.237	105.546	4.691	10.0	225	9.23	50.0
1.022	26	27	17.642	0.600	105.546	103.782	1.764	10.0	225	9.30	50.0
1.023	27	28	52.198	0.600	103.782	99.300	4.482	11.6	225	9.52	50.0
1.024	28	S29	9.491	0.600	99.300	99.225	0.075	126.5	225	9.66	50.0
1.025	S29	S30	20.242	0.600	98.250	98.200	0.050	404.8	1200	9.84	50.0
1.026	S30	S31	5.096	0.600	98.150	98.090	0.060	84.9	150	9.92	50.0
1.027	S31	S32	26.317	0.600	97.490	97.376	0.114	230.8	750	10.16	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)
1.021	4.161	165.5	238.5	1.804	1.999	1.320	0.0
1.022	4.161	165.5	238.5	1.999	2.576	1.320	0.0
1.023	3.855	153.3	238.5	2.576	1.125	1.320	0.0
1.024	1.161	46.1	238.5	1.125	1.400	1.320	0.0
1.025	1.853	2095.5	238.5	1.400	2.150	1.320	0.0
1.026	1.091	19.3	238.5	3.250	3.660	1.320	0.0
1.027	1.837	811.7	238.5	3.660	1.524	1.320	0.0

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.000	16.251	21.0	150	Circular_Default Sewer Type	140.430	139.050	1.230	139.683	138.276	1.257
1.001	14.652	15.5	150	Circular_Default Sewer Type	139.683	138.276	1.257	138.728	137.331	1.247
1.002	16.897	10.6	150	Circular_Default Sewer Type	138.728	137.331	1.247	137.593	135.744	1.699
2.000	49.693	150.0	225	Circular_Default Sewer Type	136.211	134.650	1.336	137.593	134.319	3.049
1.003	18.352	150.0	300	Circular_Default Sewer Type	137.593	134.244	3.049	136.945	134.122	2.523
1.004	16.059	150.0	300	Circular_Default Sewer Type	136.945	134.122	2.523	136.053	134.015	1.738
1.005	13.996	18.0	300	Circular_Default Sewer Type	136.053	134.015	1.738	135.147	133.237	1.610
1.006	33.001	12.0	300	Circular_Default Sewer Type	135.147	133.237	1.610	132.945	130.487	2.158
1.007	26.815	13.2	300	Circular_Default Sewer Type	132.945	130.487	2.158	131.446	128.457	2.689
1.008	39.872	21.0	300	Circular_Default Sewer Type	131.446	128.447	2.699	129.363	126.548	2.515
1.009	15.313	16.0	375	Circular_Default Sewer Type	129.363	126.473	2.515	128.306	125.516	2.415
1.010	14.406	10.5	375	Circular_Default Sewer Type	128.306	125.516	2.415	127.316	124.150	2.791
1.011	37.361	300.0	450	Circular_Default Sewer Type	127.316	124.075	2.791	127.337	123.950	2.937



Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	1	1350	Manhole	Adoptable	2	1350	Manhole	Adoptable
1.001	2	1350	Manhole	Adoptable	3	1350	Manhole	Adoptable
1.002	3	1350	Manhole	Adoptable	5	1500	Manhole	Adoptable
2.000	4	1350	Manhole	Adoptable	5	1500	Manhole	Adoptable
1.003	5	1500	Manhole	Adoptable	6	1200	Manhole	Adoptable
1.004	6	1200	Manhole	Adoptable	7	1350	Manhole	Adoptable
1.005	7	1350	Manhole	Adoptable	8	1350	Manhole	Adoptable
1.006	8	1350	Manhole	Adoptable	9	1500	Manhole	Adoptable
1.007	9	1500	Manhole	Adoptable	10	1350	Manhole	Adoptable
1.008	10	1350	Manhole	Adoptable	11	1500	Manhole	Adoptable
1.009	11	1500	Manhole	Adoptable	12	1500	Manhole	Adoptable
1.010	12	1500	Manhole	Adoptable	13	1500	Manhole	Adoptable
1.011	13	1500	Manhole	Adoptable	14	1500	Manhole	Adoptable

Pipeline Schedule



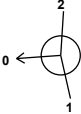










Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.012	32.629	300.0	450	Circular_Default Sewer Type	127.337	123.950	2.937	127.883	123.841	3.592
1.013	15.225	300.0	450	Circular_Default Sewer Type	127.883	123.841	3.592	127.901	123.790	3.661
1.014	56.876	52.0	450	Circular_Default Sewer Type	127.901	123.790	3.661	124.399	122.696	1.253
1.015	7.641	15.3	450	Circular_Default Sewer Type	124.399	122.696	1.253	123.922	122.196	1.276
1.016	9.971	17.0	450	Circular_Default Sewer Type	123.922	122.196	1.276	123.289	121.609	1.230
1.017	18.926	15.0	450	Circular_Default Sewer Type	123.289	121.609	1.230	122.215	120.347	1.418
1.018	17.742	13.8	450	Circular_Default Sewer Type	122.215	120.347	1.418	121.516	119.059	2.007
3.000	34.001	150.0	750	Circular_Default Sewer Type	119.382	117.900	0.732	121.638	117.673	3.215
3.001	9.629	150.0	750	Circular_Default Sewer Type	121.638	117.673	3.215	121.516	117.609	3.157
1.019	68.456	18.2	225	Circular_Default Sewer Type	121.516	117.559	3.732	115.329	113.800	1.304
1.020	35.633	10.0	225	Circular_Default Sewer Type	115.329	113.800	1.304	112.266	110.237	1.804
1.021	46.909	10.0	225	Circular_Default Sewer Type	112.266	110.237	1.804	107.770	105.546	1.999
1.022	17.642	10.0	225	Circular_Default Sewer Type	107.770	105.546	1.999	106.583	103.782	2.576
1.023	52.198	11.6	225	Circular_Default Sewer Type	106.583	103.782	2.576	100.650	99.300	1.125
1.024	9.491	126.5	225	Circular_Default Sewer Type	100.650	99.300	1.125	100.850	99.225	1.400
1.025	20.242	404.8	1200	Circular_Default Sewer Type	100.850	98.250	1.400	101.550	98.200	2.150
1.026	5.096	84.9	150	Circular_Default Sewer Type	101.550	98.150	3.250	101.900	98.090	3.660
1.027	26.317	230.8	750	Circular_Default Sewer Type	101.900	97.490	3.660	99.650	97.376	1.524

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.012	14	1500	Manhole	Adoptable	15	1500	Manhole	Adoptable
1.013	15	1500	Manhole	Adoptable	16	1500	Manhole	Adoptable
1.014	16	1500	Manhole	Adoptable	17	1500	Manhole	Adoptable
1.015	17	1500	Manhole	Adoptable	18	1500	Manhole	Adoptable
1.016	18	1500	Manhole	Adoptable	19	1500	Manhole	Adoptable
1.017	19	1500	Manhole	Adoptable	20	1500	Manhole	Adoptable
1.018	20	1500	Manhole	Adoptable	23	2100	Manhole	Adoptable
3.000	21	1800	Manhole	Adoptable	22	1800	Manhole	Adoptable
3.001	22	1800	Manhole	Adoptable	23	2100	Manhole	Adoptable
1.019	23	2100	Manhole	Adoptable	24	1350	Manhole	Adoptable
1.020	24	1350	Manhole	Adoptable	25	1200	Manhole	Adoptable
1.021	25	1200	Manhole	Adoptable	26	1200	Manhole	Adoptable
1.022	26	1200	Manhole	Adoptable	27	1200	Manhole	Adoptable
1.023	27	1200	Manhole	Adoptable	28	1350	Manhole	Adoptable
1.024	28	1350	Manhole	Adoptable	S29	2100	Manhole	Adoptable
1.025	S29	2100	Manhole	Adoptable	S30	1800	Manhole	Adoptable
1.026	S30	1800	Manhole	Adoptable	S31	2100	Manhole	Adoptable
1.027	S31	2100	Manhole	Adoptable	S32	2400	Manhole	Adoptable



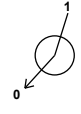
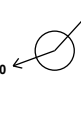
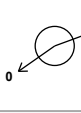


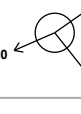

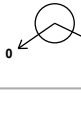

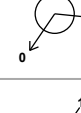

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
1	418357.699	418047.582	140.430	1.380	1350				
						0	1.000	139.050	150
2	418345.815	418036.497	139.683	1.407	1350				
						0	1.001	138.276	150

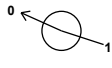



**Manhole Schedule**

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
3	418338.413	418023.852	138.728	1.397	1350		1	1.001	137.331	150
							0	1.002	137.331	150
4	418348.295	417958.518	136.211	1.561	1350					
							0	2.000	134.650	225
5	418337.344	418006.989	137.593	3.349	1500		1	2.000	134.319	225
							2	1.002	135.744	150
							0	1.003	134.244	300
6	418319.039	418005.682	136.945	2.823	1200		1	1.003	134.122	300
							0	1.004	134.122	300
7	418303.968	418011.229	136.053	2.038	1350		1	1.004	134.015	300
							0	1.005	134.015	300
8	418294.867	418021.862	135.147	1.910	1350		1	1.005	133.237	300
							0	1.006	133.237	300
9	418277.863	418050.145	132.945	2.458	1500		1	1.006	130.487	300
							0	1.007	130.487	300
10	418259.098	418069.300	131.446	2.999	1350		1	1.007	128.457	300
							0	1.008	128.447	300
11	418231.071	418040.941	129.363	2.890	1500		1	1.008	126.548	300
							0	1.009	126.473	375
12	418226.317	418026.385	128.306	2.790	1500		1	1.009	125.516	375
							0	1.010	125.516	375
13	418229.110	418012.252	127.316	3.241	1500		1	1.010	124.150	375
							0	1.011	124.075	450
14	418248.171	417980.119	127.337	3.387	1500		1	1.011	123.950	450
							0	1.012	123.950	450
15	418274.589	417960.968	127.883	4.042	1500		1	1.012	123.841	450
							0	1.013	123.841	450

**Manhole Schedule**

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
16	418282.527	417947.976	127.901	4.111	1500		1	1.013	123.790	450
							0	1.014	123.790	450
17	418287.966	417891.361	124.399	1.703	1500		1	1.014	122.696	450
							0	1.015	122.696	450
18	418285.689	417884.067	123.922	1.726	1500		1	1.015	122.196	450
							0	1.016	122.196	450
19	418278.970	417876.700	123.289	1.680	1500		1	1.016	121.609	450
							0	1.017	121.609	450
20	418261.199	417870.189	122.215	1.868	1500		1	1.017	120.347	450
							0	1.018	120.347	450
21	418275.728	417827.501	119.382	1.482	1800					
							0	3.000	117.900	750
22	418252.657	417852.477	121.638	3.965	1800		1	3.000	117.673	750
							0	3.001	117.673	750
23	418246.665	417860.014	121.516	3.957	2100		1	3.001	117.609	750
							2	1.018	119.059	450
							0	1.019	117.559	225
24	418183.919	417832.642	115.329	1.529	1350		1	1.019	113.800	225
							0	1.020	113.800	225
25	418151.838	417848.151	112.266	2.029	1200		1	1.020	110.237	225
							0	1.021	110.237	225
26	418113.264	417821.459	107.770	2.224	1200		1	1.021	105.546	225
							0	1.022	105.546	225
27	418095.712	417823.236	106.583	2.801	1200		1	1.022	103.782	225
							0	1.023	103.782	225
28	418066.298	417780.115	100.650	1.350	1350		1	1.023	99.300	225
							0	1.024	99.300	225

**Manhole Schedule**

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
S29	418057.272	417783.050	100.850	2.600	2100		1	1.024	99.225	225
S30	418038.802	417791.332	101.550	3.400	1800		1	1.025	98.200	1200
S31	418035.109	417794.844	101.900	4.410	2100		1	1.026	98.090	150
S32	418014.247	417778.802	99.650	2.274	2400		1	1.027	97.376	750

**Simulation Settings**

Rainfall Methodology	FSR	Skip Steady State	✓
Rainfall Events	Singular	Drain Down Time (mins)	240
FSR Region	England and Wales	Additional Storage (m <sup>3</sup> /ha)	20.0
M5-60 (mm)	19.000	Starting Level (m)	
Ratio-R	0.346	Check Discharge Rate(s)	✓
Summer CV	0.750	Check Discharge Volume	✓
Winter CV	0.840	100 year 360 minute (m <sup>3</sup> )	
Analysis Speed	Detailed		

**Storm Durations**

15 | 30 | 60 | 120 | 180 | 240 | 360 | 480 | 600 | 720 | 960 | 1440

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
1	0	0	0
2	0	0	0
30	0	0	0
100	30	0	0

**Pre-development Discharge Rate**

Site Makeup	Greenfield	Growth Factor 30 year	1.95
Greenfield Method	IH124	Growth Factor 100 year	2.48
Positively Drained Area (ha)		Betterment (%)	0
SAAR (mm)		QBar	
Soil Index	1	Q 1 year (l/s)	
SPR	0.10	Q 30 year (l/s)	
Region	1	Q 100 year (l/s)	
Growth Factor 1 year	0.85		

### Pre-development Discharge Volume

Site Makeup	Greenfield	Return Period (years)	100
Greenfield Method	FSR/FEH	Climate Change (%)	0
Positively Drained Area (ha)		Storm Duration (mins)	360
Soil Index	1	Betterment (%)	0
SPR	0.10	PR	
CWI		Runoff Volume (m <sup>3</sup> )	

### Node 23 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	117.559	Product Number	CTL-SHE-0126-9100-1900-9100
Design Depth (m)	1.900	Min Outlet Diameter (m)	0.150
Design Flow (l/s)	9.1	Min Node Diameter (mm)	1500

### Node S30 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Downstream Link	1.026	Sump Available	✓
Replaces Downstream Link	x	Product Number	CTL-SHE-0122-9400-2350-9400
Invert Level (m)	98.150	Min Outlet Diameter (m)	0.150
Design Depth (m)	2.350	Min Node Diameter (mm)	1500
Design Flow (l/s)	9.4		

### Node 21 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	117.900
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m <sup>2</sup> )	Inf Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )	Inf Area (m <sup>2</sup> )	Depth (m)	Area (m <sup>2</sup> )	Inf Area (m <sup>2</sup> )
0.000	587.0	0.0	1.000	889.0	0.0	1.001	0.0	0.0

### Approval Settings

Node Size	✓	Minimum Full Bore Velocity (m/s)	
Node Losses	✓	Maximum Full Bore Velocity (m/s)	3.000
Link Size	✓	Proportional Velocity	✓
Minimum Diameter (mm)	150	Return Period (years)	
Link Length	✓	Minimum Proportional Velocity (m/s)	0.750
Maximum Length (m)	100.000	Maximum Proportional Velocity (m/s)	3.000
Coordinates	✓	Surcharged Depth	✓
Accuracy (m)	1.000	Return Period (years)	
Crossings	✓	Maximum Surcharged Depth (m)	0.100
Cover Depth	✓	Flooding	✓
Minimum Cover Depth (m)		Return Period (years)	30
Maximum Cover Depth (m)	3.000	Time to Half Empty	x
Backdrops	✓	Discharge Rates	✓
Minimum Backdrop Height (m)		Discharge Volume	✓
Maximum Backdrop Height (m)	1.500	100 year 360 minute (m <sup>3</sup> )	
Full Bore Velocity	✓		

**Results for 1 year Critical Storm Duration. Lowest mass balance: 99.72%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	1	10	139.071	0.021	1.7	0.0344	0.0000	OK
15 minute winter	2	10	138.305	0.029	3.6	0.0483	0.0000	OK
15 minute winter	3	11	137.357	0.026	3.5	0.0375	0.0000	OK
15 minute winter	4	11	134.761	0.111	20.9	0.3926	0.0000	OK
15 minute winter	5	11	134.377	0.133	32.6	0.2947	0.0000	OK
15 minute winter	6	11	134.257	0.135	34.3	0.1655	0.0000	OK
15 minute winter	7	11	134.100	0.085	40.2	0.1614	0.0000	OK
15 minute winter	8	11	133.314	0.077	47.3	0.1571	0.0000	OK
15 minute winter	9	11	130.580	0.093	62.9	0.2624	0.0000	OK
15 minute winter	10	11	128.563	0.116	72.5	0.2267	0.0000	OK
15 minute winter	11	11	126.589	0.116	86.2	0.2953	0.0000	OK
15 minute winter	12	11	125.613	0.097	92.3	0.2057	0.0000	OK
15 minute winter	13	11	124.324	0.249	97.8	0.5113	0.0000	OK
15 minute winter	14	11	124.219	0.269	114.4	0.6973	0.0000	OK
15 minute winter	15	12	124.085	0.244	114.3	0.4489	0.0000	OK
15 minute winter	16	12	123.963	0.173	126.9	0.4068	0.0000	OK
15 minute winter	17	12	122.838	0.141	131.2	0.2998	0.0000	OK
15 minute winter	18	12	122.339	0.143	131.7	0.2520	0.0000	OK
15 minute winter	19	12	121.741	0.132	139.2	0.3494	0.0000	OK
15 minute winter	20	12	120.481	0.134	142.3	0.2774	0.0000	OK
180 minute winter	21	152	118.066	0.166	35.5	101.9020	0.0000	OK
15 minute summer	22	12	118.640	0.967	145.1	2.4598	0.0000	SURCHARGED
15 minute summer	23	12	118.646	1.087	145.9	4.3525	0.0000	SURCHARGED
60 minute summer	24	36	113.836	0.036	9.0	0.0514	0.0000	OK
60 minute summer	25	32	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute winter	1	1.000	2	1.7	0.854	0.043	0.0321	
15 minute winter	2	1.001	3	3.5	1.580	0.078	0.0327	
15 minute winter	3	1.002	5	3.5	1.727	0.064	0.0344	
15 minute winter	4	2.000	5	20.2	1.049	0.476	0.9545	
15 minute winter	5	1.003	6	32.7	1.072	0.362	0.5605	
15 minute winter	6	1.004	7	34.4	1.471	0.380	0.3788	
15 minute winter	7	1.005	8	40.3	2.630	0.153	0.2144	
15 minute winter	8	1.006	9	47.3	2.886	0.147	0.5416	
15 minute winter	9	1.007	10	63.0	3.096	0.205	0.5460	
15 minute winter	10	1.008	11	72.5	2.971	0.298	0.9734	
15 minute winter	11	1.009	12	86.3	3.372	0.172	0.3925	
15 minute winter	12	1.010	13	92.3	2.942	0.149	0.5229	
15 minute winter	13	1.011	14	97.6	1.034	0.525	3.5286	
15 minute winter	14	1.012	15	112.5	1.212	0.605	3.0355	
15 minute winter	15	1.013	16	114.9	1.602	0.618	1.0934	
15 minute winter	16	1.014	17	128.2	2.605	0.285	2.8034	
15 minute winter	17	1.015	18	131.7	3.073	0.159	0.3275	
15 minute winter	18	1.016	19	131.8	3.225	0.167	0.4077	
15 minute winter	19	1.017	20	139.4	3.575	0.166	0.7383	
15 minute winter	20	1.018	23	142.5	3.874	0.163	0.6532	
180 minute winter	21	3.000	22	-35.5	0.526	-0.035	5.1935	
15 minute summer	22	3.001	23	-145.1	0.508	-0.144	4.2379	
15 minute summer	23	1.019	24	9.0	1.945	0.073	0.3176	
60 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
60 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 1 year Critical Storm Duration. Lowest mass balance: 99.72%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
60 minute summer	26	32	105.582	0.036	9.0	0.0408	0.0000	OK
60 minute summer	27	32	103.819	0.037	9.0	0.0417	0.0000	OK
60 minute summer	28	37	99.371	0.071	9.0	0.1021	0.0000	OK
600 minute winter	S29	630	98.961	0.711	8.9	2.4633	0.0000	OK
600 minute winter	S30	630	98.961	0.811	8.6	2.0643	0.0000	SURCHARGED
120 minute winter	S31	230	97.544	0.054	8.3	0.1864	0.0000	OK
180 minute summer	S32	328	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
60 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
60 minute summer	27	1.023	28	9.0	1.475	0.059	0.3924	
60 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0981	
600 minute winter	S29	1.025	S30	8.6	0.365	0.004	14.6707	
600 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
120 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	157.4

**Results for 2 year Critical Storm Duration. Lowest mass balance: 99.71%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	1	10	139.074	0.024	2.1	0.0382	0.0000	OK
15 minute winter	2	10	138.309	0.033	4.6	0.0547	0.0000	OK
15 minute winter	3	11	137.361	0.029	4.5	0.0422	0.0000	OK
15 minute winter	4	11	134.780	0.130	27.0	0.4602	0.0000	OK
15 minute winter	5	11	134.400	0.156	42.0	0.3445	0.0000	OK
15 minute winter	6	11	134.278	0.156	44.3	0.1908	0.0000	OK
15 minute winter	7	11	134.113	0.098	51.9	0.1860	0.0000	OK
15 minute winter	8	11	133.325	0.088	61.0	0.1789	0.0000	OK
15 minute winter	9	11	130.593	0.106	81.2	0.3006	0.0000	OK
15 minute winter	10	11	128.581	0.134	93.7	0.2629	0.0000	OK
15 minute winter	11	11	126.607	0.134	111.6	0.3423	0.0000	OK
15 minute winter	12	11	125.626	0.110	119.5	0.2346	0.0000	OK
15 minute winter	13	11	124.375	0.300	126.7	0.6162	0.0000	OK
15 minute winter	14	11	124.271	0.321	148.1	0.8322	0.0000	OK
15 minute winter	15	11	124.124	0.283	148.4	0.5206	0.0000	OK
15 minute winter	16	11	123.989	0.199	165.4	0.4693	0.0000	OK
15 minute winter	17	12	122.862	0.166	169.7	0.3513	0.0000	OK
15 minute winter	18	12	122.363	0.167	170.6	0.2944	0.0000	OK
15 minute winter	19	12	121.762	0.153	180.4	0.4041	0.0000	OK
15 minute winter	20	12	120.502	0.155	184.5	0.3221	0.0000	OK
180 minute winter	21	176	118.127	0.227	45.7	141.6240	0.0000	OK
15 minute winter	22	11	118.833	1.160	219.7	2.9520	0.0000	SURCHARGED
15 minute winter	23	11	118.843	1.284	198.8	5.1403	0.0000	SURCHARGED
60 minute summer	24	37	113.836	0.036	9.0	0.0514	0.0000	OK
60 minute summer	25	38	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute winter	1	1.000	2	2.1	0.896	0.053	0.0379	
15 minute winter	2	1.001	3	4.5	1.693	0.099	0.0390	
15 minute winter	3	1.002	5	4.5	1.851	0.081	0.0407	
15 minute winter	4	2.000	5	26.1	1.115	0.615	1.1615	
15 minute winter	5	1.003	6	42.3	1.143	0.467	0.6793	
15 minute winter	6	1.004	7	44.5	1.569	0.491	0.4572	
15 minute winter	7	1.005	8	51.9	2.807	0.197	0.2593	
15 minute winter	8	1.006	9	61.0	3.095	0.189	0.6517	
15 minute winter	9	1.007	10	81.4	3.265	0.265	0.6692	
15 minute winter	10	1.008	11	93.9	3.172	0.385	1.1804	
15 minute winter	11	1.009	12	111.7	3.591	0.222	0.4771	
15 minute winter	12	1.010	13	119.5	2.860	0.193	0.6929	
15 minute winter	13	1.011	14	126.4	1.083	0.680	4.3590	
15 minute winter	14	1.012	15	146.1	1.294	0.787	3.6835	
15 minute winter	15	1.013	16	148.2	1.720	0.798	1.3136	
15 minute winter	16	1.014	17	165.8	2.752	0.369	3.4289	
15 minute winter	17	1.015	18	170.6	3.211	0.205	0.4061	
15 minute winter	18	1.016	19	170.8	3.397	0.217	0.5017	
15 minute winter	19	1.017	20	180.8	3.780	0.216	0.9052	
15 minute winter	20	1.018	23	185.0	4.128	0.212	0.7956	
180 minute winter	21	3.000	22	-45.7	-0.397	-0.045	6.6477	
15 minute winter	22	3.001	23	-219.7	0.508	-0.218	4.2379	
15 minute winter	23	1.019	24	9.0	1.946	0.073	0.3177	
60 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
60 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 2 year Critical Storm Duration. Lowest mass balance: 99.71%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
60 minute summer	26	38	105.582	0.036	9.0	0.0408	0.0000	OK
60 minute summer	27	38	103.819	0.037	9.0	0.0417	0.0000	OK
720 minute winter	28	795	99.582	0.282	9.0	0.4042	0.0000	SURCHARGED
720 minute winter	S29	795	99.580	1.330	9.0	4.6065	0.0000	SURCHARGED
720 minute winter	S30	795	99.580	1.430	8.6	3.6389	0.0000	SURCHARGED
60 minute summer	S31	226	97.544	0.054	8.3	0.1864	0.0000	OK
60 minute summer	S32	226	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
60 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
60 minute summer	27	1.023	28	9.0	1.486	0.059	0.3924	
720 minute winter	28	1.024	S29	9.0	0.870	0.194	0.3775	
720 minute winter	S29	1.025	S30	8.6	0.373	0.004	22.8068	
720 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
60 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	135.7

**Results for 30 year Critical Storm Duration. Lowest mass balance: 99.53%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	1	10	139.083	0.033	4.1	0.0529	0.0000	OK
15 minute winter	2	10	138.323	0.047	8.7	0.0767	0.0000	OK
15 minute winter	3	10	137.372	0.041	8.6	0.0588	0.0000	OK
15 minute winter	4	11	134.912	0.262	51.2	0.9265	0.0000	SURCHARGED
15 minute winter	5	11	134.486	0.242	77.1	0.5348	0.0000	OK
15 minute winter	6	11	134.349	0.227	81.1	0.2777	0.0000	OK
15 minute winter	7	11	134.155	0.140	95.3	0.2660	0.0000	OK
15 minute winter	8	11	133.359	0.122	112.4	0.2484	0.0000	OK
15 minute winter	9	11	130.638	0.151	150.8	0.4268	0.0000	OK
15 minute winter	10	11	128.648	0.201	174.2	0.3934	0.0000	OK
15 minute winter	11	10	126.665	0.192	208.7	0.4916	0.0000	OK
15 minute winter	12	11	125.695	0.179	223.9	0.3796	0.0000	OK
15 minute winter	13	11	124.901	0.826	237.0	1.6945	0.0000	SURCHARGED
15 minute winter	14	11	124.642	0.692	275.3	1.7949	0.0000	SURCHARGED
15 minute winter	15	11	124.327	0.486	278.7	0.8941	0.0000	SURCHARGED
15 minute winter	16	11	124.086	0.296	313.2	0.6982	0.0000	OK
15 minute winter	17	11	122.948	0.252	319.7	0.5348	0.0000	OK
15 minute winter	18	12	122.446	0.250	318.3	0.4418	0.0000	OK
15 minute winter	19	11	121.832	0.223	339.6	0.5915	0.0000	OK
15 minute winter	20	11	120.577	0.230	348.0	0.4770	0.0000	OK
240 minute winter	21	240	118.415	0.515	73.2	343.6823	0.0000	OK
15 minute winter	22	10	119.246	1.573	423.4	4.0022	0.0000	SURCHARGED
15 minute winter	23	10	119.279	1.720	379.6	6.8853	0.0000	SURCHARGED
15 minute winter	24	19	113.836	0.036	9.0	0.0514	0.0000	OK
15 minute winter	25	20	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute winter	1	1.000	2	4.0	1.088	0.104	0.0608	
15 minute winter	2	1.001	3	8.6	2.016	0.190	0.0628	
15 minute winter	3	1.002	5	8.5	2.220	0.155	0.0648	
15 minute winter	4	2.000	5	46.9	1.240	1.108	1.8379	
15 minute winter	5	1.003	6	77.3	1.308	0.853	1.0840	
15 minute winter	6	1.004	7	81.2	1.799	0.896	0.7177	
15 minute winter	7	1.005	8	95.3	3.232	0.362	0.4130	
15 minute winter	8	1.006	9	112.4	3.607	0.349	1.0292	
15 minute winter	9	1.007	10	151.0	3.641	0.491	1.1107	
15 minute winter	10	1.008	11	175.2	3.644	0.719	1.9163	
15 minute winter	11	1.009	12	209.2	3.963	0.416	0.8307	
15 minute winter	12	1.010	13	223.5	2.955	0.361	1.1671	
15 minute winter	13	1.011	14	234.1	1.478	1.260	5.9196	
15 minute winter	14	1.012	15	274.3	1.731	1.476	5.1699	
15 minute winter	15	1.013	16	277.6	1.981	1.494	2.0490	
15 minute winter	16	1.014	17	310.9	3.082	0.692	5.7500	
15 minute winter	17	1.015	18	318.3	3.505	0.383	0.6947	
15 minute winter	18	1.016	19	319.0	3.786	0.405	0.8418	
15 minute winter	19	1.017	20	339.5	4.257	0.405	1.5119	
15 minute winter	20	1.018	23	348.1	4.751	0.398	1.3011	
240 minute winter	21	3.000	22	-73.2	-0.387	-0.073	12.9505	
15 minute winter	22	3.001	23	-423.4	-0.962	-0.420	4.2379	
15 minute winter	23	1.019	24	9.0	1.944	0.073	0.3178	
15 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
15 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year Critical Storm Duration. Lowest mass balance: 99.53%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	26	19	105.582	0.036	9.0	0.0408	0.0000	OK
15 minute winter	27	20	103.819	0.037	9.0	0.0417	0.0000	OK
1440 minute winter	28	1440	100.364	1.064	9.0	1.5224	0.0000	FLOOD RISK
1440 minute winter	S29	1440	100.360	2.110	9.0	7.3077	0.0000	SURCHARGED
1440 minute winter	S30	1440	100.360	2.210	9.0	5.6235	0.0000	SURCHARGED
1440 minute winter	S31	1440	97.546	0.056	9.0	0.1935	0.0000	OK
1440 minute winter	S32	1440	97.430	0.054	9.0	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
15 minute winter	27	1.023	28	9.0	1.782	0.059	0.3924	
1440 minute winter	28	1.024	S29	9.0	0.871	0.195	0.3775	
1440 minute winter	S29	1.025	S30	9.0	0.384	0.004	22.8068	
1440 minute winter	S30	1.026	S31	9.0	1.004	0.466	0.0456	
1440 minute winter	S31	1.027	S32	9.0	0.626	0.011	0.3774	708.2

**Results for 100 year +30% CC Critical Storm Duration. Lowest mass balance: 99.84%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	1	10	139.092	0.042	6.8	0.0684	0.0000	OK
15 minute winter	2	10	138.338	0.062	14.6	0.1019	0.0000	OK
15 minute winter	3	10	137.385	0.054	14.5	0.0777	0.0000	OK
15 minute winter	4	12	135.954	1.304	85.9	4.6083	0.0000	FLOOD RISK
15 minute winter	5	11	134.851	0.607	122.4	1.3399	0.0000	SURCHARGED
15 minute winter	6	11	134.546	0.424	127.4	0.5191	0.0000	SURCHARGED
15 minute winter	7	11	134.205	0.190	150.5	0.3610	0.0000	OK
15 minute winter	8	11	133.395	0.158	178.8	0.3219	0.0000	OK
15 minute winter	9	12	130.933	0.446	242.9	1.2606	0.0000	SURCHARGED
15 minute winter	10	12	129.583	1.136	271.9	2.2237	0.0000	SURCHARGED
15 minute winter	11	12	127.128	0.655	309.8	1.6730	0.0000	SURCHARGED
15 minute winter	12	12	126.595	1.079	323.3	2.2936	0.0000	SURCHARGED
15 minute winter	13	12	126.010	1.935	337.2	3.9689	0.0000	SURCHARGED
15 minute winter	14	12	125.481	1.531	398.2	3.9716	0.0000	SURCHARGED
15 minute winter	15	12	124.829	0.988	400.9	1.8189	0.0000	SURCHARGED
15 minute winter	16	12	124.428	0.638	451.7	1.5024	0.0000	SURCHARGED
15 minute winter	17	12	123.037	0.341	463.1	0.7219	0.0000	OK
15 minute winter	18	12	122.529	0.333	462.9	0.5878	0.0000	OK
15 minute summer	19	11	121.899	0.290	494.7	0.7681	0.0000	OK
15 minute summer	20	11	120.647	0.300	508.2	0.6241	0.0000	OK
480 minute winter	21	472	118.881	0.981	75.6	723.2872	0.0000	SURCHARGED
15 minute winter	22	9	119.579	1.906	597.2	4.8507	0.0000	SURCHARGED
15 minute winter	23	9	119.642	2.083	557.9	8.3388	0.0000	SURCHARGED
15 minute winter	24	9	113.836	0.036	9.4	0.0520	0.0000	OK
15 minute summer	25	10	110.273	0.036	9.1	0.0408	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute winter	1	1.000	2	6.7	1.240	0.173	0.0887	
15 minute winter	2	1.001	3	14.5	2.299	0.319	0.0924	
15 minute winter	3	1.002	5	14.3	2.555	0.261	0.0948	
15 minute winter	4	2.000	5	73.6	1.850	1.737	1.9763	
15 minute winter	5	1.003	6	121.0	1.719	1.337	1.2923	
15 minute winter	6	1.004	7	126.7	1.955	1.399	0.9427	
15 minute winter	7	1.005	8	150.2	3.557	0.571	0.5917	
15 minute winter	8	1.006	9	178.6	3.872	0.554	1.7622	
15 minute winter	9	1.007	10	232.1	3.702	0.755	1.8883	
15 minute winter	10	1.008	11	253.5	3.693	1.041	2.8078	
15 minute winter	11	1.009	12	298.6	3.882	0.594	1.6890	
15 minute winter	12	1.010	13	318.1	2.948	0.514	1.5889	
15 minute winter	13	1.011	14	337.9	2.133	1.819	5.9196	
15 minute winter	14	1.012	15	394.8	2.492	2.125	5.1699	
15 minute winter	15	1.013	16	400.9	2.530	2.158	2.4123	
15 minute winter	16	1.014	17	450.7	3.176	1.004	8.1676	
15 minute winter	17	1.015	18	462.9	3.639	0.558	0.9719	
15 minute winter	18	1.016	19	462.8	3.980	0.588	1.1635	
15 minute summer	19	1.017	20	494.4	4.531	0.590	2.0857	
15 minute summer	20	1.018	23	507.7	5.092	0.580	2.0891	
480 minute winter	21	3.000	22	-75.6	-0.240	-0.075	14.9645	
15 minute winter	22	3.001	23	-597.2	-1.357	-0.592	4.2379	
15 minute winter	23	1.019	24	9.4	1.979	0.077	0.3265	
15 minute winter	24	1.020	25	9.1	2.241	0.055	0.1453	
15 minute summer	25	1.021	26	9.1	2.223	0.055	0.1924	

**Results for 100 year +30% CC Critical Storm Duration. Lowest mass balance: 99.84%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	26	10	105.583	0.037	9.1	0.0413	0.0000	OK
15 minute winter	27	10	103.819	0.037	9.2	0.0422	0.0000	OK
15 minute summer	28	209	99.371	0.071	9.0	0.1021	0.0000	OK
1440 minute winter	S29	930	99.157	0.907	9.0	3.1403	0.0000	OK
1440 minute winter	S30	930	99.157	1.007	8.6	2.5617	0.0000	SURCHARGED
15 minute summer	S31	194	97.544	0.054	8.3	0.1864	0.0000	OK
15 minute summer	S32	194	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute winter	26	1.022	27	9.2	2.180	0.056	0.0747	
15 minute winter	27	1.023	28	9.2	2.135	0.060	0.3924	
15 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0981	
1440 minute winter	S29	1.025	S30	8.6	0.227	0.004	18.9982	
1440 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
15 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	117.5

**Results for 1 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute summer	1	10	139.071	0.021	1.6	0.0334	0.0000	OK
15 minute summer	2	10	138.305	0.029	3.4	0.0470	0.0000	OK
15 minute summer	3	11	137.356	0.025	3.3	0.0364	0.0000	OK
15 minute summer	4	11	134.758	0.108	19.9	0.3827	0.0000	OK
15 minute summer	5	11	134.374	0.130	31.2	0.2871	0.0000	OK
15 minute summer	6	11	134.254	0.132	32.8	0.1613	0.0000	OK
15 minute summer	7	11	134.098	0.083	38.5	0.1575	0.0000	OK
15 minute summer	8	11	133.312	0.075	45.2	0.1535	0.0000	OK
15 minute summer	9	11	130.578	0.091	60.1	0.2562	0.0000	OK
15 minute summer	10	11	128.560	0.113	69.3	0.2208	0.0000	OK
15 minute summer	11	11	126.586	0.113	82.4	0.2878	0.0000	OK
15 minute summer	12	11	125.611	0.095	88.2	0.2010	0.0000	OK
15 minute summer	13	11	124.317	0.241	93.4	0.4953	0.0000	OK
15 minute summer	14	11	124.210	0.260	109.2	0.6753	0.0000	OK
15 minute summer	15	12	124.079	0.238	108.5	0.4379	0.0000	OK
15 minute summer	16	12	123.958	0.168	121.4	0.3969	0.0000	OK
15 minute summer	17	12	122.834	0.138	125.2	0.2914	0.0000	OK
15 minute summer	18	12	122.335	0.139	125.6	0.2450	0.0000	OK
15 minute summer	19	12	121.738	0.128	132.6	0.3402	0.0000	OK
15 minute summer	20	12	120.477	0.130	135.6	0.2698	0.0000	OK
15 minute summer	21	22	117.983	0.083	193.1	50.0718	0.0000	OK
15 minute summer	22	12	118.640	0.967	145.1	2.4598	0.0000	SURCHARGED
15 minute summer	23	12	118.646	1.087	145.9	4.3525	0.0000	SURCHARGED
15 minute summer	24	16	113.836	0.036	9.0	0.0514	0.0000	OK
15 minute summer	25	16	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute summer	1	1.000	2	1.6	0.837	0.040	0.0307	
15 minute summer	2	1.001	3	3.3	1.555	0.073	0.0313	
15 minute summer	3	1.002	5	3.3	1.698	0.060	0.0330	
15 minute summer	4	2.000	5	19.3	1.037	0.455	0.9235	
15 minute summer	5	1.003	6	31.3	1.061	0.346	0.5419	
15 minute summer	6	1.004	7	32.9	1.453	0.363	0.3662	
15 minute summer	7	1.005	8	38.5	2.599	0.146	0.2073	
15 minute summer	8	1.006	9	45.1	2.847	0.140	0.5241	
15 minute summer	9	1.007	10	60.2	3.067	0.196	0.5265	
15 minute summer	10	1.008	11	69.2	2.934	0.284	0.9400	
15 minute summer	11	1.009	12	82.4	3.332	0.164	0.3792	
15 minute summer	12	1.010	13	88.1	2.909	0.142	0.4968	
15 minute summer	13	1.011	14	93.0	1.024	0.501	3.3933	
15 minute summer	14	1.012	15	107.1	1.198	0.577	2.9218	
15 minute summer	15	1.013	16	109.8	1.582	0.591	1.0590	
15 minute summer	16	1.014	17	122.4	2.579	0.273	2.7040	
15 minute summer	17	1.015	18	125.6	3.048	0.151	0.3148	
15 minute summer	18	1.016	19	125.6	3.193	0.160	0.3924	
15 minute summer	19	1.017	20	132.8	3.537	0.158	0.7106	
15 minute summer	20	1.018	23	135.7	3.825	0.155	0.6294	
15 minute summer	21	3.000	22	-193.1	-0.851	-0.191	7.5735	
15 minute summer	22	3.001	23	-145.1	0.508	-0.144	4.2379	
15 minute summer	23	1.019	24	9.0	1.945	0.073	0.3176	
15 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
15 minute summer	25	1.021	26	9.0	2.210	0.054	0.1909	

**Results for 1 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute summer	26	16	105.582	0.036	9.0	0.0408	0.0000	OK
15 minute summer	27	16	103.819	0.037	9.0	0.0417	0.0000	OK
15 minute summer	28	17	99.371	0.071	9.0	0.1020	0.0000	OK
15 minute summer	S29	93	98.560	0.309	9.0	1.0721	0.0000	OK
15 minute summer	S30	93	98.559	0.409	8.4	1.0420	0.0000	SURCHARGED
15 minute summer	S31	93	97.543	0.053	8.0	0.1833	0.0000	OK
15 minute summer	S32	93	97.426	0.050	8.0	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute summer	26	1.022	27	9.0	2.161	0.054	0.0734	
15 minute summer	27	1.023	28	9.0	1.840	0.059	0.3917	
15 minute summer	28	1.024	S29	9.0	0.870	0.194	0.0979	
15 minute summer	S29	1.025	S30	8.4	0.518	0.004	5.1941	
15 minute summer	S30	1.026	S31	8.0	0.976	0.413	0.0416	
15 minute summer	S31	1.027	S32	8.0	0.611	0.010	0.3430	60.7

**Results for 1 year 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	1	10	139.071	0.021	1.7	0.0344	0.0000	OK
15 minute winter	2	10	138.305	0.029	3.6	0.0483	0.0000	OK
15 minute winter	3	11	137.357	0.026	3.5	0.0375	0.0000	OK
15 minute winter	4	11	134.761	0.111	20.9	0.3926	0.0000	OK
15 minute winter	5	11	134.377	0.133	32.6	0.2947	0.0000	OK
15 minute winter	6	11	134.257	0.135	34.3	0.1655	0.0000	OK
15 minute winter	7	11	134.100	0.085	40.2	0.1614	0.0000	OK
15 minute winter	8	11	133.314	0.077	47.3	0.1571	0.0000	OK
15 minute winter	9	11	130.580	0.093	62.9	0.2624	0.0000	OK
15 minute winter	10	11	128.563	0.116	72.5	0.2267	0.0000	OK
15 minute winter	11	11	126.589	0.116	86.2	0.2953	0.0000	OK
15 minute winter	12	11	125.613	0.097	92.3	0.2057	0.0000	OK
15 minute winter	13	11	124.324	0.249	97.8	0.5113	0.0000	OK
15 minute winter	14	11	124.219	0.269	114.4	0.6973	0.0000	OK
15 minute winter	15	12	124.085	0.244	114.3	0.4489	0.0000	OK
15 minute winter	16	12	123.963	0.173	126.9	0.4068	0.0000	OK
15 minute winter	17	12	122.838	0.141	131.2	0.2998	0.0000	OK
15 minute winter	18	12	122.339	0.143	131.7	0.2520	0.0000	OK
15 minute winter	19	12	121.741	0.132	139.2	0.3494	0.0000	OK
15 minute winter	20	12	120.481	0.134	142.3	0.2774	0.0000	OK
15 minute winter	21	23	117.996	0.096	188.3	57.7297	0.0000	OK
15 minute winter	22	12	118.638	0.965	153.9	2.4552	0.0000	SURCHARGED
15 minute winter	23	12	118.643	1.084	153.2	4.3401	0.0000	SURCHARGED
15 minute winter	24	16	113.836	0.036	9.0	0.0514	0.0000	OK
15 minute winter	25	16	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute winter	1	1.000	2	1.7	0.854	0.043	0.0321	
15 minute winter	2	1.001	3	3.5	1.580	0.078	0.0327	
15 minute winter	3	1.002	5	3.5	1.727	0.064	0.0344	
15 minute winter	4	2.000	5	20.2	1.049	0.476	0.9545	
15 minute winter	5	1.003	6	32.7	1.072	0.362	0.5605	
15 minute winter	6	1.004	7	34.4	1.471	0.380	0.3788	
15 minute winter	7	1.005	8	40.3	2.630	0.153	0.2144	
15 minute winter	8	1.006	9	47.3	2.886	0.147	0.5416	
15 minute winter	9	1.007	10	63.0	3.096	0.205	0.5460	
15 minute winter	10	1.008	11	72.5	2.971	0.298	0.9734	
15 minute winter	11	1.009	12	86.3	3.372	0.172	0.3925	
15 minute winter	12	1.010	13	92.3	2.942	0.149	0.5229	
15 minute winter	13	1.011	14	97.6	1.034	0.525	3.5286	
15 minute winter	14	1.012	15	112.5	1.212	0.605	3.0355	
15 minute winter	15	1.013	16	114.9	1.602	0.618	1.0934	
15 minute winter	16	1.014	17	128.2	2.605	0.285	2.8034	
15 minute winter	17	1.015	18	131.7	3.073	0.159	0.3275	
15 minute winter	18	1.016	19	131.8	3.225	0.167	0.4077	
15 minute winter	19	1.017	20	139.4	3.575	0.166	0.7383	
15 minute winter	20	1.018	23	142.5	3.874	0.163	0.6532	
15 minute winter	21	3.000	22	-188.3	-0.880	-0.187	7.5275	
15 minute winter	22	3.001	23	-153.9	0.508	-0.153	4.2379	
15 minute winter	23	1.019	24	9.0	1.944	0.073	0.3176	
15 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
15 minute winter	25	1.021	26	9.0	2.210	0.054	0.1909	

**Results for 1 year 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	26	16	105.582	0.036	9.0	0.0408	0.0000	OK
15 minute winter	27	16	103.819	0.037	9.0	0.0417	0.0000	OK
15 minute winter	28	17	99.371	0.071	9.0	0.1020	0.0000	OK
15 minute winter	S29	107	98.584	0.334	9.0	1.1572	0.0000	OK
15 minute winter	S30	107	98.584	0.434	8.6	1.1047	0.0000	SURCHARGED
15 minute winter	S31	107	97.543	0.053	8.0	0.1841	0.0000	OK
15 minute winter	S32	108	97.427	0.051	8.0	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute winter	26	1.022	27	9.0	2.161	0.054	0.0734	
15 minute winter	27	1.023	28	9.0	1.856	0.059	0.3920	
15 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0980	
15 minute winter	S29	1.025	S30	8.6	0.527	0.004	5.7338	
15 minute winter	S30	1.026	S31	8.0	0.978	0.417	0.0419	
15 minute winter	S31	1.027	S32	8.0	0.612	0.010	0.3458	68.5

**Results for 1 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
30 minute summer	1	18	139.070	0.020	1.4	0.0316	0.0000	OK
30 minute summer	2	18	138.304	0.028	3.1	0.0453	0.0000	OK
30 minute summer	3	18	137.356	0.025	3.1	0.0352	0.0000	OK
30 minute summer	4	18	134.753	0.103	18.1	0.3652	0.0000	OK
30 minute summer	5	18	134.368	0.124	29.0	0.2742	0.0000	OK
30 minute summer	6	18	134.248	0.126	30.2	0.1537	0.0000	OK
30 minute summer	7	18	134.094	0.079	35.2	0.1498	0.0000	OK
30 minute summer	8	18	133.309	0.072	41.4	0.1467	0.0000	OK
30 minute summer	9	18	130.574	0.087	55.6	0.2455	0.0000	OK
30 minute summer	10	18	128.554	0.107	64.0	0.2102	0.0000	OK
30 minute summer	11	18	126.580	0.107	75.7	0.2744	0.0000	OK
30 minute summer	12	18	125.607	0.090	81.0	0.1923	0.0000	OK
30 minute summer	13	19	124.303	0.228	85.8	0.4682	0.0000	OK
30 minute summer	14	19	124.199	0.249	100.1	0.6466	0.0000	OK
30 minute summer	15	19	124.070	0.229	102.2	0.4218	0.0000	OK
30 minute summer	16	19	123.952	0.162	114.1	0.3826	0.0000	OK
30 minute summer	17	19	122.827	0.131	116.6	0.2781	0.0000	OK
30 minute summer	18	19	122.328	0.132	115.8	0.2335	0.0000	OK
30 minute summer	19	19	121.732	0.123	122.9	0.3262	0.0000	OK
30 minute summer	20	19	120.471	0.124	125.5	0.2579	0.0000	OK
30 minute summer	21	36	118.008	0.108	154.5	65.5358	0.0000	OK
30 minute summer	22	18	118.395	0.722	132.9	1.8383	0.0000	OK
30 minute summer	23	18	118.399	0.840	135.6	3.3629	0.0000	SURCHARGED
30 minute summer	24	23	113.836	0.036	9.0	0.0514	0.0000	OK
30 minute summer	25	23	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
30 minute summer	1	1.000	2	1.4	0.796	0.036	0.0288	
30 minute summer	2	1.001	3	3.1	1.519	0.068	0.0299	
30 minute summer	3	1.002	5	3.1	1.663	0.056	0.0314	
30 minute summer	4	2.000	5	17.7	1.014	0.418	0.8679	
30 minute summer	5	1.003	6	28.8	1.039	0.318	0.5092	
30 minute summer	6	1.004	7	29.9	1.423	0.331	0.3429	
30 minute summer	7	1.005	8	35.0	2.537	0.133	0.1938	
30 minute summer	8	1.006	9	41.2	2.778	0.128	0.4928	
30 minute summer	9	1.007	10	55.3	3.014	0.180	0.4921	
30 minute summer	10	1.008	11	63.2	2.869	0.260	0.8796	
30 minute summer	11	1.009	12	75.5	3.259	0.150	0.3554	
30 minute summer	12	1.010	13	80.7	2.894	0.130	0.4513	
30 minute summer	13	1.011	14	86.0	1.007	0.463	3.1906	
30 minute summer	14	1.012	15	100.7	1.176	0.542	2.7928	
30 minute summer	15	1.013	16	101.9	1.543	0.548	1.0095	
30 minute summer	16	1.014	17	113.6	2.532	0.253	2.5571	
30 minute summer	17	1.015	18	115.8	3.002	0.140	0.2948	
30 minute summer	18	1.016	19	115.5	3.142	0.147	0.3685	
30 minute summer	19	1.017	20	122.6	3.470	0.146	0.6686	
30 minute summer	20	1.018	23	124.9	3.752	0.143	0.5919	
30 minute summer	21	3.000	22	-154.5	-0.841	-0.153	7.4200	
30 minute summer	22	3.001	23	-132.9	0.508	-0.132	4.2133	
30 minute summer	23	1.019	24	9.0	1.944	0.073	0.3177	
30 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
30 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 1 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
30 minute summer	26	23	105.582	0.036	9.0	0.0408	0.0000	OK
30 minute summer	27	23	103.819	0.037	9.0	0.0417	0.0000	OK
30 minute summer	28	24	99.371	0.071	9.0	0.1021	0.0000	OK
30 minute summer	S29	135	98.623	0.373	9.0	1.2921	0.0000	OK
30 minute summer	S30	135	98.623	0.473	8.4	1.2037	0.0000	SURCHARGED
30 minute summer	S31	135	97.543	0.053	8.1	0.1851	0.0000	OK
30 minute summer	S32	136	97.427	0.051	8.1	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
30 minute summer	26	1.022	27	9.0	2.161	0.054	0.0734	
30 minute summer	27	1.023	28	9.0	1.603	0.059	0.3922	
30 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0980	
30 minute summer	S29	1.025	S30	8.4	0.499	0.004	6.6088	
30 minute summer	S30	1.026	S31	8.1	0.981	0.422	0.0423	
30 minute summer	S31	1.027	S32	8.1	0.613	0.010	0.3491	82.5

**Results for 1 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
30 minute winter	1	18	139.069	0.019	1.3	0.0305	0.0000	OK
30 minute winter	2	18	138.302	0.026	2.8	0.0430	0.0000	OK
30 minute winter	3	18	137.354	0.023	2.8	0.0334	0.0000	OK
30 minute winter	4	18	134.748	0.098	16.4	0.3464	0.0000	OK
30 minute winter	5	18	134.362	0.118	26.4	0.2596	0.0000	OK
30 minute winter	6	18	134.242	0.120	27.6	0.1464	0.0000	OK
30 minute winter	7	18	134.090	0.075	32.2	0.1428	0.0000	OK
30 minute winter	8	18	133.306	0.069	37.9	0.1404	0.0000	OK
30 minute winter	9	18	130.570	0.083	50.7	0.2343	0.0000	OK
30 minute winter	10	18	128.549	0.102	58.5	0.2006	0.0000	OK
30 minute winter	11	18	126.575	0.102	69.4	0.2615	0.0000	OK
30 minute winter	12	18	125.603	0.087	74.3	0.1842	0.0000	OK
30 minute winter	13	19	124.291	0.216	78.7	0.4433	0.0000	OK
30 minute winter	14	19	124.186	0.236	92.0	0.6129	0.0000	OK
30 minute winter	15	19	124.060	0.219	93.8	0.4026	0.0000	OK
30 minute winter	16	19	123.945	0.155	105.0	0.3661	0.0000	OK
30 minute winter	17	19	122.821	0.125	107.6	0.2655	0.0000	OK
30 minute winter	18	19	122.322	0.126	107.2	0.2232	0.0000	OK
30 minute winter	19	19	121.727	0.118	114.0	0.3131	0.0000	OK
30 minute winter	20	19	120.466	0.119	116.5	0.2477	0.0000	OK
30 minute winter	21	36	118.025	0.125	137.9	75.9603	0.0000	OK
30 minute winter	22	17	118.347	0.674	123.0	1.7146	0.0000	OK
30 minute winter	23	17	118.349	0.790	126.3	3.1649	0.0000	SURCHARGED
30 minute winter	24	22	113.836	0.036	9.0	0.0514	0.0000	OK
30 minute winter	25	23	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
30 minute winter	1	1.000	2	1.3	0.788	0.033	0.0270	
30 minute winter	2	1.001	3	2.8	1.474	0.062	0.0278	
30 minute winter	3	1.002	5	2.8	1.616	0.051	0.0292	
30 minute winter	4	2.000	5	16.2	0.991	0.382	0.8112	
30 minute winter	5	1.003	6	26.3	1.014	0.290	0.4752	
30 minute winter	6	1.004	7	27.4	1.389	0.303	0.3211	
30 minute winter	7	1.005	8	32.1	2.478	0.122	0.1816	
30 minute winter	8	1.006	9	37.7	2.709	0.117	0.4622	
30 minute winter	9	1.007	10	50.6	2.953	0.164	0.4593	
30 minute winter	10	1.008	11	58.1	2.804	0.239	0.8266	
30 minute winter	11	1.009	12	69.3	3.190	0.138	0.3333	
30 minute winter	12	1.010	13	74.1	2.928	0.120	0.4111	
30 minute winter	13	1.011	14	78.8	0.988	0.424	2.9804	
30 minute winter	14	1.012	15	92.4	1.150	0.497	2.6214	
30 minute winter	15	1.013	16	93.6	1.504	0.504	0.9507	
30 minute winter	16	1.014	17	104.8	2.486	0.233	2.4027	
30 minute winter	17	1.015	18	107.2	2.961	0.129	0.2766	
30 minute winter	18	1.016	19	107.0	3.085	0.136	0.3468	
30 minute winter	19	1.017	20	113.8	3.412	0.136	0.6314	
30 minute winter	20	1.018	23	116.4	3.682	0.133	0.5609	
30 minute winter	21	3.000	22	-137.9	-0.818	-0.137	7.1137	
30 minute winter	22	3.001	23	-123.0	0.508	-0.122	4.1209	
30 minute winter	23	1.019	24	9.0	1.944	0.073	0.3177	
30 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
30 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 1 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
30 minute winter	26	23	105.582	0.036	9.0	0.0408	0.0000	OK
30 minute winter	27	23	103.819	0.037	9.0	0.0417	0.0000	OK
30 minute winter	28	24	99.371	0.071	9.0	0.1021	0.0000	OK
30 minute winter	S29	155	98.652	0.402	9.0	1.3920	0.0000	OK
30 minute winter	S30	155	98.652	0.502	8.5	1.2772	0.0000	SURCHARGED
30 minute winter	S31	155	97.544	0.054	8.2	0.1857	0.0000	OK
30 minute winter	S32	155	97.427	0.051	8.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
30 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
30 minute winter	27	1.023	28	9.0	1.730	0.059	0.3923	
30 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
30 minute winter	S29	1.025	S30	8.5	0.497	0.004	7.2728	
30 minute winter	S30	1.026	S31	8.2	0.983	0.425	0.0425	
30 minute winter	S31	1.027	S32	8.2	0.614	0.010	0.3508	92.8

**Results for 1 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
60 minute summer	1	34	139.067	0.017	1.1	0.0282	0.0000	OK
60 minute summer	2	33	138.300	0.024	2.4	0.0399	0.0000	OK
60 minute summer	3	33	137.353	0.022	2.4	0.0310	0.0000	OK
60 minute summer	4	33	134.740	0.090	14.0	0.3167	0.0000	OK
60 minute summer	5	33	134.351	0.107	22.5	0.2370	0.0000	OK
60 minute summer	6	34	134.232	0.110	23.5	0.1345	0.0000	OK
60 minute summer	7	34	134.084	0.069	27.5	0.1313	0.0000	OK
60 minute summer	8	33	133.301	0.064	32.4	0.1298	0.0000	OK
60 minute summer	9	33	130.564	0.077	43.4	0.2163	0.0000	OK
60 minute summer	10	33	128.541	0.094	50.0	0.1843	0.0000	OK
60 minute summer	11	33	126.567	0.094	59.3	0.2400	0.0000	OK
60 minute summer	12	33	125.596	0.080	63.5	0.1703	0.0000	OK
60 minute summer	13	34	124.271	0.196	67.2	0.4023	0.0000	OK
60 minute summer	14	34	124.165	0.215	78.8	0.5580	0.0000	OK
60 minute summer	15	34	124.042	0.201	80.2	0.3699	0.0000	OK
60 minute summer	16	34	123.933	0.143	89.7	0.3368	0.0000	OK
60 minute summer	17	34	122.810	0.114	91.8	0.2421	0.0000	OK
60 minute summer	18	35	122.312	0.116	91.5	0.2041	0.0000	OK
60 minute summer	19	34	121.718	0.109	97.2	0.2875	0.0000	OK
60 minute summer	20	35	120.457	0.109	99.4	0.2275	0.0000	OK
60 minute summer	21	64	118.029	0.129	103.8	78.4977	0.0000	OK
60 minute summer	22	33	118.167	0.494	100.0	1.2564	0.0000	OK
60 minute summer	23	33	118.171	0.612	107.7	2.4503	0.0000	SURCHARGED
60 minute summer	24	36	113.836	0.036	9.0	0.0514	0.0000	OK
60 minute summer	25	32	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
60 minute summer	1	1.000	2	1.1	0.756	0.028	0.0242	
60 minute summer	2	1.001	3	2.4	1.413	0.053	0.0250	
60 minute summer	3	1.002	5	2.4	1.544	0.044	0.0262	
60 minute summer	4	2.000	5	13.8	0.952	0.326	0.7210	
60 minute summer	5	1.003	6	22.4	0.974	0.247	0.4222	
60 minute summer	6	1.004	7	23.5	1.333	0.259	0.2860	
60 minute summer	7	1.005	8	27.5	2.379	0.104	0.1617	
60 minute summer	8	1.006	9	32.3	2.592	0.100	0.4131	
60 minute summer	9	1.007	10	43.2	2.852	0.141	0.4063	
60 minute summer	10	1.008	11	49.7	2.689	0.204	0.7368	
60 minute summer	11	1.009	12	59.2	3.061	0.118	0.2965	
60 minute summer	12	1.010	13	63.3	2.920	0.102	0.3451	
60 minute summer	13	1.011	14	67.4	0.956	0.363	2.6360	
60 minute summer	14	1.012	15	79.0	1.103	0.425	2.3368	
60 minute summer	15	1.013	16	79.9	1.439	0.430	0.8502	
60 minute summer	16	1.014	17	89.4	2.396	0.199	2.1286	
60 minute summer	17	1.015	18	91.5	2.875	0.110	0.2433	
60 minute summer	18	1.016	19	91.6	2.982	0.116	0.3065	
60 minute summer	19	1.017	20	97.3	3.291	0.116	0.5594	
60 minute summer	20	1.018	23	99.6	3.538	0.114	0.4997	
60 minute summer	21	3.000	22	-103.8	-0.729	-0.103	5.3955	
60 minute summer	22	3.001	23	-100.0	0.508	-0.099	3.1838	
60 minute summer	23	1.019	24	9.0	1.944	0.073	0.3178	
60 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
60 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 1 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
60 minute summer	26	32	105.582	0.036	9.0	0.0408	0.0000	OK
60 minute summer	27	32	103.819	0.037	9.0	0.0417	0.0000	OK
60 minute summer	28	37	99.371	0.071	9.0	0.1021	0.0000	OK
60 minute summer	S29	188	98.689	0.439	9.0	1.5199	0.0000	OK
60 minute summer	S30	188	98.689	0.539	8.5	1.3711	0.0000	SURCHARGED
60 minute summer	S31	188	97.544	0.054	8.2	0.1861	0.0000	OK
60 minute summer	S32	188	97.427	0.051	8.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
60 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
60 minute summer	27	1.023	28	9.0	1.475	0.059	0.3924	
60 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0981	
60 minute summer	S29	1.025	S30	8.5	0.515	0.004	8.1365	
60 minute summer	S30	1.026	S31	8.2	0.984	0.427	0.0427	
60 minute summer	S31	1.027	S32	8.2	0.615	0.010	0.3523	108.9

**Results for 1 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 99.96%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
60 minute winter	1	34	139.066	0.016	0.9	0.0257	0.0000	OK
60 minute winter	2	33	138.298	0.022	1.9	0.0355	0.0000	OK
60 minute winter	3	34	137.350	0.019	1.9	0.0278	0.0000	OK
60 minute winter	4	33	134.730	0.080	11.3	0.2827	0.0000	OK
60 minute winter	5	33	134.340	0.095	18.2	0.2109	0.0000	OK
60 minute winter	6	34	134.221	0.099	19.1	0.1209	0.0000	OK
60 minute winter	7	34	134.077	0.062	22.4	0.1180	0.0000	OK
60 minute winter	8	34	133.295	0.058	26.3	0.1174	0.0000	OK
60 minute winter	9	33	130.556	0.069	35.3	0.1952	0.0000	OK
60 minute winter	10	34	128.532	0.085	40.7	0.1657	0.0000	OK
60 minute winter	11	33	126.557	0.084	48.5	0.2154	0.0000	OK
60 minute winter	12	33	125.589	0.073	52.0	0.1544	0.0000	OK
60 minute winter	13	34	124.249	0.174	55.1	0.3570	0.0000	OK
60 minute winter	14	34	124.142	0.191	64.6	0.4966	0.0000	OK
60 minute winter	15	34	124.022	0.181	65.7	0.3331	0.0000	OK
60 minute winter	16	34	123.919	0.129	73.8	0.3043	0.0000	OK
60 minute winter	17	35	122.799	0.102	75.7	0.2172	0.0000	OK
60 minute winter	18	35	122.300	0.104	75.7	0.1834	0.0000	OK
60 minute winter	19	35	121.707	0.098	80.5	0.2601	0.0000	OK
60 minute winter	20	35	120.446	0.099	82.5	0.2055	0.0000	OK
60 minute winter	21	64	118.051	0.151	82.3	92.3477	0.0000	OK
60 minute winter	22	27	118.120	0.447	81.1	1.1376	0.0000	OK
60 minute winter	23	27	118.122	0.563	89.6	2.2528	0.0000	SURCHARGED
60 minute winter	24	28	113.836	0.036	9.0	0.0514	0.0000	OK
60 minute winter	25	28	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
60 minute winter	1	1.000	2	0.9	0.713	0.023	0.0207	
60 minute winter	2	1.001	3	1.9	1.320	0.042	0.0211	
60 minute winter	3	1.002	5	1.9	1.442	0.035	0.0223	
60 minute winter	4	2.000	5	11.2	0.901	0.265	0.6199	
60 minute winter	5	1.003	6	18.2	0.922	0.201	0.3623	
60 minute winter	6	1.004	7	19.1	1.259	0.211	0.2466	
60 minute winter	7	1.005	8	22.4	2.251	0.085	0.1395	
60 minute winter	8	1.006	9	26.3	2.438	0.082	0.3574	
60 minute winter	9	1.007	10	35.2	2.726	0.115	0.3469	
60 minute winter	10	1.008	11	40.7	2.546	0.167	0.6372	
60 minute winter	11	1.009	12	48.5	2.905	0.096	0.2558	
60 minute winter	12	1.010	13	51.9	2.915	0.084	0.2747	
60 minute winter	13	1.011	14	55.1	0.913	0.297	2.2566	
60 minute winter	14	1.012	15	64.7	1.045	0.348	2.0201	
60 minute winter	15	1.013	16	65.6	1.358	0.353	0.7394	
60 minute winter	16	1.014	17	73.7	2.288	0.164	1.8379	
60 minute winter	17	1.015	18	75.7	2.769	0.091	0.2089	
60 minute winter	18	1.016	19	75.7	2.854	0.096	0.2647	
60 minute winter	19	1.017	20	80.6	3.146	0.096	0.4850	
60 minute winter	20	1.018	23	82.6	3.369	0.094	0.4349	
60 minute winter	21	3.000	22	-82.3	-0.641	-0.082	4.8394	
60 minute winter	22	3.001	23	-81.1	0.508	-0.080	2.8613	
60 minute winter	23	1.019	24	9.0	1.943	0.073	0.3176	
60 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
60 minute winter	25	1.021	26	9.0	2.210	0.054	0.1908	

**Results for 1 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 99.96%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
60 minute winter	26	28	105.582	0.036	9.0	0.0408	0.0000	OK
60 minute winter	27	29	103.819	0.037	9.0	0.0417	0.0000	OK
60 minute winter	28	29	99.371	0.071	9.0	0.1021	0.0000	OK
60 minute winter	S29	214	98.725	0.475	9.0	1.6467	0.0000	OK
60 minute winter	S30	214	98.725	0.575	8.5	1.4643	0.0000	SURCHARGED
60 minute winter	S31	215	97.544	0.054	8.3	0.1863	0.0000	OK
60 minute winter	S32	215	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
60 minute winter	26	1.022	27	9.0	2.160	0.054	0.0734	
60 minute winter	27	1.023	28	9.0	1.494	0.059	0.3922	
60 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0980	
60 minute winter	S29	1.025	S30	8.5	0.506	0.004	9.0049	
60 minute winter	S30	1.026	S31	8.3	0.985	0.428	0.0427	
60 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3531	121.9

**Results for 1 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.97%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
120 minute summer	1	64	139.065	0.015	0.8	0.0242	0.0000	OK
120 minute summer	2	64	138.297	0.020	1.7	0.0337	0.0000	OK
120 minute summer	3	64	137.349	0.018	1.7	0.0263	0.0000	OK
120 minute summer	4	64	134.723	0.073	9.5	0.2580	0.0000	OK
120 minute summer	5	64	134.331	0.087	15.5	0.1927	0.0000	OK
120 minute summer	6	64	134.213	0.091	16.2	0.1112	0.0000	OK
120 minute summer	7	64	134.072	0.057	19.0	0.1084	0.0000	OK
120 minute summer	8	64	133.290	0.053	22.4	0.1086	0.0000	OK
120 minute summer	9	64	130.551	0.064	30.0	0.1801	0.0000	OK
120 minute summer	10	64	128.525	0.078	34.6	0.1520	0.0000	OK
120 minute summer	11	64	126.550	0.077	41.1	0.1967	0.0000	OK
120 minute summer	12	64	125.584	0.068	43.9	0.1443	0.0000	OK
120 minute summer	13	64	124.233	0.158	46.6	0.3239	0.0000	OK
120 minute summer	14	64	124.123	0.173	54.6	0.4496	0.0000	OK
120 minute summer	15	64	124.006	0.165	55.1	0.3034	0.0000	OK
120 minute summer	16	64	123.908	0.118	61.7	0.2773	0.0000	OK
120 minute summer	17	66	122.789	0.093	63.1	0.1964	0.0000	OK
120 minute summer	18	66	122.290	0.094	63.3	0.1662	0.0000	OK
120 minute summer	19	66	121.699	0.089	67.3	0.2369	0.0000	OK
120 minute summer	20	66	120.437	0.090	68.9	0.1868	0.0000	OK
120 minute summer	21	108	118.039	0.139	66.9	84.6517	0.0000	OK
120 minute summer	22	66	118.076	0.402	66.1	1.0243	0.0000	OK
120 minute summer	23	66	118.079	0.520	74.8	2.0813	0.0000	SURCHARGED
120 minute summer	24	66	113.836	0.036	9.0	0.0513	0.0000	OK
120 minute summer	25	66	110.273	0.036	9.0	0.0404	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
120 minute summer	1	1.000	2	0.8	0.687	0.021	0.0191	
120 minute summer	2	1.001	3	1.7	1.277	0.037	0.0195	
120 minute summer	3	1.002	5	1.7	1.394	0.031	0.0206	
120 minute summer	4	2.000	5	9.5	0.859	0.223	0.5474	
120 minute summer	5	1.003	6	15.4	0.883	0.171	0.3212	
120 minute summer	6	1.004	7	16.2	1.204	0.179	0.2192	
120 minute summer	7	1.005	8	19.0	2.147	0.072	0.1239	
120 minute summer	8	1.006	9	22.4	2.321	0.069	0.3190	
120 minute summer	9	1.007	10	30.0	2.631	0.097	0.3055	
120 minute summer	10	1.008	11	34.5	2.430	0.142	0.5656	
120 minute summer	11	1.009	12	41.0	2.760	0.082	0.2280	
120 minute summer	12	1.010	13	43.9	2.893	0.071	0.2276	
120 minute summer	13	1.011	14	46.5	0.878	0.250	1.9769	
120 minute summer	14	1.012	15	54.2	0.996	0.291	1.7749	
120 minute summer	15	1.013	16	54.7	1.292	0.295	0.6509	
120 minute summer	16	1.014	17	61.5	2.190	0.137	1.6037	
120 minute summer	17	1.015	18	63.3	2.669	0.076	0.1814	
120 minute summer	18	1.016	19	63.4	2.740	0.081	0.2308	
120 minute summer	19	1.017	20	67.4	3.011	0.080	0.4238	
120 minute summer	20	1.018	23	69.0	3.212	0.079	0.3815	
120 minute summer	21	3.000	22	-66.9	-0.568	-0.066	4.5720	
120 minute summer	22	3.001	23	-66.1	0.508	-0.066	2.5557	
120 minute summer	23	1.019	24	9.0	1.941	0.073	0.3169	
120 minute summer	24	1.020	25	9.0	2.215	0.054	0.1442	
120 minute summer	25	1.021	26	9.0	2.208	0.054	0.1904	

**Results for 1 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.97%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
120 minute summer	26	66	105.582	0.036	9.0	0.0407	0.0000	OK
120 minute summer	27	66	103.819	0.037	9.0	0.0417	0.0000	OK
120 minute summer	28	66	99.371	0.071	9.0	0.1019	0.0000	OK
120 minute summer	S29	258	98.749	0.499	9.0	1.7297	0.0000	OK
120 minute summer	S30	258	98.749	0.599	8.5	1.5253	0.0000	SURCHARGED
120 minute summer	S31	258	97.544	0.054	8.3	0.1864	0.0000	OK
120 minute summer	S32	258	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
120 minute summer	26	1.022	27	9.0	2.159	0.054	0.0733	
120 minute summer	27	1.023	28	9.0	1.226	0.058	0.3913	
120 minute summer	28	1.024	S29	9.0	0.870	0.194	0.0978	
120 minute summer	S29	1.025	S30	8.5	0.462	0.004	9.5787	
120 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
120 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3533	141.6

**Results for 1 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 99.96%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
120 minute winter	1	66	139.063	0.013	0.6	0.0212	0.0000	OK
120 minute winter	2	62	138.294	0.018	1.3	0.0296	0.0000	OK
120 minute winter	3	64	137.347	0.016	1.3	0.0232	0.0000	OK
120 minute winter	4	64	134.714	0.064	7.3	0.2249	0.0000	OK
120 minute winter	5	64	134.320	0.076	11.9	0.1674	0.0000	OK
120 minute winter	6	64	134.202	0.080	12.5	0.0974	0.0000	OK
120 minute winter	7	64	134.065	0.050	14.7	0.0950	0.0000	OK
120 minute winter	8	64	133.284	0.047	17.3	0.0957	0.0000	OK
120 minute winter	9	64	130.543	0.056	23.1	0.1587	0.0000	OK
120 minute winter	10	64	128.515	0.068	26.6	0.1329	0.0000	OK
120 minute winter	11	64	126.540	0.067	31.7	0.1710	0.0000	OK
120 minute winter	12	64	125.578	0.061	33.9	0.1307	0.0000	OK
120 minute winter	13	64	124.212	0.137	36.0	0.2801	0.0000	OK
120 minute winter	14	64	124.101	0.151	42.2	0.3910	0.0000	OK
120 minute winter	15	64	123.986	0.145	42.8	0.2672	0.0000	OK
120 minute winter	16	66	123.894	0.104	48.2	0.2449	0.0000	OK
120 minute winter	17	66	122.777	0.081	49.5	0.1717	0.0000	OK
120 minute winter	18	66	122.278	0.082	49.5	0.1455	0.0000	OK
120 minute winter	19	66	121.688	0.079	52.7	0.2090	0.0000	OK
120 minute winter	20	66	120.426	0.079	54.0	0.1646	0.0000	OK
120 minute winter	21	120	118.065	0.165	49.6	101.3288	0.0000	OK
120 minute winter	22	116	118.065	0.392	49.8	0.9971	0.0000	OK
120 minute winter	23	116	118.065	0.506	58.7	2.0251	0.0000	SURCHARGED
120 minute winter	24	118	113.836	0.036	8.9	0.0513	0.0000	OK
120 minute winter	25	118	110.273	0.036	8.9	0.0404	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
120 minute winter	1	1.000	2	0.6	0.626	0.015	0.0157	
120 minute winter	2	1.001	3	1.3	1.179	0.029	0.0162	
120 minute winter	3	1.002	5	1.3	1.287	0.024	0.0171	
120 minute winter	4	2.000	5	7.3	0.800	0.172	0.4532	
120 minute winter	5	1.003	6	11.9	0.823	0.131	0.2651	
120 minute winter	6	1.004	7	12.5	1.119	0.138	0.1817	
120 minute winter	7	1.005	8	14.7	1.999	0.056	0.1028	
120 minute winter	8	1.006	9	17.3	2.150	0.054	0.2659	
120 minute winter	9	1.007	10	23.1	2.481	0.075	0.2494	
120 minute winter	10	1.008	11	26.6	2.260	0.109	0.4686	
120 minute winter	11	1.009	12	31.7	2.533	0.063	0.1915	
120 minute winter	12	1.010	13	33.9	2.909	0.055	0.1694	
120 minute winter	13	1.011	14	35.9	0.825	0.193	1.6271	
120 minute winter	14	1.012	15	42.1	0.930	0.227	1.4793	
120 minute winter	15	1.013	16	42.8	1.199	0.230	0.5465	
120 minute winter	16	1.014	17	48.2	2.057	0.107	1.3368	
120 minute winter	17	1.015	18	49.5	2.528	0.060	0.1496	
120 minute winter	18	1.016	19	49.5	2.577	0.063	0.1916	
120 minute winter	19	1.017	20	52.7	2.825	0.063	0.3533	
120 minute winter	20	1.018	23	54.0	3.004	0.062	0.3193	
120 minute winter	21	3.000	22	-49.6	0.525	-0.049	5.1710	
120 minute winter	22	3.001	23	-49.8	0.503	-0.049	2.4683	
120 minute winter	23	1.019	24	8.9	1.940	0.073	0.3165	
120 minute winter	24	1.020	25	8.9	2.213	0.054	0.1440	
120 minute winter	25	1.021	26	8.9	2.207	0.054	0.1902	

**Results for 1 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 99.96%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
120 minute winter	26	118	105.582	0.036	8.9	0.0407	0.0000	OK
120 minute winter	27	118	103.819	0.037	8.9	0.0416	0.0000	OK
120 minute winter	28	120	99.371	0.071	8.9	0.1018	0.0000	OK
120 minute winter	S29	290	98.808	0.558	8.9	1.9320	0.0000	OK
120 minute winter	S30	290	98.808	0.658	8.6	1.6739	0.0000	SURCHARGED
120 minute winter	S31	230	97.544	0.054	8.3	0.1864	0.0000	OK
120 minute winter	S32	230	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
120 minute winter	26	1.022	27	8.9	2.157	0.054	0.0732	
120 minute winter	27	1.023	28	8.9	1.286	0.058	0.3908	
120 minute winter	28	1.024	S29	8.9	0.870	0.194	0.0977	
120 minute winter	S29	1.025	S30	8.6	0.502	0.004	10.9871	
120 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
120 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	157.4

**Results for 1 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 99.98%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
180 minute summer	1	96	139.063	0.013	0.6	0.0212	0.0000	OK
180 minute summer	2	96	138.294	0.018	1.3	0.0296	0.0000	OK
180 minute summer	3	96	137.347	0.016	1.3	0.0232	0.0000	OK
180 minute summer	4	96	134.714	0.064	7.3	0.2250	0.0000	OK
180 minute summer	5	96	134.320	0.076	11.9	0.1674	0.0000	OK
180 minute summer	6	96	134.202	0.080	12.5	0.0974	0.0000	OK
180 minute summer	7	96	134.065	0.050	14.6	0.0947	0.0000	OK
180 minute summer	8	96	133.284	0.047	17.2	0.0954	0.0000	OK
180 minute summer	9	96	130.543	0.056	23.0	0.1584	0.0000	OK
180 minute summer	10	96	128.515	0.068	26.5	0.1327	0.0000	OK
180 minute summer	11	96	126.540	0.067	31.6	0.1707	0.0000	OK
180 minute summer	12	96	125.578	0.061	33.8	0.1307	0.0000	OK
180 minute summer	13	96	124.211	0.136	35.8	0.2794	0.0000	OK
180 minute summer	14	96	124.100	0.150	42.0	0.3898	0.0000	OK
180 minute summer	15	96	123.986	0.145	42.6	0.2666	0.0000	OK
180 minute summer	16	96	123.894	0.104	48.0	0.2445	0.0000	OK
180 minute summer	17	96	122.777	0.081	49.2	0.1712	0.0000	OK
180 minute summer	18	96	122.278	0.082	49.2	0.1450	0.0000	OK
180 minute summer	19	96	121.688	0.079	52.5	0.2085	0.0000	OK
180 minute summer	20	96	120.426	0.079	53.8	0.1641	0.0000	OK
180 minute summer	21	144	118.041	0.141	49.2	85.8971	0.0000	OK
180 minute summer	22	148	118.041	0.368	49.5	0.9355	0.0000	OK
180 minute summer	23	96	118.042	0.483	58.5	1.9334	0.0000	SURCHARGED
180 minute summer	24	96	113.836	0.036	8.9	0.0512	0.0000	OK
180 minute summer	25	96	110.273	0.036	8.9	0.0403	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
180 minute summer	1	1.000	2	0.6	0.626	0.015	0.0157	
180 minute summer	2	1.001	3	1.3	1.179	0.029	0.0162	
180 minute summer	3	1.002	5	1.3	1.287	0.024	0.0171	
180 minute summer	4	2.000	5	7.3	0.800	0.172	0.4533	
180 minute summer	5	1.003	6	11.9	0.823	0.131	0.2653	
180 minute summer	6	1.004	7	12.5	1.121	0.138	0.1815	
180 minute summer	7	1.005	8	14.6	1.995	0.055	0.1024	
180 minute summer	8	1.006	9	17.2	2.146	0.053	0.2650	
180 minute summer	9	1.007	10	23.0	2.478	0.075	0.2488	
180 minute summer	10	1.008	11	26.5	2.259	0.109	0.4676	
180 minute summer	11	1.009	12	31.6	2.530	0.063	0.1913	
180 minute summer	12	1.010	13	33.8	2.909	0.055	0.1687	
180 minute summer	13	1.011	14	35.8	0.825	0.192	1.6208	
180 minute summer	14	1.012	15	41.9	0.928	0.226	1.4740	
180 minute summer	15	1.013	16	42.6	1.197	0.229	0.5451	
180 minute summer	16	1.014	17	47.9	2.055	0.107	1.3324	
180 minute summer	17	1.015	18	49.2	2.525	0.059	0.1489	
180 minute summer	18	1.016	19	49.2	2.572	0.062	0.1908	
180 minute summer	19	1.017	20	52.5	2.822	0.063	0.3519	
180 minute summer	20	1.018	23	53.7	2.998	0.061	0.3179	
180 minute summer	21	3.000	22	-49.2	0.525	-0.049	4.6163	
180 minute summer	22	3.001	23	-49.5	0.508	-0.049	2.2956	
180 minute summer	23	1.019	24	8.9	1.938	0.073	0.3157	
180 minute summer	24	1.020	25	8.9	2.211	0.054	0.1437	
180 minute summer	25	1.021	26	8.9	2.205	0.054	0.1896	

**Results for 1 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 99.98%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
180 minute summer	26	96	105.582	0.036	8.9	0.0406	0.0000	OK
180 minute summer	27	144	103.819	0.037	8.9	0.0415	0.0000	OK
180 minute summer	28	100	99.371	0.071	8.9	0.1016	0.0000	OK
180 minute summer	S29	312	98.788	0.538	8.9	1.8650	0.0000	OK
180 minute summer	S30	312	98.788	0.638	8.5	1.6247	0.0000	SURCHARGED
180 minute summer	S31	272	97.544	0.054	8.3	0.1864	0.0000	OK
180 minute summer	S32	328	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
180 minute summer	26	1.022	27	8.9	2.155	0.054	0.0730	
180 minute summer	27	1.023	28	8.9	1.225	0.058	0.3897	
180 minute summer	28	1.024	S29	8.9	0.869	0.193	0.0974	
180 minute summer	S29	1.025	S30	8.5	0.325	0.004	10.5197	
180 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
180 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	164.7

**Results for 1 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 99.93%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
180 minute winter	1	88	139.061	0.011	0.4	0.0176	0.0000	OK
180 minute winter	2	92	138.291	0.015	0.9	0.0248	0.0000	OK
180 minute winter	3	88	137.345	0.014	0.9	0.0194	0.0000	OK
180 minute winter	4	96	134.706	0.056	5.6	0.1964	0.0000	OK
180 minute winter	5	96	134.309	0.065	9.0	0.1445	0.0000	OK
180 minute winter	6	96	134.191	0.069	9.4	0.0845	0.0000	OK
180 minute winter	7	96	134.058	0.043	11.0	0.0820	0.0000	OK
180 minute winter	8	96	133.278	0.041	13.0	0.0834	0.0000	OK
180 minute winter	9	96	130.536	0.049	17.5	0.1390	0.0000	OK
180 minute winter	10	96	128.506	0.059	20.2	0.1157	0.0000	OK
180 minute winter	11	96	126.531	0.058	24.1	0.1485	0.0000	OK
180 minute winter	12	96	125.570	0.054	25.8	0.1148	0.0000	OK
180 minute winter	13	96	124.193	0.118	27.4	0.2415	0.0000	OK
180 minute winter	14	96	124.080	0.130	32.2	0.3379	0.0000	OK
180 minute winter	15	96	123.968	0.127	32.7	0.2334	0.0000	OK
180 minute winter	16	96	123.881	0.091	36.9	0.2144	0.0000	OK
180 minute winter	17	96	122.766	0.070	37.9	0.1487	0.0000	OK
180 minute winter	18	96	122.267	0.071	37.9	0.1262	0.0000	OK
180 minute winter	19	96	121.678	0.069	40.3	0.1824	0.0000	OK
180 minute winter	20	96	120.416	0.069	41.3	0.1433	0.0000	OK
180 minute winter	21	152	118.066	0.166	35.5	101.9020	0.0000	OK
180 minute winter	22	152	118.066	0.393	36.0	0.9996	0.0000	OK
180 minute winter	23	152	118.066	0.507	45.0	2.0290	0.0000	SURCHARGED
180 minute winter	24	172	113.836	0.036	8.9	0.0513	0.0000	OK
180 minute winter	25	172	110.273	0.036	8.9	0.0404	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
180 minute winter	1	1.000	2	0.4	0.570	0.010	0.0120	
180 minute winter	2	1.001	3	0.9	1.057	0.020	0.0125	
180 minute winter	3	1.002	5	0.9	1.155	0.016	0.0132	
180 minute winter	4	2.000	5	5.6	0.742	0.132	0.3749	
180 minute winter	5	1.003	6	9.0	0.765	0.099	0.2161	
180 minute winter	6	1.004	7	9.4	1.035	0.104	0.1481	
180 minute winter	7	1.005	8	11.0	1.840	0.042	0.0837	
180 minute winter	8	1.006	9	13.0	1.966	0.040	0.2188	
180 minute winter	9	1.007	10	17.5	2.331	0.057	0.2013	
180 minute winter	10	1.008	11	20.2	2.091	0.083	0.3852	
180 minute winter	11	1.009	12	24.1	2.347	0.048	0.1573	
180 minute winter	12	1.010	13	25.8	2.735	0.042	0.1359	
180 minute winter	13	1.011	14	27.4	0.772	0.147	1.3259	
180 minute winter	14	1.012	15	32.2	0.863	0.173	1.2165	
180 minute winter	15	1.013	16	32.7	1.107	0.176	0.4525	
180 minute winter	16	1.014	17	36.9	1.920	0.082	1.0970	
180 minute winter	17	1.015	18	37.9	2.380	0.046	0.1216	
180 minute winter	18	1.016	19	37.8	2.412	0.048	0.1565	
180 minute winter	19	1.017	20	40.3	2.638	0.048	0.2895	
180 minute winter	20	1.018	23	41.3	2.792	0.047	0.2627	
180 minute winter	21	3.000	22	-35.5	0.526	-0.035	5.1935	
180 minute winter	22	3.001	23	-36.0	0.508	-0.036	2.4752	
180 minute winter	23	1.019	24	8.9	1.941	0.073	0.3165	
180 minute winter	24	1.020	25	8.9	2.214	0.054	0.1441	
180 minute winter	25	1.021	26	8.9	2.207	0.054	0.1902	

**Results for 1 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 99.93%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
180 minute winter	26	172	105.582	0.036	8.9	0.0407	0.0000	OK
180 minute winter	27	172	103.819	0.037	8.9	0.0416	0.0000	OK
180 minute winter	28	172	99.371	0.071	8.9	0.1018	0.0000	OK
180 minute winter	S29	348	98.838	0.588	8.9	2.0381	0.0000	OK
180 minute winter	S30	348	98.838	0.688	8.6	1.7519	0.0000	SURCHARGED
180 minute winter	S31	260	97.544	0.054	8.3	0.1864	0.0000	OK
180 minute winter	S32	264	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
180 minute winter	26	1.022	27	8.9	2.157	0.054	0.0732	
180 minute winter	27	1.023	28	8.9	1.226	0.058	0.3908	
180 minute winter	28	1.024	S29	8.9	0.870	0.194	0.0977	
180 minute winter	S29	1.025	S30	8.6	0.505	0.004	11.7282	
180 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
180 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	183.4

**Results for 1 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
240 minute summer	1	128	139.062	0.012	0.5	0.0194	0.0000	OK
240 minute summer	2	124	138.293	0.017	1.1	0.0273	0.0000	OK
240 minute summer	3	124	137.346	0.015	1.1	0.0212	0.0000	OK
240 minute summer	4	124	134.709	0.059	6.3	0.2069	0.0000	OK
240 minute summer	5	124	134.313	0.069	10.1	0.1531	0.0000	OK
240 minute summer	6	124	134.195	0.073	10.5	0.0893	0.0000	OK
240 minute summer	7	124	134.061	0.046	12.3	0.0867	0.0000	OK
240 minute summer	8	124	133.280	0.043	14.4	0.0876	0.0000	OK
240 minute summer	9	124	130.539	0.052	19.4	0.1460	0.0000	OK
240 minute summer	10	124	128.509	0.062	22.4	0.1215	0.0000	OK
240 minute summer	11	124	126.534	0.061	26.6	0.1562	0.0000	OK
240 minute summer	12	124	125.573	0.057	28.5	0.1207	0.0000	OK
240 minute summer	13	124	124.199	0.124	30.2	0.2545	0.0000	OK
240 minute summer	14	124	124.087	0.137	35.5	0.3547	0.0000	OK
240 minute summer	15	124	123.973	0.132	35.7	0.2435	0.0000	OK
240 minute summer	16	128	123.885	0.095	40.2	0.2233	0.0000	OK
240 minute summer	17	128	122.770	0.073	41.2	0.1557	0.0000	OK
240 minute summer	18	128	122.271	0.075	41.3	0.1321	0.0000	OK
240 minute summer	19	128	121.681	0.072	44.0	0.1907	0.0000	OK
240 minute summer	20	128	120.419	0.072	45.1	0.1499	0.0000	OK
240 minute summer	21	180	118.040	0.140	40.1	85.4602	0.0000	OK
240 minute summer	22	180	118.040	0.367	40.1	0.9336	0.0000	OK
240 minute summer	23	176	118.040	0.481	49.0	1.9251	0.0000	SURCHARGED
240 minute summer	24	176	113.836	0.036	8.9	0.0512	0.0000	OK
240 minute summer	25	176	110.273	0.036	8.9	0.0403	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
240 minute summer	1	1.000	2	0.5	0.610	0.013	0.0139	
240 minute summer	2	1.001	3	1.1	1.121	0.024	0.0143	
240 minute summer	3	1.002	5	1.1	1.217	0.020	0.0150	
240 minute summer	4	2.000	5	6.2	0.763	0.146	0.4031	
240 minute summer	5	1.003	6	10.0	0.786	0.111	0.2341	
240 minute summer	6	1.004	7	10.5	1.066	0.116	0.1601	
240 minute summer	7	1.005	8	12.2	1.900	0.047	0.0902	
240 minute summer	8	1.006	9	14.4	2.029	0.045	0.2351	
240 minute summer	9	1.007	10	19.4	2.387	0.063	0.2174	
240 minute summer	10	1.008	11	22.2	2.148	0.091	0.4127	
240 minute summer	11	1.009	12	26.6	2.409	0.053	0.1692	
240 minute summer	12	1.010	13	28.4	2.811	0.046	0.1458	
240 minute summer	13	1.011	14	30.1	0.790	0.162	1.4223	
240 minute summer	14	1.012	15	35.1	0.884	0.189	1.2961	
240 minute summer	15	1.013	16	35.6	1.138	0.192	0.4800	
240 minute summer	16	1.014	17	40.1	1.962	0.089	1.1674	
240 minute summer	17	1.015	18	41.3	2.427	0.050	0.1301	
240 minute summer	18	1.016	19	41.3	2.465	0.053	0.1673	
240 minute summer	19	1.017	20	44.1	2.699	0.053	0.3092	
240 minute summer	20	1.018	23	45.2	2.862	0.052	0.2802	
240 minute summer	21	3.000	22	-40.1	0.523	-0.040	4.5998	
240 minute summer	22	3.001	23	-40.1	0.508	-0.040	2.2899	
240 minute summer	23	1.019	24	8.9	1.938	0.073	0.3156	
240 minute summer	24	1.020	25	8.9	2.211	0.054	0.1436	
240 minute summer	25	1.021	26	8.9	2.205	0.054	0.1896	

**Results for 1 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
240 minute summer	26	180	105.582	0.036	8.9	0.0406	0.0000	OK
240 minute summer	27	184	103.819	0.037	8.9	0.0415	0.0000	OK
240 minute summer	28	184	99.371	0.071	8.9	0.1016	0.0000	OK
240 minute summer	S29	356	98.814	0.564	8.9	1.9532	0.0000	OK
240 minute summer	S30	356	98.814	0.664	8.6	1.6895	0.0000	SURCHARGED
240 minute summer	S31	292	97.544	0.054	8.3	0.1864	0.0000	OK
240 minute summer	S32	292	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
240 minute summer	26	1.022	27	8.9	2.155	0.054	0.0730	
240 minute summer	27	1.023	28	8.9	1.224	0.058	0.3896	
240 minute summer	28	1.024	S29	8.9	0.869	0.193	0.0974	
240 minute summer	S29	1.025	S30	8.6	0.423	0.004	11.1352	
240 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
240 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	183.6

**Results for 1 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 99.98%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
240 minute winter	1	124	139.061	0.011	0.4	0.0176	0.0000	OK
240 minute winter	2	120	138.290	0.014	0.8	0.0235	0.0000	OK
240 minute winter	3	128	137.344	0.013	0.8	0.0184	0.0000	OK
240 minute winter	4	124	134.701	0.051	4.7	0.1792	0.0000	OK
240 minute winter	5	124	134.304	0.060	7.6	0.1320	0.0000	OK
240 minute winter	6	124	134.186	0.064	8.0	0.0778	0.0000	OK
240 minute winter	7	128	134.055	0.040	9.4	0.0758	0.0000	OK
240 minute winter	8	124	133.275	0.038	11.0	0.0772	0.0000	OK
240 minute winter	9	124	130.532	0.045	14.7	0.1280	0.0000	OK
240 minute winter	10	124	128.501	0.054	17.0	0.1062	0.0000	OK
240 minute winter	11	124	126.526	0.053	20.3	0.1363	0.0000	OK
240 minute winter	12	124	125.566	0.050	21.7	0.1053	0.0000	OK
240 minute winter	13	124	124.182	0.107	23.0	0.2199	0.0000	OK
240 minute winter	14	124	124.068	0.118	26.9	0.3072	0.0000	OK
240 minute winter	15	128	123.957	0.116	27.3	0.2135	0.0000	OK
240 minute winter	16	128	123.873	0.083	30.7	0.1962	0.0000	OK
240 minute winter	17	128	122.760	0.064	31.6	0.1351	0.0000	OK
240 minute winter	18	128	122.261	0.065	31.6	0.1147	0.0000	OK
240 minute winter	19	128	121.672	0.063	33.7	0.1666	0.0000	OK
240 minute winter	20	128	120.410	0.063	34.5	0.1307	0.0000	OK
240 minute winter	21	196	118.064	0.164	28.0	100.7348	0.0000	OK
240 minute winter	22	188	118.064	0.391	28.5	0.9947	0.0000	OK
240 minute winter	23	188	118.064	0.505	37.5	2.0214	0.0000	SURCHARGED
240 minute winter	24	196	113.836	0.036	8.9	0.0513	0.0000	OK
240 minute winter	25	196	110.273	0.036	8.9	0.0404	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
240 minute winter	1	1.000	2	0.4	0.572	0.010	0.0114	
240 minute winter	2	1.001	3	0.8	1.022	0.018	0.0115	
240 minute winter	3	1.002	5	0.8	1.114	0.015	0.0121	
240 minute winter	4	2.000	5	4.7	0.705	0.110	0.3293	
240 minute winter	5	1.003	6	7.6	0.727	0.084	0.1910	
240 minute winter	6	1.004	7	8.0	0.986	0.088	0.1316	
240 minute winter	7	1.005	8	9.3	1.761	0.036	0.0745	
240 minute winter	8	1.006	9	11.0	1.876	0.034	0.1946	
240 minute winter	9	1.007	10	14.7	2.239	0.048	0.1763	
240 minute winter	10	1.008	11	17.0	1.988	0.070	0.3411	
240 minute winter	11	1.009	12	20.3	2.241	0.040	0.1387	
240 minute winter	12	1.010	13	21.7	2.604	0.035	0.1200	
240 minute winter	13	1.011	14	22.9	0.739	0.123	1.1606	
240 minute winter	14	1.012	15	26.9	0.821	0.145	1.0690	
240 minute winter	15	1.013	16	27.3	1.051	0.147	0.3990	
240 minute winter	16	1.014	17	30.8	1.830	0.068	0.9613	
240 minute winter	17	1.015	18	31.6	2.279	0.038	0.1059	
240 minute winter	18	1.016	19	31.6	2.301	0.040	0.1369	
240 minute winter	19	1.017	20	33.7	2.513	0.040	0.2539	
240 minute winter	20	1.018	23	34.5	2.653	0.039	0.2308	
240 minute winter	21	3.000	22	-28.0	0.523	-0.028	5.1500	
240 minute winter	22	3.001	23	-28.5	0.508	-0.028	2.4616	
240 minute winter	23	1.019	24	8.9	1.940	0.073	0.3165	
240 minute winter	24	1.020	25	8.9	2.213	0.054	0.1440	
240 minute winter	25	1.021	26	8.9	2.207	0.054	0.1901	

**Results for 1 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 99.98%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
240 minute winter	26	196	105.582	0.036	8.9	0.0407	0.0000	OK
240 minute winter	27	196	103.819	0.037	8.9	0.0416	0.0000	OK
240 minute winter	28	196	99.371	0.071	8.9	0.1018	0.0000	OK
240 minute winter	S29	396	98.888	0.638	8.9	2.2109	0.0000	OK
240 minute winter	S30	396	98.888	0.738	8.6	1.8789	0.0000	SURCHARGED
240 minute winter	S31	272	97.544	0.054	8.3	0.1864	0.0000	OK
240 minute winter	S32	272	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
240 minute winter	26	1.022	27	8.9	2.157	0.054	0.0732	
240 minute winter	27	1.023	28	8.9	1.226	0.058	0.3907	
240 minute winter	28	1.024	S29	8.9	0.870	0.194	0.0977	
240 minute winter	S29	1.025	S30	8.6	0.357	0.004	12.9330	
240 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
240 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	204.5

**Results for 1 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
360 minute summer	1	184	139.061	0.011	0.4	0.0174	0.0000	OK
360 minute summer	2	184	138.291	0.015	0.9	0.0246	0.0000	OK
360 minute summer	3	184	137.344	0.013	0.9	0.0192	0.0000	OK
360 minute summer	4	184	134.702	0.052	4.9	0.1820	0.0000	OK
360 minute summer	5	184	134.305	0.061	7.9	0.1347	0.0000	OK
360 minute summer	6	184	134.187	0.065	8.2	0.0790	0.0000	OK
360 minute summer	7	184	134.055	0.040	9.6	0.0766	0.0000	OK
360 minute summer	8	184	133.275	0.038	11.3	0.0778	0.0000	OK
360 minute summer	9	184	130.533	0.046	15.1	0.1294	0.0000	OK
360 minute summer	10	184	128.502	0.055	17.4	0.1073	0.0000	OK
360 minute summer	11	184	126.527	0.054	20.7	0.1377	0.0000	OK
360 minute summer	12	184	125.566	0.050	22.2	0.1064	0.0000	OK
360 minute summer	13	184	124.184	0.109	23.6	0.2225	0.0000	OK
360 minute summer	14	184	124.070	0.120	27.6	0.3101	0.0000	OK
360 minute summer	15	184	123.958	0.117	27.8	0.2148	0.0000	OK
360 minute summer	16	184	123.874	0.084	31.2	0.1971	0.0000	OK
360 minute summer	17	184	122.760	0.064	31.9	0.1356	0.0000	OK
360 minute summer	18	184	122.261	0.065	31.8	0.1150	0.0000	OK
360 minute summer	19	184	121.672	0.063	33.9	0.1671	0.0000	OK
360 minute summer	20	184	120.410	0.063	34.8	0.1311	0.0000	OK
360 minute summer	21	248	118.034	0.134	28.1	81.8459	0.0000	OK
360 minute summer	22	248	118.034	0.361	28.7	0.9191	0.0000	OK
360 minute summer	23	248	118.034	0.475	37.9	1.9024	0.0000	SURCHARGED
360 minute summer	24	248	113.836	0.036	8.9	0.0512	0.0000	OK
360 minute summer	25	248	110.273	0.036	8.9	0.0403	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
360 minute summer	1	1.000	2	0.4	0.544	0.010	0.0119	
360 minute summer	2	1.001	3	0.9	1.054	0.019	0.0123	
360 minute summer	3	1.002	5	0.9	1.145	0.016	0.0129	
360 minute summer	4	2.000	5	4.8	0.710	0.114	0.3365	
360 minute summer	5	1.003	6	7.8	0.735	0.087	0.1959	
360 minute summer	6	1.004	7	8.2	0.995	0.090	0.1343	
360 minute summer	7	1.005	8	9.6	1.771	0.036	0.0756	
360 minute summer	8	1.006	9	11.2	1.880	0.035	0.1973	
360 minute summer	9	1.007	10	15.0	2.253	0.049	0.1790	
360 minute summer	10	1.008	11	17.3	1.999	0.071	0.3461	
360 minute summer	11	1.009	12	20.7	2.252	0.041	0.1409	
360 minute summer	12	1.010	13	22.2	2.620	0.036	0.1219	
360 minute summer	13	1.011	14	23.4	0.742	0.126	1.1779	
360 minute summer	14	1.012	15	27.3	0.824	0.147	1.0807	
360 minute summer	15	1.013	16	27.6	1.052	0.148	0.4021	
360 minute summer	16	1.014	17	31.0	1.833	0.069	0.9674	
360 minute summer	17	1.015	18	31.8	2.282	0.038	0.1064	
360 minute summer	18	1.016	19	31.7	2.302	0.040	0.1374	
360 minute summer	19	1.017	20	33.9	2.515	0.040	0.2548	
360 minute summer	20	1.018	23	34.7	2.655	0.040	0.2316	
360 minute summer	21	3.000	22	-28.1	0.522	-0.028	4.4706	
360 minute summer	22	3.001	23	-28.7	0.508	-0.029	2.2491	
360 minute summer	23	1.019	24	8.9	1.937	0.073	0.3153	
360 minute summer	24	1.020	25	8.9	2.210	0.054	0.1435	
360 minute summer	25	1.021	26	8.9	2.204	0.054	0.1895	

**Results for 1 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
360 minute summer	26	248	105.582	0.036	8.9	0.0406	0.0000	OK
360 minute summer	27	248	103.819	0.037	8.9	0.0415	0.0000	OK
360 minute summer	28	248	99.371	0.071	8.9	0.1015	0.0000	OK
360 minute summer	S29	440	98.843	0.593	8.9	2.0541	0.0000	OK
360 minute summer	S30	440	98.843	0.693	8.6	1.7637	0.0000	SURCHARGED
360 minute summer	S31	352	97.544	0.054	8.3	0.1864	0.0000	OK
360 minute summer	S32	352	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
360 minute summer	26	1.022	27	8.9	2.154	0.054	0.0729	
360 minute summer	27	1.023	28	8.9	1.224	0.058	0.3893	
360 minute summer	28	1.024	S29	8.9	0.869	0.193	0.0973	
360 minute summer	S29	1.025	S30	8.6	0.472	0.004	11.8403	
360 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
360 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	209.2

**Results for 1 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
360 minute winter	1	184	139.060	0.010	0.3	0.0154	0.0000	OK
360 minute winter	2	176	138.289	0.012	0.6	0.0205	0.0000	OK
360 minute winter	3	184	137.342	0.011	0.6	0.0161	0.0000	OK
360 minute winter	4	184	134.694	0.044	3.6	0.1569	0.0000	OK
360 minute winter	5	184	134.296	0.052	5.8	0.1152	0.0000	OK
360 minute winter	6	184	134.178	0.056	6.1	0.0682	0.0000	OK
360 minute winter	7	184	134.050	0.035	7.1	0.0660	0.0000	OK
360 minute winter	8	184	133.270	0.033	8.4	0.0678	0.0000	OK
360 minute winter	9	184	130.527	0.040	11.2	0.1118	0.0000	OK
360 minute winter	10	184	128.494	0.047	12.9	0.0925	0.0000	OK
360 minute winter	11	184	126.519	0.046	15.4	0.1187	0.0000	OK
360 minute winter	12	184	125.559	0.043	16.4	0.0918	0.0000	OK
360 minute winter	13	184	124.168	0.093	17.4	0.1902	0.0000	OK
360 minute winter	14	184	124.053	0.103	20.5	0.2666	0.0000	OK
360 minute winter	15	184	123.942	0.101	20.8	0.1866	0.0000	OK
360 minute winter	16	184	123.863	0.073	23.4	0.1714	0.0000	OK
360 minute winter	17	184	122.751	0.055	24.1	0.1173	0.0000	OK
360 minute winter	18	184	122.253	0.056	24.0	0.0998	0.0000	OK
360 minute winter	19	184	121.664	0.055	25.6	0.1456	0.0000	OK
360 minute winter	20	184	120.402	0.055	26.2	0.1140	0.0000	OK
360 minute winter	21	272	118.054	0.154	19.1	94.5380	0.0000	OK
360 minute winter	22	272	118.054	0.381	21.4	0.9703	0.0000	OK
360 minute winter	23	272	118.054	0.495	28.5	1.9829	0.0000	SURCHARGED
360 minute winter	24	272	113.836	0.036	8.9	0.0512	0.0000	OK
360 minute winter	25	272	110.273	0.036	8.9	0.0403	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
360 minute winter	1	1.000	2	0.3	0.523	0.008	0.0094	
360 minute winter	2	1.001	3	0.6	0.935	0.013	0.0094	
360 minute winter	3	1.002	5	0.6	1.017	0.011	0.0100	
360 minute winter	4	2.000	5	3.6	0.653	0.085	0.2727	
360 minute winter	5	1.003	6	5.8	0.674	0.064	0.1576	
360 minute winter	6	1.004	7	6.1	0.914	0.067	0.1086	
360 minute winter	7	1.005	8	7.1	1.619	0.027	0.0612	
360 minute winter	8	1.006	9	8.4	1.726	0.026	0.1600	
360 minute winter	9	1.007	10	11.2	2.065	0.036	0.1449	
360 minute winter	10	1.008	11	12.9	1.835	0.053	0.2793	
360 minute winter	11	1.009	12	15.3	2.072	0.031	0.1134	
360 minute winter	12	1.010	13	16.4	2.403	0.027	0.0986	
360 minute winter	13	1.011	14	17.4	0.688	0.094	0.9473	
360 minute winter	14	1.012	15	20.5	0.761	0.110	0.8789	
360 minute winter	15	1.013	16	20.8	0.968	0.112	0.3291	
360 minute winter	16	1.014	17	23.4	1.696	0.052	0.7874	
360 minute winter	17	1.015	18	24.0	2.130	0.029	0.0862	
360 minute winter	18	1.016	19	24.0	2.140	0.031	0.1120	
360 minute winter	19	1.017	20	25.6	2.331	0.031	0.2081	
360 minute winter	20	1.018	23	26.2	2.451	0.030	0.1898	
360 minute winter	21	3.000	22	21.4	0.519	0.021	4.9280	
360 minute winter	22	3.001	23	-19.5	0.508	-0.019	2.3932	
360 minute winter	23	1.019	24	8.9	1.940	0.073	0.3161	
360 minute winter	24	1.020	25	8.9	2.212	0.054	0.1439	
360 minute winter	25	1.021	26	8.9	2.206	0.054	0.1899	

**Results for 1 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
360 minute winter	26	272	105.582	0.036	8.9	0.0407	0.0000	OK
360 minute winter	27	272	103.819	0.037	8.9	0.0416	0.0000	OK
360 minute winter	28	272	99.371	0.071	8.9	0.1017	0.0000	OK
360 minute winter	S29	480	98.933	0.683	8.9	2.3664	0.0000	OK
360 minute winter	S30	480	98.933	0.783	8.6	1.9931	0.0000	SURCHARGED
360 minute winter	S31	328	97.544	0.054	8.3	0.1864	0.0000	OK
360 minute winter	S32	328	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
360 minute winter	26	1.022	27	8.9	2.156	0.054	0.0731	
360 minute winter	27	1.023	28	8.9	1.225	0.058	0.3903	
360 minute winter	28	1.024	S29	8.9	0.869	0.194	0.0976	
360 minute winter	S29	1.025	S30	8.6	0.353	0.004	14.0078	
360 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
360 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	236.6

**Results for 1 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.93%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
480 minute summer	1	248	139.060	0.010	0.3	0.0154	0.0000	OK
480 minute summer	2	248	138.289	0.013	0.7	0.0221	0.0000	OK
480 minute summer	3	248	137.343	0.012	0.7	0.0173	0.0000	OK
480 minute summer	4	248	134.696	0.046	3.9	0.1636	0.0000	OK
480 minute summer	5	248	134.299	0.055	6.4	0.1212	0.0000	OK
480 minute summer	6	248	134.180	0.058	6.7	0.0715	0.0000	OK
480 minute summer	7	248	134.052	0.037	7.9	0.0697	0.0000	OK
480 minute summer	8	248	133.272	0.035	9.3	0.0712	0.0000	OK
480 minute summer	9	248	130.529	0.042	12.4	0.1176	0.0000	OK
480 minute summer	10	248	128.497	0.050	14.3	0.0974	0.0000	OK
480 minute summer	11	248	126.522	0.049	17.0	0.1248	0.0000	OK
480 minute summer	12	248	125.561	0.045	18.2	0.0965	0.0000	OK
480 minute summer	13	248	124.173	0.098	19.3	0.2006	0.0000	OK
480 minute summer	14	248	124.058	0.108	22.7	0.2812	0.0000	OK
480 minute summer	15	248	123.948	0.107	23.1	0.1966	0.0000	OK
480 minute summer	16	248	123.867	0.077	26.0	0.1807	0.0000	OK
480 minute summer	17	248	122.755	0.058	26.7	0.1239	0.0000	OK
480 minute summer	18	248	122.256	0.060	26.7	0.1053	0.0000	OK
480 minute summer	19	248	121.667	0.058	28.5	0.1534	0.0000	OK
480 minute summer	20	248	120.405	0.058	29.2	0.1203	0.0000	OK
480 minute summer	21	320	118.027	0.127	22.5	77.2050	0.0000	OK
480 minute summer	22	320	118.027	0.354	22.8	0.9004	0.0000	OK
480 minute summer	23	320	118.027	0.468	31.8	1.8730	0.0000	SURCHARGED
480 minute summer	24	320	113.836	0.036	8.9	0.0511	0.0000	OK
480 minute summer	25	312	110.273	0.036	8.9	0.0402	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
480 minute summer	1	1.000	2	0.3	0.522	0.008	0.0100	
480 minute summer	2	1.001	3	0.7	0.982	0.015	0.0105	
480 minute summer	3	1.002	5	0.7	1.067	0.013	0.0111	
480 minute summer	4	2.000	5	3.9	0.669	0.092	0.2896	
480 minute summer	5	1.003	6	6.4	0.694	0.071	0.1691	
480 minute summer	6	1.004	7	6.7	0.937	0.074	0.1166	
480 minute summer	7	1.005	8	7.9	1.673	0.030	0.0661	
480 minute summer	8	1.006	9	9.3	1.784	0.029	0.1724	
480 minute summer	9	1.007	10	12.4	2.129	0.040	0.1562	
480 minute summer	10	1.008	11	14.3	1.891	0.059	0.3016	
480 minute summer	11	1.009	12	17.0	2.133	0.034	0.1220	
480 minute summer	12	1.010	13	18.2	2.474	0.029	0.1060	
480 minute summer	13	1.011	14	19.3	0.706	0.104	1.0213	
480 minute summer	14	1.012	15	22.7	0.782	0.122	0.9469	
480 minute summer	15	1.013	16	23.1	0.998	0.124	0.3547	
480 minute summer	16	1.014	17	26.0	1.748	0.058	0.8507	
480 minute summer	17	1.015	18	26.7	2.188	0.032	0.0932	
480 minute summer	18	1.016	19	26.7	2.202	0.034	0.1209	
480 minute summer	19	1.017	20	28.5	2.401	0.034	0.2247	
480 minute summer	20	1.018	23	29.2	2.529	0.033	0.2048	
480 minute summer	21	3.000	22	-22.5	0.507	-0.022	4.3066	
480 minute summer	22	3.001	23	-22.8	0.508	-0.023	2.1965	
480 minute summer	23	1.019	24	8.9	1.937	0.073	0.3150	
480 minute summer	24	1.020	25	8.9	2.209	0.054	0.1434	
480 minute summer	25	1.021	26	8.9	2.203	0.054	0.1892	

**Results for 1 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.93%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
480 minute summer	26	312	105.582	0.036	8.9	0.0406	0.0000	OK
480 minute summer	27	320	103.819	0.037	8.9	0.0415	0.0000	OK
480 minute summer	28	320	99.371	0.071	8.9	0.1015	0.0000	OK
480 minute summer	S29	512	98.861	0.611	8.9	2.1173	0.0000	OK
480 minute summer	S30	512	98.861	0.711	8.5	1.8101	0.0000	SURCHARGED
480 minute summer	S31	408	97.544	0.054	8.3	0.1864	0.0000	OK
480 minute summer	S32	408	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
480 minute summer	26	1.022	27	8.9	2.153	0.054	0.0728	
480 minute summer	27	1.023	28	8.9	1.224	0.058	0.3888	
480 minute summer	28	1.024	S29	8.9	0.868	0.193	0.0972	
480 minute summer	S29	1.025	S30	8.5	0.423	0.004	12.2813	
480 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
480 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	231.4

**Results for 1 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 99.92%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
480 minute winter	1	208	139.058	0.008	0.2	0.0127	0.0000	OK
480 minute winter	2	240	138.287	0.011	0.5	0.0188	0.0000	OK
480 minute winter	3	240	137.341	0.010	0.5	0.0148	0.0000	OK
480 minute winter	4	248	134.690	0.040	2.9	0.1414	0.0000	OK
480 minute winter	5	248	134.291	0.047	4.7	0.1037	0.0000	OK
480 minute winter	6	248	134.172	0.050	4.9	0.0614	0.0000	OK
480 minute winter	7	248	134.047	0.032	5.8	0.0600	0.0000	OK
480 minute winter	8	248	133.267	0.030	6.8	0.0613	0.0000	OK
480 minute winter	9	248	130.523	0.036	9.1	0.1013	0.0000	OK
480 minute winter	10	248	128.490	0.043	10.5	0.0837	0.0000	OK
480 minute winter	11	248	126.515	0.042	12.5	0.1076	0.0000	OK
480 minute winter	12	248	125.555	0.039	13.4	0.0830	0.0000	OK
480 minute winter	13	248	124.159	0.083	14.2	0.1712	0.0000	OK
480 minute winter	14	248	124.042	0.092	16.7	0.2398	0.0000	OK
480 minute winter	15	248	123.933	0.092	17.0	0.1692	0.0000	OK
480 minute winter	16	248	123.856	0.066	19.2	0.1559	0.0000	OK
480 minute winter	17	248	122.746	0.050	19.7	0.1062	0.0000	OK
480 minute winter	18	248	122.247	0.051	19.7	0.0903	0.0000	OK
480 minute winter	19	248	121.659	0.050	21.0	0.1323	0.0000	OK
480 minute winter	20	248	120.397	0.050	21.5	0.1036	0.0000	OK
480 minute winter	21	344	118.041	0.141	14.1	86.4056	0.0000	OK
480 minute winter	22	344	118.041	0.368	22.5	0.9375	0.0000	OK
480 minute winter	23	344	118.041	0.482	23.4	1.9314	0.0000	SURCHARGED
480 minute winter	24	344	113.836	0.036	8.9	0.0512	0.0000	OK
480 minute winter	25	344	110.273	0.036	8.9	0.0403	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
480 minute winter	1	1.000	2	0.2	0.462	0.005	0.0078	
480 minute winter	2	1.001	3	0.5	0.884	0.011	0.0083	
480 minute winter	3	1.002	5	0.5	0.962	0.009	0.0088	
480 minute winter	4	2.000	5	2.9	0.614	0.068	0.2349	
480 minute winter	5	1.003	6	4.7	0.637	0.052	0.1353	
480 minute winter	6	1.004	7	4.9	0.854	0.054	0.0936	
480 minute winter	7	1.005	8	5.8	1.530	0.022	0.0530	
480 minute winter	8	1.006	9	6.8	1.630	0.021	0.1385	
480 minute winter	9	1.007	10	9.1	1.942	0.030	0.1257	
480 minute winter	10	1.008	11	10.5	1.728	0.043	0.2423	
480 minute winter	11	1.009	12	12.5	1.959	0.025	0.0979	
480 minute winter	12	1.010	13	13.4	2.265	0.022	0.0853	
480 minute winter	13	1.011	14	14.2	0.652	0.076	0.8145	
480 minute winter	14	1.012	15	16.7	0.717	0.090	0.7602	
480 minute winter	15	1.013	16	17.0	0.911	0.091	0.2865	
480 minute winter	16	1.014	17	19.2	1.608	0.043	0.6828	
480 minute winter	17	1.015	18	19.7	2.025	0.024	0.0743	
480 minute winter	18	1.016	19	19.7	2.029	0.025	0.0968	
480 minute winter	19	1.017	20	21.0	2.206	0.025	0.1802	
480 minute winter	20	1.018	23	21.5	2.316	0.025	0.1648	
480 minute winter	21	3.000	22	22.5	0.522	0.022	4.6344	
480 minute winter	22	3.001	23	-14.5	0.508	-0.014	2.3010	
480 minute winter	23	1.019	24	8.9	1.938	0.073	0.3157	
480 minute winter	24	1.020	25	8.9	2.211	0.054	0.1437	
480 minute winter	25	1.021	26	8.9	2.205	0.054	0.1897	

**Results for 1 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 99.92%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
480 minute winter	26	344	105.582	0.036	8.9	0.0406	0.0000	OK
480 minute winter	27	344	103.819	0.037	8.9	0.0416	0.0000	OK
480 minute winter	28	344	99.371	0.071	8.9	0.1016	0.0000	OK
480 minute winter	S29	552	98.954	0.704	8.9	2.4372	0.0000	OK
480 minute winter	S30	552	98.954	0.804	8.6	2.0451	0.0000	SURCHARGED
480 minute winter	S31	384	97.544	0.054	8.3	0.1864	0.0000	OK
480 minute winter	S32	384	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
480 minute winter	26	1.022	27	8.9	2.155	0.054	0.0730	
480 minute winter	27	1.023	28	8.9	1.225	0.058	0.3897	
480 minute winter	28	1.024	S29	8.9	0.869	0.193	0.0974	
480 minute winter	S29	1.025	S30	8.6	0.371	0.004	14.4924	
480 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
480 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	259.4

**Results for 1 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.95%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
600 minute summer	1	315	139.060	0.010	0.3	0.0154	0.0000	OK
600 minute summer	2	315	138.289	0.012	0.6	0.0205	0.0000	OK
600 minute summer	3	315	137.342	0.011	0.6	0.0161	0.0000	OK
600 minute summer	4	315	134.693	0.043	3.3	0.1506	0.0000	OK
600 minute summer	5	315	134.294	0.050	5.4	0.1112	0.0000	OK
600 minute summer	6	315	134.176	0.054	5.7	0.0661	0.0000	OK
600 minute summer	7	315	134.049	0.034	6.7	0.0644	0.0000	OK
600 minute summer	8	315	133.269	0.032	7.9	0.0659	0.0000	OK
600 minute summer	9	315	130.525	0.038	10.5	0.1085	0.0000	OK
600 minute summer	10	315	128.493	0.046	12.1	0.0898	0.0000	OK
600 minute summer	11	315	126.518	0.045	14.4	0.1151	0.0000	OK
600 minute summer	12	315	125.558	0.042	15.4	0.0890	0.0000	OK
600 minute summer	13	315	124.165	0.090	16.3	0.1838	0.0000	OK
600 minute summer	14	315	124.049	0.099	19.1	0.2570	0.0000	OK
600 minute summer	15	315	123.939	0.098	19.4	0.1804	0.0000	OK
600 minute summer	16	315	123.860	0.070	21.8	0.1658	0.0000	OK
600 minute summer	17	315	122.749	0.053	22.4	0.1132	0.0000	OK
600 minute summer	18	315	122.251	0.054	22.4	0.0963	0.0000	OK
600 minute summer	19	315	121.662	0.053	23.9	0.1407	0.0000	OK
600 minute summer	20	315	120.400	0.053	24.5	0.1103	0.0000	OK
600 minute summer	21	390	118.019	0.119	17.3	72.3320	0.0000	OK
600 minute summer	22	390	118.019	0.346	17.7	0.8806	0.0000	OK
600 minute summer	23	390	118.019	0.460	26.6	1.8418	0.0000	SURCHARGED
600 minute summer	24	390	113.836	0.036	8.9	0.0511	0.0000	OK
600 minute summer	25	390	110.273	0.036	8.9	0.0402	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
600 minute summer	1	1.000	2	0.3	0.523	0.008	0.0094	
600 minute summer	2	1.001	3	0.6	0.935	0.013	0.0094	
600 minute summer	3	1.002	5	0.6	1.017	0.011	0.0100	
600 minute summer	4	2.000	5	3.3	0.637	0.078	0.2574	
600 minute summer	5	1.003	6	5.4	0.660	0.060	0.1502	
600 minute summer	6	1.004	7	5.7	0.894	0.063	0.1040	
600 minute summer	7	1.005	8	6.7	1.596	0.025	0.0588	
600 minute summer	8	1.006	9	7.9	1.701	0.024	0.1535	
600 minute summer	9	1.007	10	10.5	2.027	0.034	0.1389	
600 minute summer	10	1.008	11	12.1	1.803	0.050	0.2676	
600 minute summer	11	1.009	12	14.4	2.036	0.029	0.1083	
600 minute summer	12	1.010	13	15.4	2.360	0.025	0.0941	
600 minute summer	13	1.011	14	16.3	0.677	0.088	0.8999	
600 minute summer	14	1.012	15	19.1	0.746	0.103	0.8357	
600 minute summer	15	1.013	16	19.4	0.949	0.104	0.3135	
600 minute summer	16	1.014	17	21.8	1.666	0.049	0.7485	
600 minute summer	17	1.015	18	22.4	2.092	0.027	0.0818	
600 minute summer	18	1.016	19	22.4	2.100	0.028	0.1064	
600 minute summer	19	1.017	20	23.9	2.285	0.029	0.1980	
600 minute summer	20	1.018	23	24.5	2.404	0.028	0.1809	
600 minute summer	21	3.000	22	-17.3	0.459	-0.017	4.1346	
600 minute summer	22	3.001	23	-17.7	0.503	-0.018	2.1406	
600 minute summer	23	1.019	24	8.9	1.936	0.072	0.3146	
600 minute summer	24	1.020	25	8.9	2.208	0.054	0.1432	
600 minute summer	25	1.021	26	8.9	2.202	0.054	0.1890	

**Results for 1 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.95%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
600 minute summer	26	390	105.582	0.036	8.9	0.0405	0.0000	OK
600 minute summer	27	390	103.819	0.037	8.9	0.0415	0.0000	OK
600 minute summer	28	390	99.371	0.071	8.9	0.1014	0.0000	OK
600 minute summer	S29	585	98.869	0.619	8.9	2.1425	0.0000	OK
600 minute summer	S30	585	98.869	0.718	8.5	1.8286	0.0000	SURCHARGED
600 minute summer	S31	465	97.544	0.054	8.3	0.1864	0.0000	OK
600 minute summer	S32	465	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
600 minute summer	26	1.022	27	8.9	2.152	0.054	0.0727	
600 minute summer	27	1.023	28	8.9	1.223	0.058	0.3883	
600 minute summer	28	1.024	S29	8.9	0.868	0.192	0.0971	
600 minute summer	S29	1.025	S30	8.5	0.367	0.004	12.4566	
600 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
600 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	249.2

**Results for 1 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 99.86%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
600 minute winter	1	270	139.058	0.008	0.2	0.0127	0.0000	OK
600 minute winter	2	270	138.286	0.010	0.4	0.0170	0.0000	OK
600 minute winter	3	270	137.340	0.009	0.4	0.0133	0.0000	OK
600 minute winter	4	315	134.687	0.037	2.5	0.1314	0.0000	OK
600 minute winter	5	315	134.287	0.043	4.0	0.0956	0.0000	OK
600 minute winter	6	315	134.169	0.047	4.2	0.0570	0.0000	OK
600 minute winter	7	315	134.044	0.029	4.9	0.0552	0.0000	OK
600 minute winter	8	315	133.265	0.028	5.8	0.0569	0.0000	OK
600 minute winter	9	315	130.520	0.033	7.8	0.0942	0.0000	OK
600 minute winter	10	315	128.487	0.040	9.0	0.0777	0.0000	OK
600 minute winter	11	315	126.512	0.039	10.7	0.0996	0.0000	OK
600 minute winter	12	315	125.552	0.036	11.5	0.0770	0.0000	OK
600 minute winter	13	315	124.152	0.077	12.2	0.1586	0.0000	OK
600 minute winter	14	315	124.035	0.085	14.3	0.2216	0.0000	OK
600 minute winter	15	315	123.926	0.085	14.5	0.1567	0.0000	OK
600 minute winter	16	315	123.851	0.061	16.3	0.1440	0.0000	OK
600 minute winter	17	315	122.742	0.046	16.8	0.0978	0.0000	OK
600 minute winter	18	315	122.243	0.047	16.8	0.0834	0.0000	OK
600 minute winter	19	315	121.655	0.046	17.9	0.1223	0.0000	OK
600 minute winter	20	315	120.393	0.046	18.3	0.0955	0.0000	OK
600 minute winter	21	420	118.027	0.127	10.8	77.0500	0.0000	OK
600 minute winter	22	420	118.027	0.354	11.0	0.8998	0.0000	OK
600 minute winter	23	420	118.027	0.468	19.9	1.8720	0.0000	SURCHARGED
600 minute winter	24	420	113.836	0.036	8.9	0.0511	0.0000	OK
600 minute winter	25	420	110.273	0.036	8.9	0.0402	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
600 minute winter	1	1.000	2	0.2	0.462	0.005	0.0071	
600 minute winter	2	1.001	3	0.4	0.829	0.009	0.0071	
600 minute winter	3	1.002	5	0.4	0.898	0.007	0.0075	
600 minute winter	4	2.000	5	2.5	0.588	0.059	0.2115	
600 minute winter	5	1.003	6	4.0	0.607	0.044	0.1209	
600 minute winter	6	1.004	7	4.2	0.820	0.046	0.0836	
600 minute winter	7	1.005	8	4.9	1.454	0.019	0.0472	
600 minute winter	8	1.006	9	5.8	1.545	0.018	0.1240	
600 minute winter	9	1.007	10	7.8	1.856	0.025	0.1127	
600 minute winter	10	1.008	11	9.0	1.652	0.037	0.2173	
600 minute winter	11	1.009	12	10.7	1.871	0.021	0.0876	
600 minute winter	12	1.010	13	11.5	2.167	0.019	0.0764	
600 minute winter	13	1.011	14	12.2	0.627	0.066	0.7282	
600 minute winter	14	1.012	15	14.3	0.686	0.077	0.6799	
600 minute winter	15	1.013	16	14.5	0.869	0.078	0.2561	
600 minute winter	16	1.014	17	16.3	1.535	0.036	0.6076	
600 minute winter	17	1.015	18	16.8	1.943	0.020	0.0661	
600 minute winter	18	1.016	19	16.8	1.942	0.021	0.0862	
600 minute winter	19	1.017	20	17.9	2.109	0.021	0.1606	
600 minute winter	20	1.018	23	18.3	2.209	0.021	0.1470	
600 minute winter	21	3.000	22	11.0	0.506	0.011	4.3014	
600 minute winter	22	3.001	23	-11.0	0.505	-0.011	2.1948	
600 minute winter	23	1.019	24	8.9	1.936	0.073	0.3150	
600 minute winter	24	1.020	25	8.9	2.209	0.054	0.1434	
600 minute winter	25	1.021	26	8.9	2.203	0.054	0.1892	

**Results for 1 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 99.86%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
600 minute winter	26	420	105.582	0.036	8.9	0.0405	0.0000	OK
600 minute winter	27	420	103.819	0.037	8.9	0.0415	0.0000	OK
600 minute winter	28	420	99.371	0.071	8.9	0.1015	0.0000	OK
600 minute winter	S29	630	98.961	0.711	8.9	2.4633	0.0000	OK
600 minute winter	S30	630	98.961	0.811	8.6	2.0643	0.0000	SURCHARGED
600 minute winter	S31	450	97.544	0.054	8.3	0.1864	0.0000	OK
600 minute winter	S32	450	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
600 minute winter	26	1.022	27	8.9	2.153	0.054	0.0728	
600 minute winter	27	1.023	28	8.9	1.224	0.058	0.3888	
600 minute winter	28	1.024	S29	8.9	0.868	0.193	0.0972	
600 minute winter	S29	1.025	S30	8.6	0.365	0.004	14.6707	
600 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
600 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	280.1

**Results for 1 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 99.89%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
720 minute summer	1	345	139.058	0.008	0.2	0.0127	0.0000	OK
720 minute summer	2	375	138.287	0.011	0.5	0.0188	0.0000	OK
720 minute summer	3	375	137.341	0.010	0.5	0.0148	0.0000	OK
720 minute summer	4	375	134.690	0.040	2.9	0.1414	0.0000	OK
720 minute summer	5	375	134.291	0.047	4.7	0.1037	0.0000	OK
720 minute summer	6	375	134.172	0.050	4.9	0.0614	0.0000	OK
720 minute summer	7	375	134.047	0.032	5.8	0.0600	0.0000	OK
720 minute summer	8	375	133.267	0.030	6.8	0.0613	0.0000	OK
720 minute summer	9	375	130.523	0.036	9.1	0.1013	0.0000	OK
720 minute summer	10	375	128.490	0.043	10.5	0.0837	0.0000	OK
720 minute summer	11	375	126.515	0.042	12.5	0.1076	0.0000	OK
720 minute summer	12	375	125.555	0.039	13.4	0.0830	0.0000	OK
720 minute summer	13	375	124.159	0.083	14.2	0.1712	0.0000	OK
720 minute summer	14	375	124.042	0.092	16.7	0.2398	0.0000	OK
720 minute summer	15	375	123.933	0.092	17.0	0.1693	0.0000	OK
720 minute summer	16	375	123.856	0.066	19.2	0.1559	0.0000	OK
720 minute summer	17	375	122.746	0.050	19.7	0.1062	0.0000	OK
720 minute summer	18	375	122.247	0.051	19.7	0.0903	0.0000	OK
720 minute summer	19	375	121.659	0.050	21.0	0.1323	0.0000	OK
720 minute summer	20	375	120.397	0.050	21.5	0.1036	0.0000	OK
720 minute summer	21	450	118.010	0.110	14.2	66.7742	0.0000	OK
720 minute summer	22	450	118.010	0.337	14.5	0.8579	0.0000	OK
720 minute summer	23	450	118.010	0.451	23.4	1.8061	0.0000	SURCHARGED
720 minute summer	24	450	113.836	0.036	8.9	0.0510	0.0000	OK
720 minute summer	25	450	110.273	0.036	8.9	0.0402	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
720 minute summer	1	1.000	2	0.2	0.462	0.005	0.0078	
720 minute summer	2	1.001	3	0.5	0.884	0.011	0.0083	
720 minute summer	3	1.002	5	0.5	0.962	0.009	0.0088	
720 minute summer	4	2.000	5	2.9	0.614	0.068	0.2349	
720 minute summer	5	1.003	6	4.7	0.637	0.052	0.1353	
720 minute summer	6	1.004	7	4.9	0.854	0.054	0.0936	
720 minute summer	7	1.005	8	5.8	1.530	0.022	0.0531	
720 minute summer	8	1.006	9	6.8	1.630	0.021	0.1385	
720 minute summer	9	1.007	10	9.1	1.942	0.030	0.1257	
720 minute summer	10	1.008	11	10.5	1.728	0.043	0.2423	
720 minute summer	11	1.009	12	12.5	1.959	0.025	0.0979	
720 minute summer	12	1.010	13	13.4	2.265	0.022	0.0853	
720 minute summer	13	1.011	14	14.2	0.652	0.076	0.8145	
720 minute summer	14	1.012	15	16.7	0.717	0.090	0.7602	
720 minute summer	15	1.013	16	17.0	0.911	0.091	0.2865	
720 minute summer	16	1.014	17	19.2	1.608	0.043	0.6828	
720 minute summer	17	1.015	18	19.7	2.025	0.024	0.0744	
720 minute summer	18	1.016	19	19.7	2.029	0.025	0.0968	
720 minute summer	19	1.017	20	21.0	2.206	0.025	0.1802	
720 minute summer	20	1.018	23	21.5	2.317	0.025	0.1648	
720 minute summer	21	3.000	22	-14.2	0.442	-0.014	3.9410	
720 minute summer	22	3.001	23	-14.5	0.472	-0.014	2.0768	
720 minute summer	23	1.019	24	8.9	1.934	0.072	0.3141	
720 minute summer	24	1.020	25	8.9	2.207	0.054	0.1430	
720 minute summer	25	1.021	26	8.9	2.201	0.054	0.1887	

**Results for 1 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 99.89%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
720 minute summer	26	450	105.582	0.036	8.9	0.0405	0.0000	OK
720 minute summer	27	450	103.819	0.037	8.9	0.0414	0.0000	OK
720 minute summer	28	450	99.371	0.071	8.9	0.1012	0.0000	OK
720 minute summer	S29	645	98.857	0.607	8.9	2.1027	0.0000	OK
720 minute summer	S30	645	98.857	0.707	8.5	1.7993	0.0000	SURCHARGED
720 minute summer	S31	525	97.544	0.054	8.3	0.1864	0.0000	OK
720 minute summer	S32	525	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
720 minute summer	26	1.022	27	8.9	2.151	0.054	0.0726	
720 minute summer	27	1.023	28	8.9	1.222	0.058	0.3877	
720 minute summer	28	1.024	S29	8.9	0.867	0.192	0.0969	
720 minute summer	S29	1.025	S30	8.5	0.365	0.004	12.1793	
720 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
720 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	264.4

**Results for 1 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 99.80%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
720 minute winter	1	345	139.058	0.008	0.2	0.0127	0.0000	OK
720 minute winter	2	345	138.286	0.010	0.4	0.0170	0.0000	OK
720 minute winter	3	345	137.340	0.009	0.4	0.0133	0.0000	OK
720 minute winter	4	375	134.685	0.035	2.2	0.1234	0.0000	OK
720 minute winter	5	375	134.285	0.041	3.6	0.0907	0.0000	OK
720 minute winter	6	375	134.166	0.044	3.8	0.0543	0.0000	OK
720 minute winter	7	375	134.043	0.028	4.4	0.0525	0.0000	OK
720 minute winter	8	375	133.264	0.027	5.2	0.0541	0.0000	OK
720 minute winter	9	375	130.519	0.032	7.0	0.0893	0.0000	OK
720 minute winter	10	375	128.485	0.038	8.1	0.0738	0.0000	OK
720 minute winter	11	375	126.510	0.037	9.6	0.0945	0.0000	OK
720 minute winter	12	375	125.550	0.034	10.3	0.0730	0.0000	OK
720 minute winter	13	375	124.148	0.073	10.9	0.1497	0.0000	OK
720 minute winter	14	375	124.031	0.081	12.8	0.2096	0.0000	OK
720 minute winter	15	375	123.922	0.081	13.0	0.1488	0.0000	OK
720 minute winter	16	375	123.848	0.058	14.6	0.1368	0.0000	OK
720 minute winter	17	375	122.740	0.044	15.0	0.0924	0.0000	OK
720 minute winter	18	375	122.241	0.045	15.0	0.0788	0.0000	OK
720 minute winter	19	375	121.653	0.044	16.0	0.1157	0.0000	OK
720 minute winter	20	375	120.391	0.044	16.4	0.0905	0.0000	OK
720 minute winter	21	495	118.014	0.114	8.8	69.0098	0.0000	OK
720 minute winter	22	495	118.014	0.341	10.9	0.8671	0.0000	OK
720 minute winter	23	495	118.014	0.455	17.8	1.8206	0.0000	SURCHARGED
720 minute winter	24	495	113.836	0.036	8.9	0.0510	0.0000	OK
720 minute winter	25	495	110.273	0.036	8.9	0.0402	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
720 minute winter	1	1.000	2	0.2	0.462	0.005	0.0071	
720 minute winter	2	1.001	3	0.4	0.829	0.009	0.0071	
720 minute winter	3	1.002	5	0.4	0.898	0.007	0.0075	
720 minute winter	4	2.000	5	2.2	0.566	0.052	0.1930	
720 minute winter	5	1.003	6	3.6	0.588	0.040	0.1124	
720 minute winter	6	1.004	7	3.8	0.797	0.042	0.0778	
720 minute winter	7	1.005	8	4.4	1.411	0.017	0.0437	
720 minute winter	8	1.006	9	5.2	1.495	0.016	0.1148	
720 minute winter	9	1.007	10	7.0	1.796	0.023	0.1045	
720 minute winter	10	1.008	11	8.1	1.600	0.033	0.2019	
720 minute winter	11	1.009	12	9.6	1.816	0.019	0.0809	
720 minute winter	12	1.010	13	10.3	2.101	0.017	0.0706	
720 minute winter	13	1.011	14	10.9	0.607	0.059	0.6709	
720 minute winter	14	1.012	15	12.8	0.664	0.069	0.6289	
720 minute winter	15	1.013	16	13.0	0.841	0.070	0.2375	
720 minute winter	16	1.014	17	14.6	1.491	0.033	0.5613	
720 minute winter	17	1.015	18	15.0	1.886	0.018	0.0608	
720 minute winter	18	1.016	19	15.0	1.883	0.019	0.0794	
720 minute winter	19	1.017	20	16.0	2.043	0.019	0.1483	
720 minute winter	20	1.018	23	16.4	2.141	0.019	0.1359	
720 minute winter	21	3.000	22	10.9	0.454	0.011	4.0184	
720 minute winter	22	3.001	23	-9.0	0.502	-0.009	2.1027	
720 minute winter	23	1.019	24	8.9	1.935	0.072	0.3143	
720 minute winter	24	1.020	25	8.9	2.207	0.054	0.1431	
720 minute winter	25	1.021	26	8.9	2.201	0.054	0.1888	

**Results for 1 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 99.80%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
720 minute winter	26	495	105.582	0.036	8.9	0.0405	0.0000	OK
720 minute winter	27	495	103.819	0.037	8.9	0.0414	0.0000	OK
720 minute winter	28	495	99.371	0.071	8.9	0.1013	0.0000	OK
720 minute winter	S29	690	98.954	0.704	8.9	2.4389	0.0000	OK
720 minute winter	S30	690	98.954	0.804	8.6	2.0463	0.0000	SURCHARGED
720 minute winter	S31	510	97.544	0.054	8.3	0.1864	0.0000	OK
720 minute winter	S32	510	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
720 minute winter	26	1.022	27	8.9	2.152	0.054	0.0727	
720 minute winter	27	1.023	28	8.9	1.223	0.058	0.3880	
720 minute winter	28	1.024	S29	8.9	0.867	0.192	0.0970	
720 minute winter	S29	1.025	S30	8.6	0.370	0.004	14.5035	
720 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
720 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	299.4

**Results for 1 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 99.78%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
960 minute summer	1	480	139.058	0.008	0.2	0.0127	0.0000	OK
960 minute summer	2	480	138.286	0.010	0.4	0.0170	0.0000	OK
960 minute summer	3	480	137.340	0.009	0.4	0.0133	0.0000	OK
960 minute summer	4	495	134.687	0.037	2.5	0.1314	0.0000	OK
960 minute summer	5	495	134.287	0.043	4.0	0.0956	0.0000	OK
960 minute summer	6	495	134.169	0.047	4.2	0.0570	0.0000	OK
960 minute summer	7	495	134.044	0.029	4.9	0.0552	0.0000	OK
960 minute summer	8	495	133.265	0.028	5.8	0.0569	0.0000	OK
960 minute summer	9	495	130.520	0.033	7.7	0.0936	0.0000	OK
960 minute summer	10	495	128.487	0.039	8.9	0.0773	0.0000	OK
960 minute summer	11	495	126.512	0.039	10.6	0.0992	0.0000	OK
960 minute summer	12	495	125.552	0.036	11.3	0.0764	0.0000	OK
960 minute summer	13	495	124.152	0.077	12.0	0.1572	0.0000	OK
960 minute summer	14	495	124.035	0.085	14.1	0.2200	0.0000	OK
960 minute summer	15	495	123.926	0.085	14.3	0.1557	0.0000	OK
960 minute summer	16	495	123.851	0.061	16.1	0.1433	0.0000	OK
960 minute summer	17	495	122.742	0.046	16.5	0.0969	0.0000	OK
960 minute summer	18	495	122.243	0.047	16.5	0.0826	0.0000	OK
960 minute summer	19	495	121.655	0.046	17.6	0.1213	0.0000	OK
960 minute summer	20	495	120.393	0.046	18.0	0.0948	0.0000	OK
960 minute summer	21	585	117.992	0.092	10.6	55.6475	0.0000	OK
960 minute summer	22	585	117.992	0.319	10.8	0.8123	0.0000	OK
960 minute summer	23	585	117.992	0.433	19.6	1.7344	0.0000	SURCHARGED
960 minute summer	24	585	113.836	0.036	8.8	0.0509	0.0000	OK
960 minute summer	25	585	110.272	0.035	8.8	0.0401	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
960 minute summer	1	1.000	2	0.2	0.462	0.005	0.0071	
960 minute summer	2	1.001	3	0.4	0.829	0.009	0.0071	
960 minute summer	3	1.002	5	0.4	0.898	0.007	0.0075	
960 minute summer	4	2.000	5	2.5	0.588	0.059	0.2115	
960 minute summer	5	1.003	6	4.0	0.607	0.044	0.1209	
960 minute summer	6	1.004	7	4.2	0.820	0.046	0.0836	
960 minute summer	7	1.005	8	4.9	1.454	0.019	0.0472	
960 minute summer	8	1.006	9	5.8	1.552	0.018	0.1234	
960 minute summer	9	1.007	10	7.7	1.849	0.025	0.1117	
960 minute summer	10	1.008	11	8.9	1.646	0.037	0.2156	
960 minute summer	11	1.009	12	10.6	1.871	0.021	0.0868	
960 minute summer	12	1.010	13	11.3	2.157	0.018	0.0755	
960 minute summer	13	1.011	14	12.0	0.623	0.065	0.7200	
960 minute summer	14	1.012	15	14.1	0.683	0.076	0.6733	
960 minute summer	15	1.013	16	14.3	0.865	0.077	0.2538	
960 minute summer	16	1.014	17	16.1	1.532	0.036	0.6015	
960 minute summer	17	1.015	18	16.5	1.934	0.020	0.0652	
960 minute summer	18	1.016	19	16.5	1.932	0.021	0.0852	
960 minute summer	19	1.017	20	17.6	2.099	0.021	0.1587	
960 minute summer	20	1.018	23	18.0	2.199	0.021	0.1452	
960 minute summer	21	3.000	22	-10.6	0.441	-0.010	3.5595	
960 minute summer	22	3.001	23	-10.8	0.382	-0.011	1.9484	
960 minute summer	23	1.019	24	8.8	1.931	0.072	0.3130	
960 minute summer	24	1.020	25	8.8	2.204	0.053	0.1424	
960 minute summer	25	1.021	26	8.8	2.198	0.053	0.1880	

**Results for 1 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 99.78%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
960 minute summer	26	585	105.582	0.036	8.8	0.0404	0.0000	OK
960 minute summer	27	585	103.819	0.037	8.8	0.0413	0.0000	OK
960 minute summer	28	585	99.371	0.071	8.8	0.1010	0.0000	OK
960 minute summer	S29	750	98.834	0.584	8.8	2.0216	0.0000	OK
960 minute summer	S30	750	98.834	0.684	8.5	1.7398	0.0000	SURCHARGED
960 minute summer	S31	660	97.544	0.054	8.3	0.1864	0.0000	OK
960 minute summer	S32	660	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
960 minute summer	26	1.022	27	8.8	2.148	0.053	0.0724	
960 minute summer	27	1.023	28	8.8	1.221	0.057	0.3863	
960 minute summer	28	1.024	S29	8.8	0.866	0.191	0.0966	
960 minute summer	S29	1.025	S30	8.5	0.321	0.004	11.6131	
960 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
960 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	291.4

**Results for 1 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 99.83%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
960 minute winter	1	315	139.056	0.006	0.1	0.0093	0.0000	OK
960 minute winter	2	465	138.285	0.009	0.3	0.0149	0.0000	OK
960 minute winter	3	465	137.339	0.008	0.3	0.0116	0.0000	OK
960 minute winter	4	495	134.682	0.032	1.8	0.1119	0.0000	OK
960 minute winter	5	495	134.281	0.037	2.9	0.0816	0.0000	OK
960 minute winter	6	495	134.162	0.040	3.0	0.0485	0.0000	OK
960 minute winter	7	495	134.040	0.025	3.5	0.0470	0.0000	OK
960 minute winter	8	495	133.261	0.024	4.1	0.0484	0.0000	OK
960 minute winter	9	495	130.515	0.028	5.5	0.0795	0.0000	OK
960 minute winter	10	495	128.481	0.034	6.4	0.0660	0.0000	OK
960 minute winter	11	495	126.506	0.033	7.7	0.0850	0.0000	OK
960 minute winter	12	495	125.547	0.031	8.3	0.0658	0.0000	OK
960 minute winter	13	495	124.141	0.066	8.8	0.1344	0.0000	OK
960 minute winter	14	495	124.023	0.073	10.4	0.1886	0.0000	OK
960 minute winter	15	495	123.914	0.073	10.6	0.1349	0.0000	OK
960 minute winter	16	495	123.843	0.053	11.9	0.1241	0.0000	OK
960 minute winter	17	495	122.735	0.039	12.2	0.0835	0.0000	OK
960 minute winter	18	495	122.236	0.040	12.2	0.0712	0.0000	OK
960 minute winter	19	495	121.649	0.040	13.0	0.1049	0.0000	OK
960 minute winter	20	495	120.386	0.039	13.3	0.0819	0.0000	OK
960 minute winter	21	630	117.982	0.082	5.6	49.3632	0.0000	OK
960 minute winter	22	630	117.982	0.309	5.8	0.7863	0.0000	OK
960 minute winter	23	630	117.982	0.423	14.5	1.6936	0.0000	SURCHARGED
960 minute winter	24	630	113.836	0.036	8.8	0.0508	0.0000	OK
960 minute winter	25	630	110.272	0.035	8.8	0.0400	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
960 minute winter	1	1.000	2	0.1	0.380	0.003	0.0052	
960 minute winter	2	1.001	3	0.3	0.756	0.007	0.0058	
960 minute winter	3	1.002	5	0.3	0.823	0.005	0.0062	
960 minute winter	4	2.000	5	1.8	0.533	0.043	0.1677	
960 minute winter	5	1.003	6	2.9	0.555	0.032	0.0959	
960 minute winter	6	1.004	7	3.0	0.743	0.033	0.0661	
960 minute winter	7	1.005	8	3.5	1.318	0.013	0.0372	
960 minute winter	8	1.006	9	4.1	1.400	0.013	0.0972	
960 minute winter	9	1.007	10	5.5	1.673	0.018	0.0881	
960 minute winter	10	1.008	11	6.4	1.491	0.026	0.1712	
960 minute winter	11	1.009	12	7.7	1.706	0.015	0.0692	
960 minute winter	12	1.010	13	8.3	1.968	0.013	0.0608	
960 minute winter	13	1.011	14	8.8	0.573	0.047	0.5752	
960 minute winter	14	1.012	15	10.4	0.625	0.056	0.5430	
960 minute winter	15	1.013	16	10.6	0.789	0.057	0.2060	
960 minute winter	16	1.014	17	11.9	1.404	0.026	0.4846	
960 minute winter	17	1.015	18	12.2	1.790	0.015	0.0521	
960 minute winter	18	1.016	19	12.2	1.782	0.016	0.0683	
960 minute winter	19	1.017	20	13.0	1.932	0.016	0.1274	
960 minute winter	20	1.018	23	13.3	2.017	0.015	0.1170	
960 minute winter	21	3.000	22	-5.6	0.443	-0.006	3.3469	
960 minute winter	22	3.001	23	-5.8	0.410	-0.006	1.8754	
960 minute winter	23	1.019	24	8.8	1.929	0.072	0.3123	
960 minute winter	24	1.020	25	8.8	2.202	0.053	0.1421	
960 minute winter	25	1.021	26	8.8	2.196	0.053	0.1876	

**Results for 1 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 99.83%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
960 minute winter	26	630	105.582	0.036	8.8	0.0403	0.0000	OK
960 minute winter	27	630	103.819	0.036	8.8	0.0412	0.0000	OK
960 minute winter	28	630	99.370	0.070	8.8	0.1008	0.0000	OK
960 minute winter	S29	780	98.881	0.631	8.8	2.1870	0.0000	OK
960 minute winter	S30	780	98.881	0.731	8.5	1.8613	0.0000	SURCHARGED
960 minute winter	S31	645	97.544	0.054	8.3	0.1864	0.0000	OK
960 minute winter	S32	645	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
960 minute winter	26	1.022	27	8.8	2.146	0.053	0.0722	
960 minute winter	27	1.023	28	8.8	1.220	0.057	0.3853	
960 minute winter	28	1.024	S29	8.8	0.865	0.190	0.0963	
960 minute winter	S29	1.025	S30	8.5	0.338	0.004	12.7667	
960 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
960 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	325.8

**Results for 1 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 99.72%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
1440 minute summer	1	600	139.056	0.006	0.1	0.0093	0.0000	OK
1440 minute summer	2	750	138.285	0.009	0.3	0.0149	0.0000	OK
1440 minute summer	3	750	137.339	0.008	0.3	0.0116	0.0000	OK
1440 minute summer	4	750	134.682	0.032	1.8	0.1119	0.0000	OK
1440 minute summer	5	750	134.281	0.037	2.9	0.0816	0.0000	OK
1440 minute summer	6	750	134.162	0.040	3.0	0.0485	0.0000	OK
1440 minute summer	7	750	134.040	0.025	3.5	0.0470	0.0000	OK
1440 minute summer	8	750	133.261	0.024	4.1	0.0484	0.0000	OK
1440 minute summer	9	750	130.515	0.028	5.5	0.0795	0.0000	OK
1440 minute summer	10	750	128.481	0.034	6.4	0.0660	0.0000	OK
1440 minute summer	11	750	126.506	0.033	7.7	0.0850	0.0000	OK
1440 minute summer	12	750	125.547	0.031	8.3	0.0658	0.0000	OK
1440 minute summer	13	750	124.141	0.066	8.8	0.1344	0.0000	OK
1440 minute summer	14	750	124.023	0.073	10.4	0.1886	0.0000	OK
1440 minute summer	15	750	123.914	0.073	10.6	0.1349	0.0000	OK
1440 minute summer	16	750	123.843	0.053	11.9	0.1241	0.0000	OK
1440 minute summer	17	750	122.735	0.039	12.2	0.0835	0.0000	OK
1440 minute summer	18	750	122.236	0.040	12.2	0.0712	0.0000	OK
1440 minute summer	19	750	121.649	0.040	13.0	0.1049	0.0000	OK
1440 minute summer	20	750	120.386	0.039	13.3	0.0819	0.0000	OK
1440 minute summer	21	840	117.960	0.060	5.7	35.8943	0.0000	OK
1440 minute summer	22	840	117.960	0.287	5.8	0.7302	0.0000	OK
1440 minute summer	23	840	117.960	0.401	14.5	1.6053	0.0000	SURCHARGED
1440 minute summer	24	840	113.835	0.035	8.7	0.0506	0.0000	OK
1440 minute summer	25	840	110.272	0.035	8.7	0.0398	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
1440 minute summer	1	1.000	2	0.1	0.380	0.003	0.0052	
1440 minute summer	2	1.001	3	0.3	0.756	0.007	0.0058	
1440 minute summer	3	1.002	5	0.3	0.823	0.005	0.0062	
1440 minute summer	4	2.000	5	1.8	0.533	0.043	0.1677	
1440 minute summer	5	1.003	6	2.9	0.555	0.032	0.0959	
1440 minute summer	6	1.004	7	3.0	0.743	0.033	0.0661	
1440 minute summer	7	1.005	8	3.5	1.318	0.013	0.0372	
1440 minute summer	8	1.006	9	4.1	1.400	0.013	0.0972	
1440 minute summer	9	1.007	10	5.5	1.673	0.018	0.0881	
1440 minute summer	10	1.008	11	6.4	1.491	0.026	0.1712	
1440 minute summer	11	1.009	12	7.7	1.706	0.015	0.0692	
1440 minute summer	12	1.010	13	8.3	1.968	0.013	0.0608	
1440 minute summer	13	1.011	14	8.8	0.573	0.047	0.5752	
1440 minute summer	14	1.012	15	10.4	0.625	0.056	0.5430	
1440 minute summer	15	1.013	16	10.6	0.789	0.057	0.2060	
1440 minute summer	16	1.014	17	11.9	1.404	0.026	0.4846	
1440 minute summer	17	1.015	18	12.2	1.790	0.015	0.0521	
1440 minute summer	18	1.016	19	12.2	1.782	0.016	0.0683	
1440 minute summer	19	1.017	20	13.0	1.932	0.016	0.1274	
1440 minute summer	20	1.018	23	13.3	2.017	0.015	0.1170	
1440 minute summer	21	3.000	22	-5.7	0.386	-0.006	2.9101	
1440 minute summer	22	3.001	23	-5.8	0.274	-0.006	1.7184	
1440 minute summer	23	1.019	24	8.7	1.925	0.071	0.3104	
1440 minute summer	24	1.020	25	8.7	2.197	0.053	0.1413	
1440 minute summer	25	1.021	26	8.7	2.191	0.053	0.1865	

**Results for 1 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 99.72%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
1440 minute summer	26	840	105.582	0.035	8.7	0.0401	0.0000	OK
1440 minute summer	27	840	103.818	0.036	8.7	0.0411	0.0000	OK
1440 minute summer	28	840	99.370	0.070	8.7	0.1003	0.0000	OK
1440 minute summer	S29	960	98.774	0.524	8.7	1.8165	0.0000	OK
1440 minute summer	S30	960	98.774	0.624	8.5	1.5891	0.0000	SURCHARGED
1440 minute summer	S31	930	97.544	0.054	8.3	0.1864	0.0000	OK
1440 minute summer	S32	930	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
1440 minute summer	26	1.022	27	8.7	2.141	0.053	0.0718	
1440 minute summer	27	1.023	28	8.7	1.217	0.057	0.3830	
1440 minute summer	28	1.024	S29	8.7	0.863	0.189	0.0957	
1440 minute summer	S29	1.025	S30	8.5	0.384	0.004	10.1815	
1440 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
1440 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	331.4

**Results for 1 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 99.72%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
1440 minute winter	1	540	139.056	0.006	0.1	0.0093	0.0000	OK
1440 minute winter	2	540	138.284	0.007	0.2	0.0123	0.0000	OK
1440 minute winter	3	540	137.338	0.007	0.2	0.0097	0.0000	OK
1440 minute winter	4	750	134.678	0.028	1.4	0.0992	0.0000	OK
1440 minute winter	5	750	134.276	0.032	2.2	0.0714	0.0000	OK
1440 minute winter	6	750	134.157	0.035	2.3	0.0428	0.0000	OK
1440 minute winter	7	750	134.037	0.022	2.7	0.0416	0.0000	OK
1440 minute winter	8	750	133.258	0.021	3.2	0.0432	0.0000	OK
1440 minute winter	9	750	130.512	0.025	4.3	0.0708	0.0000	OK
1440 minute winter	10	750	128.477	0.030	5.0	0.0586	0.0000	OK
1440 minute winter	11	750	126.503	0.030	6.0	0.0755	0.0000	OK
1440 minute winter	12	750	125.543	0.027	6.4	0.0582	0.0000	OK
1440 minute winter	13	750	124.133	0.058	6.8	0.1189	0.0000	OK
1440 minute winter	14	750	124.014	0.064	8.0	0.1655	0.0000	OK
1440 minute winter	15	750	123.905	0.064	8.1	0.1187	0.0000	OK
1440 minute winter	16	750	123.836	0.046	9.1	0.1093	0.0000	OK
1440 minute winter	17	750	122.731	0.035	9.4	0.0734	0.0000	OK
1440 minute winter	18	750	122.231	0.035	9.4	0.0626	0.0000	OK
1440 minute winter	19	750	121.644	0.035	10.0	0.0925	0.0000	OK
1440 minute winter	20	750	120.382	0.035	10.2	0.0720	0.0000	OK
1440 minute winter	21	870	117.935	0.035	2.5	20.9018	0.0000	OK
1440 minute winter	22	870	117.935	0.262	2.5	0.6671	0.0000	OK
1440 minute winter	23	870	117.935	0.376	11.1	1.5060	0.0000	SURCHARGED
1440 minute winter	24	870	113.835	0.035	8.6	0.0503	0.0000	OK
1440 minute winter	25	870	110.272	0.035	8.6	0.0396	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
1440 minute winter	1	1.000	2	0.1	0.380	0.003	0.0043	
1440 minute winter	2	1.001	3	0.2	0.671	0.004	0.0044	
1440 minute winter	3	1.002	5	0.2	0.733	0.004	0.0046	
1440 minute winter	4	2.000	5	1.4	0.495	0.033	0.1407	
1440 minute winter	5	1.003	6	2.2	0.511	0.024	0.0792	
1440 minute winter	6	1.004	7	2.3	0.684	0.025	0.0550	
1440 minute winter	7	1.005	8	2.7	1.214	0.010	0.0311	
1440 minute winter	8	1.006	9	3.2	1.291	0.010	0.0818	
1440 minute winter	9	1.007	10	4.3	1.554	0.014	0.0742	
1440 minute winter	10	1.008	11	5.0	1.385	0.021	0.1440	
1440 minute winter	11	1.009	12	6.0	1.586	0.012	0.0579	
1440 minute winter	12	1.010	13	6.4	1.818	0.010	0.0507	
1440 minute winter	13	1.011	14	6.8	0.532	0.037	0.4778	
1440 minute winter	14	1.012	15	8.0	0.580	0.043	0.4500	
1440 minute winter	15	1.013	16	8.1	0.727	0.044	0.1710	
1440 minute winter	16	1.014	17	9.1	1.301	0.020	0.4019	
1440 minute winter	17	1.015	18	9.4	1.661	0.011	0.0433	
1440 minute winter	18	1.016	19	9.4	1.650	0.012	0.0568	
1440 minute winter	19	1.017	20	10.0	1.785	0.012	0.1060	
1440 minute winter	20	1.018	23	10.2	1.858	0.012	0.0974	
1440 minute winter	21	3.000	22	-2.5	0.321	-0.002	2.4524	
1440 minute winter	22	3.001	23	-2.5	0.276	-0.003	1.5436	
1440 minute winter	23	1.019	24	8.6	1.918	0.070	0.3080	
1440 minute winter	24	1.020	25	8.6	2.190	0.052	0.1401	
1440 minute winter	25	1.021	26	8.6	2.184	0.052	0.1850	

**Results for 1 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 99.72%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
1440 minute winter	26	870	105.581	0.035	8.6	0.0399	0.0000	OK
1440 minute winter	27	870	103.818	0.036	8.6	0.0409	0.0000	OK
1440 minute winter	28	870	99.370	0.070	8.6	0.0997	0.0000	OK
1440 minute winter	S29	990	98.751	0.501	8.6	1.7362	0.0000	OK
1440 minute winter	S30	990	98.751	0.601	8.4	1.5301	0.0000	SURCHARGED
1440 minute winter	S31	990	97.544	0.054	8.3	0.1864	0.0000	OK
1440 minute winter	S32	990	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
1440 minute winter	26	1.022	27	8.6	2.135	0.052	0.0712	
1440 minute winter	27	1.023	28	8.6	1.214	0.056	0.3798	
1440 minute winter	28	1.024	S29	8.6	0.861	0.187	0.0950	
1440 minute winter	S29	1.025	S30	8.4	0.361	0.004	9.6236	
1440 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
1440 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3533	371.8

**Results for 2 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute summer	1	10	139.073	0.023	2.0	0.0373	0.0000	OK
15 minute summer	2	10	138.309	0.033	4.4	0.0535	0.0000	OK
15 minute summer	3	11	137.360	0.029	4.3	0.0412	0.0000	OK
15 minute summer	4	11	134.777	0.127	25.7	0.4477	0.0000	OK
15 minute summer	5	11	134.396	0.152	40.3	0.3354	0.0000	OK
15 minute summer	6	11	134.274	0.152	42.4	0.1860	0.0000	OK
15 minute summer	7	11	134.110	0.095	49.7	0.1815	0.0000	OK
15 minute summer	8	11	133.323	0.086	58.4	0.1750	0.0000	OK
15 minute summer	9	11	130.591	0.104	77.8	0.2937	0.0000	OK
15 minute summer	10	11	128.578	0.131	89.7	0.2561	0.0000	OK
15 minute summer	11	11	126.604	0.131	106.8	0.3338	0.0000	OK
15 minute summer	12	11	125.624	0.108	114.4	0.2293	0.0000	OK
15 minute summer	13	11	124.365	0.290	121.3	0.5950	0.0000	OK
15 minute summer	14	11	124.260	0.310	141.6	0.8046	0.0000	OK
15 minute summer	15	12	124.116	0.275	141.4	0.5065	0.0000	OK
15 minute summer	16	12	123.984	0.194	157.4	0.4576	0.0000	OK
15 minute summer	17	12	122.857	0.161	162.3	0.3416	0.0000	OK
15 minute summer	18	12	122.358	0.162	163.1	0.2863	0.0000	OK
15 minute summer	19	12	121.758	0.149	172.4	0.3939	0.0000	OK
15 minute summer	20	12	120.498	0.151	176.3	0.3137	0.0000	OK
15 minute summer	21	23	118.014	0.113	243.6	68.8256	0.0000	OK
15 minute summer	22	12	118.755	1.082	202.8	2.7537	0.0000	SURCHARGED
15 minute summer	23	12	118.764	1.205	189.8	4.8252	0.0000	SURCHARGED
15 minute summer	24	16	113.836	0.036	9.0	0.0514	0.0000	OK
15 minute summer	25	16	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute summer	1	1.000	2	2.0	0.882	0.051	0.0366	
15 minute summer	2	1.001	3	4.3	1.672	0.095	0.0378	
15 minute summer	3	1.002	5	4.3	1.826	0.078	0.0394	
15 minute summer	4	2.000	5	24.9	1.103	0.589	1.1231	
15 minute summer	5	1.003	6	40.5	1.131	0.447	0.6571	
15 minute summer	6	1.004	7	42.5	1.550	0.469	0.4424	
15 minute summer	7	1.005	8	49.7	2.775	0.189	0.2509	
15 minute summer	8	1.006	9	58.4	3.058	0.181	0.6314	
15 minute summer	9	1.007	10	77.9	3.236	0.254	0.6461	
15 minute summer	10	1.008	11	89.7	3.136	0.368	1.1409	
15 minute summer	11	1.009	12	106.8	3.552	0.213	0.4614	
15 minute summer	12	1.010	13	114.4	2.948	0.185	0.6594	
15 minute summer	13	1.011	14	120.7	1.075	0.650	4.1950	
15 minute summer	14	1.012	15	139.2	1.281	0.749	3.5541	
15 minute summer	15	1.013	16	142.0	1.699	0.764	1.2713	
15 minute summer	16	1.014	17	158.6	2.727	0.353	3.3119	
15 minute summer	17	1.015	18	163.1	3.187	0.196	0.3910	
15 minute summer	18	1.016	19	163.3	3.366	0.207	0.4837	
15 minute summer	19	1.017	20	172.7	3.743	0.206	0.8733	
15 minute summer	20	1.018	23	176.7	4.082	0.202	0.7684	
15 minute summer	21	3.000	22	-243.6	-1.019	-0.242	7.5629	
15 minute summer	22	3.001	23	-202.8	0.508	-0.201	4.2379	
15 minute summer	23	1.019	24	9.0	1.944	0.073	0.3176	
15 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
15 minute summer	25	1.021	26	9.0	2.210	0.054	0.1909	

**Results for 2 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute summer	26	16	105.582	0.036	9.0	0.0408	0.0000	OK
15 minute summer	27	16	103.819	0.037	9.0	0.0417	0.0000	OK
15 minute summer	28	17	99.371	0.071	9.0	0.1020	0.0000	OK
15 minute summer	S29	128	98.616	0.366	9.0	1.2689	0.0000	OK
15 minute summer	S30	128	98.616	0.466	8.4	1.1868	0.0000	SURCHARGED
15 minute summer	S31	129	97.543	0.053	8.1	0.1850	0.0000	OK
15 minute summer	S32	129	97.427	0.051	8.1	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute summer	26	1.022	27	9.0	2.161	0.054	0.0734	
15 minute summer	27	1.023	28	9.0	1.698	0.059	0.3919	
15 minute summer	28	1.024	S29	9.0	0.870	0.195	0.0979	
15 minute summer	S29	1.025	S30	8.4	0.519	0.004	6.4571	
15 minute summer	S30	1.026	S31	8.1	0.981	0.421	0.0422	
15 minute summer	S31	1.027	S32	8.1	0.613	0.010	0.3486	79.6

**Results for 2 year 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	1	10	139.074	0.024	2.1	0.0382	0.0000	OK
15 minute winter	2	10	138.309	0.033	4.6	0.0547	0.0000	OK
15 minute winter	3	11	137.361	0.029	4.5	0.0422	0.0000	OK
15 minute winter	4	11	134.780	0.130	27.0	0.4602	0.0000	OK
15 minute winter	5	11	134.400	0.156	42.0	0.3445	0.0000	OK
15 minute winter	6	11	134.278	0.156	44.3	0.1908	0.0000	OK
15 minute winter	7	11	134.113	0.098	51.9	0.1860	0.0000	OK
15 minute winter	8	11	133.325	0.088	61.0	0.1789	0.0000	OK
15 minute winter	9	11	130.593	0.106	81.2	0.3006	0.0000	OK
15 minute winter	10	11	128.581	0.134	93.7	0.2629	0.0000	OK
15 minute winter	11	11	126.607	0.134	111.6	0.3423	0.0000	OK
15 minute winter	12	11	125.626	0.110	119.5	0.2346	0.0000	OK
15 minute winter	13	11	124.375	0.300	126.7	0.6162	0.0000	OK
15 minute winter	14	11	124.271	0.321	148.1	0.8322	0.0000	OK
15 minute winter	15	11	124.124	0.283	148.4	0.5206	0.0000	OK
15 minute winter	16	11	123.989	0.199	165.4	0.4693	0.0000	OK
15 minute winter	17	12	122.862	0.166	169.7	0.3513	0.0000	OK
15 minute winter	18	12	122.363	0.167	170.6	0.2944	0.0000	OK
15 minute winter	19	12	121.762	0.153	180.4	0.4041	0.0000	OK
15 minute winter	20	12	120.502	0.155	184.5	0.3221	0.0000	OK
15 minute winter	21	23	118.030	0.130	283.0	78.9557	0.0000	OK
15 minute winter	22	11	118.833	1.160	219.7	2.9520	0.0000	SURCHARGED
15 minute winter	23	11	118.843	1.284	198.8	5.1403	0.0000	SURCHARGED
15 minute winter	24	16	113.836	0.036	9.0	0.0514	0.0000	OK
15 minute winter	25	16	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute winter	1	1.000	2	2.1	0.896	0.053	0.0379	
15 minute winter	2	1.001	3	4.5	1.693	0.099	0.0390	
15 minute winter	3	1.002	5	4.5	1.851	0.081	0.0407	
15 minute winter	4	2.000	5	26.1	1.115	0.615	1.1615	
15 minute winter	5	1.003	6	42.3	1.143	0.467	0.6793	
15 minute winter	6	1.004	7	44.5	1.569	0.491	0.4572	
15 minute winter	7	1.005	8	51.9	2.807	0.197	0.2593	
15 minute winter	8	1.006	9	61.0	3.095	0.189	0.6517	
15 minute winter	9	1.007	10	81.4	3.265	0.265	0.6692	
15 minute winter	10	1.008	11	93.9	3.172	0.385	1.1804	
15 minute winter	11	1.009	12	111.7	3.591	0.222	0.4771	
15 minute winter	12	1.010	13	119.5	2.860	0.193	0.6929	
15 minute winter	13	1.011	14	126.4	1.083	0.680	4.3590	
15 minute winter	14	1.012	15	146.1	1.294	0.787	3.6835	
15 minute winter	15	1.013	16	148.2	1.720	0.798	1.3136	
15 minute winter	16	1.014	17	165.8	2.752	0.369	3.4289	
15 minute winter	17	1.015	18	170.6	3.211	0.205	0.4061	
15 minute winter	18	1.016	19	170.8	3.397	0.217	0.5017	
15 minute winter	19	1.017	20	180.8	3.780	0.216	0.9052	
15 minute winter	20	1.018	23	185.0	4.128	0.212	0.7956	
15 minute winter	21	3.000	22	-283.0	-1.079	-0.281	7.6261	
15 minute winter	22	3.001	23	-219.7	0.508	-0.218	4.2379	
15 minute winter	23	1.019	24	9.0	1.946	0.073	0.3177	
15 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
15 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 2 year 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	26	16	105.582	0.036	9.0	0.0408	0.0000	OK
15 minute winter	27	17	103.819	0.037	9.0	0.0417	0.0000	OK
15 minute winter	28	17	99.371	0.071	9.0	0.1021	0.0000	OK
15 minute winter	S29	148	98.644	0.394	9.0	1.3655	0.0000	OK
15 minute winter	S30	148	98.644	0.494	8.5	1.2577	0.0000	SURCHARGED
15 minute winter	S31	148	97.544	0.054	8.2	0.1855	0.0000	OK
15 minute winter	S32	148	97.427	0.051	8.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute winter	26	1.022	27	9.0	2.161	0.054	0.0734	
15 minute winter	27	1.023	28	9.0	1.780	0.059	0.3921	
15 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0980	
15 minute winter	S29	1.025	S30	8.5	0.497	0.004	7.0960	
15 minute winter	S30	1.026	S31	8.2	0.982	0.424	0.0424	
15 minute winter	S31	1.027	S32	8.2	0.614	0.010	0.3504	89.5

**Results for 2 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 99.97%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
30 minute summer	1	18	139.073	0.023	1.9	0.0366	0.0000	OK
30 minute summer	2	18	138.307	0.031	4.0	0.0514	0.0000	OK
30 minute summer	3	18	137.359	0.028	4.0	0.0399	0.0000	OK
30 minute summer	4	18	134.771	0.121	23.4	0.4267	0.0000	OK
30 minute summer	5	18	134.389	0.145	37.4	0.3198	0.0000	OK
30 minute summer	6	18	134.267	0.145	39.2	0.1774	0.0000	OK
30 minute summer	7	18	134.106	0.091	45.7	0.1728	0.0000	OK
30 minute summer	8	18	133.319	0.082	53.7	0.1673	0.0000	OK
30 minute summer	9	18	130.587	0.100	72.0	0.2813	0.0000	OK
30 minute summer	10	18	128.571	0.124	82.9	0.2436	0.0000	OK
30 minute summer	11	18	126.597	0.124	98.2	0.3180	0.0000	OK
30 minute summer	12	18	125.619	0.103	105.1	0.2193	0.0000	OK
30 minute summer	13	19	124.347	0.272	111.4	0.5579	0.0000	OK
30 minute summer	14	19	124.245	0.295	129.5	0.7644	0.0000	OK
30 minute summer	15	19	124.106	0.265	132.2	0.4880	0.0000	OK
30 minute summer	16	19	123.977	0.187	147.9	0.4413	0.0000	OK
30 minute summer	17	19	122.850	0.154	151.5	0.3261	0.0000	OK
30 minute summer	18	19	122.351	0.155	150.9	0.2730	0.0000	OK
30 minute summer	19	19	121.752	0.143	160.2	0.3778	0.0000	OK
30 minute summer	20	19	120.491	0.144	163.7	0.3000	0.0000	OK
30 minute summer	21	37	118.047	0.147	188.2	89.9667	0.0000	OK
30 minute summer	22	18	118.396	0.723	173.2	1.8390	0.0000	OK
30 minute summer	23	18	118.401	0.842	176.9	3.3731	0.0000	SURCHARGED
30 minute summer	24	23	113.836	0.036	9.0	0.0514	0.0000	OK
30 minute summer	25	23	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
30 minute summer	1	1.000	2	1.9	0.888	0.049	0.0350	
30 minute summer	2	1.001	3	4.0	1.633	0.088	0.0359	
30 minute summer	3	1.002	5	4.0	1.791	0.073	0.0376	
30 minute summer	4	2.000	5	22.9	1.081	0.542	1.0564	
30 minute summer	5	1.003	6	37.3	1.106	0.411	0.6182	
30 minute summer	6	1.004	7	38.9	1.520	0.429	0.4151	
30 minute summer	7	1.005	8	45.4	2.713	0.173	0.2350	
30 minute summer	8	1.006	9	53.5	2.985	0.166	0.5943	
30 minute summer	9	1.007	10	71.6	3.180	0.233	0.6043	
30 minute summer	10	1.008	11	82.0	3.067	0.337	1.0680	
30 minute summer	11	1.009	12	98.0	3.475	0.195	0.4325	
30 minute summer	12	1.010	13	104.8	2.883	0.169	0.5980	
30 minute summer	13	1.011	14	111.1	1.057	0.598	3.9259	
30 minute summer	14	1.012	15	130.3	1.258	0.702	3.3790	
30 minute summer	15	1.013	16	132.2	1.657	0.711	1.2144	
30 minute summer	16	1.014	17	147.6	2.681	0.329	3.1360	
30 minute summer	17	1.015	18	150.9	3.143	0.182	0.3668	
30 minute summer	18	1.016	19	150.6	3.312	0.191	0.4549	
30 minute summer	19	1.017	20	159.9	3.678	0.191	0.8227	
30 minute summer	20	1.018	23	163.0	3.999	0.186	0.7237	
30 minute summer	21	3.000	22	-188.2	-0.973	-0.187	7.4855	
30 minute summer	22	3.001	23	-173.2	0.508	-0.172	4.2137	
30 minute summer	23	1.019	24	9.0	1.944	0.073	0.3177	
30 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
30 minute summer	25	1.021	26	9.0	2.210	0.054	0.1909	

**Results for 2 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 99.97%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
30 minute summer	26	24	105.582	0.036	9.0	0.0408	0.0000	OK
30 minute summer	27	24	103.819	0.037	9.0	0.0417	0.0000	OK
30 minute summer	28	25	99.371	0.071	9.0	0.1021	0.0000	OK
30 minute summer	S29	183	98.689	0.439	9.0	1.5216	0.0000	OK
30 minute summer	S30	183	98.689	0.539	8.5	1.3724	0.0000	SURCHARGED
30 minute summer	S31	183	97.544	0.054	8.2	0.1861	0.0000	OK
30 minute summer	S32	183	97.427	0.051	8.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
30 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
30 minute summer	27	1.023	28	9.0	1.627	0.059	0.3922	
30 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0980	
30 minute summer	S29	1.025	S30	8.5	0.527	0.004	8.1483	
30 minute summer	S30	1.026	S31	8.2	0.984	0.427	0.0427	
30 minute summer	S31	1.027	S32	8.2	0.615	0.010	0.3523	106.6

**Results for 2 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 99.95%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
30 minute winter	1	18	139.071	0.021	1.7	0.0347	0.0000	OK
30 minute winter	2	18	138.306	0.030	3.6	0.0487	0.0000	OK
30 minute winter	3	18	137.358	0.027	3.6	0.0379	0.0000	OK
30 minute winter	4	18	134.764	0.114	21.1	0.4021	0.0000	OK
30 minute winter	5	18	134.381	0.136	34.0	0.3014	0.0000	OK
30 minute winter	6	18	134.260	0.138	35.6	0.1682	0.0000	OK
30 minute winter	7	18	134.101	0.086	41.6	0.1641	0.0000	OK
30 minute winter	8	18	133.315	0.078	49.0	0.1598	0.0000	OK
30 minute winter	9	18	130.582	0.095	65.6	0.2680	0.0000	OK
30 minute winter	10	18	128.565	0.118	75.6	0.2316	0.0000	OK
30 minute winter	11	18	126.591	0.118	89.9	0.3022	0.0000	OK
30 minute winter	12	18	125.615	0.099	96.1	0.2098	0.0000	OK
30 minute winter	13	19	124.331	0.256	101.9	0.5248	0.0000	OK
30 minute winter	14	19	124.228	0.278	118.9	0.7209	0.0000	OK
30 minute winter	15	19	124.093	0.252	121.2	0.4643	0.0000	OK
30 minute winter	16	19	123.969	0.179	135.9	0.4209	0.0000	OK
30 minute winter	17	19	122.842	0.146	139.4	0.3102	0.0000	OK
30 minute winter	18	19	122.343	0.147	139.1	0.2600	0.0000	OK
30 minute winter	19	19	121.745	0.136	147.9	0.3612	0.0000	OK
30 minute winter	20	19	120.485	0.138	151.2	0.2868	0.0000	OK
30 minute winter	21	37	118.068	0.168	167.8	103.5257	0.0000	OK
30 minute winter	22	16	118.373	0.700	158.5	1.7804	0.0000	OK
30 minute winter	23	16	118.376	0.817	164.0	3.2722	0.0000	SURCHARGED
30 minute winter	24	24	113.836	0.036	9.0	0.0514	0.0000	OK
30 minute winter	25	24	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
30 minute winter	1	1.000	2	1.7	0.858	0.044	0.0324	
30 minute winter	2	1.001	3	3.6	1.583	0.079	0.0333	
30 minute winter	3	1.002	5	3.6	1.738	0.065	0.0349	
30 minute winter	4	2.000	5	20.9	1.057	0.493	0.9817	
30 minute winter	5	1.003	6	33.9	1.081	0.374	0.5750	
30 minute winter	6	1.004	7	35.4	1.482	0.391	0.3873	
30 minute winter	7	1.005	8	41.5	2.649	0.158	0.2194	
30 minute winter	8	1.006	9	48.8	2.911	0.151	0.5563	
30 minute winter	9	1.007	10	65.4	3.120	0.213	0.5629	
30 minute winter	10	1.008	11	75.2	2.999	0.309	1.0002	
30 minute winter	11	1.009	12	89.7	3.402	0.179	0.4046	
30 minute winter	12	1.010	13	96.0	2.920	0.155	0.5443	
30 minute winter	13	1.011	14	101.8	1.039	0.548	3.6576	
30 minute winter	14	1.012	15	119.4	1.230	0.643	3.1675	
30 minute winter	15	1.013	16	121.1	1.616	0.652	1.1417	
30 minute winter	16	1.014	17	135.7	2.633	0.302	2.9366	
30 minute winter	17	1.015	18	139.1	3.101	0.167	0.3426	
30 minute winter	18	1.016	19	138.9	3.255	0.176	0.4264	
30 minute winter	19	1.017	20	147.7	3.617	0.176	0.7730	
30 minute winter	20	1.018	23	150.8	3.928	0.172	0.6821	
30 minute winter	21	3.000	22	-167.8	-0.928	-0.166	7.3026	
30 minute winter	22	3.001	23	-158.5	0.458	-0.157	4.1772	
30 minute winter	23	1.019	24	9.0	1.944	0.073	0.3177	
30 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
30 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 2 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 99.95%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
30 minute winter	26	24	105.582	0.036	9.0	0.0408	0.0000	OK
30 minute winter	27	24	103.819	0.037	9.0	0.0417	0.0000	OK
30 minute winter	28	25	99.371	0.071	9.0	0.1021	0.0000	OK
30 minute winter	S29	209	98.725	0.475	9.0	1.6441	0.0000	OK
30 minute winter	S30	209	98.725	0.575	8.5	1.4624	0.0000	SURCHARGED
30 minute winter	S31	209	97.544	0.054	8.3	0.1863	0.0000	OK
30 minute winter	S32	209	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
30 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
30 minute winter	27	1.023	28	9.0	1.607	0.059	0.3923	
30 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
30 minute winter	S29	1.025	S30	8.5	0.528	0.004	8.9871	
30 minute winter	S30	1.026	S31	8.3	0.985	0.428	0.0427	
30 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3531	118.8

**Results for 2 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.89%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
60 minute summer	1	33	139.070	0.020	1.4	0.0316	0.0000	OK
60 minute summer	2	33	138.303	0.027	3.0	0.0445	0.0000	OK
60 minute summer	3	33	137.355	0.024	3.0	0.0346	0.0000	OK
60 minute summer	4	33	134.753	0.103	17.8	0.3634	0.0000	OK
60 minute summer	5	33	134.367	0.123	28.6	0.2721	0.0000	OK
60 minute summer	6	33	134.247	0.125	29.9	0.1529	0.0000	OK
60 minute summer	7	33	134.093	0.078	34.9	0.1492	0.0000	OK
60 minute summer	8	33	133.309	0.072	41.1	0.1463	0.0000	OK
60 minute summer	9	33	130.574	0.087	55.1	0.2444	0.0000	OK
60 minute summer	10	33	128.554	0.107	63.5	0.2099	0.0000	OK
60 minute summer	11	33	126.580	0.107	75.4	0.2739	0.0000	OK
60 minute summer	12	33	125.606	0.090	80.7	0.1921	0.0000	OK
60 minute summer	13	34	124.303	0.228	85.6	0.4674	0.0000	OK
60 minute summer	14	34	124.199	0.249	100.0	0.6453	0.0000	OK
60 minute summer	15	34	124.070	0.229	101.9	0.4214	0.0000	OK
60 minute summer	16	34	123.953	0.163	114.3	0.3830	0.0000	OK
60 minute summer	17	34	122.828	0.132	117.1	0.2793	0.0000	OK
60 minute summer	18	34	122.329	0.133	116.7	0.2346	0.0000	OK
60 minute summer	19	34	121.733	0.124	124.2	0.3280	0.0000	OK
60 minute summer	20	34	120.472	0.125	127.0	0.2599	0.0000	OK
60 minute summer	21	65	118.075	0.175	132.1	107.7931	0.0000	OK
60 minute summer	22	34	118.189	0.516	128.9	1.3132	0.0000	OK
60 minute summer	23	34	118.196	0.637	137.6	2.5498	0.0000	SURCHARGED
60 minute summer	24	37	113.836	0.036	9.0	0.0514	0.0000	OK
60 minute summer	25	38	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
60 minute summer	1	1.000	2	1.4	0.807	0.036	0.0284	
60 minute summer	2	1.001	3	3.0	1.504	0.066	0.0292	
60 minute summer	3	1.002	5	3.0	1.648	0.054	0.0307	
60 minute summer	4	2.000	5	17.6	1.013	0.415	0.8631	
60 minute summer	5	1.003	6	28.5	1.035	0.314	0.5048	
60 minute summer	6	1.004	7	29.7	1.418	0.328	0.3407	
60 minute summer	7	1.005	8	34.8	2.530	0.132	0.1928	
60 minute summer	8	1.006	9	41.0	2.771	0.127	0.4902	
60 minute summer	9	1.007	10	54.9	3.006	0.179	0.4900	
60 minute summer	10	1.008	11	63.1	2.866	0.259	0.8784	
60 minute summer	11	1.009	12	75.3	3.257	0.150	0.3547	
60 minute summer	12	1.010	13	80.6	2.907	0.130	0.4504	
60 minute summer	13	1.011	14	85.6	1.005	0.461	3.1835	
60 minute summer	14	1.012	15	100.4	1.175	0.540	2.7874	
60 minute summer	15	1.013	16	101.8	1.540	0.548	1.0090	
60 minute summer	16	1.014	17	114.0	2.534	0.254	2.5650	
60 minute summer	17	1.015	18	116.7	3.008	0.141	0.2966	
60 minute summer	18	1.016	19	116.6	3.142	0.148	0.3711	
60 minute summer	19	1.017	20	124.0	3.479	0.148	0.6747	
60 minute summer	20	1.018	23	126.6	3.763	0.145	0.5982	
60 minute summer	21	3.000	22	-132.1	-0.822	-0.131	5.8432	
60 minute summer	22	3.001	23	-128.9	0.426	-0.128	3.3348	
60 minute summer	23	1.019	24	9.0	1.944	0.073	0.3178	
60 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
60 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 2 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.89%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
60 minute summer	26	38	105.582	0.036	9.0	0.0408	0.0000	OK
60 minute summer	27	38	103.819	0.037	9.0	0.0417	0.0000	OK
60 minute summer	28	39	99.371	0.071	9.0	0.1021	0.0000	OK
60 minute summer	S29	246	98.769	0.519	9.0	1.7986	0.0000	OK
60 minute summer	S30	246	98.769	0.619	8.6	1.5759	0.0000	SURCHARGED
60 minute summer	S31	226	97.544	0.054	8.3	0.1864	0.0000	OK
60 minute summer	S32	226	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
60 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
60 minute summer	27	1.023	28	9.0	1.486	0.059	0.3924	
60 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0981	
60 minute summer	S29	1.025	S30	8.6	0.505	0.004	10.0573	
60 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
60 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	135.7

**Results for 2 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 99.88%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
60 minute winter	1	34	139.067	0.017	1.1	0.0282	0.0000	OK
60 minute winter	2	32	138.300	0.024	2.4	0.0399	0.0000	OK
60 minute winter	3	33	137.353	0.022	2.4	0.0311	0.0000	OK
60 minute winter	4	33	134.742	0.091	14.4	0.3231	0.0000	OK
60 minute winter	5	33	134.353	0.109	23.2	0.2415	0.0000	OK
60 minute winter	6	34	134.234	0.112	24.3	0.1371	0.0000	OK
60 minute winter	7	33	134.085	0.070	28.4	0.1338	0.0000	OK
60 minute winter	8	33	133.302	0.065	33.5	0.1322	0.0000	OK
60 minute winter	9	33	130.565	0.078	44.9	0.2202	0.0000	OK
60 minute winter	10	33	128.543	0.096	51.7	0.1881	0.0000	OK
60 minute winter	11	33	126.569	0.096	61.6	0.2450	0.0000	OK
60 minute winter	12	33	125.598	0.082	65.9	0.1737	0.0000	OK
60 minute winter	13	34	124.276	0.201	69.9	0.4120	0.0000	OK
60 minute winter	14	34	124.170	0.220	82.1	0.5710	0.0000	OK
60 minute winter	15	34	124.046	0.205	83.4	0.3780	0.0000	OK
60 minute winter	16	34	123.936	0.146	93.7	0.3447	0.0000	OK
60 minute winter	17	34	122.814	0.118	96.2	0.2490	0.0000	OK
60 minute winter	18	35	122.315	0.119	96.1	0.2097	0.0000	OK
60 minute winter	19	34	121.721	0.112	102.4	0.2955	0.0000	OK
60 minute winter	20	35	120.460	0.113	104.8	0.2339	0.0000	OK
60 minute winter	21	65	118.102	0.202	106.1	125.3930	0.0000	OK
60 minute winter	22	34	118.141	0.467	105.1	1.1898	0.0000	OK
60 minute winter	23	34	118.146	0.587	113.9	2.3513	0.0000	SURCHARGED
60 minute winter	24	34	113.836	0.036	9.0	0.0514	0.0000	OK
60 minute winter	25	34	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
60 minute winter	1	1.000	2	1.1	0.756	0.028	0.0242	
60 minute winter	2	1.001	3	2.4	1.413	0.053	0.0250	
60 minute winter	3	1.002	5	2.4	1.545	0.044	0.0262	
60 minute winter	4	2.000	5	14.3	0.961	0.338	0.7408	
60 minute winter	5	1.003	6	23.2	0.983	0.256	0.4329	
60 minute winter	6	1.004	7	24.3	1.344	0.268	0.2933	
60 minute winter	7	1.005	8	28.4	2.398	0.108	0.1660	
60 minute winter	8	1.006	9	33.5	2.615	0.104	0.4238	
60 minute winter	9	1.007	10	44.8	2.874	0.146	0.4182	
60 minute winter	10	1.008	11	51.6	2.716	0.212	0.7581	
60 minute winter	11	1.009	12	61.5	3.094	0.122	0.3051	
60 minute winter	12	1.010	13	65.9	2.917	0.106	0.3607	
60 minute winter	13	1.011	14	70.0	0.962	0.377	2.7172	
60 minute winter	14	1.012	15	82.1	1.114	0.442	2.4054	
60 minute winter	15	1.013	16	83.3	1.454	0.448	0.8758	
60 minute winter	16	1.014	17	93.6	2.421	0.208	2.2048	
60 minute winter	17	1.015	18	96.1	2.902	0.116	0.2530	
60 minute winter	18	1.016	19	96.1	3.009	0.122	0.3185	
60 minute winter	19	1.017	20	102.3	3.328	0.122	0.5821	
60 minute winter	20	1.018	23	104.8	3.585	0.120	0.5191	
60 minute winter	21	3.000	22	-106.1	-0.713	-0.105	6.0475	
60 minute winter	22	3.001	23	-105.1	-0.337	-0.104	3.0144	
60 minute winter	23	1.019	24	9.0	1.944	0.073	0.3177	
60 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
60 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 2 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 99.88%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
60 minute winter	26	35	105.582	0.036	9.0	0.0408	0.0000	OK
60 minute winter	27	35	103.819	0.037	9.0	0.0417	0.0000	OK
60 minute winter	28	36	99.371	0.071	9.0	0.1021	0.0000	OK
60 minute winter	S29	280	98.818	0.568	9.0	1.9692	0.0000	OK
60 minute winter	S30	280	98.818	0.668	8.6	1.7013	0.0000	SURCHARGED
60 minute winter	S31	210	97.544	0.054	8.3	0.1864	0.0000	OK
60 minute winter	S32	210	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
60 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
60 minute winter	27	1.023	28	9.0	1.615	0.059	0.3924	
60 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
60 minute winter	S29	1.025	S30	8.6	0.527	0.004	11.2469	
60 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
60 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	137.1

**Results for 2 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.89%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
120 minute summer	1	66	139.066	0.016	0.9	0.0257	0.0000	OK
120 minute summer	2	64	138.298	0.022	2.0	0.0364	0.0000	OK
120 minute summer	3	64	137.351	0.020	2.0	0.0285	0.0000	OK
120 minute summer	4	64	134.732	0.082	11.9	0.2912	0.0000	OK
120 minute summer	5	64	134.343	0.098	19.3	0.2175	0.0000	OK
120 minute summer	6	64	134.224	0.102	20.2	0.1243	0.0000	OK
120 minute summer	7	64	134.079	0.064	23.6	0.1213	0.0000	OK
120 minute summer	8	64	133.296	0.059	27.8	0.1206	0.0000	OK
120 minute summer	9	64	130.558	0.071	37.2	0.2005	0.0000	OK
120 minute summer	10	64	128.534	0.087	42.9	0.1703	0.0000	OK
120 minute summer	11	64	126.560	0.087	51.1	0.2216	0.0000	OK
120 minute summer	12	64	125.591	0.074	54.7	0.1584	0.0000	OK
120 minute summer	13	64	124.254	0.179	58.0	0.3676	0.0000	OK
120 minute summer	14	64	124.147	0.197	68.0	0.5100	0.0000	OK
120 minute summer	15	64	124.026	0.185	68.7	0.3407	0.0000	OK
120 minute summer	16	64	123.922	0.132	77.2	0.3112	0.0000	OK
120 minute summer	17	64	122.801	0.105	79.1	0.2222	0.0000	OK
120 minute summer	18	66	122.302	0.106	78.9	0.1877	0.0000	OK
120 minute summer	19	64	121.709	0.100	84.0	0.2658	0.0000	OK
120 minute summer	20	66	120.448	0.101	85.9	0.2101	0.0000	OK
120 minute summer	21	120	118.090	0.190	85.4	117.2663	0.0000	OK
120 minute summer	22	66	118.104	0.431	84.6	1.0969	0.0000	OK
120 minute summer	23	66	118.109	0.550	93.4	2.2003	0.0000	SURCHARGED
120 minute summer	24	66	113.836	0.036	9.0	0.0514	0.0000	OK
120 minute summer	25	66	110.273	0.036	9.0	0.0404	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
120 minute summer	1	1.000	2	0.9	0.711	0.023	0.0211	
120 minute summer	2	1.001	3	2.0	1.338	0.044	0.0219	
120 minute summer	3	1.002	5	2.0	1.465	0.036	0.0231	
120 minute summer	4	2.000	5	11.9	0.914	0.280	0.6452	
120 minute summer	5	1.003	6	19.3	0.937	0.213	0.3772	
120 minute summer	6	1.004	7	20.1	1.276	0.222	0.2563	
120 minute summer	7	1.005	8	23.6	2.281	0.090	0.1450	
120 minute summer	8	1.006	9	27.8	2.476	0.086	0.3714	
120 minute summer	9	1.007	10	37.2	2.759	0.121	0.3615	
120 minute summer	10	1.008	11	42.8	2.581	0.176	0.6614	
120 minute summer	11	1.009	12	51.1	2.947	0.102	0.2658	
120 minute summer	12	1.010	13	54.7	2.900	0.088	0.2913	
120 minute summer	13	1.011	14	57.8	0.922	0.311	2.3419	
120 minute summer	14	1.012	15	67.6	1.057	0.364	2.0872	
120 minute summer	15	1.013	16	68.4	1.375	0.368	0.7624	
120 minute summer	16	1.014	17	76.9	2.311	0.171	1.8980	
120 minute summer	17	1.015	18	78.9	2.792	0.095	0.2158	
120 minute summer	18	1.016	19	78.9	2.882	0.100	0.2732	
120 minute summer	19	1.017	20	84.0	3.177	0.100	0.5004	
120 minute summer	20	1.018	23	86.1	3.408	0.098	0.4485	
120 minute summer	21	3.000	22	-85.4	-0.629	-0.085	5.7551	
120 minute summer	22	3.001	23	-84.6	0.365	-0.084	2.7602	
120 minute summer	23	1.019	24	9.0	1.943	0.073	0.3174	
120 minute summer	24	1.020	25	9.0	2.216	0.054	0.1445	
120 minute summer	25	1.021	26	9.0	2.210	0.054	0.1908	

**Results for 2 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.89%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
120 minute summer	26	66	105.582	0.036	9.0	0.0408	0.0000	OK
120 minute summer	27	66	103.819	0.037	9.0	0.0417	0.0000	OK
120 minute summer	28	66	99.371	0.071	9.0	0.1021	0.0000	OK
120 minute summer	S29	324	98.863	0.613	9.0	2.1233	0.0000	OK
120 minute summer	S30	324	98.863	0.713	8.6	1.8145	0.0000	SURCHARGED
120 minute summer	S31	218	97.544	0.054	8.3	0.1864	0.0000	OK
120 minute summer	S32	218	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
120 minute summer	26	1.022	27	9.0	2.160	0.054	0.0734	
120 minute summer	27	1.023	28	9.0	1.347	0.059	0.3920	
120 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0980	
120 minute summer	S29	1.025	S30	8.6	0.517	0.004	12.3231	
120 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
120 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	164.1

**Results for 2 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 99.85%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
120 minute winter	1	64	139.064	0.014	0.7	0.0228	0.0000	OK
120 minute winter	2	60	138.295	0.019	1.5	0.0317	0.0000	OK
120 minute winter	3	62	137.348	0.017	1.5	0.0248	0.0000	OK
120 minute winter	4	64	134.722	0.072	9.2	0.2540	0.0000	OK
120 minute winter	5	64	134.329	0.085	14.8	0.1882	0.0000	OK
120 minute winter	6	64	134.211	0.089	15.5	0.1086	0.0000	OK
120 minute winter	7	64	134.071	0.056	18.2	0.1059	0.0000	OK
120 minute winter	8	64	133.289	0.052	21.4	0.1061	0.0000	OK
120 minute winter	9	64	130.549	0.062	28.7	0.1762	0.0000	OK
120 minute winter	10	64	128.523	0.076	33.1	0.1487	0.0000	OK
120 minute winter	11	64	126.548	0.075	39.4	0.1924	0.0000	OK
120 minute winter	12	64	125.583	0.067	42.2	0.1421	0.0000	OK
120 minute winter	13	64	124.230	0.155	44.8	0.3169	0.0000	OK
120 minute winter	14	64	124.120	0.170	52.6	0.4414	0.0000	OK
120 minute winter	15	64	124.003	0.162	53.3	0.2988	0.0000	OK
120 minute winter	16	64	123.906	0.116	60.0	0.2738	0.0000	OK
120 minute winter	17	64	122.787	0.091	61.7	0.1935	0.0000	OK
120 minute winter	18	66	122.289	0.093	61.6	0.1637	0.0000	OK
120 minute winter	19	66	121.697	0.088	65.6	0.2338	0.0000	OK
120 minute winter	20	66	120.436	0.089	67.3	0.1844	0.0000	OK
120 minute winter	21	120	118.124	0.224	63.7	139.7612	0.0000	OK
120 minute winter	22	120	118.124	0.451	64.1	1.1475	0.0000	OK
120 minute winter	23	120	118.124	0.565	73.2	2.2616	0.0000	SURCHARGED
120 minute winter	24	122	113.836	0.036	9.0	0.0514	0.0000	OK
120 minute winter	25	122	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
120 minute winter	1	1.000	2	0.7	0.660	0.018	0.0174	
120 minute winter	2	1.001	3	1.5	1.229	0.033	0.0179	
120 minute winter	3	1.002	5	1.5	1.343	0.027	0.0189	
120 minute winter	4	2.000	5	9.2	0.853	0.217	0.5358	
120 minute winter	5	1.003	6	14.8	0.874	0.163	0.3106	
120 minute winter	6	1.004	7	15.5	1.188	0.171	0.2120	
120 minute winter	7	1.005	8	18.2	2.122	0.069	0.1200	
120 minute winter	8	1.006	9	21.4	2.287	0.066	0.3090	
120 minute winter	9	1.007	10	28.7	2.603	0.093	0.2953	
120 minute winter	10	1.008	11	33.0	2.402	0.136	0.5486	
120 minute winter	11	1.009	12	39.4	2.724	0.079	0.2218	
120 minute winter	12	1.010	13	42.2	2.896	0.068	0.2180	
120 minute winter	13	1.011	14	44.8	0.870	0.241	1.9240	
120 minute winter	14	1.012	15	52.5	0.988	0.283	1.7349	
120 minute winter	15	1.013	16	53.2	1.279	0.287	0.6383	
120 minute winter	16	1.014	17	60.0	2.175	0.133	1.5742	
120 minute winter	17	1.015	18	61.6	2.653	0.074	0.1774	
120 minute winter	18	1.016	19	61.6	2.719	0.078	0.2261	
120 minute winter	19	1.017	20	65.7	2.990	0.078	0.4157	
120 minute winter	20	1.018	23	67.3	3.189	0.077	0.3744	
120 minute winter	21	3.000	22	-63.7	-0.506	-0.063	6.5763	
120 minute winter	22	3.001	23	-64.1	-0.246	-0.064	2.8824	
120 minute winter	23	1.019	24	9.0	1.943	0.073	0.3176	
120 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
120 minute winter	25	1.021	26	9.0	2.210	0.054	0.1909	

**Results for 2 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 99.85%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
120 minute winter	26	122	105.582	0.036	9.0	0.0408	0.0000	OK
120 minute winter	27	122	103.819	0.037	9.0	0.0417	0.0000	OK
120 minute winter	28	122	99.371	0.071	9.0	0.1021	0.0000	OK
120 minute winter	S29	360	98.939	0.689	9.0	2.3869	0.0000	OK
120 minute winter	S30	360	98.939	0.789	8.6	2.0082	0.0000	SURCHARGED
120 minute winter	S31	210	97.544	0.054	8.3	0.1864	0.0000	OK
120 minute winter	S32	210	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
120 minute winter	26	1.022	27	9.0	2.160	0.054	0.0734	
120 minute winter	27	1.023	28	9.0	1.332	0.059	0.3922	
120 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0980	
120 minute winter	S29	1.025	S30	8.6	0.463	0.004	14.1488	
120 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
120 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	163.8

**Results for 2 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 99.91%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
180 minute summer	1	96	139.064	0.014	0.7	0.0228	0.0000	OK
180 minute summer	2	96	138.295	0.019	1.5	0.0317	0.0000	OK
180 minute summer	3	96	137.348	0.017	1.5	0.0248	0.0000	OK
180 minute summer	4	96	134.721	0.071	9.0	0.2511	0.0000	OK
180 minute summer	5	96	134.329	0.085	14.6	0.1868	0.0000	OK
180 minute summer	6	96	134.210	0.088	15.3	0.1079	0.0000	OK
180 minute summer	7	96	134.070	0.055	17.9	0.1051	0.0000	OK
180 minute summer	8	96	133.289	0.052	21.1	0.1054	0.0000	OK
180 minute summer	9	96	130.549	0.062	28.3	0.1751	0.0000	OK
180 minute summer	10	96	128.522	0.075	32.6	0.1476	0.0000	OK
180 minute summer	11	96	126.548	0.075	38.9	0.1909	0.0000	OK
180 minute summer	12	96	125.583	0.067	41.7	0.1414	0.0000	OK
180 minute summer	13	96	124.228	0.153	44.2	0.3143	0.0000	OK
180 minute summer	14	96	124.119	0.169	51.9	0.4381	0.0000	OK
180 minute summer	15	96	124.002	0.161	52.6	0.2969	0.0000	OK
180 minute summer	16	96	123.906	0.115	59.3	0.2721	0.0000	OK
180 minute summer	17	96	122.787	0.091	61.0	0.1924	0.0000	OK
180 minute summer	18	96	122.288	0.092	60.9	0.1626	0.0000	OK
180 minute summer	19	96	121.697	0.088	65.0	0.2326	0.0000	OK
180 minute summer	20	96	120.435	0.088	66.6	0.1833	0.0000	OK
180 minute summer	21	152	118.090	0.190	62.9	117.4533	0.0000	OK
180 minute summer	22	156	118.090	0.417	63.3	1.0612	0.0000	OK
180 minute summer	23	156	118.090	0.531	72.5	2.1260	0.0000	SURCHARGED
180 minute summer	24	156	113.836	0.036	9.0	0.0513	0.0000	OK
180 minute summer	25	156	110.273	0.036	9.0	0.0404	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
180 minute summer	1	1.000	2	0.7	0.660	0.018	0.0174	
180 minute summer	2	1.001	3	1.5	1.229	0.033	0.0179	
180 minute summer	3	1.002	5	1.5	1.343	0.027	0.0189	
180 minute summer	4	2.000	5	9.0	0.848	0.212	0.5275	
180 minute summer	5	1.003	6	14.6	0.871	0.161	0.3078	
180 minute summer	6	1.004	7	15.3	1.186	0.169	0.2100	
180 minute summer	7	1.005	8	17.9	2.112	0.068	0.1187	
180 minute summer	8	1.006	9	21.1	2.278	0.065	0.3061	
180 minute summer	9	1.007	10	28.3	2.597	0.092	0.2922	
180 minute summer	10	1.008	11	32.6	2.393	0.134	0.5430	
180 minute summer	11	1.009	12	38.9	2.711	0.077	0.2197	
180 minute summer	12	1.010	13	41.7	2.905	0.067	0.2145	
180 minute summer	13	1.011	14	44.2	0.867	0.238	1.9036	
180 minute summer	14	1.012	15	51.8	0.984	0.279	1.7186	
180 minute summer	15	1.013	16	52.6	1.273	0.283	0.6328	
180 minute summer	16	1.014	17	59.3	2.168	0.132	1.5608	
180 minute summer	17	1.015	18	60.9	2.647	0.073	0.1759	
180 minute summer	18	1.016	19	60.9	2.710	0.077	0.2242	
180 minute summer	19	1.017	20	65.0	2.982	0.078	0.4126	
180 minute summer	20	1.018	23	66.6	3.179	0.076	0.3715	
180 minute summer	21	3.000	22	-62.9	0.519	-0.062	5.7618	
180 minute summer	22	3.001	23	-63.3	0.375	-0.063	2.6464	
180 minute summer	23	1.019	24	9.0	1.942	0.073	0.3171	
180 minute summer	24	1.020	25	9.0	2.215	0.054	0.1443	
180 minute summer	25	1.021	26	9.0	2.209	0.054	0.1905	

**Results for 2 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 99.91%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
180 minute summer	26	156	105.582	0.036	9.0	0.0407	0.0000	OK
180 minute summer	27	156	103.819	0.037	9.0	0.0417	0.0000	OK
180 minute summer	28	156	99.371	0.071	9.0	0.1020	0.0000	OK
180 minute summer	S29	380	98.909	0.659	9.0	2.2828	0.0000	OK
180 minute summer	S30	380	98.909	0.759	8.6	1.9317	0.0000	SURCHARGED
180 minute summer	S31	244	97.544	0.054	8.3	0.1864	0.0000	OK
180 minute summer	S32	244	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
180 minute summer	26	1.022	27	9.0	2.159	0.054	0.0733	
180 minute summer	27	1.023	28	9.0	1.227	0.059	0.3916	
180 minute summer	28	1.024	S29	9.0	0.870	0.194	0.0979	
180 minute summer	S29	1.025	S30	8.6	0.456	0.004	13.4313	
180 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
180 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	190.1

**Results for 2 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 99.87%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
180 minute winter	1	96	139.063	0.013	0.6	0.0212	0.0000	OK
180 minute winter	2	96	138.293	0.017	1.2	0.0285	0.0000	OK
180 minute winter	3	96	137.347	0.016	1.2	0.0223	0.0000	OK
180 minute winter	4	96	134.712	0.062	7.0	0.2202	0.0000	OK
180 minute winter	5	96	134.318	0.074	11.3	0.1629	0.0000	OK
180 minute winter	6	96	134.200	0.078	11.9	0.0950	0.0000	OK
180 minute winter	7	96	134.064	0.049	13.9	0.0923	0.0000	OK
180 minute winter	8	96	133.283	0.046	16.4	0.0933	0.0000	OK
180 minute winter	9	96	130.542	0.055	21.9	0.1548	0.0000	OK
180 minute winter	10	96	128.513	0.066	25.2	0.1294	0.0000	OK
180 minute winter	11	96	126.538	0.065	30.0	0.1660	0.0000	OK
180 minute winter	12	96	125.576	0.060	32.1	0.1283	0.0000	OK
180 minute winter	13	96	124.208	0.132	34.0	0.2717	0.0000	OK
180 minute winter	14	96	124.096	0.146	39.9	0.3793	0.0000	OK
180 minute winter	15	96	123.982	0.141	40.5	0.2598	0.0000	OK
180 minute winter	16	96	123.891	0.101	45.6	0.2382	0.0000	OK
180 minute winter	17	96	122.775	0.079	46.8	0.1668	0.0000	OK
180 minute winter	18	96	122.276	0.080	46.8	0.1413	0.0000	OK
180 minute winter	19	96	121.686	0.077	49.9	0.2032	0.0000	OK
180 minute winter	20	96	120.424	0.077	51.1	0.1598	0.0000	OK
180 minute winter	21	176	118.127	0.227	45.7	141.6240	0.0000	OK
180 minute winter	22	176	118.127	0.454	46.4	1.1554	0.0000	OK
180 minute winter	23	172	118.127	0.568	55.6	2.2741	0.0000	SURCHARGED
180 minute winter	24	172	113.836	0.036	9.0	0.0514	0.0000	OK
180 minute winter	25	172	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
180 minute winter	1	1.000	2	0.6	0.645	0.015	0.0152	
180 minute winter	2	1.001	3	1.2	1.153	0.026	0.0153	
180 minute winter	3	1.002	5	1.2	1.256	0.022	0.0161	
180 minute winter	4	2.000	5	7.0	0.791	0.165	0.4400	
180 minute winter	5	1.003	6	11.3	0.811	0.125	0.2557	
180 minute winter	6	1.004	7	11.9	1.106	0.131	0.1752	
180 minute winter	7	1.005	8	13.9	1.968	0.053	0.0989	
180 minute winter	8	1.006	9	16.4	2.115	0.051	0.2563	
180 minute winter	9	1.007	10	21.9	2.452	0.071	0.2395	
180 minute winter	10	1.008	11	25.2	2.227	0.103	0.4511	
180 minute winter	11	1.009	12	30.0	2.484	0.060	0.1849	
180 minute winter	12	1.010	13	32.1	2.908	0.052	0.1590	
180 minute winter	13	1.011	14	34.0	0.815	0.183	1.5597	
180 minute winter	14	1.012	15	39.9	0.916	0.215	1.4205	
180 minute winter	15	1.013	16	40.5	1.179	0.218	0.5255	
180 minute winter	16	1.014	17	45.5	2.028	0.101	1.2830	
180 minute winter	17	1.015	18	46.8	2.497	0.056	0.1433	
180 minute winter	18	1.016	19	46.8	2.542	0.059	0.1838	
180 minute winter	19	1.017	20	49.9	2.786	0.060	0.3392	
180 minute winter	20	1.018	23	51.1	2.958	0.058	0.3066	
180 minute winter	21	3.000	22	-45.7	-0.397	-0.045	6.6477	
180 minute winter	22	3.001	23	-46.4	-0.191	-0.046	2.9036	
180 minute winter	23	1.019	24	9.0	1.943	0.073	0.3176	
180 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
180 minute winter	25	1.021	26	9.0	2.210	0.054	0.1909	

**Results for 2 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 99.87%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
180 minute winter	26	172	105.582	0.036	9.0	0.0408	0.0000	OK
180 minute winter	27	176	103.819	0.037	9.0	0.0417	0.0000	OK
180 minute winter	28	176	99.371	0.071	9.0	0.1021	0.0000	OK
180 minute winter	S29	420	99.028	0.778	9.0	2.6953	0.0000	OK
180 minute winter	S30	420	99.028	0.878	8.6	2.2347	0.0000	SURCHARGED
180 minute winter	S31	228	97.544	0.054	8.3	0.1864	0.0000	OK
180 minute winter	S32	228	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
180 minute winter	26	1.022	27	9.0	2.161	0.054	0.0734	
180 minute winter	27	1.023	28	9.0	1.227	0.059	0.3923	
180 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
180 minute winter	S29	1.025	S30	8.6	0.393	0.004	16.2245	
180 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
180 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	189.6

**Results for 2 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 99.92%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
240 minute summer	1	128	139.063	0.013	0.6	0.0212	0.0000	OK
240 minute summer	2	124	138.294	0.018	1.3	0.0296	0.0000	OK
240 minute summer	3	124	137.347	0.016	1.3	0.0232	0.0000	OK
240 minute summer	4	124	134.715	0.065	7.7	0.2295	0.0000	OK
240 minute summer	5	124	134.321	0.077	12.4	0.1708	0.0000	OK
240 minute summer	6	124	134.203	0.081	12.9	0.0989	0.0000	OK
240 minute summer	7	124	134.066	0.051	15.2	0.0965	0.0000	OK
240 minute summer	8	124	133.285	0.048	17.8	0.0970	0.0000	OK
240 minute summer	9	124	130.544	0.057	23.9	0.1612	0.0000	OK
240 minute summer	10	124	128.516	0.069	27.5	0.1351	0.0000	OK
240 minute summer	11	124	126.541	0.068	32.8	0.1741	0.0000	OK
240 minute summer	12	124	125.578	0.062	35.1	0.1326	0.0000	OK
240 minute summer	13	124	124.214	0.139	37.3	0.2854	0.0000	OK
240 minute summer	14	124	124.103	0.153	43.7	0.3970	0.0000	OK
240 minute summer	15	124	123.988	0.147	43.9	0.2704	0.0000	OK
240 minute summer	16	124	123.895	0.105	49.4	0.2477	0.0000	OK
240 minute summer	17	128	122.778	0.082	50.6	0.1739	0.0000	OK
240 minute summer	18	128	122.279	0.083	50.7	0.1474	0.0000	OK
240 minute summer	19	128	121.689	0.080	54.1	0.2117	0.0000	OK
240 minute summer	20	128	120.427	0.080	55.4	0.1668	0.0000	OK
240 minute summer	21	188	118.090	0.190	51.0	117.4813	0.0000	OK
240 minute summer	22	188	118.090	0.417	51.2	1.0612	0.0000	OK
240 minute summer	23	188	118.090	0.531	60.2	2.1260	0.0000	SURCHARGED
240 minute summer	24	188	113.836	0.036	9.0	0.0513	0.0000	OK
240 minute summer	25	188	110.273	0.036	9.0	0.0404	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
240 minute summer	1	1.000	2	0.6	0.626	0.015	0.0157	
240 minute summer	2	1.001	3	1.3	1.179	0.029	0.0162	
240 minute summer	3	1.002	5	1.3	1.287	0.024	0.0171	
240 minute summer	4	2.000	5	7.6	0.808	0.179	0.4657	
240 minute summer	5	1.003	6	12.3	0.832	0.136	0.2719	
240 minute summer	6	1.004	7	12.9	1.128	0.142	0.1858	
240 minute summer	7	1.005	8	15.1	2.016	0.058	0.1051	
240 minute summer	8	1.006	9	17.8	2.168	0.055	0.2717	
240 minute summer	9	1.007	10	23.8	2.499	0.078	0.2557	
240 minute summer	10	1.008	11	27.4	2.279	0.112	0.4793	
240 minute summer	11	1.009	12	32.7	2.560	0.065	0.1961	
240 minute summer	12	1.010	13	35.1	2.907	0.057	0.1764	
240 minute summer	13	1.011	14	37.1	0.832	0.199	1.6654	
240 minute summer	14	1.012	15	43.2	0.936	0.233	1.5071	
240 minute summer	15	1.013	16	43.8	1.208	0.236	0.5555	
240 minute summer	16	1.014	17	49.3	2.069	0.110	1.3595	
240 minute summer	17	1.015	18	50.7	2.542	0.061	0.1524	
240 minute summer	18	1.016	19	50.8	2.593	0.064	0.1952	
240 minute summer	19	1.017	20	54.1	2.844	0.065	0.3602	
240 minute summer	20	1.018	23	55.5	3.027	0.063	0.3256	
240 minute summer	21	3.000	22	-51.0	0.523	-0.051	5.7626	
240 minute summer	22	3.001	23	-51.2	0.413	-0.051	2.6465	
240 minute summer	23	1.019	24	9.0	1.942	0.073	0.3171	
240 minute summer	24	1.020	25	9.0	2.215	0.054	0.1443	
240 minute summer	25	1.021	26	9.0	2.209	0.054	0.1905	

**Results for 2 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 99.92%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
240 minute summer	26	196	105.582	0.036	9.0	0.0407	0.0000	OK
240 minute summer	27	196	103.819	0.037	9.0	0.0417	0.0000	OK
240 minute summer	28	188	99.371	0.071	9.0	0.1020	0.0000	OK
240 minute summer	S29	432	98.954	0.704	9.0	2.4389	0.0000	OK
240 minute summer	S30	432	98.954	0.804	8.6	2.0463	0.0000	SURCHARGED
240 minute summer	S31	268	97.544	0.054	8.3	0.1864	0.0000	OK
240 minute summer	S32	268	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
240 minute summer	26	1.022	27	9.0	2.159	0.054	0.0733	
240 minute summer	27	1.023	28	9.0	1.227	0.059	0.3916	
240 minute summer	28	1.024	S29	9.0	0.870	0.194	0.0979	
240 minute summer	S29	1.025	S30	8.6	0.325	0.004	14.5036	
240 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
240 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	214.9

**Results for 2 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
240 minute winter	1	124	139.062	0.012	0.5	0.0192	0.0000	OK
240 minute winter	2	124	138.292	0.016	1.0	0.0259	0.0000	OK
240 minute winter	3	124	137.345	0.014	1.0	0.0201	0.0000	OK
240 minute winter	4	124	134.707	0.056	5.8	0.1995	0.0000	OK
240 minute winter	5	124	134.311	0.067	9.3	0.1473	0.0000	OK
240 minute winter	6	124	134.193	0.071	9.8	0.0863	0.0000	OK
240 minute winter	7	124	134.059	0.044	11.5	0.0839	0.0000	OK
240 minute winter	8	124	133.279	0.042	13.5	0.0848	0.0000	OK
240 minute winter	9	124	130.537	0.050	18.1	0.1411	0.0000	OK
240 minute winter	10	124	128.507	0.060	20.9	0.1175	0.0000	OK
240 minute winter	11	124	126.532	0.059	24.8	0.1507	0.0000	OK
240 minute winter	12	124	125.571	0.055	26.6	0.1165	0.0000	OK
240 minute winter	13	124	124.195	0.120	28.2	0.2451	0.0000	OK
240 minute winter	14	124	124.082	0.132	33.0	0.3420	0.0000	OK
240 minute winter	15	128	123.969	0.128	33.4	0.2359	0.0000	OK
240 minute winter	16	128	123.882	0.092	37.6	0.2167	0.0000	OK
240 minute winter	17	128	122.767	0.071	38.7	0.1504	0.0000	OK
240 minute winter	18	128	122.268	0.072	38.7	0.1276	0.0000	OK
240 minute winter	19	128	121.679	0.070	41.3	0.1846	0.0000	OK
240 minute winter	20	128	120.417	0.070	42.3	0.1451	0.0000	OK
240 minute winter	21	200	118.123	0.223	36.2	139.2298	0.0000	OK
240 minute winter	22	200	118.123	0.450	36.9	1.1462	0.0000	OK
240 minute winter	23	200	118.123	0.564	46.0	2.2597	0.0000	SURCHARGED
240 minute winter	24	200	113.836	0.036	9.0	0.0514	0.0000	OK
240 minute winter	25	200	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
240 minute winter	1	1.000	2	0.5	0.607	0.013	0.0132	
240 minute winter	2	1.001	3	1.0	1.086	0.022	0.0132	
240 minute winter	3	1.002	5	1.0	1.179	0.018	0.0139	
240 minute winter	4	2.000	5	5.8	0.748	0.136	0.3833	
240 minute winter	5	1.003	6	9.3	0.771	0.103	0.2223	
240 minute winter	6	1.004	7	9.8	1.046	0.108	0.1527	
240 minute winter	7	1.005	8	11.5	1.867	0.044	0.0861	
240 minute winter	8	1.006	9	13.5	1.992	0.042	0.2240	
240 minute winter	9	1.007	10	18.1	2.348	0.059	0.2062	
240 minute winter	10	1.008	11	20.8	2.109	0.085	0.3935	
240 minute winter	11	1.009	12	24.8	2.365	0.049	0.1607	
240 minute winter	12	1.010	13	26.6	2.757	0.043	0.1388	
240 minute winter	13	1.011	14	28.1	0.778	0.151	1.3509	
240 minute winter	14	1.012	15	32.9	0.869	0.177	1.2353	
240 minute winter	15	1.013	16	33.4	1.115	0.180	0.4594	
240 minute winter	16	1.014	17	37.7	1.931	0.084	1.1146	
240 minute winter	17	1.015	18	38.7	2.392	0.047	0.1237	
240 minute winter	18	1.016	19	38.7	2.424	0.049	0.1592	
240 minute winter	19	1.017	20	41.3	2.655	0.049	0.2946	
240 minute winter	20	1.018	23	42.3	2.811	0.048	0.2673	
240 minute winter	21	3.000	22	-36.2	-0.333	-0.036	6.5605	
240 minute winter	22	3.001	23	-36.9	-0.159	-0.037	2.8789	
240 minute winter	23	1.019	24	9.0	1.943	0.073	0.3176	
240 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
240 minute winter	25	1.021	26	9.0	2.210	0.054	0.1909	

**Results for 2 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
240 minute winter	26	200	105.582	0.036	9.0	0.0408	0.0000	OK
240 minute winter	27	228	103.819	0.037	9.0	0.0417	0.0000	OK
240 minute winter	28	228	99.371	0.071	9.0	0.1021	0.0000	OK
240 minute winter	S29	480	99.054	0.804	9.0	2.7837	0.0000	OK
240 minute winter	S30	480	99.054	0.904	8.6	2.2997	0.0000	SURCHARGED
240 minute winter	S31	272	97.544	0.054	8.3	0.1864	0.0000	OK
240 minute winter	S32	272	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
240 minute winter	26	1.022	27	9.0	2.160	0.054	0.0734	
240 minute winter	27	1.023	28	9.0	1.227	0.059	0.3922	
240 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0980	
240 minute winter	S29	1.025	S30	8.6	0.447	0.004	16.8009	
240 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
240 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	216.3

**Results for 2 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 99.98%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
360 minute summer	1	184	139.062	0.012	0.5	0.0193	0.0000	OK
360 minute summer	2	184	138.292	0.016	1.0	0.0260	0.0000	OK
360 minute summer	3	184	137.345	0.014	1.0	0.0203	0.0000	OK
360 minute summer	4	184	134.707	0.057	6.0	0.2017	0.0000	OK
360 minute summer	5	184	134.312	0.067	9.6	0.1490	0.0000	OK
360 minute summer	6	184	134.193	0.071	10.0	0.0870	0.0000	OK
360 minute summer	7	184	134.060	0.045	11.8	0.0848	0.0000	OK
360 minute summer	8	184	133.279	0.042	13.8	0.0858	0.0000	OK
360 minute summer	9	184	130.538	0.050	18.5	0.1426	0.0000	OK
360 minute summer	10	184	128.508	0.061	21.3	0.1186	0.0000	OK
360 minute summer	11	184	126.533	0.060	25.4	0.1525	0.0000	OK
360 minute summer	12	184	125.571	0.055	27.1	0.1177	0.0000	OK
360 minute summer	13	184	124.196	0.121	28.8	0.2477	0.0000	OK
360 minute summer	14	184	124.083	0.133	33.7	0.3449	0.0000	OK
360 minute summer	15	184	123.970	0.129	33.8	0.2369	0.0000	OK
360 minute summer	16	184	123.882	0.092	38.0	0.2173	0.0000	OK
360 minute summer	17	184	122.767	0.071	38.9	0.1506	0.0000	OK
360 minute summer	18	184	122.268	0.072	38.8	0.1277	0.0000	OK
360 minute summer	19	184	121.679	0.070	41.4	0.1847	0.0000	OK
360 minute summer	20	184	120.417	0.070	42.4	0.1451	0.0000	OK
360 minute summer	21	256	118.084	0.184	36.1	113.8319	0.0000	OK
360 minute summer	22	256	118.084	0.411	37.0	1.0468	0.0000	OK
360 minute summer	23	256	118.084	0.525	46.2	2.1034	0.0000	SURCHARGED
360 minute summer	24	264	113.836	0.036	9.0	0.0513	0.0000	OK
360 minute summer	25	264	110.273	0.036	9.0	0.0404	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
360 minute summer	1	1.000	2	0.5	0.610	0.013	0.0133	
360 minute summer	2	1.001	3	1.0	1.088	0.022	0.0133	
360 minute summer	3	1.002	5	1.0	1.185	0.018	0.0140	
360 minute summer	4	2.000	5	5.9	0.752	0.139	0.3891	
360 minute summer	5	1.003	6	9.5	0.775	0.105	0.2256	
360 minute summer	6	1.004	7	10.0	1.049	0.110	0.1548	
360 minute summer	7	1.005	8	11.7	1.877	0.045	0.0875	
360 minute summer	8	1.006	9	13.8	2.008	0.043	0.2275	
360 minute summer	9	1.007	10	18.4	2.360	0.060	0.2094	
360 minute summer	10	1.008	11	21.2	2.119	0.087	0.3987	
360 minute summer	11	1.009	12	25.3	2.381	0.050	0.1633	
360 minute summer	12	1.010	13	27.1	2.772	0.044	0.1408	
360 minute summer	13	1.011	14	28.6	0.781	0.154	1.3688	
360 minute summer	14	1.012	15	33.3	0.872	0.179	1.2471	
360 minute summer	15	1.013	16	33.6	1.116	0.181	0.4617	
360 minute summer	16	1.014	17	37.8	1.932	0.084	1.1181	
360 minute summer	17	1.015	18	38.8	2.392	0.047	0.1238	
360 minute summer	18	1.016	19	38.7	2.422	0.049	0.1593	
360 minute summer	19	1.017	20	41.3	2.654	0.049	0.2947	
360 minute summer	20	1.018	23	42.3	2.810	0.048	0.2672	
360 minute summer	21	3.000	22	-36.1	0.515	-0.036	5.6286	
360 minute summer	22	3.001	23	-37.0	0.508	-0.037	2.6067	
360 minute summer	23	1.019	24	9.0	1.942	0.073	0.3170	
360 minute summer	24	1.020	25	9.0	2.215	0.054	0.1443	
360 minute summer	25	1.021	26	9.0	2.209	0.054	0.1905	

**Results for 2 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 99.98%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
360 minute summer	26	264	105.582	0.036	9.0	0.0407	0.0000	OK
360 minute summer	27	264	103.819	0.037	9.0	0.0417	0.0000	OK
360 minute summer	28	264	99.371	0.071	9.0	0.1020	0.0000	OK
360 minute summer	S29	520	99.010	0.760	9.0	2.6322	0.0000	OK
360 minute summer	S30	520	99.010	0.860	8.6	2.1884	0.0000	SURCHARGED
360 minute summer	S31	328	97.544	0.054	8.3	0.1864	0.0000	OK
360 minute summer	S32	328	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
360 minute summer	26	1.022	27	9.0	2.159	0.054	0.0733	
360 minute summer	27	1.023	28	9.0	1.226	0.059	0.3914	
360 minute summer	28	1.024	S29	9.0	0.870	0.194	0.0978	
360 minute summer	S29	1.025	S30	8.6	0.448	0.004	15.8072	
360 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
360 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	255.1

**Results for 2 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 99.94%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
360 minute winter	1	168	139.060	0.010	0.3	0.0154	0.0000	OK
360 minute winter	2	176	138.289	0.013	0.7	0.0221	0.0000	OK
360 minute winter	3	176	137.343	0.012	0.7	0.0173	0.0000	OK
360 minute winter	4	184	134.699	0.049	4.4	0.1732	0.0000	OK
360 minute winter	5	184	134.302	0.058	7.1	0.1275	0.0000	OK
360 minute winter	6	184	134.183	0.061	7.4	0.0748	0.0000	OK
360 minute winter	7	184	134.053	0.038	8.6	0.0728	0.0000	OK
360 minute winter	8	184	133.273	0.036	10.1	0.0741	0.0000	OK
360 minute winter	9	184	130.531	0.044	13.6	0.1231	0.0000	OK
360 minute winter	10	184	128.499	0.052	15.7	0.1021	0.0000	OK
360 minute winter	11	184	126.524	0.051	18.7	0.1308	0.0000	OK
360 minute winter	12	184	125.564	0.047	20.0	0.1010	0.0000	OK
360 minute winter	13	184	124.178	0.103	21.2	0.2105	0.0000	OK
360 minute winter	14	184	124.064	0.113	24.8	0.2943	0.0000	OK
360 minute winter	15	184	123.952	0.111	25.2	0.2049	0.0000	OK
360 minute winter	16	184	123.870	0.080	28.3	0.1884	0.0000	OK
360 minute winter	17	184	122.757	0.061	29.1	0.1294	0.0000	OK
360 minute winter	18	184	122.258	0.062	29.1	0.1099	0.0000	OK
360 minute winter	19	184	121.669	0.060	31.0	0.1600	0.0000	OK
360 minute winter	20	184	120.407	0.060	31.8	0.1256	0.0000	OK
360 minute winter	21	280	118.114	0.214	24.9	132.7662	0.0000	OK
360 minute winter	22	280	118.114	0.440	28.1	1.1210	0.0000	OK
360 minute winter	23	280	118.113	0.554	34.6	2.2200	0.0000	SURCHARGED
360 minute winter	24	280	113.836	0.036	9.0	0.0514	0.0000	OK
360 minute winter	25	280	110.273	0.036	9.0	0.0404	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
360 minute winter	1	1.000	2	0.3	0.523	0.008	0.0100	
360 minute winter	2	1.001	3	0.7	0.982	0.015	0.0105	
360 minute winter	3	1.002	5	0.7	1.067	0.013	0.0111	
360 minute winter	4	2.000	5	4.4	0.692	0.103	0.3140	
360 minute winter	5	1.003	6	7.1	0.716	0.078	0.1811	
360 minute winter	6	1.004	7	7.3	0.963	0.081	0.1244	
360 minute winter	7	1.005	8	8.6	1.719	0.033	0.0703	
360 minute winter	8	1.006	9	10.1	1.826	0.031	0.1837	
360 minute winter	9	1.007	10	13.6	2.188	0.044	0.1668	
360 minute winter	10	1.008	11	15.7	1.942	0.064	0.3220	
360 minute winter	11	1.009	12	18.7	2.193	0.037	0.1306	
360 minute winter	12	1.010	13	20.0	2.541	0.032	0.1132	
360 minute winter	13	1.011	14	21.1	0.724	0.114	1.0921	
360 minute winter	14	1.012	15	24.8	0.802	0.133	1.0076	
360 minute winter	15	1.013	16	25.1	1.023	0.135	0.3764	
360 minute winter	16	1.014	17	28.3	1.788	0.063	0.9047	
360 minute winter	17	1.015	18	29.1	2.234	0.035	0.0994	
360 minute winter	18	1.016	19	29.0	2.250	0.037	0.1287	
360 minute winter	19	1.017	20	31.0	2.457	0.037	0.2391	
360 minute winter	20	1.018	23	31.8	2.594	0.036	0.2178	
360 minute winter	21	3.000	22	28.1	0.512	0.028	6.3225	
360 minute winter	22	3.001	23	-25.5	0.369	-0.025	2.8105	
360 minute winter	23	1.019	24	9.0	1.943	0.073	0.3175	
360 minute winter	24	1.020	25	9.0	2.216	0.054	0.1445	
360 minute winter	25	1.021	26	9.0	2.210	0.054	0.1908	

**Results for 2 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 99.94%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
360 minute winter	26	280	105.582	0.036	9.0	0.0408	0.0000	OK
360 minute winter	27	280	103.819	0.037	9.0	0.0417	0.0000	OK
360 minute winter	28	280	99.371	0.071	9.0	0.1021	0.0000	OK
360 minute winter	S29	576	99.234	0.984	9.0	3.4073	0.0000	OK
360 minute winter	S30	576	99.234	1.084	8.6	2.7579	0.0000	SURCHARGED
360 minute winter	S31	304	97.544	0.054	8.3	0.1864	0.0000	OK
360 minute winter	S32	304	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
360 minute winter	26	1.022	27	9.0	2.160	0.054	0.0734	
360 minute winter	27	1.023	28	9.0	1.227	0.059	0.3921	
360 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0980	
360 minute winter	S29	1.025	S30	8.6	0.212	0.004	20.4604	
360 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
360 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	261.5

**Results for 2 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.98%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
480 minute summer	1	248	139.061	0.011	0.4	0.0176	0.0000	OK
480 minute summer	2	248	138.290	0.014	0.8	0.0235	0.0000	OK
480 minute summer	3	248	137.344	0.013	0.8	0.0184	0.0000	OK
480 minute summer	4	248	134.701	0.051	4.8	0.1816	0.0000	OK
480 minute summer	5	248	134.304	0.060	7.7	0.1332	0.0000	OK
480 minute summer	6	248	134.186	0.064	8.1	0.0785	0.0000	OK
480 minute summer	7	248	134.055	0.040	9.5	0.0763	0.0000	OK
480 minute summer	8	248	133.275	0.038	11.2	0.0777	0.0000	OK
480 minute summer	9	248	130.533	0.046	15.0	0.1292	0.0000	OK
480 minute summer	10	248	128.502	0.055	17.3	0.1071	0.0000	OK
480 minute summer	11	248	126.527	0.054	20.6	0.1373	0.0000	OK
480 minute summer	12	248	125.566	0.050	22.0	0.1060	0.0000	OK
480 minute summer	13	248	124.183	0.108	23.3	0.2216	0.0000	OK
480 minute summer	14	248	124.070	0.120	27.4	0.3103	0.0000	OK
480 minute summer	15	248	123.958	0.117	27.8	0.2153	0.0000	OK
480 minute summer	16	248	123.874	0.084	31.3	0.1978	0.0000	OK
480 minute summer	17	248	122.760	0.064	32.2	0.1365	0.0000	OK
480 minute summer	18	248	122.262	0.066	32.2	0.1159	0.0000	OK
480 minute summer	19	248	121.673	0.063	34.3	0.1681	0.0000	OK
480 minute summer	20	248	120.410	0.063	35.1	0.1318	0.0000	OK
480 minute summer	21	328	118.077	0.176	28.6	108.7484	0.0000	OK
480 minute summer	22	328	118.076	0.403	29.1	1.0267	0.0000	OK
480 minute summer	23	328	118.076	0.517	38.2	2.0717	0.0000	SURCHARGED
480 minute summer	24	328	113.836	0.036	9.0	0.0513	0.0000	OK
480 minute summer	25	328	110.273	0.036	9.0	0.0404	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
480 minute summer	1	1.000	2	0.4	0.572	0.010	0.0114	
480 minute summer	2	1.001	3	0.8	1.022	0.018	0.0115	
480 minute summer	3	1.002	5	0.8	1.114	0.015	0.0121	
480 minute summer	4	2.000	5	4.8	0.710	0.113	0.3358	
480 minute summer	5	1.003	6	7.7	0.730	0.085	0.1935	
480 minute summer	6	1.004	7	8.1	0.991	0.089	0.1332	
480 minute summer	7	1.005	8	9.5	1.767	0.036	0.0753	
480 minute summer	8	1.006	9	11.2	1.880	0.035	0.1969	
480 minute summer	9	1.007	10	15.0	2.252	0.049	0.1786	
480 minute summer	10	1.008	11	17.3	1.998	0.071	0.3453	
480 minute summer	11	1.009	12	20.6	2.250	0.041	0.1402	
480 minute summer	12	1.010	13	22.0	2.615	0.036	0.1212	
480 minute summer	13	1.011	14	23.3	0.741	0.125	1.1751	
480 minute summer	14	1.012	15	27.4	0.826	0.147	1.0830	
480 minute summer	15	1.013	16	27.8	1.056	0.150	0.4038	
480 minute summer	16	1.014	17	31.3	1.837	0.070	0.9741	
480 minute summer	17	1.015	18	32.2	2.290	0.039	0.1075	
480 minute summer	18	1.016	19	32.2	2.313	0.041	0.1388	
480 minute summer	19	1.017	20	34.3	2.525	0.041	0.2571	
480 minute summer	20	1.018	23	35.1	2.665	0.040	0.2336	
480 minute summer	21	3.000	22	-28.6	0.525	-0.028	5.4430	
480 minute summer	22	3.001	23	-29.1	0.508	-0.029	2.5508	
480 minute summer	23	1.019	24	9.0	1.941	0.073	0.3168	
480 minute summer	24	1.020	25	9.0	2.214	0.054	0.1442	
480 minute summer	25	1.021	26	9.0	2.208	0.054	0.1904	

**Results for 2 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.98%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
480 minute summer	26	328	105.582	0.036	9.0	0.0407	0.0000	OK
480 minute summer	27	328	103.819	0.037	9.0	0.0417	0.0000	OK
480 minute summer	28	328	99.371	0.071	9.0	0.1019	0.0000	OK
480 minute summer	S29	592	99.045	0.795	9.0	2.7546	0.0000	OK
480 minute summer	S30	592	99.045	0.895	8.6	2.2783	0.0000	SURCHARGED
480 minute summer	S31	384	97.544	0.054	8.3	0.1864	0.0000	OK
480 minute summer	S32	384	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
480 minute summer	26	1.022	27	9.0	2.158	0.054	0.0732	
480 minute summer	27	1.023	28	9.0	1.226	0.058	0.3912	
480 minute summer	28	1.024	S29	9.0	0.870	0.194	0.0978	
480 minute summer	S29	1.025	S30	8.6	0.464	0.004	16.6136	
480 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
480 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	279.0

**Results for 2 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
480 minute winter	1	240	139.060	0.010	0.3	0.0154	0.0000	OK
480 minute winter	2	232	138.289	0.012	0.6	0.0205	0.0000	OK
480 minute winter	3	240	137.342	0.011	0.6	0.0161	0.0000	OK
480 minute winter	4	248	134.694	0.044	3.5	0.1550	0.0000	OK
480 minute winter	5	248	134.296	0.052	5.7	0.1143	0.0000	OK
480 minute winter	6	248	134.177	0.055	6.0	0.0678	0.0000	OK
480 minute winter	7	248	134.050	0.035	7.0	0.0657	0.0000	OK
480 minute winter	8	248	133.270	0.033	8.3	0.0675	0.0000	OK
480 minute winter	9	248	130.527	0.039	11.1	0.1115	0.0000	OK
480 minute winter	10	248	128.494	0.047	12.8	0.0923	0.0000	OK
480 minute winter	11	248	126.519	0.046	15.3	0.1185	0.0000	OK
480 minute winter	12	248	125.559	0.043	16.4	0.0917	0.0000	OK
480 minute winter	13	248	124.168	0.093	17.4	0.1901	0.0000	OK
480 minute winter	14	248	124.053	0.103	20.4	0.2659	0.0000	OK
480 minute winter	15	248	123.942	0.101	20.7	0.1862	0.0000	OK
480 minute winter	16	248	123.863	0.073	23.3	0.1712	0.0000	OK
480 minute winter	17	248	122.751	0.055	23.9	0.1170	0.0000	OK
480 minute winter	18	248	122.252	0.056	23.9	0.0995	0.0000	OK
480 minute winter	19	248	121.664	0.055	25.5	0.1452	0.0000	OK
480 minute winter	20	248	120.402	0.055	26.1	0.1137	0.0000	OK
480 minute winter	21	352	118.101	0.201	18.9	124.8266	0.0000	OK
480 minute winter	22	360	118.101	0.428	29.3	1.0901	0.0000	OK
480 minute winter	23	352	118.101	0.542	28.4	2.1714	0.0000	SURCHARGED
480 minute winter	24	352	113.836	0.036	9.0	0.0514	0.0000	OK
480 minute winter	25	352	110.273	0.036	9.0	0.0404	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
480 minute winter	1	1.000	2	0.3	0.523	0.008	0.0094	
480 minute winter	2	1.001	3	0.6	0.935	0.013	0.0094	
480 minute winter	3	1.002	5	0.6	1.017	0.011	0.0100	
480 minute winter	4	2.000	5	3.5	0.649	0.083	0.2682	
480 minute winter	5	1.003	6	5.7	0.671	0.063	0.1561	
480 minute winter	6	1.004	7	6.0	0.910	0.066	0.1076	
480 minute winter	7	1.005	8	7.0	1.612	0.027	0.0608	
480 minute winter	8	1.006	9	8.3	1.720	0.026	0.1592	
480 minute winter	9	1.007	10	11.1	2.062	0.036	0.1444	
480 minute winter	10	1.008	11	12.8	1.833	0.053	0.2785	
480 minute winter	11	1.009	12	15.3	2.070	0.030	0.1132	
480 minute winter	12	1.010	13	16.4	2.401	0.026	0.0984	
480 minute winter	13	1.011	14	17.4	0.689	0.094	0.9451	
480 minute winter	14	1.012	15	20.4	0.760	0.110	0.8761	
480 minute winter	15	1.013	16	20.7	0.967	0.111	0.3284	
480 minute winter	16	1.014	17	23.3	1.697	0.052	0.7854	
480 minute winter	17	1.015	18	23.9	2.127	0.029	0.0859	
480 minute winter	18	1.016	19	23.9	2.137	0.030	0.1115	
480 minute winter	19	1.017	20	25.5	2.327	0.030	0.2074	
480 minute winter	20	1.018	23	26.1	2.448	0.030	0.1892	
480 minute winter	21	3.000	22	29.3	0.521	0.029	6.0318	
480 minute winter	22	3.001	23	-19.3	0.508	-0.019	2.7259	
480 minute winter	23	1.019	24	9.0	1.943	0.073	0.3173	
480 minute winter	24	1.020	25	9.0	2.216	0.054	0.1444	
480 minute winter	25	1.021	26	9.0	2.209	0.054	0.1907	

**Results for 2 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
480 minute winter	26	352	105.582	0.036	9.0	0.0408	0.0000	OK
480 minute winter	27	352	103.819	0.037	9.0	0.0417	0.0000	OK
480 minute winter	28	656	99.407	0.107	9.0	0.1534	0.0000	OK
480 minute winter	S29	656	99.406	1.156	9.0	4.0059	0.0000	OK
480 minute winter	S30	656	99.406	1.256	8.6	3.1977	0.0000	SURCHARGED
480 minute winter	S31	352	97.544	0.054	8.3	0.1864	0.0000	OK
480 minute winter	S32	352	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
480 minute winter	26	1.022	27	9.0	2.160	0.054	0.0734	
480 minute winter	27	1.023	28	9.0	1.275	0.059	0.5761	
480 minute winter	28	1.024	S29	9.0	0.871	0.195	0.2513	
480 minute winter	S29	1.025	S30	8.6	0.291	0.004	22.6735	
480 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
480 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	304.0

**Results for 2 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.90%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
600 minute summer	1	300	139.060	0.010	0.3	0.0154	0.0000	OK
600 minute summer	2	315	138.289	0.013	0.7	0.0221	0.0000	OK
600 minute summer	3	315	137.343	0.012	0.7	0.0173	0.0000	OK
600 minute summer	4	315	134.696	0.046	3.9	0.1636	0.0000	OK
600 minute summer	5	315	134.299	0.055	6.4	0.1212	0.0000	OK
600 minute summer	6	315	134.181	0.058	6.7	0.0715	0.0000	OK
600 minute summer	7	315	134.051	0.036	7.8	0.0693	0.0000	OK
600 minute summer	8	315	133.272	0.035	9.2	0.0708	0.0000	OK
600 minute summer	9	315	130.529	0.041	12.3	0.1172	0.0000	OK
600 minute summer	10	315	128.497	0.050	14.2	0.0971	0.0000	OK
600 minute summer	11	315	126.522	0.049	16.9	0.1245	0.0000	OK
600 minute summer	12	315	125.561	0.045	18.1	0.0962	0.0000	OK
600 minute summer	13	315	124.173	0.098	19.2	0.2000	0.0000	OK
600 minute summer	14	315	124.058	0.108	22.6	0.2805	0.0000	OK
600 minute summer	15	315	123.948	0.107	23.0	0.1962	0.0000	OK
600 minute summer	16	315	123.867	0.077	25.9	0.1804	0.0000	OK
600 minute summer	17	315	122.754	0.058	26.6	0.1236	0.0000	OK
600 minute summer	18	315	122.256	0.059	26.6	0.1051	0.0000	OK
600 minute summer	19	315	121.667	0.058	28.4	0.1531	0.0000	OK
600 minute summer	20	315	120.405	0.058	29.1	0.1201	0.0000	OK
600 minute summer	21	405	118.069	0.169	22.1	103.7993	0.0000	OK
600 minute summer	22	405	118.069	0.396	22.6	1.0070	0.0000	OK
600 minute summer	23	405	118.069	0.510	31.7	2.0408	0.0000	SURCHARGED
600 minute summer	24	405	113.836	0.036	9.0	0.0513	0.0000	OK
600 minute summer	25	405	110.273	0.036	9.0	0.0404	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
600 minute summer	1	1.000	2	0.3	0.522	0.008	0.0100	
600 minute summer	2	1.001	3	0.7	0.982	0.015	0.0105	
600 minute summer	3	1.002	5	0.7	1.067	0.013	0.0111	
600 minute summer	4	2.000	5	3.9	0.669	0.092	0.2896	
600 minute summer	5	1.003	6	6.4	0.694	0.071	0.1692	
600 minute summer	6	1.004	7	6.7	0.940	0.074	0.1163	
600 minute summer	7	1.005	8	7.8	1.666	0.030	0.0655	
600 minute summer	8	1.006	9	9.2	1.777	0.029	0.1713	
600 minute summer	9	1.007	10	12.3	2.124	0.040	0.1553	
600 minute summer	10	1.008	11	14.2	1.887	0.058	0.3001	
600 minute summer	11	1.009	12	16.9	2.129	0.034	0.1215	
600 minute summer	12	1.010	13	18.1	2.470	0.029	0.1056	
600 minute summer	13	1.011	14	19.2	0.705	0.103	1.0176	
600 minute summer	14	1.012	15	22.6	0.781	0.122	0.9440	
600 minute summer	15	1.013	16	23.0	0.997	0.124	0.3537	
600 minute summer	16	1.014	17	25.9	1.746	0.058	0.8484	
600 minute summer	17	1.015	18	26.6	2.186	0.032	0.0930	
600 minute summer	18	1.016	19	26.6	2.200	0.034	0.1206	
600 minute summer	19	1.017	20	28.4	2.398	0.034	0.2241	
600 minute summer	20	1.018	23	29.1	2.527	0.033	0.2044	
600 minute summer	21	3.000	22	-22.1	0.515	-0.022	5.2622	
600 minute summer	22	3.001	23	-22.6	0.507	-0.022	2.4960	
600 minute summer	23	1.019	24	9.0	1.941	0.073	0.3166	
600 minute summer	24	1.020	25	9.0	2.214	0.054	0.1441	
600 minute summer	25	1.021	26	9.0	2.207	0.054	0.1902	

**Results for 2 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.90%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
600 minute summer	26	405	105.582	0.036	9.0	0.0407	0.0000	OK
600 minute summer	27	405	103.819	0.037	9.0	0.0416	0.0000	OK
600 minute summer	28	405	99.371	0.071	9.0	0.1019	0.0000	OK
600 minute summer	S29	675	99.089	0.839	9.0	2.9046	0.0000	OK
600 minute summer	S30	675	99.089	0.939	8.6	2.3885	0.0000	SURCHARGED
600 minute summer	S31	435	97.544	0.054	8.3	0.1864	0.0000	OK
600 minute summer	S32	435	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
600 minute summer	26	1.022	27	9.0	2.158	0.054	0.0732	
600 minute summer	27	1.023	28	9.0	1.226	0.058	0.3909	
600 minute summer	28	1.024	S29	9.0	0.870	0.194	0.0977	
600 minute summer	S29	1.025	S30	8.6	0.394	0.004	17.5718	
600 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
600 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3533	300.5

**Results for 2 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 99.96%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
600 minute winter	1	255	139.058	0.008	0.2	0.0127	0.0000	OK
600 minute winter	2	300	138.287	0.011	0.5	0.0188	0.0000	OK
600 minute winter	3	300	137.341	0.010	0.5	0.0148	0.0000	OK
600 minute winter	4	315	134.691	0.041	3.0	0.1437	0.0000	OK
600 minute winter	5	315	134.292	0.048	4.9	0.1059	0.0000	OK
600 minute winter	6	315	134.173	0.051	5.1	0.0626	0.0000	OK
600 minute winter	7	315	134.047	0.032	6.0	0.0610	0.0000	OK
600 minute winter	8	315	133.268	0.031	7.1	0.0626	0.0000	OK
600 minute winter	9	315	130.524	0.037	9.5	0.1034	0.0000	OK
600 minute winter	10	315	128.491	0.044	10.9	0.0852	0.0000	OK
600 minute winter	11	315	126.516	0.043	13.0	0.1096	0.0000	OK
600 minute winter	12	315	125.556	0.040	13.9	0.0846	0.0000	OK
600 minute winter	13	315	124.160	0.085	14.7	0.1743	0.0000	OK
600 minute winter	14	315	124.044	0.094	17.3	0.2442	0.0000	OK
600 minute winter	15	315	123.935	0.093	17.6	0.1721	0.0000	OK
600 minute winter	16	315	123.857	0.067	19.8	0.1583	0.0000	OK
600 minute winter	17	315	122.747	0.051	20.3	0.1077	0.0000	OK
600 minute winter	18	315	122.248	0.052	20.3	0.0917	0.0000	OK
600 minute winter	19	315	121.660	0.051	21.7	0.1344	0.0000	OK
600 minute winter	20	315	120.398	0.051	22.2	0.1052	0.0000	OK
600 minute winter	21	435	118.087	0.187	14.8	115.5853	0.0000	OK
600 minute winter	22	435	118.087	0.414	16.7	1.0538	0.0000	OK
600 minute winter	23	435	118.087	0.528	24.2	2.1143	0.0000	SURCHARGED
600 minute winter	24	435	113.836	0.036	9.0	0.0513	0.0000	OK
600 minute winter	25	435	110.273	0.036	9.0	0.0404	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
600 minute winter	1	1.000	2	0.2	0.462	0.005	0.0078	
600 minute winter	2	1.001	3	0.5	0.884	0.011	0.0083	
600 minute winter	3	1.002	5	0.5	0.962	0.009	0.0088	
600 minute winter	4	2.000	5	3.0	0.620	0.071	0.2406	
600 minute winter	5	1.003	6	4.9	0.645	0.054	0.1394	
600 minute winter	6	1.004	7	5.1	0.865	0.056	0.0961	
600 minute winter	7	1.005	8	6.0	1.542	0.023	0.0545	
600 minute winter	8	1.006	9	7.1	1.649	0.022	0.1428	
600 minute winter	9	1.007	10	9.5	1.967	0.031	0.1295	
600 minute winter	10	1.008	11	10.9	1.747	0.045	0.2488	
600 minute winter	11	1.009	12	13.0	1.983	0.026	0.1006	
600 minute winter	12	1.010	13	13.9	2.289	0.022	0.0875	
600 minute winter	13	1.011	14	14.7	0.658	0.079	0.8357	
600 minute winter	14	1.012	15	17.3	0.724	0.093	0.7794	
600 minute winter	15	1.013	16	17.6	0.921	0.095	0.2932	
600 minute winter	16	1.014	17	19.8	1.624	0.044	0.6981	
600 minute winter	17	1.015	18	20.3	2.040	0.024	0.0760	
600 minute winter	18	1.016	19	20.3	2.043	0.026	0.0991	
600 minute winter	19	1.017	20	21.7	2.226	0.026	0.1845	
600 minute winter	20	1.018	23	22.2	2.338	0.025	0.1686	
600 minute winter	21	3.000	22	16.7	0.521	0.017	5.6933	
600 minute winter	22	3.001	23	-15.2	0.508	-0.015	2.6260	
600 minute winter	23	1.019	24	9.0	1.942	0.073	0.3171	
600 minute winter	24	1.020	25	9.0	2.215	0.054	0.1443	
600 minute winter	25	1.021	26	9.0	2.209	0.054	0.1905	

**Results for 2 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 99.96%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
600 minute winter	26	435	105.582	0.036	9.0	0.0407	0.0000	OK
600 minute winter	27	435	103.819	0.037	9.0	0.0417	0.0000	OK
600 minute winter	28	720	99.521	0.221	9.0	0.3159	0.0000	OK
600 minute winter	S29	720	99.518	1.268	9.0	4.3919	0.0000	SURCHARGED
600 minute winter	S30	720	99.518	1.368	8.6	3.4812	0.0000	SURCHARGED
600 minute winter	S31	405	97.544	0.054	8.3	0.1864	0.0000	OK
600 minute winter	S32	405	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
600 minute winter	26	1.022	27	9.0	2.159	0.054	0.0733	
600 minute winter	27	1.023	28	9.0	1.289	0.059	1.1338	
600 minute winter	28	1.024	S29	9.0	0.870	0.194	0.3765	
600 minute winter	S29	1.025	S30	8.6	0.349	0.004	22.8068	
600 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
600 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3533	337.5

**Results for 2 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 99.90%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
720 minute summer	1	375	139.060	0.010	0.3	0.0154	0.0000	OK
720 minute summer	2	375	138.289	0.012	0.6	0.0205	0.0000	OK
720 minute summer	3	375	137.342	0.011	0.6	0.0161	0.0000	OK
720 minute summer	4	375	134.694	0.044	3.5	0.1550	0.0000	OK
720 minute summer	5	375	134.296	0.052	5.7	0.1143	0.0000	OK
720 minute summer	6	375	134.177	0.055	6.0	0.0678	0.0000	OK
720 minute summer	7	375	134.050	0.035	7.0	0.0658	0.0000	OK
720 minute summer	8	375	133.270	0.033	8.2	0.0671	0.0000	OK
720 minute summer	9	375	130.526	0.039	11.0	0.1110	0.0000	OK
720 minute summer	10	375	128.494	0.047	12.7	0.0919	0.0000	OK
720 minute summer	11	375	126.519	0.046	15.1	0.1177	0.0000	OK
720 minute summer	12	375	125.559	0.043	16.2	0.0912	0.0000	OK
720 minute summer	13	375	124.167	0.092	17.2	0.1889	0.0000	OK
720 minute summer	14	375	124.052	0.102	20.2	0.2646	0.0000	OK
720 minute summer	15	375	123.942	0.101	20.5	0.1854	0.0000	OK
720 minute summer	16	375	123.862	0.072	23.1	0.1705	0.0000	OK
720 minute summer	17	375	122.751	0.055	23.7	0.1165	0.0000	OK
720 minute summer	18	375	122.252	0.056	23.7	0.0990	0.0000	OK
720 minute summer	19	375	121.664	0.055	25.3	0.1447	0.0000	OK
720 minute summer	20	375	120.402	0.055	25.9	0.1133	0.0000	OK
720 minute summer	21	465	118.059	0.159	18.8	97.2670	0.0000	OK
720 minute summer	22	465	118.059	0.385	19.2	0.9811	0.0000	OK
720 minute summer	23	465	118.059	0.499	28.2	2.0000	0.0000	SURCHARGED
720 minute summer	24	465	113.836	0.036	8.9	0.0513	0.0000	OK
720 minute summer	25	465	110.273	0.036	8.9	0.0403	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
720 minute summer	1	1.000	2	0.3	0.523	0.008	0.0094	
720 minute summer	2	1.001	3	0.6	0.935	0.013	0.0094	
720 minute summer	3	1.002	5	0.6	1.017	0.011	0.0100	
720 minute summer	4	2.000	5	3.5	0.649	0.083	0.2682	
720 minute summer	5	1.003	6	5.7	0.671	0.063	0.1560	
720 minute summer	6	1.004	7	6.0	0.909	0.066	0.1077	
720 minute summer	7	1.005	8	7.0	1.618	0.027	0.0606	
720 minute summer	8	1.006	9	8.2	1.712	0.025	0.1581	
720 minute summer	9	1.007	10	11.0	2.056	0.036	0.1435	
720 minute summer	10	1.008	11	12.7	1.828	0.052	0.2770	
720 minute summer	11	1.009	12	15.1	2.062	0.030	0.1122	
720 minute summer	12	1.010	13	16.2	2.393	0.026	0.0975	
720 minute summer	13	1.011	14	17.2	0.686	0.093	0.9375	
720 minute summer	14	1.012	15	20.2	0.758	0.109	0.8700	
720 minute summer	15	1.013	16	20.5	0.964	0.110	0.3262	
720 minute summer	16	1.014	17	23.1	1.693	0.051	0.7805	
720 minute summer	17	1.015	18	23.7	2.122	0.029	0.0853	
720 minute summer	18	1.016	19	23.7	2.131	0.030	0.1109	
720 minute summer	19	1.017	20	25.3	2.322	0.030	0.2062	
720 minute summer	20	1.018	23	25.9	2.442	0.030	0.1882	
720 minute summer	21	3.000	22	-18.8	0.487	-0.019	5.0260	
720 minute summer	22	3.001	23	-19.2	0.508	-0.019	2.4235	
720 minute summer	23	1.019	24	8.9	1.940	0.073	0.3163	
720 minute summer	24	1.020	25	8.9	2.213	0.054	0.1440	
720 minute summer	25	1.021	26	8.9	2.207	0.054	0.1900	

**Results for 2 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 99.90%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
720 minute summer	26	465	105.582	0.036	8.9	0.0407	0.0000	OK
720 minute summer	27	465	103.819	0.037	8.9	0.0416	0.0000	OK
720 minute summer	28	465	99.371	0.071	8.9	0.1018	0.0000	OK
720 minute summer	S29	750	99.104	0.854	8.9	2.9574	0.0000	OK
720 minute summer	S30	750	99.104	0.954	8.6	2.4273	0.0000	SURCHARGED
720 minute summer	S31	495	97.544	0.054	8.3	0.1864	0.0000	OK
720 minute summer	S32	495	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
720 minute summer	26	1.022	27	8.9	2.157	0.054	0.0731	
720 minute summer	27	1.023	28	8.9	1.225	0.058	0.3905	
720 minute summer	28	1.024	S29	8.9	0.870	0.194	0.0976	
720 minute summer	S29	1.025	S30	8.6	0.371	0.004	17.9005	
720 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
720 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3533	318.2

**Results for 2 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 99.86%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
720 minute winter	1	315	139.058	0.008	0.2	0.0127	0.0000	OK
720 minute winter	2	315	138.286	0.010	0.4	0.0170	0.0000	OK
720 minute winter	3	315	137.340	0.009	0.4	0.0133	0.0000	OK
720 minute winter	4	375	134.689	0.039	2.7	0.1365	0.0000	OK
720 minute winter	5	375	134.289	0.045	4.3	0.0992	0.0000	OK
720 minute winter	6	375	134.170	0.048	4.5	0.0589	0.0000	OK
720 minute winter	7	375	134.045	0.030	5.3	0.0574	0.0000	OK
720 minute winter	8	375	133.266	0.029	6.2	0.0587	0.0000	OK
720 minute winter	9	375	130.521	0.034	8.3	0.0969	0.0000	OK
720 minute winter	10	375	128.488	0.041	9.6	0.0802	0.0000	OK
720 minute winter	11	375	126.513	0.040	11.4	0.1028	0.0000	OK
720 minute winter	12	375	125.553	0.037	12.2	0.0793	0.0000	OK
720 minute winter	13	375	124.155	0.079	12.9	0.1630	0.0000	OK
720 minute winter	14	375	124.038	0.088	15.2	0.2286	0.0000	OK
720 minute winter	15	375	123.929	0.088	15.4	0.1613	0.0000	OK
720 minute winter	16	375	123.853	0.063	17.4	0.1486	0.0000	OK
720 minute winter	17	375	122.744	0.048	17.9	0.1011	0.0000	OK
720 minute winter	18	375	122.245	0.049	17.9	0.0861	0.0000	OK
720 minute winter	19	375	121.657	0.048	19.1	0.1262	0.0000	OK
720 minute winter	20	375	120.395	0.048	19.6	0.0989	0.0000	OK
720 minute winter	21	510	118.072	0.172	12.0	106.0774	0.0000	OK
720 minute winter	22	510	118.072	0.399	20.3	1.0162	0.0000	OK
720 minute winter	23	510	118.072	0.513	21.3	2.0552	0.0000	SURCHARGED
720 minute winter	24	510	113.836	0.036	9.0	0.0513	0.0000	OK
720 minute winter	25	510	110.273	0.036	9.0	0.0404	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
720 minute winter	1	1.000	2	0.2	0.462	0.005	0.0071	
720 minute winter	2	1.001	3	0.4	0.829	0.009	0.0071	
720 minute winter	3	1.002	5	0.4	0.898	0.007	0.0075	
720 minute winter	4	2.000	5	2.7	0.601	0.064	0.2233	
720 minute winter	5	1.003	6	4.3	0.621	0.047	0.1272	
720 minute winter	6	1.004	7	4.5	0.835	0.050	0.0880	
720 minute winter	7	1.005	8	5.3	1.492	0.020	0.0497	
720 minute winter	8	1.006	9	6.2	1.581	0.019	0.1298	
720 minute winter	9	1.007	10	8.3	1.890	0.027	0.1178	
720 minute winter	10	1.008	11	9.6	1.683	0.039	0.2274	
720 minute winter	11	1.009	12	11.4	1.907	0.023	0.0915	
720 minute winter	12	1.010	13	12.2	2.204	0.020	0.0797	
720 minute winter	13	1.011	14	12.9	0.635	0.069	0.7593	
720 minute winter	14	1.012	15	15.2	0.699	0.082	0.7096	
720 minute winter	15	1.013	16	15.4	0.884	0.083	0.2674	
720 minute winter	16	1.014	17	17.4	1.563	0.039	0.6366	
720 minute winter	17	1.015	18	17.9	1.975	0.022	0.0692	
720 minute winter	18	1.016	19	17.9	1.976	0.023	0.0903	
720 minute winter	19	1.017	20	19.1	2.146	0.023	0.1685	
720 minute winter	20	1.018	23	19.6	2.254	0.022	0.1543	
720 minute winter	21	3.000	22	20.3	0.496	0.020	5.3462	
720 minute winter	22	3.001	23	-12.3	0.508	-0.012	2.5216	
720 minute winter	23	1.019	24	9.0	1.941	0.073	0.3167	
720 minute winter	24	1.020	25	9.0	2.214	0.054	0.1441	
720 minute winter	25	1.021	26	9.0	2.208	0.054	0.1903	

**Results for 2 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 99.86%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
720 minute winter	26	510	105.582	0.036	9.0	0.0407	0.0000	OK
720 minute winter	27	510	103.819	0.037	9.0	0.0416	0.0000	OK
720 minute winter	28	795	99.582	0.282	9.0	0.4042	0.0000	SURCHARGED
720 minute winter	S29	795	99.580	1.330	9.0	4.6065	0.0000	SURCHARGED
720 minute winter	S30	795	99.580	1.430	8.6	3.6389	0.0000	SURCHARGED
720 minute winter	S31	465	97.544	0.054	8.3	0.1864	0.0000	OK
720 minute winter	S32	465	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
720 minute winter	26	1.022	27	9.0	2.158	0.054	0.0732	
720 minute winter	27	1.023	28	9.0	1.279	0.058	1.1429	
720 minute winter	28	1.024	S29	9.0	0.870	0.194	0.3775	
720 minute winter	S29	1.025	S30	8.6	0.373	0.004	22.8068	
720 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
720 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	356.2

**Results for 2 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 99.82%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
960 minute summer	1	450	139.058	0.008	0.2	0.0127	0.0000	OK
960 minute summer	2	495	138.287	0.011	0.5	0.0188	0.0000	OK
960 minute summer	3	495	137.341	0.010	0.5	0.0148	0.0000	OK
960 minute summer	4	495	134.690	0.040	2.9	0.1414	0.0000	OK
960 minute summer	5	495	134.291	0.047	4.7	0.1037	0.0000	OK
960 minute summer	6	495	134.172	0.050	4.9	0.0614	0.0000	OK
960 minute summer	7	495	134.047	0.032	5.8	0.0600	0.0000	OK
960 minute summer	8	495	133.267	0.030	6.8	0.0613	0.0000	OK
960 minute summer	9	495	130.523	0.036	9.1	0.1013	0.0000	OK
960 minute summer	10	495	128.490	0.043	10.5	0.0837	0.0000	OK
960 minute summer	11	495	126.515	0.042	12.5	0.1076	0.0000	OK
960 minute summer	12	495	125.555	0.039	13.4	0.0830	0.0000	OK
960 minute summer	13	495	124.159	0.083	14.2	0.1712	0.0000	OK
960 minute summer	14	495	124.042	0.092	16.7	0.2398	0.0000	OK
960 minute summer	15	495	123.933	0.092	17.0	0.1693	0.0000	OK
960 minute summer	16	495	123.856	0.066	19.2	0.1559	0.0000	OK
960 minute summer	17	495	122.746	0.050	19.7	0.1062	0.0000	OK
960 minute summer	18	495	122.247	0.051	19.7	0.0903	0.0000	OK
960 minute summer	19	495	121.659	0.050	21.0	0.1323	0.0000	OK
960 minute summer	20	495	120.397	0.050	21.5	0.1036	0.0000	OK
960 minute summer	21	600	118.041	0.141	14.1	85.9268	0.0000	OK
960 minute summer	22	600	118.041	0.368	18.5	0.9357	0.0000	OK
960 minute summer	23	600	118.041	0.482	23.4	1.9285	0.0000	SURCHARGED
960 minute summer	24	600	113.836	0.036	8.9	0.0512	0.0000	OK
960 minute summer	25	600	110.273	0.036	8.9	0.0403	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
960 minute summer	1	1.000	2	0.2	0.462	0.005	0.0078	
960 minute summer	2	1.001	3	0.5	0.884	0.011	0.0083	
960 minute summer	3	1.002	5	0.5	0.962	0.009	0.0088	
960 minute summer	4	2.000	5	2.9	0.614	0.068	0.2349	
960 minute summer	5	1.003	6	4.7	0.637	0.052	0.1353	
960 minute summer	6	1.004	7	4.9	0.854	0.054	0.0936	
960 minute summer	7	1.005	8	5.8	1.530	0.022	0.0531	
960 minute summer	8	1.006	9	6.8	1.630	0.021	0.1385	
960 minute summer	9	1.007	10	9.1	1.942	0.030	0.1257	
960 minute summer	10	1.008	11	10.5	1.728	0.043	0.2423	
960 minute summer	11	1.009	12	12.5	1.959	0.025	0.0979	
960 minute summer	12	1.010	13	13.4	2.265	0.022	0.0853	
960 minute summer	13	1.011	14	14.2	0.652	0.076	0.8145	
960 minute summer	14	1.012	15	16.7	0.717	0.090	0.7602	
960 minute summer	15	1.013	16	17.0	0.911	0.091	0.2865	
960 minute summer	16	1.014	17	19.2	1.608	0.043	0.6828	
960 minute summer	17	1.015	18	19.7	2.025	0.024	0.0744	
960 minute summer	18	1.016	19	19.7	2.029	0.025	0.0968	
960 minute summer	19	1.017	20	21.0	2.206	0.025	0.1802	
960 minute summer	20	1.018	23	21.5	2.317	0.025	0.1648	
960 minute summer	21	3.000	22	18.5	0.446	0.018	4.6176	
960 minute summer	22	3.001	23	-14.5	0.452	-0.014	2.2958	
960 minute summer	23	1.019	24	8.9	1.938	0.073	0.3156	
960 minute summer	24	1.020	25	8.9	2.211	0.054	0.1436	
960 minute summer	25	1.021	26	8.9	2.205	0.054	0.1896	

**Results for 2 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 99.82%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
960 minute summer	26	600	105.582	0.036	8.9	0.0406	0.0000	OK
960 minute summer	27	600	103.819	0.037	8.9	0.0415	0.0000	OK
960 minute summer	28	600	99.371	0.071	8.9	0.1016	0.0000	OK
960 minute summer	S29	855	99.067	0.817	8.9	2.8295	0.0000	OK
960 minute summer	S30	855	99.067	0.917	8.6	2.3333	0.0000	SURCHARGED
960 minute summer	S31	615	97.544	0.054	8.3	0.1864	0.0000	OK
960 minute summer	S32	615	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
960 minute summer	26	1.022	27	8.9	2.155	0.054	0.0730	
960 minute summer	27	1.023	28	8.9	1.224	0.058	0.3897	
960 minute summer	28	1.024	S29	8.9	0.869	0.193	0.0974	
960 minute summer	S29	1.025	S30	8.6	0.366	0.004	17.0961	
960 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
960 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	348.7

**Results for 2 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 99.79%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
960 minute winter	1	450	139.058	0.008	0.2	0.0127	0.0000	OK
960 minute winter	2	450	138.286	0.010	0.4	0.0170	0.0000	OK
960 minute winter	3	450	137.340	0.009	0.4	0.0133	0.0000	OK
960 minute winter	4	495	134.685	0.035	2.2	0.1234	0.0000	OK
960 minute winter	5	495	134.285	0.041	3.6	0.0907	0.0000	OK
960 minute winter	6	495	134.166	0.044	3.8	0.0543	0.0000	OK
960 minute winter	7	495	134.043	0.028	4.4	0.0525	0.0000	OK
960 minute winter	8	495	133.264	0.027	5.2	0.0541	0.0000	OK
960 minute winter	9	495	130.518	0.031	6.9	0.0887	0.0000	OK
960 minute winter	10	495	128.484	0.037	7.9	0.0730	0.0000	OK
960 minute winter	11	495	126.510	0.037	9.4	0.0935	0.0000	OK
960 minute winter	12	495	125.550	0.034	10.1	0.0724	0.0000	OK
960 minute winter	13	495	124.147	0.072	10.7	0.1482	0.0000	OK
960 minute winter	14	495	124.030	0.080	12.6	0.2080	0.0000	OK
960 minute winter	15	495	123.921	0.080	12.8	0.1477	0.0000	OK
960 minute winter	16	495	123.848	0.058	14.4	0.1359	0.0000	OK
960 minute winter	17	495	122.739	0.043	14.8	0.0918	0.0000	OK
960 minute winter	18	495	122.240	0.044	14.8	0.0782	0.0000	OK
960 minute winter	19	495	121.652	0.043	15.8	0.1150	0.0000	OK
960 minute winter	20	495	120.390	0.043	16.2	0.0900	0.0000	OK
960 minute winter	21	645	118.041	0.141	8.5	86.1510	0.0000	OK
960 minute winter	22	645	118.041	0.368	11.1	0.9366	0.0000	OK
960 minute winter	23	645	118.041	0.482	17.6	1.9300	0.0000	SURCHARGED
960 minute winter	24	645	113.836	0.036	8.9	0.0512	0.0000	OK
960 minute winter	25	645	110.273	0.036	8.9	0.0403	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
960 minute winter	1	1.000	2	0.2	0.462	0.005	0.0071	
960 minute winter	2	1.001	3	0.4	0.829	0.009	0.0071	
960 minute winter	3	1.002	5	0.4	0.898	0.007	0.0075	
960 minute winter	4	2.000	5	2.2	0.566	0.052	0.1930	
960 minute winter	5	1.003	6	3.6	0.588	0.040	0.1124	
960 minute winter	6	1.004	7	3.8	0.797	0.042	0.0778	
960 minute winter	7	1.005	8	4.4	1.411	0.017	0.0437	
960 minute winter	8	1.006	9	5.2	1.503	0.016	0.1142	
960 minute winter	9	1.007	10	6.9	1.789	0.022	0.1035	
960 minute winter	10	1.008	11	7.9	1.587	0.032	0.1984	
960 minute winter	11	1.009	12	9.4	1.806	0.019	0.0797	
960 minute winter	12	1.010	13	10.1	2.090	0.016	0.0696	
960 minute winter	13	1.011	14	10.7	0.604	0.058	0.6623	
960 minute winter	14	1.012	15	12.6	0.661	0.068	0.6219	
960 minute winter	15	1.013	16	12.8	0.836	0.069	0.2350	
960 minute winter	16	1.014	17	14.4	1.485	0.032	0.5560	
960 minute winter	17	1.015	18	14.8	1.880	0.018	0.0602	
960 minute winter	18	1.016	19	14.8	1.876	0.019	0.0787	
960 minute winter	19	1.017	20	15.8	2.035	0.019	0.1469	
960 minute winter	20	1.018	23	16.2	2.134	0.019	0.1347	
960 minute winter	21	3.000	22	11.1	0.442	0.011	4.6258	
960 minute winter	22	3.001	23	-8.7	0.498	-0.009	2.2984	
960 minute winter	23	1.019	24	8.9	1.938	0.073	0.3156	
960 minute winter	24	1.020	25	8.9	2.211	0.054	0.1437	
960 minute winter	25	1.021	26	8.9	2.205	0.054	0.1896	

**Results for 2 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 99.79%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
960 minute winter	26	645	105.582	0.036	8.9	0.0406	0.0000	OK
960 minute winter	27	645	103.819	0.037	8.9	0.0415	0.0000	OK
960 minute winter	28	930	99.521	0.221	8.9	0.3159	0.0000	OK
960 minute winter	S29	930	99.518	1.268	8.9	4.3932	0.0000	SURCHARGED
960 minute winter	S30	930	99.518	1.368	8.6	3.4822	0.0000	SURCHARGED
960 minute winter	S31	585	97.544	0.054	8.3	0.1864	0.0000	OK
960 minute winter	S32	585	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
960 minute winter	26	1.022	27	8.9	2.155	0.054	0.0730	
960 minute winter	27	1.023	28	8.9	1.224	0.058	1.1250	
960 minute winter	28	1.024	S29	8.9	0.869	0.193	0.3765	
960 minute winter	S29	1.025	S30	8.6	0.356	0.004	22.8068	
960 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
960 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	391.1

**Results for 2 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 99.71%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
1440 minute summer	1	750	139.058	0.008	0.2	0.0127	0.0000	OK
1440 minute summer	2	750	138.286	0.010	0.4	0.0170	0.0000	OK
1440 minute summer	3	750	137.340	0.009	0.4	0.0133	0.0000	OK
1440 minute summer	4	750	134.685	0.035	2.2	0.1234	0.0000	OK
1440 minute summer	5	750	134.285	0.041	3.6	0.0907	0.0000	OK
1440 minute summer	6	750	134.166	0.044	3.8	0.0543	0.0000	OK
1440 minute summer	7	750	134.043	0.028	4.4	0.0525	0.0000	OK
1440 minute summer	8	750	133.264	0.027	5.2	0.0541	0.0000	OK
1440 minute summer	9	750	130.518	0.031	6.9	0.0887	0.0000	OK
1440 minute summer	10	750	128.484	0.037	7.9	0.0730	0.0000	OK
1440 minute summer	11	750	126.510	0.037	9.4	0.0935	0.0000	OK
1440 minute summer	12	750	125.550	0.034	10.1	0.0724	0.0000	OK
1440 minute summer	13	750	124.147	0.072	10.7	0.1484	0.0000	OK
1440 minute summer	14	750	124.030	0.080	12.5	0.2071	0.0000	OK
1440 minute summer	15	750	123.921	0.080	12.7	0.1472	0.0000	OK
1440 minute summer	16	750	123.848	0.057	14.3	0.1354	0.0000	OK
1440 minute summer	17	750	122.739	0.043	14.7	0.0915	0.0000	OK
1440 minute summer	18	750	122.240	0.044	14.7	0.0780	0.0000	OK
1440 minute summer	19	750	121.652	0.043	15.7	0.1147	0.0000	OK
1440 minute summer	20	750	120.390	0.043	16.1	0.0897	0.0000	OK
1440 minute summer	21	870	118.003	0.103	8.5	62.3869	0.0000	OK
1440 minute summer	22	870	118.003	0.330	8.7	0.8400	0.0000	OK
1440 minute summer	23	870	118.003	0.444	17.5	1.7780	0.0000	SURCHARGED
1440 minute summer	24	870	113.836	0.036	8.8	0.0510	0.0000	OK
1440 minute summer	25	870	110.273	0.035	8.8	0.0401	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
1440 minute summer	1	1.000	2	0.2	0.462	0.005	0.0071	
1440 minute summer	2	1.001	3	0.4	0.829	0.009	0.0071	
1440 minute summer	3	1.002	5	0.4	0.898	0.007	0.0075	
1440 minute summer	4	2.000	5	2.2	0.566	0.052	0.1930	
1440 minute summer	5	1.003	6	3.6	0.588	0.040	0.1124	
1440 minute summer	6	1.004	7	3.8	0.797	0.042	0.0778	
1440 minute summer	7	1.005	8	4.4	1.411	0.017	0.0437	
1440 minute summer	8	1.006	9	5.2	1.503	0.016	0.1142	
1440 minute summer	9	1.007	10	6.9	1.789	0.022	0.1035	
1440 minute summer	10	1.008	11	7.9	1.587	0.032	0.1984	
1440 minute summer	11	1.009	12	9.4	1.805	0.019	0.0797	
1440 minute summer	12	1.010	13	10.1	2.090	0.016	0.0696	
1440 minute summer	13	1.011	14	10.7	0.605	0.058	0.6608	
1440 minute summer	14	1.012	15	12.5	0.660	0.067	0.6184	
1440 minute summer	15	1.013	16	12.7	0.834	0.068	0.2338	
1440 minute summer	16	1.014	17	14.3	1.483	0.032	0.5533	
1440 minute summer	17	1.015	18	14.7	1.877	0.018	0.0599	
1440 minute summer	18	1.016	19	14.7	1.872	0.019	0.0783	
1440 minute summer	19	1.017	20	15.7	2.032	0.019	0.1463	
1440 minute summer	20	1.018	23	16.1	2.130	0.018	0.1341	
1440 minute summer	21	3.000	22	-8.5	0.418	-0.008	3.7896	
1440 minute summer	22	3.001	23	-8.7	0.304	-0.009	2.0265	
1440 minute summer	23	1.019	24	8.8	1.933	0.072	0.3137	
1440 minute summer	24	1.020	25	8.8	2.206	0.053	0.1428	
1440 minute summer	25	1.021	26	8.8	2.200	0.053	0.1885	

**Results for 2 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 99.71%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
1440 minute summer	26	870	105.582	0.036	8.8	0.0404	0.0000	OK
1440 minute summer	27	870	103.819	0.037	8.8	0.0414	0.0000	OK
1440 minute summer	28	870	99.371	0.071	8.8	0.1011	0.0000	OK
1440 minute summer	S29	1080	98.953	0.703	8.8	2.4356	0.0000	OK
1440 minute summer	S30	1080	98.953	0.803	8.5	2.0439	0.0000	SURCHARGED
1440 minute summer	S31	870	97.544	0.054	8.3	0.1864	0.0000	OK
1440 minute summer	S32	870	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
1440 minute summer	26	1.022	27	8.8	2.150	0.053	0.0725	
1440 minute summer	27	1.023	28	8.8	1.222	0.058	0.3872	
1440 minute summer	28	1.024	S29	8.8	0.867	0.191	0.0968	
1440 minute summer	S29	1.025	S30	8.5	0.304	0.004	14.4811	
1440 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
1440 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	395.2

**Results for 2 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 99.77%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
1440 minute winter	1	510	139.056	0.006	0.1	0.0093	0.0000	OK
1440 minute winter	2	510	138.284	0.007	0.2	0.0123	0.0000	OK
1440 minute winter	3	510	137.338	0.007	0.2	0.0097	0.0000	OK
1440 minute winter	4	720	134.680	0.030	1.6	0.1058	0.0000	OK
1440 minute winter	5	720	134.278	0.034	2.5	0.0760	0.0000	OK
1440 minute winter	6	720	134.159	0.037	2.6	0.0453	0.0000	OK
1440 minute winter	7	720	134.038	0.023	3.1	0.0443	0.0000	OK
1440 minute winter	8	720	133.260	0.023	3.7	0.0462	0.0000	OK
1440 minute winter	9	750	130.514	0.027	5.0	0.0761	0.0000	OK
1440 minute winter	10	750	128.479	0.032	5.8	0.0630	0.0000	OK
1440 minute winter	11	750	126.505	0.032	6.9	0.0806	0.0000	OK
1440 minute winter	12	750	125.545	0.029	7.4	0.0623	0.0000	OK
1440 minute winter	13	750	124.137	0.062	7.9	0.1277	0.0000	OK
1440 minute winter	14	750	124.019	0.069	9.3	0.1785	0.0000	OK
1440 minute winter	15	750	123.910	0.069	9.4	0.1274	0.0000	OK
1440 minute winter	16	750	123.840	0.050	10.6	0.1176	0.0000	OK
1440 minute winter	17	750	122.733	0.037	10.9	0.0789	0.0000	OK
1440 minute winter	18	750	122.234	0.038	10.9	0.0673	0.0000	OK
1440 minute winter	19	750	121.647	0.037	11.6	0.0992	0.0000	OK
1440 minute winter	20	750	120.384	0.037	11.9	0.0775	0.0000	OK
1440 minute winter	21	930	117.984	0.084	4.2	50.7406	0.0000	OK
1440 minute winter	22	930	117.984	0.311	6.1	0.7921	0.0000	OK
1440 minute winter	23	930	117.984	0.425	13.0	1.7026	0.0000	SURCHARGED
1440 minute winter	24	930	113.836	0.036	8.8	0.0508	0.0000	OK
1440 minute winter	25	930	110.272	0.035	8.8	0.0400	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
1440 minute winter	1	1.000	2	0.1	0.380	0.003	0.0043	
1440 minute winter	2	1.001	3	0.2	0.671	0.004	0.0044	
1440 minute winter	3	1.002	5	0.2	0.733	0.004	0.0046	
1440 minute winter	4	2.000	5	1.6	0.515	0.038	0.1543	
1440 minute winter	5	1.003	6	2.5	0.531	0.028	0.0864	
1440 minute winter	6	1.004	7	2.6	0.708	0.029	0.0600	
1440 minute winter	7	1.005	8	3.1	1.263	0.012	0.0343	
1440 minute winter	8	1.006	9	3.7	1.359	0.011	0.0907	
1440 minute winter	9	1.007	10	5.0	1.629	0.016	0.0823	
1440 minute winter	10	1.008	11	5.8	1.448	0.024	0.1598	
1440 minute winter	11	1.009	12	6.9	1.652	0.014	0.0640	
1440 minute winter	12	1.010	13	7.4	1.900	0.012	0.0561	
1440 minute winter	13	1.011	14	7.9	0.555	0.043	0.5317	
1440 minute winter	14	1.012	15	9.3	0.607	0.050	0.5000	
1440 minute winter	15	1.013	16	9.4	0.761	0.051	0.1896	
1440 minute winter	16	1.014	17	10.6	1.357	0.024	0.4466	
1440 minute winter	17	1.015	18	10.9	1.733	0.013	0.0481	
1440 minute winter	18	1.016	19	10.9	1.725	0.014	0.0630	
1440 minute winter	19	1.017	20	11.6	1.864	0.014	0.1178	
1440 minute winter	20	1.018	23	11.9	1.949	0.014	0.1084	
1440 minute winter	21	3.000	22	6.1	0.429	0.006	3.3934	
1440 minute winter	22	3.001	23	5.4	0.334	0.005	1.8916	
1440 minute winter	23	1.019	24	8.8	1.930	0.072	0.3124	
1440 minute winter	24	1.020	25	8.8	2.202	0.053	0.1422	
1440 minute winter	25	1.021	26	8.8	2.196	0.053	0.1877	

**Results for 2 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 99.77%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
1440 minute winter	26	930	105.582	0.036	8.8	0.0403	0.0000	OK
1440 minute winter	27	930	103.819	0.036	8.8	0.0413	0.0000	OK
1440 minute winter	28	930	99.370	0.070	8.8	0.1008	0.0000	OK
1440 minute winter	S29	1110	99.010	0.760	8.8	2.6315	0.0000	OK
1440 minute winter	S30	1110	99.010	0.860	8.5	2.1879	0.0000	SURCHARGED
1440 minute winter	S31	840	97.544	0.054	8.3	0.1864	0.0000	OK
1440 minute winter	S32	840	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
1440 minute winter	26	1.022	27	8.8	2.146	0.053	0.0722	
1440 minute winter	27	1.023	28	8.8	1.220	0.057	0.3855	
1440 minute winter	28	1.024	S29	8.8	0.866	0.190	0.0964	
1440 minute winter	S29	1.025	S30	8.5	0.296	0.004	15.8026	
1440 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
1440 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3533	441.7

**Results for 30 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 99.79%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute summer	1	10	139.082	0.032	3.9	0.0517	0.0000	OK
15 minute summer	2	10	138.322	0.046	8.4	0.0749	0.0000	OK
15 minute summer	3	10	137.371	0.040	8.3	0.0575	0.0000	OK
15 minute summer	4	11	134.881	0.231	48.7	0.8162	0.0000	SURCHARGED
15 minute summer	5	11	134.477	0.233	74.1	0.5142	0.0000	OK
15 minute summer	6	11	134.343	0.221	77.8	0.2700	0.0000	OK
15 minute summer	7	11	134.152	0.137	91.8	0.2599	0.0000	OK
15 minute summer	8	11	133.356	0.119	108.4	0.2435	0.0000	OK
15 minute summer	9	11	130.635	0.148	145.4	0.4180	0.0000	OK
15 minute summer	10	11	128.643	0.196	168.2	0.3830	0.0000	OK
15 minute summer	11	11	126.662	0.189	201.1	0.4829	0.0000	OK
15 minute summer	12	11	125.683	0.167	215.5	0.3542	0.0000	OK
15 minute summer	13	11	124.812	0.737	228.6	1.5113	0.0000	SURCHARGED
15 minute summer	14	11	124.569	0.619	267.9	1.6050	0.0000	SURCHARGED
15 minute summer	15	11	124.276	0.435	271.7	0.8009	0.0000	OK
15 minute summer	16	11	124.082	0.292	305.1	0.6870	0.0000	OK
15 minute summer	17	11	122.944	0.248	312.0	0.5246	0.0000	OK
15 minute summer	18	11	122.441	0.245	309.6	0.4332	0.0000	OK
15 minute summer	19	11	121.828	0.219	329.7	0.5805	0.0000	OK
15 minute summer	20	11	120.571	0.224	336.7	0.4663	0.0000	OK
15 minute summer	21	24	118.130	0.230	523.0	143.3609	0.0000	OK
15 minute summer	22	10	119.240	1.567	405.4	3.9882	0.0000	SURCHARGED
15 minute summer	23	10	119.258	1.699	365.8	6.8022	0.0000	SURCHARGED
15 minute summer	24	17	113.836	0.036	9.0	0.0514	0.0000	OK
15 minute summer	25	18	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute summer	1	1.000	2	3.9	1.073	0.099	0.0589	
15 minute summer	2	1.001	3	8.3	1.994	0.182	0.0608	
15 minute summer	3	1.002	5	8.2	2.194	0.149	0.0629	
15 minute summer	4	2.000	5	44.7	1.223	1.055	1.8195	
15 minute summer	5	1.003	6	74.1	1.297	0.818	1.0483	
15 minute summer	6	1.004	7	78.2	1.786	0.863	0.6971	
15 minute summer	7	1.005	8	92.0	3.208	0.349	0.4013	
15 minute summer	8	1.006	9	108.6	3.578	0.337	1.0021	
15 minute summer	9	1.007	10	145.8	3.625	0.474	1.0777	
15 minute summer	10	1.008	11	168.7	3.618	0.693	1.8596	
15 minute summer	11	1.009	12	201.3	3.966	0.401	0.7877	
15 minute summer	12	1.010	13	215.6	2.859	0.348	1.1350	
15 minute summer	13	1.011	14	228.2	1.441	1.228	5.9196	
15 minute summer	14	1.012	15	267.5	1.689	1.440	5.1447	
15 minute summer	15	1.013	16	270.8	1.992	1.457	2.0217	
15 minute summer	16	1.014	17	303.5	3.068	0.676	5.6314	
15 minute summer	17	1.015	18	309.6	3.493	0.373	0.6786	
15 minute summer	18	1.016	19	308.9	3.770	0.393	0.8221	
15 minute summer	19	1.017	20	328.5	4.236	0.392	1.4725	
15 minute summer	20	1.018	23	336.4	4.724	0.385	1.2651	
15 minute summer	21	3.000	22	-523.0	-1.940	-0.519	8.0016	
15 minute summer	22	3.001	23	-405.4	-0.921	-0.402	4.2379	
15 minute summer	23	1.019	24	9.0	1.946	0.073	0.3177	
15 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
15 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 99.79%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute summer	26	18	105.582	0.036	9.0	0.0408	0.0000	OK
15 minute summer	27	18	103.819	0.037	9.0	0.0417	0.0000	OK
15 minute summer	28	19	99.371	0.071	9.0	0.1021	0.0000	OK
15 minute summer	S29	255	98.806	0.556	9.0	1.9277	0.0000	OK
15 minute summer	S30	255	98.806	0.656	8.6	1.6707	0.0000	SURCHARGED
15 minute summer	S31	204	97.544	0.054	8.3	0.1864	0.0000	OK
15 minute summer	S32	204	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
15 minute summer	27	1.023	28	9.0	1.848	0.059	0.3923	
15 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0981	
15 minute summer	S29	1.025	S30	8.6	0.512	0.004	10.9567	
15 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
15 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	117.3

**Results for 30 year 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 99.83%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	1	10	139.083	0.033	4.1	0.0529	0.0000	OK
15 minute winter	2	10	138.323	0.047	8.7	0.0767	0.0000	OK
15 minute winter	3	10	137.372	0.041	8.6	0.0588	0.0000	OK
15 minute winter	4	11	134.912	0.262	51.2	0.9265	0.0000	SURCHARGED
15 minute winter	5	11	134.486	0.242	77.1	0.5348	0.0000	OK
15 minute winter	6	11	134.349	0.227	81.1	0.2777	0.0000	OK
15 minute winter	7	11	134.155	0.140	95.3	0.2660	0.0000	OK
15 minute winter	8	11	133.359	0.122	112.4	0.2484	0.0000	OK
15 minute winter	9	11	130.638	0.151	150.8	0.4268	0.0000	OK
15 minute winter	10	11	128.648	0.201	174.2	0.3934	0.0000	OK
15 minute winter	11	10	126.665	0.192	208.7	0.4916	0.0000	OK
15 minute winter	12	11	125.695	0.179	223.9	0.3796	0.0000	OK
15 minute winter	13	11	124.901	0.826	237.0	1.6945	0.0000	SURCHARGED
15 minute winter	14	11	124.642	0.692	275.3	1.7949	0.0000	SURCHARGED
15 minute winter	15	11	124.327	0.486	278.7	0.8941	0.0000	SURCHARGED
15 minute winter	16	11	124.086	0.296	313.2	0.6982	0.0000	OK
15 minute winter	17	11	122.948	0.252	319.7	0.5348	0.0000	OK
15 minute winter	18	12	122.446	0.250	318.3	0.4418	0.0000	OK
15 minute winter	19	11	121.832	0.223	339.6	0.5915	0.0000	OK
15 minute winter	20	11	120.577	0.230	348.0	0.4770	0.0000	OK
15 minute winter	21	24	118.159	0.259	534.0	162.5581	0.0000	OK
15 minute winter	22	10	119.246	1.573	423.4	4.0022	0.0000	SURCHARGED
15 minute winter	23	10	119.279	1.720	379.6	6.8853	0.0000	SURCHARGED
15 minute winter	24	19	113.836	0.036	9.0	0.0514	0.0000	OK
15 minute winter	25	20	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute winter	1	1.000	2	4.0	1.088	0.104	0.0608	
15 minute winter	2	1.001	3	8.6	2.016	0.190	0.0628	
15 minute winter	3	1.002	5	8.5	2.220	0.155	0.0648	
15 minute winter	4	2.000	5	46.9	1.240	1.108	1.8379	
15 minute winter	5	1.003	6	77.3	1.308	0.853	1.0840	
15 minute winter	6	1.004	7	81.2	1.799	0.896	0.7177	
15 minute winter	7	1.005	8	95.3	3.232	0.362	0.4130	
15 minute winter	8	1.006	9	112.4	3.607	0.349	1.0292	
15 minute winter	9	1.007	10	151.0	3.641	0.491	1.1107	
15 minute winter	10	1.008	11	175.2	3.644	0.719	1.9163	
15 minute winter	11	1.009	12	209.2	3.963	0.416	0.8307	
15 minute winter	12	1.010	13	223.5	2.955	0.361	1.1671	
15 minute winter	13	1.011	14	234.1	1.478	1.260	5.9196	
15 minute winter	14	1.012	15	274.3	1.731	1.476	5.1699	
15 minute winter	15	1.013	16	277.6	1.981	1.494	2.0490	
15 minute winter	16	1.014	17	310.9	3.082	0.692	5.7500	
15 minute winter	17	1.015	18	318.3	3.505	0.383	0.6947	
15 minute winter	18	1.016	19	319.0	3.786	0.405	0.8418	
15 minute winter	19	1.017	20	339.5	4.257	0.405	1.5119	
15 minute winter	20	1.018	23	348.1	4.751	0.398	1.3011	
15 minute winter	21	3.000	22	-534.0	-1.922	-0.530	8.2579	
15 minute winter	22	3.001	23	-423.4	-0.962	-0.420	4.2379	
15 minute winter	23	1.019	24	9.0	1.944	0.073	0.3178	
15 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
15 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 99.83%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	26	19	105.582	0.036	9.0	0.0408	0.0000	OK
15 minute winter	27	20	103.819	0.037	9.0	0.0417	0.0000	OK
15 minute winter	28	25	99.371	0.071	9.0	0.1021	0.0000	OK
15 minute winter	S29	255	98.826	0.576	9.0	1.9967	0.0000	OK
15 minute winter	S30	255	98.826	0.676	8.6	1.7215	0.0000	SURCHARGED
15 minute winter	S31	196	97.544	0.054	8.3	0.1864	0.0000	OK
15 minute winter	S32	196	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
15 minute winter	27	1.023	28	9.0	1.782	0.059	0.3924	
15 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
15 minute winter	S29	1.025	S30	8.6	0.488	0.004	11.4388	
15 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
15 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	117.4

**Results for 30 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 99.86%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
30 minute summer	1	18	139.080	0.030	3.5	0.0493	0.0000	OK
30 minute summer	2	18	138.320	0.043	7.6	0.0715	0.0000	OK
30 minute summer	3	18	137.370	0.039	7.6	0.0554	0.0000	OK
30 minute summer	4	18	134.849	0.199	44.5	0.7023	0.0000	OK
30 minute summer	5	18	134.467	0.223	70.5	0.4926	0.0000	OK
30 minute summer	6	18	134.334	0.212	73.7	0.2595	0.0000	OK
30 minute summer	7	18	134.146	0.131	86.3	0.2499	0.0000	OK
30 minute summer	8	18	133.352	0.115	101.8	0.2346	0.0000	OK
30 minute summer	9	18	130.630	0.143	136.8	0.4028	0.0000	OK
30 minute summer	10	18	128.633	0.186	157.9	0.3643	0.0000	OK
30 minute summer	11	18	126.656	0.183	187.7	0.4674	0.0000	OK
30 minute summer	12	18	125.666	0.150	201.1	0.3198	0.0000	OK
30 minute summer	13	18	124.696	0.621	212.7	1.2743	0.0000	SURCHARGED
30 minute summer	14	19	124.492	0.541	247.6	1.4046	0.0000	SURCHARGED
30 minute summer	15	19	124.245	0.404	251.6	0.7436	0.0000	OK
30 minute summer	16	19	124.067	0.277	282.8	0.6529	0.0000	OK
30 minute summer	17	19	122.933	0.237	291.6	0.5021	0.0000	OK
30 minute summer	18	19	122.432	0.235	292.0	0.4161	0.0000	OK
30 minute summer	19	19	121.820	0.211	310.5	0.5588	0.0000	OK
30 minute summer	20	19	120.563	0.216	317.8	0.4492	0.0000	OK
30 minute summer	21	38	118.200	0.300	346.4	190.3493	0.0000	OK
30 minute summer	22	18	118.394	0.721	338.3	1.8343	0.0000	OK
30 minute summer	23	18	118.415	0.856	344.4	3.4271	0.0000	SURCHARGED
30 minute summer	24	96	113.836	0.036	9.0	0.0514	0.0000	OK
30 minute summer	25	96	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
30 minute summer	1	1.000	2	3.5	1.041	0.090	0.0551	
30 minute summer	2	1.001	3	7.6	1.945	0.167	0.0573	
30 minute summer	3	1.002	5	7.6	2.151	0.138	0.0597	
30 minute summer	4	2.000	5	42.8	1.226	1.012	1.7382	
30 minute summer	5	1.003	6	70.2	1.283	0.775	1.0042	
30 minute summer	6	1.004	7	73.3	1.766	0.809	0.6659	
30 minute summer	7	1.005	8	86.0	3.162	0.327	0.3816	
30 minute summer	8	1.006	9	101.5	3.526	0.315	0.9546	
30 minute summer	9	1.007	10	136.4	3.590	0.444	1.0184	
30 minute summer	10	1.008	11	156.7	3.561	0.644	1.7550	
30 minute summer	11	1.009	12	187.5	3.967	0.373	0.7243	
30 minute summer	12	1.010	13	200.2	2.897	0.323	1.0918	
30 minute summer	13	1.011	14	211.5	1.335	1.138	5.9196	
30 minute summer	14	1.012	15	247.9	1.566	1.334	5.0318	
30 minute summer	15	1.013	16	252.8	1.965	1.361	1.9214	
30 minute summer	16	1.014	17	284.2	3.038	0.633	5.3184	
30 minute summer	17	1.015	18	292.0	3.466	0.352	0.6439	
30 minute summer	18	1.016	19	292.1	3.724	0.371	0.7822	
30 minute summer	19	1.017	20	310.6	4.191	0.371	1.4028	
30 minute summer	20	1.018	23	317.9	4.662	0.364	1.2106	
30 minute summer	21	3.000	22	-346.4	-1.386	-0.344	8.4085	
30 minute summer	22	3.001	23	-338.3	-0.770	-0.335	4.2111	
30 minute summer	23	1.019	24	9.0	1.944	0.073	0.3178	
30 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
30 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 99.86%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
30 minute summer	26	96	105.582	0.036	9.0	0.0408	0.0000	OK
30 minute summer	27	97	103.819	0.037	9.0	0.0417	0.0000	OK
30 minute summer	28	98	99.371	0.071	9.0	0.1021	0.0000	OK
30 minute summer	S29	270	98.865	0.615	9.0	2.1303	0.0000	OK
30 minute summer	S30	270	98.865	0.715	8.6	1.8196	0.0000	SURCHARGED
30 minute summer	S31	191	97.544	0.054	8.3	0.1864	0.0000	OK
30 minute summer	S32	192	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
30 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
30 minute summer	27	1.023	28	9.0	1.859	0.059	0.3924	
30 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0981	
30 minute summer	S29	1.025	S30	8.6	0.501	0.004	12.3714	
30 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
30 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	124.3

**Results for 30 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 99.89%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
30 minute winter	1	18	139.079	0.029	3.2	0.0472	0.0000	OK
30 minute winter	2	18	138.317	0.041	6.9	0.0680	0.0000	OK
30 minute winter	3	18	137.368	0.037	6.9	0.0527	0.0000	OK
30 minute winter	4	18	134.830	0.180	40.3	0.6367	0.0000	OK
30 minute winter	5	18	134.453	0.209	64.7	0.4606	0.0000	OK
30 minute winter	6	18	134.323	0.201	67.7	0.2456	0.0000	OK
30 minute winter	7	18	134.140	0.125	79.3	0.2376	0.0000	OK
30 minute winter	8	18	133.347	0.110	93.3	0.2236	0.0000	OK
30 minute winter	9	18	130.622	0.135	125.0	0.3821	0.0000	OK
30 minute winter	10	18	128.622	0.175	144.2	0.3427	0.0000	OK
30 minute winter	11	18	126.647	0.174	171.5	0.4440	0.0000	OK
30 minute winter	12	18	125.654	0.138	183.6	0.2935	0.0000	OK
30 minute winter	13	18	124.602	0.527	194.7	1.0804	0.0000	SURCHARGED
30 minute winter	14	19	124.428	0.478	227.4	1.2394	0.0000	SURCHARGED
30 minute winter	15	19	124.218	0.377	230.7	0.6947	0.0000	OK
30 minute winter	16	19	124.052	0.262	259.8	0.6171	0.0000	OK
30 minute winter	17	19	122.919	0.223	267.9	0.4732	0.0000	OK
30 minute winter	18	19	122.418	0.222	268.3	0.3929	0.0000	OK
30 minute winter	19	19	121.809	0.200	285.6	0.5304	0.0000	OK
30 minute winter	20	19	120.552	0.205	292.5	0.4260	0.0000	OK
30 minute winter	21	38	118.238	0.338	310.2	216.2599	0.0000	OK
30 minute winter	22	13	118.406	0.733	309.1	1.8649	0.0000	OK
30 minute winter	23	13	118.410	0.851	317.5	3.4068	0.0000	SURCHARGED
30 minute winter	24	145	113.836	0.036	9.0	0.0514	0.0000	OK
30 minute winter	25	147	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
30 minute winter	1	1.000	2	3.2	1.018	0.082	0.0515	
30 minute winter	2	1.001	3	6.9	1.895	0.152	0.0534	
30 minute winter	3	1.002	5	6.9	2.094	0.126	0.0557	
30 minute winter	4	2.000	5	39.6	1.208	0.935	1.6320	
30 minute winter	5	1.003	6	64.5	1.260	0.712	0.9396	
30 minute winter	6	1.004	7	67.5	1.733	0.745	0.6253	
30 minute winter	7	1.005	8	79.1	3.104	0.301	0.3572	
30 minute winter	8	1.006	9	93.1	3.455	0.289	0.8928	
30 minute winter	9	1.007	10	124.8	3.539	0.406	0.9455	
30 minute winter	10	1.008	11	143.5	3.499	0.589	1.6358	
30 minute winter	11	1.009	12	171.3	3.957	0.341	0.6637	
30 minute winter	12	1.010	13	183.4	2.888	0.296	1.0594	
30 minute winter	13	1.011	14	193.6	1.222	1.042	5.9196	
30 minute winter	14	1.012	15	227.2	1.461	1.223	4.9005	
30 minute winter	15	1.013	16	231.7	1.924	1.247	1.8091	
30 minute winter	16	1.014	17	260.9	2.994	0.581	4.9536	
30 minute winter	17	1.015	18	268.3	3.429	0.323	0.5979	
30 minute winter	18	1.016	19	268.4	3.673	0.341	0.7289	
30 minute winter	19	1.017	20	285.8	4.129	0.341	1.3100	
30 minute winter	20	1.018	23	292.6	4.580	0.335	1.1342	
30 minute winter	21	3.000	22	-310.2	-1.268	-0.308	9.3080	
30 minute winter	22	3.001	23	-309.1	-0.717	-0.307	4.2254	
30 minute winter	23	1.019	24	9.0	1.944	0.073	0.3178	
30 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
30 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 99.89%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
30 minute winter	26	147	105.582	0.036	9.0	0.0408	0.0000	OK
30 minute winter	27	148	103.819	0.037	9.0	0.0417	0.0000	OK
30 minute winter	28	149	99.371	0.071	9.0	0.1021	0.0000	OK
30 minute winter	S29	270	98.872	0.622	9.0	2.1532	0.0000	OK
30 minute winter	S30	270	98.872	0.722	8.6	1.8365	0.0000	SURCHARGED
30 minute winter	S31	192	97.544	0.054	8.3	0.1864	0.0000	OK
30 minute winter	S32	192	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
30 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
30 minute winter	27	1.023	28	9.0	1.730	0.059	0.3924	
30 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
30 minute winter	S29	1.025	S30	8.6	0.497	0.004	12.5315	
30 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
30 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	124.2

**Results for 30 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.92%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
60 minute summer	1	33	139.077	0.027	2.7	0.0434	0.0000	OK
60 minute summer	2	33	138.314	0.038	5.8	0.0621	0.0000	OK
60 minute summer	3	33	137.365	0.034	5.8	0.0482	0.0000	OK
60 minute summer	4	33	134.806	0.156	33.9	0.5503	0.0000	OK
60 minute summer	5	33	134.429	0.185	54.6	0.4080	0.0000	OK
60 minute summer	6	33	134.303	0.181	57.2	0.2213	0.0000	OK
60 minute summer	7	33	134.128	0.113	66.9	0.2149	0.0000	OK
60 minute summer	8	33	133.337	0.100	78.8	0.2042	0.0000	OK
60 minute summer	9	33	130.610	0.123	105.5	0.3469	0.0000	OK
60 minute summer	10	33	128.604	0.157	121.6	0.3070	0.0000	OK
60 minute summer	11	33	126.629	0.156	144.6	0.3995	0.0000	OK
60 minute summer	12	33	125.642	0.126	154.8	0.2682	0.0000	OK
60 minute summer	13	34	124.456	0.381	164.1	0.7820	0.0000	OK
60 minute summer	14	34	124.347	0.397	190.6	1.0301	0.0000	OK
60 minute summer	15	34	124.176	0.335	194.1	0.6160	0.0000	OK
60 minute summer	16	34	124.025	0.234	217.9	0.5524	0.0000	OK
60 minute summer	17	34	122.894	0.197	223.7	0.4184	0.0000	OK
60 minute summer	18	34	122.393	0.197	223.4	0.3483	0.0000	OK
60 minute summer	19	34	121.788	0.179	237.8	0.4745	0.0000	OK
60 minute summer	20	34	120.530	0.183	243.3	0.3796	0.0000	OK
60 minute summer	21	67	118.266	0.366	254.8	235.9960	0.0000	OK
60 minute summer	22	34	118.292	0.619	255.0	1.5752	0.0000	OK
60 minute summer	23	34	118.309	0.750	264.0	3.0030	0.0000	SURCHARGED
60 minute summer	24	214	113.836	0.036	9.0	0.0514	0.0000	OK
60 minute summer	25	214	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
60 minute summer	1	1.000	2	2.7	0.972	0.069	0.0455	
60 minute summer	2	1.001	3	5.8	1.809	0.128	0.0470	
60 minute summer	3	1.002	5	5.8	1.995	0.106	0.0491	
60 minute summer	4	2.000	5	33.5	1.173	0.792	1.4231	
60 minute summer	5	1.003	6	54.5	1.213	0.602	0.8249	
60 minute summer	6	1.004	7	57.0	1.667	0.630	0.5513	
60 minute summer	7	1.005	8	66.8	2.983	0.254	0.3137	
60 minute summer	8	1.006	9	78.6	3.308	0.244	0.7870	
60 minute summer	9	1.007	10	105.3	3.433	0.343	0.8229	
60 minute summer	10	1.008	11	121.0	3.368	0.497	1.4330	
60 minute summer	11	1.009	12	144.5	3.810	0.288	0.5816	
60 minute summer	12	1.010	13	154.6	2.913	0.250	0.9268	
60 minute summer	13	1.011	14	163.1	1.121	0.878	5.4412	
60 minute summer	14	1.012	15	191.2	1.385	1.029	4.4779	
60 minute summer	15	1.013	16	194.1	1.838	1.045	1.5977	
60 minute summer	16	1.014	17	217.8	2.898	0.485	4.2767	
60 minute summer	17	1.015	18	223.4	3.343	0.269	0.5107	
60 minute summer	18	1.016	19	223.2	3.561	0.284	0.6260	
60 minute summer	19	1.017	20	237.6	3.988	0.284	1.1276	
60 minute summer	20	1.018	23	243.0	4.395	0.278	0.9817	
60 minute summer	21	3.000	22	-254.8	-1.092	-0.253	9.9712	
60 minute summer	22	3.001	23	-255.0	-0.622	-0.253	3.9302	
60 minute summer	23	1.019	24	9.0	1.944	0.073	0.3178	
60 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
60 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.92%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
60 minute summer	26	214	105.582	0.036	9.0	0.0408	0.0000	OK
60 minute summer	27	215	103.819	0.037	9.0	0.0417	0.0000	OK
60 minute summer	28	216	99.371	0.071	9.0	0.1021	0.0000	OK
60 minute summer	S29	300	98.916	0.666	9.0	2.3065	0.0000	OK
60 minute summer	S30	300	98.916	0.766	8.6	1.9491	0.0000	SURCHARGED
60 minute summer	S31	196	97.544	0.054	8.3	0.1864	0.0000	OK
60 minute summer	S32	196	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
60 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
60 minute summer	27	1.023	28	9.0	1.763	0.059	0.3924	
60 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0981	
60 minute summer	S29	1.025	S30	8.6	0.496	0.004	13.5948	
60 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
60 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	138.3

**Results for 30 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 99.94%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
60 minute winter	1	33	139.074	0.024	2.2	0.0393	0.0000	OK
60 minute winter	2	33	138.310	0.034	4.7	0.0558	0.0000	OK
60 minute winter	3	33	137.361	0.030	4.7	0.0433	0.0000	OK
60 minute winter	4	33	134.785	0.135	27.5	0.4767	0.0000	OK
60 minute winter	5	33	134.405	0.161	44.5	0.3564	0.0000	OK
60 minute winter	6	33	134.282	0.160	46.6	0.1962	0.0000	OK
60 minute winter	7	33	134.116	0.101	54.6	0.1912	0.0000	OK
60 minute winter	8	33	133.327	0.090	64.2	0.1836	0.0000	OK
60 minute winter	9	33	130.597	0.110	86.0	0.3097	0.0000	OK
60 minute winter	10	33	128.586	0.139	99.1	0.2712	0.0000	OK
60 minute winter	11	33	126.611	0.138	118.0	0.3536	0.0000	OK
60 minute winter	12	33	125.630	0.113	126.3	0.2413	0.0000	OK
60 minute winter	13	34	124.390	0.315	133.9	0.6457	0.0000	OK
60 minute winter	14	34	124.287	0.337	156.8	0.8738	0.0000	OK
60 minute winter	15	34	124.137	0.296	159.5	0.5449	0.0000	OK
60 minute winter	16	34	123.999	0.209	179.4	0.4922	0.0000	OK
60 minute winter	17	34	122.870	0.174	184.3	0.3691	0.0000	OK
60 minute winter	18	34	122.371	0.174	184.1	0.3083	0.0000	OK
60 minute winter	19	34	121.769	0.160	196.2	0.4238	0.0000	OK
60 minute winter	20	34	120.510	0.163	200.9	0.3383	0.0000	OK
60 minute winter	21	66	118.314	0.414	208.1	269.8825	0.0000	OK
60 minute winter	22	67	118.314	0.641	209.1	1.6304	0.0000	OK
60 minute winter	23	67	118.314	0.755	218.4	3.0212	0.0000	SURCHARGED
60 minute winter	24	280	113.836	0.036	9.0	0.0514	0.0000	OK
60 minute winter	25	280	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
60 minute winter	1	1.000	2	2.2	0.920	0.056	0.0391	
60 minute winter	2	1.001	3	4.7	1.707	0.103	0.0404	
60 minute winter	3	1.002	5	4.7	1.879	0.086	0.0422	
60 minute winter	4	2.000	5	27.4	1.126	0.647	1.2093	
60 minute winter	5	1.003	6	44.4	1.155	0.491	0.7059	
60 minute winter	6	1.004	7	46.6	1.585	0.514	0.4738	
60 minute winter	7	1.005	8	54.5	2.838	0.207	0.2691	
60 minute winter	8	1.006	9	64.2	3.135	0.199	0.6773	
60 minute winter	9	1.007	10	85.9	3.300	0.279	0.6984	
60 minute winter	10	1.008	11	98.9	3.212	0.406	1.2275	
60 minute winter	11	1.009	12	117.9	3.635	0.235	0.4974	
60 minute winter	12	1.010	13	126.2	2.900	0.204	0.7378	
60 minute winter	13	1.011	14	133.8	1.089	0.720	4.5907	
60 minute winter	14	1.012	15	157.0	1.318	0.845	3.8803	
60 minute winter	15	1.013	16	159.5	1.743	0.859	1.3898	
60 minute winter	16	1.014	17	179.4	2.791	0.399	3.6585	
60 minute winter	17	1.015	18	184.1	3.248	0.222	0.4332	
60 minute winter	18	1.016	19	184.1	3.436	0.234	0.5347	
60 minute winter	19	1.017	20	196.1	3.840	0.234	0.9669	
60 minute winter	20	1.018	23	200.8	4.206	0.230	0.8476	
60 minute winter	21	3.000	22	-208.1	-0.930	-0.206	11.0447	
60 minute winter	22	3.001	23	-209.1	-0.538	-0.207	3.9956	
60 minute winter	23	1.019	24	9.0	1.944	0.073	0.3178	
60 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
60 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 99.94%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
60 minute winter	26	280	105.582	0.036	9.0	0.0408	0.0000	OK
60 minute winter	27	281	103.819	0.037	9.0	0.0417	0.0000	OK
60 minute winter	28	283	99.371	0.071	9.0	0.1021	0.0000	OK
60 minute winter	S29	300	98.904	0.654	9.0	2.2666	0.0000	OK
60 minute winter	S30	300	98.904	0.754	8.6	1.9197	0.0000	SURCHARGED
60 minute winter	S31	203	97.544	0.054	8.3	0.1864	0.0000	OK
60 minute winter	S32	203	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
60 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
60 minute winter	27	1.023	28	9.0	1.762	0.059	0.3924	
60 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
60 minute winter	S29	1.025	S30	8.6	0.518	0.004	13.3187	
60 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
60 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	138.0

**Results for 30 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.95%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
120 minute summer	1	64	139.072	0.022	1.8	0.0356	0.0000	OK
120 minute summer	2	64	138.307	0.031	3.9	0.0507	0.0000	OK
120 minute summer	3	64	137.359	0.028	3.9	0.0395	0.0000	OK
120 minute summer	4	64	134.769	0.119	22.4	0.4189	0.0000	OK
120 minute summer	5	64	134.386	0.142	36.4	0.3144	0.0000	OK
120 minute summer	6	64	134.265	0.143	38.2	0.1751	0.0000	OK
120 minute summer	7	64	134.105	0.090	44.7	0.1711	0.0000	OK
120 minute summer	8	64	133.318	0.081	52.6	0.1659	0.0000	OK
120 minute summer	9	64	130.586	0.099	70.4	0.2783	0.0000	OK
120 minute summer	10	64	128.570	0.123	81.2	0.2416	0.0000	OK
120 minute summer	11	64	126.596	0.123	96.7	0.3152	0.0000	OK
120 minute summer	12	64	125.619	0.102	103.5	0.2179	0.0000	OK
120 minute summer	13	64	124.345	0.270	109.8	0.5542	0.0000	OK
120 minute summer	14	64	124.242	0.292	128.6	0.7568	0.0000	OK
120 minute summer	15	64	124.104	0.263	130.2	0.4834	0.0000	OK
120 minute summer	16	64	123.976	0.186	146.4	0.4383	0.0000	OK
120 minute summer	17	64	122.849	0.153	150.1	0.3244	0.0000	OK
120 minute summer	18	64	122.350	0.154	149.6	0.2716	0.0000	OK
120 minute summer	19	64	121.751	0.142	159.6	0.3768	0.0000	OK
120 minute summer	20	64	120.491	0.144	163.4	0.2998	0.0000	OK
120 minute summer	21	126	118.319	0.419	166.5	273.7271	0.0000	OK
120 minute summer	22	126	118.319	0.646	167.9	1.6440	0.0000	OK
120 minute summer	23	126	118.319	0.760	177.6	3.0426	0.0000	SURCHARGED
120 minute summer	24	348	113.836	0.036	9.0	0.0514	0.0000	OK
120 minute summer	25	348	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
120 minute summer	1	1.000	2	1.8	0.865	0.046	0.0341	
120 minute summer	2	1.001	3	3.9	1.620	0.086	0.0353	
120 minute summer	3	1.002	5	3.9	1.779	0.071	0.0370	
120 minute summer	4	2.000	5	22.4	1.075	0.528	1.0342	
120 minute summer	5	1.003	6	36.4	1.100	0.401	0.6065	
120 minute summer	6	1.004	7	38.1	1.508	0.421	0.4088	
120 minute summer	7	1.005	8	44.7	2.701	0.170	0.2320	
120 minute summer	8	1.006	9	52.6	2.967	0.163	0.5862	
120 minute summer	9	1.007	10	70.4	3.167	0.229	0.5964	
120 minute summer	10	1.008	11	81.1	3.057	0.333	1.0581	
120 minute summer	11	1.009	12	96.7	3.467	0.192	0.4279	
120 minute summer	12	1.010	13	103.5	2.905	0.167	0.5930	
120 minute summer	13	1.011	14	109.5	1.052	0.590	3.8878	
120 minute summer	14	1.012	15	128.1	1.251	0.690	3.3402	
120 minute summer	15	1.013	16	129.9	1.646	0.699	1.2016	
120 minute summer	16	1.014	17	146.0	2.673	0.325	3.1098	
120 minute summer	17	1.015	18	149.6	3.140	0.180	0.3641	
120 minute summer	18	1.016	19	149.5	3.300	0.190	0.4524	
120 minute summer	19	1.017	20	159.4	3.674	0.190	0.8210	
120 minute summer	20	1.018	23	163.0	4.001	0.186	0.7233	
120 minute summer	21	3.000	22	-166.5	-0.775	-0.165	11.1603	
120 minute summer	22	3.001	23	-167.9	-0.462	-0.167	4.0184	
120 minute summer	23	1.019	24	9.0	1.944	0.073	0.3178	
120 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
120 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.95%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
120 minute summer	26	348	105.582	0.036	9.0	0.0408	0.0000	OK
120 minute summer	27	350	103.819	0.037	9.0	0.0417	0.0000	OK
120 minute summer	28	350	99.371	0.071	9.0	0.1021	0.0000	OK
120 minute summer	S29	360	98.988	0.738	9.0	2.5566	0.0000	OK
120 minute summer	S30	360	98.988	0.838	8.6	2.1329	0.0000	SURCHARGED
120 minute summer	S31	214	97.544	0.054	8.3	0.1864	0.0000	OK
120 minute summer	S32	214	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
120 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
120 minute summer	27	1.023	28	9.0	1.274	0.059	0.3924	
120 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0981	
120 minute summer	S29	1.025	S30	8.6	0.512	0.004	15.3021	
120 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
120 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	166.1

**Results for 30 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 99.96%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
120 minute winter	1	64	139.070	0.020	1.4	0.0316	0.0000	OK
120 minute winter	2	64	138.303	0.027	3.0	0.0445	0.0000	OK
120 minute winter	3	64	137.355	0.024	3.0	0.0347	0.0000	OK
120 minute winter	4	64	134.752	0.102	17.3	0.3594	0.0000	OK
120 minute winter	5	64	134.366	0.122	28.1	0.2696	0.0000	OK
120 minute winter	6	64	134.246	0.124	29.5	0.1521	0.0000	OK
120 minute winter	7	64	134.093	0.078	34.6	0.1486	0.0000	OK
120 minute winter	8	64	133.309	0.071	40.7	0.1457	0.0000	OK
120 minute winter	9	64	130.573	0.086	54.4	0.2430	0.0000	OK
120 minute winter	10	64	128.554	0.107	62.7	0.2090	0.0000	OK
120 minute winter	11	64	126.580	0.107	74.6	0.2723	0.0000	OK
120 minute winter	12	64	125.606	0.090	79.9	0.1913	0.0000	OK
120 minute winter	13	64	124.302	0.227	84.8	0.4653	0.0000	OK
120 minute winter	14	64	124.197	0.247	99.6	0.6417	0.0000	OK
120 minute winter	15	64	124.069	0.228	101.0	0.4193	0.0000	OK
120 minute winter	16	64	123.952	0.162	113.7	0.3818	0.0000	OK
120 minute winter	17	64	122.828	0.132	116.8	0.2790	0.0000	OK
120 minute winter	18	64	122.329	0.133	116.7	0.2345	0.0000	OK
120 minute winter	19	64	121.733	0.124	124.4	0.3283	0.0000	OK
120 minute winter	20	64	120.472	0.125	127.5	0.2605	0.0000	OK
120 minute winter	21	124	118.379	0.479	127.0	316.8965	0.0000	OK
120 minute winter	22	126	118.379	0.706	128.9	1.7956	0.0000	OK
120 minute winter	23	126	118.379	0.819	138.7	3.2813	0.0000	SURCHARGED
120 minute winter	24	58	113.836	0.036	9.0	0.0514	0.0000	OK
120 minute winter	25	60	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
120 minute winter	1	1.000	2	1.4	0.807	0.036	0.0284	
120 minute winter	2	1.001	3	3.0	1.503	0.066	0.0293	
120 minute winter	3	1.002	5	3.0	1.650	0.055	0.0307	
120 minute winter	4	2.000	5	17.3	1.009	0.408	0.8517	
120 minute winter	5	1.003	6	28.1	1.031	0.310	0.4999	
120 minute winter	6	1.004	7	29.5	1.412	0.326	0.3383	
120 minute winter	7	1.005	8	34.6	2.526	0.131	0.1917	
120 minute winter	8	1.006	9	40.7	2.763	0.126	0.4867	
120 minute winter	9	1.007	10	54.4	3.000	0.177	0.4864	
120 minute winter	10	1.008	11	62.6	2.859	0.257	0.8737	
120 minute winter	11	1.009	12	74.6	3.250	0.149	0.3522	
120 minute winter	12	1.010	13	79.9	2.905	0.129	0.4472	
120 minute winter	13	1.011	14	84.8	1.001	0.456	3.1630	
120 minute winter	14	1.012	15	99.4	1.171	0.535	2.7691	
120 minute winter	15	1.013	16	100.9	1.534	0.543	1.0036	
120 minute winter	16	1.014	17	113.6	2.531	0.253	2.5577	
120 minute winter	17	1.015	18	116.7	3.009	0.141	0.2963	
120 minute winter	18	1.016	19	116.6	3.137	0.148	0.3711	
120 minute winter	19	1.017	20	124.4	3.480	0.148	0.6764	
120 minute winter	20	1.018	23	127.4	3.767	0.146	0.6005	
120 minute winter	21	3.000	22	-127.0	-0.622	-0.126	12.3493	
120 minute winter	22	3.001	23	-128.9	-0.374	-0.128	4.1878	
120 minute winter	23	1.019	24	9.0	1.944	0.073	0.3178	
120 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
120 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 99.96%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
120 minute winter	26	60	105.582	0.036	9.0	0.0408	0.0000	OK
120 minute winter	27	60	103.819	0.037	9.0	0.0417	0.0000	OK
120 minute winter	28	60	99.371	0.071	9.0	0.1021	0.0000	OK
120 minute winter	S29	360	98.950	0.700	9.0	2.4241	0.0000	OK
120 minute winter	S30	360	98.950	0.800	8.6	2.0355	0.0000	SURCHARGED
120 minute winter	S31	228	97.544	0.054	8.3	0.1864	0.0000	OK
120 minute winter	S32	228	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
120 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
120 minute winter	27	1.023	28	9.0	1.503	0.059	0.3924	
120 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
120 minute winter	S29	1.025	S30	8.6	0.418	0.004	14.4030	
120 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
120 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	165.6

**Results for 30 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 99.96%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
180 minute summer	1	96	139.069	0.019	1.3	0.0305	0.0000	OK
180 minute summer	2	96	138.302	0.026	2.8	0.0430	0.0000	OK
180 minute summer	3	96	137.354	0.023	2.8	0.0335	0.0000	OK
180 minute summer	4	96	134.750	0.100	16.8	0.3534	0.0000	OK
180 minute summer	5	96	134.364	0.120	27.2	0.2645	0.0000	OK
180 minute summer	6	96	134.244	0.122	28.5	0.1493	0.0000	OK
180 minute summer	7	96	134.092	0.077	33.4	0.1458	0.0000	OK
180 minute summer	8	96	133.307	0.070	39.3	0.1432	0.0000	OK
180 minute summer	9	96	130.572	0.085	52.6	0.2389	0.0000	OK
180 minute summer	10	96	128.552	0.105	60.7	0.2054	0.0000	OK
180 minute summer	11	96	126.578	0.105	72.4	0.2677	0.0000	OK
180 minute summer	12	96	125.605	0.089	77.5	0.1884	0.0000	OK
180 minute summer	13	96	124.297	0.222	82.2	0.4560	0.0000	OK
180 minute summer	14	96	124.193	0.243	96.5	0.6296	0.0000	OK
180 minute summer	15	96	124.065	0.224	98.0	0.4125	0.0000	OK
180 minute summer	16	96	123.950	0.159	110.3	0.3758	0.0000	OK
180 minute summer	17	96	122.826	0.129	113.4	0.2743	0.0000	OK
180 minute summer	18	96	122.327	0.131	113.4	0.2306	0.0000	OK
180 minute summer	19	96	121.731	0.122	121.0	0.3233	0.0000	OK
180 minute summer	20	96	120.471	0.123	124.0	0.2566	0.0000	OK
180 minute summer	21	184	118.337	0.437	123.7	286.7883	0.0000	OK
180 minute summer	22	184	118.337	0.664	125.3	1.6907	0.0000	OK
180 minute summer	23	184	118.337	0.778	134.9	3.1164	0.0000	SURCHARGED
180 minute summer	24	92	113.836	0.036	9.0	0.0514	0.0000	OK
180 minute summer	25	92	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
180 minute summer	1	1.000	2	1.3	0.788	0.033	0.0270	
180 minute summer	2	1.001	3	2.8	1.473	0.062	0.0278	
180 minute summer	3	1.002	5	2.8	1.618	0.051	0.0292	
180 minute summer	4	2.000	5	16.8	1.002	0.397	0.8335	
180 minute summer	5	1.003	6	27.2	1.024	0.300	0.4876	
180 minute summer	6	1.004	7	28.5	1.400	0.315	0.3300	
180 minute summer	7	1.005	8	33.4	2.503	0.127	0.1869	
180 minute summer	8	1.006	9	39.3	2.735	0.122	0.4751	
180 minute summer	9	1.007	10	52.6	2.976	0.171	0.4742	
180 minute summer	10	1.008	11	60.7	2.835	0.249	0.8536	
180 minute summer	11	1.009	12	72.4	3.226	0.144	0.3443	
180 minute summer	12	1.010	13	77.5	2.911	0.125	0.4321	
180 minute summer	13	1.011	14	82.2	0.995	0.442	3.0862	
180 minute summer	14	1.012	15	96.5	1.162	0.519	2.7077	
180 minute summer	15	1.013	16	97.9	1.522	0.527	0.9825	
180 minute summer	16	1.014	17	110.3	2.515	0.246	2.5005	
180 minute summer	17	1.015	18	113.4	2.994	0.137	0.2894	
180 minute summer	18	1.016	19	113.4	3.116	0.144	0.3629	
180 minute summer	19	1.017	20	121.0	3.458	0.144	0.6621	
180 minute summer	20	1.018	23	123.9	3.741	0.142	0.5884	
180 minute summer	21	3.000	22	-123.7	-0.606	-0.123	11.5438	
180 minute summer	22	3.001	23	-125.3	-0.368	-0.124	4.0878	
180 minute summer	23	1.019	24	9.0	1.944	0.073	0.3178	
180 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
180 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 99.96%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
180 minute summer	26	92	105.582	0.036	9.0	0.0408	0.0000	OK
180 minute summer	27	92	103.819	0.037	9.0	0.0417	0.0000	OK
180 minute summer	28	420	99.371	0.071	9.0	0.1021	0.0000	OK
180 minute summer	S29	420	99.070	0.820	9.0	2.8403	0.0000	OK
180 minute summer	S30	420	99.070	0.920	8.6	2.3412	0.0000	SURCHARGED
180 minute summer	S31	228	97.544	0.054	8.3	0.1864	0.0000	OK
180 minute summer	S32	228	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
180 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
180 minute summer	27	1.023	28	9.0	1.256	0.059	0.3924	
180 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0981	
180 minute summer	S29	1.025	S30	8.6	0.327	0.004	17.1656	
180 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
180 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	193.1

**Results for 30 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 99.97%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
180 minute winter	1	92	139.067	0.017	1.0	0.0270	0.0000	OK
180 minute winter	2	96	138.299	0.023	2.2	0.0382	0.0000	OK
180 minute winter	3	96	137.352	0.021	2.2	0.0298	0.0000	OK
180 minute winter	4	96	134.736	0.086	12.9	0.3048	0.0000	OK
180 minute winter	5	96	134.347	0.103	20.9	0.2276	0.0000	OK
180 minute winter	6	96	134.228	0.106	21.9	0.1299	0.0000	OK
180 minute winter	7	96	134.082	0.067	25.7	0.1268	0.0000	OK
180 minute winter	8	96	133.299	0.062	30.3	0.1258	0.0000	OK
180 minute winter	9	96	130.561	0.074	40.6	0.2095	0.0000	OK
180 minute winter	10	96	128.538	0.091	46.8	0.1785	0.0000	OK
180 minute winter	11	96	126.564	0.091	55.8	0.2324	0.0000	OK
180 minute winter	12	96	125.594	0.078	59.7	0.1654	0.0000	OK
180 minute winter	13	96	124.264	0.189	63.3	0.3877	0.0000	OK
180 minute winter	14	96	124.157	0.207	74.3	0.5381	0.0000	OK
180 minute winter	15	96	124.036	0.195	75.5	0.3584	0.0000	OK
180 minute winter	16	96	123.929	0.139	85.0	0.3274	0.0000	OK
180 minute winter	17	96	122.807	0.111	87.4	0.2357	0.0000	OK
180 minute winter	18	96	122.309	0.112	87.4	0.1987	0.0000	OK
180 minute winter	19	96	121.715	0.106	93.2	0.2809	0.0000	OK
180 minute winter	20	96	120.454	0.107	95.5	0.2223	0.0000	OK
180 minute winter	21	184	118.405	0.505	92.2	335.9414	0.0000	OK
180 minute winter	22	184	118.404	0.731	94.1	1.8615	0.0000	OK
180 minute winter	23	184	118.404	0.845	103.9	3.3849	0.0000	SURCHARGED
180 minute winter	24	92	113.836	0.036	9.0	0.0514	0.0000	OK
180 minute winter	25	92	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
180 minute winter	1	1.000	2	1.0	0.737	0.026	0.0226	
180 minute winter	2	1.001	3	2.2	1.376	0.048	0.0234	
180 minute winter	3	1.002	5	2.2	1.506	0.040	0.0247	
180 minute winter	4	2.000	5	12.9	0.935	0.305	0.6857	
180 minute winter	5	1.003	6	20.9	0.957	0.231	0.4010	
180 minute winter	6	1.004	7	21.9	1.306	0.242	0.2723	
180 minute winter	7	1.005	8	25.7	2.333	0.098	0.1542	
180 minute winter	8	1.006	9	30.3	2.537	0.094	0.3950	
180 minute winter	9	1.007	10	40.6	2.812	0.132	0.3873	
180 minute winter	10	1.008	11	46.8	2.644	0.192	0.7057	
180 minute winter	11	1.009	12	55.8	3.017	0.111	0.2837	
180 minute winter	12	1.010	13	59.7	2.904	0.096	0.3224	
180 minute winter	13	1.011	14	63.3	0.941	0.341	2.5127	
180 minute winter	14	1.012	15	74.3	1.084	0.400	2.2356	
180 minute winter	15	1.013	16	75.5	1.413	0.406	0.8164	
180 minute winter	16	1.014	17	85.0	2.366	0.189	2.0476	
180 minute winter	17	1.015	18	87.4	2.849	0.105	0.2344	
180 minute winter	18	1.016	19	87.4	2.945	0.111	0.2960	
180 minute winter	19	1.017	20	93.2	3.254	0.111	0.5418	
180 minute winter	20	1.018	23	95.5	3.498	0.109	0.4842	
180 minute winter	21	3.000	22	-92.2	-0.473	-0.091	12.7897	
180 minute winter	22	3.001	23	-94.1	-0.283	-0.093	4.2241	
180 minute winter	23	1.019	24	9.0	1.944	0.073	0.3178	
180 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
180 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 99.97%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
180 minute winter	26	92	105.582	0.036	9.0	0.0408	0.0000	OK
180 minute winter	27	92	103.819	0.037	9.0	0.0417	0.0000	OK
180 minute winter	28	92	99.371	0.071	9.0	0.1021	0.0000	OK
180 minute winter	S29	420	99.005	0.755	9.0	2.6166	0.0000	OK
180 minute winter	S30	420	99.005	0.855	8.5	2.1769	0.0000	SURCHARGED
180 minute winter	S31	244	97.544	0.054	8.3	0.1864	0.0000	OK
180 minute winter	S32	244	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
180 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
180 minute winter	27	1.023	28	9.0	1.228	0.059	0.3924	
180 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
180 minute winter	S29	1.025	S30	8.5	0.516	0.004	15.7030	
180 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
180 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	193.0

**Results for 30 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 99.96%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
240 minute summer	1	124	139.067	0.017	1.1	0.0282	0.0000	OK
240 minute summer	2	124	138.300	0.024	2.4	0.0398	0.0000	OK
240 minute summer	3	124	137.353	0.022	2.4	0.0310	0.0000	OK
240 minute summer	4	124	134.740	0.090	14.2	0.3193	0.0000	OK
240 minute summer	5	124	134.352	0.108	22.8	0.2388	0.0000	OK
240 minute summer	6	124	134.233	0.111	23.8	0.1355	0.0000	OK
240 minute summer	7	124	134.085	0.070	27.9	0.1324	0.0000	OK
240 minute summer	8	124	133.301	0.064	32.9	0.1309	0.0000	OK
240 minute summer	9	124	130.564	0.077	44.1	0.2182	0.0000	OK
240 minute summer	10	124	128.542	0.095	50.8	0.1862	0.0000	OK
240 minute summer	11	124	126.568	0.095	60.5	0.2426	0.0000	OK
240 minute summer	12	124	125.597	0.081	64.7	0.1720	0.0000	OK
240 minute summer	13	124	124.273	0.198	68.6	0.4064	0.0000	OK
240 minute summer	14	124	124.167	0.216	80.3	0.5616	0.0000	OK
240 minute summer	15	124	124.043	0.202	80.9	0.3716	0.0000	OK
240 minute summer	16	124	123.934	0.144	91.1	0.3392	0.0000	OK
240 minute summer	17	124	122.811	0.115	93.3	0.2444	0.0000	OK
240 minute summer	18	124	122.312	0.116	93.0	0.2057	0.0000	OK
240 minute summer	19	124	121.719	0.110	99.3	0.2906	0.0000	OK
240 minute summer	20	124	120.458	0.111	101.6	0.2299	0.0000	OK
240 minute summer	21	244	118.341	0.441	99.0	289.4749	0.0000	OK
240 minute summer	22	244	118.341	0.668	100.9	1.7002	0.0000	OK
240 minute summer	23	244	118.341	0.782	110.7	3.1312	0.0000	SURCHARGED
240 minute summer	24	124	113.836	0.036	9.0	0.0514	0.0000	OK
240 minute summer	25	124	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
240 minute summer	1	1.000	2	1.1	0.759	0.028	0.0241	
240 minute summer	2	1.001	3	2.4	1.412	0.053	0.0249	
240 minute summer	3	1.002	5	2.4	1.542	0.043	0.0261	
240 minute summer	4	2.000	5	14.0	0.955	0.331	0.7289	
240 minute summer	5	1.003	6	22.7	0.978	0.251	0.4263	
240 minute summer	6	1.004	7	23.7	1.332	0.262	0.2890	
240 minute summer	7	1.005	8	27.9	2.385	0.106	0.1636	
240 minute summer	8	1.006	9	32.8	2.594	0.102	0.4182	
240 minute summer	9	1.007	10	44.0	2.863	0.143	0.4121	
240 minute summer	10	1.008	11	50.6	2.699	0.208	0.7470	
240 minute summer	11	1.009	12	60.4	3.078	0.120	0.3009	
240 minute summer	12	1.010	13	64.6	2.900	0.104	0.3521	
240 minute summer	13	1.011	14	68.2	0.957	0.367	2.6642	
240 minute summer	14	1.012	15	79.6	1.104	0.429	2.3536	
240 minute summer	15	1.013	16	80.6	1.438	0.434	0.8565	
240 minute summer	16	1.014	17	90.7	2.402	0.202	2.1527	
240 minute summer	17	1.015	18	93.0	2.883	0.112	0.2464	
240 minute summer	18	1.016	19	92.9	2.986	0.118	0.3106	
240 minute summer	19	1.017	20	99.1	3.303	0.118	0.5682	
240 minute summer	20	1.018	23	101.5	3.555	0.116	0.5067	
240 minute summer	21	3.000	22	-99.0	-0.505	-0.098	11.6201	
240 minute summer	22	3.001	23	-100.9	-0.314	-0.100	4.0998	
240 minute summer	23	1.019	24	9.0	1.944	0.073	0.3178	
240 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
240 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 99.96%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
240 minute summer	26	124	105.582	0.036	9.0	0.0408	0.0000	OK
240 minute summer	27	124	103.819	0.037	9.0	0.0417	0.0000	OK
240 minute summer	28	124	99.371	0.071	9.0	0.1021	0.0000	OK
240 minute summer	S29	480	99.193	0.943	9.0	3.2665	0.0000	OK
240 minute summer	S30	480	99.193	1.043	8.6	2.6544	0.0000	SURCHARGED
240 minute summer	S31	240	97.544	0.054	8.3	0.1864	0.0000	OK
240 minute summer	S32	240	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
240 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
240 minute summer	27	1.023	28	9.0	1.350	0.059	0.3924	
240 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0981	
240 minute summer	S29	1.025	S30	8.6	0.411	0.004	19.7129	
240 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
240 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	220.1

**Results for 30 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 99.98%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
240 minute winter	1	120	139.065	0.015	0.8	0.0242	0.0000	OK
240 minute winter	2	124	138.297	0.021	1.8	0.0346	0.0000	OK
240 minute winter	3	124	137.350	0.019	1.8	0.0270	0.0000	OK
240 minute winter	4	124	134.727	0.077	10.6	0.2734	0.0000	OK
240 minute winter	5	124	134.336	0.092	17.2	0.2040	0.0000	OK
240 minute winter	6	124	134.218	0.096	17.9	0.1170	0.0000	OK
240 minute winter	7	124	134.075	0.060	21.0	0.1141	0.0000	OK
240 minute winter	8	124	133.293	0.056	24.7	0.1138	0.0000	OK
240 minute winter	9	124	130.554	0.067	33.1	0.1891	0.0000	OK
240 minute winter	10	124	128.529	0.082	38.2	0.1602	0.0000	OK
240 minute winter	11	124	126.554	0.081	45.5	0.2081	0.0000	OK
240 minute winter	12	124	125.587	0.071	48.7	0.1503	0.0000	OK
240 minute winter	13	124	124.243	0.168	51.7	0.3439	0.0000	OK
240 minute winter	14	124	124.134	0.184	60.6	0.4783	0.0000	OK
240 minute winter	15	124	124.016	0.175	61.5	0.3219	0.0000	OK
240 minute winter	16	124	123.915	0.125	69.3	0.2945	0.0000	OK
240 minute winter	17	128	122.795	0.099	71.1	0.2098	0.0000	OK
240 minute winter	18	128	122.296	0.100	71.2	0.1772	0.0000	OK
240 minute winter	19	128	121.704	0.095	75.9	0.2521	0.0000	OK
240 minute winter	20	128	120.443	0.096	77.7	0.1990	0.0000	OK
240 minute winter	21	240	118.415	0.515	73.2	343.6823	0.0000	OK
240 minute winter	22	240	118.415	0.742	74.9	1.8883	0.0000	OK
240 minute winter	23	240	118.415	0.856	84.6	3.4272	0.0000	SURCHARGED
240 minute winter	24	120	113.836	0.036	9.0	0.0514	0.0000	OK
240 minute winter	25	124	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
240 minute winter	1	1.000	2	0.8	0.687	0.021	0.0196	
240 minute winter	2	1.001	3	1.8	1.299	0.040	0.0204	
240 minute winter	3	1.002	5	1.8	1.418	0.033	0.0214	
240 minute winter	4	2.000	5	10.6	0.885	0.249	0.5925	
240 minute winter	5	1.003	6	17.1	0.909	0.189	0.3461	
240 minute winter	6	1.004	7	17.9	1.237	0.198	0.2355	
240 minute winter	7	1.005	8	21.0	2.209	0.080	0.1331	
240 minute winter	8	1.006	9	24.7	2.390	0.077	0.3417	
240 minute winter	9	1.007	10	33.1	2.688	0.108	0.3300	
240 minute winter	10	1.008	11	38.1	2.500	0.157	0.6083	
240 minute winter	11	1.009	12	45.5	2.853	0.091	0.2447	
240 minute winter	12	1.010	13	48.7	2.891	0.079	0.2558	
240 minute winter	13	1.011	14	51.7	0.899	0.278	2.1462	
240 minute winter	14	1.012	15	60.5	1.026	0.326	1.9253	
240 minute winter	15	1.013	16	61.5	1.333	0.331	0.7063	
240 minute winter	16	1.014	17	69.2	2.254	0.154	1.7532	
240 minute winter	17	1.015	18	71.2	2.735	0.086	0.1988	
240 minute winter	18	1.016	19	71.2	2.812	0.090	0.2525	
240 minute winter	19	1.017	20	75.9	3.099	0.091	0.4636	
240 minute winter	20	1.018	23	77.7	3.315	0.089	0.4161	
240 minute winter	21	3.000	22	-73.2	-0.387	-0.073	12.9505	
240 minute winter	22	3.001	23	-74.9	-0.230	-0.074	4.2345	
240 minute winter	23	1.019	24	9.0	1.944	0.073	0.3177	
240 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
240 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 99.98%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
240 minute winter	26	124	105.582	0.036	9.0	0.0408	0.0000	OK
240 minute winter	27	124	103.819	0.037	9.0	0.0417	0.0000	OK
240 minute winter	28	124	99.371	0.071	9.0	0.1021	0.0000	OK
240 minute winter	S29	480	99.085	0.835	9.0	2.8930	0.0000	OK
240 minute winter	S30	480	99.085	0.935	8.6	2.3800	0.0000	SURCHARGED
240 minute winter	S31	252	97.544	0.054	8.3	0.1864	0.0000	OK
240 minute winter	S32	252	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
240 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
240 minute winter	27	1.023	28	9.0	1.227	0.059	0.3924	
240 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
240 minute winter	S29	1.025	S30	8.6	0.306	0.004	17.4983	
240 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
240 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	220.4

**Results for 30 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 99.92%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
360 minute summer	1	184	139.066	0.016	0.9	0.0255	0.0000	OK
360 minute summer	2	184	138.298	0.022	1.9	0.0354	0.0000	OK
360 minute summer	3	184	137.350	0.019	1.9	0.0275	0.0000	OK
360 minute summer	4	184	134.728	0.078	10.8	0.2746	0.0000	OK
360 minute summer	5	184	134.337	0.093	17.4	0.2054	0.0000	OK
360 minute summer	6	184	134.218	0.096	18.2	0.1178	0.0000	OK
360 minute summer	7	184	134.075	0.060	21.3	0.1149	0.0000	OK
360 minute summer	8	184	133.293	0.056	25.1	0.1145	0.0000	OK
360 minute summer	9	184	130.554	0.067	33.6	0.1904	0.0000	OK
360 minute summer	10	184	128.529	0.082	38.7	0.1611	0.0000	OK
360 minute summer	11	184	126.555	0.082	46.0	0.2091	0.0000	OK
360 minute summer	12	184	125.587	0.071	49.2	0.1510	0.0000	OK
360 minute summer	13	184	124.243	0.168	52.2	0.3451	0.0000	OK
360 minute summer	14	184	124.135	0.184	61.0	0.4785	0.0000	OK
360 minute summer	15	184	124.016	0.174	61.4	0.3212	0.0000	OK
360 minute summer	16	184	123.915	0.125	69.1	0.2938	0.0000	OK
360 minute summer	17	184	122.795	0.099	70.8	0.2089	0.0000	OK
360 minute summer	18	184	122.296	0.100	70.5	0.1762	0.0000	OK
360 minute summer	19	184	121.704	0.095	75.3	0.2510	0.0000	OK
360 minute summer	20	184	120.442	0.095	77.1	0.1980	0.0000	OK
360 minute summer	21	320	118.331	0.431	72.5	281.8312	0.0000	OK
360 minute summer	22	320	118.331	0.658	74.3	1.6735	0.0000	OK
360 minute summer	23	320	118.331	0.772	84.0	3.0893	0.0000	SURCHARGED
360 minute summer	24	600	113.836	0.036	9.0	0.0514	0.0000	OK
360 minute summer	25	600	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
360 minute summer	1	1.000	2	0.9	0.711	0.023	0.0205	
360 minute summer	2	1.001	3	1.9	1.317	0.041	0.0209	
360 minute summer	3	1.002	5	1.9	1.434	0.034	0.0220	
360 minute summer	4	2.000	5	10.6	0.886	0.251	0.5957	
360 minute summer	5	1.003	6	17.3	0.910	0.191	0.3493	
360 minute summer	6	1.004	7	18.1	1.239	0.200	0.2377	
360 minute summer	7	1.005	8	21.3	2.217	0.081	0.1344	
360 minute summer	8	1.006	9	25.0	2.397	0.078	0.3450	
360 minute summer	9	1.007	10	33.5	2.697	0.109	0.3331	
360 minute summer	10	1.008	11	38.5	2.506	0.158	0.6125	
360 minute summer	11	1.009	12	45.9	2.857	0.091	0.2464	
360 minute summer	12	1.010	13	49.2	2.877	0.079	0.2578	
360 minute summer	13	1.011	14	51.8	0.900	0.279	2.1514	
360 minute summer	14	1.012	15	60.4	1.026	0.325	1.9232	
360 minute summer	15	1.013	16	61.1	1.328	0.329	0.7041	
360 minute summer	16	1.014	17	68.8	2.249	0.153	1.7453	
360 minute summer	17	1.015	18	70.5	2.730	0.085	0.1974	
360 minute summer	18	1.016	19	70.4	2.802	0.090	0.2508	
360 minute summer	19	1.017	20	75.2	3.091	0.090	0.4606	
360 minute summer	20	1.018	23	76.9	3.305	0.088	0.4131	
360 minute summer	21	3.000	22	-72.5	-0.387	-0.072	11.4020	
360 minute summer	22	3.001	23	-74.3	-0.242	-0.074	4.0634	
360 minute summer	23	1.019	24	9.0	1.944	0.073	0.3178	
360 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
360 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 99.92%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
360 minute summer	26	600	105.582	0.036	9.0	0.0408	0.0000	OK
360 minute summer	27	600	103.819	0.037	9.0	0.0417	0.0000	OK
360 minute summer	28	600	99.566	0.266	9.0	0.3806	0.0000	SURCHARGED
360 minute summer	S29	600	99.562	1.312	9.0	4.5460	0.0000	SURCHARGED
360 minute summer	S30	600	99.562	1.412	8.6	3.5945	0.0000	SURCHARGED
360 minute summer	S31	272	97.544	0.054	8.3	0.1864	0.0000	OK
360 minute summer	S32	272	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
360 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
360 minute summer	27	1.023	28	9.0	1.246	0.059	1.1485	
360 minute summer	28	1.024	S29	9.0	0.871	0.195	0.3775	
360 minute summer	S29	1.025	S30	8.6	0.202	0.004	22.8068	
360 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
360 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	270.8

**Results for 30 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 99.99%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
360 minute winter	1	176	139.063	0.013	0.6	0.0212	0.0000	OK
360 minute winter	2	176	138.294	0.018	1.3	0.0296	0.0000	OK
360 minute winter	3	176	137.347	0.016	1.3	0.0232	0.0000	OK
360 minute winter	4	184	134.716	0.066	7.9	0.2341	0.0000	OK
360 minute winter	5	184	134.323	0.079	12.8	0.1739	0.0000	OK
360 minute winter	6	184	134.204	0.082	13.4	0.1007	0.0000	OK
360 minute winter	7	184	134.067	0.052	15.7	0.0981	0.0000	OK
360 minute winter	8	184	133.285	0.048	18.4	0.0987	0.0000	OK
360 minute winter	9	184	130.545	0.058	24.6	0.1637	0.0000	OK
360 minute winter	10	184	128.517	0.070	28.4	0.1376	0.0000	OK
360 minute winter	11	184	126.542	0.069	33.9	0.1773	0.0000	OK
360 minute winter	12	184	125.579	0.063	36.3	0.1341	0.0000	OK
360 minute winter	13	184	124.217	0.142	38.5	0.2908	0.0000	OK
360 minute winter	14	184	124.106	0.156	45.1	0.4053	0.0000	OK
360 minute winter	15	184	123.991	0.150	45.7	0.2763	0.0000	OK
360 minute winter	16	184	123.898	0.108	51.5	0.2533	0.0000	OK
360 minute winter	17	184	122.780	0.084	52.8	0.1778	0.0000	OK
360 minute winter	18	184	122.281	0.085	52.8	0.1505	0.0000	OK
360 minute winter	19	184	121.691	0.082	56.4	0.2162	0.0000	OK
360 minute winter	20	184	120.429	0.082	57.8	0.1703	0.0000	OK
360 minute winter	21	352	118.409	0.509	52.0	339.5110	0.0000	OK
360 minute winter	22	352	118.409	0.736	53.3	1.8742	0.0000	OK
360 minute winter	23	352	118.409	0.850	62.8	3.4050	0.0000	SURCHARGED
360 minute winter	24	184	113.836	0.036	9.0	0.0514	0.0000	OK
360 minute winter	25	184	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
360 minute winter	1	1.000	2	0.6	0.626	0.015	0.0157	
360 minute winter	2	1.001	3	1.3	1.179	0.029	0.0162	
360 minute winter	3	1.002	5	1.3	1.287	0.024	0.0171	
360 minute winter	4	2.000	5	7.9	0.817	0.186	0.4790	
360 minute winter	5	1.003	6	12.8	0.840	0.141	0.2789	
360 minute winter	6	1.004	7	13.4	1.141	0.147	0.1905	
360 minute winter	7	1.005	8	15.6	2.034	0.059	0.1077	
360 minute winter	8	1.006	9	18.4	2.194	0.057	0.2781	
360 minute winter	9	1.007	10	24.6	2.517	0.080	0.2625	
360 minute winter	10	1.008	11	28.4	2.302	0.117	0.4917	
360 minute winter	11	1.009	12	33.9	2.593	0.067	0.2005	
360 minute winter	12	1.010	13	36.3	2.896	0.059	0.1832	
360 minute winter	13	1.011	14	38.4	0.839	0.207	1.7117	
360 minute winter	14	1.012	15	45.0	0.947	0.242	1.5518	
360 minute winter	15	1.013	16	45.7	1.222	0.246	0.5728	
360 minute winter	16	1.014	17	51.4	2.092	0.114	1.4037	
360 minute winter	17	1.015	18	52.8	2.565	0.064	0.1573	
360 minute winter	18	1.016	19	52.8	2.615	0.067	0.2012	
360 minute winter	19	1.017	20	56.4	2.873	0.067	0.3712	
360 minute winter	20	1.018	23	57.7	3.059	0.066	0.3351	
360 minute winter	21	3.000	22	-52.0	-0.294	-0.052	12.8647	
360 minute winter	22	3.001	23	-53.3	-0.169	-0.053	4.2290	
360 minute winter	23	1.019	24	9.0	1.944	0.073	0.3178	
360 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
360 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 99.99%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
360 minute winter	26	184	105.582	0.036	9.0	0.0408	0.0000	OK
360 minute winter	27	184	103.819	0.037	9.0	0.0417	0.0000	OK
360 minute winter	28	600	99.520	0.220	9.0	0.3148	0.0000	OK
360 minute winter	S29	600	99.517	1.267	9.1	4.3875	0.0000	SURCHARGED
360 minute winter	S30	600	99.517	1.367	8.6	3.4780	0.0000	SURCHARGED
360 minute winter	S31	256	97.544	0.054	8.3	0.1864	0.0000	OK
360 minute winter	S32	256	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
360 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
360 minute winter	27	1.023	28	9.0	1.288	0.059	1.1415	
360 minute winter	28	1.024	S29	9.1	0.871	0.198	0.3763	
360 minute winter	S29	1.025	S30	8.6	0.361	0.004	22.8068	
360 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
360 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	270.0

**Results for 30 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.71%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
480 minute summer	1	248	139.064	0.014	0.7	0.0228	0.0000	OK
480 minute summer	2	248	138.295	0.019	1.5	0.0317	0.0000	OK
480 minute summer	3	248	137.348	0.017	1.5	0.0248	0.0000	OK
480 minute summer	4	248	134.719	0.069	8.5	0.2437	0.0000	OK
480 minute summer	5	248	134.326	0.082	13.8	0.1813	0.0000	OK
480 minute summer	6	248	134.208	0.086	14.5	0.1050	0.0000	OK
480 minute summer	7	248	134.069	0.054	17.0	0.1024	0.0000	OK
480 minute summer	8	248	133.287	0.050	20.0	0.1027	0.0000	OK
480 minute summer	9	248	130.547	0.060	26.7	0.1702	0.0000	OK
480 minute summer	10	248	128.520	0.073	30.8	0.1435	0.0000	OK
480 minute summer	11	248	126.545	0.072	36.7	0.1851	0.0000	OK
480 minute summer	12	248	125.581	0.065	39.3	0.1382	0.0000	OK
480 minute summer	13	248	124.223	0.148	41.7	0.3043	0.0000	OK
480 minute summer	14	248	124.114	0.164	49.0	0.4245	0.0000	OK
480 minute summer	15	248	123.998	0.157	49.8	0.2887	0.0000	OK
480 minute summer	16	248	123.902	0.112	56.1	0.2646	0.0000	OK
480 minute summer	17	248	122.784	0.088	57.7	0.1867	0.0000	OK
480 minute summer	18	248	122.285	0.089	57.7	0.1579	0.0000	OK
480 minute summer	19	248	121.694	0.085	61.5	0.2260	0.0000	OK
480 minute summer	20	248	120.433	0.086	63.0	0.1781	0.0000	OK
480 minute summer	21	384	118.321	0.421	57.7	275.1393	0.0000	OK
480 minute summer	22	384	118.321	0.648	59.1	1.6498	0.0000	OK
480 minute summer	23	384	118.321	0.762	68.6	3.0520	0.0000	SURCHARGED
480 minute summer	24	696	113.836	0.036	9.0	0.0514	0.0000	OK
480 minute summer	25	696	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
480 minute summer	1	1.000	2	0.7	0.660	0.018	0.0174	
480 minute summer	2	1.001	3	1.5	1.229	0.033	0.0179	
480 minute summer	3	1.002	5	1.5	1.343	0.027	0.0189	
480 minute summer	4	2.000	5	8.5	0.835	0.201	0.5061	
480 minute summer	5	1.003	6	13.8	0.857	0.152	0.2956	
480 minute summer	6	1.004	7	14.5	1.167	0.160	0.2021	
480 minute summer	7	1.005	8	17.0	2.083	0.065	0.1143	
480 minute summer	8	1.006	9	20.0	2.247	0.062	0.2943	
480 minute summer	9	1.007	10	26.7	2.561	0.087	0.2796	
480 minute summer	10	1.008	11	30.8	2.356	0.126	0.5214	
480 minute summer	11	1.009	12	36.7	2.661	0.073	0.2113	
480 minute summer	12	1.010	13	39.3	2.887	0.063	0.2008	
480 minute summer	13	1.011	14	41.7	0.855	0.224	1.8225	
480 minute summer	14	1.012	15	49.0	0.969	0.264	1.6503	
480 minute summer	15	1.013	16	49.8	1.253	0.268	0.6087	
480 minute summer	16	1.014	17	56.1	2.138	0.125	1.4982	
480 minute summer	17	1.015	18	57.7	2.617	0.069	0.1685	
480 minute summer	18	1.016	19	57.7	2.675	0.073	0.2151	
480 minute summer	19	1.017	20	61.5	2.939	0.073	0.3960	
480 minute summer	20	1.018	23	63.0	3.131	0.072	0.3570	
480 minute summer	21	3.000	22	-57.7	-0.323	-0.057	11.2047	
480 minute summer	22	3.001	23	-59.1	-0.197	-0.059	4.0273	
480 minute summer	23	1.019	24	9.0	1.944	0.073	0.3178	
480 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
480 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.71%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
480 minute summer	26	696	105.582	0.036	9.0	0.0408	0.0000	OK
480 minute summer	27	696	103.819	0.037	9.0	0.0417	0.0000	OK
480 minute summer	28	720	100.053	0.753	9.0	1.0773	0.0000	SURCHARGED
480 minute summer	S29	720	100.049	1.799	9.2	6.2309	0.0000	SURCHARGED
480 minute summer	S30	720	100.049	1.899	8.6	4.8324	0.0000	SURCHARGED
480 minute summer	S31	720	97.544	0.054	8.3	0.1872	0.0000	OK
480 minute summer	S32	720	97.428	0.052	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
480 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
480 minute summer	27	1.023	28	9.0	1.273	0.059	1.1485	
480 minute summer	28	1.024	S29	9.2	0.871	0.199	0.3775	
480 minute summer	S29	1.025	S30	8.6	0.250	0.004	22.8068	
480 minute summer	S30	1.026	S31	8.3	0.987	0.433	0.0431	
480 minute summer	S31	1.027	S32	8.3	0.617	0.010	0.3560	321.7

**Results for 30 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 99.73%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
480 minute winter	1	232	139.062	0.012	0.5	0.0194	0.0000	OK
480 minute winter	2	240	138.293	0.017	1.1	0.0274	0.0000	OK
480 minute winter	3	240	137.346	0.015	1.1	0.0214	0.0000	OK
480 minute winter	4	248	134.709	0.059	6.3	0.2086	0.0000	OK
480 minute winter	5	248	134.314	0.070	10.3	0.1551	0.0000	OK
480 minute winter	6	248	134.196	0.074	10.8	0.0905	0.0000	OK
480 minute winter	7	248	134.061	0.046	12.7	0.0883	0.0000	OK
480 minute winter	8	248	133.281	0.044	14.9	0.0890	0.0000	OK
480 minute winter	9	248	130.539	0.052	19.9	0.1480	0.0000	OK
480 minute winter	10	248	128.510	0.063	22.9	0.1232	0.0000	OK
480 minute winter	11	248	126.535	0.062	27.3	0.1582	0.0000	OK
480 minute winter	12	248	125.574	0.058	29.2	0.1223	0.0000	OK
480 minute winter	13	248	124.201	0.126	31.0	0.2583	0.0000	OK
480 minute winter	14	248	124.089	0.139	36.4	0.3610	0.0000	OK
480 minute winter	15	248	123.976	0.135	37.0	0.2483	0.0000	OK
480 minute winter	16	248	123.887	0.097	41.7	0.2279	0.0000	OK
480 minute winter	17	248	122.771	0.075	42.9	0.1590	0.0000	OK
480 minute winter	18	248	122.272	0.076	42.9	0.1348	0.0000	OK
480 minute winter	19	248	121.682	0.073	45.8	0.1944	0.0000	OK
480 minute winter	20	248	120.421	0.074	46.9	0.1529	0.0000	OK
480 minute winter	21	448	118.394	0.494	40.6	327.9972	0.0000	OK
480 minute winter	22	448	118.394	0.721	41.6	1.8346	0.0000	OK
480 minute winter	23	448	118.394	0.835	51.0	3.3428	0.0000	SURCHARGED
480 minute winter	24	248	113.836	0.036	9.0	0.0514	0.0000	OK
480 minute winter	25	248	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
480 minute winter	1	1.000	2	0.5	0.611	0.013	0.0139	
480 minute winter	2	1.001	3	1.1	1.122	0.024	0.0144	
480 minute winter	3	1.002	5	1.1	1.224	0.020	0.0152	
480 minute winter	4	2.000	5	6.3	0.767	0.149	0.4080	
480 minute winter	5	1.003	6	10.3	0.792	0.114	0.2387	
480 minute winter	6	1.004	7	10.8	1.074	0.119	0.1637	
480 minute winter	7	1.005	8	12.7	1.922	0.048	0.0925	
480 minute winter	8	1.006	9	14.9	2.054	0.046	0.2400	
480 minute winter	9	1.007	10	19.9	2.402	0.065	0.2222	
480 minute winter	10	1.008	11	22.9	2.167	0.094	0.4214	
480 minute winter	11	1.009	12	27.3	2.426	0.054	0.1724	
480 minute winter	12	1.010	13	29.2	2.833	0.047	0.1485	
480 minute winter	13	1.011	14	31.0	0.796	0.167	1.4550	
480 minute winter	14	1.012	15	36.4	0.893	0.196	1.3302	
480 minute winter	15	1.013	16	37.0	1.149	0.199	0.4935	
480 minute winter	16	1.014	17	41.7	1.982	0.093	1.2020	
480 minute winter	17	1.015	18	42.9	2.448	0.052	0.1339	
480 minute winter	18	1.016	19	42.9	2.486	0.055	0.1721	
480 minute winter	19	1.017	20	45.8	2.725	0.055	0.3181	
480 minute winter	20	1.018	23	46.9	2.890	0.054	0.2879	
480 minute winter	21	3.000	22	-40.6	-0.244	-0.040	12.6157	
480 minute winter	22	3.001	23	-41.6	-0.136	-0.041	4.2113	
480 minute winter	23	1.019	24	9.0	1.944	0.073	0.3177	
480 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
480 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 99.73%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
480 minute winter	26	248	105.582	0.036	9.0	0.0408	0.0000	OK
480 minute winter	27	248	103.819	0.037	9.0	0.0417	0.0000	OK
480 minute winter	28	720	100.067	0.767	9.0	1.0982	0.0000	SURCHARGED
480 minute winter	S29	720	100.063	1.813	9.1	6.2815	0.0000	SURCHARGED
480 minute winter	S30	720	100.063	1.913	8.6	4.8695	0.0000	SURCHARGED
480 minute winter	S31	720	97.544	0.054	8.4	0.1875	0.0000	OK
480 minute winter	S32	720	97.428	0.052	8.4	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
480 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
480 minute winter	27	1.023	28	9.0	1.276	0.059	1.1483	
480 minute winter	28	1.024	S29	9.1	0.871	0.197	0.3775	
480 minute winter	S29	1.025	S30	8.6	0.418	0.004	22.8068	
480 minute winter	S30	1.026	S31	8.4	0.988	0.434	0.0432	
480 minute winter	S31	1.027	S32	8.4	0.617	0.010	0.3570	323.3

**Results for 30 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.66%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
600 minute summer	1	315	139.063	0.013	0.6	0.0212	0.0000	OK
600 minute summer	2	315	138.293	0.017	1.2	0.0285	0.0000	OK
600 minute summer	3	315	137.347	0.016	1.2	0.0223	0.0000	OK
600 minute summer	4	315	134.712	0.062	7.0	0.2202	0.0000	OK
600 minute summer	5	315	134.318	0.074	11.3	0.1629	0.0000	OK
600 minute summer	6	315	134.200	0.078	11.9	0.0950	0.0000	OK
600 minute summer	7	315	134.064	0.049	13.9	0.0924	0.0000	OK
600 minute summer	8	315	133.283	0.046	16.4	0.0933	0.0000	OK
600 minute summer	9	315	130.542	0.055	21.9	0.1547	0.0000	OK
600 minute summer	10	315	128.513	0.066	25.3	0.1297	0.0000	OK
600 minute summer	11	315	126.538	0.065	30.1	0.1664	0.0000	OK
600 minute summer	12	315	125.576	0.060	32.2	0.1284	0.0000	OK
600 minute summer	13	315	124.208	0.133	34.2	0.2726	0.0000	OK
600 minute summer	14	315	124.097	0.147	40.1	0.3804	0.0000	OK
600 minute summer	15	315	123.983	0.142	40.7	0.2605	0.0000	OK
600 minute summer	16	315	123.891	0.101	45.8	0.2388	0.0000	OK
600 minute summer	17	315	122.775	0.079	47.1	0.1673	0.0000	OK
600 minute summer	18	315	122.276	0.080	47.1	0.1417	0.0000	OK
600 minute summer	19	315	121.686	0.077	50.2	0.2038	0.0000	OK
600 minute summer	20	315	120.424	0.077	51.4	0.1603	0.0000	OK
600 minute summer	21	450	118.309	0.409	45.3	266.0597	0.0000	OK
600 minute summer	22	450	118.309	0.636	46.5	1.6174	0.0000	OK
600 minute summer	23	450	118.309	0.750	55.9	3.0011	0.0000	SURCHARGED
600 minute summer	24	780	113.836	0.036	9.0	0.0514	0.0000	OK
600 minute summer	25	780	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
600 minute summer	1	1.000	2	0.6	0.645	0.015	0.0152	
600 minute summer	2	1.001	3	1.2	1.153	0.026	0.0153	
600 minute summer	3	1.002	5	1.2	1.256	0.022	0.0161	
600 minute summer	4	2.000	5	7.0	0.791	0.165	0.4400	
600 minute summer	5	1.003	6	11.3	0.811	0.125	0.2558	
600 minute summer	6	1.004	7	11.9	1.106	0.131	0.1752	
600 minute summer	7	1.005	8	13.9	1.968	0.053	0.0989	
600 minute summer	8	1.006	9	16.4	2.116	0.051	0.2563	
600 minute summer	9	1.007	10	21.9	2.449	0.071	0.2398	
600 minute summer	10	1.008	11	25.3	2.230	0.104	0.4524	
600 minute summer	11	1.009	12	30.1	2.488	0.060	0.1853	
600 minute summer	12	1.010	13	32.2	2.901	0.052	0.1599	
600 minute summer	13	1.011	14	34.2	0.816	0.184	1.5666	
600 minute summer	14	1.012	15	40.1	0.918	0.216	1.4262	
600 minute summer	15	1.013	16	40.7	1.182	0.219	0.5276	
600 minute summer	16	1.014	17	45.8	2.030	0.102	1.2882	
600 minute summer	17	1.015	18	47.1	2.500	0.057	0.1440	
600 minute summer	18	1.016	19	47.1	2.546	0.060	0.1846	
600 minute summer	19	1.017	20	50.2	2.790	0.060	0.3406	
600 minute summer	20	1.018	23	51.4	2.963	0.059	0.3079	
600 minute summer	21	3.000	22	-45.3	-0.275	-0.045	10.9309	
600 minute summer	22	3.001	23	-46.5	-0.164	-0.046	3.9735	
600 minute summer	23	1.019	24	9.0	1.944	0.073	0.3178	
600 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
600 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.66%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
600 minute summer	26	780	105.582	0.036	9.0	0.0408	0.0000	OK
600 minute summer	27	780	103.819	0.037	9.0	0.0417	0.0000	OK
600 minute summer	28	840	100.224	0.924	9.0	1.3223	0.0000	SURCHARGED
600 minute summer	S29	840	100.220	1.970	9.0	6.8236	0.0000	SURCHARGED
600 minute summer	S30	840	100.220	2.070	8.8	5.2678	0.0000	SURCHARGED
600 minute summer	S31	840	97.545	0.055	8.7	0.1907	0.0000	OK
600 minute summer	S32	840	97.429	0.053	8.7	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
600 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
600 minute summer	27	1.023	28	9.0	1.227	0.059	1.1485	
600 minute summer	28	1.024	S29	9.0	0.871	0.195	0.3775	
600 minute summer	S29	1.025	S30	8.8	0.351	0.004	22.8068	
600 minute summer	S30	1.026	S31	8.7	0.997	0.451	0.0445	
600 minute summer	S31	1.027	S32	8.7	0.622	0.011	0.3680	368.1

**Results for 30 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 99.84%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
600 minute winter	1	285	139.061	0.011	0.4	0.0176	0.0000	OK
600 minute winter	2	300	138.291	0.015	0.9	0.0248	0.0000	OK
600 minute winter	3	300	137.345	0.014	0.9	0.0194	0.0000	OK
600 minute winter	4	315	134.704	0.054	5.3	0.1910	0.0000	OK
600 minute winter	5	315	134.308	0.064	8.6	0.1411	0.0000	OK
600 minute winter	6	315	134.190	0.068	9.0	0.0826	0.0000	OK
600 minute winter	7	315	134.057	0.042	10.6	0.0806	0.0000	OK
600 minute winter	8	315	133.277	0.040	12.5	0.0819	0.0000	OK
600 minute winter	9	315	130.535	0.048	16.7	0.1360	0.0000	OK
600 minute winter	10	315	128.505	0.058	19.3	0.1131	0.0000	OK
600 minute winter	11	315	126.530	0.057	23.0	0.1451	0.0000	OK
600 minute winter	12	315	125.569	0.053	24.6	0.1121	0.0000	OK
600 minute winter	13	315	124.190	0.115	26.1	0.2354	0.0000	OK
600 minute winter	14	315	124.077	0.127	30.6	0.3289	0.0000	OK
600 minute winter	15	315	123.965	0.124	31.1	0.2276	0.0000	OK
600 minute winter	16	315	123.879	0.089	35.0	0.2090	0.0000	OK
600 minute winter	17	315	122.764	0.068	36.0	0.1448	0.0000	OK
600 minute winter	18	315	122.266	0.070	36.0	0.1229	0.0000	OK
600 minute winter	19	315	121.676	0.067	38.4	0.1779	0.0000	OK
600 minute winter	20	315	120.414	0.067	39.3	0.1396	0.0000	OK
600 minute winter	21	495	118.379	0.479	32.6	317.3452	0.0000	OK
600 minute winter	22	495	118.379	0.706	33.5	1.7978	0.0000	OK
600 minute winter	23	495	118.379	0.820	42.8	3.2849	0.0000	SURCHARGED
600 minute winter	24	315	113.836	0.036	9.0	0.0514	0.0000	OK
600 minute winter	25	315	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
600 minute winter	1	1.000	2	0.4	0.572	0.010	0.0120	
600 minute winter	2	1.001	3	0.9	1.057	0.020	0.0125	
600 minute winter	3	1.002	5	0.9	1.155	0.016	0.0132	
600 minute winter	4	2.000	5	5.3	0.731	0.125	0.3605	
600 minute winter	5	1.003	6	8.6	0.755	0.095	0.2092	
600 minute winter	6	1.004	7	9.0	1.020	0.099	0.1437	
600 minute winter	7	1.005	8	10.6	1.822	0.040	0.0814	
600 minute winter	8	1.006	9	12.5	1.947	0.039	0.2123	
600 minute winter	9	1.007	10	16.7	2.307	0.054	0.1941	
600 minute winter	10	1.008	11	19.3	2.063	0.079	0.3731	
600 minute winter	11	1.009	12	23.0	2.318	0.046	0.1520	
600 minute winter	12	1.010	13	24.6	2.698	0.040	0.1313	
600 minute winter	13	1.011	14	26.1	0.764	0.140	1.2780	
600 minute winter	14	1.012	15	30.6	0.851	0.165	1.1734	
600 minute winter	15	1.013	16	31.1	1.092	0.167	0.4367	
600 minute winter	16	1.014	17	35.0	1.894	0.078	1.0564	
600 minute winter	17	1.015	18	36.0	2.353	0.043	0.1169	
600 minute winter	18	1.016	19	36.0	2.381	0.046	0.1508	
600 minute winter	19	1.017	20	38.4	2.604	0.046	0.2792	
600 minute winter	20	1.018	23	39.3	2.752	0.045	0.2534	
600 minute winter	21	3.000	22	-32.6	-0.210	-0.032	12.3627	
600 minute winter	22	3.001	23	-33.5	-0.113	-0.033	4.1894	
600 minute winter	23	1.019	24	9.0	1.944	0.073	0.3177	
600 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
600 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 99.84%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
600 minute winter	26	315	105.582	0.036	9.0	0.0408	0.0000	OK
600 minute winter	27	315	103.819	0.037	9.0	0.0417	0.0000	OK
600 minute winter	28	840	100.159	0.859	9.0	1.2292	0.0000	SURCHARGED
600 minute winter	S29	840	100.155	1.905	9.0	6.5984	0.0000	SURCHARGED
600 minute winter	S30	840	100.155	2.005	8.7	5.1023	0.0000	SURCHARGED
600 minute winter	S31	840	97.545	0.055	8.6	0.1894	0.0000	OK
600 minute winter	S32	840	97.429	0.053	8.6	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
600 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
600 minute winter	27	1.023	28	9.0	1.227	0.059	1.1484	
600 minute winter	28	1.024	S29	9.0	0.871	0.195	0.3775	
600 minute winter	S29	1.025	S30	8.7	0.156	0.004	22.8068	
600 minute winter	S30	1.026	S31	8.6	0.993	0.444	0.0440	
600 minute winter	S31	1.027	S32	8.6	0.620	0.011	0.3635	374.1

**Results for 30 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 99.57%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
720 minute summer	1	375	139.062	0.012	0.5	0.0194	0.0000	OK
720 minute summer	2	375	138.293	0.017	1.1	0.0274	0.0000	OK
720 minute summer	3	375	137.346	0.015	1.1	0.0214	0.0000	OK
720 minute summer	4	375	134.709	0.059	6.2	0.2069	0.0000	OK
720 minute summer	5	375	134.314	0.070	10.1	0.1535	0.0000	OK
720 minute summer	6	375	134.195	0.073	10.6	0.0897	0.0000	OK
720 minute summer	7	375	134.061	0.046	12.4	0.0872	0.0000	OK
720 minute summer	8	375	133.280	0.043	14.6	0.0882	0.0000	OK
720 minute summer	9	375	130.539	0.052	19.5	0.1465	0.0000	OK
720 minute summer	10	375	128.509	0.062	22.5	0.1221	0.0000	OK
720 minute summer	11	375	126.534	0.061	26.8	0.1567	0.0000	OK
720 minute summer	12	375	125.573	0.057	28.7	0.1212	0.0000	OK
720 minute summer	13	375	124.200	0.125	30.4	0.2555	0.0000	OK
720 minute summer	14	375	124.088	0.138	35.7	0.3572	0.0000	OK
720 minute summer	15	375	123.975	0.134	36.3	0.2459	0.0000	OK
720 minute summer	16	375	123.886	0.096	40.9	0.2257	0.0000	OK
720 minute summer	17	375	122.770	0.074	42.0	0.1571	0.0000	OK
720 minute summer	18	375	122.271	0.075	42.0	0.1333	0.0000	OK
720 minute summer	19	375	121.682	0.073	44.8	0.1922	0.0000	OK
720 minute summer	20	375	120.420	0.073	45.9	0.1512	0.0000	OK
720 minute summer	21	525	118.299	0.399	39.5	259.0776	0.0000	OK
720 minute summer	22	525	118.299	0.626	40.5	1.5925	0.0000	OK
720 minute summer	23	525	118.299	0.740	49.9	2.9618	0.0000	SURCHARGED
720 minute summer	24	855	113.836	0.036	9.0	0.0514	0.0000	OK
720 minute summer	25	855	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
720 minute summer	1	1.000	2	0.5	0.588	0.013	0.0139	
720 minute summer	2	1.001	3	1.1	1.122	0.024	0.0144	
720 minute summer	3	1.002	5	1.1	1.224	0.020	0.0152	
720 minute summer	4	2.000	5	6.2	0.764	0.146	0.4033	
720 minute summer	5	1.003	6	10.1	0.788	0.112	0.2354	
720 minute summer	6	1.004	7	10.6	1.070	0.117	0.1613	
720 minute summer	7	1.005	8	12.4	1.907	0.047	0.0910	
720 minute summer	8	1.006	9	14.6	2.043	0.045	0.2366	
720 minute summer	9	1.007	10	19.5	2.389	0.063	0.2189	
720 minute summer	10	1.008	11	22.5	2.156	0.092	0.4161	
720 minute summer	11	1.009	12	26.8	2.414	0.053	0.1701	
720 minute summer	12	1.010	13	28.7	2.819	0.046	0.1467	
720 minute summer	13	1.011	14	30.4	0.793	0.164	1.4338	
720 minute summer	14	1.012	15	35.7	0.888	0.192	1.3117	
720 minute summer	15	1.013	16	36.3	1.142	0.195	0.4870	
720 minute summer	16	1.014	17	40.9	1.973	0.091	1.1844	
720 minute summer	17	1.015	18	42.0	2.436	0.051	0.1317	
720 minute summer	18	1.016	19	42.0	2.473	0.053	0.1693	
720 minute summer	19	1.017	20	44.8	2.709	0.053	0.3130	
720 minute summer	20	1.018	23	45.9	2.874	0.052	0.2834	
720 minute summer	21	3.000	22	-39.5	-0.243	-0.039	10.7163	
720 minute summer	22	3.001	23	-40.5	-0.145	-0.040	3.9297	
720 minute summer	23	1.019	24	9.0	1.944	0.073	0.3178	
720 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
720 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 99.57%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
720 minute summer	26	855	105.582	0.036	9.0	0.0408	0.0000	OK
720 minute summer	27	855	103.819	0.037	9.0	0.0417	0.0000	OK
720 minute summer	28	960	100.300	1.000	9.0	1.4307	0.0000	SURCHARGED
720 minute summer	S29	960	100.296	2.046	9.1	7.0859	0.0000	SURCHARGED
720 minute summer	S30	960	100.296	2.146	8.9	5.4605	0.0000	SURCHARGED
720 minute summer	S31	960	97.546	0.056	8.9	0.1923	0.0000	OK
720 minute summer	S32	960	97.430	0.054	8.9	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
720 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
720 minute summer	27	1.023	28	9.0	1.238	0.059	1.1485	
720 minute summer	28	1.024	S29	9.1	0.871	0.198	0.3775	
720 minute summer	S29	1.025	S30	8.9	0.435	0.004	22.8068	
720 minute summer	S30	1.026	S31	8.9	1.001	0.459	0.0451	
720 minute summer	S31	1.027	S32	8.9	0.624	0.011	0.3731	416.6

**Results for 30 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 99.61%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
720 minute winter	1	360	139.061	0.011	0.4	0.0176	0.0000	OK
720 minute winter	2	360	138.290	0.014	0.8	0.0235	0.0000	OK
720 minute winter	3	360	137.344	0.013	0.8	0.0184	0.0000	OK
720 minute winter	4	375	134.701	0.051	4.7	0.1797	0.0000	OK
720 minute winter	5	375	134.304	0.060	7.6	0.1324	0.0000	OK
720 minute winter	6	375	134.186	0.064	8.0	0.0780	0.0000	OK
720 minute winter	7	375	134.055	0.040	9.4	0.0759	0.0000	OK
720 minute winter	8	375	133.275	0.038	11.1	0.0774	0.0000	OK
720 minute winter	9	375	130.532	0.045	14.8	0.1284	0.0000	OK
720 minute winter	10	375	128.501	0.054	17.0	0.1062	0.0000	OK
720 minute winter	11	375	126.526	0.053	20.2	0.1360	0.0000	OK
720 minute winter	12	375	125.565	0.049	21.6	0.1051	0.0000	OK
720 minute winter	13	375	124.182	0.107	22.9	0.2196	0.0000	OK
720 minute winter	14	375	124.069	0.118	26.9	0.3073	0.0000	OK
720 minute winter	15	375	123.957	0.116	27.3	0.2134	0.0000	OK
720 minute winter	16	375	123.873	0.083	30.7	0.1960	0.0000	OK
720 minute winter	17	375	122.760	0.064	31.6	0.1351	0.0000	OK
720 minute winter	18	375	122.261	0.065	31.6	0.1148	0.0000	OK
720 minute winter	19	375	121.672	0.063	33.7	0.1666	0.0000	OK
720 minute winter	20	375	120.410	0.063	34.5	0.1307	0.0000	OK
720 minute winter	21	570	118.365	0.465	27.5	306.4743	0.0000	OK
720 minute winter	22	570	118.365	0.692	28.2	1.7600	0.0000	OK
720 minute winter	23	570	118.365	0.806	37.5	3.2254	0.0000	SURCHARGED
720 minute winter	24	375	113.836	0.036	9.0	0.0514	0.0000	OK
720 minute winter	25	375	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
720 minute winter	1	1.000	2	0.4	0.572	0.010	0.0114	
720 minute winter	2	1.001	3	0.8	1.022	0.018	0.0115	
720 minute winter	3	1.002	5	0.8	1.114	0.015	0.0121	
720 minute winter	4	2.000	5	4.7	0.706	0.111	0.3307	
720 minute winter	5	1.003	6	7.6	0.728	0.084	0.1917	
720 minute winter	6	1.004	7	8.0	0.987	0.088	0.1321	
720 minute winter	7	1.005	8	9.4	1.760	0.036	0.0748	
720 minute winter	8	1.006	9	11.1	1.879	0.034	0.1953	
720 minute winter	9	1.007	10	14.8	2.243	0.048	0.1770	
720 minute winter	10	1.008	11	17.0	1.988	0.070	0.3410	
720 minute winter	11	1.009	12	20.2	2.238	0.040	0.1382	
720 minute winter	12	1.010	13	21.6	2.601	0.035	0.1196	
720 minute winter	13	1.011	14	22.9	0.738	0.123	1.1596	
720 minute winter	14	1.012	15	26.9	0.821	0.145	1.0689	
720 minute winter	15	1.013	16	27.3	1.051	0.147	0.3986	
720 minute winter	16	1.014	17	30.7	1.827	0.068	0.9607	
720 minute winter	17	1.015	18	31.6	2.279	0.038	0.1059	
720 minute winter	18	1.016	19	31.6	2.301	0.040	0.1369	
720 minute winter	19	1.017	20	33.7	2.513	0.040	0.2538	
720 minute winter	20	1.018	23	34.5	2.653	0.039	0.2308	
720 minute winter	21	3.000	22	-27.5	-0.184	-0.027	12.0859	
720 minute winter	22	3.001	23	-28.2	-0.097	-0.028	4.1620	
720 minute winter	23	1.019	24	9.0	1.944	0.073	0.3178	
720 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
720 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 99.61%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
720 minute winter	26	375	105.582	0.036	9.0	0.0408	0.0000	OK
720 minute winter	27	375	103.819	0.037	9.0	0.0417	0.0000	OK
720 minute winter	28	960	100.309	1.009	9.0	1.4445	0.0000	SURCHARGED
720 minute winter	S29	960	100.305	2.055	9.0	7.1192	0.0000	SURCHARGED
720 minute winter	S30	960	100.305	2.155	8.9	5.4850	0.0000	SURCHARGED
720 minute winter	S31	960	97.546	0.056	8.9	0.1924	0.0000	OK
720 minute winter	S32	960	97.430	0.054	8.9	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
720 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
720 minute winter	27	1.023	28	9.0	1.270	0.059	1.1485	
720 minute winter	28	1.024	S29	9.0	0.871	0.195	0.3775	
720 minute winter	S29	1.025	S30	8.9	0.192	0.004	22.8068	
720 minute winter	S30	1.026	S31	8.9	1.001	0.460	0.0452	
720 minute winter	S31	1.027	S32	8.9	0.625	0.011	0.3738	427.2

**Results for 30 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 99.53%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
960 minute summer	1	480	139.061	0.011	0.4	0.0176	0.0000	OK
960 minute summer	2	495	138.291	0.015	0.9	0.0248	0.0000	OK
960 minute summer	3	495	137.345	0.014	0.9	0.0194	0.0000	OK
960 minute summer	4	495	134.703	0.053	5.1	0.1873	0.0000	OK
960 minute summer	5	495	134.307	0.063	8.3	0.1385	0.0000	OK
960 minute summer	6	495	134.189	0.066	8.7	0.0813	0.0000	OK
960 minute summer	7	495	134.057	0.042	10.2	0.0791	0.0000	OK
960 minute summer	8	495	133.276	0.039	12.0	0.0803	0.0000	OK
960 minute summer	9	495	130.534	0.047	16.0	0.1333	0.0000	OK
960 minute summer	10	495	128.504	0.057	18.5	0.1107	0.0000	OK
960 minute summer	11	495	126.529	0.055	22.0	0.1418	0.0000	OK
960 minute summer	12	495	125.568	0.052	23.6	0.1098	0.0000	OK
960 minute summer	13	495	124.187	0.112	25.0	0.2301	0.0000	OK
960 minute summer	14	495	124.074	0.124	29.3	0.3214	0.0000	OK
960 minute summer	15	495	123.962	0.121	29.8	0.2229	0.0000	OK
960 minute summer	16	495	123.877	0.087	33.6	0.2049	0.0000	OK
960 minute summer	17	495	122.763	0.067	34.5	0.1415	0.0000	OK
960 minute summer	18	495	122.264	0.068	34.5	0.1202	0.0000	OK
960 minute summer	19	495	121.675	0.066	36.8	0.1741	0.0000	OK
960 minute summer	20	495	120.413	0.066	37.7	0.1367	0.0000	OK
960 minute summer	21	660	118.279	0.379	30.9	244.9848	0.0000	OK
960 minute summer	22	660	118.279	0.606	31.7	1.5417	0.0000	OK
960 minute summer	23	660	118.279	0.720	41.0	2.8820	0.0000	SURCHARGED
960 minute summer	24	990	113.836	0.036	9.0	0.0514	0.0000	OK
960 minute summer	25	990	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
960 minute summer	1	1.000	2	0.4	0.572	0.010	0.0120	
960 minute summer	2	1.001	3	0.9	1.057	0.020	0.0125	
960 minute summer	3	1.002	5	0.9	1.155	0.016	0.0132	
960 minute summer	4	2.000	5	5.1	0.723	0.120	0.3507	
960 minute summer	5	1.003	6	8.3	0.747	0.092	0.2040	
960 minute summer	6	1.004	7	8.7	1.012	0.096	0.1402	
960 minute summer	7	1.005	8	10.2	1.804	0.039	0.0792	
960 minute summer	8	1.006	9	12.0	1.923	0.037	0.2062	
960 minute summer	9	1.007	10	16.0	2.287	0.052	0.1877	
960 minute summer	10	1.008	11	18.5	2.037	0.076	0.3621	
960 minute summer	11	1.009	12	22.0	2.288	0.044	0.1473	
960 minute summer	12	1.010	13	23.6	2.667	0.038	0.1275	
960 minute summer	13	1.011	14	25.0	0.755	0.135	1.2375	
960 minute summer	14	1.012	15	29.3	0.840	0.158	1.1376	
960 minute summer	15	1.013	16	29.8	1.077	0.160	0.4242	
960 minute summer	16	1.014	17	33.6	1.874	0.075	1.0252	
960 minute summer	17	1.015	18	34.5	2.328	0.042	0.1132	
960 minute summer	18	1.016	19	34.5	2.355	0.044	0.1461	
960 minute summer	19	1.017	20	36.8	2.573	0.044	0.2707	
960 minute summer	20	1.018	23	37.7	2.720	0.043	0.2460	
960 minute summer	21	3.000	22	-30.9	-0.200	-0.031	10.2683	
960 minute summer	22	3.001	23	-31.7	-0.117	-0.031	3.8327	
960 minute summer	23	1.019	24	9.0	1.944	0.073	0.3178	
960 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
960 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 99.53%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
960 minute summer	26	990	105.582	0.036	9.0	0.0408	0.0000	OK
960 minute summer	27	990	103.819	0.037	9.0	0.0417	0.0000	OK
960 minute summer	28	1140	100.332	1.032	9.0	1.4768	0.0000	SURCHARGED
960 minute summer	S29	1140	100.328	2.078	9.0	7.1975	0.0000	SURCHARGED
960 minute summer	S30	1140	100.328	2.178	8.9	5.5425	0.0000	SURCHARGED
960 minute summer	S31	1140	97.546	0.056	8.9	0.1929	0.0000	OK
960 minute summer	S32	1140	97.430	0.054	8.9	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
960 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
960 minute summer	27	1.023	28	9.0	1.264	0.059	1.1485	
960 minute summer	28	1.024	S29	9.0	0.871	0.195	0.3775	
960 minute summer	S29	1.025	S30	8.9	0.440	0.004	22.8068	
960 minute summer	S30	1.026	S31	8.9	1.002	0.462	0.0453	
960 minute summer	S31	1.027	S32	8.9	0.625	0.011	0.3753	508.7

**Results for 30 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 99.53%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
960 minute winter	1	435	139.060	0.010	0.3	0.0154	0.0000	OK
960 minute winter	2	435	138.289	0.012	0.6	0.0205	0.0000	OK
960 minute winter	3	435	137.342	0.011	0.6	0.0161	0.0000	OK
960 minute winter	4	495	134.696	0.046	3.8	0.1615	0.0000	OK
960 minute winter	5	495	134.298	0.054	6.1	0.1183	0.0000	OK
960 minute winter	6	495	134.179	0.057	6.4	0.0699	0.0000	OK
960 minute winter	7	495	134.051	0.036	7.5	0.0680	0.0000	OK
960 minute winter	8	495	133.271	0.034	8.8	0.0694	0.0000	OK
960 minute winter	9	495	130.528	0.041	11.8	0.1149	0.0000	OK
960 minute winter	10	495	128.496	0.049	13.6	0.0951	0.0000	OK
960 minute winter	11	495	126.521	0.048	16.2	0.1219	0.0000	OK
960 minute winter	12	495	125.560	0.044	17.4	0.0944	0.0000	OK
960 minute winter	13	495	124.171	0.096	18.5	0.1963	0.0000	OK
960 minute winter	14	495	124.056	0.106	21.7	0.2746	0.0000	OK
960 minute winter	15	495	123.945	0.104	22.0	0.1919	0.0000	OK
960 minute winter	16	495	123.865	0.075	24.8	0.1765	0.0000	OK
960 minute winter	17	495	122.753	0.057	25.5	0.1209	0.0000	OK
960 minute winter	18	495	122.254	0.058	25.5	0.1028	0.0000	OK
960 minute winter	19	495	121.666	0.057	27.2	0.1499	0.0000	OK
960 minute winter	20	495	120.404	0.057	27.9	0.1176	0.0000	OK
960 minute winter	21	705	118.332	0.432	20.6	282.5370	0.0000	OK
960 minute winter	22	705	118.332	0.659	30.8	1.6760	0.0000	OK
960 minute winter	23	705	118.332	0.773	30.4	3.0932	0.0000	SURCHARGED
960 minute winter	24	1110	113.836	0.036	9.0	0.0514	0.0000	OK
960 minute winter	25	1110	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
960 minute winter	1	1.000	2	0.3	0.523	0.008	0.0094	
960 minute winter	2	1.001	3	0.6	0.935	0.013	0.0094	
960 minute winter	3	1.002	5	0.6	1.017	0.011	0.0100	
960 minute winter	4	2.000	5	3.8	0.664	0.090	0.2843	
960 minute winter	5	1.003	6	6.1	0.684	0.067	0.1636	
960 minute winter	6	1.004	7	6.4	0.927	0.071	0.1128	
960 minute winter	7	1.005	8	7.5	1.649	0.029	0.0637	
960 minute winter	8	1.006	9	8.8	1.750	0.027	0.1662	
960 minute winter	9	1.007	10	11.8	2.099	0.038	0.1508	
960 minute winter	10	1.008	11	13.6	1.864	0.056	0.2909	
960 minute winter	11	1.009	12	16.2	2.102	0.032	0.1180	
960 minute winter	12	1.010	13	17.4	2.442	0.028	0.1027	
960 minute winter	13	1.011	14	18.5	0.699	0.100	0.9891	
960 minute winter	14	1.012	15	21.7	0.773	0.117	0.9158	
960 minute winter	15	1.013	16	22.0	0.984	0.118	0.3429	
960 minute winter	16	1.014	17	24.8	1.725	0.055	0.8223	
960 minute winter	17	1.015	18	25.5	2.162	0.031	0.0901	
960 minute winter	18	1.016	19	25.5	2.175	0.032	0.1169	
960 minute winter	19	1.017	20	27.2	2.369	0.032	0.2174	
960 minute winter	20	1.018	23	27.9	2.496	0.032	0.1984	
960 minute winter	21	3.000	22	30.8	0.191	0.031	11.4227	
960 minute winter	22	3.001	23	-21.2	-0.076	-0.021	4.0672	
960 minute winter	23	1.019	24	9.0	1.944	0.073	0.3178	
960 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
960 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 99.53%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
960 minute winter	26	1110	105.582	0.036	9.0	0.0408	0.0000	OK
960 minute winter	27	1110	103.819	0.037	9.0	0.0417	0.0000	OK
960 minute winter	28	1200	100.358	1.058	9.0	1.5136	0.0000	FLOOD RISK
960 minute winter	S29	1200	100.354	2.104	9.0	7.2865	0.0000	SURCHARGED
960 minute winter	S30	1200	100.354	2.204	9.0	5.6079	0.0000	SURCHARGED
960 minute winter	S31	1200	97.546	0.056	9.0	0.1934	0.0000	OK
960 minute winter	S32	1200	97.430	0.054	9.0	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
960 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
960 minute winter	27	1.023	28	9.0	1.273	0.059	1.1485	
960 minute winter	28	1.024	S29	9.0	0.871	0.195	0.3775	
960 minute winter	S29	1.025	S30	9.0	0.243	0.004	22.8068	
960 minute winter	S30	1.026	S31	9.0	1.004	0.465	0.0455	
960 minute winter	S31	1.027	S32	9.0	0.626	0.011	0.3770	527.4

**Results for 30 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 99.75%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
1440 minute summer	1	750	139.060	0.010	0.3	0.0154	0.0000	OK
1440 minute summer	2	750	138.289	0.012	0.6	0.0205	0.0000	OK
1440 minute summer	3	750	137.342	0.011	0.6	0.0161	0.0000	OK
1440 minute summer	4	750	134.695	0.045	3.7	0.1594	0.0000	OK
1440 minute summer	5	750	134.297	0.053	6.0	0.1174	0.0000	OK
1440 minute summer	6	750	134.179	0.057	6.3	0.0694	0.0000	OK
1440 minute summer	7	750	134.051	0.036	7.4	0.0675	0.0000	OK
1440 minute summer	8	750	133.271	0.034	8.7	0.0690	0.0000	OK
1440 minute summer	9	750	130.527	0.040	11.6	0.1139	0.0000	OK
1440 minute summer	10	750	128.495	0.048	13.4	0.0944	0.0000	OK
1440 minute summer	11	750	126.520	0.047	16.0	0.1212	0.0000	OK
1440 minute summer	12	750	125.560	0.044	17.1	0.0936	0.0000	OK
1440 minute summer	13	750	124.170	0.095	18.1	0.1941	0.0000	OK
1440 minute summer	14	750	124.055	0.105	21.2	0.2713	0.0000	OK
1440 minute summer	15	750	123.944	0.103	21.5	0.1898	0.0000	OK
1440 minute summer	16	750	123.864	0.074	24.2	0.1744	0.0000	OK
1440 minute summer	17	750	122.752	0.056	24.9	0.1195	0.0000	OK
1440 minute summer	18	750	122.254	0.057	24.9	0.1016	0.0000	OK
1440 minute summer	19	750	121.665	0.056	26.6	0.1482	0.0000	OK
1440 minute summer	20	750	120.403	0.056	27.3	0.1163	0.0000	OK
1440 minute summer	21	930	118.235	0.335	20.0	214.2641	0.0000	OK
1440 minute summer	22	930	118.235	0.562	26.1	1.4296	0.0000	OK
1440 minute summer	23	930	118.235	0.676	29.7	2.7056	0.0000	SURCHARGED
1440 minute summer	24	1170	113.836	0.036	9.0	0.0514	0.0000	OK
1440 minute summer	25	1170	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
1440 minute summer	1	1.000	2	0.3	0.523	0.008	0.0094	
1440 minute summer	2	1.001	3	0.6	0.935	0.013	0.0094	
1440 minute summer	3	1.002	5	0.6	1.017	0.011	0.0100	
1440 minute summer	4	2.000	5	3.7	0.659	0.087	0.2789	
1440 minute summer	5	1.003	6	6.0	0.681	0.066	0.1617	
1440 minute summer	6	1.004	7	6.3	0.922	0.070	0.1116	
1440 minute summer	7	1.005	8	7.4	1.642	0.028	0.0631	
1440 minute summer	8	1.006	9	8.7	1.748	0.027	0.1645	
1440 minute summer	9	1.007	10	11.6	2.089	0.038	0.1489	
1440 minute summer	10	1.008	11	13.4	1.856	0.055	0.2879	
1440 minute summer	11	1.009	12	16.0	2.098	0.032	0.1168	
1440 minute summer	12	1.010	13	17.1	2.430	0.028	0.1014	
1440 minute summer	13	1.011	14	18.1	0.696	0.097	0.9729	
1440 minute summer	14	1.012	15	21.2	0.768	0.114	0.9007	
1440 minute summer	15	1.013	16	21.5	0.978	0.116	0.3373	
1440 minute summer	16	1.014	17	24.2	1.713	0.054	0.8080	
1440 minute summer	17	1.015	18	24.9	2.149	0.030	0.0885	
1440 minute summer	18	1.016	19	24.9	2.160	0.032	0.1149	
1440 minute summer	19	1.017	20	26.6	2.353	0.032	0.2139	
1440 minute summer	20	1.018	23	27.3	2.480	0.031	0.1953	
1440 minute summer	21	3.000	22	26.1	0.475	0.026	9.2454	
1440 minute summer	22	3.001	23	-20.5	0.497	-0.020	3.5931	
1440 minute summer	23	1.019	24	9.0	1.944	0.073	0.3178	
1440 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
1440 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 99.75%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
1440 minute summer	26	1170	105.582	0.036	9.0	0.0408	0.0000	OK
1440 minute summer	27	1170	103.819	0.037	9.0	0.0417	0.0000	OK
1440 minute summer	28	1380	100.339	1.039	9.0	1.4866	0.0000	SURCHARGED
1440 minute summer	S29	1380	100.335	2.085	9.0	7.2211	0.0000	SURCHARGED
1440 minute summer	S30	1380	100.335	2.185	8.9	5.5598	0.0000	SURCHARGED
1440 minute summer	S31	1380	97.546	0.056	8.9	0.1930	0.0000	OK
1440 minute summer	S32	1380	97.430	0.054	8.9	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
1440 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
1440 minute summer	27	1.023	28	9.0	1.227	0.059	1.1485	
1440 minute summer	28	1.024	S29	9.0	0.871	0.195	0.3775	
1440 minute summer	S29	1.025	S30	8.9	0.198	0.004	22.8068	
1440 minute summer	S30	1.026	S31	8.9	1.003	0.463	0.0454	
1440 minute summer	S31	1.027	S32	8.9	0.625	0.011	0.3757	669.9

**Results for 30 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 99.84%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
1440 minute winter	1	630	139.058	0.008	0.2	0.0127	0.0000	OK
1440 minute winter	2	750	138.287	0.011	0.5	0.0188	0.0000	OK
1440 minute winter	3	750	137.341	0.010	0.5	0.0148	0.0000	OK
1440 minute winter	4	750	134.689	0.039	2.8	0.1390	0.0000	OK
1440 minute winter	5	750	134.290	0.046	4.6	0.1026	0.0000	OK
1440 minute winter	6	750	134.172	0.050	4.8	0.0608	0.0000	OK
1440 minute winter	7	750	134.046	0.031	5.6	0.0590	0.0000	OK
1440 minute winter	8	750	133.267	0.030	6.6	0.0605	0.0000	OK
1440 minute winter	9	750	130.522	0.035	8.8	0.0997	0.0000	OK
1440 minute winter	10	750	128.489	0.042	10.1	0.0821	0.0000	OK
1440 minute winter	11	750	126.514	0.041	12.0	0.1055	0.0000	OK
1440 minute winter	12	750	125.554	0.038	12.8	0.0812	0.0000	OK
1440 minute winter	13	750	124.157	0.082	13.6	0.1675	0.0000	OK
1440 minute winter	14	750	124.040	0.090	16.0	0.2346	0.0000	OK
1440 minute winter	15	750	123.931	0.090	16.3	0.1658	0.0000	OK
1440 minute winter	16	750	123.855	0.065	18.3	0.1523	0.0000	OK
1440 minute winter	17	750	122.745	0.049	18.8	0.1037	0.0000	OK
1440 minute winter	18	750	122.246	0.050	18.8	0.0883	0.0000	OK
1440 minute winter	19	750	121.658	0.049	20.1	0.1295	0.0000	OK
1440 minute winter	20	750	120.396	0.049	20.6	0.1014	0.0000	OK
1440 minute winter	21	1020	118.258	0.358	17.5	230.6795	0.0000	OK
1440 minute winter	22	1020	118.258	0.585	21.5	1.4898	0.0000	OK
1440 minute winter	23	1020	118.258	0.699	22.4	2.8003	0.0000	SURCHARGED
1440 minute winter	24	1320	113.836	0.036	9.0	0.0514	0.0000	OK
1440 minute winter	25	1320	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
1440 minute winter	1	1.000	2	0.2	0.462	0.005	0.0078	
1440 minute winter	2	1.001	3	0.5	0.884	0.011	0.0083	
1440 minute winter	3	1.002	5	0.5	0.962	0.009	0.0088	
1440 minute winter	4	2.000	5	2.8	0.607	0.066	0.2292	
1440 minute winter	5	1.003	6	4.6	0.633	0.051	0.1334	
1440 minute winter	6	1.004	7	4.8	0.853	0.053	0.0920	
1440 minute winter	7	1.005	8	5.6	1.513	0.021	0.0518	
1440 minute winter	8	1.006	9	6.6	1.616	0.020	0.1354	
1440 minute winter	9	1.007	10	8.8	1.923	0.029	0.1228	
1440 minute winter	10	1.008	11	10.1	1.708	0.041	0.2357	
1440 minute winter	11	1.009	12	12.0	1.937	0.024	0.0949	
1440 minute winter	12	1.010	13	12.8	2.235	0.021	0.0825	
1440 minute winter	13	1.011	14	13.6	0.644	0.073	0.7890	
1440 minute winter	14	1.012	15	16.0	0.708	0.086	0.7373	
1440 minute winter	15	1.013	16	16.3	0.901	0.088	0.2777	
1440 minute winter	16	1.014	17	18.3	1.586	0.041	0.6598	
1440 minute winter	17	1.015	18	18.8	2.002	0.023	0.0718	
1440 minute winter	18	1.016	19	18.8	2.003	0.024	0.0937	
1440 minute winter	19	1.017	20	20.1	2.178	0.024	0.1747	
1440 minute winter	20	1.018	23	20.6	2.287	0.024	0.1598	
1440 minute winter	21	3.000	22	21.5	0.467	0.021	9.7991	
1440 minute winter	22	3.001	23	-13.3	0.368	-0.013	3.7256	
1440 minute winter	23	1.019	24	9.0	1.944	0.073	0.3178	
1440 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
1440 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 30 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 99.84%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
1440 minute winter	26	1320	105.582	0.036	9.0	0.0408	0.0000	OK
1440 minute winter	27	1320	103.819	0.037	9.0	0.0417	0.0000	OK
1440 minute winter	28	1440	100.364	1.064	9.0	1.5224	0.0000	FLOOD RISK
1440 minute winter	S29	1440	100.360	2.110	9.0	7.3077	0.0000	SURCHARGED
1440 minute winter	S30	1440	100.360	2.210	9.0	5.6235	0.0000	SURCHARGED
1440 minute winter	S31	1440	97.546	0.056	9.0	0.1935	0.0000	OK
1440 minute winter	S32	1440	97.430	0.054	9.0	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
1440 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
1440 minute winter	27	1.023	28	9.0	1.227	0.059	1.1485	
1440 minute winter	28	1.024	S29	9.0	0.871	0.195	0.3775	
1440 minute winter	S29	1.025	S30	9.0	0.384	0.004	22.8068	
1440 minute winter	S30	1.026	S31	9.0	1.004	0.466	0.0456	
1440 minute winter	S31	1.027	S32	9.0	0.626	0.011	0.3774	708.2

**Results for 100 year +30% CC 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 99.85%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute summer	1	10	139.091	0.041	6.5	0.0669	0.0000	OK
15 minute summer	2	10	138.336	0.060	13.9	0.0992	0.0000	OK
15 minute summer	3	10	137.384	0.053	13.8	0.0759	0.0000	OK
15 minute summer	4	12	135.814	1.164	81.7	4.1127	0.0000	SURCHARGED
15 minute summer	5	11	134.797	0.553	117.5	1.2223	0.0000	SURCHARGED
15 minute summer	6	11	134.517	0.395	122.3	0.4835	0.0000	SURCHARGED
15 minute summer	7	11	134.199	0.184	144.3	0.3501	0.0000	OK
15 minute summer	8	11	133.391	0.154	171.5	0.3139	0.0000	OK
15 minute summer	9	12	130.714	0.227	233.2	0.6401	0.0000	OK
15 minute summer	10	12	129.395	0.948	265.9	1.8561	0.0000	SURCHARGED
15 minute summer	11	12	126.940	0.467	305.5	1.1927	0.0000	SURCHARGED
15 minute summer	12	12	126.416	0.900	323.1	1.9124	0.0000	SURCHARGED
15 minute summer	13	12	125.846	1.771	335.7	3.6323	0.0000	SURCHARGED
15 minute summer	14	12	125.336	1.386	396.3	3.5959	0.0000	SURCHARGED
15 minute summer	15	12	124.716	0.875	398.4	1.6117	0.0000	SURCHARGED
15 minute summer	16	12	124.337	0.547	454.4	1.2879	0.0000	SURCHARGED
15 minute summer	17	11	123.035	0.339	460.2	0.7175	0.0000	OK
15 minute summer	18	11	122.527	0.331	459.7	0.5842	0.0000	OK
15 minute summer	19	11	121.899	0.290	494.7	0.7681	0.0000	OK
15 minute summer	20	11	120.647	0.300	508.2	0.6241	0.0000	OK
15 minute summer	21	24	118.289	0.389	699.4	252.2389	0.0000	OK
15 minute summer	22	9	119.489	1.816	596.4	4.6213	0.0000	SURCHARGED
15 minute summer	23	9	119.532	1.973	558.6	7.9009	0.0000	SURCHARGED
15 minute summer	24	10	113.836	0.036	9.0	0.0518	0.0000	OK
15 minute summer	25	10	110.273	0.036	9.1	0.0408	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute summer	1	1.000	2	6.5	1.229	0.165	0.0858	
15 minute summer	2	1.001	3	13.8	2.273	0.304	0.0892	
15 minute summer	3	1.002	5	13.7	2.526	0.250	0.0917	
15 minute summer	4	2.000	5	70.6	1.776	1.668	1.9763	
15 minute summer	5	1.003	6	116.1	1.648	1.282	1.2923	
15 minute summer	6	1.004	7	121.5	1.890	1.341	0.9294	
15 minute summer	7	1.005	8	143.9	3.529	0.547	0.5719	
15 minute summer	8	1.006	9	171.3	3.846	0.531	1.5311	
15 minute summer	9	1.007	10	228.2	3.716	0.743	1.7096	
15 minute summer	10	1.008	11	251.5	3.749	1.033	2.8078	
15 minute summer	11	1.009	12	299.3	4.005	0.596	1.6890	
15 minute summer	12	1.010	13	315.6	2.916	0.510	1.5889	
15 minute summer	13	1.011	14	332.0	2.096	1.787	5.9196	
15 minute summer	14	1.012	15	391.3	2.470	2.106	5.1699	
15 minute summer	15	1.013	16	396.7	2.504	2.135	2.4123	
15 minute summer	16	1.014	17	445.9	3.203	0.993	8.1070	
15 minute summer	17	1.015	18	459.7	3.637	0.554	0.9658	
15 minute summer	18	1.016	19	459.5	4.000	0.584	1.1608	
15 minute summer	19	1.017	20	494.4	4.531	0.590	2.0857	
15 minute summer	20	1.018	23	507.7	5.092	0.580	2.0891	
15 minute summer	21	3.000	22	-699.4	-2.527	-0.694	10.4972	
15 minute summer	22	3.001	23	-596.4	-1.355	-0.592	4.2379	
15 minute summer	23	1.019	24	9.0	1.954	0.073	0.3178	
15 minute summer	24	1.020	25	9.1	2.229	0.055	0.1462	
15 minute summer	25	1.021	26	9.1	2.223	0.055	0.1924	

**Results for 100 year +30% CC 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 99.85%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute summer	26	10	105.582	0.036	9.1	0.0409	0.0000	OK
15 minute summer	27	209	103.819	0.037	9.0	0.0417	0.0000	OK
15 minute summer	28	209	99.371	0.071	9.0	0.1021	0.0000	OK
15 minute summer	S29	255	98.849	0.599	9.0	2.0736	0.0000	OK
15 minute summer	S30	255	98.849	0.699	8.6	1.7780	0.0000	SURCHARGED
15 minute summer	S31	194	97.544	0.054	8.3	0.1864	0.0000	OK
15 minute summer	S32	194	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute summer	26	1.022	27	9.0	2.174	0.054	0.0735	
15 minute summer	27	1.023	28	9.0	2.115	0.059	0.3924	
15 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0981	
15 minute summer	S29	1.025	S30	8.6	0.525	0.004	11.9764	
15 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
15 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	117.5

**Results for 100 year +30% CC 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 99.89%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	1	10	139.092	0.042	6.8	0.0684	0.0000	OK
15 minute winter	2	10	138.338	0.062	14.6	0.1019	0.0000	OK
15 minute winter	3	10	137.385	0.054	14.5	0.0777	0.0000	OK
15 minute winter	4	12	135.954	1.304	85.9	4.6083	0.0000	FLOOD RISK
15 minute winter	5	11	134.851	0.607	122.4	1.3399	0.0000	SURCHARGED
15 minute winter	6	11	134.546	0.424	127.4	0.5191	0.0000	SURCHARGED
15 minute winter	7	11	134.205	0.190	150.5	0.3610	0.0000	OK
15 minute winter	8	11	133.395	0.158	178.8	0.3219	0.0000	OK
15 minute winter	9	12	130.933	0.446	242.9	1.2606	0.0000	SURCHARGED
15 minute winter	10	12	129.583	1.136	271.9	2.2237	0.0000	SURCHARGED
15 minute winter	11	12	127.128	0.655	309.8	1.6730	0.0000	SURCHARGED
15 minute winter	12	12	126.595	1.079	323.3	2.2936	0.0000	SURCHARGED
15 minute winter	13	12	126.010	1.935	337.2	3.9689	0.0000	SURCHARGED
15 minute winter	14	12	125.481	1.531	398.2	3.9716	0.0000	SURCHARGED
15 minute winter	15	12	124.829	0.988	400.9	1.8189	0.0000	SURCHARGED
15 minute winter	16	12	124.428	0.638	451.7	1.5024	0.0000	SURCHARGED
15 minute winter	17	12	123.037	0.341	463.1	0.7219	0.0000	OK
15 minute winter	18	12	122.529	0.333	462.9	0.5878	0.0000	OK
15 minute winter	19	12	121.898	0.289	493.2	0.7664	0.0000	OK
15 minute winter	20	12	120.646	0.299	505.3	0.6217	0.0000	OK
15 minute winter	21	24	118.335	0.435	727.6	285.0934	0.0000	OK
15 minute winter	22	9	119.579	1.906	597.2	4.8507	0.0000	SURCHARGED
15 minute winter	23	9	119.642	2.083	557.9	8.3388	0.0000	SURCHARGED
15 minute winter	24	9	113.836	0.036	9.4	0.0520	0.0000	OK
15 minute winter	25	10	110.273	0.036	9.1	0.0406	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute winter	1	1.000	2	6.7	1.240	0.173	0.0887	
15 minute winter	2	1.001	3	14.5	2.299	0.319	0.0924	
15 minute winter	3	1.002	5	14.3	2.555	0.261	0.0948	
15 minute winter	4	2.000	5	73.6	1.850	1.737	1.9763	
15 minute winter	5	1.003	6	121.0	1.719	1.337	1.2923	
15 minute winter	6	1.004	7	126.7	1.955	1.399	0.9427	
15 minute winter	7	1.005	8	150.2	3.557	0.571	0.5917	
15 minute winter	8	1.006	9	178.6	3.872	0.554	1.7622	
15 minute winter	9	1.007	10	232.1	3.702	0.755	1.8883	
15 minute winter	10	1.008	11	253.5	3.693	1.041	2.8078	
15 minute winter	11	1.009	12	298.6	3.882	0.594	1.6890	
15 minute winter	12	1.010	13	318.1	2.948	0.514	1.5889	
15 minute winter	13	1.011	14	337.9	2.133	1.819	5.9196	
15 minute winter	14	1.012	15	394.8	2.492	2.125	5.1699	
15 minute winter	15	1.013	16	400.9	2.530	2.158	2.4123	
15 minute winter	16	1.014	17	450.7	3.176	1.004	8.1676	
15 minute winter	17	1.015	18	462.9	3.639	0.558	0.9719	
15 minute winter	18	1.016	19	462.8	3.980	0.588	1.1635	
15 minute winter	19	1.017	20	493.3	4.493	0.589	2.0785	
15 minute winter	20	1.018	23	505.6	5.091	0.578	2.2235	
15 minute winter	21	3.000	22	-727.6	-2.530	-0.722	11.4978	
15 minute winter	22	3.001	23	-597.2	-1.357	-0.592	4.2379	
15 minute winter	23	1.019	24	9.4	1.979	0.077	0.3265	
15 minute winter	24	1.020	25	9.1	2.241	0.055	0.1453	
15 minute winter	25	1.021	26	9.1	2.213	0.055	0.1933	

**Results for 100 year +30% CC 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 99.89%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
15 minute winter	26	10	105.583	0.037	9.1	0.0413	0.0000	OK
15 minute winter	27	10	103.819	0.037	9.2	0.0422	0.0000	OK
15 minute winter	28	255	99.371	0.071	9.2	0.1021	0.0000	OK
15 minute winter	S29	255	98.837	0.587	9.0	2.0335	0.0000	OK
15 minute winter	S30	255	98.837	0.687	8.6	1.7485	0.0000	SURCHARGED
15 minute winter	S31	201	97.544	0.054	8.3	0.1864	0.0000	OK
15 minute winter	S32	201	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute winter	26	1.022	27	9.2	2.180	0.056	0.0747	
15 minute winter	27	1.023	28	9.2	2.135	0.060	0.3924	
15 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
15 minute winter	S29	1.025	S30	8.6	0.526	0.004	11.6959	
15 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
15 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	117.4

**Results for 100 year +30% CC 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 99.95%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
30 minute summer	1	18	139.090	0.040	6.0	0.0645	0.0000	OK
30 minute summer	2	18	138.334	0.058	12.9	0.0952	0.0000	OK
30 minute summer	3	18	137.382	0.051	12.9	0.0733	0.0000	OK
30 minute summer	4	19	135.688	1.037	75.6	3.6654	0.0000	SURCHARGED
30 minute summer	5	19	134.741	0.497	110.8	1.0983	0.0000	SURCHARGED
30 minute summer	6	19	134.488	0.366	116.3	0.4474	0.0000	SURCHARGED
30 minute summer	7	19	134.192	0.177	136.6	0.3371	0.0000	OK
30 minute summer	8	18	133.387	0.150	161.1	0.3065	0.0000	OK
30 minute summer	9	19	130.687	0.199	219.8	0.5635	0.0000	OK
30 minute summer	10	19	129.078	0.631	252.0	1.2360	0.0000	SURCHARGED
30 minute summer	11	19	126.759	0.286	290.8	0.7312	0.0000	OK
30 minute summer	12	19	126.222	0.706	310.3	1.5011	0.0000	SURCHARGED
30 minute summer	13	19	125.680	1.605	324.5	3.2925	0.0000	SURCHARGED
30 minute summer	14	19	125.192	1.242	381.8	3.2217	0.0000	SURCHARGED
30 minute summer	15	19	124.582	0.741	387.7	1.3638	0.0000	SURCHARGED
30 minute summer	16	19	124.197	0.407	438.5	0.9581	0.0000	OK
30 minute summer	17	19	123.029	0.333	451.6	0.7058	0.0000	OK
30 minute summer	18	19	122.522	0.326	451.7	0.5757	0.0000	OK
30 minute summer	19	19	121.894	0.285	482.8	0.7541	0.0000	OK
30 minute summer	20	19	120.642	0.295	495.3	0.6121	0.0000	OK
30 minute summer	21	39	118.411	0.511	531.4	340.4443	0.0000	OK
30 minute summer	22	19	118.464	0.791	532.1	2.0123	0.0000	SURCHARGED
30 minute summer	23	19	118.518	0.959	540.7	3.8389	0.0000	SURCHARGED
30 minute summer	24	9	113.836	0.036	9.0	0.0514	0.0000	OK
30 minute summer	25	9	110.273	0.036	9.0	0.0404	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
30 minute summer	1	1.000	2	6.0	1.207	0.154	0.0813	
30 minute summer	2	1.001	3	12.9	2.231	0.284	0.0848	
30 minute summer	3	1.002	5	12.9	2.486	0.235	0.0877	
30 minute summer	4	2.000	5	67.2	1.689	1.587	1.9763	
30 minute summer	5	1.003	6	110.8	1.574	1.224	1.2923	
30 minute summer	6	1.004	7	116.5	1.908	1.286	0.9133	
30 minute summer	7	1.005	8	136.7	3.490	0.520	0.5482	
30 minute summer	8	1.006	9	161.5	3.903	0.501	1.3984	
30 minute summer	9	1.007	10	215.9	3.716	0.703	1.6110	
30 minute summer	10	1.008	11	242.9	3.709	0.997	2.8076	
30 minute summer	11	1.009	12	289.2	4.005	0.576	1.5352	
30 minute summer	12	1.010	13	307.1	2.860	0.496	1.5889	
30 minute summer	13	1.011	14	326.7	2.062	1.758	5.9196	
30 minute summer	14	1.012	15	381.4	2.407	2.053	5.1699	
30 minute summer	15	1.013	16	387.6	2.448	2.086	2.3535	
30 minute summer	16	1.014	17	438.9	3.188	0.977	7.8639	
30 minute summer	17	1.015	18	451.7	3.633	0.544	0.9502	
30 minute summer	18	1.016	19	451.8	3.960	0.574	1.1400	
30 minute summer	19	1.017	20	483.1	4.479	0.576	2.0411	
30 minute summer	20	1.018	23	495.7	5.076	0.567	1.7304	
30 minute summer	21	3.000	22	-531.4	-1.750	-0.527	12.8832	
30 minute summer	22	3.001	23	-532.1	-1.209	-0.528	4.2379	
30 minute summer	23	1.019	24	9.0	1.944	0.073	0.3176	
30 minute summer	24	1.020	25	9.0	2.217	0.054	0.1444	
30 minute summer	25	1.021	26	9.0	2.209	0.054	0.1904	

**Results for 100 year +30% CC 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 99.95%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
30 minute summer	26	10	105.582	0.036	9.0	0.0407	0.0000	OK
30 minute summer	27	10	103.819	0.037	9.0	0.0417	0.0000	OK
30 minute summer	28	270	99.371	0.071	9.0	0.1019	0.0000	OK
30 minute summer	S29	270	98.819	0.569	9.0	1.9713	0.0000	OK
30 minute summer	S30	270	98.819	0.669	8.6	1.7028	0.0000	SURCHARGED
30 minute summer	S31	225	97.544	0.054	8.3	0.1864	0.0000	OK
30 minute summer	S32	225	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
30 minute summer	26	1.022	27	9.0	2.160	0.054	0.0733	
30 minute summer	27	1.023	28	9.0	1.763	0.059	0.3910	
30 minute summer	28	1.024	S29	9.0	0.870	0.194	0.0977	
30 minute summer	S29	1.025	S30	8.6	0.498	0.004	11.2615	
30 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
30 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	124.2

**Results for 100 year +30% CC 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 99.93%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
30 minute winter	1	18	139.088	0.038	5.4	0.0612	0.0000	OK
30 minute winter	2	18	138.331	0.055	11.7	0.0902	0.0000	OK
30 minute winter	3	18	137.380	0.049	11.7	0.0696	0.0000	OK
30 minute winter	4	19	135.500	0.850	68.4	3.0026	0.0000	SURCHARGED
30 minute winter	5	19	134.666	0.422	104.1	0.9316	0.0000	SURCHARGED
30 minute winter	6	19	134.446	0.324	108.6	0.3957	0.0000	SURCHARGED
30 minute winter	7	19	134.184	0.169	127.5	0.3208	0.0000	OK
30 minute winter	8	19	133.382	0.145	150.5	0.2953	0.0000	OK
30 minute winter	9	18	130.669	0.182	204.5	0.5146	0.0000	OK
30 minute winter	10	18	128.716	0.269	237.1	0.5267	0.0000	OK
30 minute winter	11	19	126.725	0.252	281.8	0.6434	0.0000	OK
30 minute winter	12	19	126.107	0.591	300.3	1.2555	0.0000	SURCHARGED
30 minute winter	13	19	125.591	1.516	316.9	3.1100	0.0000	SURCHARGED
30 minute winter	14	19	125.125	1.175	371.6	3.0480	0.0000	SURCHARGED
30 minute winter	15	19	124.547	0.706	377.0	1.3002	0.0000	SURCHARGED
30 minute winter	16	19	124.177	0.387	424.5	0.9117	0.0000	OK
30 minute winter	17	19	123.018	0.322	435.7	0.6830	0.0000	OK
30 minute winter	18	19	122.512	0.316	434.9	0.5579	0.0000	OK
30 minute winter	19	19	121.886	0.277	463.8	0.7323	0.0000	OK
30 minute winter	20	19	120.632	0.285	474.9	0.5927	0.0000	OK
30 minute winter	21	39	118.471	0.571	504.6	386.1237	0.0000	OK
30 minute winter	22	11	118.495	0.822	506.9	2.0930	0.0000	SURCHARGED
30 minute winter	23	20	118.513	0.954	516.6	3.8181	0.0000	SURCHARGED
30 minute winter	24	9	113.836	0.036	9.0	0.0514	0.0000	OK
30 minute winter	25	9	110.273	0.036	9.0	0.0404	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
30 minute winter	1	1.000	2	5.4	1.171	0.138	0.0755	
30 minute winter	2	1.001	3	11.7	2.176	0.258	0.0788	
30 minute winter	3	1.002	5	11.7	2.422	0.213	0.0816	
30 minute winter	4	2.000	5	63.1	1.587	1.490	1.9763	
30 minute winter	5	1.003	6	103.5	1.471	1.143	1.2923	
30 minute winter	6	1.004	7	108.6	1.886	1.199	0.8929	
30 minute winter	7	1.005	8	127.5	3.424	0.484	0.5210	
30 minute winter	8	1.006	9	150.5	3.863	0.467	1.2923	
30 minute winter	9	1.007	10	204.2	3.724	0.664	1.4670	
30 minute winter	10	1.008	11	234.7	3.762	0.964	2.4963	
30 minute winter	11	1.009	12	279.7	3.993	0.557	1.4466	
30 minute winter	12	1.010	13	298.6	2.848	0.482	1.5889	
30 minute winter	13	1.011	14	316.3	1.997	1.702	5.9196	
30 minute winter	14	1.012	15	371.1	2.342	1.997	5.1699	
30 minute winter	15	1.013	16	376.8	2.390	2.028	2.3102	
30 minute winter	16	1.014	17	423.9	3.178	0.944	7.5799	
30 minute winter	17	1.015	18	434.9	3.620	0.524	0.9183	
30 minute winter	18	1.016	19	434.6	3.941	0.552	1.1018	
30 minute winter	19	1.017	20	463.5	4.457	0.553	1.9691	
30 minute winter	20	1.018	23	474.3	5.035	0.542	1.6699	
30 minute winter	21	3.000	22	-504.6	-1.593	-0.500	13.6015	
30 minute winter	22	3.001	23	-506.9	-1.152	-0.503	4.2379	
30 minute winter	23	1.019	24	9.0	1.944	0.073	0.3170	
30 minute winter	24	1.020	25	9.0	2.216	0.054	0.1444	
30 minute winter	25	1.021	26	9.0	2.209	0.054	0.1905	

**Results for 100 year +30% CC 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 99.93%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
30 minute winter	26	9	105.582	0.036	9.0	0.0407	0.0000	OK
30 minute winter	27	10	103.819	0.037	8.9	0.0416	0.0000	OK
30 minute winter	28	10	99.371	0.071	8.9	0.1015	0.0000	OK
30 minute winter	S29	270	98.778	0.528	8.9	1.8296	0.0000	OK
30 minute winter	S30	270	98.778	0.628	8.6	1.5987	0.0000	SURCHARGED
30 minute winter	S31	253	97.544	0.054	8.3	0.1864	0.0000	OK
30 minute winter	S32	253	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
30 minute winter	26	1.022	27	8.9	2.161	0.054	0.0730	
30 minute winter	27	1.023	28	8.9	1.961	0.058	0.3894	
30 minute winter	28	1.024	S29	8.9	0.868	0.193	0.0972	
30 minute winter	S29	1.025	S30	8.6	0.530	0.004	10.2727	
30 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
30 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	123.7

**Results for 100 year +30% CC 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.98%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
60 minute summer	1	33	139.085	0.035	4.6	0.0564	0.0000	OK
60 minute summer	2	33	138.326	0.050	9.9	0.0824	0.0000	OK
60 minute summer	3	33	137.375	0.044	9.9	0.0636	0.0000	OK
60 minute summer	4	34	135.127	0.477	57.9	1.6843	0.0000	SURCHARGED
60 minute summer	5	34	134.531	0.287	89.2	0.6347	0.0000	OK
60 minute summer	6	34	134.375	0.253	93.7	0.3098	0.0000	OK
60 minute summer	7	34	134.168	0.153	109.9	0.2911	0.0000	OK
60 minute summer	8	33	133.369	0.132	129.9	0.2697	0.0000	OK
60 minute summer	9	33	130.653	0.166	175.5	0.4685	0.0000	OK
60 minute summer	10	33	128.673	0.226	203.0	0.4424	0.0000	OK
60 minute summer	11	33	126.679	0.206	242.0	0.5260	0.0000	OK
60 minute summer	12	34	125.758	0.242	259.6	0.5147	0.0000	OK
60 minute summer	13	34	125.212	1.137	273.9	2.3323	0.0000	SURCHARGED
60 minute summer	14	34	124.863	0.913	321.6	2.3676	0.0000	SURCHARGED
60 minute summer	15	34	124.429	0.587	327.4	1.0815	0.0000	SURCHARGED
60 minute summer	16	34	124.126	0.336	368.3	0.7925	0.0000	OK
60 minute summer	17	34	122.984	0.288	379.0	0.6095	0.0000	OK
60 minute summer	18	34	122.480	0.284	379.0	0.5011	0.0000	OK
60 minute summer	19	34	121.860	0.251	403.7	0.6639	0.0000	OK
60 minute summer	20	34	120.605	0.258	413.4	0.5361	0.0000	OK
60 minute summer	21	68	118.533	0.633	439.2	433.9262	0.0000	OK
60 minute summer	22	70	118.533	0.860	440.2	2.1891	0.0000	SURCHARGED
60 minute summer	23	70	118.533	0.974	449.3	3.9004	0.0000	SURCHARGED
60 minute summer	24	25	113.836	0.036	9.0	0.0514	0.0000	OK
60 minute summer	25	16	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
60 minute summer	1	1.000	2	4.6	1.125	0.118	0.0669	
60 minute summer	2	1.001	3	9.9	2.085	0.218	0.0696	
60 minute summer	3	1.002	5	9.9	2.315	0.180	0.0723	
60 minute summer	4	2.000	5	54.8	1.381	1.295	1.9536	
60 minute summer	5	1.003	6	89.3	1.336	0.986	1.2193	
60 minute summer	6	1.004	7	93.8	1.850	1.035	0.7996	
60 minute summer	7	1.005	8	109.9	3.331	0.418	0.4621	
60 minute summer	8	1.006	9	129.6	3.730	0.402	1.1527	
60 minute summer	9	1.007	10	175.1	3.703	0.570	1.2635	
60 minute summer	10	1.008	11	201.7	3.724	0.828	2.1614	
60 minute summer	11	1.009	12	241.9	3.971	0.481	1.0436	
60 minute summer	12	1.010	13	257.7	2.907	0.416	1.3363	
60 minute summer	13	1.011	14	274.6	1.733	1.478	5.9196	
60 minute summer	14	1.012	15	322.4	2.035	1.735	5.1699	
60 minute summer	15	1.013	16	327.7	2.142	1.763	2.1737	
60 minute summer	16	1.014	17	368.9	3.145	0.821	6.6567	
60 minute summer	17	1.015	18	379.0	3.572	0.456	0.8107	
60 minute summer	18	1.016	19	378.9	3.868	0.481	0.9770	
60 minute summer	19	1.017	20	403.7	4.372	0.482	1.7481	
60 minute summer	20	1.018	23	413.4	4.912	0.473	1.4925	
60 minute summer	21	3.000	22	-439.2	-1.338	-0.436	14.2253	
60 minute summer	22	3.001	23	-440.2	-1.000	-0.437	4.2379	
60 minute summer	23	1.019	24	9.0	1.944	0.073	0.3178	
60 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
60 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 100 year +30% CC 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.98%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
60 minute summer	26	26	105.582	0.036	9.0	0.0408	0.0000	OK
60 minute summer	27	26	103.819	0.037	9.0	0.0417	0.0000	OK
60 minute summer	28	17	99.371	0.071	9.0	0.1021	0.0000	OK
60 minute summer	S29	300	98.746	0.496	9.0	1.7185	0.0000	OK
60 minute summer	S30	300	98.746	0.596	8.5	1.5170	0.0000	SURCHARGED
60 minute summer	S31	300	97.544	0.054	8.3	0.1864	0.0000	OK
60 minute summer	S32	300	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
60 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
60 minute summer	27	1.023	28	9.0	1.878	0.059	0.3924	
60 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0981	
60 minute summer	S29	1.025	S30	8.5	0.509	0.004	9.5009	
60 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
60 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3533	137.9

**Results for 100 year +30% CC 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 99.97%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
60 minute winter	1	33	139.081	0.031	3.7	0.0506	0.0000	OK
60 minute winter	2	33	138.321	0.045	8.0	0.0735	0.0000	OK
60 minute winter	3	33	137.371	0.040	8.0	0.0569	0.0000	OK
60 minute winter	4	34	134.894	0.244	46.9	0.8620	0.0000	SURCHARGED
60 minute winter	5	34	134.478	0.234	74.5	0.5175	0.0000	OK
60 minute winter	6	34	134.343	0.221	78.2	0.2705	0.0000	OK
60 minute winter	7	34	134.152	0.137	91.7	0.2598	0.0000	OK
60 minute winter	8	34	133.356	0.119	108.1	0.2430	0.0000	OK
60 minute winter	9	33	130.635	0.148	145.1	0.4172	0.0000	OK
60 minute winter	10	33	128.642	0.195	167.7	0.3814	0.0000	OK
60 minute winter	11	33	126.662	0.189	200.1	0.4818	0.0000	OK
60 minute winter	12	33	125.681	0.165	214.4	0.3514	0.0000	OK
60 minute winter	13	33	124.804	0.728	227.4	1.4941	0.0000	SURCHARGED
60 minute winter	14	33	124.564	0.614	266.7	1.5917	0.0000	SURCHARGED
60 minute winter	15	34	124.275	0.433	270.6	0.7980	0.0000	OK
60 minute winter	16	34	124.081	0.291	304.9	0.6866	0.0000	OK
60 minute winter	17	34	122.946	0.250	313.8	0.5289	0.0000	OK
60 minute winter	18	34	122.444	0.248	314.0	0.4373	0.0000	OK
60 minute winter	19	34	121.830	0.221	334.7	0.5862	0.0000	OK
60 minute winter	20	34	120.574	0.227	342.9	0.4721	0.0000	OK
60 minute winter	21	68	118.608	0.708	362.8	493.4238	0.0000	OK
60 minute winter	22	68	118.608	0.935	363.9	2.3800	0.0000	SURCHARGED
60 minute winter	23	68	118.608	1.049	373.0	4.2007	0.0000	SURCHARGED
60 minute winter	24	22	113.836	0.036	9.0	0.0514	0.0000	OK
60 minute winter	25	22	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
60 minute winter	1	1.000	2	3.7	1.058	0.095	0.0572	
60 minute winter	2	1.001	3	8.0	1.972	0.176	0.0595	
60 minute winter	3	1.002	5	8.0	2.183	0.146	0.0619	
60 minute winter	4	2.000	5	45.9	1.228	1.084	1.8300	
60 minute winter	5	1.003	6	74.6	1.300	0.824	1.0527	
60 minute winter	6	1.004	7	78.2	1.786	0.864	0.6977	
60 minute winter	7	1.005	8	91.8	3.206	0.349	0.4007	
60 minute winter	8	1.006	9	108.1	3.577	0.335	0.9984	
60 minute winter	9	1.007	10	145.1	3.623	0.472	1.0731	
60 minute winter	10	1.008	11	167.5	3.611	0.688	1.8498	
60 minute winter	11	1.009	12	200.1	3.975	0.398	0.7828	
60 minute winter	12	1.010	13	214.2	2.902	0.346	1.1314	
60 minute winter	13	1.011	14	226.8	1.432	1.221	5.9196	
60 minute winter	14	1.012	15	266.4	1.682	1.434	5.1401	
60 minute winter	15	1.013	16	271.0	1.982	1.459	2.0189	
60 minute winter	16	1.014	17	305.4	3.069	0.680	5.6548	
60 minute winter	17	1.015	18	314.0	3.498	0.378	0.6860	
60 minute winter	18	1.016	19	314.0	3.763	0.399	0.8322	
60 minute winter	19	1.017	20	334.8	4.244	0.400	1.4934	
60 minute winter	20	1.018	23	343.0	4.736	0.392	1.2854	
60 minute winter	21	3.000	22	-362.8	-1.125	-0.360	14.8057	
60 minute winter	22	3.001	23	-363.9	-0.827	-0.361	4.2379	
60 minute winter	23	1.019	24	9.0	1.944	0.073	0.3177	
60 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
60 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 100 year +30% CC 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 99.97%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
60 minute winter	26	22	105.582	0.036	9.0	0.0408	0.0000	OK
60 minute winter	27	22	103.819	0.037	9.0	0.0417	0.0000	OK
60 minute winter	28	23	99.371	0.071	9.0	0.1021	0.0000	OK
60 minute winter	S29	300	98.663	0.413	9.0	1.4292	0.0000	OK
60 minute winter	S30	300	98.663	0.513	8.4	1.3045	0.0000	SURCHARGED
60 minute winter	S31	300	97.544	0.054	8.2	0.1858	0.0000	OK
60 minute winter	S32	300	97.427	0.051	8.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
60 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
60 minute winter	27	1.023	28	9.0	1.909	0.059	0.3924	
60 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
60 minute winter	S29	1.025	S30	8.4	0.520	0.004	7.5228	
60 minute winter	S30	1.026	S31	8.2	0.983	0.425	0.0425	
60 minute winter	S31	1.027	S32	8.2	0.615	0.010	0.3513	135.9

**Results for 100 year +30% CC 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.96%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
120 minute summer	1	64	139.078	0.028	3.0	0.0457	0.0000	OK
120 minute summer	2	64	138.316	0.040	6.5	0.0659	0.0000	OK
120 minute summer	3	64	137.367	0.036	6.5	0.0511	0.0000	OK
120 minute summer	4	64	134.823	0.173	38.3	0.6125	0.0000	OK
120 minute summer	5	64	134.446	0.202	62.0	0.4463	0.0000	OK
120 minute summer	6	64	134.318	0.196	65.0	0.2395	0.0000	OK
120 minute summer	7	64	134.137	0.122	76.1	0.2320	0.0000	OK
120 minute summer	8	64	133.344	0.107	89.7	0.2189	0.0000	OK
120 minute summer	9	64	130.619	0.132	120.1	0.3734	0.0000	OK
120 minute summer	10	64	128.618	0.171	138.5	0.3344	0.0000	OK
120 minute summer	11	64	126.643	0.170	165.0	0.4334	0.0000	OK
120 minute summer	12	64	125.651	0.135	176.7	0.2877	0.0000	OK
120 minute summer	13	64	124.572	0.497	187.5	1.0188	0.0000	SURCHARGED
120 minute summer	14	64	124.412	0.462	220.0	1.1987	0.0000	SURCHARGED
120 minute summer	15	64	124.209	0.368	223.3	0.6774	0.0000	OK
120 minute summer	16	64	124.046	0.256	251.2	0.6035	0.0000	OK
120 minute summer	17	64	122.913	0.217	257.9	0.4600	0.0000	OK
120 minute summer	18	64	122.412	0.216	257.1	0.3818	0.0000	OK
120 minute summer	19	64	121.804	0.195	274.1	0.5171	0.0000	OK
120 minute summer	20	64	120.546	0.199	280.4	0.4142	0.0000	OK
120 minute summer	21	128	118.645	0.745	290.6	522.7482	0.0000	OK
120 minute summer	22	128	118.644	0.971	294.4	2.4723	0.0000	SURCHARGED
120 minute summer	23	128	118.644	1.085	304.5	4.3459	0.0000	SURCHARGED
120 minute summer	24	52	113.836	0.036	9.0	0.0514	0.0000	OK
120 minute summer	25	52	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
120 minute summer	1	1.000	2	3.0	0.998	0.077	0.0492	
120 minute summer	2	1.001	3	6.5	1.865	0.143	0.0511	
120 minute summer	3	1.002	5	6.5	2.060	0.118	0.0533	
120 minute summer	4	2.000	5	38.2	1.197	0.902	1.5857	
120 minute summer	5	1.003	6	62.0	1.250	0.684	0.9099	
120 minute summer	6	1.004	7	64.9	1.715	0.717	0.6068	
120 minute summer	7	1.005	8	76.1	3.076	0.289	0.3465	
120 minute summer	8	1.006	9	89.7	3.419	0.278	0.8668	
120 minute summer	9	1.007	10	120.0	3.515	0.391	0.9161	
120 minute summer	10	1.008	11	138.4	3.473	0.568	1.5895	
120 minute summer	11	1.009	12	165.0	3.927	0.328	0.6444	
120 minute summer	12	1.010	13	176.7	2.910	0.285	1.0523	
120 minute summer	13	1.011	14	187.3	1.182	1.008	5.9196	
120 minute summer	14	1.012	15	219.8	1.439	1.183	4.8486	
120 minute summer	15	1.013	16	222.9	1.901	1.200	1.7654	
120 minute summer	16	1.014	17	250.9	2.971	0.559	4.8013	
120 minute summer	17	1.015	18	257.1	3.408	0.310	0.5765	
120 minute summer	18	1.016	19	256.8	3.639	0.326	0.7037	
120 minute summer	19	1.017	20	273.6	4.094	0.327	1.2651	
120 minute summer	20	1.018	23	279.5	4.531	0.320	1.0950	
120 minute summer	21	3.000	22	-290.6	-0.887	-0.288	14.9557	
120 minute summer	22	3.001	23	-294.4	-0.674	-0.292	4.2379	
120 minute summer	23	1.019	24	9.0	1.944	0.073	0.3178	
120 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
120 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 100 year +30% CC 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.96%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
120 minute summer	26	54	105.582	0.036	9.0	0.0408	0.0000	OK
120 minute summer	27	54	103.819	0.037	9.0	0.0417	0.0000	OK
120 minute summer	28	54	99.371	0.071	9.0	0.1021	0.0000	OK
120 minute summer	S29	360	98.629	0.379	9.0	1.3139	0.0000	OK
120 minute summer	S30	360	98.629	0.479	8.5	1.2198	0.0000	SURCHARGED
120 minute summer	S31	360	97.543	0.053	8.1	0.1853	0.0000	OK
120 minute summer	S32	360	97.427	0.051	8.1	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
120 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
120 minute summer	27	1.023	28	9.0	1.705	0.059	0.3924	
120 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0981	
120 minute summer	S29	1.025	S30	8.5	0.518	0.004	6.7536	
120 minute summer	S30	1.026	S31	8.1	0.981	0.423	0.0423	
120 minute summer	S31	1.027	S32	8.1	0.614	0.010	0.3495	164.1

**Results for 100 year +30% CC 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 99.98%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
120 minute winter	1	64	139.075	0.025	2.3	0.0401	0.0000	OK
120 minute winter	2	64	138.311	0.035	5.0	0.0576	0.0000	OK
120 minute winter	3	64	137.362	0.031	5.0	0.0447	0.0000	OK
120 minute winter	4	64	134.792	0.142	29.6	0.5020	0.0000	OK
120 minute winter	5	64	134.413	0.169	47.9	0.3737	0.0000	OK
120 minute winter	6	64	134.290	0.167	50.2	0.2048	0.0000	OK
120 minute winter	7	64	134.120	0.105	58.9	0.1996	0.0000	OK
120 minute winter	8	64	133.331	0.094	69.4	0.1912	0.0000	OK
120 minute winter	9	64	130.601	0.114	92.8	0.3229	0.0000	OK
120 minute winter	10	64	128.592	0.145	107.0	0.2842	0.0000	OK
120 minute winter	11	64	126.618	0.145	127.5	0.3703	0.0000	OK
120 minute winter	12	64	125.634	0.118	136.5	0.2513	0.0000	OK
120 minute winter	13	64	124.413	0.338	144.8	0.6924	0.0000	OK
120 minute winter	14	64	124.308	0.358	169.9	0.9292	0.0000	OK
120 minute winter	15	64	124.151	0.310	172.5	0.5714	0.0000	OK
120 minute winter	16	64	124.009	0.219	194.2	0.5153	0.0000	OK
120 minute winter	17	64	122.879	0.183	199.5	0.3883	0.0000	OK
120 minute winter	18	64	122.379	0.183	199.3	0.3240	0.0000	OK
120 minute winter	19	64	121.777	0.168	212.6	0.4440	0.0000	OK
120 minute winter	20	64	120.518	0.171	217.7	0.3549	0.0000	OK
120 minute winter	21	126	118.737	0.837	224.0	599.2670	0.0000	SURCHARGED
120 minute winter	22	128	118.737	1.064	227.1	2.7077	0.0000	SURCHARGED
120 minute winter	23	128	118.737	1.178	236.9	4.7162	0.0000	SURCHARGED
120 minute winter	24	48	113.836	0.036	9.0	0.0514	0.0000	OK
120 minute winter	25	48	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
120 minute winter	1	1.000	2	2.3	0.933	0.059	0.0407	
120 minute winter	2	1.001	3	5.0	1.737	0.110	0.0422	
120 minute winter	3	1.002	5	5.0	1.912	0.091	0.0442	
120 minute winter	4	2.000	5	29.6	1.144	0.699	1.2849	
120 minute winter	5	1.003	6	47.9	1.177	0.529	0.7466	
120 minute winter	6	1.004	7	50.2	1.614	0.554	0.5008	
120 minute winter	7	1.005	8	58.9	2.893	0.224	0.2851	
120 minute winter	8	1.006	9	69.4	3.199	0.215	0.7166	
120 minute winter	9	1.007	10	92.8	3.350	0.302	0.7430	
120 minute winter	10	1.008	11	106.9	3.274	0.439	1.3026	
120 minute winter	11	1.009	12	127.5	3.704	0.254	0.5282	
120 minute winter	12	1.010	13	136.5	2.900	0.221	0.8079	
120 minute winter	13	1.011	14	144.7	1.101	0.779	4.9110	
120 minute winter	14	1.012	15	169.8	1.344	0.914	4.1101	
120 minute winter	15	1.013	16	172.4	1.779	0.928	1.4694	
120 minute winter	16	1.014	17	194.0	2.834	0.432	3.8966	
120 minute winter	17	1.015	18	199.3	3.288	0.240	0.4633	
120 minute winter	18	1.016	19	199.3	3.485	0.253	0.5705	
120 minute winter	19	1.017	20	212.5	3.903	0.254	1.0307	
120 minute winter	20	1.018	23	217.6	4.286	0.249	0.9014	
120 minute winter	21	3.000	22	-224.0	-0.705	-0.222	14.9645	
120 minute winter	22	3.001	23	-227.1	-0.520	-0.225	4.2379	
120 minute winter	23	1.019	24	9.0	1.944	0.073	0.3177	
120 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
120 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 100 year +30% CC 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 99.98%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
120 minute winter	26	48	105.582	0.036	9.0	0.0408	0.0000	OK
120 minute winter	27	48	103.819	0.037	9.0	0.0417	0.0000	OK
120 minute winter	28	48	99.371	0.071	9.0	0.1021	0.0000	OK
120 minute winter	S29	88	98.556	0.306	9.0	1.0612	0.0000	OK
120 minute winter	S30	88	98.556	0.406	8.4	1.0342	0.0000	SURCHARGED
120 minute winter	S31	88	97.543	0.053	7.9	0.1832	0.0000	OK
120 minute winter	S32	88	97.426	0.050	7.9	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
120 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
120 minute winter	27	1.023	28	9.0	1.396	0.059	0.3924	
120 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
120 minute winter	S29	1.025	S30	8.4	0.516	0.004	5.1268	
120 minute winter	S30	1.026	S31	7.9	0.976	0.412	0.0415	
120 minute winter	S31	1.027	S32	7.9	0.610	0.010	0.3426	156.8

**Results for 100 year +30% CC 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 99.97%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
180 minute summer	1	96	139.075	0.025	2.3	0.0401	0.0000	OK
180 minute summer	2	96	138.311	0.035	4.9	0.0570	0.0000	OK
180 minute summer	3	96	137.362	0.031	4.9	0.0442	0.0000	OK
180 minute summer	4	96	134.789	0.139	28.6	0.4904	0.0000	OK
180 minute summer	5	96	134.410	0.166	46.4	0.3662	0.0000	OK
180 minute summer	6	96	134.287	0.165	48.7	0.2012	0.0000	OK
180 minute summer	7	96	134.118	0.103	57.1	0.1962	0.0000	OK
180 minute summer	8	96	133.329	0.092	67.2	0.1881	0.0000	OK
180 minute summer	9	96	130.599	0.112	89.9	0.3173	0.0000	OK
180 minute summer	10	96	128.590	0.142	103.7	0.2790	0.0000	OK
180 minute summer	11	96	126.615	0.142	123.6	0.3635	0.0000	OK
180 minute summer	12	96	125.632	0.116	132.3	0.2472	0.0000	OK
180 minute summer	13	96	124.403	0.328	140.3	0.6732	0.0000	OK
180 minute summer	14	96	124.300	0.350	164.7	0.9067	0.0000	OK
180 minute summer	15	96	124.146	0.305	167.3	0.5608	0.0000	OK
180 minute summer	16	96	124.005	0.215	188.3	0.5062	0.0000	OK
180 minute summer	17	96	122.876	0.180	193.5	0.3809	0.0000	OK
180 minute summer	18	96	122.376	0.180	193.5	0.3180	0.0000	OK
180 minute summer	19	96	121.774	0.165	206.4	0.4364	0.0000	OK
180 minute summer	20	96	120.515	0.168	211.5	0.3488	0.0000	OK
180 minute summer	21	188	118.698	0.798	217.2	566.2486	0.0000	SURCHARGED
180 minute summer	22	188	118.697	1.024	220.3	2.6068	0.0000	SURCHARGED
180 minute summer	23	188	118.697	1.138	230.1	4.5574	0.0000	SURCHARGED
180 minute summer	24	80	113.836	0.036	9.0	0.0514	0.0000	OK
180 minute summer	25	80	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
180 minute summer	1	1.000	2	2.3	0.933	0.059	0.0404	
180 minute summer	2	1.001	3	4.9	1.727	0.108	0.0416	
180 minute summer	3	1.002	5	4.9	1.902	0.089	0.0435	
180 minute summer	4	2.000	5	28.6	1.136	0.675	1.2506	
180 minute summer	5	1.003	6	46.4	1.168	0.512	0.7293	
180 minute summer	6	1.004	7	48.7	1.602	0.538	0.4897	
180 minute summer	7	1.005	8	57.1	2.871	0.217	0.2785	
180 minute summer	8	1.006	9	67.2	3.172	0.208	0.7001	
180 minute summer	9	1.007	10	89.9	3.329	0.293	0.7246	
180 minute summer	10	1.008	11	103.7	3.250	0.426	1.2725	
180 minute summer	11	1.009	12	123.6	3.677	0.246	0.5155	
180 minute summer	12	1.010	13	132.3	2.887	0.214	0.7796	
180 minute summer	13	1.011	14	140.3	1.095	0.755	4.7823	
180 minute summer	14	1.012	15	164.7	1.334	0.886	4.0186	
180 minute summer	15	1.013	16	167.2	1.765	0.900	1.4379	
180 minute summer	16	1.014	17	188.3	2.818	0.419	3.8036	
180 minute summer	17	1.015	18	193.5	3.274	0.233	0.4517	
180 minute summer	18	1.016	19	193.5	3.466	0.246	0.5568	
180 minute summer	19	1.017	20	206.4	3.880	0.246	1.0069	
180 minute summer	20	1.018	23	211.4	4.258	0.242	0.8816	
180 minute summer	21	3.000	22	-217.2	-0.662	-0.215	14.9645	
180 minute summer	22	3.001	23	-220.3	-0.506	-0.218	4.2379	
180 minute summer	23	1.019	24	9.0	1.944	0.073	0.3178	
180 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
180 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 100 year +30% CC 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 99.97%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
180 minute summer	26	80	105.582	0.036	9.0	0.0408	0.0000	OK
180 minute summer	27	80	103.819	0.037	9.0	0.0417	0.0000	OK
180 minute summer	28	84	99.371	0.071	9.0	0.1021	0.0000	OK
180 minute summer	S29	124	98.609	0.359	9.0	1.2449	0.0000	OK
180 minute summer	S30	124	98.609	0.459	8.5	1.1690	0.0000	SURCHARGED
180 minute summer	S31	124	97.543	0.053	8.1	0.1848	0.0000	OK
180 minute summer	S32	124	97.427	0.051	8.1	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
180 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
180 minute summer	27	1.023	28	9.0	1.228	0.059	0.3923	
180 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0981	
180 minute summer	S29	1.025	S30	8.5	0.486	0.004	6.3003	
180 minute summer	S30	1.026	S31	8.1	0.980	0.420	0.0422	
180 minute summer	S31	1.027	S32	8.1	0.613	0.010	0.3481	189.5

**Results for 100 year +30% CC 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 99.99%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
180 minute winter	1	92	139.071	0.021	1.7	0.0347	0.0000	OK
180 minute winter	2	96	138.306	0.030	3.7	0.0494	0.0000	OK
180 minute winter	3	96	137.358	0.027	3.7	0.0385	0.0000	OK
180 minute winter	4	96	134.767	0.117	22.0	0.4146	0.0000	OK
180 minute winter	5	96	134.385	0.140	35.6	0.3103	0.0000	OK
180 minute winter	6	96	134.263	0.141	37.3	0.1729	0.0000	OK
180 minute winter	7	96	134.104	0.089	43.8	0.1690	0.0000	OK
180 minute winter	8	96	133.318	0.081	51.6	0.1643	0.0000	OK
180 minute winter	9	96	130.585	0.098	69.1	0.2755	0.0000	OK
180 minute winter	10	96	128.569	0.122	79.7	0.2392	0.0000	OK
180 minute winter	11	96	126.595	0.122	95.0	0.3120	0.0000	OK
180 minute winter	12	96	125.618	0.102	101.7	0.2160	0.0000	OK
180 minute winter	13	96	124.342	0.267	107.9	0.5480	0.0000	OK
180 minute winter	14	96	124.239	0.289	126.7	0.7503	0.0000	OK
180 minute winter	15	96	124.102	0.261	128.7	0.4804	0.0000	OK
180 minute winter	16	96	123.975	0.185	145.0	0.4362	0.0000	OK
180 minute winter	17	96	122.849	0.153	149.0	0.3233	0.0000	OK
180 minute winter	18	96	122.349	0.153	149.0	0.2709	0.0000	OK
180 minute winter	19	96	121.751	0.142	158.9	0.3759	0.0000	OK
180 minute winter	20	96	120.491	0.144	162.8	0.2994	0.0000	OK
180 minute winter	21	188	118.800	0.900	165.4	652.8190	0.0000	SURCHARGED
180 minute winter	22	188	118.800	1.127	167.6	2.8673	0.0000	SURCHARGED
180 minute winter	23	188	118.800	1.241	177.2	4.9672	0.0000	SURCHARGED
180 minute winter	24	72	113.836	0.036	9.0	0.0514	0.0000	OK
180 minute winter	25	72	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
180 minute winter	1	1.000	2	1.7	0.858	0.044	0.0328	
180 minute winter	2	1.001	3	3.7	1.595	0.081	0.0340	
180 minute winter	3	1.002	5	3.7	1.752	0.067	0.0357	
180 minute winter	4	2.000	5	22.0	1.071	0.520	1.0210	
180 minute winter	5	1.003	6	35.6	1.095	0.393	0.5965	
180 minute winter	6	1.004	7	37.3	1.499	0.412	0.4022	
180 minute winter	7	1.005	8	43.8	2.685	0.166	0.2284	
180 minute winter	8	1.006	9	51.6	2.951	0.160	0.5782	
180 minute winter	9	1.007	10	69.1	3.154	0.225	0.5879	
180 minute winter	10	1.008	11	79.7	3.044	0.327	1.0442	
180 minute winter	11	1.009	12	95.0	3.452	0.189	0.4222	
180 minute winter	12	1.010	13	101.7	2.905	0.164	0.5827	
180 minute winter	13	1.011	14	107.9	1.049	0.581	3.8429	
180 minute winter	14	1.012	15	126.7	1.248	0.682	3.3112	
180 minute winter	15	1.013	16	128.7	1.643	0.693	1.1931	
180 minute winter	16	1.014	17	145.0	2.670	0.323	3.0924	
180 minute winter	17	1.015	18	149.0	3.139	0.179	0.3627	
180 minute winter	18	1.016	19	149.0	3.296	0.189	0.4509	
180 minute winter	19	1.017	20	158.9	3.673	0.190	0.8187	
180 minute winter	20	1.018	23	162.8	4.001	0.186	0.7222	
180 minute winter	21	3.000	22	-165.4	-0.516	-0.164	14.9645	
180 minute winter	22	3.001	23	-167.6	-0.382	-0.166	4.2379	
180 minute winter	23	1.019	24	9.0	1.944	0.073	0.3177	
180 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
180 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 100 year +30% CC 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 99.99%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
180 minute winter	26	76	105.582	0.036	9.0	0.0408	0.0000	OK
180 minute winter	27	76	103.819	0.037	9.0	0.0417	0.0000	OK
180 minute winter	28	76	99.371	0.071	9.0	0.1021	0.0000	OK
180 minute winter	S29	116	98.604	0.354	9.0	1.2248	0.0000	OK
180 minute winter	S30	116	98.604	0.454	8.5	1.1543	0.0000	SURCHARGED
180 minute winter	S31	116	97.543	0.053	8.1	0.1847	0.0000	OK
180 minute winter	S32	116	97.427	0.051	8.1	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
180 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
180 minute winter	27	1.023	28	9.0	1.419	0.059	0.3924	
180 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
180 minute winter	S29	1.025	S30	8.5	0.335	0.004	6.1696	
180 minute winter	S30	1.026	S31	8.1	0.980	0.420	0.0421	
180 minute winter	S31	1.027	S32	8.1	0.613	0.010	0.3476	182.0

**Results for 100 year +30% CC 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 99.98%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
240 minute summer	1	124	139.073	0.023	1.9	0.0365	0.0000	OK
240 minute summer	2	124	138.308	0.032	4.1	0.0519	0.0000	OK
240 minute summer	3	124	137.359	0.028	4.1	0.0403	0.0000	OK
240 minute summer	4	124	134.773	0.123	24.1	0.4357	0.0000	OK
240 minute summer	5	124	134.392	0.148	38.7	0.3266	0.0000	OK
240 minute summer	6	124	134.270	0.148	40.5	0.1810	0.0000	OK
240 minute summer	7	124	134.108	0.093	47.5	0.1767	0.0000	OK
240 minute summer	8	124	133.321	0.084	55.9	0.1709	0.0000	OK
240 minute summer	9	124	130.589	0.102	74.9	0.2874	0.0000	OK
240 minute summer	10	124	128.575	0.128	86.3	0.2499	0.0000	OK
240 minute summer	11	124	126.601	0.128	102.8	0.3263	0.0000	OK
240 minute summer	12	124	125.622	0.106	109.9	0.2246	0.0000	OK
240 minute summer	13	124	124.357	0.282	116.6	0.5784	0.0000	OK
240 minute summer	14	124	124.253	0.303	136.6	0.7870	0.0000	OK
240 minute summer	15	124	124.112	0.271	137.7	0.4991	0.0000	OK
240 minute summer	16	124	123.982	0.192	155.0	0.4524	0.0000	OK
240 minute summer	17	124	122.855	0.159	158.8	0.3359	0.0000	OK
240 minute summer	18	124	122.355	0.159	158.4	0.2810	0.0000	OK
240 minute summer	19	124	121.756	0.147	169.1	0.3893	0.0000	OK
240 minute summer	20	124	120.496	0.149	173.2	0.3101	0.0000	OK
240 minute summer	21	248	118.727	0.827	175.3	590.5541	0.0000	SURCHARGED
240 minute summer	22	248	118.726	1.053	178.5	2.6808	0.0000	SURCHARGED
240 minute summer	23	248	118.726	1.167	188.5	4.6739	0.0000	SURCHARGED
240 minute summer	24	108	113.836	0.036	9.0	0.0514	0.0000	OK
240 minute summer	25	108	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
240 minute summer	1	1.000	2	1.9	0.878	0.049	0.0353	
240 minute summer	2	1.001	3	4.1	1.642	0.090	0.0365	
240 minute summer	3	1.002	5	4.1	1.801	0.074	0.0382	
240 minute summer	4	2.000	5	23.8	1.090	0.561	1.0845	
240 minute summer	5	1.003	6	38.6	1.117	0.426	0.6347	
240 minute summer	6	1.004	7	40.4	1.528	0.446	0.4268	
240 minute summer	7	1.005	8	47.4	2.739	0.180	0.2423	
240 minute summer	8	1.006	9	55.8	3.014	0.173	0.6122	
240 minute summer	9	1.007	10	74.7	3.207	0.243	0.6253	
240 minute summer	10	1.008	11	86.0	3.101	0.353	1.1054	
240 minute summer	11	1.009	12	102.7	3.517	0.204	0.4478	
240 minute summer	12	1.010	13	109.8	2.900	0.177	0.6324	
240 minute summer	13	1.011	14	116.0	1.063	0.624	4.0766	
240 minute summer	14	1.012	15	135.5	1.269	0.730	3.4827	
240 minute summer	15	1.013	16	137.2	1.670	0.738	1.2505	
240 minute summer	16	1.014	17	154.4	2.705	0.344	3.2511	
240 minute summer	17	1.015	18	158.4	3.171	0.191	0.3816	
240 minute summer	18	1.016	19	158.2	3.334	0.201	0.4736	
240 minute summer	19	1.017	20	168.9	3.720	0.202	0.8594	
240 minute summer	20	1.018	23	172.8	4.058	0.198	0.7562	
240 minute summer	21	3.000	22	-175.3	-0.530	-0.174	14.9645	
240 minute summer	22	3.001	23	-178.5	-0.419	-0.177	4.2379	
240 minute summer	23	1.019	24	9.0	1.944	0.073	0.3178	
240 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
240 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 100 year +30% CC 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 99.98%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
240 minute summer	26	108	105.582	0.036	9.0	0.0408	0.0000	OK
240 minute summer	27	108	103.819	0.037	9.0	0.0417	0.0000	OK
240 minute summer	28	108	99.371	0.071	9.0	0.1021	0.0000	OK
240 minute summer	S29	152	98.647	0.397	9.0	1.3769	0.0000	OK
240 minute summer	S30	152	98.647	0.497	8.5	1.2661	0.0000	SURCHARGED
240 minute summer	S31	152	97.544	0.054	8.2	0.1856	0.0000	OK
240 minute summer	S32	152	97.427	0.051	8.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
240 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
240 minute summer	27	1.023	28	9.0	1.228	0.059	0.3924	
240 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0981	
240 minute summer	S29	1.025	S30	8.5	0.357	0.004	7.1715	
240 minute summer	S30	1.026	S31	8.2	0.982	0.424	0.0425	
240 minute summer	S31	1.027	S32	8.2	0.614	0.010	0.3506	215.7

**Results for 100 year +30% CC 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 99.99%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
240 minute winter	1	120	139.070	0.020	1.4	0.0316	0.0000	OK
240 minute winter	2	120	138.303	0.027	3.0	0.0445	0.0000	OK
240 minute winter	3	120	137.355	0.024	3.0	0.0347	0.0000	OK
240 minute winter	4	124	134.754	0.104	17.9	0.3662	0.0000	OK
240 minute winter	5	124	134.368	0.124	29.0	0.2744	0.0000	OK
240 minute winter	6	124	134.248	0.126	30.3	0.1544	0.0000	OK
240 minute winter	7	124	134.094	0.079	35.5	0.1507	0.0000	OK
240 minute winter	8	124	133.310	0.072	41.8	0.1478	0.0000	OK
240 minute winter	9	124	130.574	0.087	56.0	0.2467	0.0000	OK
240 minute winter	10	124	128.556	0.109	64.6	0.2125	0.0000	OK
240 minute winter	11	124	126.581	0.108	77.0	0.2771	0.0000	OK
240 minute winter	12	124	125.608	0.091	82.5	0.1944	0.0000	OK
240 minute winter	13	124	124.307	0.232	87.5	0.4749	0.0000	OK
240 minute winter	14	124	124.202	0.252	102.7	0.6545	0.0000	OK
240 minute winter	15	124	124.073	0.232	104.2	0.4266	0.0000	OK
240 minute winter	16	124	123.955	0.165	117.3	0.3883	0.0000	OK
240 minute winter	17	124	122.830	0.134	120.6	0.2844	0.0000	OK
240 minute winter	18	124	122.331	0.135	120.5	0.2389	0.0000	OK
240 minute winter	19	124	121.735	0.126	128.6	0.3342	0.0000	OK
240 minute winter	20	124	120.475	0.128	131.8	0.2654	0.0000	OK
240 minute winter	21	244	118.835	0.935	132.4	682.9681	0.0000	SURCHARGED
240 minute winter	22	244	118.835	1.162	133.9	2.9561	0.0000	SURCHARGED
240 minute winter	23	244	118.835	1.275	143.4	5.1070	0.0000	SURCHARGED
240 minute winter	24	100	113.836	0.036	9.0	0.0514	0.0000	OK
240 minute winter	25	100	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
240 minute winter	1	1.000	2	1.4	0.807	0.036	0.0284	
240 minute winter	2	1.001	3	3.0	1.503	0.066	0.0293	
240 minute winter	3	1.002	5	3.0	1.650	0.055	0.0307	
240 minute winter	4	2.000	5	17.9	1.017	0.422	0.8726	
240 minute winter	5	1.003	6	28.9	1.040	0.320	0.5109	
240 minute winter	6	1.004	7	30.3	1.423	0.335	0.3452	
240 minute winter	7	1.005	8	35.5	2.543	0.135	0.1955	
240 minute winter	8	1.006	9	41.8	2.783	0.130	0.4968	
240 minute winter	9	1.007	10	56.0	3.018	0.182	0.4979	
240 minute winter	10	1.008	11	64.5	2.882	0.265	0.8932	
240 minute winter	11	1.009	12	77.0	3.276	0.153	0.3607	
240 minute winter	12	1.010	13	82.5	2.900	0.133	0.4629	
240 minute winter	13	1.011	14	87.4	1.007	0.471	3.2431	
240 minute winter	14	1.012	15	102.6	1.181	0.552	2.8339	
240 minute winter	15	1.013	16	104.1	1.548	0.560	1.0263	
240 minute winter	16	1.014	17	117.3	2.549	0.261	2.6215	
240 minute winter	17	1.015	18	120.5	3.026	0.145	0.3043	
240 minute winter	18	1.016	19	120.5	3.157	0.153	0.3808	
240 minute winter	19	1.017	20	128.6	3.507	0.153	0.6939	
240 minute winter	20	1.018	23	131.7	3.797	0.151	0.6156	
240 minute winter	21	3.000	22	-132.4	-0.409	-0.131	14.9645	
240 minute winter	22	3.001	23	-133.9	-0.305	-0.133	4.2379	
240 minute winter	23	1.019	24	9.0	1.944	0.073	0.3177	
240 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
240 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 100 year +30% CC 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 99.99%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
240 minute winter	26	100	105.582	0.036	9.0	0.0408	0.0000	OK
240 minute winter	27	100	103.819	0.037	9.0	0.0417	0.0000	OK
240 minute winter	28	100	99.371	0.071	9.0	0.1021	0.0000	OK
240 minute winter	S29	148	98.643	0.393	9.0	1.3613	0.0000	OK
240 minute winter	S30	148	98.643	0.493	8.5	1.2546	0.0000	SURCHARGED
240 minute winter	S31	148	97.544	0.054	8.2	0.1855	0.0000	OK
240 minute winter	S32	148	97.427	0.051	8.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
240 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
240 minute winter	27	1.023	28	9.0	1.238	0.059	0.3924	
240 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
240 minute winter	S29	1.025	S30	8.5	0.523	0.004	7.0675	
240 minute winter	S30	1.026	S31	8.2	0.982	0.424	0.0424	
240 minute winter	S31	1.027	S32	8.2	0.614	0.010	0.3504	210.9

**Results for 100 year +30% CC 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 99.99%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
360 minute summer	1	184	139.070	0.019	1.4	0.0315	0.0000	OK
360 minute summer	2	184	138.303	0.027	3.1	0.0451	0.0000	OK
360 minute summer	3	184	137.356	0.024	3.1	0.0350	0.0000	OK
360 minute summer	4	184	134.754	0.104	18.2	0.3676	0.0000	OK
360 minute summer	5	184	134.369	0.125	29.2	0.2754	0.0000	OK
360 minute summer	6	184	134.248	0.126	30.5	0.1546	0.0000	OK
360 minute summer	7	184	134.094	0.079	35.7	0.1509	0.0000	OK
360 minute summer	8	184	133.310	0.073	42.0	0.1479	0.0000	OK
360 minute summer	9	184	130.575	0.088	56.3	0.2472	0.0000	OK
360 minute summer	10	184	128.556	0.109	64.9	0.2128	0.0000	OK
360 minute summer	11	184	126.582	0.109	77.4	0.2777	0.0000	OK
360 minute summer	12	184	125.608	0.092	82.9	0.1947	0.0000	OK
360 minute summer	13	184	124.307	0.232	87.9	0.4752	0.0000	OK
360 minute summer	14	184	124.202	0.252	102.9	0.6531	0.0000	OK
360 minute summer	15	184	124.072	0.231	103.7	0.4250	0.0000	OK
360 minute summer	16	184	123.954	0.164	116.6	0.3868	0.0000	OK
360 minute summer	17	184	122.829	0.133	119.5	0.2826	0.0000	OK
360 minute summer	18	184	122.330	0.134	119.1	0.2372	0.0000	OK
360 minute summer	19	184	121.734	0.125	127.2	0.3322	0.0000	OK
360 minute summer	20	184	120.474	0.127	130.2	0.2635	0.0000	OK
360 minute summer	21	368	118.749	0.849	129.5	609.3097	0.0000	SURCHARGED
360 minute summer	22	368	118.749	1.076	132.0	2.7378	0.0000	SURCHARGED
360 minute summer	23	368	118.749	1.190	141.8	4.7635	0.0000	SURCHARGED
360 minute summer	24	160	113.836	0.036	9.0	0.0514	0.0000	OK
360 minute summer	25	160	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
360 minute summer	1	1.000	2	1.4	0.795	0.036	0.0287	
360 minute summer	2	1.001	3	3.1	1.516	0.068	0.0298	
360 minute summer	3	1.002	5	3.1	1.659	0.056	0.0312	
360 minute summer	4	2.000	5	17.9	1.017	0.424	0.8762	
360 minute summer	5	1.003	6	29.1	1.041	0.321	0.5127	
360 minute summer	6	1.004	7	30.4	1.421	0.335	0.3459	
360 minute summer	7	1.005	8	35.6	2.543	0.135	0.1959	
360 minute summer	8	1.006	9	41.9	2.782	0.130	0.4980	
360 minute summer	9	1.007	10	56.2	3.019	0.183	0.4992	
360 minute summer	10	1.008	11	64.7	2.882	0.265	0.8947	
360 minute summer	11	1.009	12	77.3	3.277	0.154	0.3616	
360 minute summer	12	1.010	13	82.8	2.897	0.134	0.4637	
360 minute summer	13	1.011	14	87.4	1.007	0.470	3.2400	
360 minute summer	14	1.012	15	102.0	1.179	0.549	2.8237	
360 minute summer	15	1.013	16	103.2	1.542	0.556	1.0212	
360 minute summer	16	1.014	17	116.2	2.543	0.259	2.6031	
360 minute summer	17	1.015	18	119.1	3.019	0.143	0.3014	
360 minute summer	18	1.016	19	119.0	3.146	0.151	0.3773	
360 minute summer	19	1.017	20	127.0	3.497	0.152	0.6874	
360 minute summer	20	1.018	23	129.9	3.783	0.149	0.6096	
360 minute summer	21	3.000	22	-129.5	-0.382	-0.128	14.9645	
360 minute summer	22	3.001	23	-132.0	-0.310	-0.131	4.2379	
360 minute summer	23	1.019	24	9.0	1.944	0.073	0.3177	
360 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
360 minute summer	25	1.021	26	9.0	2.210	0.054	0.1909	

**Results for 100 year +30% CC 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 99.99%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
360 minute summer	26	160	105.582	0.036	9.0	0.0408	0.0000	OK
360 minute summer	27	160	103.819	0.037	9.0	0.0417	0.0000	OK
360 minute summer	28	168	99.371	0.071	9.0	0.1021	0.0000	OK
360 minute summer	S29	216	98.709	0.459	9.0	1.5903	0.0000	OK
360 minute summer	S30	216	98.709	0.559	8.6	1.4228	0.0000	SURCHARGED
360 minute summer	S31	216	97.544	0.054	8.2	0.1863	0.0000	OK
360 minute summer	S32	216	97.427	0.051	8.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
360 minute summer	26	1.022	27	9.0	2.161	0.054	0.0734	
360 minute summer	27	1.023	28	9.0	1.227	0.059	0.3923	
360 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0981	
360 minute summer	S29	1.025	S30	8.6	0.316	0.004	8.6173	
360 minute summer	S30	1.026	S31	8.2	0.984	0.428	0.0427	
360 minute summer	S31	1.027	S32	8.2	0.615	0.010	0.3529	269.0

**Results for 100 year +30% CC 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 99.99%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
360 minute winter	1	184	139.067	0.017	1.1	0.0282	0.0000	OK
360 minute winter	2	184	138.300	0.024	2.3	0.0390	0.0000	OK
360 minute winter	3	184	137.352	0.021	2.3	0.0304	0.0000	OK
360 minute winter	4	184	134.738	0.088	13.3	0.3094	0.0000	OK
360 minute winter	5	184	134.349	0.105	21.5	0.2315	0.0000	OK
360 minute winter	6	184	134.230	0.108	22.6	0.1320	0.0000	OK
360 minute winter	7	184	134.083	0.068	26.5	0.1289	0.0000	OK
360 minute winter	8	184	133.300	0.063	31.2	0.1276	0.0000	OK
360 minute winter	9	184	130.562	0.075	41.7	0.2122	0.0000	OK
360 minute winter	10	184	128.539	0.092	48.0	0.1809	0.0000	OK
360 minute winter	11	184	126.565	0.092	57.2	0.2355	0.0000	OK
360 minute winter	12	184	125.595	0.079	61.2	0.1674	0.0000	OK
360 minute winter	13	184	124.267	0.192	64.9	0.3933	0.0000	OK
360 minute winter	14	184	124.160	0.210	76.1	0.5452	0.0000	OK
360 minute winter	15	184	124.038	0.197	77.1	0.3625	0.0000	OK
360 minute winter	16	184	123.931	0.141	86.9	0.3311	0.0000	OK
360 minute winter	17	184	122.809	0.113	89.2	0.2384	0.0000	OK
360 minute winter	18	184	122.310	0.114	89.1	0.2009	0.0000	OK
360 minute winter	19	184	121.716	0.107	95.1	0.2841	0.0000	OK
360 minute winter	20	184	120.455	0.108	97.4	0.2247	0.0000	OK
360 minute winter	21	360	118.867	0.967	95.5	711.4634	0.0000	SURCHARGED
360 minute winter	22	360	118.867	1.194	96.8	3.0388	0.0000	SURCHARGED
360 minute winter	23	360	118.867	1.308	106.0	5.2372	0.0000	SURCHARGED
360 minute winter	24	144	113.836	0.036	9.0	0.0514	0.0000	OK
360 minute winter	25	144	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
360 minute winter	1	1.000	2	1.1	0.759	0.028	0.0236	
360 minute winter	2	1.001	3	2.3	1.393	0.050	0.0241	
360 minute winter	3	1.002	5	2.3	1.524	0.042	0.0254	
360 minute winter	4	2.000	5	13.3	0.941	0.313	0.6997	
360 minute winter	5	1.003	6	21.5	0.963	0.238	0.4102	
360 minute winter	6	1.004	7	22.6	1.317	0.250	0.2787	
360 minute winter	7	1.005	8	26.5	2.354	0.101	0.1576	
360 minute winter	8	1.006	9	31.2	2.561	0.097	0.4026	
360 minute winter	9	1.007	10	41.6	2.828	0.135	0.3951	
360 minute winter	10	1.008	11	48.0	2.662	0.197	0.7187	
360 minute winter	11	1.009	12	57.2	3.036	0.114	0.2889	
360 minute winter	12	1.010	13	61.2	2.901	0.099	0.3312	
360 minute winter	13	1.011	14	64.8	0.946	0.349	2.5584	
360 minute winter	14	1.012	15	75.9	1.091	0.409	2.2717	
360 minute winter	15	1.013	16	77.1	1.421	0.415	0.8289	
360 minute winter	16	1.014	17	86.8	2.379	0.193	2.0807	
360 minute winter	17	1.015	18	89.1	2.860	0.107	0.2381	
360 minute winter	18	1.016	19	89.1	2.957	0.113	0.3006	
360 minute winter	19	1.017	20	95.1	3.271	0.113	0.5502	
360 minute winter	20	1.018	23	97.3	3.515	0.111	0.4913	
360 minute winter	21	3.000	22	-95.5	-0.297	-0.095	14.9645	
360 minute winter	22	3.001	23	-96.8	-0.220	-0.096	4.2379	
360 minute winter	23	1.019	24	9.0	1.944	0.073	0.3177	
360 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
360 minute winter	25	1.021	26	9.0	2.210	0.054	0.1909	

**Results for 100 year +30% CC 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 99.99%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
360 minute winter	26	144	105.582	0.036	9.0	0.0408	0.0000	OK
360 minute winter	27	152	103.819	0.037	9.0	0.0417	0.0000	OK
360 minute winter	28	152	99.371	0.071	9.0	0.1021	0.0000	OK
360 minute winter	S29	208	98.708	0.458	9.0	1.5874	0.0000	OK
360 minute winter	S30	208	98.708	0.558	8.6	1.4208	0.0000	SURCHARGED
360 minute winter	S31	208	97.544	0.054	8.2	0.1863	0.0000	OK
360 minute winter	S32	208	97.427	0.051	8.2	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
360 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
360 minute winter	27	1.023	28	9.0	1.315	0.059	0.3924	
360 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
360 minute winter	S29	1.025	S30	8.6	0.221	0.004	8.5978	
360 minute winter	S30	1.026	S31	8.2	0.984	0.428	0.0427	
360 minute winter	S31	1.027	S32	8.2	0.615	0.010	0.3528	268.3

**Results for 100 year +30% CC 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.99%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
480 minute summer	1	248	139.067	0.017	1.1	0.0282	0.0000	OK
480 minute summer	2	248	138.300	0.024	2.4	0.0399	0.0000	OK
480 minute summer	3	248	137.353	0.022	2.4	0.0311	0.0000	OK
480 minute summer	4	248	134.741	0.091	14.3	0.3227	0.0000	OK
480 minute summer	5	248	134.353	0.109	23.1	0.2408	0.0000	OK
480 minute summer	6	248	134.234	0.112	24.2	0.1368	0.0000	OK
480 minute summer	7	248	134.085	0.070	28.4	0.1337	0.0000	OK
480 minute summer	8	248	133.302	0.065	33.4	0.1320	0.0000	OK
480 minute summer	9	248	130.565	0.078	44.7	0.2198	0.0000	OK
480 minute summer	10	248	128.543	0.096	51.6	0.1881	0.0000	OK
480 minute summer	11	248	126.569	0.096	61.5	0.2449	0.0000	OK
480 minute summer	12	248	125.598	0.082	65.8	0.1736	0.0000	OK
480 minute summer	13	248	124.276	0.201	69.8	0.4115	0.0000	OK
480 minute summer	14	248	124.170	0.220	82.0	0.5704	0.0000	OK
480 minute summer	15	248	124.046	0.205	83.3	0.3778	0.0000	OK
480 minute summer	16	248	123.936	0.146	93.8	0.3449	0.0000	OK
480 minute summer	17	248	122.814	0.118	96.4	0.2495	0.0000	OK
480 minute summer	18	248	122.315	0.119	96.4	0.2101	0.0000	OK
480 minute summer	19	248	121.721	0.112	102.8	0.2961	0.0000	OK
480 minute summer	20	248	120.460	0.113	105.3	0.2346	0.0000	OK
480 minute summer	21	488	118.752	0.852	103.4	611.8380	0.0000	SURCHARGED
480 minute summer	22	488	118.752	1.079	105.2	2.7455	0.0000	SURCHARGED
480 minute summer	23	488	118.752	1.193	114.6	4.7757	0.0000	SURCHARGED
480 minute summer	24	216	113.836	0.036	9.0	0.0514	0.0000	OK
480 minute summer	25	216	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
480 minute summer	1	1.000	2	1.1	0.746	0.028	0.0242	
480 minute summer	2	1.001	3	2.4	1.412	0.053	0.0250	
480 minute summer	3	1.002	5	2.4	1.545	0.044	0.0262	
480 minute summer	4	2.000	5	14.3	0.961	0.338	0.7398	
480 minute summer	5	1.003	6	23.1	0.982	0.255	0.4317	
480 minute summer	6	1.004	7	24.2	1.341	0.267	0.2929	
480 minute summer	7	1.005	8	28.4	2.398	0.108	0.1658	
480 minute summer	8	1.006	9	33.4	2.612	0.104	0.4230	
480 minute summer	9	1.007	10	44.7	2.871	0.145	0.4177	
480 minute summer	10	1.008	11	51.6	2.715	0.212	0.7580	
480 minute summer	11	1.009	12	61.5	3.094	0.122	0.3049	
480 minute summer	12	1.010	13	65.8	2.897	0.106	0.3601	
480 minute summer	13	1.011	14	69.8	0.961	0.376	2.7136	
480 minute summer	14	1.012	15	82.0	1.114	0.441	2.4032	
480 minute summer	15	1.013	16	83.3	1.453	0.448	0.8757	
480 minute summer	16	1.014	17	93.8	2.422	0.209	2.2081	
480 minute summer	17	1.015	18	96.4	2.904	0.116	0.2537	
480 minute summer	18	1.016	19	96.4	3.009	0.122	0.3195	
480 minute summer	19	1.017	20	102.8	3.331	0.123	0.5842	
480 minute summer	20	1.018	23	105.3	3.589	0.120	0.5210	
480 minute summer	21	3.000	22	-103.4	-0.312	-0.103	14.9645	
480 minute summer	22	3.001	23	-105.2	-0.247	-0.104	4.2379	
480 minute summer	23	1.019	24	9.0	1.944	0.073	0.3177	
480 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
480 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 100 year +30% CC 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.99%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
480 minute summer	26	216	105.582	0.036	9.0	0.0408	0.0000	OK
480 minute summer	27	216	103.819	0.037	9.0	0.0417	0.0000	OK
480 minute summer	28	224	99.371	0.071	9.0	0.1021	0.0000	OK
480 minute summer	S29	280	98.762	0.512	9.0	1.7723	0.0000	OK
480 minute summer	S30	280	98.762	0.612	8.6	1.5566	0.0000	SURCHARGED
480 minute summer	S31	272	97.544	0.054	8.3	0.1864	0.0000	OK
480 minute summer	S32	272	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
480 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
480 minute summer	27	1.023	28	9.0	1.227	0.059	0.3923	
480 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0981	
480 minute summer	S29	1.025	S30	8.6	0.167	0.004	9.8744	
480 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
480 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	325.6

**Results for 100 year +30% CC 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
480 minute winter	1	232	139.065	0.015	0.8	0.0242	0.0000	OK
480 minute winter	2	248	138.297	0.021	1.8	0.0346	0.0000	OK
480 minute winter	3	248	137.350	0.019	1.8	0.0270	0.0000	OK
480 minute winter	4	248	134.728	0.078	10.6	0.2739	0.0000	OK
480 minute winter	5	248	134.337	0.093	17.2	0.2043	0.0000	OK
480 minute winter	6	248	134.218	0.096	18.0	0.1173	0.0000	OK
480 minute winter	7	248	134.075	0.060	21.1	0.1143	0.0000	OK
480 minute winter	8	248	133.293	0.056	24.9	0.1143	0.0000	OK
480 minute winter	9	248	130.554	0.067	33.3	0.1897	0.0000	OK
480 minute winter	10	248	128.529	0.082	38.4	0.1608	0.0000	OK
480 minute winter	11	248	126.555	0.082	45.8	0.2088	0.0000	OK
480 minute winter	12	248	125.587	0.071	49.0	0.1506	0.0000	OK
480 minute winter	13	248	124.243	0.168	52.0	0.3451	0.0000	OK
480 minute winter	14	248	124.135	0.185	61.1	0.4806	0.0000	OK
480 minute winter	15	248	124.017	0.176	62.1	0.3235	0.0000	OK
480 minute winter	16	248	123.916	0.126	69.9	0.2959	0.0000	OK
480 minute winter	17	248	122.796	0.100	71.8	0.2108	0.0000	OK
480 minute winter	18	248	122.297	0.101	71.8	0.1780	0.0000	OK
480 minute winter	19	248	121.705	0.096	76.6	0.2533	0.0000	OK
480 minute winter	20	248	120.443	0.096	78.5	0.2000	0.0000	OK
480 minute winter	21	472	118.881	0.981	75.6	723.2872	0.0000	SURCHARGED
480 minute winter	22	472	118.881	1.208	76.3	3.0733	0.0000	SURCHARGED
480 minute winter	23	472	118.881	1.322	85.4	5.2915	0.0000	SURCHARGED
480 minute winter	24	200	113.836	0.036	9.0	0.0514	0.0000	OK
480 minute winter	25	200	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
480 minute winter	1	1.000	2	0.8	0.687	0.021	0.0196	
480 minute winter	2	1.001	3	1.8	1.299	0.040	0.0204	
480 minute winter	3	1.002	5	1.8	1.418	0.033	0.0214	
480 minute winter	4	2.000	5	10.6	0.887	0.250	0.5942	
480 minute winter	5	1.003	6	17.2	0.910	0.190	0.3471	
480 minute winter	6	1.004	7	18.0	1.239	0.199	0.2362	
480 minute winter	7	1.005	8	21.1	2.210	0.080	0.1337	
480 minute winter	8	1.006	9	24.9	2.397	0.077	0.3435	
480 minute winter	9	1.007	10	33.3	2.692	0.108	0.3318	
480 minute winter	10	1.008	11	38.4	2.505	0.158	0.6113	
480 minute winter	11	1.009	12	45.8	2.858	0.091	0.2457	
480 minute winter	12	1.010	13	49.0	2.889	0.079	0.2575	
480 minute winter	13	1.011	14	52.0	0.900	0.280	2.1584	
480 minute winter	14	1.012	15	61.1	1.029	0.329	1.9380	
480 minute winter	15	1.013	16	62.1	1.336	0.334	0.7110	
480 minute winter	16	1.014	17	69.9	2.259	0.156	1.7655	
480 minute winter	17	1.015	18	71.8	2.740	0.086	0.2002	
480 minute winter	18	1.016	19	71.8	2.817	0.091	0.2543	
480 minute winter	19	1.017	20	76.6	3.105	0.091	0.4669	
480 minute winter	20	1.018	23	78.5	3.323	0.090	0.4191	
480 minute winter	21	3.000	22	-75.6	-0.240	-0.075	14.9645	
480 minute winter	22	3.001	23	-76.3	-0.173	-0.076	4.2379	
480 minute winter	23	1.019	24	9.0	1.944	0.073	0.3177	
480 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
480 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 100 year +30% CC 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
480 minute winter	26	200	105.582	0.036	9.0	0.0408	0.0000	OK
480 minute winter	27	200	103.819	0.037	9.0	0.0417	0.0000	OK
480 minute winter	28	200	99.371	0.071	9.0	0.1021	0.0000	OK
480 minute winter	S29	272	98.766	0.516	9.0	1.7869	0.0000	OK
480 minute winter	S30	272	98.766	0.616	8.6	1.5673	0.0000	SURCHARGED
480 minute winter	S31	256	97.544	0.054	8.3	0.1864	0.0000	OK
480 minute winter	S32	256	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
480 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
480 minute winter	27	1.023	28	9.0	1.227	0.059	0.3924	
480 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
480 minute winter	S29	1.025	S30	8.6	0.309	0.004	9.9759	
480 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
480 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	325.1

**Results for 100 year +30% CC 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.99%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
600 minute summer	1	315	139.066	0.016	0.9	0.0257	0.0000	OK
600 minute summer	2	315	138.298	0.022	2.0	0.0364	0.0000	OK
600 minute summer	3	315	137.351	0.020	2.0	0.0285	0.0000	OK
600 minute summer	4	315	134.731	0.081	11.6	0.2876	0.0000	OK
600 minute summer	5	315	134.341	0.097	18.8	0.2146	0.0000	OK
600 minute summer	6	315	134.223	0.100	19.7	0.1229	0.0000	OK
600 minute summer	7	315	134.078	0.063	23.1	0.1199	0.0000	OK
600 minute summer	8	315	133.296	0.059	27.2	0.1193	0.0000	OK
600 minute summer	9	315	130.557	0.070	36.4	0.1983	0.0000	OK
600 minute summer	10	315	128.533	0.086	42.0	0.1685	0.0000	OK
600 minute summer	11	315	126.559	0.086	50.1	0.2192	0.0000	OK
600 minute summer	12	315	125.590	0.074	53.6	0.1569	0.0000	OK
600 minute summer	13	315	124.252	0.177	56.9	0.3639	0.0000	OK
600 minute summer	14	315	124.145	0.195	66.8	0.5058	0.0000	OK
600 minute summer	15	315	124.025	0.184	67.9	0.3390	0.0000	OK
600 minute summer	16	315	123.922	0.132	76.5	0.3100	0.0000	OK
600 minute summer	17	315	122.801	0.105	78.6	0.2219	0.0000	OK
600 minute summer	18	315	122.302	0.106	78.6	0.1873	0.0000	OK
600 minute summer	19	315	121.709	0.100	83.8	0.2655	0.0000	OK
600 minute summer	20	315	120.448	0.101	85.9	0.2100	0.0000	OK
600 minute summer	21	600	118.742	0.842	82.9	603.7956	0.0000	SURCHARGED
600 minute summer	22	600	118.742	1.069	84.2	2.7217	0.0000	SURCHARGED
600 minute summer	23	600	118.742	1.183	93.5	4.7384	0.0000	SURCHARGED
600 minute summer	24	285	113.836	0.036	9.0	0.0514	0.0000	OK
600 minute summer	25	285	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
600 minute summer	1	1.000	2	0.9	0.698	0.023	0.0211	
600 minute summer	2	1.001	3	2.0	1.338	0.044	0.0219	
600 minute summer	3	1.002	5	2.0	1.465	0.036	0.0231	
600 minute summer	4	2.000	5	11.6	0.909	0.274	0.6345	
600 minute summer	5	1.003	6	18.8	0.931	0.208	0.3709	
600 minute summer	6	1.004	7	19.7	1.269	0.218	0.2522	
600 minute summer	7	1.005	8	23.1	2.267	0.088	0.1427	
600 minute summer	8	1.006	9	27.2	2.460	0.084	0.3658	
600 minute summer	9	1.007	10	36.4	2.745	0.118	0.3558	
600 minute summer	10	1.008	11	42.0	2.568	0.172	0.6522	
600 minute summer	11	1.009	12	50.1	2.932	0.100	0.2620	
600 minute summer	12	1.010	13	53.6	2.884	0.087	0.2853	
600 minute summer	13	1.011	14	56.9	0.919	0.306	2.3133	
600 minute summer	14	1.012	15	66.8	1.054	0.360	2.0687	
600 minute summer	15	1.013	16	67.9	1.370	0.365	0.7577	
600 minute summer	16	1.014	17	76.5	2.309	0.170	1.8905	
600 minute summer	17	1.015	18	78.6	2.790	0.095	0.2153	
600 minute summer	18	1.016	19	78.6	2.875	0.100	0.2726	
600 minute summer	19	1.017	20	83.8	3.174	0.100	0.4998	
600 minute summer	20	1.018	23	85.9	3.405	0.098	0.4479	
600 minute summer	21	3.000	22	-82.9	-0.263	-0.082	14.9645	
600 minute summer	22	3.001	23	-84.2	-0.204	-0.084	4.2379	
600 minute summer	23	1.019	24	9.0	1.943	0.073	0.3176	
600 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
600 minute summer	25	1.021	26	9.0	2.210	0.054	0.1909	

**Results for 100 year +30% CC 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.99%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
600 minute summer	26	285	105.582	0.036	9.0	0.0408	0.0000	OK
600 minute summer	27	285	103.819	0.037	9.0	0.0417	0.0000	OK
600 minute summer	28	285	99.371	0.071	9.0	0.1021	0.0000	OK
600 minute summer	S29	360	98.802	0.552	9.0	1.9127	0.0000	OK
600 minute summer	S30	360	98.802	0.652	8.6	1.6597	0.0000	SURCHARGED
600 minute summer	S31	300	97.544	0.054	8.3	0.1864	0.0000	OK
600 minute summer	S32	300	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
600 minute summer	26	1.022	27	9.0	2.161	0.054	0.0734	
600 minute summer	27	1.023	28	9.0	1.227	0.059	0.3923	
600 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0981	
600 minute summer	S29	1.025	S30	8.6	0.216	0.004	10.8522	
600 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
600 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	379.6

**Results for 100 year +30% CC 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 99.99%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
600 minute winter	1	300	139.064	0.014	0.7	0.0228	0.0000	OK
600 minute winter	2	300	138.295	0.019	1.5	0.0317	0.0000	OK
600 minute winter	3	300	137.348	0.017	1.5	0.0248	0.0000	OK
600 minute winter	4	315	134.721	0.071	8.9	0.2497	0.0000	OK
600 minute winter	5	315	134.328	0.084	14.4	0.1855	0.0000	OK
600 minute winter	6	315	134.210	0.088	15.1	0.1072	0.0000	OK
600 minute winter	7	315	134.070	0.055	17.7	0.1045	0.0000	OK
600 minute winter	8	315	133.288	0.051	20.8	0.1047	0.0000	OK
600 minute winter	9	315	130.549	0.062	27.9	0.1738	0.0000	OK
600 minute winter	10	315	128.522	0.075	32.2	0.1467	0.0000	OK
600 minute winter	11	315	126.547	0.074	38.4	0.1897	0.0000	OK
600 minute winter	12	315	125.582	0.066	41.1	0.1406	0.0000	OK
600 minute winter	13	315	124.227	0.152	43.6	0.3120	0.0000	OK
600 minute winter	14	315	124.118	0.168	51.2	0.4350	0.0000	OK
600 minute winter	15	315	124.001	0.160	52.0	0.2951	0.0000	OK
600 minute winter	16	315	123.905	0.115	58.6	0.2705	0.0000	OK
600 minute winter	17	315	122.786	0.090	60.2	0.1911	0.0000	OK
600 minute winter	18	315	122.288	0.091	60.2	0.1616	0.0000	OK
600 minute winter	19	315	121.696	0.087	64.2	0.2311	0.0000	OK
600 minute winter	20	315	120.435	0.088	65.8	0.1822	0.0000	OK
600 minute winter	21	585	118.877	0.977	62.1	719.8458	0.0000	SURCHARGED
600 minute winter	22	585	118.877	1.204	62.6	3.0633	0.0000	SURCHARGED
600 minute winter	23	585	118.877	1.318	71.6	5.2759	0.0000	SURCHARGED
600 minute winter	24	255	113.836	0.036	9.0	0.0514	0.0000	OK
600 minute winter	25	255	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
600 minute winter	1	1.000	2	0.7	0.660	0.018	0.0174	
600 minute winter	2	1.001	3	1.5	1.229	0.033	0.0179	
600 minute winter	3	1.002	5	1.5	1.343	0.027	0.0189	
600 minute winter	4	2.000	5	8.9	0.845	0.210	0.5233	
600 minute winter	5	1.003	6	14.4	0.867	0.159	0.3048	
600 minute winter	6	1.004	7	15.1	1.181	0.167	0.2082	
600 minute winter	7	1.005	8	17.7	2.108	0.067	0.1177	
600 minute winter	8	1.006	9	20.8	2.269	0.064	0.3031	
600 minute winter	9	1.007	10	27.9	2.587	0.091	0.2893	
600 minute winter	10	1.008	11	32.2	2.385	0.132	0.5384	
600 minute winter	11	1.009	12	38.4	2.701	0.076	0.2178	
600 minute winter	12	1.010	13	41.1	2.902	0.066	0.2112	
600 minute winter	13	1.011	14	43.6	0.865	0.235	1.8849	
600 minute winter	14	1.012	15	51.2	0.981	0.276	1.7033	
600 minute winter	15	1.013	16	52.0	1.269	0.280	0.6276	
600 minute winter	16	1.014	17	58.6	2.162	0.130	1.5472	
600 minute winter	17	1.015	18	60.2	2.640	0.073	0.1742	
600 minute winter	18	1.016	19	60.2	2.703	0.076	0.2222	
600 minute winter	19	1.017	20	64.2	2.972	0.077	0.4089	
600 minute winter	20	1.018	23	65.8	3.169	0.075	0.3684	
600 minute winter	21	3.000	22	-62.1	-0.206	-0.062	14.9645	
600 minute winter	22	3.001	23	-62.6	-0.142	-0.062	4.2379	
600 minute winter	23	1.019	24	9.0	1.944	0.073	0.3177	
600 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
600 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 100 year +30% CC 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 99.99%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
600 minute winter	26	255	105.582	0.036	9.0	0.0408	0.0000	OK
600 minute winter	27	255	103.819	0.037	9.0	0.0417	0.0000	OK
600 minute winter	28	255	99.371	0.071	9.0	0.1021	0.0000	OK
600 minute winter	S29	345	98.818	0.568	9.0	1.9669	0.0000	OK
600 minute winter	S30	345	98.818	0.668	8.6	1.6996	0.0000	SURCHARGED
600 minute winter	S31	285	97.544	0.054	8.3	0.1864	0.0000	OK
600 minute winter	S32	285	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
600 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
600 minute winter	27	1.023	28	9.0	1.227	0.059	0.3924	
600 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
600 minute winter	S29	1.025	S30	8.6	0.486	0.004	11.2311	
600 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
600 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3533	377.9

**Results for 100 year +30% CC 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 99.97%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
720 minute summer	1	375	139.065	0.015	0.8	0.0242	0.0000	OK
720 minute summer	2	375	138.297	0.020	1.7	0.0337	0.0000	OK
720 minute summer	3	375	137.349	0.018	1.7	0.0263	0.0000	OK
720 minute summer	4	375	134.726	0.076	10.3	0.2698	0.0000	OK
720 minute summer	5	375	134.335	0.091	16.7	0.2011	0.0000	OK
720 minute summer	6	375	134.217	0.095	17.5	0.1156	0.0000	OK
720 minute summer	7	375	134.074	0.059	20.5	0.1127	0.0000	OK
720 minute summer	8	375	133.292	0.055	24.1	0.1125	0.0000	OK
720 minute summer	9	375	130.553	0.066	32.3	0.1868	0.0000	OK
720 minute summer	10	375	128.528	0.081	37.3	0.1584	0.0000	OK
720 minute summer	11	375	126.553	0.080	44.5	0.2055	0.0000	OK
720 minute summer	12	375	125.586	0.070	47.6	0.1489	0.0000	OK
720 minute summer	13	375	124.240	0.165	50.5	0.3393	0.0000	OK
720 minute summer	14	375	124.132	0.182	59.3	0.4725	0.0000	OK
720 minute summer	15	375	124.014	0.173	60.2	0.3183	0.0000	OK
720 minute summer	16	375	123.914	0.124	67.8	0.2913	0.0000	OK
720 minute summer	17	375	122.794	0.098	69.7	0.2074	0.0000	OK
720 minute summer	18	375	122.295	0.099	69.7	0.1751	0.0000	OK
720 minute summer	19	375	121.703	0.094	74.4	0.2494	0.0000	OK
720 minute summer	20	375	120.442	0.095	76.2	0.1969	0.0000	OK
720 minute summer	21	675	118.725	0.825	72.4	588.9232	0.0000	SURCHARGED
720 minute summer	22	675	118.725	1.052	73.6	2.6765	0.0000	SURCHARGED
720 minute summer	23	675	118.725	1.166	82.9	4.6672	0.0000	SURCHARGED
720 minute summer	24	330	113.836	0.036	9.0	0.0514	0.0000	OK
720 minute summer	25	330	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
720 minute summer	1	1.000	2	0.8	0.687	0.021	0.0191	
720 minute summer	2	1.001	3	1.7	1.277	0.037	0.0195	
720 minute summer	3	1.002	5	1.7	1.394	0.031	0.0206	
720 minute summer	4	2.000	5	10.3	0.880	0.243	0.5820	
720 minute summer	5	1.003	6	16.7	0.902	0.184	0.3398	
720 minute summer	6	1.004	7	17.5	1.229	0.193	0.2314	
720 minute summer	7	1.005	8	20.5	2.194	0.078	0.1308	
720 minute summer	8	1.006	9	24.1	2.373	0.075	0.3359	
720 minute summer	9	1.007	10	32.3	2.672	0.105	0.3241	
720 minute summer	10	1.008	11	37.3	2.485	0.153	0.5986	
720 minute summer	11	1.009	12	44.5	2.834	0.089	0.2409	
720 minute summer	12	1.010	13	47.6	2.904	0.077	0.2492	
720 minute summer	13	1.011	14	50.5	0.895	0.272	2.1097	
720 minute summer	14	1.012	15	59.3	1.021	0.319	1.8954	
720 minute summer	15	1.013	16	60.2	1.324	0.324	0.6958	
720 minute summer	16	1.014	17	67.8	2.242	0.151	1.7261	
720 minute summer	17	1.015	18	69.7	2.724	0.084	0.1955	
720 minute summer	18	1.016	19	69.7	2.797	0.089	0.2485	
720 minute summer	19	1.017	20	74.4	3.083	0.089	0.4567	
720 minute summer	20	1.018	23	76.2	3.298	0.087	0.4101	
720 minute summer	21	3.000	22	-72.4	-0.233	-0.072	14.9645	
720 minute summer	22	3.001	23	-73.6	-0.180	-0.073	4.2379	
720 minute summer	23	1.019	24	9.0	1.944	0.073	0.3177	
720 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
720 minute summer	25	1.021	26	9.0	2.210	0.054	0.1909	

**Results for 100 year +30% CC 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 99.97%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
720 minute summer	26	330	105.582	0.036	9.0	0.0408	0.0000	OK
720 minute summer	27	330	103.819	0.037	9.0	0.0417	0.0000	OK
720 minute summer	28	345	99.371	0.071	9.0	0.1021	0.0000	OK
720 minute summer	S29	420	98.831	0.581	9.0	2.0125	0.0000	OK
720 minute summer	S30	420	98.831	0.681	8.6	1.7331	0.0000	SURCHARGED
720 minute summer	S31	345	97.544	0.054	8.3	0.1864	0.0000	OK
720 minute summer	S32	345	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
720 minute summer	26	1.022	27	9.0	2.161	0.054	0.0734	
720 minute summer	27	1.023	28	9.0	1.227	0.059	0.3922	
720 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0980	
720 minute summer	S29	1.025	S30	8.6	0.236	0.004	11.5492	
720 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
720 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	437.3

**Results for 100 year +30% CC 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
720 minute winter	1	345	139.063	0.013	0.6	0.0212	0.0000	OK
720 minute winter	2	360	138.294	0.018	1.3	0.0296	0.0000	OK
720 minute winter	3	360	137.347	0.016	1.3	0.0232	0.0000	OK
720 minute winter	4	375	134.716	0.066	7.8	0.2329	0.0000	OK
720 minute winter	5	375	134.322	0.078	12.6	0.1726	0.0000	OK
720 minute winter	6	375	134.204	0.082	13.2	0.1001	0.0000	OK
720 minute winter	7	375	134.066	0.051	15.5	0.0977	0.0000	OK
720 minute winter	8	375	133.285	0.048	18.2	0.0981	0.0000	OK
720 minute winter	9	375	130.545	0.058	24.4	0.1630	0.0000	OK
720 minute winter	10	375	128.517	0.070	28.1	0.1368	0.0000	OK
720 minute winter	11	375	126.542	0.069	33.5	0.1762	0.0000	OK
720 minute winter	12	375	125.579	0.063	35.9	0.1336	0.0000	OK
720 minute winter	13	375	124.216	0.141	38.1	0.2894	0.0000	OK
720 minute winter	14	375	124.106	0.156	44.7	0.4036	0.0000	OK
720 minute winter	15	375	123.991	0.150	45.4	0.2754	0.0000	OK
720 minute winter	16	375	123.897	0.107	51.1	0.2524	0.0000	OK
720 minute winter	17	375	122.780	0.084	52.5	0.1773	0.0000	OK
720 minute winter	18	375	122.281	0.085	52.5	0.1501	0.0000	OK
720 minute winter	19	375	121.690	0.081	56.0	0.2154	0.0000	OK
720 minute winter	20	375	120.429	0.082	57.4	0.1698	0.0000	OK
720 minute winter	21	705	118.869	0.969	53.0	713.2128	0.0000	SURCHARGED
720 minute winter	22	705	118.869	1.196	53.5	3.0441	0.0000	SURCHARGED
720 minute winter	23	705	118.869	1.310	62.5	5.2457	0.0000	SURCHARGED
720 minute winter	24	300	113.836	0.036	9.0	0.0514	0.0000	OK
720 minute winter	25	300	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
720 minute winter	1	1.000	2	0.6	0.645	0.015	0.0157	
720 minute winter	2	1.001	3	1.3	1.179	0.029	0.0162	
720 minute winter	3	1.002	5	1.3	1.287	0.024	0.0171	
720 minute winter	4	2.000	5	7.8	0.815	0.184	0.4756	
720 minute winter	5	1.003	6	12.6	0.837	0.139	0.2763	
720 minute winter	6	1.004	7	13.2	1.137	0.146	0.1891	
720 minute winter	7	1.005	8	15.5	2.030	0.059	0.1069	
720 minute winter	8	1.006	9	18.2	2.183	0.056	0.2761	
720 minute winter	9	1.007	10	24.4	2.513	0.079	0.2605	
720 minute winter	10	1.008	11	28.1	2.296	0.115	0.4880	
720 minute winter	11	1.009	12	33.5	2.583	0.067	0.1989	
720 minute winter	12	1.010	13	35.9	2.902	0.058	0.1812	
720 minute winter	13	1.011	14	38.1	0.837	0.205	1.7007	
720 minute winter	14	1.012	15	44.7	0.945	0.241	1.5436	
720 minute winter	15	1.013	16	45.4	1.220	0.244	0.5701	
720 minute winter	16	1.014	17	51.1	2.088	0.114	1.3972	
720 minute winter	17	1.015	18	52.5	2.562	0.063	0.1566	
720 minute winter	18	1.016	19	52.5	2.613	0.067	0.2003	
720 minute winter	19	1.017	20	56.0	2.868	0.067	0.3695	
720 minute winter	20	1.018	23	57.4	3.055	0.066	0.3337	
720 minute winter	21	3.000	22	-53.0	-0.184	-0.053	14.9645	
720 minute winter	22	3.001	23	-53.5	-0.122	-0.053	4.2379	
720 minute winter	23	1.019	24	9.0	1.944	0.073	0.3177	
720 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
720 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 100 year +30% CC 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
720 minute winter	26	300	105.582	0.036	9.0	0.0408	0.0000	OK
720 minute winter	27	300	103.819	0.037	9.0	0.0417	0.0000	OK
720 minute winter	28	300	99.371	0.071	9.0	0.1021	0.0000	OK
720 minute winter	S29	420	98.868	0.618	9.0	2.1394	0.0000	OK
720 minute winter	S30	420	98.868	0.718	8.6	1.8263	0.0000	SURCHARGED
720 minute winter	S31	495	97.544	0.054	8.3	0.1864	0.0000	OK
720 minute winter	S32	495	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
720 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
720 minute winter	27	1.023	28	9.0	1.227	0.059	0.3923	
720 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
720 minute winter	S29	1.025	S30	8.6	0.399	0.004	12.4352	
720 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
720 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	433.8

**Results for 100 year +30% CC 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 99.92%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
960 minute summer	1	495	139.064	0.014	0.7	0.0228	0.0000	OK
960 minute summer	2	495	138.295	0.019	1.5	0.0317	0.0000	OK
960 minute summer	3	495	137.348	0.017	1.5	0.0248	0.0000	OK
960 minute summer	4	495	134.719	0.069	8.4	0.2422	0.0000	OK
960 minute summer	5	495	134.326	0.082	13.7	0.1805	0.0000	OK
960 minute summer	6	495	134.208	0.086	14.4	0.1046	0.0000	OK
960 minute summer	7	495	134.069	0.054	16.9	0.1021	0.0000	OK
960 minute summer	8	495	133.287	0.050	19.9	0.1025	0.0000	OK
960 minute summer	9	495	130.547	0.060	26.6	0.1698	0.0000	OK
960 minute summer	10	495	128.520	0.073	30.7	0.1432	0.0000	OK
960 minute summer	11	495	126.545	0.072	36.6	0.1848	0.0000	OK
960 minute summer	12	495	125.581	0.065	39.2	0.1381	0.0000	OK
960 minute summer	13	495	124.223	0.148	41.6	0.3039	0.0000	OK
960 minute summer	14	495	124.113	0.163	48.8	0.4236	0.0000	OK
960 minute summer	15	495	123.998	0.156	49.6	0.2881	0.0000	OK
960 minute summer	16	495	123.902	0.112	55.8	0.2639	0.0000	OK
960 minute summer	17	495	122.784	0.088	57.3	0.1860	0.0000	OK
960 minute summer	18	495	122.285	0.089	57.3	0.1573	0.0000	OK
960 minute summer	19	495	121.694	0.085	61.1	0.2252	0.0000	OK
960 minute summer	20	495	120.432	0.085	62.6	0.1775	0.0000	OK
960 minute summer	21	825	118.695	0.795	57.7	564.4774	0.0000	SURCHARGED
960 minute summer	22	825	118.695	1.022	58.8	2.6020	0.0000	SURCHARGED
960 minute summer	23	825	118.695	1.136	68.1	4.5501	0.0000	SURCHARGED
960 minute summer	24	450	113.836	0.036	9.0	0.0514	0.0000	OK
960 minute summer	25	450	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
960 minute summer	1	1.000	2	0.7	0.660	0.018	0.0174	
960 minute summer	2	1.001	3	1.5	1.229	0.033	0.0179	
960 minute summer	3	1.002	5	1.5	1.343	0.027	0.0189	
960 minute summer	4	2.000	5	8.4	0.832	0.198	0.5018	
960 minute summer	5	1.003	6	13.7	0.855	0.151	0.2941	
960 minute summer	6	1.004	7	14.4	1.165	0.159	0.2012	
960 minute summer	7	1.005	8	16.9	2.079	0.064	0.1138	
960 minute summer	8	1.006	9	19.9	2.243	0.062	0.2934	
960 minute summer	9	1.007	10	26.6	2.559	0.087	0.2788	
960 minute summer	10	1.008	11	30.7	2.354	0.126	0.5202	
960 minute summer	11	1.009	12	36.6	2.659	0.073	0.2109	
960 minute summer	12	1.010	13	39.2	2.880	0.063	0.2003	
960 minute summer	13	1.011	14	41.6	0.855	0.224	1.8180	
960 minute summer	14	1.012	15	48.8	0.968	0.263	1.6454	
960 minute summer	15	1.013	16	49.6	1.252	0.267	0.6067	
960 minute summer	16	1.014	17	55.8	2.137	0.124	1.4917	
960 minute summer	17	1.015	18	57.3	2.613	0.069	0.1676	
960 minute summer	18	1.016	19	57.3	2.670	0.073	0.2140	
960 minute summer	19	1.017	20	61.1	2.934	0.073	0.3942	
960 minute summer	20	1.018	23	62.6	3.126	0.072	0.3553	
960 minute summer	21	3.000	22	-57.7	-0.198	-0.057	14.9645	
960 minute summer	22	3.001	23	-58.8	-0.145	-0.058	4.2379	
960 minute summer	23	1.019	24	9.0	1.944	0.073	0.3177	
960 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
960 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 100 year +30% CC 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 99.92%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
960 minute summer	26	450	105.582	0.036	9.0	0.0408	0.0000	OK
960 minute summer	27	450	103.819	0.037	9.0	0.0417	0.0000	OK
960 minute summer	28	450	99.371	0.071	9.0	0.1021	0.0000	OK
960 minute summer	S29	570	98.860	0.610	9.0	2.1121	0.0000	OK
960 minute summer	S30	570	98.860	0.710	8.6	1.8062	0.0000	SURCHARGED
960 minute summer	S31	675	97.544	0.054	8.3	0.1864	0.0000	OK
960 minute summer	S32	675	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
960 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
960 minute summer	27	1.023	28	9.0	1.227	0.059	0.3924	
960 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0981	
960 minute summer	S29	1.025	S30	8.6	0.300	0.004	12.2450	
960 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
960 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3533	543.3

**Results for 100 year +30% CC 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 99.99%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
960 minute winter	1	465	139.062	0.012	0.5	0.0194	0.0000	OK
960 minute winter	2	480	138.293	0.017	1.1	0.0274	0.0000	OK
960 minute winter	3	480	137.346	0.015	1.1	0.0214	0.0000	OK
960 minute winter	4	495	134.709	0.059	6.2	0.2069	0.0000	OK
960 minute winter	5	495	134.314	0.070	10.1	0.1535	0.0000	OK
960 minute winter	6	495	134.195	0.073	10.6	0.0897	0.0000	OK
960 minute winter	7	495	134.061	0.046	12.4	0.0872	0.0000	OK
960 minute winter	8	495	133.280	0.043	14.6	0.0882	0.0000	OK
960 minute winter	9	495	130.539	0.052	19.6	0.1468	0.0000	OK
960 minute winter	10	495	128.510	0.063	22.6	0.1224	0.0000	OK
960 minute winter	11	495	126.534	0.061	26.9	0.1570	0.0000	OK
960 minute winter	12	495	125.573	0.057	28.8	0.1214	0.0000	OK
960 minute winter	13	495	124.200	0.125	30.6	0.2565	0.0000	OK
960 minute winter	14	495	124.088	0.138	35.9	0.3583	0.0000	OK
960 minute winter	15	495	123.975	0.134	36.5	0.2466	0.0000	OK
960 minute winter	16	495	123.886	0.096	41.1	0.2263	0.0000	OK
960 minute winter	17	495	122.770	0.074	42.2	0.1575	0.0000	OK
960 minute winter	18	495	122.272	0.076	42.2	0.1336	0.0000	OK
960 minute winter	19	495	121.682	0.073	45.0	0.1927	0.0000	OK
960 minute winter	20	495	120.420	0.073	46.1	0.1515	0.0000	OK
960 minute winter	21	900	118.836	0.936	40.7	684.1123	0.0000	SURCHARGED
960 minute winter	22	900	118.836	1.163	41.2	2.9598	0.0000	SURCHARGED
960 minute winter	23	900	118.836	1.277	50.2	5.1131	0.0000	SURCHARGED
960 minute winter	24	420	113.836	0.036	9.0	0.0514	0.0000	OK
960 minute winter	25	420	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
960 minute winter	1	1.000	2	0.5	0.612	0.013	0.0139	
960 minute winter	2	1.001	3	1.1	1.122	0.024	0.0144	
960 minute winter	3	1.002	5	1.1	1.224	0.020	0.0152	
960 minute winter	4	2.000	5	6.2	0.764	0.146	0.4033	
960 minute winter	5	1.003	6	10.1	0.788	0.112	0.2354	
960 minute winter	6	1.004	7	10.6	1.070	0.117	0.1613	
960 minute winter	7	1.005	8	12.4	1.907	0.047	0.0910	
960 minute winter	8	1.006	9	14.6	2.041	0.045	0.2370	
960 minute winter	9	1.007	10	19.6	2.392	0.064	0.2197	
960 minute winter	10	1.008	11	22.6	2.159	0.093	0.4174	
960 minute winter	11	1.009	12	26.9	2.416	0.054	0.1706	
960 minute winter	12	1.010	13	28.8	2.822	0.047	0.1471	
960 minute winter	13	1.011	14	30.6	0.794	0.165	1.4404	
960 minute winter	14	1.012	15	35.9	0.890	0.193	1.3170	
960 minute winter	15	1.013	16	36.5	1.144	0.196	0.4888	
960 minute winter	16	1.014	17	41.1	1.975	0.092	1.1886	
960 minute winter	17	1.015	18	42.2	2.439	0.051	0.1322	
960 minute winter	18	1.016	19	42.2	2.477	0.054	0.1699	
960 minute winter	19	1.017	20	45.0	2.712	0.054	0.3140	
960 minute winter	20	1.018	23	46.1	2.877	0.053	0.2843	
960 minute winter	21	3.000	22	-40.7	-0.160	-0.040	14.9645	
960 minute winter	22	3.001	23	-41.2	-0.098	-0.041	4.2379	
960 minute winter	23	1.019	24	9.0	1.944	0.073	0.3177	
960 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
960 minute winter	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 100 year +30% CC 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 99.99%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
960 minute winter	26	420	105.582	0.036	9.0	0.0408	0.0000	OK
960 minute winter	27	420	103.819	0.037	9.0	0.0417	0.0000	OK
960 minute winter	28	420	99.371	0.071	9.0	0.1021	0.0000	OK
960 minute winter	S29	570	98.960	0.710	9.0	2.4606	0.0000	OK
960 minute winter	S30	570	98.960	0.810	8.6	2.0623	0.0000	SURCHARGED
960 minute winter	S31	390	97.544	0.054	8.3	0.1864	0.0000	OK
960 minute winter	S32	390	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
960 minute winter	26	1.022	27	9.0	2.161	0.054	0.0735	
960 minute winter	27	1.023	28	9.0	1.227	0.059	0.3924	
960 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
960 minute winter	S29	1.025	S30	8.6	0.190	0.004	14.6520	
960 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
960 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3534	541.6

**Results for 100 year +30% CC 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 99.84%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
1440 minute summer	1	750	139.062	0.012	0.5	0.0194	0.0000	OK
1440 minute summer	2	750	138.293	0.017	1.1	0.0274	0.0000	OK
1440 minute summer	3	750	137.346	0.015	1.1	0.0214	0.0000	OK
1440 minute summer	4	750	134.708	0.058	6.0	0.2034	0.0000	OK
1440 minute summer	5	750	134.312	0.068	9.8	0.1511	0.0000	OK
1440 minute summer	6	750	134.194	0.072	10.3	0.0884	0.0000	OK
1440 minute summer	7	750	134.060	0.045	12.1	0.0861	0.0000	OK
1440 minute summer	8	750	133.280	0.043	14.2	0.0870	0.0000	OK
1440 minute summer	9	750	130.538	0.051	19.0	0.1446	0.0000	OK
1440 minute summer	10	750	128.509	0.062	21.9	0.1205	0.0000	OK
1440 minute summer	11	750	126.534	0.061	26.1	0.1547	0.0000	OK
1440 minute summer	12	750	125.572	0.056	27.9	0.1195	0.0000	OK
1440 minute summer	13	750	124.198	0.123	29.6	0.2518	0.0000	OK
1440 minute summer	14	750	124.086	0.136	34.8	0.3523	0.0000	OK
1440 minute summer	15	750	123.973	0.132	35.4	0.2428	0.0000	OK
1440 minute summer	16	750	123.885	0.095	39.9	0.2229	0.0000	OK
1440 minute summer	17	750	122.769	0.073	41.0	0.1551	0.0000	OK
1440 minute summer	18	750	122.271	0.074	41.0	0.1316	0.0000	OK
1440 minute summer	19	750	121.681	0.072	43.7	0.1898	0.0000	OK
1440 minute summer	20	750	120.419	0.072	44.8	0.1493	0.0000	OK
1440 minute summer	21	1080	118.643	0.743	38.8	521.7425	0.0000	OK
1440 minute summer	22	1080	118.644	0.971	39.5	2.4699	0.0000	SURCHARGED
1440 minute summer	23	1080	118.644	1.085	48.7	4.3424	0.0000	SURCHARGED
1440 minute summer	24	690	113.836	0.036	9.0	0.0514	0.0000	OK
1440 minute summer	25	690	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
1440 minute summer	1	1.000	2	0.5	0.588	0.013	0.0139	
1440 minute summer	2	1.001	3	1.1	1.122	0.024	0.0144	
1440 minute summer	3	1.002	5	1.1	1.224	0.020	0.0152	
1440 minute summer	4	2.000	5	6.0	0.757	0.142	0.3940	
1440 minute summer	5	1.003	6	9.8	0.781	0.108	0.2304	
1440 minute summer	6	1.004	7	10.3	1.060	0.114	0.1582	
1440 minute summer	7	1.005	8	12.1	1.895	0.046	0.0894	
1440 minute summer	8	1.006	9	14.2	2.025	0.044	0.2322	
1440 minute summer	9	1.007	10	19.0	2.376	0.062	0.2145	
1440 minute summer	10	1.008	11	21.9	2.140	0.090	0.4081	
1440 minute summer	11	1.009	12	26.1	2.399	0.052	0.1668	
1440 minute summer	12	1.010	13	27.9	2.796	0.045	0.1438	
1440 minute summer	13	1.011	14	29.6	0.787	0.159	1.4060	
1440 minute summer	14	1.012	15	34.8	0.882	0.187	1.2880	
1440 minute summer	15	1.013	16	35.4	1.134	0.191	0.4785	
1440 minute summer	16	1.014	17	39.9	1.960	0.089	1.1632	
1440 minute summer	17	1.015	18	41.0	2.423	0.049	0.1293	
1440 minute summer	18	1.016	19	41.0	2.459	0.052	0.1662	
1440 minute summer	19	1.017	20	43.7	2.691	0.052	0.3073	
1440 minute summer	20	1.018	23	44.8	2.856	0.051	0.2785	
1440 minute summer	21	3.000	22	-38.8	-0.153	-0.038	14.9549	
1440 minute summer	22	3.001	23	-39.5	-0.104	-0.039	4.2379	
1440 minute summer	23	1.019	24	9.0	1.944	0.073	0.3177	
1440 minute summer	24	1.020	25	9.0	2.217	0.054	0.1446	
1440 minute summer	25	1.021	26	9.0	2.211	0.054	0.1909	

**Results for 100 year +30% CC 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 99.84%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
1440 minute summer	26	690	105.582	0.036	9.0	0.0408	0.0000	OK
1440 minute summer	27	690	103.819	0.037	9.0	0.0417	0.0000	OK
1440 minute summer	28	690	99.371	0.071	9.0	0.1021	0.0000	OK
1440 minute summer	S29	900	98.949	0.699	9.0	2.4208	0.0000	OK
1440 minute summer	S30	900	98.949	0.799	8.6	2.0330	0.0000	SURCHARGED
1440 minute summer	S31	1680	97.544	0.054	8.3	0.1864	0.0000	OK
1440 minute summer	S32	1680	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
1440 minute summer	26	1.022	27	9.0	2.161	0.054	0.0735	
1440 minute summer	27	1.023	28	9.0	1.227	0.059	0.3924	
1440 minute summer	28	1.024	S29	9.0	0.871	0.195	0.0981	
1440 minute summer	S29	1.025	S30	8.6	0.157	0.004	14.3799	
1440 minute summer	S30	1.026	S31	8.3	0.985	0.429	0.0428	
1440 minute summer	S31	1.027	S32	8.3	0.615	0.010	0.3534	735.6

**Results for 100 year +30% CC 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 99.85%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
1440 minute winter	1	750	139.061	0.011	0.4	0.0176	0.0000	OK
1440 minute winter	2	750	138.290	0.014	0.8	0.0235	0.0000	OK
1440 minute winter	3	750	137.344	0.013	0.8	0.0184	0.0000	OK
1440 minute winter	4	750	134.700	0.050	4.6	0.1777	0.0000	OK
1440 minute winter	5	750	134.304	0.060	7.5	0.1315	0.0000	OK
1440 minute winter	6	750	134.185	0.063	7.9	0.0775	0.0000	OK
1440 minute winter	7	750	134.055	0.040	9.2	0.0752	0.0000	OK
1440 minute winter	8	750	133.274	0.037	10.8	0.0764	0.0000	OK
1440 minute winter	9	750	130.532	0.045	14.4	0.1266	0.0000	OK
1440 minute winter	10	750	128.501	0.054	16.6	0.1050	0.0000	OK
1440 minute winter	11	750	126.526	0.053	19.8	0.1346	0.0000	OK
1440 minute winter	12	750	125.565	0.049	21.2	0.1041	0.0000	OK
1440 minute winter	13	750	124.181	0.106	22.5	0.2176	0.0000	OK
1440 minute winter	14	750	124.067	0.117	26.4	0.3042	0.0000	OK
1440 minute winter	15	750	123.956	0.115	26.8	0.2115	0.0000	OK
1440 minute winter	16	750	123.873	0.083	30.2	0.1945	0.0000	OK
1440 minute winter	17	750	122.759	0.063	31.0	0.1338	0.0000	OK
1440 minute winter	18	750	122.260	0.064	31.0	0.1136	0.0000	OK
1440 minute winter	19	750	121.671	0.062	33.1	0.1651	0.0000	OK
1440 minute winter	20	750	120.409	0.062	33.9	0.1296	0.0000	OK
1440 minute winter	21	1170	118.769	0.869	27.5	626.4343	0.0000	SURCHARGED
1440 minute winter	22	1170	118.769	1.096	27.9	2.7895	0.0000	SURCHARGED
1440 minute winter	23	1170	118.769	1.210	36.9	4.8451	0.0000	SURCHARGED
1440 minute winter	24	660	113.836	0.036	9.0	0.0514	0.0000	OK
1440 minute winter	25	660	110.273	0.036	9.0	0.0405	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
1440 minute winter	1	1.000	2	0.4	0.572	0.010	0.0114	
1440 minute winter	2	1.001	3	0.8	1.022	0.018	0.0115	
1440 minute winter	3	1.002	5	0.8	1.114	0.015	0.0121	
1440 minute winter	4	2.000	5	4.6	0.702	0.109	0.3256	
1440 minute winter	5	1.003	6	7.5	0.725	0.083	0.1900	
1440 minute winter	6	1.004	7	7.9	0.986	0.087	0.1307	
1440 minute winter	7	1.005	8	9.2	1.751	0.035	0.0735	
1440 minute winter	8	1.006	9	10.8	1.865	0.033	0.1916	
1440 minute winter	9	1.007	10	14.4	2.225	0.047	0.1736	
1440 minute winter	10	1.008	11	16.6	1.974	0.068	0.3353	
1440 minute winter	11	1.009	12	19.8	2.226	0.039	0.1363	
1440 minute winter	12	1.010	13	21.2	2.587	0.034	0.1181	
1440 minute winter	13	1.011	14	22.5	0.735	0.121	1.1442	
1440 minute winter	14	1.012	15	26.4	0.817	0.142	1.0548	
1440 minute winter	15	1.013	16	26.8	1.044	0.144	0.3938	
1440 minute winter	16	1.014	17	30.2	1.820	0.067	0.9487	
1440 minute winter	17	1.015	18	31.0	2.269	0.037	0.1044	
1440 minute winter	18	1.016	19	31.0	2.289	0.039	0.1350	
1440 minute winter	19	1.017	20	33.1	2.501	0.039	0.2506	
1440 minute winter	20	1.018	23	33.9	2.640	0.039	0.2279	
1440 minute winter	21	3.000	22	-27.5	-0.124	-0.027	14.9645	
1440 minute winter	22	3.001	23	-27.9	-0.070	-0.028	4.2379	
1440 minute winter	23	1.019	24	9.0	1.944	0.073	0.3177	
1440 minute winter	24	1.020	25	9.0	2.217	0.054	0.1446	
1440 minute winter	25	1.021	26	9.0	2.210	0.054	0.1909	

**Results for 100 year +30% CC 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 99.85%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
1440 minute winter	26	660	105.582	0.036	9.0	0.0408	0.0000	OK
1440 minute winter	27	660	103.819	0.037	9.0	0.0417	0.0000	OK
1440 minute winter	28	660	99.371	0.071	9.0	0.1021	0.0000	OK
1440 minute winter	S29	930	99.157	0.907	9.0	3.1403	0.0000	OK
1440 minute winter	S30	930	99.157	1.007	8.6	2.5617	0.0000	SURCHARGED
1440 minute winter	S31	600	97.544	0.054	8.3	0.1864	0.0000	OK
1440 minute winter	S32	600	97.427	0.051	8.3	0.0000	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
1440 minute winter	26	1.022	27	9.0	2.161	0.054	0.0734	
1440 minute winter	27	1.023	28	9.0	1.227	0.059	0.3923	
1440 minute winter	28	1.024	S29	9.0	0.871	0.195	0.0981	
1440 minute winter	S29	1.025	S30	8.6	0.227	0.004	18.9982	
1440 minute winter	S30	1.026	S31	8.3	0.985	0.429	0.0428	
1440 minute winter	S31	1.027	S32	8.3	0.615	0.010	0.3533	730.8