

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	100	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	40	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Inverts
M5-60 (mm)	20.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.400	Preferred Cover Depth (m)	0.500
CV	1.000	Include Intermediate Ground	x
Time of Entry (mins)	1.00	Enforce best practice design rules	x

Adoptable Manhole Type

Max Width (mm)	Diameter (mm)	Max Width (mm)	Diameter (mm)
374	1200	749	1500
499	1350	900	1800

>900 Link+900 mm

Max Depth (m)	Diameter (mm)	Max Depth (m)	Diameter (mm)
1.500	1050	99.999	1200

Circular Default Sewer Type Link Type

Shape	Circular	Auto Increment (mm)	75
Barrels	1	Follow Ground	x

Available Diameters (mm)

100 | 150

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
1	0.062	1.00	47.725	600	0.000	0.000	1.475
2	0.051	1.00	47.500	450	1.410	-12.050	1.350
3	0.055	1.00	46.600	450	19.480	0.910	1.300
4	0.000	1.00	46.600	450	12.860	16.020	0.730
5	0.000	1.00	46.600	450	39.140	13.190	1.170
6	0.000		46.600	450	40.230	8.420	1.250
9	0.040	1.00	45.250	450	49.340	-14.410	2.000
7	0.015	1.00	46.000	450	43.280	6.470	2.443
8	0.000	1.00	45.500	1200	46.620	-10.510	2.000
10	0.000	1.00	44.500	450	61.390	-11.530	1.750
11	0.005	1.00	45.500		48.000	0.300	1.950
12	0.009	1.00	43.100	450	97.390	-29.300	1.250
13	0.026	1.00	42.750	450	93.970	-38.420	2.270
15	0.026	1.00	42.500	450	76.900	-66.100	2.020
16	0.005	1.00	42.600	450	71.010	-62.600	0.810
17	0.005	1.00	42.800	450	57.600	-54.800	0.790
19	0.000	1.00	42.400	600	109.600	-45.200	2.000
20	0.000	1.00	42.400	1800	110.900	-42.860	2.100
21	0.026	1.00	42.000	450	93.980	-72.380	1.000
22	0.010	1.00	42.200	450	91.660	-76.380	1.050
23	0.019	1.00	41.800	450	109.000	-86.500	0.580
24	0.085	1.00	42.000	450	143.660	-86.140	0.650

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
25	0.025	1.00	42.100	450	110.800	-60.060	0.600
26	0.019	1.00	42.100	1200	101.400	-76.460	1.100
27	0.000	1.00	41.200	1200	94.600	-71.310	0.720

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	12.132	0.600	46.250	46.150	0.100	121.3	150	1.22	50.0
1.001	2	9	47.988	0.600	46.150	43.350	2.800	17.1	225	1.47	50.0
1.002	3	9	33.561	0.600	45.300	43.350	1.950	17.2	150	1.23	50.0
1.003	4	5	26.432	0.600	45.870	45.430	0.440	60.1	150	1.34	50.0
1.004	5	6	4.893	0.600	45.430	45.350	0.080	61.2	150	1.40	50.0
1.005	6	7	3.620	0.600	45.350	43.600	1.750	2.1	225	1.41	50.0
1.006	8	9	4.755	0.600	43.500	43.250	0.250	19.0	225	1.23	50.0
1.007	9	10	12.389	0.600	43.250	42.750	0.500	24.8	225	1.55	50.0
1.008	11	8	10.898	0.600	43.550	43.500	0.050	218.0	225	1.21	50.0
1.009	10	12	40.147	0.600	42.750	41.850	0.900	44.6	225	1.89	50.0
1.010	12	13	9.740	0.600	41.850	41.750	0.100	97.4	225	2.02	50.0
1.011	16	15	6.851	0.600	41.790	41.730	0.060	114.2	150	1.34	50.0
1.012	17	16	15.513	0.600	42.010	41.790	0.220	70.5	150	1.22	50.0
1.014	19	20	2.677	0.600	40.400	40.300	0.100	26.8	150	1.02	50.0
1.015	22	21	4.624	0.600	41.150	41.000	0.150	30.8	150	1.04	50.0
1.016	23	26	12.592	0.600	41.220	41.000	0.220	57.2	225	1.62	50.0
1.017	24	23	34.662	0.600	41.350	41.220	0.130	266.6	500	1.50	50.0
1.018	25	26	18.903	0.600	41.500	41.090	0.410	46.1	150	1.21	50.0
1.019	26	21	8.468	0.600	41.090	41.000	0.090	94.1	225	1.73	50.0
1.020	21	27	1.237	0.600	41.000	40.900	0.100	12.4	225	1.73	50.0

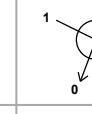
Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.000	0.911	16.1	15.7	1.325	1.200	0.062	0.0	120	1.035
1.001	3.176	126.3	28.6	1.125	1.675	0.113	0.0	73	2.581
1.002	2.439	43.1	13.9	1.150	1.750	0.055	0.0	58	2.175
1.003	1.300	23.0	0.0	0.580	1.020	0.000	0.0	0	0.000
1.004	1.288	22.8	0.0	1.020	1.100	0.000	0.0	0	0.000
1.005	9.166	364.4	0.0	1.025	2.175	0.000	0.0	0	0.000
1.006	3.014	119.8	1.3	1.775	1.775	0.005	0.0	16	0.990
1.007	2.639	104.9	53.9	1.775	1.525	0.213	0.0	115	2.660
1.008	0.881	35.0	1.3	1.725	1.775	0.005	0.0	29	0.420
1.009	1.963	78.1	53.9	1.525	1.025	0.213	0.0	138	2.113
1.010	1.325	52.7	56.2	1.025	0.775	0.222	0.0	205	1.476
1.011	0.939	16.6	2.5	0.660	0.620	0.010	0.0	40	0.680
1.012	1.199	21.2	1.3	0.640	0.660	0.005	0.0	25	0.659
1.014	1.953	34.5	0.0	1.850	1.950	0.000	0.0	0	0.000
1.015	1.819	32.2	2.5	0.900	0.850	0.010	0.0	28	1.088
1.016	1.732	68.9	26.3	0.355	0.875	0.104	0.0	96	1.618
1.017	1.325	260.2	21.5	0.150	0.080	0.085	0.0	96	0.814
1.018	1.485	26.3	6.3	0.450	0.860	0.025	0.0	50	1.226
1.019	1.348	53.6	37.4	0.785	0.775	0.148	0.0	138	1.454
1.020	3.741	148.7	46.5	0.775	0.075	0.184	0.0	87	3.325

Pipeline Schedule

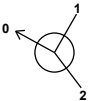
Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.000	12.132	121.3	150	Circular_Default Sewer Type	47.725	46.250	1.325	47.500	46.150	1.200
1.001	47.988	17.1	225	Circular_Default Sewer Type	47.500	46.150	1.125	45.250	43.350	1.675
1.002	33.561	17.2	150	Circular_Default Sewer Type	46.600	45.300	1.150	45.250	43.350	1.750
1.003	26.432	60.1	150	Circular_Default Sewer Type	46.600	45.870	0.580	46.600	45.430	1.020
1.004	4.893	61.2	150	Circular_Default Sewer Type	46.600	45.430	1.020	46.600	45.350	1.100
1.005	3.620	2.1	225	Circular_Default Sewer Type	46.600	45.350	1.025	46.000	43.600	2.175
1.006	4.755	19.0	225	Circular_Default Sewer Type	45.500	43.500	1.775	45.250	43.250	1.775
1.007	12.389	24.8	225	Circular_Default Sewer Type	45.250	43.250	1.775	44.500	42.750	1.525
1.008	10.898	218.0	225	Circular_Default Sewer Type	45.500	43.550	1.725	45.500	43.500	1.775
1.009	40.147	44.6	225	Circular_Default Sewer Type	44.500	42.750	1.525	43.100	41.850	1.025
1.010	9.740	97.4	225	Circular_Default Sewer Type	43.100	41.850	1.025	42.750	41.750	0.775
1.011	6.851	114.2	150	Circular_Default Sewer Type	42.600	41.790	0.660	42.500	41.730	0.620
1.012	15.513	70.5	150	Circular_Default Sewer Type	42.800	42.010	0.640	42.600	41.790	0.660
1.014	2.677	26.8	150	Circular_Default Sewer Type	42.400	40.400	1.850	42.400	40.300	1.950
1.015	4.624	30.8	150	Circular_Default Sewer Type	42.200	41.150	0.900	42.000	41.000	0.850
1.016	12.592	57.2	225	Circular_Default Sewer Type	41.800	41.220	0.355	42.100	41.000	0.875
1.017	34.662	266.6	500	Circular_Default Sewer Type	42.000	41.350	0.150	41.800	41.220	0.080
1.018	18.903	46.1	150	Circular_Default Sewer Type	42.100	41.500	0.450	42.100	41.090	0.860
1.019	8.468	94.1	225	Circular_Default Sewer Type	42.100	41.090	0.785	42.000	41.000	0.775
1.020	1.237	12.4	225	Circular_Default Sewer Type	42.000	41.000	0.775	41.200	40.900	0.075

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	1	600	Manhole	Adoptable	2	450	Manhole	Adoptable
1.001	2	450	Manhole	Adoptable	9	450	Manhole	Adoptable
1.002	3	450	Manhole	Adoptable	9	450	Manhole	Adoptable
1.003	4	450	Manhole	Adoptable	5	450	Manhole	Adoptable
1.004	5	450	Manhole	Adoptable	6	450	Manhole	Adoptable
1.005	6	450	Manhole	Adoptable	7	450	Manhole	Adoptable
1.006	8	1200	Manhole	Adoptable	9	450	Manhole	Adoptable
1.007	9	450	Manhole	Adoptable	10	450	Manhole	Adoptable
1.008	11		Junction		8	1200	Manhole	Adoptable
1.009	10	450	Manhole	Adoptable	12	450	Manhole	Adoptable
1.010	12	450	Manhole	Adoptable	13	450	Manhole	Adoptable
1.011	16	450	Manhole	Adoptable	15	450	Manhole	Adoptable
1.012	17	450	Manhole	Adoptable	16	450	Manhole	Adoptable
1.014	19	600	Manhole	Adoptable	20	1800	Manhole	Adoptable
1.015	22	450	Manhole	Adoptable	21	450	Manhole	Adoptable
1.016	23	450	Manhole	Adoptable	26	1200	Manhole	Adoptable
1.017	24	450	Manhole	Adoptable	23	450	Manhole	Adoptable
1.018	25	450	Manhole	Adoptable	26	1200	Manhole	Adoptable
1.019	26	1200	Manhole	Adoptable	21	450	Manhole	Adoptable
1.020	21	450	Manhole	Adoptable	27	1200	Manhole	Adoptable

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)	
1	0.000	0.000	47.725	1.475	600		0	1.000	46.250	150
2	1.410	-12.050	47.500	1.350	450		1	1.000	46.150	150
							0	1.001	46.150	225
3	19.480	0.910	46.600	1.300	450		0	1.002	45.300	150
4	12.860	16.020	46.600	0.730	450		0	1.003	45.870	150
5	39.140	13.190	46.600	1.170	450		1	1.003	45.430	150
							0	1.004	45.430	150
6	40.230	8.420	46.600	1.250	450		1	1.004	45.350	150
							0	1.005	45.350	225
9	49.340	-14.410	45.250	2.000	450		1	1.006	43.250	225
							2	1.002	43.350	150
							3	1.001	43.350	225
							0	1.007	43.250	225
7	43.280	6.470	46.000	2.443	450		1	1.005	43.600	225
8	46.620	-10.510	45.500	2.000	1200		1	1.008	43.500	225
							0	1.006	43.500	225
10	61.390	-11.530	44.500	1.750	450		1	1.007	42.750	225
							0	1.009	42.750	225
11	48.000	0.300	45.500	1.950			0	1.008	43.550	225
12	97.390	-29.300	43.100	1.250	450		1	1.009	41.850	225
							0	1.010	41.850	225
13	93.970	-38.420	42.750	2.270	450		1	1.010	41.750	225

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
15	76.900	-66.100	42.500	2.020	450	 1	1.011	41.730	150
16	71.010	-62.600	42.600	0.810	450	 1 0	1.012 1.011	41.790 41.790	150 150
17	57.600	-54.800	42.800	0.790	450	 0	1.012	42.010	150
19	109.600	-45.200	42.400	2.000	600	 0	1.014	40.400	150
20	110.900	-42.860	42.400	2.100	1800	 1	1.014	40.300	150
21	93.980	-72.380	42.000	1.000	450	 1 2 0	1.019 1.015	41.000 41.000	225 150
22	91.660	-76.380	42.200	1.050	450	 0	1.015	41.150	150
23	109.000	-86.500	41.800	0.580	450	 0 1	1.017	41.220	500
24	143.660	-86.140	42.000	0.650	450	 0	1.016	41.220	225
25	110.800	-60.060	42.100	0.600	450	 0	1.018	41.500	150
26	101.400	-76.460	42.100	1.100	1200	 1 2 0	1.018 1.016	41.090 41.000	150 225
27	94.600	-71.310	41.200	0.720	1200	 1	1.020	40.900	225

Simulation Settings

Rainfall Methodology	FSR	Drain Down Time (mins)	240
FSR Region	England and Wales	Additional Storage (m³/ha)	20.0
M5-60 (mm)	20.000	Check Discharge Rate(s)	✓
Ratio-R	0.400	30 year (l/s)	1.6
Summer CV	0.500	100 year (l/s)	2.1
Winter CV	0.840	Check Discharge Volume	✓
Analysis Speed	Normal	100 year 360 minute (m³)	48
Skip Steady State	✓		

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 %)
30	0	0	0
100	40	0	0

Pre-development Discharge Rate

Site Makeup	Greenfield	Growth Factor 30 year	2.40
Greenfield Method	IH124	Growth Factor 100 year	3.19
Positively Drained Area (ha)	0.196	Betterment (%)	0
SAAR (mm)	703	QBar	0.7
Soil Index	3	Q 30 year (l/s)	1.6
SPR	0.40	Q 100 year (l/s)	2.1
Region	7		

Pre-development Discharge Volume

Site Makeup	Greenfield	Return Period (years)	100
Greenfield Method	FSR/FEH	Climate Change (%)	0
Positively Drained Area (ha)	0.196	Storm Duration (mins)	360
Soil Index	3	Betterment (%)	0
SPR	0.40	PR	0.391
CWI	105.630	Runoff Volume (m³)	48

Node 8 Online Orifice Control

Flap Valve	x	Design Depth (m)	1.040	Discharge Coefficient	0.600
Replaces Downstream Link	x	Design Flow (l/s)	30.0		
Invert Level (m)	43.500	Diameter (m)	0.120		

Node 20 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	40.300	Product Number	CTL-SHE-0131-1000-2000-1000
Design Depth (m)	2.000	Min Outlet Diameter (m)	0.150
Design Flow (l/s)	10.0	Min Node Diameter (mm)	1500

Node 11 Flow through Pond Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Porosity	0.95	Main Channel Length (m)	7.000
Side Inf Coefficient (m/hr)	0.00000	Invert Level (m)	43.550	Main Channel Slope (1:X)	1000.0
Safety Factor	2.0	Time to half empty (mins)	0	Main Channel n	0.025

Inlets

7

Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	73.5	0.0

Node 19 Flow through Pond Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Main Channel Length (m)	200.000
Side Inf Coefficient (m/hr)	0.00000	Invert Level (m)	40.400	Main Channel Slope (1:X)	2500.0
Safety Factor	2.0	Time to half empty (mins)	76	Main Channel n	0.025

Inlets

15 | 27 | 13

Depth (m)	Area (m ²)	Inf Area (m ²)
0.000	526.3	0.0

Other (defaults)

Entry Loss (manhole)	0.250	Entry Loss (junction)	0.000	Apply Recommended Losses	x
Exit Loss (manhole)	0.250	Exit Loss (junction)	0.000	Flood Risk (m)	0.100

Approval Settings

Node Size	✓	Proportional Velocity	✓
Node Losses	✓	Return Period (years)	100
Link Size	✓	Minimum Proportional Velocity (m/s)	0.750
Minimum Diameter (mm)	150	Maximum Proportional Velocity (m/s)	3.000
Link Length	✓	Surcharged Depth	✓
Maximum Length (m)	100.000	Return Period (years)	100
Coordinates	✓	Maximum Surcharged Depth (m)	0.100
Accuracy (m)	1.000	Flooding	✓
Crossings	✓	Return Period (years)	30
Cover Depth	✓	Time to Half Empty	✓
Minimum Cover Depth (m)	0.500	Return Period (years)	100
Maximum Cover Depth (m)	3.000	Discharge Rates	✓
Backdrops	✓	1 year (l/s)	1.0
Minimum Backdrop Height (m)	0.200	30 year (l/s)	3.0
Maximum Backdrop Height (m)	1.500	100 year (l/s)	3.9
Full Bore Velocity	✓	Discharge Volume	✓
Minimum Full Bore Velocity (m/s)	1.000	100 year 360 minute (m ³)	48
Maximum Full Bore Velocity (m/s)	3.000		

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
1 year 15 minute summer	109.521	30.991	1 year 120 minute summer	30.053	7.942
1 year 15 minute winter	76.857	30.991	1 year 120 minute winter	19.966	7.942
1 year 30 minute summer	71.439	20.215	1 year 180 minute summer	23.233	5.979
1 year 30 minute winter	50.133	20.215	1 year 180 minute winter	15.102	5.979
1 year 60 minute summer	48.435	12.800	1 year 240 minute summer	18.475	4.882
1 year 60 minute winter	32.179	12.800	1 year 240 minute winter	12.274	4.882

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
1 year 360 minute summer	14.169	3.646	30 year 720 minute summer	17.490	4.687
1 year 360 minute winter	9.210	3.646	30 year 720 minute winter	11.754	4.687
1 year 480 minute summer	11.185	2.956	30 year 960 minute summer	14.215	3.743
1 year 480 minute winter	7.431	2.956	30 year 960 minute winter	9.416	3.743
1 year 600 minute summer	9.182	2.511	30 year 1440 minute summer	10.161	2.723
1 year 600 minute winter	6.274	2.511	30 year 1440 minute winter	6.829	2.723
1 year 720 minute summer	8.203	2.199	100 year +40% CC 15 minute summer	488.233	138.153
1 year 720 minute winter	5.513	2.199	100 year +40% CC 15 minute winter	342.620	138.153
1 year 960 minute summer	6.768	1.782	100 year +40% CC 30 minute summer	320.551	90.705
1 year 960 minute winter	4.483	1.782	100 year +40% CC 30 minute winter	224.948	90.705
1 year 1440 minute summer	4.949	1.326	100 year +40% CC 60 minute summer	214.603	56.713
1 year 1440 minute winter	3.326	1.326	100 year +40% CC 60 minute winter	142.577	56.713
30 year 15 minute summer	268.706	76.035	100 year +40% CC 120 minute summer	129.587	34.246
30 year 15 minute winter	188.566	76.035	100 year +40% CC 120 minute winter	86.094	34.246
30 year 30 minute summer	174.929	49.499	100 year +40% CC 180 minute summer	97.729	25.149
30 year 30 minute winter	122.757	49.499	100 year +40% CC 180 minute winter	63.526	25.149
30 year 60 minute summer	116.589	30.811	100 year +40% CC 240 minute summer	75.977	20.078
30 year 60 minute winter	77.459	30.811	100 year +40% CC 240 minute winter	50.477	20.078
30 year 120 minute summer	70.438	18.615	100 year +40% CC 360 minute summer	56.677	14.585
30 year 120 minute winter	46.797	18.615	100 year +40% CC 360 minute winter	36.841	14.585
30 year 180 minute summer	53.298	13.715	100 year +40% CC 480 minute summer	43.979	11.622
30 year 180 minute winter	34.645	13.715	100 year +40% CC 480 minute winter	29.219	11.622
30 year 240 minute summer	41.604	10.995	100 year +40% CC 600 minute summer	35.604	9.738
30 year 240 minute winter	27.641	10.995	100 year +40% CC 600 minute winter	24.327	9.738
30 year 360 minute summer	31.221	8.034	100 year +40% CC 720 minute summer	31.433	8.424
30 year 360 minute winter	20.295	8.034	100 year +40% CC 720 minute winter	21.125	8.424
30 year 480 minute summer	24.324	6.428	100 year +40% CC 960 minute summer	25.432	6.697
30 year 480 minute winter	16.160	6.428	100 year +40% CC 960 minute winter	16.847	6.697
30 year 600 minute summer	19.756	5.404	100 year +40% CC 1440 minute summer	18.055	4.839
30 year 600 minute winter	13.498	5.404	100 year +40% CC 1440 minute winter	12.134	4.839

Results for 1 year Critical Storm Duration. Lowest mass balance: -2532.51%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	8	46.346	0.096	11.1	0.1081	0.0000	OK
15 minute winter	2	8	46.210	0.060	19.9	0.0549	0.0000	OK
15 minute winter	3	8	45.349	0.049	9.9	0.0492	0.0000	OK
15 minute summer	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
15 minute summer	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
15 minute summer	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
15 minute winter	9	8	43.346	0.096	35.8	0.0537	0.0000	OK
60 minute winter	7	41	43.572	0.015	1.1	0.0042	0.0000	OK
60 minute winter	8	42	43.527	0.027	0.7	0.0305	0.0000	OK
15 minute winter	10	9	42.855	0.105	35.4	0.0166	0.0000	OK
60 minute winter	11	41	43.572	0.022	1.0	0.0011	0.0000	OK
15 minute winter	12	9	42.006	0.156	36.2	0.0471	0.0000	OK
30 minute winter	13	167	40.887	0.407	28.2	0.1579	0.0000	OK
30 minute winter	15	171	40.787	0.307	4.2	0.1278	0.0000	OK
15 minute winter	16	9	41.823	0.033	1.8	0.0094	0.0000	OK
15 minute winter	17	8	42.031	0.021	0.9	0.0059	0.0000	OK
30 minute winter	19	168	40.789	0.389	48.1	0.1102	0.0000	SURCHARGED
30 minute winter	20	169	40.773	0.473	10.0	1.2039	0.0000	OK
15 minute winter	21	9	41.102	0.102	30.4	0.0695	0.0000	OK
15 minute winter	22	8	41.174	0.024	1.8	0.0084	0.0000	OK
15 minute winter	23	9	41.297	0.077	17.7	0.0625	0.0000	OK
15 minute winter	24	8	41.431	0.081	15.2	0.2260	0.0000	OK
15 minute winter	25	8	41.542	0.041	4.5	0.0412	0.0000	OK
15 minute winter	26	9	41.209	0.209	24.4	0.3079	0.0000	OK
30 minute winter	27	171	41.000	0.520	431.5	0.5882	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	10.8	1.168	0.672	0.1122	
15 minute winter	2	1.001	9	19.0	2.279	0.151	0.4011	
15 minute winter	3	1.002	9	9.5	1.939	0.221	0.1650	
15 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
15 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
15 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
15 minute winter	9	1.007	10	35.4	2.081	0.337	0.2106	
60 minute winter	7	Flow through pond	11	0.6	0.008	0.000	1.2740	
60 minute winter	8	1.006	9	0.7	0.623	0.006	0.0217	
15 minute winter	10	1.009	12	34.8	1.514	0.446	0.9504	
60 minute winter	11	1.008	8	0.7	0.299	0.020	0.0252	
15 minute winter	12	1.010	13	36.9	1.349	0.701	0.2664	
30 minute winter	13	Flow through pond	19	48.1	0.189	0.013	181.6071	
30 minute winter	15	Flow through pond	19	48.1	0.189	0.013	181.6071	
15 minute winter	16	1.011	15	1.7	0.593	0.102	0.0195	
15 minute winter	17	1.012	16	0.9	0.404	0.041	0.0337	
30 minute winter	19	1.014	20	10.0	0.827	0.289	0.0471	
30 minute winter	20	Hydro-Brake®		9.8				143.2
15 minute winter	21	1.020	27	30.6	2.206	0.206	0.0172	
15 minute winter	22	1.015	21	1.8	0.406	0.055	0.0334	
15 minute winter	23	1.016	26	17.4	0.657	0.253	0.3172	
15 minute winter	24	1.017	23	14.3	0.736	0.055	0.6755	
15 minute winter	25	1.018	26	4.4	0.650	0.167	0.1763	
15 minute winter	26	1.019	21	24.8	1.281	0.463	0.1642	
30 minute winter	27	Flow through pond	19	48.1	0.189	0.013	181.6071	

Results for 30 year Critical Storm Duration. Lowest mass balance: -2532.51%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	8	46.589	0.339	27.3	0.3805	0.0000	SURCHARGED
15 minute winter	2	8	46.246	0.096	47.2	0.0879	0.0000	OK
15 minute winter	3	8	45.381	0.081	24.2	0.0811	0.0000	OK
15 minute summer	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
15 minute summer	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
15 minute summer	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
15 minute winter	9	9	43.565	0.315	88.2	0.1761	0.0000	SURCHARGED
30 minute winter	7	21	43.590	0.033	4.3	0.0093	0.0000	OK
15 minute winter	8	10	43.577	0.077	2.5	0.0868	0.0000	OK
15 minute winter	10	10	43.213	0.463	77.0	0.0736	0.0000	SURCHARGED
30 minute winter	11	21	43.590	0.040	3.6	0.0020	0.0000	OK
15 minute winter	12	9	42.277	0.427	77.0	0.1294	0.0000	SURCHARGED
30 minute summer	13	144	40.883	0.403	56.8	0.1565	0.0000	OK
120 minute winter	15	214	40.804	0.324	3.8	0.1347	0.0000	OK
15 minute winter	16	8	41.844	0.054	4.3	0.0152	0.0000	OK
15 minute winter	17	8	42.042	0.032	2.2	0.0092	0.0000	OK
120 minute winter	19	210	40.806	0.406	33.7	0.1149	0.0000	SURCHARGED
120 minute winter	20	210	40.789	0.489	9.9	1.2449	0.0000	OK
15 minute winter	21	9	41.181	0.181	68.8	0.1230	0.0000	OK
15 minute winter	22	8	41.187	0.037	4.4	0.0131	0.0000	OK
15 minute winter	23	9	41.417	0.197	44.9	0.1604	0.0000	OK
15 minute winter	24	8	41.479	0.129	37.4	0.3576	0.0000	OK
15 minute winter	25	8	41.567	0.067	11.0	0.0665	0.0000	OK
15 minute winter	26	9	41.339	0.339	55.2	0.5001	0.0000	SURCHARGED
120 minute winter	27	214	41.028	0.548	53.7	0.6200	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	25.0	1.555	1.553	0.1791	
15 minute winter	2	1.001	9	45.9	2.817	0.363	1.3059	
15 minute winter	3	1.002	9	24.4	2.330	0.565	0.4412	
15 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
15 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
15 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
15 minute winter	9	1.007	10	77.0	2.356	0.734	0.4927	
30 minute winter	7	Flow through pond	11	2.2	0.022	0.000	2.5392	
15 minute winter	8	1.006	9	4.6	0.937	0.038	0.1161	
15 minute winter	10	1.009	12	74.0	1.861	0.948	1.5967	
30 minute winter	11	1.008	8	2.4	0.376	0.069	0.0726	
15 minute winter	12	1.010	13	76.9	1.933	1.460	0.3832	
30 minute summer	13	Flow through pond	19	65.2	0.232	0.018	181.9983	
120 minute winter	15	Flow through pond	19	33.7	0.160	0.009	191.6790	
15 minute winter	16	1.011	15	4.1	0.752	0.245	0.0374	
15 minute winter	17	1.012	16	2.1	0.509	0.100	0.0656	
120 minute winter	19	1.014	20	9.9	0.823	0.286	0.0471	
120 minute winter	20	Hydro-Brake®		9.8				195.8
15 minute winter	21	1.020	27	68.9	2.567	0.463	0.0327	
15 minute winter	22	1.015	21	4.3	0.529	0.135	0.0486	
15 minute winter	23	1.016	26	40.1	1.028	0.582	0.4826	
15 minute winter	24	1.017	23	36.5	0.866	0.140	1.8623	
15 minute winter	25	1.018	26	10.8	0.766	0.411	0.2383	
15 minute winter	26	1.019	21	55.1	1.467	1.028	0.3134	
120 minute winter	27	Flow through pond	19	33.7	0.160	0.009	191.6790	

Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: -2532.51%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	9	47.263	1.013	49.6	1.1375	0.0000	SURCHARGED
15 minute winter	2	9	46.294	0.144	84.2	0.1320	0.0000	OK
15 minute winter	3	9	46.071	0.771	44.0	0.7752	0.0000	SURCHARGED
15 minute summer	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
15 minute summer	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
15 minute summer	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
15 minute winter	9	10	44.708	1.458	146.7	0.8151	0.0000	SURCHARGED
15 minute winter	7	13	43.725	0.168	22.1	0.0473	0.0000	OK
15 minute winter	8	11	43.739	0.239	29.2	0.2708	0.0000	SURCHARGED
15 minute winter	10	10	44.120	1.370	97.9	0.2178	0.0000	SURCHARGED
15 minute winter	11	13	43.724	0.174	31.3	0.0089	0.0000	OK
15 minute winter	12	10	42.509	0.659	101.2	0.1998	0.0000	SURCHARGED
120 minute winter	13	116	40.905	0.425	51.7	0.1650	0.0000	OK
120 minute winter	15	118	40.899	0.419	7.2	0.1743	0.0000	OK
15 minute winter	16	8	41.867	0.077	7.9	0.0217	0.0000	OK
15 minute winter	17	8	42.053	0.043	4.0	0.0124	0.0000	OK
120 minute winter	19	118	40.898	0.498	54.3	0.1409	0.0000	SURCHARGED
120 minute winter	20	118	40.881	0.581	10.1	1.4792	0.0000	OK
15 minute winter	21	9	41.301	0.301	100.5	0.2046	0.0000	SURCHARGED
15 minute winter	22	9	41.315	0.165	8.0	0.0576	0.0000	SURCHARGED
15 minute winter	23	10	41.789	0.569	69.0	0.4629	0.0000	FLOOD RISK
15 minute winter	24	10	41.784	0.434	68.0	1.2047	0.0000	OK
15 minute winter	25	9	41.795	0.295	20.0	0.2931	0.0000	SURCHARGED
15 minute winter	26	10	41.592	0.592	78.7	0.8744	0.0000	SURCHARGED
180 minute winter	27	172	41.197	0.717	53.5	0.8105	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	45.1	2.563	2.803	0.2123	
15 minute winter	2	1.001	9	81.0	2.841	0.642	1.5993	
15 minute winter	3	1.002	9	36.0	2.446	0.836	0.5908	
15 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
15 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
15 minute summer	6	1.005	7	0.0	0.000	0.000	0.0023	
15 minute winter	9	1.007	10	97.9	2.463	0.933	0.4927	
15 minute winter	7	Flow through pond	11	13.0	0.035	0.000	11.9385	
15 minute winter	8	1.006	9	-32.6	1.641	-0.272	0.1891	
15 minute winter	10	1.009	12	96.8	2.435	1.240	1.5967	
15 minute winter	11	1.008	8	-28.9	-1.044	-0.826	0.3907	
15 minute winter	12	1.010	13	101.5	2.553	1.927	0.3835	
120 minute winter	13	Flow through pond	19	54.3	0.164	0.015	241.0134	
120 minute winter	15	Flow through pond	19	54.3	0.164	0.015	241.0134	
15 minute winter	16	1.011	15	7.5	0.872	0.450	0.0588	
15 minute winter	17	1.012	16	3.9	0.588	0.183	0.1032	
120 minute winter	19	1.014	20	10.1	0.828	0.293	0.0471	
120 minute winter	20	Hydro-Brake®		9.8				849.9
15 minute winter	21	1.020	27	100.8	2.799	0.678	0.0400	
15 minute winter	22	1.015	21	7.4	0.616	0.229	0.0814	
15 minute winter	23	1.016	26	55.5	1.395	0.806	0.5008	
15 minute winter	24	1.017	23	55.9	0.864	0.215	6.5181	
15 minute winter	25	1.018	26	17.1	0.975	0.650	0.3328	
15 minute winter	26	1.019	21	79.0	1.987	1.474	0.3368	
180 minute winter	27	Flow through pond	19	40.7	0.161	0.011	239.7186	

Results for 1 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: -69.24%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	8	46.335	0.085	9.4	0.0960	0.0000	OK
15 minute summer	2	8	46.202	0.052	16.5	0.0479	0.0000	OK
15 minute summer	3	8	45.343	0.043	8.4	0.0437	0.0000	OK
15 minute summer	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
15 minute summer	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
15 minute summer	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
15 minute summer	9	8	43.333	0.083	28.1	0.0466	0.0000	OK
15 minute summer	7	15	43.563	0.006	2.3	0.0017	0.0000	OK
15 minute summer	8	16	43.513	0.013	0.2	0.0150	0.0000	OK
15 minute summer	10	9	42.839	0.089	27.1	0.0142	0.0000	OK
15 minute summer	11	15	43.563	0.013	2.2	0.0007	0.0000	OK
15 minute summer	12	9	41.980	0.130	27.2	0.0395	0.0000	OK
15 minute summer	13	18	40.575	0.095	31.1	0.0370	0.0000	OK
15 minute summer	15	18	40.575	0.095	5.1	0.0394	0.0000	OK
15 minute summer	16	9	41.819	0.029	1.5	0.0081	0.0000	OK
15 minute summer	17	8	42.028	0.018	0.8	0.0053	0.0000	OK
15 minute summer	19	35	40.462	0.062	24.9	0.0174	0.0000	OK
15 minute summer	20	35	40.466	0.166	7.9	0.4235	0.0000	OK
15 minute summer	21	9	41.085	0.085	22.4	0.0574	0.0000	OK
15 minute summer	22	8	41.172	0.022	1.5	0.0075	0.0000	OK
15 minute summer	23	9	41.287	0.067	13.6	0.0542	0.0000	OK
15 minute summer	24	8	41.422	0.072	12.9	0.2003	0.0000	OK
15 minute summer	25	8	41.537	0.037	3.8	0.0369	0.0000	OK
15 minute summer	26	9	41.190	0.190	17.9	0.2803	0.0000	OK
15 minute summer	27	18	40.599	0.119	335.8	0.1342	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	1	1.000	2	8.8	1.110	0.544	0.0960	
15 minute summer	2	1.001	9	14.4	2.098	0.114	0.3301	
15 minute summer	3	1.002	9	7.5	1.813	0.175	0.1398	
15 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
15 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
15 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
15 minute summer	9	1.007	10	27.1	1.980	0.259	0.1698	
15 minute summer	7	Flow through pond	11	1.7	0.027	0.000	0.6615	
15 minute summer	8	1.006	9	0.2	0.500	0.002	0.0317	
15 minute summer	10	1.009	12	26.3	1.470	0.337	0.7729	
15 minute summer	11	1.008	8	0.2	0.307	0.006	0.0100	
15 minute summer	12	1.010	13	28.6	1.279	0.543	0.2177	
15 minute summer	13	Flow through pond	19	24.9	0.158	0.007	31.5674	
15 minute summer	15	Flow through pond	19	24.9	0.158	0.007	31.5674	
15 minute summer	16	1.011	15	1.3	0.548	0.076	0.0158	
15 minute summer	17	1.012	16	0.7	0.397	0.032	0.0270	
15 minute summer	19	1.014	20	7.9	0.679	0.229	0.0327	
15 minute summer	20	Hydro-Brake®		7.8				39.8
15 minute summer	21	1.020	27	22.8	2.086	0.153	0.0136	
15 minute summer	22	1.015	21	1.4	0.387	0.044	0.0266	
15 minute summer	23	1.016	26	13.3	0.568	0.193	0.2869	
15 minute summer	24	1.017	23	10.7	0.689	0.041	0.5383	
15 minute summer	25	1.018	26	3.5	0.572	0.134	0.1448	
15 minute summer	26	1.019	21	18.8	1.230	0.351	0.1297	
15 minute summer	27	Flow through pond	19	24.9	0.158	0.007	31.5674	

Results for 1 year 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 11.84%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	8	46.346	0.096	11.1	0.1081	0.0000	OK
15 minute winter	2	8	46.210	0.060	19.9	0.0549	0.0000	OK
15 minute winter	3	8	45.349	0.049	9.9	0.0492	0.0000	OK
15 minute winter	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
15 minute winter	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
15 minute winter	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
15 minute winter	9	8	43.346	0.096	35.8	0.0537	0.0000	OK
15 minute winter	7	15	43.569	0.012	2.7	0.0034	0.0000	OK
15 minute winter	8	15	43.522	0.022	0.5	0.0253	0.0000	OK
15 minute winter	10	9	42.855	0.105	35.4	0.0166	0.0000	OK
15 minute winter	11	15	43.569	0.019	2.5	0.0010	0.0000	OK
15 minute winter	12	9	42.006	0.156	36.2	0.0471	0.0000	OK
15 minute winter	13	11	40.604	0.124	40.9	0.0481	0.0000	OK
15 minute winter	15	12	40.590	0.110	6.3	0.0459	0.0000	OK
15 minute winter	16	9	41.823	0.033	1.8	0.0094	0.0000	OK
15 minute winter	17	8	42.031	0.021	0.9	0.0059	0.0000	OK
15 minute winter	19	31	40.491	0.091	34.6	0.0257	0.0000	OK
15 minute winter	20	32	40.489	0.189	8.6	0.4799	0.0000	OK
15 minute winter	21	9	41.102	0.102	30.4	0.0695	0.0000	OK
15 minute winter	22	8	41.174	0.024	1.8	0.0084	0.0000	OK
15 minute winter	23	9	41.297	0.077	17.7	0.0625	0.0000	OK
15 minute winter	24	8	41.431	0.081	15.2	0.2260	0.0000	OK
15 minute winter	25	8	41.542	0.041	4.5	0.0412	0.0000	OK
15 minute winter	26	9	41.209	0.209	24.4	0.3079	0.0000	OK
15 minute winter	27	12	40.592	0.112	110.5	0.1267	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	10.8	1.168	0.672	0.1122	
15 minute winter	2	1.001	9	19.0	2.279	0.151	0.4011	
15 minute winter	3	1.002	9	9.5	1.939	0.221	0.1650	
15 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
15 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
15 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
15 minute winter	9	1.007	10	35.4	2.081	0.337	0.2106	
15 minute winter	7	Flow through pond	11	1.6	0.025	0.000	1.0790	
15 minute winter	8	1.006	9	0.5	0.636	0.004	0.0385	
15 minute winter	10	1.009	12	34.8	1.514	0.446	0.9504	
15 minute winter	11	1.008	8	0.5	0.331	0.015	0.0197	
15 minute winter	12	1.010	13	36.9	1.349	0.701	0.2664	
15 minute winter	13	Flow through pond	19	34.6	0.182	0.010	39.4737	
15 minute winter	15	Flow through pond	19	34.6	0.182	0.010	39.4737	
15 minute winter	16	1.011	15	1.7	0.593	0.102	0.0195	
15 minute winter	17	1.012	16	0.9	0.404	0.041	0.0337	
15 minute winter	19	1.014	20	8.6	0.777	0.249	0.0385	
15 minute winter	20	Hydro-Brake®		8.1				48.8
15 minute winter	21	1.020	27	30.6	2.206	0.206	0.0172	
15 minute winter	22	1.015	21	1.8	0.406	0.055	0.0334	
15 minute winter	23	1.016	26	17.4	0.657	0.253	0.3172	
15 minute winter	24	1.017	23	14.3	0.736	0.055	0.6755	
15 minute winter	25	1.018	26	4.4	0.650	0.167	0.1763	
15 minute winter	26	1.019	21	24.8	1.281	0.463	0.1642	
15 minute winter	27	Flow through pond	19	34.6	0.182	0.010	39.4737	

Results for 1 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: -53.06%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	1	16	46.319	0.069	6.2	0.0771	0.0000	OK
30 minute summer	2	16	46.196	0.046	11.3	0.0418	0.0000	OK
30 minute summer	3	16	45.337	0.037	5.5	0.0368	0.0000	OK
30 minute summer	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
30 minute summer	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
30 minute summer	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
30 minute summer	9	16	43.320	0.070	20.8	0.0392	0.0000	OK
30 minute summer	7	28	43.565	0.008	1.5	0.0022	0.0000	OK
30 minute summer	8	28	43.516	0.016	0.3	0.0180	0.0000	OK
30 minute summer	10	16	42.828	0.078	20.7	0.0125	0.0000	OK
30 minute summer	11	28	43.565	0.015	1.6	0.0008	0.0000	OK
30 minute summer	12	16	41.957	0.107	21.4	0.0324	0.0000	OK
30 minute summer	13	17	40.594	0.114	23.1	0.0444	0.0000	OK
30 minute summer	15	18	40.584	0.104	3.6	0.0431	0.0000	OK
30 minute summer	16	16	41.815	0.025	1.0	0.0071	0.0000	OK
30 minute summer	17	16	42.026	0.016	0.5	0.0045	0.0000	OK
30 minute summer	19	40	40.496	0.096	32.9	0.0272	0.0000	OK
30 minute summer	20	40	40.493	0.193	8.5	0.4899	0.0000	OK
30 minute summer	21	16	41.071	0.071	17.6	0.0485	0.0000	OK
30 minute summer	22	16	41.168	0.018	1.0	0.0064	0.0000	OK
30 minute summer	23	16	41.278	0.058	10.3	0.0468	0.0000	OK
30 minute summer	24	16	41.412	0.062	8.4	0.1721	0.0000	OK
30 minute summer	25	16	41.531	0.031	2.5	0.0310	0.0000	OK
30 minute summer	26	16	41.175	0.175	14.3	0.2584	0.0000	OK
30 minute summer	27	13	40.593	0.113	101.4	0.1273	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	1	1.000	2	6.2	1.006	0.385	0.0752	
30 minute summer	2	1.001	9	11.2	1.964	0.089	0.2744	
30 minute summer	3	1.002	9	5.5	1.665	0.127	0.1107	
30 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
30 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
30 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
30 minute summer	9	1.007	10	20.7	1.818	0.198	0.1414	
30 minute summer	7	Flow through pond	11	1.1	0.017	0.000	0.7859	
30 minute summer	8	1.006	9	0.3	0.537	0.002	0.0253	
30 minute summer	10	1.009	12	20.5	1.333	0.263	0.6193	
30 minute summer	11	1.008	8	0.3	0.290	0.008	0.0126	
30 minute summer	12	1.010	13	20.6	1.187	0.392	0.1698	
30 minute summer	13	Flow through pond	19	32.9	0.174	0.009	39.1052	
30 minute summer	15	Flow through pond	19	32.9	0.174	0.009	39.1052	
30 minute summer	16	1.011	15	1.0	0.504	0.058	0.0131	
30 minute summer	17	1.012	16	0.5	0.342	0.023	0.0228	
30 minute summer	19	1.014	20	8.5	0.799	0.247	0.0395	
30 minute summer	20	Hydro-Brake®		8.2				51.9
30 minute summer	21	1.020	27	17.4	1.975	0.117	0.0109	
30 minute summer	22	1.015	21	1.0	0.294	0.031	0.0219	
30 minute summer	23	1.016	26	9.9	0.481	0.144	0.2590	
30 minute summer	24	1.017	23	8.4	0.636	0.032	0.4565	
30 minute summer	25	1.018	26	2.5	0.491	0.095	0.1225	
30 minute summer	26	1.019	21	14.0	1.151	0.260	0.1039	
30 minute summer	27	Flow through pond	19	32.9	0.174	0.009	39.1052	

Results for 1 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: -533.34%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	1	16	46.325	0.075	7.3	0.0846	0.0000	OK
30 minute winter	2	16	46.200	0.050	13.3	0.0455	0.0000	OK
30 minute winter	3	16	45.340	0.040	6.4	0.0398	0.0000	OK
30 minute winter	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
30 minute winter	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
30 minute winter	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
30 minute winter	9	16	43.327	0.077	24.6	0.0431	0.0000	OK
30 minute winter	7	23	43.571	0.014	1.8	0.0039	0.0000	OK
30 minute winter	8	24	43.525	0.025	0.6	0.0284	0.0000	OK
30 minute winter	10	16	42.836	0.086	24.6	0.0137	0.0000	OK
30 minute winter	11	23	43.571	0.021	1.5	0.0011	0.0000	OK
30 minute winter	12	16	41.971	0.121	25.6	0.0367	0.0000	OK
30 minute winter	13	167	40.887	0.407	28.2	0.1579	0.0000	OK
30 minute winter	15	171	40.787	0.307	4.2	0.1278	0.0000	OK
30 minute winter	16	16	41.818	0.028	1.2	0.0079	0.0000	OK
30 minute winter	17	16	42.027	0.017	0.6	0.0050	0.0000	OK
30 minute winter	19	168	40.789	0.389	48.1	0.1102	0.0000	SURCHARGED
30 minute winter	20	169	40.773	0.473	10.0	1.2039	0.0000	OK
30 minute winter	21	16	41.081	0.081	21.2	0.0548	0.0000	OK
30 minute winter	22	16	41.170	0.020	1.2	0.0070	0.0000	OK
30 minute winter	23	16	41.283	0.063	12.1	0.0515	0.0000	OK
30 minute winter	24	16	41.417	0.067	9.9	0.1862	0.0000	OK
30 minute winter	25	16	41.534	0.034	2.9	0.0334	0.0000	OK
30 minute winter	26	16	41.185	0.185	17.1	0.2728	0.0000	OK
30 minute winter	27	171	41.000	0.520	431.5	0.5882	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	1	1.000	2	7.3	1.051	0.454	0.0846	
30 minute winter	2	1.001	9	13.3	2.062	0.105	0.3090	
30 minute winter	3	1.002	9	6.4	1.739	0.148	0.1235	
30 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
30 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
30 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
30 minute winter	9	1.007	10	24.6	1.894	0.234	0.1607	
30 minute winter	7	Flow through pond	11	1.0	0.016	0.000	1.1980	
30 minute winter	8	1.006	9	0.6	0.649	0.005	0.0294	
30 minute winter	10	1.009	12	24.5	1.374	0.314	0.7165	
30 minute winter	11	1.008	8	0.6	0.305	0.018	0.0229	
30 minute winter	12	1.010	13	25.3	1.242	0.480	0.1985	
30 minute winter	13	Flow through pond	19	48.1	0.189	0.013	181.6071	
30 minute winter	15	Flow through pond	19	48.1	0.189	0.013	181.6071	
30 minute winter	16	1.011	15	1.2	0.534	0.071	0.0151	
30 minute winter	17	1.012	16	0.6	0.359	0.028	0.0262	
30 minute winter	19	1.014	20	10.0	0.827	0.289	0.0471	
30 minute winter	20	Hydro-Brake®		9.8				143.2
30 minute winter	21	1.020	27	21.1	2.054	0.142	0.0128	
30 minute winter	22	1.015	21	1.2	0.387	0.037	0.0255	
30 minute winter	23	1.016	26	12.0	0.535	0.174	0.2773	
30 minute winter	24	1.017	23	9.9	0.663	0.038	0.5180	
30 minute winter	25	1.018	26	2.9	0.571	0.110	0.1388	
30 minute winter	26	1.019	21	17.0	1.187	0.317	0.1214	
30 minute winter	27	Flow through pond	19	48.1	0.189	0.013	181.6071	

Results for 1 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: -52.95%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	1	31	46.306	0.056	4.2	0.0623	0.0000	OK
60 minute summer	2	31	46.188	0.038	7.6	0.0344	0.0000	OK
60 minute summer	3	31	45.330	0.030	3.7	0.0302	0.0000	OK
60 minute summer	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
60 minute summer	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
60 minute summer	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
60 minute summer	9	31	43.307	0.057	14.0	0.0317	0.0000	OK
60 minute summer	7	40	43.565	0.008	1.0	0.0023	0.0000	OK
60 minute summer	8	43	43.516	0.016	0.3	0.0185	0.0000	OK
60 minute summer	10	31	42.814	0.064	14.0	0.0102	0.0000	OK
60 minute summer	11	40	43.565	0.015	1.0	0.0008	0.0000	OK
60 minute summer	12	32	41.936	0.086	14.5	0.0260	0.0000	OK
60 minute summer	13	10	40.582	0.102	15.8	0.0397	0.0000	OK
60 minute summer	15	10	40.578	0.098	2.3	0.0408	0.0000	OK
60 minute summer	16	33	41.810	0.020	0.6	0.0056	0.0000	OK
60 minute summer	17	33	42.023	0.013	0.3	0.0036	0.0000	OK
60 minute summer	19	51	40.515	0.115	27.3	0.0326	0.0000	OK
60 minute summer	20	51	40.508	0.208	8.4	0.5293	0.0000	OK
60 minute summer	21	31	41.057	0.057	12.1	0.0385	0.0000	OK
60 minute summer	22	31	41.165	0.015	0.7	0.0054	0.0000	OK
60 minute summer	23	31	41.268	0.048	7.0	0.0388	0.0000	OK
60 minute summer	24	31	41.401	0.051	5.7	0.1428	0.0000	OK
60 minute summer	25	31	41.526	0.026	1.7	0.0257	0.0000	OK
60 minute summer	26	31	41.159	0.159	9.8	0.2353	0.0000	OK
60 minute summer	27	13	40.571	0.091	49.8	0.1026	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	1	1.000	2	4.2	0.904	0.261	0.0568	
60 minute summer	2	1.001	9	7.6	1.749	0.060	0.2074	
60 minute summer	3	1.002	9	3.7	1.486	0.086	0.0834	
60 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
60 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
60 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
60 minute summer	9	1.007	10	14.0	1.641	0.134	0.1060	
60 minute summer	7	Flow through pond	11	0.7	0.012	0.000	0.8101	
60 minute summer	8	1.006	9	0.3	0.501	0.003	0.0191	
60 minute summer	10	1.009	12	13.9	1.206	0.178	0.4646	
60 minute summer	11	1.008	8	0.3	0.265	0.009	0.0131	
60 minute summer	12	1.010	13	14.3	1.082	0.272	0.1288	
60 minute summer	13	Flow through pond	19	27.3	0.169	0.008	42.8092	
60 minute summer	15	Flow through pond	19	27.3	0.169	0.008	42.8092	
60 minute summer	16	1.011	15	0.6	0.441	0.036	0.0093	
60 minute summer	17	1.012	16	0.3	0.297	0.014	0.0162	
60 minute summer	19	1.014	20	8.4	0.825	0.243	0.0430	
60 minute summer	20	Hydro-Brake®		8.4				68.0
60 minute summer	21	1.020	27	12.0	1.835	0.081	0.0081	
60 minute summer	22	1.015	21	0.7	0.334	0.022	0.0163	
60 minute summer	23	1.016	26	6.8	0.383	0.099	0.2279	
60 minute summer	24	1.017	23	5.7	0.567	0.022	0.3462	
60 minute summer	25	1.018	26	1.7	0.437	0.065	0.0944	
60 minute summer	26	1.019	21	9.7	1.068	0.180	0.0772	
60 minute summer	27	Flow through pond	19	27.3	0.169	0.008	42.8092	

Results for 1 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: -277.54%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	1	31	46.309	0.059	4.7	0.0662	0.0000	OK
60 minute winter	2	31	46.190	0.040	8.5	0.0364	0.0000	OK
60 minute winter	3	31	45.332	0.032	4.1	0.0318	0.0000	OK
60 minute winter	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
60 minute winter	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
60 minute winter	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
60 minute winter	9	31	43.311	0.061	15.9	0.0339	0.0000	OK
60 minute winter	7	41	43.572	0.015	1.1	0.0042	0.0000	OK
60 minute winter	8	42	43.527	0.027	0.7	0.0305	0.0000	OK
60 minute winter	10	31	42.819	0.069	15.9	0.0109	0.0000	OK
60 minute winter	11	41	43.572	0.022	1.0	0.0011	0.0000	OK
60 minute winter	12	32	41.944	0.094	16.6	0.0284	0.0000	OK
60 minute winter	13	224	40.616	0.136	18.5	0.0527	0.0000	OK
60 minute winter	15	212	40.613	0.133	2.8	0.0552	0.0000	OK
60 minute winter	16	33	41.813	0.023	0.8	0.0065	0.0000	OK
60 minute winter	17	33	42.024	0.014	0.4	0.0041	0.0000	OK
60 minute winter	19	227	40.612	0.212	36.4	0.0601	0.0000	SURCHARGED
60 minute winter	20	226	40.598	0.298	9.2	0.7581	0.0000	OK
60 minute winter	21	31	41.062	0.062	13.8	0.0420	0.0000	OK
60 minute winter	22	31	41.166	0.016	0.8	0.0057	0.0000	OK
60 minute winter	23	31	41.271	0.051	7.8	0.0413	0.0000	OK
60 minute winter	24	31	41.404	0.054	6.4	0.1512	0.0000	OK
60 minute winter	25	31	41.527	0.027	1.9	0.0271	0.0000	OK
60 minute winter	26	31	41.164	0.164	11.1	0.2426	0.0000	OK
60 minute winter	27	13	40.571	0.091	52.7	0.1032	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	1	1.000	2	4.7	0.931	0.292	0.0616	
60 minute winter	2	1.001	9	8.5	1.810	0.067	0.2251	
60 minute winter	3	1.002	9	4.1	1.531	0.095	0.0898	
60 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
60 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
60 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
60 minute winter	9	1.007	10	15.9	1.695	0.152	0.1166	
60 minute winter	7	Flow through pond	11	0.6	0.008	0.000	1.2740	
60 minute winter	8	1.006	9	0.7	0.623	0.006	0.0217	
60 minute winter	10	1.009	12	15.9	1.237	0.204	0.5180	
60 minute winter	11	1.008	8	0.7	0.299	0.020	0.0252	
60 minute winter	12	1.010	13	16.6	1.121	0.315	0.1441	
60 minute winter	13	Flow through pond	19	36.4	0.168	0.010	91.7344	
60 minute winter	15	Flow through pond	19	36.4	0.168	0.010	91.7344	
60 minute winter	16	1.011	15	0.8	0.479	0.048	0.0114	
60 minute winter	17	1.012	16	0.4	0.321	0.019	0.0198	
60 minute winter	19	1.014	20	9.2	0.825	0.266	0.0471	
60 minute winter	20	Hydro-Brake®		9.2				155.1
60 minute winter	21	1.020	27	13.8	2.912	0.093	0.0091	
60 minute winter	22	1.015	21	0.8	0.299	0.025	0.0182	
60 minute winter	23	1.016	26	7.8	0.414	0.113	0.2378	
60 minute winter	24	1.017	23	6.4	0.586	0.025	0.3780	
60 minute winter	25	1.018	26	1.9	0.492	0.072	0.1030	
60 minute winter	26	1.019	21	11.0	1.093	0.206	0.0859	
60 minute winter	27	Flow through pond	19	36.4	0.168	0.010	91.7344	

Results for 1 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: -35.41%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	1	62	46.293	0.043	2.6	0.0485	0.0000	OK
120 minute summer	2	62	46.180	0.030	4.7	0.0273	0.0000	OK
120 minute summer	3	62	45.324	0.024	2.3	0.0239	0.0000	OK
120 minute summer	4	2	45.870	0.000	0.0	0.0000	0.0000	OK
120 minute summer	5	2	45.430	0.000	0.0	0.0000	0.0000	OK
120 minute summer	6	2	45.350	0.000	0.0	0.0000	0.0000	OK
120 minute summer	9	62	43.295	0.045	8.9	0.0249	0.0000	OK
120 minute summer	7	74	43.565	0.008	0.6	0.0023	0.0000	OK
120 minute summer	8	76	43.516	0.016	0.3	0.0186	0.0000	OK
120 minute summer	10	62	42.801	0.051	8.9	0.0081	0.0000	OK
120 minute summer	11	74	43.565	0.015	0.5	0.0008	0.0000	OK
120 minute summer	12	62	41.917	0.067	9.3	0.0204	0.0000	OK
120 minute summer	13	12	40.580	0.100	10.3	0.0389	0.0000	OK
120 minute summer	15	12	40.582	0.102	1.5	0.0424	0.0000	OK
120 minute summer	16	66	41.806	0.016	0.4	0.0046	0.0000	OK
120 minute summer	17	64	42.020	0.010	0.2	0.0030	0.0000	OK
120 minute summer	19	86	40.491	0.091	27.1	0.0257	0.0000	OK
120 minute summer	20	86	40.489	0.189	8.6	0.4801	0.0000	OK
120 minute summer	21	62	41.043	0.043	7.6	0.0292	0.0000	OK
120 minute summer	22	62	41.162	0.012	0.4	0.0041	0.0000	OK
120 minute summer	23	62	41.258	0.038	4.3	0.0309	0.0000	OK
120 minute summer	24	62	41.391	0.041	3.5	0.1136	0.0000	OK
120 minute summer	25	62	41.520	0.020	1.0	0.0199	0.0000	OK
120 minute summer	26	62	41.144	0.144	6.1	0.2131	0.0000	OK
120 minute summer	27	26	40.563	0.083	49.7	0.0937	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	1	1.000	2	2.6	0.786	0.162	0.0405	
120 minute summer	2	1.001	9	4.7	1.521	0.037	0.1482	
120 minute summer	3	1.002	9	2.3	1.294	0.053	0.0597	
120 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
120 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
120 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
120 minute summer	9	1.007	10	8.9	1.446	0.085	0.0760	
120 minute summer	7	Flow through pond	11	0.3	0.006	0.000	0.8125	
120 minute summer	8	1.006	9	0.3	0.447	0.003	0.0139	
120 minute summer	10	1.009	12	8.9	1.064	0.113	0.3357	
120 minute summer	11	1.008	8	0.3	0.260	0.009	0.0132	
120 minute summer	12	1.010	13	9.2	0.963	0.175	0.0932	
120 minute summer	13	Flow through pond	19	27.1	0.169	0.008	34.9847	
120 minute summer	15	Flow through pond	19	27.1	0.169	0.008	34.9847	
120 minute summer	16	1.011	15	0.4	0.391	0.024	0.0070	
120 minute summer	17	1.012	16	0.2	0.263	0.009	0.0121	
120 minute summer	19	1.014	20	8.6	0.816	0.248	0.0385	
120 minute summer	20	Hydro-Brake®		8.1				79.6
120 minute summer	21	1.020	27	7.6	1.665	0.051	0.0056	
120 minute summer	22	1.015	21	0.4	0.204	0.012	0.0111	
120 minute summer	23	1.016	26	4.3	0.284	0.062	0.1971	
120 minute summer	24	1.017	23	3.5	0.491	0.013	0.2470	
120 minute summer	25	1.018	26	1.0	0.356	0.038	0.0676	
120 minute summer	26	1.019	21	6.1	0.962	0.113	0.0536	
120 minute summer	27	Flow through pond	19	27.1	0.169	0.008	34.9847	

Results for 1 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: -243.12%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	1	62	46.296	0.046	2.9	0.0513	0.0000	OK
120 minute winter	2	62	46.182	0.032	5.3	0.0289	0.0000	OK
120 minute winter	3	62	45.325	0.025	2.6	0.0254	0.0000	OK
120 minute winter	4	2	45.870	0.000	0.0	0.0000	0.0000	OK
120 minute winter	5	2	45.430	0.000	0.0	0.0000	0.0000	OK
120 minute winter	6	2	45.350	0.000	0.0	0.0000	0.0000	OK
120 minute winter	9	62	43.298	0.048	10.1	0.0267	0.0000	OK
120 minute winter	7	76	43.570	0.013	0.7	0.0036	0.0000	OK
120 minute winter	8	76	43.524	0.024	0.6	0.0269	0.0000	OK
120 minute winter	10	62	42.805	0.055	10.1	0.0087	0.0000	OK
120 minute winter	11	76	43.570	0.020	0.7	0.0010	0.0000	OK
120 minute winter	12	62	41.923	0.073	10.5	0.0220	0.0000	OK
120 minute winter	13	360	40.634	0.154	11.7	0.0597	0.0000	OK
120 minute winter	15	360	40.628	0.148	2.6	0.0616	0.0000	OK
120 minute winter	16	60	41.806	0.016	0.4	0.0046	0.0000	OK
120 minute winter	17	58	42.020	0.010	0.2	0.0030	0.0000	OK
120 minute winter	19	360	40.630	0.230	36.3	0.0650	0.0000	SURCHARGED
120 minute winter	20	360	40.615	0.315	9.3	0.8008	0.0000	OK
120 minute winter	21	62	41.047	0.047	8.7	0.0317	0.0000	OK
120 minute winter	22	62	41.163	0.013	0.5	0.0046	0.0000	OK
120 minute winter	23	62	41.260	0.040	4.9	0.0330	0.0000	OK
120 minute winter	24	62	41.394	0.044	4.0	0.1210	0.0000	OK
120 minute winter	25	62	41.522	0.022	1.2	0.0217	0.0000	OK
120 minute winter	26	62	41.148	0.148	7.0	0.2191	0.0000	OK
120 minute winter	27	16	40.564	0.084	447.4	0.0953	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	1	1.000	2	2.9	0.809	0.180	0.0438	
120 minute winter	2	1.001	9	5.3	1.576	0.042	0.1614	
120 minute winter	3	1.002	9	2.6	1.340	0.060	0.0651	
120 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
120 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
120 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
120 minute winter	9	1.007	10	10.1	1.500	0.097	0.0839	
120 minute winter	7	Flow through pond	11	0.5	0.008	0.000	1.1374	
120 minute winter	8	1.006	9	0.6	0.504	0.005	0.0158	
120 minute winter	10	1.009	12	10.1	1.103	0.130	0.3704	
120 minute winter	11	1.008	8	0.6	0.287	0.016	0.0213	
120 minute winter	12	1.010	13	10.5	0.997	0.200	0.1027	
120 minute winter	13	Flow through pond	19	36.3	0.170	0.010	100.6615	
120 minute winter	15	Flow through pond	19	36.3	0.170	0.010	100.6615	
120 minute winter	16	1.011	15	0.4	0.391	0.024	0.0070	
120 minute winter	17	1.012	16	0.2	0.263	0.009	0.0121	
120 minute winter	19	1.014	20	9.3	0.787	0.268	0.0471	
120 minute winter	20	Hydro-Brake®		9.3				182.0
120 minute winter	21	1.020	27	8.7	2.801	0.058	0.0063	
120 minute winter	22	1.015	21	0.5	0.313	0.016	0.0125	
120 minute winter	23	1.016	26	4.9	0.310	0.071	0.2054	
120 minute winter	24	1.017	23	4.0	0.512	0.015	0.2710	
120 minute winter	25	1.018	26	1.2	0.433	0.046	0.0750	
120 minute winter	26	1.019	21	7.0	0.994	0.130	0.0598	
120 minute winter	27	Flow through pond	19	36.3	0.170	0.010	100.6615	

Results for 1 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: -27.81%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	1	92	46.288	0.038	2.0	0.0423	0.0000	OK
180 minute summer	2	92	46.176	0.026	3.6	0.0238	0.0000	OK
180 minute summer	3	92	45.321	0.021	1.8	0.0210	0.0000	OK
180 minute summer	4	4	45.870	0.000	0.0	0.0000	0.0000	OK
180 minute summer	5	4	45.430	0.000	0.0	0.0000	0.0000	OK
180 minute summer	6	4	45.350	0.000	0.0	0.0000	0.0000	OK
180 minute summer	9	92	43.289	0.039	6.7	0.0217	0.0000	OK
180 minute summer	7	112	43.565	0.008	0.5	0.0022	0.0000	OK
180 minute summer	8	112	43.516	0.016	0.3	0.0178	0.0000	OK
180 minute summer	10	92	42.794	0.044	6.7	0.0070	0.0000	OK
180 minute summer	11	112	43.565	0.015	0.4	0.0007	0.0000	OK
180 minute summer	12	92	41.907	0.057	6.9	0.0174	0.0000	OK
180 minute summer	13	12	40.579	0.099	7.6	0.0384	0.0000	OK
180 minute summer	15	12	40.580	0.100	1.1	0.0417	0.0000	OK
180 minute summer	16	92	41.805	0.015	0.4	0.0043	0.0000	OK
180 minute summer	17	92	42.020	0.010	0.2	0.0029	0.0000	OK
180 minute summer	19	48	40.465	0.065	27.8	0.0185	0.0000	OK
180 minute summer	20	48	40.470	0.170	7.9	0.4318	0.0000	OK
180 minute summer	21	92	41.036	0.036	5.6	0.0245	0.0000	OK
180 minute summer	22	92	41.160	0.010	0.3	0.0036	0.0000	OK
180 minute summer	23	92	41.253	0.033	3.2	0.0268	0.0000	OK
180 minute summer	24	92	41.386	0.036	2.7	0.1003	0.0000	OK
180 minute summer	25	92	41.518	0.018	0.8	0.0178	0.0000	OK
180 minute summer	26	92	41.137	0.137	4.6	0.2020	0.0000	OK
180 minute summer	27	32	40.557	0.077	49.1	0.0875	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	1	1.000	2	2.0	0.727	0.123	0.0333	
180 minute summer	2	1.001	9	3.5	1.392	0.028	0.1212	
180 minute summer	3	1.002	9	1.8	1.196	0.041	0.0496	
180 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
180 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
180 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
180 minute summer	9	1.007	10	6.7	1.341	0.064	0.0621	
180 minute summer	7	Flow through pond	11	0.3	0.004	0.000	0.7784	
180 minute summer	8	1.006	9	0.3	0.369	0.002	0.0115	
180 minute summer	10	1.009	12	6.6	0.990	0.085	0.2701	
180 minute summer	11	1.008	8	0.3	0.256	0.008	0.0124	
180 minute summer	12	1.010	13	6.8	0.887	0.129	0.0747	
180 minute summer	13	Flow through pond	19	27.8	0.174	0.008	32.0232	
180 minute summer	15	Flow through pond	19	27.8	0.174	0.008	32.0232	
180 minute summer	16	1.011	15	0.3	0.371	0.020	0.0063	
180 minute summer	17	1.012	16	0.2	0.259	0.009	0.0110	
180 minute summer	19	1.014	20	7.9	0.816	0.228	0.0334	
180 minute summer	20	Hydro-Brake®		7.9				86.9
180 minute summer	21	1.020	27	5.6	1.556	0.038	0.0045	
180 minute summer	22	1.015	21	0.3	0.187	0.009	0.0088	
180 minute summer	23	1.016	26	3.2	0.233	0.046	0.1816	
180 minute summer	24	1.017	23	2.6	0.455	0.010	0.2016	
180 minute summer	25	1.018	26	0.8	0.356	0.030	0.0556	
180 minute summer	26	1.019	21	4.5	0.901	0.084	0.0427	
180 minute summer	27	Flow through pond	19	27.8	0.174	0.008	32.0232	

Results for 1 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 32.24%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	1	92	46.290	0.040	2.2	0.0445	0.0000	OK
180 minute winter	2	92	46.178	0.028	4.0	0.0252	0.0000	OK
180 minute winter	3	92	45.322	0.022	1.9	0.0218	0.0000	OK
180 minute winter	4	4	45.870	0.000	0.0	0.0000	0.0000	OK
180 minute winter	5	4	45.430	0.000	0.0	0.0000	0.0000	OK
180 minute winter	6	4	45.350	0.000	0.0	0.0000	0.0000	OK
180 minute winter	9	92	43.291	0.041	7.6	0.0230	0.0000	OK
180 minute winter	7	112	43.569	0.012	0.5	0.0033	0.0000	OK
180 minute winter	8	112	43.522	0.022	0.5	0.0246	0.0000	OK
180 minute winter	10	92	42.797	0.047	7.6	0.0075	0.0000	OK
180 minute winter	11	112	43.569	0.019	0.6	0.0009	0.0000	OK
180 minute winter	12	96	41.912	0.062	7.9	0.0188	0.0000	OK
180 minute winter	13	12	40.576	0.096	8.8	0.0371	0.0000	OK
180 minute winter	15	16	40.576	0.096	1.3	0.0399	0.0000	OK
180 minute winter	16	96	41.806	0.016	0.4	0.0046	0.0000	OK
180 minute winter	17	96	42.020	0.010	0.2	0.0030	0.0000	OK
180 minute winter	19	124	40.527	0.127	27.7	0.0358	0.0000	OK
180 minute winter	20	128	40.517	0.217	8.5	0.5532	0.0000	OK
180 minute winter	21	92	41.040	0.040	6.6	0.0269	0.0000	OK
180 minute winter	22	92	41.162	0.012	0.4	0.0041	0.0000	OK
180 minute winter	23	92	41.255	0.035	3.7	0.0286	0.0000	OK
180 minute winter	24	92	41.388	0.038	3.0	0.1056	0.0000	OK
180 minute winter	25	92	41.519	0.019	0.9	0.0189	0.0000	OK
180 minute winter	26	92	41.141	0.141	5.3	0.2074	0.0000	OK
180 minute winter	27	20	40.569	0.089	47.1	0.1010	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	1	1.000	2	2.2	0.747	0.136	0.0359	111.3
180 minute winter	2	1.001	9	4.0	1.444	0.031	0.1319	
180 minute winter	3	1.002	9	1.9	1.222	0.044	0.0522	
180 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
180 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
180 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
180 minute winter	9	1.007	10	7.6	1.386	0.072	0.0681	
180 minute winter	7	Flow through pond	11	0.4	0.006	0.000	1.0502	
180 minute winter	8	1.006	9	0.5	0.444	0.004	0.0131	
180 minute winter	10	1.009	12	7.6	1.024	0.097	0.2988	
180 minute winter	11	1.008	8	0.5	0.280	0.014	0.0190	
180 minute winter	12	1.010	13	7.9	0.924	0.149	0.0829	
180 minute winter	13	Flow through pond	19	27.7	0.173	0.008	46.7869	
180 minute winter	15	Flow through pond	19	27.7	0.173	0.008	46.7869	
180 minute winter	16	1.011	15	0.4	0.391	0.024	0.0070	
180 minute winter	17	1.012	16	0.2	0.260	0.009	0.0121	
180 minute winter	19	1.014	20	8.5	0.676	0.247	0.0448	
180 minute winter	20	Hydro-Brake®		8.5				
180 minute winter	21	1.020	27	6.5	1.613	0.044	0.0050	
180 minute winter	22	1.015	21	0.4	0.346	0.012	0.0100	
180 minute winter	23	1.016	26	3.7	0.256	0.053	0.1890	
180 minute winter	24	1.017	23	3.0	0.468	0.011	0.2209	
180 minute winter	25	1.018	26	0.9	0.355	0.034	0.0615	
180 minute winter	26	1.019	21	5.3	0.935	0.098	0.0480	
180 minute winter	27	Flow through pond	19	27.7	0.173	0.008	46.7869	

Results for 1 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: -21.93%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	1	124	46.284	0.034	1.6	0.0379	0.0000	OK
240 minute summer	2	124	46.174	0.024	2.9	0.0217	0.0000	OK
240 minute summer	3	124	45.319	0.019	1.4	0.0188	0.0000	OK
240 minute summer	4	4	45.870	0.000	0.0	0.0000	0.0000	OK
240 minute summer	5	4	45.430	0.000	0.0	0.0000	0.0000	OK
240 minute summer	6	4	45.350	0.000	0.0	0.0000	0.0000	OK
240 minute summer	9	124	43.285	0.035	5.5	0.0195	0.0000	OK
240 minute summer	7	144	43.564	0.007	0.4	0.0020	0.0000	OK
240 minute summer	8	144	43.515	0.015	0.3	0.0171	0.0000	OK
240 minute summer	10	124	42.790	0.040	5.5	0.0064	0.0000	OK
240 minute summer	11	144	43.564	0.014	0.4	0.0007	0.0000	OK
240 minute summer	12	124	41.902	0.052	5.7	0.0158	0.0000	OK
240 minute summer	13	16	40.580	0.100	6.4	0.0387	0.0000	OK
240 minute summer	15	12	40.580	0.100	0.9	0.0418	0.0000	OK
240 minute summer	16	116	41.802	0.012	0.2	0.0033	0.0000	OK
240 minute summer	17	116	42.018	0.008	0.1	0.0022	0.0000	OK
240 minute summer	19	52	40.464	0.064	26.8	0.0182	0.0000	OK
240 minute summer	20	52	40.469	0.169	7.9	0.4298	0.0000	OK
240 minute summer	21	124	41.033	0.033	4.8	0.0225	0.0000	OK
240 minute summer	22	124	41.160	0.010	0.3	0.0036	0.0000	OK
240 minute summer	23	124	41.250	0.030	2.7	0.0247	0.0000	OK
240 minute summer	24	124	41.383	0.033	2.2	0.0922	0.0000	OK
240 minute summer	25	124	41.516	0.016	0.6	0.0156	0.0000	OK
240 minute summer	26	124	41.133	0.133	3.8	0.1962	0.0000	OK
240 minute summer	27	36	40.557	0.077	49.1	0.0865	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	1	1.000	2	1.6	0.681	0.099	0.0287	
240 minute summer	2	1.001	9	2.9	1.315	0.023	0.1059	
240 minute summer	3	1.002	9	1.4	1.115	0.032	0.0421	
240 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
240 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
240 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
240 minute summer	9	1.007	10	5.5	1.263	0.052	0.0539	
240 minute summer	7	Flow through pond	11	0.3	0.004	0.000	0.7462	
240 minute summer	8	1.006	9	0.3	0.301	0.002	0.0101	
240 minute summer	10	1.009	12	5.5	0.937	0.070	0.2360	
240 minute summer	11	1.008	8	0.3	0.253	0.008	0.0117	
240 minute summer	12	1.010	13	5.7	0.846	0.108	0.0654	
240 minute summer	13	Flow through pond	19	26.8	0.168	0.007	31.9683	
240 minute summer	15	Flow through pond	19	26.8	0.168	0.007	31.9683	
240 minute summer	16	1.011	15	0.2	0.317	0.012	0.0043	
240 minute summer	17	1.012	16	0.1	0.222	0.005	0.0075	
240 minute summer	19	1.014	20	7.9	0.817	0.228	0.0332	
240 minute summer	20	Hydro-Brake®		7.9				92.6
240 minute summer	21	1.020	27	4.8	1.504	0.032	0.0040	
240 minute summer	22	1.015	21	0.3	0.193	0.009	0.0079	
240 minute summer	23	1.016	26	2.7	0.208	0.039	0.1737	
240 minute summer	24	1.017	23	2.2	0.428	0.008	0.1782	
240 minute summer	25	1.018	26	0.6	0.356	0.023	0.0485	
240 minute summer	26	1.019	21	3.8	0.860	0.071	0.0376	
240 minute summer	27	Flow through pond	19	26.8	0.168	0.007	31.9683	

Results for 1 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 31.52%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	1	124	46.286	0.036	1.8	0.0402	0.0000	OK
240 minute winter	2	124	46.175	0.025	3.3	0.0231	0.0000	OK
240 minute winter	3	124	45.320	0.020	1.6	0.0200	0.0000	OK
240 minute winter	4	4	45.870	0.000	0.0	0.0000	0.0000	OK
240 minute winter	5	4	45.430	0.000	0.0	0.0000	0.0000	OK
240 minute winter	6	4	45.350	0.000	0.0	0.0000	0.0000	OK
240 minute winter	9	124	43.288	0.038	6.4	0.0210	0.0000	OK
240 minute winter	7	144	43.568	0.011	0.4	0.0030	0.0000	OK
240 minute winter	8	144	43.520	0.020	0.4	0.0229	0.0000	OK
240 minute winter	10	124	42.793	0.043	6.4	0.0069	0.0000	OK
240 minute winter	11	144	43.568	0.018	0.5	0.0009	0.0000	OK
240 minute winter	12	124	41.907	0.057	6.7	0.0172	0.0000	OK
240 minute winter	13	12	40.576	0.096	7.3	0.0373	0.0000	OK
240 minute winter	15	16	40.574	0.094	0.9	0.0392	0.0000	OK
240 minute winter	16	96	41.802	0.012	0.2	0.0033	0.0000	OK
240 minute winter	17	96	42.018	0.008	0.1	0.0022	0.0000	OK
240 minute winter	19	168	40.488	0.088	27.8	0.0249	0.0000	OK
240 minute winter	20	168	40.486	0.186	8.6	0.4744	0.0000	OK
240 minute winter	21	124	41.034	0.034	5.1	0.0233	0.0000	OK
240 minute winter	22	112	41.160	0.010	0.3	0.0036	0.0000	OK
240 minute winter	23	124	41.251	0.031	2.9	0.0256	0.0000	OK
240 minute winter	24	120	41.385	0.035	2.4	0.0959	0.0000	OK
240 minute winter	25	120	41.517	0.017	0.7	0.0168	0.0000	OK
240 minute winter	26	124	41.135	0.135	4.1	0.1987	0.0000	OK
240 minute winter	27	20	40.581	0.101	47.4	0.1145	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	1	1.000	2	1.8	0.703	0.112	0.0313	121.5
240 minute winter	2	1.001	9	3.3	1.367	0.026	0.1159	
240 minute winter	3	1.002	9	1.6	1.162	0.037	0.0462	
240 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
240 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
240 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
240 minute winter	9	1.007	10	6.4	1.317	0.061	0.0599	
240 minute winter	7	Flow through pond	11	0.4	0.003	0.000	0.9812	
240 minute winter	8	1.006	9	0.4	0.418	0.004	0.0116	
240 minute winter	10	1.009	12	6.4	0.972	0.081	0.2638	
240 minute winter	11	1.008	8	0.4	0.274	0.012	0.0173	
240 minute winter	12	1.010	13	6.6	0.883	0.126	0.0734	
240 minute winter	13	Flow through pond	19	27.8	0.174	0.008	33.4402	
240 minute winter	15	Flow through pond	19	27.8	0.174	0.008	33.4402	
240 minute winter	16	1.011	15	0.2	0.317	0.012	0.0043	
240 minute winter	17	1.012	16	0.1	0.222	0.005	0.0075	
240 minute winter	19	1.014	20	8.6	0.682	0.250	0.0379	
240 minute winter	20	Hydro-Brake®		8.1				
240 minute winter	21	1.020	27	5.1	1.524	0.034	0.0041	
240 minute winter	22	1.015	21	0.3	0.204	0.009	0.0082	
240 minute winter	23	1.016	26	2.9	0.218	0.042	0.1771	
240 minute winter	24	1.017	23	2.4	0.444	0.009	0.1885	
240 minute winter	25	1.018	26	0.7	0.356	0.027	0.0517	
240 minute winter	26	1.019	21	4.1	0.881	0.076	0.0396	
240 minute winter	27	Flow through pond	19	27.8	0.174	0.008	33.4402	

Results for 1 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: -20.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	1	184	46.279	0.029	1.2	0.0328	0.0000	OK
360 minute summer	2	184	46.171	0.021	2.2	0.0189	0.0000	OK
360 minute summer	3	184	45.317	0.017	1.1	0.0167	0.0000	OK
360 minute summer	4	8	45.870	0.000	0.0	0.0000	0.0000	OK
360 minute summer	5	8	45.430	0.000	0.0	0.0000	0.0000	OK
360 minute summer	6	8	45.350	0.000	0.0	0.0000	0.0000	OK
360 minute summer	9	184	43.281	0.031	4.3	0.0172	0.0000	OK
360 minute summer	7	208	43.564	0.007	0.3	0.0020	0.0000	OK
360 minute summer	8	208	43.515	0.015	0.3	0.0170	0.0000	OK
360 minute summer	10	184	42.785	0.035	4.2	0.0056	0.0000	OK
360 minute summer	11	208	43.564	0.014	0.3	0.0007	0.0000	OK
360 minute summer	12	184	41.896	0.046	4.4	0.0138	0.0000	OK
360 minute summer	13	24	40.569	0.089	4.9	0.0345	0.0000	OK
360 minute summer	15	24	40.569	0.089	0.7	0.0370	0.0000	OK
360 minute summer	16	176	41.802	0.012	0.2	0.0033	0.0000	OK
360 minute summer	17	176	42.018	0.008	0.1	0.0022	0.0000	OK
360 minute summer	19	40	40.463	0.063	24.9	0.0179	0.0000	OK
360 minute summer	20	40	40.468	0.168	7.8	0.4276	0.0000	OK
360 minute summer	21	184	41.028	0.028	3.6	0.0191	0.0000	OK
360 minute summer	22	184	41.159	0.009	0.2	0.0030	0.0000	OK
360 minute summer	23	184	41.247	0.027	2.1	0.0216	0.0000	OK
360 minute summer	24	184	41.379	0.029	1.7	0.0808	0.0000	OK
360 minute summer	25	184	41.514	0.014	0.5	0.0142	0.0000	OK
360 minute summer	26	184	41.128	0.128	2.9	0.1883	0.0000	OK
360 minute summer	27	24	40.572	0.092	131.6	0.1044	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	1	1.000	2	1.2	0.623	0.074	0.0235	
360 minute summer	2	1.001	9	2.2	1.208	0.017	0.0866	
360 minute summer	3	1.002	9	1.1	1.034	0.025	0.0353	
360 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
360 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
360 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
360 minute summer	9	1.007	10	4.2	1.173	0.040	0.0449	
360 minute summer	7	Flow through pond	11	0.2	0.004	0.000	0.7437	
360 minute summer	8	1.006	9	0.3	0.232	0.002	0.0086	
360 minute summer	10	1.009	12	4.2	0.872	0.054	0.1953	
360 minute summer	11	1.008	8	0.3	0.253	0.008	0.0117	
360 minute summer	12	1.010	13	4.4	0.788	0.083	0.0542	
360 minute summer	13	Flow through pond	19	24.9	0.155	0.007	32.1091	
360 minute summer	15	Flow through pond	19	24.9	0.155	0.007	32.1091	
360 minute summer	16	1.011	15	0.2	0.317	0.012	0.0043	
360 minute summer	17	1.012	16	0.1	0.214	0.005	0.0075	
360 minute summer	19	1.014	20	7.8	0.619	0.227	0.0330	
360 minute summer	20	Hydro-Brake®		7.8				102.5
360 minute summer	21	1.020	27	3.6	1.402	0.024	0.0032	
360 minute summer	22	1.015	21	0.2	0.187	0.006	0.0062	
360 minute summer	23	1.016	26	2.0	0.333	0.030	0.1627	
360 minute summer	24	1.017	23	1.7	0.393	0.006	0.1470	
360 minute summer	25	1.018	26	0.5	0.243	0.019	0.0407	
360 minute summer	26	1.019	21	2.9	0.809	0.054	0.0305	
360 minute summer	27	Flow through pond	19	24.9	0.155	0.007	32.1091	

Results for 1 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 35.62%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	1	184	46.280	0.030	1.3	0.0341	0.0000	OK
360 minute winter	2	184	46.172	0.022	2.4	0.0198	0.0000	OK
360 minute winter	3	184	45.317	0.017	1.2	0.0174	0.0000	OK
360 minute winter	4	8	45.870	0.000	0.0	0.0000	0.0000	OK
360 minute winter	5	8	45.430	0.000	0.0	0.0000	0.0000	OK
360 minute winter	6	8	45.350	0.000	0.0	0.0000	0.0000	OK
360 minute winter	9	184	43.283	0.033	4.8	0.0183	0.0000	OK
360 minute winter	7	208	43.566	0.009	0.3	0.0026	0.0000	OK
360 minute winter	8	216	43.518	0.018	0.4	0.0208	0.0000	OK
360 minute winter	10	184	42.788	0.038	4.8	0.0060	0.0000	OK
360 minute winter	11	208	43.566	0.016	0.4	0.0008	0.0000	OK
360 minute winter	12	184	41.899	0.049	5.0	0.0148	0.0000	OK
360 minute winter	13	16	40.576	0.096	5.6	0.0371	0.0000	OK
360 minute winter	15	24	40.574	0.094	0.8	0.0392	0.0000	OK
360 minute winter	16	144	41.802	0.012	0.2	0.0033	0.0000	OK
360 minute winter	17	144	42.018	0.008	0.1	0.0022	0.0000	OK
360 minute winter	19	40	40.465	0.065	27.7	0.0183	0.0000	OK
360 minute winter	20	40	40.469	0.169	7.9	0.4305	0.0000	OK
360 minute winter	21	184	41.029	0.029	3.9	0.0200	0.0000	OK
360 minute winter	22	160	41.159	0.009	0.2	0.0030	0.0000	OK
360 minute winter	23	184	41.248	0.028	2.2	0.0224	0.0000	OK
360 minute winter	24	184	41.380	0.030	1.8	0.0838	0.0000	OK
360 minute winter	25	168	41.514	0.014	0.5	0.0143	0.0000	OK
360 minute winter	26	192	41.129	0.129	3.1	0.1903	0.0000	OK
360 minute winter	27	32	40.538	0.058	47.0	0.0656	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	1	1.000	2	1.3	0.638	0.081	0.0249	
360 minute winter	2	1.001	9	2.4	1.242	0.019	0.0927	
360 minute winter	3	1.002	9	1.2	1.063	0.028	0.0377	
360 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
360 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
360 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
360 minute winter	9	1.007	10	4.8	1.217	0.046	0.0491	
360 minute winter	7	Flow through pond	11	0.3	0.003	0.000	0.8993	
360 minute winter	8	1.006	9	0.4	0.367	0.003	0.0096	
360 minute winter	10	1.009	12	4.8	0.903	0.062	0.2144	
360 minute winter	11	1.008	8	0.4	0.266	0.011	0.0153	
360 minute winter	12	1.010	13	5.0	0.816	0.095	0.0595	
360 minute winter	13	Flow through pond	19	27.7	0.173	0.008	32.0029	
360 minute winter	15	Flow through pond	19	27.7	0.173	0.008	32.0029	
360 minute winter	16	1.011	15	0.2	0.317	0.012	0.0043	
360 minute winter	17	1.012	16	0.1	0.214	0.005	0.0075	
360 minute winter	19	1.014	20	7.9	0.658	0.228	0.0333	
360 minute winter	20	Hydro-Brake®		7.9				133.4
360 minute winter	21	1.020	27	3.9	1.429	0.026	0.0034	
360 minute winter	22	1.015	21	0.2	0.187	0.006	0.0066	
360 minute winter	23	1.016	26	2.2	0.180	0.032	0.1654	
360 minute winter	24	1.017	23	1.8	0.402	0.007	0.1551	
360 minute winter	25	1.018	26	0.5	0.356	0.019	0.0423	
360 minute winter	26	1.019	21	3.1	0.826	0.058	0.0322	
360 minute winter	27	Flow through pond	19	27.7	0.173	0.008	32.0029	

Results for 1 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: -28.50%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	1	248	46.277	0.027	1.0	0.0301	0.0000	OK
480 minute summer	2	248	46.169	0.019	1.8	0.0173	0.0000	OK
480 minute summer	3	248	45.315	0.015	0.9	0.0152	0.0000	OK
480 minute summer	4	8	45.870	0.000	0.0	0.0000	0.0000	OK
480 minute summer	5	8	45.430	0.000	0.0	0.0000	0.0000	OK
480 minute summer	6	8	45.350	0.000	0.0	0.0000	0.0000	OK
480 minute summer	9	248	43.278	0.028	3.5	0.0156	0.0000	OK
480 minute summer	7	264	43.563	0.006	0.2	0.0016	0.0000	OK
480 minute summer	8	264	43.513	0.013	0.2	0.0147	0.0000	OK
480 minute summer	10	248	42.782	0.032	3.5	0.0051	0.0000	OK
480 minute summer	11	264	43.563	0.013	0.3	0.0006	0.0000	OK
480 minute summer	12	248	41.891	0.041	3.6	0.0124	0.0000	OK
480 minute summer	13	24	40.569	0.089	4.0	0.0345	0.0000	OK
480 minute summer	15	24	40.569	0.089	0.7	0.0370	0.0000	OK
480 minute summer	16	240	41.802	0.012	0.2	0.0033	0.0000	OK
480 minute summer	17	240	42.018	0.008	0.1	0.0022	0.0000	OK
480 minute summer	19	40	40.463	0.063	24.9	0.0179	0.0000	OK
480 minute summer	20	40	40.468	0.168	7.8	0.4276	0.0000	OK
480 minute summer	21	248	41.025	0.025	2.9	0.0170	0.0000	OK
480 minute summer	22	248	41.159	0.009	0.2	0.0030	0.0000	OK
480 minute summer	23	248	41.244	0.024	1.6	0.0193	0.0000	OK
480 minute summer	24	248	41.376	0.026	1.3	0.0720	0.0000	OK
480 minute summer	25	248	41.513	0.013	0.4	0.0129	0.0000	OK
480 minute summer	26	248	41.124	0.124	2.3	0.1824	0.0000	OK
480 minute summer	27	24	40.572	0.092	131.6	0.1044	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	1	1.000	2	1.0	0.593	0.062	0.0206	
480 minute summer	2	1.001	9	1.8	1.139	0.014	0.0758	
480 minute summer	3	1.002	9	0.9	0.976	0.021	0.0309	
480 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
480 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
480 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
480 minute summer	9	1.007	10	3.5	1.102	0.033	0.0391	
480 minute summer	7	Flow through pond	11	0.2	0.004	0.000	0.6438	
480 minute summer	8	1.006	9	0.2	0.206	0.002	0.0075	
480 minute summer	10	1.009	12	3.5	0.828	0.044	0.1687	
480 minute summer	11	1.008	8	0.2	0.242	0.006	0.0097	
480 minute summer	12	1.010	13	3.6	0.743	0.068	0.0467	
480 minute summer	13	Flow through pond	19	24.9	0.155	0.007	32.1091	
480 minute summer	15	Flow through pond	19	24.9	0.155	0.007	32.1091	
480 minute summer	16	1.011	15	0.2	0.317	0.012	0.0043	
480 minute summer	17	1.012	16	0.1	0.214	0.005	0.0075	
480 minute summer	19	1.014	20	7.8	0.614	0.227	0.0330	
480 minute summer	20	Hydro-Brake®		7.8				111.8
480 minute summer	21	1.020	27	2.9	1.331	0.019	0.0027	
480 minute summer	22	1.015	21	0.2	0.198	0.006	0.0054	
480 minute summer	23	1.016	26	1.6	0.333	0.023	0.1545	
480 minute summer	24	1.017	23	1.3	0.365	0.005	0.1234	
480 minute summer	25	1.018	26	0.4	0.231	0.015	0.0347	
480 minute summer	26	1.019	21	2.3	0.760	0.043	0.0258	
480 minute summer	27	Flow through pond	19	24.9	0.155	0.007	32.1091	

Results for 1 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 37.42%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	1	248	46.278	0.028	1.1	0.0315	0.0000	OK
480 minute winter	2	248	46.170	0.020	2.0	0.0182	0.0000	OK
480 minute winter	3	248	45.316	0.016	1.0	0.0160	0.0000	OK
480 minute winter	4	8	45.870	0.000	0.0	0.0000	0.0000	OK
480 minute winter	5	8	45.430	0.000	0.0	0.0000	0.0000	OK
480 minute winter	6	8	45.350	0.000	0.0	0.0000	0.0000	OK
480 minute winter	9	248	43.280	0.030	4.0	0.0168	0.0000	OK
480 minute winter	7	272	43.566	0.009	0.3	0.0025	0.0000	OK
480 minute winter	8	272	43.518	0.018	0.3	0.0199	0.0000	OK
480 minute winter	10	248	42.785	0.035	4.0	0.0055	0.0000	OK
480 minute winter	11	272	43.566	0.016	0.4	0.0008	0.0000	OK
480 minute winter	12	248	41.895	0.045	4.2	0.0135	0.0000	OK
480 minute winter	13	24	40.580	0.100	4.7	0.0386	0.0000	OK
480 minute winter	15	24	40.582	0.102	0.7	0.0423	0.0000	OK
480 minute winter	16	200	41.802	0.012	0.2	0.0033	0.0000	OK
480 minute winter	17	200	42.018	0.008	0.1	0.0022	0.0000	OK
480 minute winter	19	48	40.464	0.064	26.9	0.0181	0.0000	OK
480 minute winter	20	48	40.469	0.169	7.9	0.4289	0.0000	OK
480 minute winter	21	248	41.026	0.026	3.2	0.0179	0.0000	OK
480 minute winter	22	224	41.159	0.009	0.2	0.0030	0.0000	OK
480 minute winter	23	248	41.245	0.025	1.8	0.0204	0.0000	OK
480 minute winter	24	248	41.378	0.028	1.5	0.0770	0.0000	OK
480 minute winter	25	216	41.513	0.013	0.4	0.0129	0.0000	OK
480 minute winter	26	248	41.125	0.125	2.5	0.1844	0.0000	OK
480 minute winter	27	40	40.539	0.059	446.0	0.0669	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	1	1.000	2	1.1	0.609	0.068	0.0221	
480 minute winter	2	1.001	9	2.0	1.179	0.016	0.0814	
480 minute winter	3	1.002	9	1.0	1.008	0.023	0.0333	
480 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
480 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
480 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
480 minute winter	9	1.007	10	4.0	1.150	0.038	0.0433	
480 minute winter	7	Flow through pond	11	0.3	0.003	0.000	0.8631	
480 minute winter	8	1.006	9	0.3	0.242	0.003	0.0086	
480 minute winter	10	1.009	12	4.0	0.857	0.051	0.1890	
480 minute winter	11	1.008	8	0.3	0.262	0.010	0.0144	
480 minute winter	12	1.010	13	4.2	0.779	0.080	0.0527	
480 minute winter	13	Flow through pond	19	26.9	0.169	0.007	31.9068	
480 minute winter	15	Flow through pond	19	26.9	0.169	0.007	31.9068	
480 minute winter	16	1.011	15	0.2	0.317	0.012	0.0043	
480 minute winter	17	1.012	16	0.1	0.214	0.005	0.0075	
480 minute winter	19	1.014	20	7.9	0.769	0.228	0.0332	
480 minute winter	20	Hydro-Brake®		7.8				145.0
480 minute winter	21	1.020	27	3.2	1.368	0.022	0.0029	
480 minute winter	22	1.015	21	0.2	0.198	0.006	0.0057	
480 minute winter	23	1.016	26	1.8	0.156	0.026	0.1576	
480 minute winter	24	1.017	23	1.5	0.383	0.006	0.1359	
480 minute winter	25	1.018	26	0.4	0.350	0.015	0.0363	
480 minute winter	26	1.019	21	2.5	0.773	0.047	0.0275	
480 minute winter	27	Flow through pond	19	26.9	0.169	0.007	31.9068	

Results for 1 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: -34.17%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	1	315	46.274	0.024	0.8	0.0269	0.0000	OK
600 minute summer	2	315	46.167	0.017	1.5	0.0159	0.0000	OK
600 minute summer	3	315	45.313	0.013	0.7	0.0135	0.0000	OK
600 minute summer	4	15	45.870	0.000	0.0	0.0000	0.0000	OK
600 minute summer	5	15	45.430	0.000	0.0	0.0000	0.0000	OK
600 minute summer	6	15	45.350	0.000	0.0	0.0000	0.0000	OK
600 minute summer	9	315	43.276	0.026	2.9	0.0144	0.0000	OK
600 minute summer	7	330	43.563	0.006	0.2	0.0018	0.0000	OK
600 minute summer	8	330	43.514	0.014	0.2	0.0157	0.0000	OK
600 minute summer	10	315	42.780	0.030	2.9	0.0047	0.0000	OK
600 minute summer	11	330	43.563	0.013	0.3	0.0007	0.0000	OK
600 minute summer	12	315	41.888	0.038	3.0	0.0114	0.0000	OK
600 minute summer	13	30	40.576	0.096	3.3	0.0371	0.0000	OK
600 minute summer	15	30	40.578	0.098	0.5	0.0408	0.0000	OK
600 minute summer	16	300	41.802	0.012	0.2	0.0033	0.0000	OK
600 minute summer	17	300	42.018	0.008	0.1	0.0022	0.0000	OK
600 minute summer	19	45	40.463	0.063	24.7	0.0178	0.0000	OK
600 minute summer	20	45	40.467	0.167	7.8	0.4262	0.0000	OK
600 minute summer	21	315	41.022	0.022	2.2	0.0147	0.0000	OK
600 minute summer	22	270	41.156	0.006	0.1	0.0022	0.0000	OK
600 minute summer	23	315	41.241	0.021	1.3	0.0175	0.0000	OK
600 minute summer	24	315	41.374	0.024	1.1	0.0671	0.0000	OK
600 minute summer	25	300	41.511	0.011	0.3	0.0113	0.0000	OK
600 minute summer	26	315	41.120	0.120	1.8	0.1770	0.0000	OK
600 minute summer	27	45	40.519	0.039	445.4	0.0446	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	1	1.000	2	0.8	0.549	0.050	0.0178	121.3
600 minute summer	2	1.001	9	1.5	1.075	0.012	0.0669	
600 minute summer	3	1.002	9	0.7	0.907	0.016	0.0259	
600 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
600 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
600 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
600 minute summer	9	1.007	10	2.9	1.043	0.028	0.0345	
600 minute summer	7	Flow through pond	11	0.2	0.003	0.000	0.6854	
600 minute summer	8	1.006	9	0.2	0.218	0.002	0.0068	
600 minute summer	10	1.009	12	2.9	0.786	0.037	0.1488	
600 minute summer	11	1.008	8	0.2	0.246	0.007	0.0105	
600 minute summer	12	1.010	13	3.0	0.708	0.057	0.0413	
600 minute summer	13	Flow through pond	19	24.7	0.154	0.007	32.0355	
600 minute summer	15	Flow through pond	19	24.7	0.154	0.007	32.0355	
600 minute summer	16	1.011	15	0.2	0.317	0.012	0.0043	
600 minute summer	17	1.012	16	0.1	0.213	0.005	0.0075	
600 minute summer	19	1.014	20	7.8	0.688	0.227	0.0329	
600 minute summer	20	Hydro-Brake®		7.8				
600 minute summer	21	1.020	27	2.2	1.245	0.015	0.0022	
600 minute summer	22	1.015	21	0.1	0.171	0.003	0.0042	
600 minute summer	23	1.016	26	1.3	0.122	0.019	0.1474	
600 minute summer	24	1.017	23	1.1	0.354	0.004	0.1080	
600 minute summer	25	1.018	26	0.3	0.220	0.011	0.0292	
600 minute summer	26	1.019	21	1.8	0.720	0.034	0.0213	
600 minute summer	27	Flow through pond	19	24.7	0.154	0.007	32.0355	

Results for 1 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 34.71%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	1	300	46.275	0.025	0.9	0.0286	0.0000	OK
600 minute winter	2	300	46.168	0.018	1.6	0.0164	0.0000	OK
600 minute winter	3	300	45.314	0.014	0.8	0.0144	0.0000	OK
600 minute winter	4	15	45.870	0.000	0.0	0.0000	0.0000	OK
600 minute winter	5	15	45.430	0.000	0.0	0.0000	0.0000	OK
600 minute winter	6	15	45.350	0.000	0.0	0.0000	0.0000	OK
600 minute winter	9	330	43.277	0.027	3.3	0.0152	0.0000	OK
600 minute winter	7	360	43.565	0.008	0.2	0.0021	0.0000	OK
600 minute winter	8	360	43.516	0.016	0.3	0.0177	0.0000	OK
600 minute winter	10	330	42.781	0.031	3.3	0.0050	0.0000	OK
600 minute winter	11	360	43.565	0.015	0.3	0.0007	0.0000	OK
600 minute winter	12	330	41.890	0.040	3.4	0.0121	0.0000	OK
600 minute winter	13	30	40.576	0.096	3.8	0.0374	0.0000	OK
600 minute winter	15	30	40.572	0.092	0.6	0.0385	0.0000	OK
600 minute winter	16	270	41.802	0.012	0.2	0.0033	0.0000	OK
600 minute winter	17	270	42.018	0.008	0.1	0.0022	0.0000	OK
600 minute winter	19	45	40.461	0.061	18.9	0.0172	0.0000	OK
600 minute winter	20	45	40.466	0.166	7.8	0.4213	0.0000	OK
600 minute winter	21	315	41.024	0.024	2.7	0.0164	0.0000	OK
600 minute winter	22	210	41.156	0.006	0.1	0.0022	0.0000	OK
600 minute winter	23	300	41.243	0.023	1.5	0.0187	0.0000	OK
600 minute winter	24	300	41.375	0.025	1.2	0.0694	0.0000	OK
600 minute winter	25	315	41.513	0.013	0.4	0.0129	0.0000	OK
600 minute winter	26	315	41.123	0.123	2.2	0.1814	0.0000	OK
600 minute winter	27	45	40.528	0.048	47.3	0.0537	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	1	1.000	2	0.9	0.576	0.056	0.0191	154.0
600 minute winter	2	1.001	9	1.6	1.098	0.013	0.0700	
600 minute winter	3	1.002	9	0.8	0.943	0.019	0.0285	
600 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
600 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
600 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
600 minute winter	9	1.007	10	3.3	1.084	0.031	0.0376	
600 minute winter	7	Flow through pond	11	0.2	0.003	0.000	0.7758	
600 minute winter	8	1.006	9	0.3	0.221	0.002	0.0075	
600 minute winter	10	1.009	12	3.3	0.815	0.042	0.1622	
600 minute winter	11	1.008	8	0.3	0.255	0.008	0.0124	
600 minute winter	12	1.010	13	3.4	0.732	0.064	0.0449	
600 minute winter	13	Flow through pond	19	18.9	0.139	0.005	28.4565	
600 minute winter	15	Flow through pond	19	18.9	0.139	0.005	28.4565	
600 minute winter	16	1.011	15	0.2	0.317	0.012	0.0043	
600 minute winter	17	1.012	16	0.1	0.213	0.005	0.0075	
600 minute winter	19	1.014	20	7.8	0.679	0.227	0.0325	
600 minute winter	20	Hydro-Brake®		7.8				
600 minute winter	21	1.020	27	2.7	1.307	0.018	0.0026	
600 minute winter	22	1.015	21	0.1	0.179	0.003	0.0048	
600 minute winter	23	1.016	26	1.5	0.135	0.022	0.1529	
600 minute winter	24	1.017	23	1.2	0.356	0.005	0.1169	
600 minute winter	25	1.018	26	0.4	0.348	0.015	0.0339	
600 minute winter	26	1.019	21	2.2	0.757	0.041	0.0248	
600 minute winter	27	Flow through pond	19	18.9	0.139	0.005	28.4565	

Results for 1 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: -45.61%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	1	375	46.272	0.022	0.7	0.0252	0.0000	OK
720 minute summer	2	375	46.166	0.016	1.3	0.0149	0.0000	OK
720 minute summer	3	375	45.313	0.013	0.6	0.0126	0.0000	OK
720 minute summer	4	15	45.870	0.000	0.0	0.0000	0.0000	OK
720 minute summer	5	15	45.430	0.000	0.0	0.0000	0.0000	OK
720 minute summer	6	15	45.350	0.000	0.0	0.0000	0.0000	OK
720 minute summer	9	375	43.274	0.024	2.6	0.0136	0.0000	OK
720 minute summer	7	390	43.562	0.005	0.2	0.0014	0.0000	OK
720 minute summer	8	390	43.512	0.012	0.2	0.0135	0.0000	OK
720 minute summer	10	375	42.778	0.028	2.6	0.0044	0.0000	OK
720 minute summer	11	390	43.562	0.012	0.2	0.0006	0.0000	OK
720 minute summer	12	375	41.885	0.035	2.7	0.0107	0.0000	OK
720 minute summer	13	30	40.576	0.096	3.0	0.0371	0.0000	OK
720 minute summer	15	30	40.578	0.098	0.5	0.0408	0.0000	OK
720 minute summer	16	375	41.802	0.012	0.2	0.0033	0.0000	OK
720 minute summer	17	375	42.018	0.008	0.1	0.0022	0.0000	OK
720 minute summer	19	45	40.463	0.063	24.7	0.0178	0.0000	OK
720 minute summer	20	45	40.467	0.167	7.8	0.4262	0.0000	OK
720 minute summer	21	375	41.021	0.021	2.1	0.0143	0.0000	OK
720 minute summer	22	315	41.156	0.006	0.1	0.0022	0.0000	OK
720 minute summer	23	375	41.241	0.021	1.2	0.0168	0.0000	OK
720 minute summer	24	375	41.373	0.023	1.0	0.0643	0.0000	OK
720 minute summer	25	375	41.511	0.011	0.3	0.0113	0.0000	OK
720 minute summer	26	375	41.119	0.119	1.7	0.1758	0.0000	OK
720 minute summer	27	45	40.519	0.039	445.4	0.0446	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	1	1.000	2	0.7	0.529	0.043	0.0162	
720 minute summer	2	1.001	9	1.3	1.029	0.010	0.0606	
720 minute summer	3	1.002	9	0.6	0.864	0.014	0.0233	
720 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
720 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
720 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
720 minute summer	9	1.007	10	2.6	1.005	0.024	0.0316	
720 minute summer	7	Flow through pond	11	0.1	0.003	0.000	0.5844	
720 minute summer	8	1.006	9	0.2	0.189	0.002	0.0062	
720 minute summer	10	1.009	12	2.6	0.757	0.033	0.1363	
720 minute summer	11	1.008	8	0.2	0.233	0.005	0.0087	
720 minute summer	12	1.010	13	2.7	0.685	0.050	0.0378	
720 minute summer	13	Flow through pond	19	24.7	0.154	0.007	32.0355	
720 minute summer	15	Flow through pond	19	24.7	0.154	0.007	32.0355	
720 minute summer	16	1.011	15	0.2	0.317	0.012	0.0043	
720 minute summer	17	1.012	16	0.1	0.213	0.005	0.0075	
720 minute summer	19	1.014	20	7.8	0.688	0.227	0.0329	
720 minute summer	20	Hydro-Brake®		7.8				132.9
720 minute summer	21	1.020	27	2.1	1.232	0.014	0.0021	
720 minute summer	22	1.015	21	0.1	0.198	0.003	0.0040	
720 minute summer	23	1.016	26	1.2	0.114	0.017	0.1456	
720 minute summer	24	1.017	23	1.0	0.344	0.004	0.1013	
720 minute summer	25	1.018	26	0.3	0.213	0.011	0.0283	
720 minute summer	26	1.019	21	1.7	0.708	0.032	0.0205	
720 minute summer	27	Flow through pond	19	24.7	0.154	0.007	32.0355	

Results for 1 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 34.61%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	1	345	46.274	0.024	0.8	0.0269	0.0000	OK
720 minute winter	2	375	46.167	0.017	1.5	0.0159	0.0000	OK
720 minute winter	3	360	45.313	0.013	0.7	0.0135	0.0000	OK
720 minute winter	4	15	45.870	0.000	0.0	0.0000	0.0000	OK
720 minute winter	5	15	45.430	0.000	0.0	0.0000	0.0000	OK
720 minute winter	6	15	45.350	0.000	0.0	0.0000	0.0000	OK
720 minute winter	9	375	43.276	0.026	3.0	0.0146	0.0000	OK
720 minute winter	7	420	43.564	0.007	0.2	0.0021	0.0000	OK
720 minute winter	8	420	43.515	0.015	0.3	0.0173	0.0000	OK
720 minute winter	10	375	42.780	0.030	3.0	0.0048	0.0000	OK
720 minute winter	11	420	43.564	0.014	0.3	0.0007	0.0000	OK
720 minute winter	12	375	41.888	0.038	3.1	0.0115	0.0000	OK
720 minute winter	13	30	40.576	0.096	3.4	0.0374	0.0000	OK
720 minute winter	15	30	40.572	0.092	0.5	0.0385	0.0000	OK
720 minute winter	16	330	41.802	0.012	0.2	0.0033	0.0000	OK
720 minute winter	17	330	42.018	0.008	0.1	0.0022	0.0000	OK
720 minute winter	19	45	40.461	0.061	18.9	0.0171	0.0000	OK
720 minute winter	20	45	40.465	0.165	7.8	0.4209	0.0000	OK
720 minute winter	21	360	41.022	0.022	2.2	0.0147	0.0000	OK
720 minute winter	22	255	41.156	0.006	0.1	0.0022	0.0000	OK
720 minute winter	23	360	41.241	0.021	1.3	0.0175	0.0000	OK
720 minute winter	24	360	41.374	0.024	1.1	0.0671	0.0000	OK
720 minute winter	25	330	41.511	0.011	0.3	0.0113	0.0000	OK
720 minute winter	26	360	41.120	0.120	1.8	0.1770	0.0000	OK
720 minute winter	27	45	40.527	0.047	47.3	0.0533	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	1	1.000	2	0.8	0.558	0.050	0.0178	161.8
720 minute winter	2	1.001	9	1.5	1.075	0.012	0.0669	
720 minute winter	3	1.002	9	0.7	0.907	0.016	0.0259	
720 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
720 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
720 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
720 minute winter	9	1.007	10	3.0	1.050	0.028	0.0351	
720 minute winter	7	Flow through pond	11	0.2	0.003	0.000	0.7586	
720 minute winter	8	1.006	9	0.3	0.224	0.002	0.0071	
720 minute winter	10	1.009	12	3.0	0.791	0.038	0.1513	
720 minute winter	11	1.008	8	0.3	0.254	0.008	0.0120	
720 minute winter	12	1.010	13	3.1	0.712	0.058	0.0420	
720 minute winter	13	Flow through pond	19	18.9	0.139	0.005	28.3336	
720 minute winter	15	Flow through pond	19	18.9	0.139	0.005	28.3336	
720 minute winter	16	1.011	15	0.2	0.317	0.012	0.0043	
720 minute winter	17	1.012	16	0.1	0.213	0.005	0.0075	
720 minute winter	19	1.014	20	7.8	0.679	0.227	0.0325	
720 minute winter	20	Hydro-Brake®		7.8				
720 minute winter	21	1.020	27	2.2	1.245	0.015	0.0022	
720 minute winter	22	1.015	21	0.1	0.189	0.003	0.0042	
720 minute winter	23	1.016	26	1.3	0.294	0.019	0.1474	
720 minute winter	24	1.017	23	1.1	0.354	0.004	0.1080	
720 minute winter	25	1.018	26	0.3	0.219	0.011	0.0292	
720 minute winter	26	1.019	21	1.8	0.720	0.034	0.0213	
720 minute winter	27	Flow through pond	19	18.9	0.139	0.005	28.3336	

Results for 1 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: -75.15%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	1	495	46.271	0.021	0.6	0.0234	0.0000	OK
960 minute summer	2	495	46.165	0.015	1.1	0.0138	0.0000	OK
960 minute summer	3	480	45.312	0.011	0.5	0.0116	0.0000	OK
960 minute summer	4	15	45.870	0.000	0.0	0.0000	0.0000	OK
960 minute summer	5	15	45.430	0.000	0.0	0.0000	0.0000	OK
960 minute summer	6	15	45.350	0.000	0.0	0.0000	0.0000	OK
960 minute summer	9	495	43.272	0.022	2.1	0.0123	0.0000	OK
960 minute summer	7	585	43.559	0.002	0.1	0.0006	0.0000	OK
960 minute summer	8	585	43.508	0.008	0.1	0.0091	0.0000	OK
960 minute summer	10	495	42.775	0.025	2.1	0.0040	0.0000	OK
960 minute summer	11	585	43.559	0.009	0.1	0.0005	0.0000	OK
960 minute summer	12	495	41.882	0.032	2.2	0.0097	0.0000	OK
960 minute summer	13	45	40.553	0.072	2.4	0.0281	0.0000	OK
960 minute summer	15	45	40.552	0.072	0.2	0.0301	0.0000	OK
960 minute summer	16	15	41.790	0.000	0.0	0.0000	0.0000	OK
960 minute summer	17	15	42.010	0.000	0.0	0.0000	0.0000	OK
960 minute summer	19	60	40.463	0.063	21.4	0.0177	0.0000	OK
960 minute summer	20	60	40.467	0.167	7.8	0.4258	0.0000	OK
960 minute summer	21	495	41.019	0.019	1.7	0.0128	0.0000	OK
960 minute summer	22	435	41.156	0.006	0.1	0.0022	0.0000	OK
960 minute summer	23	495	41.239	0.019	1.0	0.0155	0.0000	OK
960 minute summer	24	495	41.371	0.021	0.8	0.0580	0.0000	OK
960 minute summer	25	450	41.509	0.009	0.2	0.0094	0.0000	OK
960 minute summer	26	495	41.117	0.117	1.4	0.1720	0.0000	OK
960 minute summer	27	45	40.552	0.072	4.5	0.0817	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	1	1.000	2	0.6	0.505	0.037	0.0145	
960 minute summer	2	1.001	9	1.1	0.978	0.009	0.0540	
960 minute summer	3	1.002	9	0.5	0.816	0.012	0.0206	
960 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
960 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
960 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
960 minute summer	9	1.007	10	2.1	0.944	0.020	0.0274	
960 minute summer	7	Flow through pond	11	0.1	0.003	0.000	0.3908	
960 minute summer	8	1.006	9	0.1	0.157	0.001	0.0052	
960 minute summer	10	1.009	12	2.1	0.711	0.027	0.1181	
960 minute summer	11	1.008	8	0.1	0.203	0.003	0.0052	
960 minute summer	12	1.010	13	2.2	0.646	0.041	0.0329	
960 minute summer	13	Flow through pond	19	21.4	0.137	0.006	31.2924	
960 minute summer	15	Flow through pond	19	21.4	0.137	0.006	31.2924	
960 minute summer	16	1.011	15	0.0	0.000	0.000	0.0000	
960 minute summer	17	1.012	16	0.0	0.000	0.000	0.0000	
960 minute summer	19	1.014	20	7.8	0.681	0.226	0.0329	
960 minute summer	20	Hydro-Brake®		7.8				156.4
960 minute summer	21	1.020	27	1.7	1.162	0.011	0.0018	
960 minute summer	22	1.015	21	0.1	0.190	0.003	0.0035	
960 minute summer	23	1.016	26	1.0	0.099	0.015	0.1407	
960 minute summer	24	1.017	23	0.8	0.318	0.003	0.0874	
960 minute summer	25	1.018	26	0.2	0.208	0.008	0.0241	
960 minute summer	26	1.019	21	1.4	0.674	0.026	0.0177	
960 minute summer	27	Flow through pond	19	21.4	0.137	0.006	31.2924	

Results for 1 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 22.70%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	1	450	46.271	0.021	0.6	0.0234	0.0000	OK
960 minute winter	2	450	46.165	0.015	1.1	0.0138	0.0000	OK
960 minute winter	3	480	45.313	0.013	0.6	0.0126	0.0000	OK
960 minute winter	4	15	45.870	0.000	0.0	0.0000	0.0000	OK
960 minute winter	5	15	45.430	0.000	0.0	0.0000	0.0000	OK
960 minute winter	6	15	45.350	0.000	0.0	0.0000	0.0000	OK
960 minute winter	9	510	43.273	0.023	2.4	0.0130	0.0000	OK
960 minute winter	7	510	43.564	0.007	0.2	0.0019	0.0000	OK
960 minute winter	8	510	43.515	0.015	0.3	0.0164	0.0000	OK
960 minute winter	10	510	42.777	0.027	2.4	0.0043	0.0000	OK
960 minute winter	11	510	43.564	0.014	0.3	0.0007	0.0000	OK
960 minute winter	12	510	41.884	0.034	2.5	0.0103	0.0000	OK
960 minute winter	13	45	40.553	0.073	2.8	0.0282	0.0000	OK
960 minute winter	15	45	40.553	0.073	0.8	0.0303	0.0000	OK
960 minute winter	16	480	41.802	0.012	0.2	0.0033	0.0000	OK
960 minute winter	17	480	42.018	0.008	0.1	0.0022	0.0000	OK
960 minute winter	19	75	40.460	0.060	14.6	0.0170	0.0000	OK
960 minute winter	20	75	40.465	0.165	7.8	0.4198	0.0000	OK
960 minute winter	21	480	41.021	0.021	2.0	0.0139	0.0000	OK
960 minute winter	22	345	41.156	0.006	0.1	0.0022	0.0000	OK
960 minute winter	23	480	41.240	0.020	1.1	0.0162	0.0000	OK
960 minute winter	24	480	41.372	0.022	0.9	0.0613	0.0000	OK
960 minute winter	25	480	41.511	0.011	0.3	0.0113	0.0000	OK
960 minute winter	26	480	41.118	0.118	1.6	0.1745	0.0000	OK
960 minute winter	27	60	40.532	0.052	326.5	0.0583	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	1	1.000	2	0.6	0.505	0.037	0.0145	
960 minute winter	2	1.001	9	1.1	0.978	0.009	0.0540	
960 minute winter	3	1.002	9	0.6	0.864	0.014	0.0233	
960 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
960 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
960 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
960 minute winter	9	1.007	10	2.4	0.982	0.022	0.0298	
960 minute winter	7	Flow through pond	11	0.2	0.003	0.000	0.7183	
960 minute winter	8	1.006	9	0.3	0.214	0.002	0.0061	
960 minute winter	10	1.009	12	2.4	0.738	0.030	0.1285	
960 minute winter	11	1.008	8	0.3	0.250	0.007	0.0112	
960 minute winter	12	1.010	13	2.5	0.669	0.047	0.0357	
960 minute winter	13	Flow through pond	19	14.6	0.106	0.004	28.9997	
960 minute winter	15	Flow through pond	19	14.6	0.106	0.004	28.9997	
960 minute winter	16	1.011	15	0.2	0.317	0.012	0.0043	
960 minute winter	17	1.012	16	0.1	0.213	0.005	0.0075	
960 minute winter	19	1.014	20	7.8	0.605	0.227	0.0324	
960 minute winter	20	Hydro-Brake®		7.8				182.8
960 minute winter	21	1.020	27	2.0	1.216	0.013	0.0020	
960 minute winter	22	1.015	21	0.1	0.201	0.003	0.0039	
960 minute winter	23	1.016	26	1.1	0.295	0.016	0.1437	
960 minute winter	24	1.017	23	0.9	0.331	0.003	0.0944	
960 minute winter	25	1.018	26	0.3	0.219	0.011	0.0274	
960 minute winter	26	1.019	21	1.6	0.694	0.030	0.0197	
960 minute winter	27	Flow through pond	19	14.6	0.106	0.004	28.9997	

Results for 1 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: -130.98%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	1	780	46.267	0.017	0.4	0.0194	0.0000	OK
1440 minute summer	2	750	46.163	0.013	0.8	0.0119	0.0000	OK
1440 minute summer	3	750	45.310	0.010	0.4	0.0104	0.0000	OK
1440 minute summer	4	30	45.870	0.000	0.0	0.0000	0.0000	OK
1440 minute summer	5	30	45.430	0.000	0.0	0.0000	0.0000	OK
1440 minute summer	6	30	45.350	0.000	0.0	0.0000	0.0000	OK
1440 minute summer	9	750	43.269	0.019	1.6	0.0108	0.0000	OK
1440 minute summer	7	840	43.559	0.002	0.1	0.0006	0.0000	OK
1440 minute summer	8	840	43.508	0.008	0.1	0.0091	0.0000	OK
1440 minute summer	10	750	42.772	0.022	1.6	0.0035	0.0000	OK
1440 minute summer	11	840	43.559	0.009	0.1	0.0005	0.0000	OK
1440 minute summer	12	750	41.878	0.028	1.7	0.0086	0.0000	OK
1440 minute summer	13	90	40.562	0.082	1.9	0.0320	0.0000	OK
1440 minute summer	15	90	40.563	0.083	0.2	0.0344	0.0000	OK
1440 minute summer	16	30	41.790	0.000	0.0	0.0000	0.0000	OK
1440 minute summer	17	30	42.010	0.000	0.0	0.0000	0.0000	OK
1440 minute summer	19	120	40.451	0.051	23.5	0.0145	0.0000	OK
1440 minute summer	20	120	40.456	0.156	7.5	0.3980	0.0000	OK
1440 minute summer	21	750	41.016	0.016	1.3	0.0111	0.0000	OK
1440 minute summer	22	720	41.156	0.006	0.1	0.0022	0.0000	OK
1440 minute summer	23	750	41.236	0.016	0.7	0.0131	0.0000	OK
1440 minute summer	24	750	41.369	0.018	0.6	0.0513	0.0000	OK
1440 minute summer	25	750	41.509	0.009	0.2	0.0094	0.0000	OK
1440 minute summer	26	750	41.113	0.113	1.0	0.1661	0.0000	OK
1440 minute summer	27	90	40.564	0.084	1.5	0.0946	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	1	1.000	2	0.4	0.452	0.025	0.0111	
1440 minute summer	2	1.001	9	0.8	0.886	0.006	0.0433	
1440 minute summer	3	1.002	9	0.4	0.762	0.009	0.0176	
1440 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
1440 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
1440 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
1440 minute summer	9	1.007	10	1.6	0.870	0.015	0.0226	
1440 minute summer	7	Flow through pond	11	0.1	0.003	0.000	0.3941	
1440 minute summer	8	1.006	9	0.1	0.160	0.001	0.0044	
1440 minute summer	10	1.009	12	1.6	0.655	0.020	0.0980	
1440 minute summer	11	1.008	8	0.1	0.204	0.003	0.0052	
1440 minute summer	12	1.010	13	1.7	0.600	0.032	0.0274	
1440 minute summer	13	Flow through pond	19	23.5	0.148	0.007	31.7216	
1440 minute summer	15	Flow through pond	19	23.5	0.148	0.007	31.7216	
1440 minute summer	16	1.011	15	0.0	0.000	0.000	0.0000	
1440 minute summer	17	1.012	16	0.0	0.000	0.000	0.0000	
1440 minute summer	19	1.014	20	7.5	0.641	0.219	0.0307	
1440 minute summer	20	Hydro-Brake®		7.6				196.8
1440 minute summer	21	1.020	27	1.3	1.080	0.009	0.0015	
1440 minute summer	22	1.015	21	0.1	0.191	0.003	0.0030	
1440 minute summer	23	1.016	26	0.7	0.075	0.010	0.1328	
1440 minute summer	24	1.017	23	0.6	0.296	0.002	0.0704	
1440 minute summer	25	1.018	26	0.2	0.209	0.008	0.0200	
1440 minute summer	26	1.019	21	1.0	0.605	0.019	0.0142	
1440 minute summer	27	Flow through pond	19	23.5	0.148	0.007	31.7216	

Results for 1 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 4.27%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	1	720	46.269	0.019	0.5	0.0215	0.0000	OK
1440 minute winter	2	720	46.164	0.014	0.9	0.0126	0.0000	OK
1440 minute winter	3	660	45.310	0.010	0.4	0.0104	0.0000	OK
1440 minute winter	4	30	45.870	0.000	0.0	0.0000	0.0000	OK
1440 minute winter	5	30	45.430	0.000	0.0	0.0000	0.0000	OK
1440 minute winter	6	30	45.350	0.000	0.0	0.0000	0.0000	OK
1440 minute winter	9	750	43.270	0.020	1.7	0.0112	0.0000	OK
1440 minute winter	7	990	43.559	0.002	0.1	0.0006	0.0000	OK
1440 minute winter	8	990	43.508	0.008	0.1	0.0093	0.0000	OK
1440 minute winter	10	750	42.773	0.023	1.7	0.0037	0.0000	OK
1440 minute winter	11	990	43.559	0.009	0.1	0.0005	0.0000	OK
1440 minute winter	12	750	41.879	0.029	1.8	0.0088	0.0000	OK
1440 minute winter	13	90	40.539	0.059	2.0	0.0229	0.0000	OK
1440 minute winter	15	90	40.539	0.059	0.2	0.0245	0.0000	OK
1440 minute winter	16	30	41.790	0.000	0.0	0.0000	0.0000	OK
1440 minute winter	17	30	42.010	0.000	0.0	0.0000	0.0000	OK
1440 minute winter	19	90	40.455	0.055	17.7	0.0154	0.0000	OK
1440 minute winter	20	90	40.459	0.159	7.8	0.4055	0.0000	OK
1440 minute winter	21	750	41.017	0.017	1.4	0.0115	0.0000	OK
1440 minute winter	22	600	41.156	0.006	0.1	0.0022	0.0000	OK
1440 minute winter	23	750	41.237	0.017	0.8	0.0138	0.0000	OK
1440 minute winter	24	750	41.370	0.020	0.7	0.0549	0.0000	OK
1440 minute winter	25	660	41.509	0.009	0.2	0.0094	0.0000	OK
1440 minute winter	26	750	41.114	0.114	1.1	0.1675	0.0000	OK
1440 minute winter	27	90	40.539	0.059	3.7	0.0666	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	1	1.000	2	0.5	0.482	0.031	0.0127	228.5
1440 minute winter	2	1.001	9	0.9	0.919	0.007	0.0470	
1440 minute winter	3	1.002	9	0.4	0.762	0.009	0.0176	
1440 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
1440 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
1440 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
1440 minute winter	9	1.007	10	1.7	0.887	0.016	0.0237	
1440 minute winter	7	Flow through pond	11	0.1	0.003	0.000	0.4001	
1440 minute winter	8	1.006	9	0.1	0.175	0.001	0.0046	
1440 minute winter	10	1.009	12	1.7	0.668	0.022	0.1026	
1440 minute winter	11	1.008	8	0.1	0.205	0.003	0.0053	
1440 minute winter	12	1.010	13	1.8	0.611	0.034	0.0287	
1440 minute winter	13	Flow through pond	19	17.7	0.119	0.005	29.8545	
1440 minute winter	15	Flow through pond	19	17.7	0.119	0.005	29.8545	
1440 minute winter	16	1.011	15	0.0	0.000	0.000	0.0000	
1440 minute winter	17	1.012	16	0.0	0.000	0.000	0.0000	
1440 minute winter	19	1.014	20	7.8	0.595	0.226	0.0313	
1440 minute winter	20	Hydro-Brake®		7.7				
1440 minute winter	21	1.020	27	1.4	1.099	0.009	0.0016	
1440 minute winter	22	1.015	21	0.1	0.202	0.003	0.0031	
1440 minute winter	23	1.016	26	0.8	0.083	0.011	0.1348	
1440 minute winter	24	1.017	23	0.7	0.312	0.003	0.0773	
1440 minute winter	25	1.018	26	0.2	0.209	0.008	0.0209	
1440 minute winter	26	1.019	21	1.1	0.622	0.020	0.0150	
1440 minute winter	27	Flow through pond	19	17.7	0.119	0.005	29.8545	

Results for 30 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 54.73%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	8	46.455	0.205	23.1	0.2298	0.0000	SURCHARGED
15 minute summer	2	8	46.233	0.083	38.1	0.0760	0.0000	OK
15 minute summer	3	8	45.372	0.072	20.5	0.0723	0.0000	OK
15 minute summer	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
15 minute summer	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
15 minute summer	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
15 minute summer	9	8	43.398	0.148	68.6	0.0825	0.0000	OK
15 minute summer	7	13	43.575	0.018	5.6	0.0050	0.0000	OK
15 minute summer	8	14	43.532	0.032	0.9	0.0363	0.0000	OK
15 minute summer	10	9	42.912	0.162	66.8	0.0258	0.0000	OK
15 minute summer	11	13	43.575	0.025	4.0	0.0013	0.0000	OK
15 minute summer	12	9	42.213	0.363	66.7	0.1099	0.0000	SURCHARGED
15 minute summer	13	10	40.636	0.156	75.5	0.0605	0.0000	OK
15 minute summer	15	8	40.617	0.137	12.7	0.0570	0.0000	OK
15 minute summer	16	8	41.836	0.046	3.6	0.0130	0.0000	OK
15 minute summer	17	8	42.039	0.029	1.9	0.0082	0.0000	OK
15 minute summer	19	31	40.517	0.117	46.6	0.0331	0.0000	OK
15 minute summer	20	31	40.509	0.209	9.4	0.5329	0.0000	OK
15 minute summer	21	9	41.154	0.154	55.7	0.1042	0.0000	OK
15 minute summer	22	8	41.184	0.034	3.7	0.0118	0.0000	OK
15 minute summer	23	9	41.336	0.116	34.8	0.0947	0.0000	OK
15 minute summer	24	8	41.466	0.116	31.7	0.3231	0.0000	OK
15 minute summer	25	8	41.560	0.060	9.3	0.0594	0.0000	OK
15 minute summer	26	9	41.272	0.272	46.0	0.4014	0.0000	OK
15 minute summer	27	11	40.615	0.135	106.0	0.1523	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	1	1.000	2	19.1	1.230	1.189	0.1675	
15 minute summer	2	1.001	9	34.9	2.683	0.276	0.6244	
15 minute summer	3	1.002	9	18.8	2.311	0.437	0.2737	
15 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
15 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
15 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
15 minute summer	9	1.007	10	66.8	2.353	0.637	0.3517	
15 minute summer	7	Flow through pond	11	2.2	0.029	0.000	1.4855	
15 minute summer	8	1.006	9	0.9	0.741	0.007	0.0658	
15 minute summer	10	1.009	12	64.5	1.696	0.826	1.4138	
15 minute summer	11	1.008	8	0.9	0.379	0.026	0.0316	
15 minute summer	12	1.010	13	69.2	1.739	1.313	0.3810	
15 minute summer	13	Flow through pond	19	46.6	0.211	0.013	47.0110	
15 minute summer	15	Flow through pond	19	46.6	0.211	0.013	47.0110	
15 minute summer	16	1.011	15	3.0	0.699	0.182	0.0301	
15 minute summer	17	1.012	16	1.7	0.496	0.080	0.0540	
15 minute summer	19	1.014	20	9.4	0.872	0.272	0.0433	
15 minute summer	20	Hydro-Brake®		8.4				55.7
15 minute summer	21	1.020	27	55.5	2.472	0.373	0.0277	
15 minute summer	22	1.015	21	3.6	0.455	0.111	0.0475	
15 minute summer	23	1.016	26	33.4	0.970	0.485	0.3807	
15 minute summer	24	1.017	23	27.7	0.867	0.106	1.1083	
15 minute summer	25	1.018	26	8.8	0.717	0.336	0.2284	
15 minute summer	26	1.019	21	45.9	1.447	0.857	0.2679	
15 minute summer	27	Flow through pond	19	46.6	0.211	0.013	47.0110	

Results for 30 year 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: -95.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	8	46.589	0.339	27.3	0.3805	0.0000	SURCHARGED
15 minute winter	2	8	46.246	0.096	47.2	0.0879	0.0000	OK
15 minute winter	3	8	45.381	0.081	24.2	0.0811	0.0000	OK
15 minute winter	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
15 minute winter	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
15 minute winter	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
15 minute winter	9	9	43.565	0.315	88.2	0.1761	0.0000	SURCHARGED
15 minute winter	7	12	43.587	0.030	6.6	0.0084	0.0000	OK
15 minute winter	8	10	43.577	0.077	2.5	0.0868	0.0000	OK
15 minute winter	10	10	43.213	0.463	77.0	0.0736	0.0000	SURCHARGED
15 minute winter	11	12	43.587	0.037	4.9	0.0019	0.0000	OK
15 minute winter	12	9	42.277	0.427	77.0	0.1294	0.0000	SURCHARGED
15 minute winter	13	11	40.705	0.225	86.7	0.0874	0.0000	OK
15 minute winter	15	12	40.664	0.184	15.5	0.0765	0.0000	OK
15 minute winter	16	8	41.844	0.054	4.3	0.0152	0.0000	OK
15 minute winter	17	8	42.042	0.032	2.2	0.0092	0.0000	OK
15 minute winter	19	255	40.612	0.212	92.1	0.0601	0.0000	SURCHARGED
15 minute winter	20	255	40.598	0.298	11.0	0.7579	0.0000	OK
15 minute winter	21	9	41.181	0.181	68.8	0.1230	0.0000	OK
15 minute winter	22	8	41.187	0.037	4.4	0.0131	0.0000	OK
15 minute winter	23	9	41.417	0.197	44.9	0.1604	0.0000	OK
15 minute winter	24	8	41.479	0.129	37.4	0.3576	0.0000	OK
15 minute winter	25	8	41.567	0.067	11.0	0.0665	0.0000	OK
15 minute winter	26	9	41.339	0.339	55.2	0.5001	0.0000	SURCHARGED
15 minute winter	27	12	40.668	0.188	68.9	0.2126	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	25.0	1.555	1.553	0.1791	
15 minute winter	2	1.001	9	45.9	2.817	0.363	1.3059	
15 minute winter	3	1.002	9	24.4	2.330	0.565	0.4412	
15 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
15 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
15 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
15 minute winter	9	1.007	10	77.0	2.356	0.734	0.4927	
15 minute winter	7	Flow through pond	11	2.8	0.029	0.000	2.3266	
15 minute winter	8	1.006	9	4.6	0.937	0.038	0.1161	
15 minute winter	10	1.009	12	74.0	1.861	0.948	1.5967	
15 minute winter	11	1.008	8	2.1	0.395	0.059	0.0858	
15 minute winter	12	1.010	13	76.9	1.933	1.460	0.3832	
15 minute winter	13	Flow through pond	19	92.1	0.284	0.026	91.6881	
15 minute winter	15	Flow through pond	19	92.1	0.284	0.026	91.6881	
15 minute winter	16	1.011	15	4.1	0.752	0.245	0.0374	
15 minute winter	17	1.012	16	2.1	0.509	0.100	0.0656	
15 minute winter	19	1.014	20	11.0	0.952	0.319	0.0471	
15 minute winter	20	Hydro-Brake®		9.2				133.0
15 minute winter	21	1.020	27	68.9	2.567	0.463	0.0327	
15 minute winter	22	1.015	21	4.3	0.529	0.135	0.0486	
15 minute winter	23	1.016	26	40.1	1.028	0.582	0.4826	
15 minute winter	24	1.017	23	36.5	0.866	0.140	1.8623	
15 minute winter	25	1.018	26	10.8	0.766	0.411	0.2383	
15 minute winter	26	1.019	21	55.1	1.467	1.028	0.3134	
15 minute winter	27	Flow through pond	19	92.1	0.284	0.026	91.6881	

Results for 30 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: -290.58%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	1	16	46.371	0.121	15.1	0.1359	0.0000	OK
30 minute summer	2	16	46.222	0.072	27.5	0.0662	0.0000	OK
30 minute summer	3	16	45.359	0.059	13.4	0.0589	0.0000	OK
30 minute summer	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
30 minute summer	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
30 minute summer	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
30 minute summer	9	16	43.370	0.120	51.0	0.0670	0.0000	OK
30 minute summer	7	21	43.578	0.021	3.6	0.0058	0.0000	OK
30 minute summer	8	22	43.537	0.037	1.1	0.0422	0.0000	OK
30 minute summer	10	16	42.881	0.131	50.9	0.0208	0.0000	OK
30 minute summer	11	21	43.578	0.028	2.8	0.0014	0.0000	OK
30 minute summer	12	16	42.059	0.209	52.9	0.0633	0.0000	OK
30 minute summer	13	144	40.883	0.403	56.8	0.1565	0.0000	OK
30 minute summer	15	149	40.787	0.307	8.7	0.1278	0.0000	OK
30 minute summer	16	16	41.830	0.040	2.4	0.0113	0.0000	OK
30 minute summer	17	16	42.034	0.024	1.2	0.0069	0.0000	OK
30 minute summer	19	146	40.790	0.390	65.2	0.1104	0.0000	SURCHARGED
30 minute summer	20	146	40.773	0.473	10.0	1.2046	0.0000	OK
30 minute summer	21	16	41.131	0.131	44.2	0.0888	0.0000	OK
30 minute summer	22	16	41.178	0.028	2.4	0.0097	0.0000	OK
30 minute summer	23	16	41.313	0.093	25.4	0.0760	0.0000	OK
30 minute summer	24	16	41.447	0.097	20.7	0.2686	0.0000	OK
30 minute summer	25	16	41.549	0.049	6.1	0.0488	0.0000	OK
30 minute summer	26	16	41.241	0.241	35.8	0.3561	0.0000	OK
30 minute summer	27	149	41.001	0.521	236.7	0.5889	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	1	1.000	2	15.1	1.259	0.938	0.1434	
30 minute summer	2	1.001	9	27.5	2.527	0.217	0.5214	
30 minute summer	3	1.002	9	13.4	2.130	0.311	0.2111	
30 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
30 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
30 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
30 minute summer	9	1.007	10	50.9	2.239	0.485	0.2818	
30 minute summer	7	Flow through pond	11	1.6	0.013	0.000	1.6876	
30 minute summer	8	1.006	9	1.1	0.745	0.009	0.0525	
30 minute summer	10	1.009	12	50.7	1.609	0.650	1.2538	
30 minute summer	11	1.008	8	1.1	0.350	0.033	0.0386	
30 minute summer	12	1.010	13	50.6	1.414	0.961	0.3479	
30 minute summer	13	Flow through pond	19	65.2	0.232	0.018	181.9983	
30 minute summer	15	Flow through pond	19	65.2	0.232	0.018	181.9983	
30 minute summer	16	1.011	15	2.4	0.648	0.142	0.0249	
30 minute summer	17	1.012	16	1.2	0.435	0.056	0.0434	
30 minute summer	19	1.014	20	10.0	0.741	0.289	0.0471	
30 minute summer	20	Hydro-Brake®		9.8				143.0
30 minute summer	21	1.020	27	44.0	2.362	0.296	0.0231	
30 minute summer	22	1.015	21	2.4	0.361	0.075	0.0428	
30 minute summer	23	1.016	26	25.1	0.792	0.364	0.3483	
30 minute summer	24	1.017	23	20.8	0.805	0.080	0.8960	
30 minute summer	25	1.018	26	6.1	0.599	0.232	0.2138	
30 minute summer	26	1.019	21	35.5	1.356	0.662	0.2214	
30 minute summer	27	Flow through pond	19	65.2	0.232	0.018	181.9983	

Results for 30 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: -32.01%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	1	16	46.398	0.148	17.8	0.1658	0.0000	OK
30 minute winter	2	16	46.229	0.079	32.2	0.0721	0.0000	OK
30 minute winter	3	16	45.364	0.064	15.8	0.0646	0.0000	OK
30 minute winter	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
30 minute winter	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
30 minute winter	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
30 minute winter	9	16	43.385	0.135	60.7	0.0754	0.0000	OK
30 minute winter	7	21	43.590	0.033	4.3	0.0093	0.0000	OK
30 minute winter	8	22	43.561	0.061	2.4	0.0687	0.0000	OK
30 minute winter	10	16	42.901	0.151	60.7	0.0240	0.0000	OK
30 minute winter	11	21	43.590	0.040	3.6	0.0020	0.0000	OK
30 minute winter	12	16	42.160	0.310	63.0	0.0940	0.0000	SURCHARGED
30 minute winter	13	18	40.694	0.214	69.7	0.0831	0.0000	OK
30 minute winter	15	19	40.664	0.184	10.2	0.0766	0.0000	OK
30 minute winter	16	16	41.834	0.044	2.8	0.0123	0.0000	OK
30 minute winter	17	16	42.036	0.026	1.4	0.0075	0.0000	OK
30 minute winter	19	35	40.623	0.223	104.8	0.0632	0.0000	SURCHARGED
30 minute winter	20	35	40.608	0.308	9.6	0.7847	0.0000	OK
30 minute winter	21	16	41.148	0.148	52.4	0.1003	0.0000	OK
30 minute winter	22	16	41.180	0.030	2.9	0.0107	0.0000	OK
30 minute winter	23	16	41.322	0.102	29.7	0.0834	0.0000	OK
30 minute winter	24	16	41.455	0.105	24.3	0.2910	0.0000	OK
30 minute winter	25	16	41.554	0.054	7.2	0.0532	0.0000	OK
30 minute winter	26	16	41.262	0.262	42.2	0.3864	0.0000	OK
30 minute winter	27	19	40.666	0.186	111.1	0.2100	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	1	1.000	2	17.6	1.281	1.094	0.1633	
30 minute winter	2	1.001	9	32.2	2.641	0.255	0.5858	
30 minute winter	3	1.002	9	15.8	2.224	0.366	0.2384	
30 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
30 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
30 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
30 minute winter	9	1.007	10	60.7	2.305	0.578	0.3291	
30 minute winter	7	Flow through pond	11	2.2	0.022	0.000	2.5392	
30 minute winter	8	1.006	9	2.4	0.904	0.020	0.0619	
30 minute winter	10	1.009	12	60.4	1.621	0.773	1.3664	
30 minute winter	11	1.008	8	2.4	0.376	0.069	0.0726	
30 minute winter	12	1.010	13	62.4	1.570	1.184	0.3770	
30 minute winter	13	Flow through pond	19	104.8	0.278	0.029	96.0962	
30 minute winter	15	Flow through pond	19	104.8	0.278	0.029	96.0962	
30 minute winter	16	1.011	15	2.8	0.679	0.168	0.0282	
30 minute winter	17	1.012	16	1.4	0.451	0.066	0.0489	
30 minute winter	19	1.014	20	9.6	0.751	0.279	0.0471	
30 minute winter	20	Hydro-Brake®		9.2				139.6
30 minute winter	21	1.020	27	52.4	2.442	0.352	0.0265	
30 minute winter	22	1.015	21	2.9	0.479	0.090	0.0465	
30 minute winter	23	1.016	26	29.6	0.893	0.431	0.3611	
30 minute winter	24	1.017	23	24.3	0.831	0.094	1.0146	
30 minute winter	25	1.018	26	7.2	0.722	0.274	0.2198	
30 minute winter	26	1.019	21	42.2	1.399	0.786	0.2546	
30 minute winter	27	Flow through pond	19	104.8	0.278	0.029	96.0962	

Results for 30 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: -132.26%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	1	31	46.341	0.091	10.0	0.1021	0.0000	OK
60 minute summer	2	31	46.209	0.059	18.3	0.0535	0.0000	OK
60 minute summer	3	31	45.347	0.047	8.9	0.0473	0.0000	OK
60 minute summer	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
60 minute summer	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
60 minute summer	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
60 minute summer	9	31	43.344	0.094	34.3	0.0523	0.0000	OK
60 minute summer	7	37	43.578	0.021	2.4	0.0060	0.0000	OK
60 minute summer	8	38	43.538	0.038	1.2	0.0433	0.0000	OK
60 minute summer	10	31	42.853	0.103	34.3	0.0164	0.0000	OK
60 minute summer	11	37	43.578	0.028	2.0	0.0014	0.0000	OK
60 minute summer	12	31	42.001	0.151	35.7	0.0456	0.0000	OK
60 minute summer	13	78	40.621	0.141	39.2	0.0548	0.0000	OK
60 minute summer	15	79	40.621	0.141	5.8	0.0586	0.0000	OK
60 minute summer	16	31	41.822	0.032	1.6	0.0091	0.0000	OK
60 minute summer	17	31	42.030	0.020	0.8	0.0057	0.0000	OK
60 minute summer	19	81	40.616	0.216	52.7	0.0610	0.0000	SURCHARGED
60 minute summer	20	82	40.601	0.301	9.2	0.7661	0.0000	OK
60 minute summer	21	31	41.100	0.100	29.4	0.0677	0.0000	OK
60 minute summer	22	31	41.173	0.023	1.6	0.0080	0.0000	OK
60 minute summer	23	31	41.295	0.075	16.9	0.0612	0.0000	OK
60 minute summer	24	31	41.429	0.079	13.8	0.2192	0.0000	OK
60 minute summer	25	31	41.540	0.040	4.0	0.0393	0.0000	OK
60 minute summer	26	31	41.206	0.206	23.8	0.3036	0.0000	OK
60 minute summer	27	34	40.597	0.117	481.1	0.1329	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	1	1.000	2	10.0	1.142	0.621	0.1063	
60 minute summer	2	1.001	9	18.3	2.257	0.145	0.3886	
60 minute summer	3	1.002	9	8.9	1.906	0.206	0.1566	
60 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
60 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
60 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
60 minute summer	9	1.007	10	34.3	2.053	0.327	0.2069	
60 minute summer	7	Flow through pond	11	1.2	0.009	0.000	1.7204	
60 minute summer	8	1.006	9	1.2	0.679	0.010	0.0390	
60 minute summer	10	1.009	12	34.2	1.480	0.438	0.9240	
60 minute summer	11	1.008	8	1.2	0.332	0.034	0.0398	
60 minute summer	12	1.010	13	35.0	1.335	0.665	0.2562	
60 minute summer	13	Flow through pond	19	52.7	0.169	0.015	93.2033	
60 minute summer	15	Flow through pond	19	52.7	0.169	0.015	93.2033	
60 minute summer	16	1.011	15	1.6	0.580	0.095	0.0186	
60 minute summer	17	1.012	16	0.8	0.388	0.038	0.0324	
60 minute summer	19	1.014	20	9.2	0.803	0.267	0.0471	
60 minute summer	20	Hydro-Brake®		9.2				153.7
60 minute summer	21	1.020	27	29.3	2.187	0.197	0.0167	
60 minute summer	22	1.015	21	1.6	0.293	0.050	0.0326	
60 minute summer	23	1.016	26	16.7	0.643	0.243	0.3128	
60 minute summer	24	1.017	23	13.8	0.725	0.053	0.6615	
60 minute summer	25	1.018	26	4.0	0.537	0.152	0.1728	
60 minute summer	26	1.019	21	23.6	1.263	0.441	0.1589	
60 minute summer	27	Flow through pond	19	52.7	0.169	0.015	93.2033	

Results for 30 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: -0.99%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	1	31	46.348	0.098	11.2	0.1097	0.0000	OK
60 minute winter	2	31	46.212	0.062	20.4	0.0566	0.0000	OK
60 minute winter	3	31	45.350	0.050	9.9	0.0500	0.0000	OK
60 minute winter	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
60 minute winter	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
60 minute winter	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
60 minute winter	9	31	43.351	0.101	38.9	0.0565	0.0000	OK
60 minute winter	7	38	43.588	0.031	2.7	0.0088	0.0000	OK
60 minute winter	8	39	43.558	0.058	2.2	0.0654	0.0000	OK
60 minute winter	10	31	42.861	0.111	38.9	0.0177	0.0000	OK
60 minute winter	11	38	43.588	0.038	2.6	0.0020	0.0000	OK
60 minute winter	12	32	42.017	0.167	40.5	0.0505	0.0000	OK
60 minute winter	13	57	40.681	0.201	45.0	0.0781	0.0000	OK
60 minute winter	15	59	40.676	0.196	6.5	0.0815	0.0000	OK
60 minute winter	16	32	41.825	0.035	1.8	0.0098	0.0000	OK
60 minute winter	17	32	42.031	0.021	0.9	0.0060	0.0000	OK
60 minute winter	19	60	40.674	0.274	63.5	0.0774	0.0000	SURCHARGED
60 minute winter	20	67	40.658	0.358	9.6	0.9110	0.0000	OK
60 minute winter	21	31	41.108	0.108	33.1	0.0733	0.0000	OK
60 minute winter	22	31	41.174	0.024	1.8	0.0085	0.0000	OK
60 minute winter	23	31	41.300	0.080	18.8	0.0649	0.0000	OK
60 minute winter	24	31	41.433	0.083	15.4	0.2312	0.0000	OK
60 minute winter	25	31	41.542	0.042	4.5	0.0417	0.0000	OK
60 minute winter	26	31	41.214	0.214	26.7	0.3165	0.0000	OK
60 minute winter	27	57	40.677	0.197	366.6	0.2227	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	1	1.000	2	11.2	1.176	0.696	0.1153	
60 minute winter	2	1.001	9	20.4	2.328	0.162	0.4204	
60 minute winter	3	1.002	9	9.9	1.963	0.230	0.1693	
60 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
60 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
60 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
60 minute winter	9	1.007	10	38.9	2.112	0.371	0.2284	
60 minute winter	7	Flow through pond	11	1.8	0.014	0.000	2.4282	
60 minute winter	8	1.006	9	2.2	0.782	0.019	0.0444	
60 minute winter	10	1.009	12	38.9	1.511	0.498	1.0261	
60 minute winter	11	1.008	8	2.2	0.364	0.064	0.0681	
60 minute winter	12	1.010	13	40.4	1.372	0.767	0.2865	
60 minute winter	13	Flow through pond	19	63.5	0.166	0.018	122.7688	
60 minute winter	15	Flow through pond	19	63.5	0.166	0.018	122.7688	
60 minute winter	16	1.011	15	1.8	0.602	0.108	0.0205	
60 minute winter	17	1.012	16	0.9	0.400	0.042	0.0355	
60 minute winter	19	1.014	20	9.6	0.825	0.278	0.0471	
60 minute winter	20	Hydro-Brake®		9.5				157.8
60 minute winter	21	1.020	27	33.1	2.360	0.223	0.0184	
60 minute winter	22	1.015	21	1.8	0.410	0.056	0.0356	
60 minute winter	23	1.016	26	18.8	0.683	0.273	0.3252	
60 minute winter	24	1.017	23	15.4	0.744	0.059	0.7182	
60 minute winter	25	1.018	26	4.5	0.602	0.171	0.1858	
60 minute winter	26	1.019	21	26.6	1.288	0.497	0.1750	
60 minute winter	27	Flow through pond	19	63.5	0.166	0.018	122.7688	

Results for 30 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: -118.14%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	1	62	46.318	0.068	6.1	0.0764	0.0000	OK
120 minute summer	2	62	46.195	0.045	11.1	0.0416	0.0000	OK
120 minute summer	3	62	45.336	0.036	5.4	0.0365	0.0000	OK
120 minute summer	4	2	45.870	0.000	0.0	0.0000	0.0000	OK
120 minute summer	5	2	45.430	0.000	0.0	0.0000	0.0000	OK
120 minute summer	6	2	45.350	0.000	0.0	0.0000	0.0000	OK
120 minute summer	9	62	43.321	0.071	21.1	0.0395	0.0000	OK
120 minute summer	7	70	43.576	0.019	1.5	0.0055	0.0000	OK
120 minute summer	8	72	43.535	0.035	1.0	0.0397	0.0000	OK
120 minute summer	10	62	42.829	0.079	21.1	0.0126	0.0000	OK
120 minute summer	11	70	43.576	0.026	1.4	0.0013	0.0000	OK
120 minute summer	12	62	41.961	0.111	22.0	0.0335	0.0000	OK
120 minute summer	13	328	40.634	0.154	24.4	0.0596	0.0000	OK
120 minute summer	15	334	40.635	0.155	3.5	0.0646	0.0000	OK
120 minute summer	16	62	41.816	0.026	1.0	0.0072	0.0000	OK
120 minute summer	17	62	42.026	0.016	0.5	0.0046	0.0000	OK
120 minute summer	19	334	40.630	0.230	34.8	0.0650	0.0000	SURCHARGED
120 minute summer	20	334	40.615	0.315	9.3	0.8009	0.0000	OK
120 minute summer	21	62	41.073	0.073	18.0	0.0495	0.0000	OK
120 minute summer	22	62	41.168	0.018	1.0	0.0064	0.0000	OK
120 minute summer	23	62	41.278	0.058	10.2	0.0474	0.0000	OK
120 minute summer	24	62	41.412	0.062	8.3	0.1709	0.0000	OK
120 minute summer	25	62	41.531	0.031	2.4	0.0304	0.0000	OK
120 minute summer	26	62	41.176	0.176	14.5	0.2605	0.0000	OK
120 minute summer	27	80	40.582	0.102	447.9	0.1152	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	1	1.000	2	6.1	1.000	0.379	0.0744	
120 minute summer	2	1.001	9	11.1	1.958	0.088	0.2720	
120 minute summer	3	1.002	9	5.4	1.657	0.125	0.1094	
120 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
120 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
120 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
120 minute summer	9	1.007	10	21.1	1.821	0.201	0.1435	
120 minute summer	7	Flow through pond	11	0.9	0.006	0.000	1.5974	
120 minute summer	8	1.006	9	1.0	0.544	0.009	0.0273	
120 minute summer	10	1.009	12	21.1	1.322	0.270	0.6408	
120 minute summer	11	1.008	8	1.0	0.319	0.029	0.0355	
120 minute summer	12	1.010	13	21.9	1.199	0.416	0.1779	
120 minute summer	13	Flow through pond	19	34.8	0.158	0.010	100.6645	
120 minute summer	15	Flow through pond	19	34.8	0.158	0.010	100.6645	
120 minute summer	16	1.011	15	1.0	0.510	0.060	0.0134	
120 minute summer	17	1.012	16	0.5	0.339	0.024	0.0232	
120 minute summer	19	1.014	20	9.3	0.795	0.268	0.0471	
120 minute summer	20	Hydro-Brake®		9.3				182.7
120 minute summer	21	1.020	27	18.0	2.397	0.121	0.0112	
120 minute summer	22	1.015	21	1.0	0.334	0.031	0.0224	
120 minute summer	23	1.016	26	10.2	0.487	0.148	0.2616	
120 minute summer	24	1.017	23	8.3	0.628	0.032	0.4581	
120 minute summer	25	1.018	26	2.4	0.434	0.091	0.1238	
120 minute summer	26	1.019	21	14.5	1.153	0.270	0.1066	
120 minute summer	27	Flow through pond	19	34.8	0.158	0.010	100.6645	

Results for 30 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: -31.63%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	1	62	46.322	0.072	6.8	0.0812	0.0000	OK
120 minute winter	2	62	46.198	0.048	12.4	0.0440	0.0000	OK
120 minute winter	3	62	45.338	0.038	6.0	0.0385	0.0000	OK
120 minute winter	4	2	45.870	0.000	0.0	0.0000	0.0000	OK
120 minute winter	5	2	45.430	0.000	0.0	0.0000	0.0000	OK
120 minute winter	6	2	45.350	0.000	0.0	0.0000	0.0000	OK
120 minute winter	9	62	43.326	0.076	24.2	0.0427	0.0000	OK
120 minute winter	7	70	43.583	0.026	1.6	0.0074	0.0000	OK
120 minute winter	8	72	43.548	0.048	1.7	0.0542	0.0000	OK
120 minute winter	10	62	42.835	0.085	24.2	0.0136	0.0000	OK
120 minute winter	11	70	43.583	0.033	1.8	0.0017	0.0000	OK
120 minute winter	12	62	41.970	0.120	25.1	0.0365	0.0000	OK
120 minute winter	13	214	40.805	0.325	27.9	0.1261	0.0000	OK
120 minute winter	15	214	40.804	0.324	3.8	0.1347	0.0000	OK
120 minute winter	16	62	41.816	0.026	1.0	0.0073	0.0000	OK
120 minute winter	17	60	42.026	0.016	0.5	0.0046	0.0000	OK
120 minute winter	19	210	40.806	0.406	33.7	0.1149	0.0000	SURCHARGED
120 minute winter	20	210	40.789	0.489	9.9	1.2449	0.0000	OK
120 minute winter	21	62	41.078	0.078	20.1	0.0531	0.0000	OK
120 minute winter	22	60	41.169	0.019	1.1	0.0067	0.0000	OK
120 minute winter	23	62	41.282	0.062	11.4	0.0502	0.0000	OK
120 minute winter	24	62	41.415	0.065	9.3	0.1805	0.0000	OK
120 minute winter	25	62	41.533	0.033	2.7	0.0322	0.0000	OK
120 minute winter	26	62	41.182	0.182	16.2	0.2689	0.0000	OK
120 minute winter	27	214	41.028	0.548	53.7	0.6200	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	1	1.000	2	6.8	1.030	0.422	0.0804	
120 minute winter	2	1.001	9	12.4	2.022	0.098	0.2944	
120 minute winter	3	1.002	9	6.0	1.707	0.139	0.1180	
120 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
120 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
120 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
120 minute winter	9	1.007	10	24.2	1.884	0.230	0.1589	
120 minute winter	7	Flow through pond	11	1.3	0.008	0.000	2.0756	
120 minute winter	8	1.006	9	1.7	0.667	0.014	0.0314	
120 minute winter	10	1.009	12	24.1	1.365	0.309	0.7109	
120 minute winter	11	1.008	8	1.7	0.346	0.048	0.0534	
120 minute winter	12	1.010	13	25.1	1.239	0.477	0.1975	
120 minute winter	13	Flow through pond	19	33.7	0.160	0.009	191.6790	
120 minute winter	15	Flow through pond	19	33.7	0.160	0.009	191.6790	
120 minute winter	16	1.011	15	1.0	0.510	0.060	0.0134	
120 minute winter	17	1.012	16	0.5	0.339	0.024	0.0233	
120 minute winter	19	1.014	20	9.9	0.823	0.286	0.0471	
120 minute winter	20	Hydro-Brake®		9.8				195.8
120 minute winter	21	1.020	27	20.1	2.034	0.135	0.0159	
120 minute winter	22	1.015	21	1.1	0.297	0.034	0.0245	
120 minute winter	23	1.016	26	11.4	0.520	0.166	0.2723	
120 minute winter	24	1.017	23	9.3	0.649	0.036	0.4968	
120 minute winter	25	1.018	26	2.7	0.470	0.103	0.1338	
120 minute winter	26	1.019	21	16.2	1.178	0.302	0.1166	
120 minute winter	27	Flow through pond	19	33.7	0.160	0.009	191.6790	

Results for 30 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: -111.87%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	1	92	46.308	0.058	4.6	0.0652	0.0000	OK
180 minute summer	2	92	46.189	0.039	8.4	0.0360	0.0000	OK
180 minute summer	3	92	45.331	0.031	4.1	0.0316	0.0000	OK
180 minute summer	4	4	45.870	0.000	0.0	0.0000	0.0000	OK
180 minute summer	5	4	45.430	0.000	0.0	0.0000	0.0000	OK
180 minute summer	6	4	45.350	0.000	0.0	0.0000	0.0000	OK
180 minute summer	9	92	43.311	0.061	15.9	0.0339	0.0000	OK
180 minute summer	7	104	43.575	0.018	1.1	0.0050	0.0000	OK
180 minute summer	8	104	43.532	0.032	0.9	0.0367	0.0000	OK
180 minute summer	10	92	42.818	0.068	15.9	0.0108	0.0000	OK
180 minute summer	11	104	43.575	0.025	1.1	0.0013	0.0000	OK
180 minute summer	12	92	41.943	0.093	16.4	0.0281	0.0000	OK
180 minute summer	13	392	40.634	0.154	18.1	0.0597	0.0000	OK
180 minute summer	15	396	40.628	0.148	2.7	0.0616	0.0000	OK
180 minute summer	16	92	41.812	0.022	0.8	0.0063	0.0000	OK
180 minute summer	17	92	42.024	0.014	0.4	0.0040	0.0000	OK
180 minute summer	19	396	40.630	0.230	29.6	0.0650	0.0000	SURCHARGED
180 minute summer	20	396	40.615	0.315	9.3	0.8008	0.0000	OK
180 minute summer	21	92	41.060	0.060	13.2	0.0408	0.0000	OK
180 minute summer	22	92	41.165	0.015	0.7	0.0054	0.0000	OK
180 minute summer	23	92	41.270	0.050	7.6	0.0405	0.0000	OK
180 minute summer	24	92	41.404	0.054	6.3	0.1490	0.0000	OK
180 minute summer	25	92	41.527	0.027	1.9	0.0270	0.0000	OK
180 minute summer	26	92	41.163	0.163	10.7	0.2405	0.0000	OK
180 minute summer	27	116	40.571	0.091	444.8	0.1027	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	1	1.000	2	4.6	0.922	0.284	0.0605	
180 minute summer	2	1.001	9	8.3	1.794	0.065	0.2208	
180 minute summer	3	1.002	9	4.1	1.526	0.094	0.0891	
180 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
180 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
180 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
180 minute summer	9	1.007	10	15.9	1.696	0.151	0.1161	
180 minute summer	7	Flow through pond	11	0.8	0.006	0.000	1.4941	
180 minute summer	8	1.006	9	0.9	0.464	0.008	0.0223	
180 minute summer	10	1.009	12	15.7	1.237	0.202	0.5125	
180 minute summer	11	1.008	8	0.9	0.312	0.026	0.0321	
180 minute summer	12	1.010	13	16.2	1.113	0.307	0.1417	
180 minute summer	13	Flow through pond	19	29.6	0.152	0.008	100.6636	
180 minute summer	15	Flow through pond	19	29.6	0.152	0.008	100.6636	
180 minute summer	16	1.011	15	0.8	0.471	0.046	0.0110	
180 minute summer	17	1.012	16	0.4	0.318	0.018	0.0192	
180 minute summer	19	1.014	20	9.3	0.730	0.268	0.0471	
180 minute summer	20	Hydro-Brake®		9.3				208.1
180 minute summer	21	1.020	27	13.2	2.752	0.088	0.0087	
180 minute summer	22	1.015	21	0.7	0.334	0.022	0.0174	
180 minute summer	23	1.016	26	7.5	0.404	0.108	0.2349	
180 minute summer	24	1.017	23	6.2	0.580	0.024	0.3688	
180 minute summer	25	1.018	26	1.9	0.434	0.072	0.1009	
180 minute summer	26	1.019	21	10.6	1.083	0.198	0.0831	
180 minute summer	27	Flow through pond	19	29.6	0.152	0.008	100.6636	

Results for 30 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 7.77%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	1	92	46.311	0.061	5.0	0.0684	0.0000	OK
180 minute winter	2	92	46.191	0.041	9.1	0.0377	0.0000	OK
180 minute winter	3	92	45.333	0.033	4.4	0.0329	0.0000	OK
180 minute winter	4	4	45.870	0.000	0.0	0.0000	0.0000	OK
180 minute winter	5	4	45.430	0.000	0.0	0.0000	0.0000	OK
180 minute winter	6	4	45.350	0.000	0.0	0.0000	0.0000	OK
180 minute winter	9	92	43.314	0.064	17.8	0.0360	0.0000	OK
180 minute winter	7	104	43.580	0.023	1.2	0.0065	0.0000	OK
180 minute winter	8	104	43.542	0.042	1.4	0.0474	0.0000	OK
180 minute winter	10	92	42.823	0.073	17.8	0.0115	0.0000	OK
180 minute winter	11	104	43.580	0.030	1.4	0.0015	0.0000	OK
180 minute winter	12	92	41.950	0.100	18.4	0.0302	0.0000	OK
180 minute winter	13	180	40.687	0.207	20.5	0.0805	0.0000	OK
180 minute winter	15	184	40.685	0.205	3.4	0.0852	0.0000	OK
180 minute winter	16	92	41.813	0.023	0.8	0.0065	0.0000	OK
180 minute winter	17	92	42.024	0.014	0.4	0.0041	0.0000	OK
180 minute winter	19	184	40.683	0.283	25.8	0.0802	0.0000	SURCHARGED
180 minute winter	20	184	40.668	0.368	9.5	0.9355	0.0000	OK
180 minute winter	21	92	41.064	0.064	14.7	0.0437	0.0000	OK
180 minute winter	22	92	41.166	0.016	0.8	0.0057	0.0000	OK
180 minute winter	23	92	41.273	0.053	8.4	0.0429	0.0000	OK
180 minute winter	24	92	41.406	0.056	6.9	0.1565	0.0000	OK
180 minute winter	25	92	41.528	0.028	2.0	0.0278	0.0000	OK
180 minute winter	26	92	41.167	0.167	11.9	0.2470	0.0000	OK
180 minute winter	27	132	40.662	0.182	49.4	0.2058	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	1	1.000	2	5.0	0.946	0.310	0.0645	
180 minute winter	2	1.001	9	9.1	1.845	0.072	0.2361	
180 minute winter	3	1.002	9	4.4	1.563	0.102	0.0943	
180 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
180 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
180 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
180 minute winter	9	1.007	10	17.8	1.743	0.169	0.1265	
180 minute winter	7	Flow through pond	11	1.0	0.007	0.000	1.8552	
180 minute winter	8	1.006	9	1.4	0.545	0.011	0.0251	
180 minute winter	10	1.009	12	17.7	1.271	0.227	0.5624	
180 minute winter	11	1.008	8	1.4	0.333	0.039	0.0448	
180 minute winter	12	1.010	13	18.4	1.150	0.349	0.1559	
180 minute winter	13	Flow through pond	19	25.8	0.158	0.007	128.5429	
180 minute winter	15	Flow through pond	19	25.8	0.158	0.007	128.5429	
180 minute winter	16	1.011	15	0.8	0.479	0.048	0.0114	
180 minute winter	17	1.012	16	0.4	0.318	0.019	0.0198	
180 minute winter	19	1.014	20	9.5	0.819	0.276	0.0471	
180 minute winter	20	Hydro-Brake®		9.5				218.7
180 minute winter	21	1.020	27	14.7	2.329	0.099	0.0096	
180 minute winter	22	1.015	21	0.8	0.306	0.025	0.0191	
180 minute winter	23	1.016	26	8.4	0.433	0.121	0.2438	
180 minute winter	24	1.017	23	6.9	0.599	0.026	0.3985	
180 minute winter	25	1.018	26	2.0	0.416	0.076	0.1080	
180 minute winter	26	1.019	21	11.8	1.108	0.221	0.0907	
180 minute winter	27	Flow through pond	19	25.8	0.158	0.007	128.5429	

Results for 30 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: -123.80%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	1	124	46.301	0.051	3.6	0.0574	0.0000	OK
240 minute summer	2	124	46.185	0.035	6.5	0.0320	0.0000	OK
240 minute summer	3	124	45.328	0.028	3.2	0.0281	0.0000	OK
240 minute summer	4	4	45.870	0.000	0.0	0.0000	0.0000	OK
240 minute summer	5	4	45.430	0.000	0.0	0.0000	0.0000	OK
240 minute summer	6	4	45.350	0.000	0.0	0.0000	0.0000	OK
240 minute summer	9	124	43.304	0.054	12.7	0.0300	0.0000	OK
240 minute summer	7	132	43.574	0.017	0.9	0.0048	0.0000	OK
240 minute summer	8	136	43.531	0.031	0.9	0.0352	0.0000	OK
240 minute summer	10	124	42.811	0.061	12.7	0.0097	0.0000	OK
240 minute summer	11	132	43.574	0.024	1.0	0.0012	0.0000	OK
240 minute summer	12	124	41.932	0.082	13.2	0.0249	0.0000	OK
240 minute summer	13	480	40.634	0.154	14.7	0.0596	0.0000	OK
240 minute summer	15	480	40.635	0.155	2.1	0.0646	0.0000	OK
240 minute summer	16	124	41.810	0.020	0.6	0.0056	0.0000	OK
240 minute summer	17	124	42.023	0.013	0.3	0.0036	0.0000	OK
240 minute summer	19	480	40.630	0.230	28.2	0.0650	0.0000	SURCHARGED
240 minute summer	20	480	40.615	0.315	9.3	0.8009	0.0000	OK
240 minute summer	21	124	41.053	0.053	10.6	0.0358	0.0000	OK
240 minute summer	22	124	41.164	0.014	0.6	0.0050	0.0000	OK
240 minute summer	23	124	41.265	0.045	6.0	0.0364	0.0000	OK
240 minute summer	24	124	41.398	0.048	4.9	0.1330	0.0000	OK
240 minute summer	25	124	41.524	0.024	1.4	0.0234	0.0000	OK
240 minute summer	26	124	41.155	0.155	8.5	0.2284	0.0000	OK
240 minute summer	27	20	40.564	0.084	446.3	0.0950	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	1	1.000	2	3.6	0.864	0.224	0.0510	
240 minute summer	2	1.001	9	6.5	1.676	0.051	0.1862	
240 minute summer	3	1.002	9	3.2	1.424	0.074	0.0754	
240 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
240 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
240 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
240 minute summer	9	1.007	10	12.7	1.594	0.121	0.0988	
240 minute summer	7	Flow through pond	11	0.7	0.004	0.000	1.4407	
240 minute summer	8	1.006	9	0.9	0.427	0.007	0.0193	
240 minute summer	10	1.009	12	12.7	1.169	0.163	0.4377	
240 minute summer	11	1.008	8	0.9	0.308	0.024	0.0304	
240 minute summer	12	1.010	13	13.2	1.057	0.250	0.1214	
240 minute summer	13	Flow through pond	19	28.2	0.162	0.008	100.6597	
240 minute summer	15	Flow through pond	19	28.2	0.162	0.008	100.6597	
240 minute summer	16	1.011	15	0.6	0.441	0.036	0.0093	
240 minute summer	17	1.012	16	0.3	0.293	0.014	0.0162	
240 minute summer	19	1.014	20	9.3	0.816	0.268	0.0471	
240 minute summer	20	Hydro-Brake®		9.3				240.0
240 minute summer	21	1.020	27	10.6	2.470	0.071	0.0074	
240 minute summer	22	1.015	21	0.6	0.363	0.019	0.0147	
240 minute summer	23	1.016	26	6.0	0.354	0.087	0.2184	
240 minute summer	24	1.017	23	4.9	0.543	0.019	0.3130	
240 minute summer	25	1.018	26	1.4	0.356	0.053	0.0854	
240 minute summer	26	1.019	21	8.5	1.034	0.159	0.0698	
240 minute summer	27	Flow through pond	19	28.2	0.162	0.008	100.6597	

Results for 30 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 5.95%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	1	124	46.304	0.054	4.0	0.0607	0.0000	OK
240 minute winter	2	124	46.187	0.037	7.3	0.0338	0.0000	OK
240 minute winter	3	120	45.329	0.029	3.5	0.0294	0.0000	OK
240 minute winter	4	4	45.870	0.000	0.0	0.0000	0.0000	OK
240 minute winter	5	4	45.430	0.000	0.0	0.0000	0.0000	OK
240 minute winter	6	4	45.350	0.000	0.0	0.0000	0.0000	OK
240 minute winter	9	124	43.307	0.057	14.4	0.0321	0.0000	OK
240 minute winter	7	136	43.577	0.020	1.0	0.0058	0.0000	OK
240 minute winter	8	136	43.537	0.037	1.1	0.0420	0.0000	OK
240 minute winter	10	124	42.815	0.065	14.4	0.0104	0.0000	OK
240 minute winter	11	136	43.577	0.027	1.2	0.0014	0.0000	OK
240 minute winter	12	124	41.939	0.089	15.0	0.0268	0.0000	OK
240 minute winter	13	236	40.682	0.202	16.7	0.0784	0.0000	OK
240 minute winter	15	236	40.680	0.200	2.3	0.0831	0.0000	OK
240 minute winter	16	116	41.810	0.020	0.6	0.0056	0.0000	OK
240 minute winter	17	112	42.023	0.013	0.3	0.0036	0.0000	OK
240 minute winter	19	240	40.678	0.278	27.7	0.0786	0.0000	SURCHARGED
240 minute winter	20	240	40.662	0.362	9.5	0.9219	0.0000	OK
240 minute winter	21	124	41.056	0.056	11.8	0.0382	0.0000	OK
240 minute winter	22	112	41.164	0.014	0.6	0.0050	0.0000	OK
240 minute winter	23	124	41.267	0.047	6.7	0.0384	0.0000	OK
240 minute winter	24	124	41.401	0.051	5.5	0.1405	0.0000	OK
240 minute winter	25	120	41.525	0.025	1.6	0.0250	0.0000	OK
240 minute winter	26	124	41.159	0.159	9.5	0.2342	0.0000	OK
240 minute winter	27	168	40.650	0.170	47.2	0.1917	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	1	1.000	2	4.0	0.888	0.248	0.0551	
240 minute winter	2	1.001	9	7.3	1.732	0.058	0.2023	
240 minute winter	3	1.002	9	3.5	1.463	0.081	0.0803	
240 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
240 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
240 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
240 minute winter	9	1.007	10	14.4	1.649	0.137	0.1084	
240 minute winter	7	Flow through pond	11	0.9	0.008	0.000	1.6743	
240 minute winter	8	1.006	9	1.1	0.507	0.009	0.0216	
240 minute winter	10	1.009	12	14.4	1.205	0.185	0.4818	
240 minute winter	11	1.008	8	1.1	0.322	0.032	0.0383	
240 minute winter	12	1.010	13	15.0	1.093	0.285	0.1337	
240 minute winter	13	Flow through pond	19	27.7	0.172	0.008	125.7087	
240 minute winter	15	Flow through pond	19	27.7	0.172	0.008	125.7087	
240 minute winter	16	1.011	15	0.6	0.441	0.036	0.0093	
240 minute winter	17	1.012	16	0.3	0.293	0.014	0.0162	
240 minute winter	19	1.014	20	9.5	0.683	0.276	0.0471	
240 minute winter	20	Hydro-Brake®		9.5				245.0
240 minute winter	21	1.020	27	11.8	1.830	0.079	0.0080	
240 minute winter	22	1.015	21	0.6	0.374	0.019	0.0159	
240 minute winter	23	1.016	26	6.7	0.379	0.097	0.2264	
240 minute winter	24	1.017	23	5.5	0.561	0.021	0.3398	
240 minute winter	25	1.018	26	1.6	0.419	0.061	0.0926	
240 minute winter	26	1.019	21	9.5	1.060	0.177	0.0761	
240 minute winter	27	Flow through pond	19	27.7	0.172	0.008	125.7087	

Results for 30 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 52.73%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	1	184	46.294	0.044	2.7	0.0493	0.0000	OK
360 minute summer	2	184	46.180	0.030	4.9	0.0277	0.0000	OK
360 minute summer	3	184	45.324	0.024	2.4	0.0243	0.0000	OK
360 minute summer	4	8	45.870	0.000	0.0	0.0000	0.0000	OK
360 minute summer	5	8	45.430	0.000	0.0	0.0000	0.0000	OK
360 minute summer	6	8	45.350	0.000	0.0	0.0000	0.0000	OK
360 minute summer	9	184	43.296	0.046	9.5	0.0258	0.0000	OK
360 minute summer	7	200	43.572	0.015	0.7	0.0042	0.0000	OK
360 minute summer	8	200	43.527	0.027	0.7	0.0309	0.0000	OK
360 minute summer	10	184	42.803	0.053	9.5	0.0084	0.0000	OK
360 minute summer	11	200	43.572	0.022	0.7	0.0011	0.0000	OK
360 minute summer	12	184	41.920	0.070	9.8	0.0211	0.0000	OK
360 minute summer	13	16	40.579	0.099	10.8	0.0386	0.0000	OK
360 minute summer	15	16	40.580	0.100	1.5	0.0417	0.0000	OK
360 minute summer	16	184	41.806	0.016	0.4	0.0046	0.0000	OK
360 minute summer	17	176	42.020	0.010	0.2	0.0030	0.0000	OK
360 minute summer	19	224	40.527	0.127	27.5	0.0360	0.0000	OK
360 minute summer	20	224	40.518	0.218	8.5	0.5548	0.0000	OK
360 minute summer	21	184	41.044	0.044	7.8	0.0297	0.0000	OK
360 minute summer	22	184	41.162	0.012	0.4	0.0041	0.0000	OK
360 minute summer	23	184	41.259	0.039	4.5	0.0314	0.0000	OK
360 minute summer	24	184	41.392	0.042	3.7	0.1162	0.0000	OK
360 minute summer	25	184	41.521	0.021	1.1	0.0207	0.0000	OK
360 minute summer	26	184	41.145	0.145	6.3	0.2145	0.0000	OK
360 minute summer	27	72	40.546	0.066	49.1	0.0746	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	1	1.000	2	2.7	0.793	0.167	0.0414	
360 minute summer	2	1.001	9	4.8	1.535	0.038	0.1515	
360 minute summer	3	1.002	9	2.4	1.307	0.055	0.0613	
360 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
360 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
360 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
360 minute summer	9	1.007	10	9.5	1.474	0.090	0.0797	
360 minute summer	7	Flow through pond	11	0.5	0.003	0.000	1.2866	
360 minute summer	8	1.006	9	0.7	0.399	0.006	0.0156	
360 minute summer	10	1.009	12	9.4	1.084	0.121	0.3506	
360 minute summer	11	1.008	8	0.7	0.298	0.020	0.0257	
360 minute summer	12	1.010	13	9.7	0.977	0.185	0.0971	
360 minute summer	13	Flow through pond	19	27.5	0.171	0.008	47.1873	
360 minute summer	15	Flow through pond	19	27.5	0.171	0.008	47.1873	
360 minute summer	16	1.011	15	0.4	0.391	0.024	0.0070	
360 minute summer	17	1.012	16	0.2	0.260	0.009	0.0121	
360 minute summer	19	1.014	20	8.5	0.817	0.246	0.0449	
360 minute summer	20	Hydro-Brake®		8.5				158.6
360 minute summer	21	1.020	27	7.8	1.675	0.052	0.0057	
360 minute summer	22	1.015	21	0.4	0.198	0.012	0.0113	
360 minute summer	23	1.016	26	4.4	0.290	0.064	0.1991	
360 minute summer	24	1.017	23	3.7	0.499	0.014	0.2539	
360 minute summer	25	1.018	26	1.1	0.356	0.042	0.0697	
360 minute summer	26	1.019	21	6.3	0.971	0.117	0.0549	
360 minute summer	27	Flow through pond	19	27.5	0.171	0.008	47.1873	

Results for 30 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: -23.10%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	1	192	46.296	0.046	2.9	0.0513	0.0000	OK
360 minute winter	2	184	46.182	0.032	5.3	0.0289	0.0000	OK
360 minute winter	3	184	45.325	0.025	2.6	0.0254	0.0000	OK
360 minute winter	4	8	45.870	0.000	0.0	0.0000	0.0000	OK
360 minute winter	5	8	45.430	0.000	0.0	0.0000	0.0000	OK
360 minute winter	6	8	45.350	0.000	0.0	0.0000	0.0000	OK
360 minute winter	9	184	43.299	0.049	10.6	0.0273	0.0000	OK
360 minute winter	7	200	43.574	0.017	0.7	0.0049	0.0000	OK
360 minute winter	8	200	43.531	0.031	0.9	0.0354	0.0000	OK
360 minute winter	10	184	42.806	0.056	10.6	0.0089	0.0000	OK
360 minute winter	11	200	43.574	0.024	0.9	0.0012	0.0000	OK
360 minute winter	12	184	41.924	0.074	11.0	0.0225	0.0000	OK
360 minute winter	13	424	40.873	0.393	12.2	0.1527	0.0000	OK
360 minute winter	15	432	40.783	0.303	1.8	0.1262	0.0000	OK
360 minute winter	16	160	41.806	0.016	0.4	0.0046	0.0000	OK
360 minute winter	17	152	42.020	0.010	0.2	0.0030	0.0000	OK
360 minute winter	19	432	40.783	0.383	30.8	0.1084	0.0000	SURCHARGED
360 minute winter	20	440	40.766	0.466	10.0	1.1869	0.0000	OK
360 minute winter	21	184	41.047	0.047	8.7	0.0317	0.0000	OK
360 minute winter	22	184	41.163	0.013	0.5	0.0046	0.0000	OK
360 minute winter	23	184	41.260	0.040	4.9	0.0329	0.0000	OK
360 minute winter	24	184	41.394	0.044	4.0	0.1209	0.0000	OK
360 minute winter	25	184	41.522	0.022	1.2	0.0217	0.0000	OK
360 minute winter	26	184	41.148	0.148	7.0	0.2191	0.0000	OK
360 minute winter	27	432	40.994	0.514	46.8	0.5813	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	1	1.000	2	2.9	0.813	0.180	0.0438	
360 minute winter	2	1.001	9	5.3	1.576	0.042	0.1613	
360 minute winter	3	1.002	9	2.6	1.339	0.060	0.0650	
360 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
360 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
360 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
360 minute winter	9	1.007	10	10.6	1.518	0.101	0.0865	
360 minute winter	7	Flow through pond	11	0.7	0.005	0.000	1.4520	
360 minute winter	8	1.006	9	0.9	0.399	0.007	0.0173	
360 minute winter	10	1.009	12	10.6	1.116	0.135	0.3819	
360 minute winter	11	1.008	8	0.9	0.308	0.025	0.0307	
360 minute winter	12	1.010	13	11.0	1.008	0.208	0.1059	
360 minute winter	13	Flow through pond	19	30.8	0.153	0.009	180.6640	
360 minute winter	15	Flow through pond	19	30.8	0.153	0.009	180.6640	
360 minute winter	16	1.011	15	0.4	0.391	0.024	0.0070	
360 minute winter	17	1.012	16	0.2	0.260	0.009	0.0121	
360 minute winter	19	1.014	20	10.0	0.656	0.288	0.0471	
360 minute winter	20	Hydro-Brake®		9.8				297.5
360 minute winter	21	1.020	27	8.7	1.715	0.058	0.0096	
360 minute winter	22	1.015	21	0.5	0.202	0.016	0.0125	
360 minute winter	23	1.016	26	4.9	0.309	0.071	0.2053	
360 minute winter	24	1.017	23	4.0	0.511	0.015	0.2706	
360 minute winter	25	1.018	26	1.2	0.338	0.046	0.0749	
360 minute winter	26	1.019	21	7.0	0.993	0.130	0.0597	
360 minute winter	27	Flow through pond	19	30.8	0.153	0.009	180.6640	

Results for 30 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 53.89%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	1	248	46.289	0.039	2.1	0.0435	0.0000	OK
480 minute summer	2	248	46.177	0.027	3.8	0.0247	0.0000	OK
480 minute summer	3	248	45.322	0.022	1.9	0.0218	0.0000	OK
480 minute summer	4	8	45.870	0.000	0.0	0.0000	0.0000	OK
480 minute summer	5	8	45.430	0.000	0.0	0.0000	0.0000	OK
480 minute summer	6	8	45.350	0.000	0.0	0.0000	0.0000	OK
480 minute summer	9	248	43.291	0.041	7.6	0.0230	0.0000	OK
480 minute summer	7	256	43.569	0.012	0.5	0.0035	0.0000	OK
480 minute summer	8	256	43.523	0.023	0.5	0.0263	0.0000	OK
480 minute summer	10	248	42.797	0.047	7.6	0.0075	0.0000	OK
480 minute summer	11	256	43.569	0.019	0.6	0.0010	0.0000	OK
480 minute summer	12	248	41.912	0.062	7.9	0.0188	0.0000	OK
480 minute summer	13	16	40.579	0.099	8.8	0.0384	0.0000	OK
480 minute summer	15	16	40.580	0.100	1.3	0.0416	0.0000	OK
480 minute summer	16	248	41.806	0.016	0.4	0.0046	0.0000	OK
480 minute summer	17	248	42.020	0.010	0.2	0.0030	0.0000	OK
480 minute summer	19	296	40.514	0.114	27.8	0.0323	0.0000	OK
480 minute summer	20	296	40.507	0.207	8.4	0.5272	0.0000	OK
480 minute summer	21	248	41.038	0.038	6.1	0.0258	0.0000	OK
480 minute summer	22	232	41.160	0.010	0.3	0.0036	0.0000	OK
480 minute summer	23	248	41.254	0.034	3.5	0.0280	0.0000	OK
480 minute summer	24	248	41.388	0.038	2.9	0.1043	0.0000	OK
480 minute summer	25	248	41.518	0.018	0.8	0.0179	0.0000	OK
480 minute summer	26	248	41.139	0.139	4.9	0.2048	0.0000	OK
480 minute summer	27	56	40.538	0.058	50.8	0.0659	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	1	1.000	2	2.1	0.738	0.130	0.0348	
480 minute summer	2	1.001	9	3.8	1.426	0.030	0.1279	
480 minute summer	3	1.002	9	1.9	1.222	0.044	0.0522	
480 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
480 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
480 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
480 minute summer	9	1.007	10	7.6	1.385	0.072	0.0681	
480 minute summer	7	Flow through pond	11	0.4	0.003	0.000	1.1114	
480 minute summer	8	1.006	9	0.5	0.277	0.004	0.0134	
480 minute summer	10	1.009	12	7.6	1.023	0.097	0.2996	
480 minute summer	11	1.008	8	0.5	0.284	0.015	0.0207	
480 minute summer	12	1.010	13	7.9	0.925	0.150	0.0832	
480 minute summer	13	Flow through pond	19	27.8	0.174	0.008	41.0720	
480 minute summer	15	Flow through pond	19	27.8	0.174	0.008	41.0720	
480 minute summer	16	1.011	15	0.4	0.391	0.024	0.0070	
480 minute summer	17	1.012	16	0.2	0.260	0.009	0.0121	
480 minute summer	19	1.014	20	8.4	0.815	0.242	0.0428	
480 minute summer	20	Hydro-Brake®		8.4				169.6
480 minute summer	21	1.020	27	6.1	1.590	0.041	0.0048	
480 minute summer	22	1.015	21	0.3	0.200	0.009	0.0093	
480 minute summer	23	1.016	26	3.5	0.249	0.051	0.1857	
480 minute summer	24	1.017	23	2.9	0.467	0.011	0.2151	
480 minute summer	25	1.018	26	0.8	0.356	0.030	0.0581	
480 minute summer	26	1.019	21	4.9	0.917	0.091	0.0454	
480 minute summer	27	Flow through pond	19	27.8	0.174	0.008	41.0720	

Results for 30 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 70.71%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	1	240	46.291	0.041	2.3	0.0455	0.0000	OK
480 minute winter	2	240	46.178	0.028	4.2	0.0259	0.0000	OK
480 minute winter	3	248	45.323	0.023	2.1	0.0229	0.0000	OK
480 minute winter	4	8	45.870	0.000	0.0	0.0000	0.0000	OK
480 minute winter	5	8	45.430	0.000	0.0	0.0000	0.0000	OK
480 minute winter	6	8	45.350	0.000	0.0	0.0000	0.0000	OK
480 minute winter	9	248	43.294	0.044	8.5	0.0244	0.0000	OK
480 minute winter	7	256	43.573	0.016	0.6	0.0045	0.0000	OK
480 minute winter	8	256	43.529	0.029	0.8	0.0327	0.0000	OK
480 minute winter	10	248	42.800	0.050	8.5	0.0080	0.0000	OK
480 minute winter	11	256	43.573	0.023	0.8	0.0012	0.0000	OK
480 minute winter	12	248	41.916	0.066	8.8	0.0200	0.0000	OK
480 minute winter	13	336	40.588	0.108	9.8	0.0420	0.0000	OK
480 minute winter	15	336	40.591	0.111	1.4	0.0460	0.0000	OK
480 minute winter	16	224	41.806	0.016	0.4	0.0046	0.0000	OK
480 minute winter	17	216	42.020	0.010	0.2	0.0030	0.0000	OK
480 minute winter	19	336	40.586	0.186	26.2	0.0528	0.0000	SURCHARGED
480 minute winter	20	344	40.572	0.272	9.0	0.6934	0.0000	OK
480 minute winter	21	248	41.041	0.041	6.9	0.0277	0.0000	OK
480 minute winter	22	232	41.162	0.012	0.4	0.0041	0.0000	OK
480 minute winter	23	248	41.256	0.036	3.9	0.0295	0.0000	OK
480 minute winter	24	248	41.389	0.039	3.2	0.1090	0.0000	OK
480 minute winter	25	232	41.519	0.019	0.9	0.0189	0.0000	OK
480 minute winter	26	248	41.142	0.142	5.5	0.2091	0.0000	OK
480 minute winter	27	336	40.662	0.182	46.7	0.2064	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	1	1.000	2	2.3	0.757	0.143	0.0372	
480 minute winter	2	1.001	9	4.2	1.470	0.033	0.1372	
480 minute winter	3	1.002	9	2.1	1.260	0.049	0.0560	
480 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
480 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
480 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
480 minute winter	9	1.007	10	8.5	1.430	0.081	0.0740	
480 minute winter	7	Flow through pond	11	0.6	0.003	0.000	1.3526	
480 minute winter	8	1.006	9	0.8	0.365	0.006	0.0149	
480 minute winter	10	1.009	12	8.5	1.056	0.109	0.3258	
480 minute winter	11	1.008	8	0.8	0.302	0.022	0.0276	
480 minute winter	12	1.010	13	8.8	0.953	0.168	0.0903	
480 minute winter	13	Flow through pond	19	26.2	0.163	0.007	77.3254	
480 minute winter	15	Flow through pond	19	26.2	0.163	0.007	77.3254	
480 minute winter	16	1.011	15	0.4	0.391	0.024	0.0070	
480 minute winter	17	1.012	16	0.2	0.260	0.009	0.0121	
480 minute winter	19	1.014	20	9.0	0.656	0.260	0.0471	
480 minute winter	20	Hydro-Brake®		9.0				260.2
480 minute winter	21	1.020	27	6.9	1.632	0.046	0.0052	
480 minute winter	22	1.015	21	0.4	0.199	0.012	0.0104	
480 minute winter	23	1.016	26	3.9	0.268	0.057	0.1917	
480 minute winter	24	1.017	23	3.2	0.479	0.012	0.2315	
480 minute winter	25	1.018	26	0.9	0.356	0.034	0.0630	
480 minute winter	26	1.019	21	5.5	0.939	0.103	0.0498	
480 minute winter	27	Flow through pond	19	26.2	0.163	0.007	77.3254	

Results for 30 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 52.10%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	1	315	46.285	0.035	1.7	0.0391	0.0000	OK
600 minute summer	2	315	46.175	0.024	3.1	0.0224	0.0000	OK
600 minute summer	3	315	45.319	0.019	1.5	0.0194	0.0000	OK
600 minute summer	4	15	45.870	0.000	0.0	0.0000	0.0000	OK
600 minute summer	5	15	45.430	0.000	0.0	0.0000	0.0000	OK
600 minute summer	6	15	45.350	0.000	0.0	0.0000	0.0000	OK
600 minute summer	9	315	43.287	0.037	6.1	0.0206	0.0000	OK
600 minute summer	7	330	43.568	0.011	0.4	0.0030	0.0000	OK
600 minute summer	8	330	43.520	0.020	0.4	0.0231	0.0000	OK
600 minute summer	10	315	42.792	0.042	6.1	0.0068	0.0000	OK
600 minute summer	11	330	43.568	0.018	0.5	0.0009	0.0000	OK
600 minute summer	12	315	41.905	0.055	6.3	0.0167	0.0000	OK
600 minute summer	13	30	40.578	0.098	7.0	0.0381	0.0000	OK
600 minute summer	15	30	40.578	0.098	0.9	0.0409	0.0000	OK
600 minute summer	16	255	41.802	0.012	0.2	0.0033	0.0000	OK
600 minute summer	17	255	42.018	0.008	0.1	0.0022	0.0000	OK
600 minute summer	19	360	40.495	0.095	26.6	0.0270	0.0000	OK
600 minute summer	20	360	40.492	0.192	8.6	0.4887	0.0000	OK
600 minute summer	21	315	41.034	0.034	5.0	0.0230	0.0000	OK
600 minute summer	22	315	41.160	0.010	0.3	0.0036	0.0000	OK
600 minute summer	23	315	41.251	0.031	2.8	0.0251	0.0000	OK
600 minute summer	24	315	41.384	0.034	2.3	0.0941	0.0000	OK
600 minute summer	25	315	41.517	0.017	0.7	0.0168	0.0000	OK
600 minute summer	26	315	41.134	0.134	4.0	0.1979	0.0000	OK
600 minute summer	27	315	40.528	0.048	5.2	0.0543	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	1	1.000	2	1.7	0.692	0.106	0.0301	
600 minute summer	2	1.001	9	3.1	1.342	0.025	0.1109	
600 minute summer	3	1.002	9	1.5	1.139	0.035	0.0442	
600 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
600 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
600 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
600 minute summer	9	1.007	10	6.1	1.304	0.058	0.0584	
600 minute summer	7	Flow through pond	11	0.4	0.003	0.000	0.9886	
600 minute summer	8	1.006	9	0.4	0.266	0.004	0.0115	
600 minute summer	10	1.009	12	6.1	0.968	0.079	0.2554	
600 minute summer	11	1.008	8	0.4	0.275	0.013	0.0175	
600 minute summer	12	1.010	13	6.3	0.871	0.120	0.0708	
600 minute summer	13	Flow through pond	19	26.6	0.166	0.007	35.3154	
600 minute summer	15	Flow through pond	19	26.6	0.166	0.007	35.3154	
600 minute summer	16	1.011	15	0.2	0.317	0.012	0.0043	
600 minute summer	17	1.012	16	0.1	0.213	0.005	0.0075	
600 minute summer	19	1.014	20	8.6	0.667	0.249	0.0394	
600 minute summer	20	Hydro-Brake®		8.2				181.6
600 minute summer	21	1.020	27	5.0	1.518	0.034	0.0041	
600 minute summer	22	1.015	21	0.3	0.190	0.009	0.0081	
600 minute summer	23	1.016	26	2.8	0.213	0.041	0.1758	
600 minute summer	24	1.017	23	2.3	0.436	0.009	0.1834	
600 minute summer	25	1.018	26	0.7	0.356	0.027	0.0510	
600 minute summer	26	1.019	21	4.0	0.874	0.075	0.0390	
600 minute summer	27	Flow through pond	19	26.6	0.166	0.007	35.3154	

Results for 30 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: -19.63%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	1	315	46.288	0.038	2.0	0.0424	0.0000	OK
600 minute winter	2	315	46.176	0.026	3.6	0.0240	0.0000	OK
600 minute winter	3	315	45.321	0.021	1.7	0.0206	0.0000	OK
600 minute winter	4	15	45.870	0.000	0.0	0.0000	0.0000	OK
600 minute winter	5	15	45.430	0.000	0.0	0.0000	0.0000	OK
600 minute winter	6	15	45.350	0.000	0.0	0.0000	0.0000	OK
600 minute winter	9	315	43.290	0.040	7.2	0.0224	0.0000	OK
600 minute winter	7	315	43.571	0.014	0.5	0.0039	0.0000	OK
600 minute winter	8	315	43.526	0.026	0.6	0.0288	0.0000	OK
600 minute winter	10	315	42.796	0.046	7.2	0.0073	0.0000	OK
600 minute winter	11	315	43.571	0.021	0.7	0.0011	0.0000	OK
600 minute winter	12	315	41.910	0.060	7.5	0.0183	0.0000	OK
600 minute winter	13	585	40.681	0.201	8.3	0.0781	0.0000	OK
600 minute winter	15	570	40.679	0.199	1.2	0.0828	0.0000	OK
600 minute winter	16	315	41.806	0.016	0.4	0.0046	0.0000	OK
600 minute winter	17	315	42.020	0.010	0.2	0.0030	0.0000	OK
600 minute winter	19	585	40.676	0.276	27.6	0.0781	0.0000	SURCHARGED
600 minute winter	20	585	40.660	0.360	9.5	0.9173	0.0000	OK
600 minute winter	21	315	41.037	0.037	5.8	0.0251	0.0000	OK
600 minute winter	22	285	41.160	0.010	0.3	0.0036	0.0000	OK
600 minute winter	23	315	41.253	0.033	3.3	0.0272	0.0000	OK
600 minute winter	24	315	41.386	0.036	2.7	0.1010	0.0000	OK
600 minute winter	25	315	41.518	0.018	0.8	0.0179	0.0000	OK
600 minute winter	26	315	41.138	0.138	4.7	0.2033	0.0000	OK
600 minute winter	27	45	40.582	0.102	317.9	0.1151	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	1	1.000	2	2.0	0.728	0.124	0.0336	
600 minute winter	2	1.001	9	3.6	1.403	0.029	0.1232	
600 minute winter	3	1.002	9	1.7	1.183	0.039	0.0483	
600 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
600 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
600 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
600 minute winter	9	1.007	10	7.2	1.364	0.069	0.0657	
600 minute winter	7	Flow through pond	11	0.5	0.003	0.000	1.2130	
600 minute winter	8	1.006	9	0.6	0.351	0.005	0.0132	
600 minute winter	10	1.009	12	7.2	1.008	0.093	0.2890	
600 minute winter	11	1.008	8	0.6	0.293	0.018	0.0234	
600 minute winter	12	1.010	13	7.5	0.913	0.143	0.0803	
600 minute winter	13	Flow through pond	19	27.6	0.173	0.008	124.5138	
600 minute winter	15	Flow through pond	19	27.6	0.173	0.008	124.5138	
600 minute winter	16	1.011	15	0.4	0.391	0.024	0.0070	
600 minute winter	17	1.012	16	0.2	0.260	0.009	0.0121	
600 minute winter	19	1.014	20	9.5	0.640	0.275	0.0471	
600 minute winter	20	Hydro-Brake®		9.5				387.7
600 minute winter	21	1.020	27	5.8	1.936	0.039	0.0046	
600 minute winter	22	1.015	21	0.3	0.193	0.009	0.0090	
600 minute winter	23	1.016	26	3.3	0.238	0.048	0.1834	
600 minute winter	24	1.017	23	2.7	0.456	0.010	0.2051	
600 minute winter	25	1.018	26	0.8	0.336	0.030	0.0568	
600 minute winter	26	1.019	21	4.7	0.911	0.088	0.0439	
600 minute winter	27	Flow through pond	19	27.6	0.173	0.008	124.5138	

Results for 30 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 51.48%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	1	375	46.283	0.033	1.5	0.0367	0.0000	OK
720 minute summer	2	375	46.173	0.023	2.7	0.0210	0.0000	OK
720 minute summer	3	375	45.318	0.018	1.3	0.0181	0.0000	OK
720 minute summer	4	15	45.870	0.000	0.0	0.0000	0.0000	OK
720 minute summer	5	15	45.430	0.000	0.0	0.0000	0.0000	OK
720 minute summer	6	15	45.350	0.000	0.0	0.0000	0.0000	OK
720 minute summer	9	375	43.285	0.035	5.4	0.0194	0.0000	OK
720 minute summer	7	390	43.568	0.011	0.4	0.0030	0.0000	OK
720 minute summer	8	390	43.520	0.020	0.4	0.0232	0.0000	OK
720 minute summer	10	375	42.790	0.040	5.4	0.0064	0.0000	OK
720 minute summer	11	390	43.568	0.018	0.5	0.0009	0.0000	OK
720 minute summer	12	375	41.902	0.052	5.6	0.0157	0.0000	OK
720 minute summer	13	30	40.580	0.100	6.2	0.0389	0.0000	OK
720 minute summer	15	30	40.581	0.101	0.8	0.0419	0.0000	OK
720 minute summer	16	315	41.802	0.012	0.2	0.0033	0.0000	OK
720 minute summer	17	315	42.018	0.008	0.1	0.0022	0.0000	OK
720 minute summer	19	420	40.480	0.080	26.7	0.0225	0.0000	OK
720 minute summer	20	435	40.480	0.180	8.8	0.4583	0.0000	OK
720 minute summer	21	375	41.032	0.032	4.5	0.0217	0.0000	OK
720 minute summer	22	345	41.159	0.009	0.2	0.0030	0.0000	OK
720 minute summer	23	375	41.250	0.030	2.6	0.0243	0.0000	OK
720 minute summer	24	375	41.382	0.032	2.1	0.0901	0.0000	OK
720 minute summer	25	375	41.516	0.016	0.6	0.0156	0.0000	OK
720 minute summer	26	375	41.132	0.132	3.7	0.1955	0.0000	OK
720 minute summer	27	375	40.524	0.044	5.4	0.0500	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	1	1.000	2	1.5	0.669	0.093	0.0274	
720 minute summer	2	1.001	9	2.7	1.287	0.021	0.1007	
720 minute summer	3	1.002	9	1.3	1.090	0.030	0.0400	
720 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
720 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
720 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
720 minute summer	9	1.007	10	5.4	1.258	0.052	0.0535	
720 minute summer	7	Flow through pond	11	0.4	0.003	0.000	0.9891	
720 minute summer	8	1.006	9	0.4	0.260	0.004	0.0106	
720 minute summer	10	1.009	12	5.4	0.934	0.070	0.2343	
720 minute summer	11	1.008	8	0.4	0.275	0.013	0.0175	
720 minute summer	12	1.010	13	5.6	0.844	0.107	0.0650	
720 minute summer	13	Flow through pond	19	26.7	0.167	0.007	31.9675	
720 minute summer	15	Flow through pond	19	26.7	0.167	0.007	31.9675	
720 minute summer	16	1.011	15	0.2	0.317	0.012	0.0043	
720 minute summer	17	1.012	16	0.1	0.213	0.005	0.0075	
720 minute summer	19	1.014	20	8.8	0.675	0.255	0.0363	
720 minute summer	20	Hydro-Brake®		8.0				187.8
720 minute summer	21	1.020	27	4.5	1.482	0.030	0.0038	
720 minute summer	22	1.015	21	0.2	0.182	0.006	0.0072	
720 minute summer	23	1.016	26	2.6	0.202	0.038	0.1725	
720 minute summer	24	1.017	23	2.1	0.421	0.008	0.1730	
720 minute summer	25	1.018	26	0.6	0.356	0.023	0.0479	
720 minute summer	26	1.019	21	3.7	0.865	0.069	0.0365	
720 minute summer	27	Flow through pond	19	26.7	0.167	0.007	31.9675	

Results for 30 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: -36.85%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	1	375	46.285	0.035	1.7	0.0391	0.0000	OK
720 minute winter	2	375	46.175	0.024	3.1	0.0224	0.0000	OK
720 minute winter	3	360	45.319	0.019	1.5	0.0194	0.0000	OK
720 minute winter	4	15	45.870	0.000	0.0	0.0000	0.0000	OK
720 minute winter	5	15	45.430	0.000	0.0	0.0000	0.0000	OK
720 minute winter	6	15	45.350	0.000	0.0	0.0000	0.0000	OK
720 minute winter	9	375	43.287	0.037	6.2	0.0207	0.0000	OK
720 minute winter	7	405	43.569	0.012	0.4	0.0033	0.0000	OK
720 minute winter	8	405	43.522	0.022	0.5	0.0250	0.0000	OK
720 minute winter	10	375	42.793	0.043	6.2	0.0068	0.0000	OK
720 minute winter	11	405	43.569	0.019	0.5	0.0010	0.0000	OK
720 minute winter	12	375	41.905	0.055	6.4	0.0168	0.0000	OK
720 minute winter	13	705	40.647	0.167	7.1	0.0648	0.0000	OK
720 minute winter	15	705	40.644	0.164	1.4	0.0681	0.0000	OK
720 minute winter	16	240	41.802	0.012	0.2	0.0033	0.0000	OK
720 minute winter	17	240	42.018	0.008	0.1	0.0022	0.0000	OK
720 minute winter	19	705	40.642	0.242	31.4	0.0685	0.0000	SURCHARGED
720 minute winter	20	705	40.627	0.327	9.3	0.8321	0.0000	OK
720 minute winter	21	375	41.034	0.034	5.0	0.0230	0.0000	OK
720 minute winter	22	360	41.160	0.010	0.3	0.0036	0.0000	OK
720 minute winter	23	375	41.251	0.031	2.8	0.0251	0.0000	OK
720 minute winter	24	375	41.384	0.034	2.3	0.0941	0.0000	OK
720 minute winter	25	360	41.517	0.017	0.7	0.0168	0.0000	OK
720 minute winter	26	375	41.134	0.134	4.0	0.1979	0.0000	OK
720 minute winter	27	435	40.542	0.062	307.2	0.0701	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	1	1.000	2	1.7	0.692	0.106	0.0301	
720 minute winter	2	1.001	9	3.1	1.342	0.025	0.1109	
720 minute winter	3	1.002	9	1.5	1.139	0.035	0.0442	
720 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
720 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
720 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
720 minute winter	9	1.007	10	6.2	1.307	0.059	0.0588	
720 minute winter	7	Flow through pond	11	0.4	0.003	0.000	1.0627	
720 minute winter	8	1.006	9	0.5	0.309	0.004	0.0117	
720 minute winter	10	1.009	12	6.2	0.970	0.079	0.2572	
720 minute winter	11	1.008	8	0.5	0.281	0.014	0.0194	
720 minute winter	12	1.010	13	6.4	0.874	0.121	0.0712	
720 minute winter	13	Flow through pond	19	31.4	0.174	0.009	106.4025	
720 minute winter	15	Flow through pond	19	31.4	0.174	0.009	106.4025	
720 minute winter	16	1.011	15	0.2	0.317	0.012	0.0043	
720 minute winter	17	1.012	16	0.1	0.213	0.005	0.0075	
720 minute winter	19	1.014	20	9.3	0.656	0.270	0.0471	
720 minute winter	20	Hydro-Brake®		9.3				427.7
720 minute winter	21	1.020	27	5.0	1.565	0.034	0.0041	
720 minute winter	22	1.015	21	0.3	0.202	0.009	0.0081	
720 minute winter	23	1.016	26	2.8	0.213	0.041	0.1758	
720 minute winter	24	1.017	23	2.3	0.436	0.009	0.1834	
720 minute winter	25	1.018	26	0.7	0.325	0.027	0.0510	
720 minute winter	26	1.019	21	4.0	0.874	0.075	0.0390	
720 minute winter	27	Flow through pond	19	31.4	0.174	0.009	106.4025	

Results for 30 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 42.36%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	1	495	46.279	0.029	1.2	0.0328	0.0000	OK
960 minute summer	2	495	46.171	0.021	2.2	0.0190	0.0000	OK
960 minute summer	3	495	45.317	0.017	1.1	0.0168	0.0000	OK
960 minute summer	4	15	45.870	0.000	0.0	0.0000	0.0000	OK
960 minute summer	5	15	45.430	0.000	0.0	0.0000	0.0000	OK
960 minute summer	6	15	45.350	0.000	0.0	0.0000	0.0000	OK
960 minute summer	9	495	43.282	0.032	4.5	0.0176	0.0000	OK
960 minute summer	7	510	43.567	0.010	0.3	0.0027	0.0000	OK
960 minute summer	8	525	43.519	0.019	0.4	0.0211	0.0000	OK
960 minute summer	10	495	42.786	0.036	4.5	0.0058	0.0000	OK
960 minute summer	11	525	43.567	0.017	0.4	0.0008	0.0000	OK
960 minute summer	12	495	41.897	0.047	4.7	0.0142	0.0000	OK
960 minute summer	13	30	40.575	0.095	5.2	0.0367	0.0000	OK
960 minute summer	15	30	40.574	0.094	0.7	0.0393	0.0000	OK
960 minute summer	16	435	41.802	0.012	0.2	0.0033	0.0000	OK
960 minute summer	17	435	42.018	0.008	0.1	0.0022	0.0000	OK
960 minute summer	19	45	40.463	0.063	26.8	0.0179	0.0000	OK
960 minute summer	20	45	40.468	0.168	7.8	0.4273	0.0000	OK
960 minute summer	21	495	41.029	0.029	3.7	0.0194	0.0000	OK
960 minute summer	22	465	41.159	0.009	0.2	0.0030	0.0000	OK
960 minute summer	23	495	41.247	0.027	2.1	0.0219	0.0000	OK
960 minute summer	24	495	41.379	0.029	1.7	0.0815	0.0000	OK
960 minute summer	25	495	41.514	0.014	0.5	0.0143	0.0000	OK
960 minute summer	26	495	41.128	0.128	3.0	0.1893	0.0000	OK
960 minute summer	27	30	40.588	0.108	5.7	0.1217	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	1	1.000	2	1.2	0.624	0.075	0.0235	
960 minute summer	2	1.001	9	2.2	1.211	0.017	0.0872	
960 minute summer	3	1.002	9	1.1	1.037	0.026	0.0356	
960 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
960 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
960 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
960 minute summer	9	1.007	10	4.5	1.188	0.042	0.0466	
960 minute summer	7	Flow through pond	11	0.3	0.003	0.000	0.9085	
960 minute summer	8	1.006	9	0.4	0.241	0.003	0.0093	
960 minute summer	10	1.009	12	4.5	0.883	0.057	0.2037	
960 minute summer	11	1.008	8	0.4	0.267	0.011	0.0155	
960 minute summer	12	1.010	13	4.7	0.801	0.088	0.0566	
960 minute summer	13	Flow through pond	19	26.8	0.166	0.007	32.2731	
960 minute summer	15	Flow through pond	19	26.8	0.166	0.007	32.2731	
960 minute summer	16	1.011	15	0.2	0.317	0.012	0.0043	
960 minute summer	17	1.012	16	0.1	0.213	0.005	0.0075	
960 minute summer	19	1.014	20	7.8	0.636	0.227	0.0330	
960 minute summer	20	Hydro-Brake®		7.8				211.0
960 minute summer	21	1.020	27	3.7	1.412	0.025	0.0032	
960 minute summer	22	1.015	21	0.2	0.186	0.006	0.0063	
960 minute summer	23	1.016	26	2.1	0.173	0.030	0.1640	
960 minute summer	24	1.017	23	1.7	0.394	0.007	0.1495	
960 minute summer	25	1.018	26	0.5	0.242	0.019	0.0416	
960 minute summer	26	1.019	21	3.0	0.818	0.056	0.0313	
960 minute summer	27	Flow through pond	19	26.8	0.166	0.007	32.2731	

Results for 30 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 72.17%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	1	495	46.282	0.032	1.4	0.0355	0.0000	OK
960 minute winter	2	495	46.172	0.022	2.5	0.0202	0.0000	OK
960 minute winter	3	480	45.317	0.017	1.2	0.0175	0.0000	OK
960 minute winter	4	15	45.870	0.000	0.0	0.0000	0.0000	OK
960 minute winter	5	15	45.430	0.000	0.0	0.0000	0.0000	OK
960 minute winter	6	15	45.350	0.000	0.0	0.0000	0.0000	OK
960 minute winter	9	495	43.283	0.033	5.0	0.0186	0.0000	OK
960 minute winter	7	570	43.567	0.010	0.3	0.0028	0.0000	OK
960 minute winter	8	570	43.519	0.019	0.4	0.0218	0.0000	OK
960 minute winter	10	495	42.788	0.038	5.0	0.0061	0.0000	OK
960 minute winter	11	570	43.567	0.017	0.4	0.0009	0.0000	OK
960 minute winter	12	495	41.900	0.050	5.2	0.0151	0.0000	OK
960 minute winter	13	30	40.576	0.096	5.8	0.0374	0.0000	OK
960 minute winter	15	30	40.572	0.092	0.8	0.0385	0.0000	OK
960 minute winter	16	345	41.802	0.012	0.2	0.0033	0.0000	OK
960 minute winter	17	345	42.018	0.008	0.1	0.0022	0.0000	OK
960 minute winter	19	585	40.510	0.110	18.9	0.0311	0.0000	OK
960 minute winter	20	585	40.504	0.204	8.3	0.5180	0.0000	OK
960 minute winter	21	495	41.030	0.030	4.0	0.0203	0.0000	OK
960 minute winter	22	405	41.159	0.009	0.2	0.0030	0.0000	OK
960 minute winter	23	495	41.248	0.028	2.3	0.0229	0.0000	OK
960 minute winter	24	495	41.381	0.031	1.9	0.0860	0.0000	OK
960 minute winter	25	435	41.514	0.014	0.5	0.0143	0.0000	OK
960 minute winter	26	495	41.129	0.129	3.2	0.1911	0.0000	OK
960 minute winter	27	45	40.528	0.048	47.3	0.0538	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	1	1.000	2	1.4	0.657	0.087	0.0261	
960 minute winter	2	1.001	9	2.5	1.257	0.020	0.0954	
960 minute winter	3	1.002	9	1.2	1.064	0.028	0.0378	
960 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
960 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
960 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
960 minute winter	9	1.007	10	5.0	1.229	0.048	0.0505	
960 minute winter	7	Flow through pond	11	0.3	0.003	0.000	0.9372	
960 minute winter	8	1.006	9	0.4	0.242	0.003	0.0100	
960 minute winter	10	1.009	12	5.0	0.913	0.064	0.2208	
960 minute winter	11	1.008	8	0.4	0.269	0.011	0.0162	
960 minute winter	12	1.010	13	5.2	0.826	0.099	0.0613	
960 minute winter	13	Flow through pond	19	18.9	0.139	0.005	38.9417	
960 minute winter	15	Flow through pond	19	18.9	0.139	0.005	38.9417	
960 minute winter	16	1.011	15	0.2	0.317	0.012	0.0043	
960 minute winter	17	1.012	16	0.1	0.213	0.005	0.0075	
960 minute winter	19	1.014	20	8.3	0.679	0.241	0.0421	
960 minute winter	20	Hydro-Brake®		8.3				297.8
960 minute winter	21	1.020	27	4.0	1.438	0.027	0.0034	
960 minute winter	22	1.015	21	0.2	0.201	0.006	0.0067	
960 minute winter	23	1.016	26	2.3	0.294	0.033	0.1668	
960 minute winter	24	1.017	23	1.9	0.410	0.007	0.1605	
960 minute winter	25	1.018	26	0.5	0.348	0.019	0.0431	
960 minute winter	26	1.019	21	3.2	0.828	0.060	0.0329	
960 minute winter	27	Flow through pond	19	18.9	0.139	0.005	38.9417	

Results for 30 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 22.54%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	1	750	46.275	0.025	0.9	0.0286	0.0000	OK
1440 minute summer	2	750	46.168	0.018	1.6	0.0164	0.0000	OK
1440 minute summer	3	750	45.314	0.014	0.8	0.0144	0.0000	OK
1440 minute summer	4	30	45.870	0.000	0.0	0.0000	0.0000	OK
1440 minute summer	5	30	45.430	0.000	0.0	0.0000	0.0000	OK
1440 minute summer	6	30	45.350	0.000	0.0	0.0000	0.0000	OK
1440 minute summer	9	750	43.277	0.027	3.3	0.0152	0.0000	OK
1440 minute summer	7	780	43.565	0.008	0.2	0.0021	0.0000	OK
1440 minute summer	8	780	43.516	0.016	0.3	0.0177	0.0000	OK
1440 minute summer	10	750	42.781	0.031	3.3	0.0050	0.0000	OK
1440 minute summer	11	780	43.565	0.015	0.3	0.0007	0.0000	OK
1440 minute summer	12	750	41.890	0.040	3.4	0.0121	0.0000	OK
1440 minute summer	13	60	40.520	0.040	3.8	0.0154	0.0000	OK
1440 minute summer	15	60	40.519	0.039	0.6	0.0164	0.0000	OK
1440 minute summer	16	720	41.802	0.012	0.2	0.0033	0.0000	OK
1440 minute summer	17	720	42.018	0.008	0.1	0.0022	0.0000	OK
1440 minute summer	19	60	40.463	0.063	9.4	0.0178	0.0000	OK
1440 minute summer	20	60	40.467	0.167	7.8	0.4261	0.0000	OK
1440 minute summer	21	750	41.024	0.024	2.7	0.0164	0.0000	OK
1440 minute summer	22	600	41.156	0.006	0.1	0.0022	0.0000	OK
1440 minute summer	23	750	41.243	0.023	1.5	0.0187	0.0000	OK
1440 minute summer	24	750	41.375	0.025	1.2	0.0694	0.0000	OK
1440 minute summer	25	750	41.513	0.013	0.4	0.0129	0.0000	OK
1440 minute summer	26	750	41.123	0.123	2.2	0.1814	0.0000	OK
1440 minute summer	27	60	40.519	0.039	4.9	0.0446	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	1	1.000	2	0.9	0.576	0.056	0.0191	
1440 minute summer	2	1.001	9	1.6	1.098	0.013	0.0700	
1440 minute summer	3	1.002	9	0.8	0.943	0.019	0.0285	
1440 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
1440 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
1440 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
1440 minute summer	9	1.007	10	3.3	1.084	0.031	0.0376	
1440 minute summer	7	Flow through pond	11	0.2	0.003	0.000	0.7732	
1440 minute summer	8	1.006	9	0.3	0.219	0.002	0.0075	
1440 minute summer	10	1.009	12	3.3	0.815	0.042	0.1622	
1440 minute summer	11	1.008	8	0.3	0.255	0.008	0.0123	
1440 minute summer	12	1.010	13	3.4	0.732	0.064	0.0449	
1440 minute summer	13	Flow through pond	19	9.4	0.070	0.003	26.9086	
1440 minute summer	15	Flow through pond	19	9.4	0.070	0.003	26.9086	
1440 minute summer	16	1.011	15	0.2	0.317	0.012	0.0043	
1440 minute summer	17	1.012	16	0.1	0.213	0.005	0.0075	
1440 minute summer	19	1.014	20	7.8	0.613	0.227	0.0329	
1440 minute summer	20	Hydro-Brake®		7.8				255.3
1440 minute summer	21	1.020	27	2.7	1.307	0.018	0.0026	
1440 minute summer	22	1.015	21	0.1	0.200	0.003	0.0048	
1440 minute summer	23	1.016	26	1.5	0.135	0.022	0.1529	
1440 minute summer	24	1.017	23	1.2	0.356	0.005	0.1169	
1440 minute summer	25	1.018	26	0.4	0.236	0.015	0.0339	
1440 minute summer	26	1.019	21	2.2	0.757	0.041	0.0248	
1440 minute summer	27	Flow through pond	19	9.4	0.070	0.003	26.9086	

Results for 30 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 68.63%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	1	780	46.277	0.027	1.0	0.0300	0.0000	OK
1440 minute winter	2	780	46.169	0.019	1.8	0.0173	0.0000	OK
1440 minute winter	3	780	45.315	0.015	0.9	0.0152	0.0000	OK
1440 minute winter	4	30	45.870	0.000	0.0	0.0000	0.0000	OK
1440 minute winter	5	30	45.430	0.000	0.0	0.0000	0.0000	OK
1440 minute winter	6	30	45.350	0.000	0.0	0.0000	0.0000	OK
1440 minute winter	9	780	43.278	0.028	3.6	0.0159	0.0000	OK
1440 minute winter	7	900	43.565	0.008	0.2	0.0022	0.0000	OK
1440 minute winter	8	900	43.516	0.016	0.3	0.0182	0.0000	OK
1440 minute winter	10	780	42.783	0.033	3.6	0.0052	0.0000	OK
1440 minute winter	11	900	43.565	0.015	0.3	0.0008	0.0000	OK
1440 minute winter	12	780	41.892	0.042	3.7	0.0126	0.0000	OK
1440 minute winter	13	60	40.533	0.053	4.1	0.0205	0.0000	OK
1440 minute winter	15	60	40.533	0.053	0.6	0.0219	0.0000	OK
1440 minute winter	16	600	41.802	0.012	0.2	0.0033	0.0000	OK
1440 minute winter	17	600	42.018	0.008	0.1	0.0022	0.0000	OK
1440 minute winter	19	60	40.459	0.059	15.1	0.0166	0.0000	OK
1440 minute winter	20	60	40.464	0.164	7.8	0.4167	0.0000	OK
1440 minute winter	21	780	41.025	0.025	3.0	0.0173	0.0000	OK
1440 minute winter	22	720	41.159	0.009	0.2	0.0030	0.0000	OK
1440 minute winter	23	780	41.244	0.024	1.7	0.0198	0.0000	OK
1440 minute winter	24	780	41.377	0.027	1.4	0.0744	0.0000	OK
1440 minute winter	25	690	41.513	0.013	0.4	0.0129	0.0000	OK
1440 minute winter	26	780	41.124	0.124	2.4	0.1834	0.0000	OK
1440 minute winter	27	60	40.533	0.053	3.0	0.0595	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	1	1.000	2	1.0	0.593	0.062	0.0206	339.7
1440 minute winter	2	1.001	9	1.8	1.139	0.014	0.0757	
1440 minute winter	3	1.002	9	0.9	0.975	0.021	0.0309	
1440 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
1440 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
1440 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
1440 minute winter	9	1.007	10	3.6	1.114	0.034	0.0400	
1440 minute winter	7	Flow through pond	11	0.2	0.003	0.000	0.7953	
1440 minute winter	8	1.006	9	0.3	0.237	0.003	0.0080	
1440 minute winter	10	1.009	12	3.6	0.837	0.046	0.1728	
1440 minute winter	11	1.008	8	0.3	0.256	0.009	0.0128	
1440 minute winter	12	1.010	13	3.7	0.750	0.070	0.0478	
1440 minute winter	13	Flow through pond	19	15.1	0.103	0.004	29.3120	
1440 minute winter	15	Flow through pond	19	15.1	0.103	0.004	29.3120	
1440 minute winter	16	1.011	15	0.2	0.317	0.012	0.0043	
1440 minute winter	17	1.012	16	0.1	0.213	0.005	0.0075	
1440 minute winter	19	1.014	20	7.8	0.612	0.227	0.0321	
1440 minute winter	20	Hydro-Brake®		7.8				
1440 minute winter	21	1.020	27	3.0	1.343	0.020	0.0028	
1440 minute winter	22	1.015	21	0.2	0.202	0.006	0.0055	
1440 minute winter	23	1.016	26	1.7	0.148	0.025	0.1559	
1440 minute winter	24	1.017	23	1.4	0.374	0.005	0.1294	
1440 minute winter	25	1.018	26	0.4	0.235	0.015	0.0355	
1440 minute winter	26	1.019	21	2.4	0.770	0.045	0.0265	
1440 minute winter	27	Flow through pond	19	15.1	0.103	0.004	29.3120	

Results for 100 year +40% CC 15 minute summer. 1455 minute analysis at 1 minute timestep. Mass balance: -873.62%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	8	46.835	0.585	41.9	0.6571	0.0000	SURCHARGED
15 minute summer	2	8	46.264	0.114	67.3	0.1039	0.0000	OK
15 minute summer	3	8	45.405	0.105	37.2	0.1053	0.0000	OK
15 minute summer	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
15 minute summer	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
15 minute summer	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
15 minute summer	9	9	43.927	0.677	127.6	0.3784	0.0000	SURCHARGED
15 minute summer	7	11	43.616	0.059	11.2	0.0167	0.0000	OK
15 minute summer	8	9	43.663	0.163	15.2	0.1846	0.0000	OK
15 minute summer	10	9	43.491	0.741	82.6	0.1178	0.0000	SURCHARGED
15 minute summer	11	11	43.616	0.066	19.9	0.0034	0.0000	OK
15 minute summer	12	9	42.348	0.498	85.3	0.1508	0.0000	SURCHARGED
15 minute summer	13	11	40.714	0.234	96.4	0.0909	0.0000	OK
15 minute summer	15	8	40.675	0.195	23.2	0.0811	0.0000	OK
15 minute summer	16	8	41.856	0.066	6.5	0.0186	0.0000	OK
15 minute summer	17	8	42.049	0.039	3.4	0.0112	0.0000	OK
15 minute summer	19	302	40.612	0.212	102.3	0.0601	0.0000	SURCHARGED
15 minute summer	20	301	40.598	0.298	9.9	0.7580	0.0000	OK
15 minute summer	21	9	41.215	0.215	82.5	0.1460	0.0000	OK
15 minute summer	22	9	41.216	0.066	6.8	0.0230	0.0000	OK
15 minute summer	23	9	41.537	0.317	67.8	0.2583	0.0000	SURCHARGED
15 minute summer	24	9	41.526	0.176	57.5	0.4888	0.0000	OK
15 minute summer	25	8	41.588	0.088	17.0	0.0872	0.0000	OK
15 minute summer	26	9	41.422	0.422	63.2	0.6226	0.0000	SURCHARGED
15 minute summer	27	12	40.679	0.199	83.3	0.2252	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	1	1.000	2	33.2	1.984	2.064	0.1936	
15 minute summer	2	1.001	9	64.7	2.730	0.512	1.4361	
15 minute summer	3	1.002	9	35.9	2.374	0.832	0.5159	
15 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
15 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
15 minute summer	6	1.005	7	0.0	0.000	0.000	0.0023	
15 minute summer	9	1.007	10	82.6	2.380	0.788	0.4927	
15 minute summer	7	Flow through pond	11	-4.6	0.028	0.000	4.3657	
15 minute summer	8	1.006	9	-20.4	1.187	-0.170	0.1891	
15 minute summer	10	1.009	12	81.4	2.046	1.042	1.5967	
15 minute summer	11	1.008	8	-17.7	-1.009	-0.506	0.2075	
15 minute summer	12	1.010	13	85.0	2.138	1.614	0.3835	
15 minute summer	13	Flow through pond	19	102.3	0.298	0.028	91.7179	
15 minute summer	15	Flow through pond	19	102.3	0.298	0.028	91.7179	
15 minute summer	16	1.011	15	5.7	0.815	0.341	0.0481	
15 minute summer	17	1.012	16	3.1	0.572	0.148	0.0858	
15 minute summer	19	1.014	20	9.9	0.981	0.287	0.0471	
15 minute summer	20	Hydro-Brake®		9.2				793.0
15 minute summer	21	1.020	27	83.3	2.630	0.560	0.0375	
15 minute summer	22	1.015	21	5.2	0.522	0.163	0.0578	
15 minute summer	23	1.016	26	47.6	1.196	0.691	0.5008	
15 minute summer	24	1.017	23	54.9	0.882	0.211	3.3368	
15 minute summer	25	1.018	26	15.5	0.979	0.591	0.2678	
15 minute summer	26	1.019	21	65.9	1.657	1.229	0.3340	
15 minute summer	27	Flow through pond	19	102.3	0.298	0.028	91.7179	

Results for 100 year +40% CC 15 minute winter. 1455 minute analysis at 1 minute timestep. Mass balance: -431.26%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	9	47.263	1.013	49.6	1.1375	0.0000	SURCHARGED
15 minute winter	2	9	46.294	0.144	84.2	0.1320	0.0000	OK
15 minute winter	3	9	46.071	0.771	44.0	0.7752	0.0000	SURCHARGED
15 minute winter	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
15 minute winter	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
15 minute winter	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
15 minute winter	9	10	44.708	1.458	146.7	0.8151	0.0000	SURCHARGED
15 minute winter	7	13	43.725	0.168	22.1	0.0473	0.0000	OK
15 minute winter	8	11	43.739	0.239	29.2	0.2708	0.0000	SURCHARGED
15 minute winter	10	10	44.120	1.370	97.9	0.2178	0.0000	SURCHARGED
15 minute winter	11	13	43.724	0.174	31.3	0.0089	0.0000	OK
15 minute winter	12	10	42.509	0.659	101.2	0.1998	0.0000	SURCHARGED
15 minute winter	13	11	40.788	0.308	117.4	0.1194	0.0000	OK
15 minute winter	15	9	40.772	0.292	28.3	0.1215	0.0000	OK
15 minute winter	16	8	41.867	0.077	7.9	0.0217	0.0000	OK
15 minute winter	17	8	42.053	0.043	4.0	0.0124	0.0000	OK
15 minute winter	19	18	40.690	0.290	187.8	0.0821	0.0000	SURCHARGED
15 minute winter	20	18	40.674	0.374	12.5	0.9522	0.0000	OK
15 minute winter	21	9	41.301	0.301	100.5	0.2046	0.0000	SURCHARGED
15 minute winter	22	9	41.315	0.165	8.0	0.0576	0.0000	SURCHARGED
15 minute winter	23	10	41.789	0.569	69.0	0.4629	0.0000	FLOOD RISK
15 minute winter	24	10	41.784	0.434	68.0	1.2047	0.0000	OK
15 minute winter	25	9	41.795	0.295	20.0	0.2931	0.0000	SURCHARGED
15 minute winter	26	10	41.592	0.592	78.7	0.8744	0.0000	SURCHARGED
15 minute winter	27	12	40.742	0.262	100.8	0.2967	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	1	1.000	2	45.1	2.563	2.803	0.2123	
15 minute winter	2	1.001	9	81.0	2.841	0.642	1.5993	
15 minute winter	3	1.002	9	36.0	2.446	0.836	0.5908	
15 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
15 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
15 minute winter	6	1.005	7	0.0	0.000	0.000	0.0408	
15 minute winter	9	1.007	10	97.9	2.463	0.933	0.4927	
15 minute winter	7	Flow through pond	11	13.0	0.035	0.000	11.9385	
15 minute winter	8	1.006	9	-32.6	1.641	-0.272	0.1891	
15 minute winter	10	1.009	12	96.8	2.435	1.240	1.5967	
15 minute winter	11	1.008	8	-28.9	-1.044	-0.826	0.3907	
15 minute winter	12	1.010	13	101.5	2.553	1.927	0.3835	
15 minute winter	13	Flow through pond	19	187.8	0.370	0.052	124.0862	
15 minute winter	15	Flow through pond	19	187.8	0.370	0.052	124.0862	
15 minute winter	16	1.011	15	7.5	0.872	0.450	0.0588	
15 minute winter	17	1.012	16	3.9	0.588	0.183	0.1032	
15 minute winter	19	1.014	20	12.5	0.983	0.362	0.0471	
15 minute winter	20	Hydro-Brake®		9.5				791.5
15 minute winter	21	1.020	27	100.8	2.799	0.678	0.0400	
15 minute winter	22	1.015	21	7.4	0.616	0.229	0.0814	
15 minute winter	23	1.016	26	55.5	1.395	0.806	0.5008	
15 minute winter	24	1.017	23	55.9	0.864	0.215	6.5181	
15 minute winter	25	1.018	26	17.1	0.975	0.650	0.3328	
15 minute winter	26	1.019	21	79.0	1.987	1.474	0.3368	
15 minute winter	27	Flow through pond	19	187.8	0.370	0.052	124.0862	

Results for 100 year +40% CC 30 minute summer. 1470 minute analysis at 1 minute timestep. Mass balance: -610.57%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	1	16	46.642	0.392	27.6	0.4407	0.0000	SURCHARGED
30 minute summer	2	16	46.247	0.097	49.5	0.0889	0.0000	OK
30 minute summer	3	15	45.381	0.081	24.5	0.0816	0.0000	OK
30 minute summer	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
30 minute summer	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
30 minute summer	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
30 minute summer	9	17	43.630	0.380	91.7	0.2122	0.0000	SURCHARGED
30 minute summer	7	19	43.598	0.041	6.7	0.0117	0.0000	OK
30 minute summer	8	17	43.617	0.117	3.8	0.1319	0.0000	OK
30 minute summer	10	17	43.269	0.519	82.4	0.0824	0.0000	SURCHARGED
30 minute summer	11	19	43.599	0.049	6.0	0.0025	0.0000	OK
30 minute summer	12	17	42.290	0.440	78.5	0.1335	0.0000	SURCHARGED
30 minute summer	13	19	40.731	0.251	88.6	0.0974	0.0000	OK
30 minute summer	15	19	40.689	0.209	16.0	0.0869	0.0000	OK
30 minute summer	16	16	41.846	0.056	4.4	0.0158	0.0000	OK
30 minute summer	17	16	42.043	0.033	2.2	0.0093	0.0000	OK
30 minute summer	19	34	40.638	0.238	129.3	0.0673	0.0000	SURCHARGED
30 minute summer	20	34	40.623	0.323	10.3	0.8213	0.0000	OK
30 minute summer	21	16	41.187	0.187	72.0	0.1272	0.0000	OK
30 minute summer	22	16	41.188	0.038	4.5	0.0133	0.0000	OK
30 minute summer	23	17	41.445	0.225	46.9	0.1834	0.0000	SURCHARGED
30 minute summer	24	15	41.479	0.129	37.8	0.3584	0.0000	OK
30 minute summer	25	16	41.568	0.068	11.1	0.0675	0.0000	OK
30 minute summer	26	16	41.346	0.346	56.4	0.5109	0.0000	SURCHARGED
30 minute summer	27	19	40.692	0.212	91.0	0.2398	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	1	1.000	2	26.8	1.644	1.667	0.1800	
30 minute summer	2	1.001	9	49.4	2.840	0.391	1.3476	
30 minute summer	3	1.002	9	24.5	2.431	0.568	0.4583	
30 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
30 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
30 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
30 minute summer	9	1.007	10	82.4	2.340	0.785	0.4927	
30 minute summer	7	Flow through pond	11	3.8	0.022	0.000	3.1584	
30 minute summer	8	1.006	9	-4.5	0.945	-0.038	0.1514	
30 minute summer	10	1.009	12	75.5	1.898	0.967	1.5967	
30 minute summer	11	1.008	8	-4.3	0.403	-0.122	0.1406	
30 minute summer	12	1.010	13	78.6	1.975	1.491	0.3835	
30 minute summer	13	Flow through pond	19	129.3	0.310	0.036	103.1923	
30 minute summer	15	Flow through pond	19	129.3	0.310	0.036	103.1923	
30 minute summer	16	1.011	15	4.4	0.764	0.263	0.0392	
30 minute summer	17	1.012	16	2.2	0.510	0.104	0.0682	
30 minute summer	19	1.014	20	10.3	0.749	0.297	0.0471	
30 minute summer	20	Hydro-Brake®		9.3				795.4
30 minute summer	21	1.020	27	71.7	2.583	0.482	0.0337	
30 minute summer	22	1.015	21	4.5	0.437	0.140	0.0488	
30 minute summer	23	1.016	26	40.7	1.049	0.590	0.5006	
30 minute summer	24	1.017	23	38.4	0.845	0.148	2.0659	
30 minute summer	25	1.018	26	11.1	0.756	0.423	0.2397	
30 minute summer	26	1.019	21	56.0	1.447	1.045	0.3180	
30 minute summer	27	Flow through pond	19	129.3	0.310	0.036	103.1923	

Results for 100 year +40% CC 30 minute winter. 1470 minute analysis at 1 minute timestep. Mass balance: -329.66%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	1	16	46.799	0.549	32.5	0.6170	0.0000	SURCHARGED
30 minute winter	2	16	46.257	0.107	58.8	0.0981	0.0000	OK
30 minute winter	3	16	45.390	0.090	28.9	0.0909	0.0000	OK
30 minute winter	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
30 minute winter	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
30 minute winter	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
30 minute winter	9	17	44.010	0.760	108.4	0.4249	0.0000	SURCHARGED
30 minute winter	7	20	43.691	0.134	12.6	0.0377	0.0000	OK
30 minute winter	8	18	43.695	0.195	16.7	0.2210	0.0000	OK
30 minute winter	10	17	43.561	0.811	83.7	0.1289	0.0000	SURCHARGED
30 minute winter	11	20	43.690	0.140	18.8	0.0071	0.0000	OK
30 minute winter	12	17	42.369	0.519	87.5	0.1573	0.0000	SURCHARGED
30 minute winter	13	904	40.887	0.407	99.9	0.1579	0.0000	OK
30 minute winter	15	908	40.787	0.307	18.8	0.1277	0.0000	OK
30 minute winter	16	16	41.852	0.062	5.2	0.0174	0.0000	OK
30 minute winter	17	16	42.045	0.035	2.6	0.0101	0.0000	OK
30 minute winter	19	905	40.789	0.389	185.2	0.1102	0.0000	SURCHARGED
30 minute winter	20	464	40.773	0.473	10.9	1.2032	0.0000	OK
30 minute winter	21	17	41.217	0.217	83.9	0.1477	0.0000	OK
30 minute winter	22	17	41.218	0.068	5.2	0.0238	0.0000	OK
30 minute winter	23	18	41.566	0.346	50.3	0.2816	0.0000	SURCHARGED
30 minute winter	24	18	41.562	0.212	44.6	0.5879	0.0000	OK
30 minute winter	25	16	41.575	0.075	13.1	0.0746	0.0000	OK
30 minute winter	26	17	41.430	0.430	66.3	0.6341	0.0000	SURCHARGED
30 minute winter	27	908	41.000	0.520	83.9	0.5878	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	1	1.000	2	32.0	1.906	1.989	0.1885	
30 minute winter	2	1.001	9	58.7	2.843	0.465	1.4019	
30 minute winter	3	1.002	9	28.7	2.366	0.666	0.4817	
30 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
30 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
30 minute winter	6	1.005	7	0.0	0.000	0.000	0.0271	
30 minute winter	9	1.007	10	83.7	2.321	0.798	0.4927	
30 minute winter	7	Flow through pond	11	7.2	0.030	0.000	9.5600	
30 minute winter	8	1.006	9	-17.1	1.481	-0.143	0.1891	
30 minute winter	10	1.009	12	83.2	2.093	1.066	1.5967	
30 minute winter	11	1.008	8	-16.4	-0.647	-0.469	0.3328	
30 minute winter	12	1.010	13	87.4	2.198	1.660	0.3835	
30 minute winter	13	Flow through pond	19	185.2	0.345	0.051	181.4736	
30 minute winter	15	Flow through pond	19	185.2	0.345	0.051	181.4736	
30 minute winter	16	1.011	15	5.2	0.798	0.313	0.0446	
30 minute winter	17	1.012	16	2.6	0.529	0.123	0.0774	
30 minute winter	19	1.014	20	10.9	0.798	0.315	0.0471	
30 minute winter	20	Hydro-Brake®		9.8				822.6
30 minute winter	21	1.020	27	83.9	2.627	0.564	0.0377	
30 minute winter	22	1.015	21	5.2	0.487	0.161	0.0586	
30 minute winter	23	1.016	26	47.0	1.182	0.682	0.5008	
30 minute winter	24	1.017	23	40.3	0.854	0.155	3.8709	
30 minute winter	25	1.018	26	13.1	0.865	0.498	0.2499	
30 minute winter	26	1.019	21	66.5	1.673	1.241	0.3350	
30 minute winter	27	Flow through pond	19	185.2	0.345	0.051	181.4736	

Results for 100 year +40% CC 60 minute summer. 1500 minute analysis at 1 minute timestep. Mass balance: -467.70%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	1	31	46.426	0.176	18.5	0.1979	0.0000	SURCHARGED
60 minute summer	2	31	46.230	0.080	33.4	0.0733	0.0000	OK
60 minute summer	3	31	45.366	0.066	16.4	0.0660	0.0000	OK
60 minute summer	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
60 minute summer	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
60 minute summer	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
60 minute summer	9	31	43.389	0.139	63.2	0.0774	0.0000	OK
60 minute summer	7	36	43.593	0.036	4.5	0.0102	0.0000	OK
60 minute summer	8	36	43.568	0.068	2.9	0.0765	0.0000	OK
60 minute summer	10	31	42.908	0.158	63.1	0.0251	0.0000	OK
60 minute summer	11	36	43.593	0.043	4.0	0.0022	0.0000	OK
60 minute summer	12	31	42.176	0.326	65.1	0.0988	0.0000	SURCHARGED
60 minute summer	13	56	40.701	0.221	72.0	0.0858	0.0000	OK
60 minute summer	15	61	40.696	0.216	10.7	0.0900	0.0000	OK
60 minute summer	16	31	41.835	0.045	3.0	0.0128	0.0000	OK
60 minute summer	17	31	42.037	0.027	1.5	0.0077	0.0000	OK
60 minute summer	19	60	40.693	0.293	93.4	0.0829	0.0000	SURCHARGED
60 minute summer	20	60	40.677	0.377	10.0	0.9595	0.0000	OK
60 minute summer	21	31	41.152	0.152	54.6	0.1032	0.0000	OK
60 minute summer	22	31	41.181	0.031	3.0	0.0108	0.0000	OK
60 minute summer	23	31	41.325	0.105	31.1	0.0854	0.0000	OK
60 minute summer	24	31	41.457	0.107	25.3	0.2972	0.0000	OK
60 minute summer	25	31	41.555	0.055	7.5	0.0544	0.0000	OK
60 minute summer	26	31	41.268	0.268	44.0	0.3950	0.0000	OK
60 minute summer	27	60	40.696	0.216	371.3	0.2444	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	1	1.000	2	18.2	1.262	1.131	0.1648	
60 minute summer	2	1.001	9	33.2	2.660	0.263	0.5984	
60 minute summer	3	1.002	9	16.4	2.245	0.380	0.2451	
60 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
60 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
60 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
60 minute summer	9	1.007	10	63.1	2.319	0.601	0.3430	
60 minute summer	7	Flow through pond	11	2.5	0.013	0.000	2.7678	
60 minute summer	8	1.006	9	2.8	0.777	0.024	0.0648	
60 minute summer	10	1.009	12	62.4	1.656	0.800	1.3953	
60 minute summer	11	1.008	8	2.9	0.383	0.082	0.0835	
60 minute summer	12	1.010	13	64.4	1.621	1.223	0.3784	
60 minute summer	13	Flow through pond	19	93.4	0.201	0.026	133.4056	
60 minute summer	15	Flow through pond	19	93.4	0.201	0.026	133.4056	
60 minute summer	16	1.011	15	3.0	0.690	0.180	0.0296	
60 minute summer	17	1.012	16	1.5	0.460	0.071	0.0514	
60 minute summer	19	1.014	20	10.0	0.810	0.289	0.0471	
60 minute summer	20	Hydro-Brake®		9.6				818.2
60 minute summer	21	1.020	27	54.5	2.460	0.367	0.0273	
60 minute summer	22	1.015	21	3.0	0.437	0.093	0.0468	
60 minute summer	23	1.016	26	30.8	0.923	0.448	0.3646	
60 minute summer	24	1.017	23	25.4	0.839	0.097	1.0478	
60 minute summer	25	1.018	26	7.5	0.628	0.286	0.2214	
60 minute summer	26	1.019	21	43.9	1.410	0.820	0.2632	
60 minute summer	27	Flow through pond	19	93.4	0.201	0.026	133.4056	

Results for 100 year +40% CC 60 minute winter. 1500 minute analysis at 1 minute timestep. Mass balance: -191.24%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	1	31	46.478	0.228	20.6	0.2563	0.0000	SURCHARGED
60 minute winter	2	31	46.236	0.086	37.6	0.0784	0.0000	OK
60 minute winter	3	31	45.370	0.070	18.3	0.0704	0.0000	OK
60 minute winter	4	1	45.870	0.000	0.0	0.0000	0.0000	OK
60 minute winter	5	1	45.430	0.000	0.0	0.0000	0.0000	OK
60 minute winter	6	1	45.350	0.000	0.0	0.0000	0.0000	OK
60 minute winter	9	32	43.426	0.176	72.8	0.0982	0.0000	OK
60 minute winter	7	36	43.606	0.049	5.0	0.0140	0.0000	OK
60 minute winter	8	37	43.596	0.096	4.9	0.1091	0.0000	OK
60 minute winter	10	33	43.114	0.364	71.6	0.0579	0.0000	SURCHARGED
60 minute winter	11	36	43.606	0.056	5.4	0.0029	0.0000	OK
60 minute winter	12	33	42.251	0.401	73.7	0.1216	0.0000	SURCHARGED
60 minute winter	13	58	40.841	0.361	81.9	0.1400	0.0000	OK
60 minute winter	15	61	40.837	0.357	12.0	0.1485	0.0000	OK
60 minute winter	16	31	41.839	0.049	3.4	0.0137	0.0000	OK
60 minute winter	17	31	42.039	0.029	1.7	0.0082	0.0000	OK
60 minute winter	19	61	40.835	0.435	121.4	0.1232	0.0000	SURCHARGED
60 minute winter	20	61	40.819	0.519	10.4	1.3198	0.0000	OK
60 minute winter	21	31	41.164	0.164	60.5	0.1113	0.0000	OK
60 minute winter	22	31	41.182	0.032	3.3	0.0114	0.0000	OK
60 minute winter	23	32	41.346	0.126	34.7	0.1030	0.0000	OK
60 minute winter	24	30	41.463	0.113	28.3	0.3133	0.0000	OK
60 minute winter	25	31	41.558	0.058	8.3	0.0575	0.0000	OK
60 minute winter	26	31	41.284	0.284	48.8	0.4198	0.0000	OK
60 minute winter	27	60	40.836	0.356	60.5	0.4028	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	1	1.000	2	20.6	1.308	1.277	0.1698	
60 minute winter	2	1.001	9	37.5	2.751	0.297	0.6547	
60 minute winter	3	1.002	9	18.3	2.309	0.425	0.2786	
60 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
60 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
60 minute winter	6	1.005	7	0.0	0.000	0.000	0.0006	
60 minute winter	9	1.007	10	71.6	2.297	0.683	0.4525	
60 minute winter	7	Flow through pond	11	3.8	0.022	0.000	3.6982	
60 minute winter	8	1.006	9	4.9	0.892	0.041	0.0860	
60 minute winter	10	1.009	12	70.9	1.784	0.908	1.5967	
60 minute winter	11	1.008	8	4.9	0.416	0.140	0.1309	
60 minute winter	12	1.010	13	73.8	1.855	1.401	0.3823	
60 minute winter	13	Flow through pond	19	121.4	0.246	0.034	207.7086	
60 minute winter	15	Flow through pond	19	121.4	0.246	0.034	207.7086	
60 minute winter	16	1.011	15	3.4	0.715	0.204	0.0325	
60 minute winter	17	1.012	16	1.7	0.474	0.080	0.0565	
60 minute winter	19	1.014	20	10.4	0.703	0.301	0.0471	
60 minute winter	20	Hydro-Brake®		9.8				812.7
60 minute winter	21	1.020	27	60.5	2.612	0.407	0.0296	
60 minute winter	22	1.015	21	3.3	0.452	0.103	0.0472	
60 minute winter	23	1.016	26	34.3	0.972	0.499	0.3950	
60 minute winter	24	1.017	23	28.4	0.841	0.109	1.2413	
60 minute winter	25	1.018	26	8.3	0.660	0.316	0.2257	
60 minute winter	26	1.019	21	48.7	1.438	0.909	0.2856	
60 minute winter	27	Flow through pond	19	121.4	0.246	0.034	207.7086	

Results for 100 year +40% CC 120 minute summer. 1560 minute analysis at 2 minute timestep. Mass balance: -370.14%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	1	62	46.348	0.098	11.2	0.1097	0.0000	OK
120 minute summer	2	62	46.212	0.062	20.4	0.0566	0.0000	OK
120 minute summer	3	62	45.350	0.050	9.9	0.0500	0.0000	OK
120 minute summer	4	2	45.870	0.000	0.0	0.0000	0.0000	OK
120 minute summer	5	2	45.430	0.000	0.0	0.0000	0.0000	OK
120 minute summer	6	2	45.350	0.000	0.0	0.0000	0.0000	OK
120 minute summer	9	62	43.352	0.102	39.3	0.0568	0.0000	OK
120 minute summer	7	68	43.589	0.032	2.7	0.0091	0.0000	OK
120 minute summer	8	68	43.560	0.060	2.3	0.0675	0.0000	OK
120 minute summer	10	62	42.862	0.112	39.3	0.0178	0.0000	OK
120 minute summer	11	68	43.589	0.039	2.8	0.0020	0.0000	OK
120 minute summer	12	62	42.018	0.168	40.9	0.0509	0.0000	OK
120 minute summer	13	120	40.713	0.233	45.5	0.0902	0.0000	OK
120 minute summer	15	126	40.711	0.231	6.5	0.0963	0.0000	OK
120 minute summer	16	62	41.825	0.035	1.8	0.0098	0.0000	OK
120 minute summer	17	62	42.031	0.021	0.9	0.0060	0.0000	OK
120 minute summer	19	124	40.708	0.308	55.2	0.0871	0.0000	SURCHARGED
120 minute summer	20	124	40.692	0.392	9.6	0.9972	0.0000	OK
120 minute summer	21	62	41.108	0.108	33.1	0.0733	0.0000	OK
120 minute summer	22	62	41.174	0.024	1.8	0.0085	0.0000	OK
120 minute summer	23	62	41.300	0.080	18.7	0.0648	0.0000	OK
120 minute summer	24	62	41.433	0.083	15.3	0.2304	0.0000	OK
120 minute summer	25	62	41.542	0.042	4.5	0.0417	0.0000	OK
120 minute summer	26	62	41.214	0.214	26.6	0.3164	0.0000	OK
120 minute summer	27	96	40.698	0.218	442.4	0.2462	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	1	1.000	2	11.2	1.176	0.696	0.1153	
120 minute summer	2	1.001	9	20.4	2.328	0.162	0.4205	
120 minute summer	3	1.002	9	9.9	1.963	0.230	0.1693	
120 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
120 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
120 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
120 minute summer	9	1.007	10	39.3	2.116	0.375	0.2302	
120 minute summer	7	Flow through pond	11	1.9	0.008	0.000	2.4931	
120 minute summer	8	1.006	9	2.3	0.646	0.020	0.0453	
120 minute summer	10	1.009	12	39.3	1.515	0.503	1.0352	
120 minute summer	11	1.008	8	2.3	0.366	0.067	0.0710	
120 minute summer	12	1.010	13	40.8	1.374	0.775	0.2888	
120 minute summer	13	Flow through pond	19	55.2	0.159	0.015	141.3819	
120 minute summer	15	Flow through pond	19	55.2	0.159	0.015	141.3819	
120 minute summer	16	1.011	15	1.8	0.602	0.108	0.0205	
120 minute summer	17	1.012	16	0.9	0.400	0.042	0.0355	
120 minute summer	19	1.014	20	9.6	0.800	0.279	0.0471	
120 minute summer	20	Hydro-Brake®		9.6				847.6
120 minute summer	21	1.020	27	33.1	3.098	0.223	0.0184	
120 minute summer	22	1.015	21	1.8	0.411	0.056	0.0356	
120 minute summer	23	1.016	26	18.7	0.681	0.272	0.3250	
120 minute summer	24	1.017	23	15.3	0.741	0.059	0.7154	
120 minute summer	25	1.018	26	4.5	0.522	0.171	0.1857	
120 minute summer	26	1.019	21	26.6	1.288	0.496	0.1749	
120 minute summer	27	Flow through pond	19	55.2	0.159	0.015	141.3819	

Results for 100 year +40% CC 120 minute winter. 1560 minute analysis at 2 minute timestep. Mass balance: -137.46%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	1	62	46.355	0.105	12.5	0.1181	0.0000	OK
120 minute winter	2	62	46.215	0.065	22.7	0.0599	0.0000	OK
120 minute winter	3	62	45.353	0.053	11.0	0.0529	0.0000	OK
120 minute winter	4	2	45.870	0.000	0.0	0.0000	0.0000	OK
120 minute winter	5	2	45.430	0.000	0.0	0.0000	0.0000	OK
120 minute winter	6	2	45.350	0.000	0.0	0.0000	0.0000	OK
120 minute winter	9	62	43.360	0.110	44.8	0.0616	0.0000	OK
120 minute winter	7	68	43.597	0.040	3.0	0.0114	0.0000	OK
120 minute winter	8	68	43.577	0.077	3.5	0.0868	0.0000	OK
120 minute winter	10	62	42.871	0.121	44.8	0.0193	0.0000	OK
120 minute winter	11	68	43.597	0.047	3.6	0.0024	0.0000	OK
120 minute winter	12	62	42.038	0.188	46.6	0.0569	0.0000	OK
120 minute winter	13	116	40.905	0.425	51.7	0.1650	0.0000	OK
120 minute winter	15	118	40.899	0.419	7.2	0.1743	0.0000	OK
120 minute winter	16	64	41.827	0.037	2.0	0.0103	0.0000	OK
120 minute winter	17	62	42.032	0.022	1.0	0.0063	0.0000	OK
120 minute winter	19	118	40.898	0.498	54.3	0.1409	0.0000	SURCHARGED
120 minute winter	20	118	40.881	0.581	10.1	1.4792	0.0000	OK
120 minute winter	21	62	41.116	0.116	36.9	0.0788	0.0000	OK
120 minute winter	22	60	41.175	0.025	2.0	0.0089	0.0000	OK
120 minute winter	23	62	41.305	0.085	20.9	0.0688	0.0000	OK
120 minute winter	24	62	41.438	0.088	17.1	0.2437	0.0000	OK
120 minute winter	25	62	41.544	0.044	5.0	0.0440	0.0000	OK
120 minute winter	26	62	41.224	0.224	29.7	0.3300	0.0000	OK
120 minute winter	27	116	40.901	0.421	216.3	0.4767	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	1	1.000	2	12.5	1.209	0.777	0.1248	
120 minute winter	2	1.001	9	22.7	2.399	0.180	0.4541	
120 minute winter	3	1.002	9	11.0	2.021	0.255	0.1827	
120 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
120 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
120 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
120 minute winter	9	1.007	10	44.8	2.177	0.427	0.2548	
120 minute winter	7	Flow through pond	11	2.7	0.014	0.000	3.0643	
120 minute winter	8	1.006	9	3.5	0.714	0.029	0.0516	
120 minute winter	10	1.009	12	44.8	1.541	0.573	1.1486	
120 minute winter	11	1.008	8	3.5	0.390	0.099	0.0981	
120 minute winter	12	1.010	13	46.5	1.404	0.883	0.3217	
120 minute winter	13	Flow through pond	19	54.3	0.164	0.015	241.0134	
120 minute winter	15	Flow through pond	19	54.3	0.164	0.015	241.0134	
120 minute winter	16	1.011	15	2.0	0.620	0.120	0.0221	
120 minute winter	17	1.012	16	1.0	0.411	0.047	0.0384	
120 minute winter	19	1.014	20	10.1	0.828	0.293	0.0471	
120 minute winter	20	Hydro-Brake®		9.8				849.9
120 minute winter	21	1.020	27	36.9	2.807	0.248	0.0200	
120 minute winter	22	1.015	21	2.0	0.393	0.062	0.0384	
120 minute winter	23	1.016	26	20.9	0.722	0.304	0.3358	
120 minute winter	24	1.017	23	17.1	0.763	0.066	0.7772	
120 minute winter	25	1.018	26	5.0	0.589	0.190	0.1977	
120 minute winter	26	1.019	21	29.7	1.315	0.554	0.1913	
120 minute winter	27	Flow through pond	19	54.3	0.164	0.015	241.0134	

Results for 100 year +40% CC 180 minute summer. 1620 minute analysis at 4 minute timestep. Mass balance: -327.68%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	1	92	46.332	0.082	8.4	0.0916	0.0000	OK
180 minute summer	2	92	46.203	0.053	15.2	0.0486	0.0000	OK
180 minute summer	3	92	45.343	0.043	7.5	0.0430	0.0000	OK
180 minute summer	4	4	45.870	0.000	0.0	0.0000	0.0000	OK
180 minute summer	5	4	45.430	0.000	0.0	0.0000	0.0000	OK
180 minute summer	6	4	45.350	0.000	0.0	0.0000	0.0000	OK
180 minute summer	9	92	43.335	0.085	29.4	0.0478	0.0000	OK
180 minute summer	7	100	43.586	0.029	2.0	0.0081	0.0000	OK
180 minute summer	8	100	43.553	0.053	2.0	0.0599	0.0000	OK
180 minute summer	10	92	42.845	0.095	29.3	0.0150	0.0000	OK
180 minute summer	11	100	43.586	0.036	2.2	0.0018	0.0000	OK
180 minute summer	12	92	41.985	0.135	30.3	0.0409	0.0000	OK
180 minute summer	13	184	40.716	0.236	33.4	0.0916	0.0000	OK
180 minute summer	15	184	40.714	0.234	4.9	0.0972	0.0000	OK
180 minute summer	16	92	41.820	0.030	1.4	0.0085	0.0000	OK
180 minute summer	17	92	42.029	0.019	0.7	0.0053	0.0000	OK
180 minute summer	19	184	40.711	0.311	38.5	0.0882	0.0000	SURCHARGED
180 minute summer	20	188	40.696	0.395	9.6	1.0065	0.0000	OK
180 minute summer	21	92	41.088	0.088	24.4	0.0600	0.0000	OK
180 minute summer	22	92	41.171	0.021	1.4	0.0075	0.0000	OK
180 minute summer	23	92	41.288	0.068	13.9	0.0552	0.0000	OK
180 minute summer	24	92	41.422	0.072	11.5	0.1992	0.0000	OK
180 minute summer	25	92	41.536	0.036	3.4	0.0361	0.0000	OK
180 minute summer	26	92	41.193	0.193	19.7	0.2849	0.0000	OK
180 minute summer	27	128	40.690	0.210	24.4	0.2372	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	1	1.000	2	8.3	1.090	0.518	0.0932	
180 minute summer	2	1.001	9	15.1	2.137	0.119	0.3388	
180 minute summer	3	1.002	9	7.4	1.813	0.172	0.1375	
180 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
180 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
180 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
180 minute summer	9	1.007	10	29.3	1.980	0.280	0.1837	
180 minute summer	7	Flow through pond	11	1.5	0.006	0.000	2.2564	
180 minute summer	8	1.006	9	1.9	0.572	0.016	0.0363	
180 minute summer	10	1.009	12	29.1	1.431	0.373	0.8172	
180 minute summer	11	1.008	8	2.0	0.354	0.056	0.0608	
180 minute summer	12	1.010	13	29.9	1.288	0.568	0.2264	
180 minute summer	13	Flow through pond	19	38.5	0.172	0.011	143.3713	
180 minute summer	15	Flow through pond	19	38.5	0.172	0.011	143.3713	
180 minute summer	16	1.011	15	1.4	0.557	0.082	0.0168	
180 minute summer	17	1.012	16	0.7	0.373	0.033	0.0292	
180 minute summer	19	1.014	20	9.6	0.719	0.279	0.0471	
180 minute summer	20	Hydro-Brake®		9.6				871.4
180 minute summer	21	1.020	27	24.4	3.004	0.164	0.0144	
180 minute summer	22	1.015	21	1.4	0.294	0.043	0.0285	
180 minute summer	23	1.016	26	13.8	0.577	0.200	0.2918	
180 minute summer	24	1.017	23	11.3	0.685	0.044	0.5731	
180 minute summer	25	1.018	26	3.4	0.493	0.129	0.1530	
180 minute summer	26	1.019	21	19.6	1.216	0.365	0.1363	
180 minute summer	27	Flow through pond	19	38.5	0.172	0.011	143.3713	

Results for 100 year +40% CC 180 minute winter. 1620 minute analysis at 4 minute timestep. Mass balance: -117.09%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	1	92	46.336	0.086	9.2	0.0969	0.0000	OK
180 minute winter	2	92	46.206	0.056	16.8	0.0512	0.0000	OK
180 minute winter	3	92	45.345	0.045	8.2	0.0452	0.0000	OK
180 minute winter	4	4	45.870	0.000	0.0	0.0000	0.0000	OK
180 minute winter	5	4	45.430	0.000	0.0	0.0000	0.0000	OK
180 minute winter	6	4	45.350	0.000	0.0	0.0000	0.0000	OK
180 minute winter	9	92	43.342	0.092	33.3	0.0513	0.0000	OK
180 minute winter	7	100	43.592	0.035	2.2	0.0098	0.0000	OK
180 minute winter	8	100	43.565	0.065	2.7	0.0736	0.0000	OK
180 minute winter	10	92	42.852	0.102	33.2	0.0162	0.0000	OK
180 minute winter	11	100	43.592	0.042	2.8	0.0021	0.0000	OK
180 minute winter	12	92	41.998	0.148	34.5	0.0449	0.0000	OK
180 minute winter	13	164	40.903	0.423	38.3	0.1640	0.0000	OK
180 minute winter	15	176	40.896	0.416	5.3	0.1731	0.0000	OK
180 minute winter	16	92	41.820	0.030	1.4	0.0086	0.0000	OK
180 minute winter	17	92	42.029	0.019	0.7	0.0054	0.0000	OK
180 minute winter	19	176	40.896	0.496	40.7	0.1404	0.0000	SURCHARGED
180 minute winter	20	176	40.879	0.579	10.0	1.4747	0.0000	OK
180 minute winter	21	172	41.123	0.123	27.2	0.0838	0.0000	OK
180 minute winter	22	92	41.172	0.022	1.5	0.0077	0.0000	OK
180 minute winter	23	92	41.292	0.072	15.4	0.0584	0.0000	OK
180 minute winter	24	92	41.425	0.075	12.6	0.2091	0.0000	OK
180 minute winter	25	92	41.538	0.038	3.7	0.0377	0.0000	OK
180 minute winter	26	92	41.200	0.200	21.8	0.2950	0.0000	OK
180 minute winter	27	172	41.197	0.717	53.5	0.8105	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	1	1.000	2	9.2	1.117	0.571	0.0999	
180 minute winter	2	1.001	9	16.7	2.202	0.133	0.3650	
180 minute winter	3	1.002	9	8.2	1.863	0.190	0.1474	
180 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
180 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
180 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
180 minute winter	9	1.007	10	33.2	2.037	0.317	0.2023	
180 minute winter	7	Flow through pond	11	2.1	0.010	0.000	2.6751	
180 minute winter	8	1.006	9	2.7	0.623	0.022	0.0410	
180 minute winter	10	1.009	12	33.2	1.466	0.425	0.9063	
180 minute winter	11	1.008	8	2.7	0.373	0.077	0.0793	
180 minute winter	12	1.010	13	34.4	1.328	0.653	0.2520	
180 minute winter	13	Flow through pond	19	40.7	0.161	0.011	239.7186	
180 minute winter	15	Flow through pond	19	40.7	0.161	0.011	239.7186	
180 minute winter	16	1.011	15	1.4	0.562	0.084	0.0171	
180 minute winter	17	1.012	16	0.7	0.373	0.033	0.0296	
180 minute winter	19	1.014	20	10.0	0.827	0.290	0.0471	
180 minute winter	20	Hydro-Brake®		9.8				881.7
180 minute winter	21	1.020	27	27.2	3.130	0.183	0.0380	
180 minute winter	22	1.015	21	1.5	0.406	0.047	0.0361	
180 minute winter	23	1.016	26	15.3	0.612	0.223	0.3033	
180 minute winter	24	1.017	23	12.6	0.705	0.048	0.6183	
180 minute winter	25	1.018	26	3.7	0.514	0.141	0.1638	
180 minute winter	26	1.019	21	21.8	1.241	0.407	0.1487	
180 minute winter	27	Flow through pond	19	40.7	0.161	0.011	239.7186	

Results for 100 year +40% CC 240 minute summer. 1680 minute analysis at 4 minute timestep. Mass balance: -308.63%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	1	124	46.320	0.070	6.5	0.0792	0.0000	OK
240 minute summer	2	124	46.197	0.047	11.9	0.0431	0.0000	OK
240 minute summer	3	124	45.338	0.038	5.8	0.0379	0.0000	OK
240 minute summer	4	4	45.870	0.000	0.0	0.0000	0.0000	OK
240 minute summer	5	4	45.430	0.000	0.0	0.0000	0.0000	OK
240 minute summer	6	4	45.350	0.000	0.0	0.0000	0.0000	OK
240 minute summer	9	124	43.325	0.075	23.3	0.0418	0.0000	OK
240 minute summer	7	132	43.583	0.026	1.6	0.0074	0.0000	OK
240 minute summer	8	132	43.548	0.048	1.7	0.0540	0.0000	OK
240 minute summer	10	124	42.834	0.084	23.3	0.0133	0.0000	OK
240 minute summer	11	132	43.583	0.033	1.8	0.0017	0.0000	OK
240 minute summer	12	124	41.968	0.118	24.2	0.0356	0.0000	OK
240 minute summer	13	240	40.714	0.234	26.9	0.0910	0.0000	OK
240 minute summer	15	244	40.712	0.232	3.7	0.0967	0.0000	OK
240 minute summer	16	124	41.816	0.026	1.0	0.0073	0.0000	OK
240 minute summer	17	124	42.026	0.016	0.5	0.0046	0.0000	OK
240 minute summer	19	244	40.710	0.310	32.1	0.0878	0.0000	SURCHARGED
240 minute summer	20	244	40.694	0.394	9.6	1.0030	0.0000	OK
240 minute summer	21	124	41.076	0.076	19.4	0.0519	0.0000	OK
240 minute summer	22	124	41.169	0.019	1.1	0.0067	0.0000	OK
240 minute summer	23	124	41.281	0.061	11.0	0.0493	0.0000	OK
240 minute summer	24	124	41.414	0.064	9.0	0.1777	0.0000	OK
240 minute summer	25	124	41.532	0.032	2.6	0.0316	0.0000	OK
240 minute summer	26	124	41.180	0.180	15.6	0.2660	0.0000	OK
240 minute summer	27	160	40.679	0.199	25.2	0.2254	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	1	1.000	2	6.5	1.017	0.404	0.0779	
240 minute summer	2	1.001	9	11.9	1.998	0.094	0.2859	
240 minute summer	3	1.002	9	5.8	1.691	0.135	0.1151	
240 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
240 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
240 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
240 minute summer	9	1.007	10	23.3	1.868	0.222	0.1548	
240 minute summer	7	Flow through pond	11	1.3	0.007	0.000	2.0670	
240 minute summer	8	1.006	9	1.7	0.497	0.014	0.0307	
240 minute summer	10	1.009	12	23.3	1.356	0.299	0.6916	
240 minute summer	11	1.008	8	1.7	0.345	0.047	0.0531	
240 minute summer	12	1.010	13	24.2	1.228	0.459	0.1920	
240 minute summer	13	Flow through pond	19	32.1	0.171	0.009	142.6610	
240 minute summer	15	Flow through pond	19	32.1	0.171	0.009	142.6610	
240 minute summer	16	1.011	15	1.0	0.510	0.060	0.0134	
240 minute summer	17	1.012	16	0.5	0.339	0.024	0.0233	
240 minute summer	19	1.014	20	9.6	0.706	0.279	0.0471	
240 minute summer	20	Hydro-Brake®		9.6				897.8
240 minute summer	21	1.020	27	19.4	2.843	0.130	0.0120	
240 minute summer	22	1.015	21	1.1	0.334	0.034	0.0239	
240 minute summer	23	1.016	26	11.0	0.509	0.160	0.2687	
240 minute summer	24	1.017	23	9.0	0.644	0.035	0.4848	
240 minute summer	25	1.018	26	2.6	0.434	0.099	0.1303	
240 minute summer	26	1.019	21	15.6	1.168	0.291	0.1132	
240 minute summer	27	Flow through pond	19	32.1	0.171	0.009	142.6610	

Results for 100 year +40% CC 240 minute winter. 1680 minute analysis at 4 minute timestep. Mass balance: -107.20%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	1	124	46.325	0.075	7.3	0.0846	0.0000	OK
240 minute winter	2	124	46.200	0.050	13.3	0.0455	0.0000	OK
240 minute winter	3	124	45.340	0.040	6.5	0.0401	0.0000	OK
240 minute winter	4	4	45.870	0.000	0.0	0.0000	0.0000	OK
240 minute winter	5	4	45.430	0.000	0.0	0.0000	0.0000	OK
240 minute winter	6	4	45.350	0.000	0.0	0.0000	0.0000	OK
240 minute winter	9	124	43.331	0.081	26.7	0.0451	0.0000	OK
240 minute winter	7	132	43.588	0.031	1.8	0.0089	0.0000	OK
240 minute winter	8	132	43.558	0.058	2.3	0.0657	0.0000	OK
240 minute winter	10	124	42.840	0.090	26.7	0.0143	0.0000	OK
240 minute winter	11	132	43.588	0.038	2.3	0.0020	0.0000	OK
240 minute winter	12	124	41.978	0.128	27.7	0.0389	0.0000	OK
240 minute winter	13	188	40.884	0.404	30.8	0.1569	0.0000	OK
240 minute winter	15	196	40.880	0.400	4.3	0.1665	0.0000	OK
240 minute winter	16	120	41.818	0.028	1.2	0.0079	0.0000	OK
240 minute winter	17	120	42.027	0.017	0.6	0.0050	0.0000	OK
240 minute winter	19	192	40.877	0.477	33.5	0.1349	0.0000	SURCHARGED
240 minute winter	20	192	40.860	0.560	10.0	1.4250	0.0000	OK
240 minute winter	21	124	41.082	0.082	21.6	0.0556	0.0000	OK
240 minute winter	22	124	41.170	0.020	1.2	0.0070	0.0000	OK
240 minute winter	23	124	41.284	0.064	12.2	0.0519	0.0000	OK
240 minute winter	24	124	41.417	0.067	10.0	0.1870	0.0000	OK
240 minute winter	25	120	41.534	0.034	2.9	0.0334	0.0000	OK
240 minute winter	26	124	41.186	0.186	17.3	0.2742	0.0000	OK
240 minute winter	27	188	40.879	0.399	52.7	0.4516	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	1	1.000	2	7.3	1.051	0.453	0.0846	
240 minute winter	2	1.001	9	13.3	2.064	0.105	0.3094	
240 minute winter	3	1.002	9	6.5	1.747	0.151	0.1249	
240 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
240 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
240 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
240 minute winter	9	1.007	10	26.7	1.931	0.254	0.1711	
240 minute winter	7	Flow through pond	11	1.7	0.009	0.000	2.4366	
240 minute winter	8	1.006	9	2.2	0.588	0.019	0.0348	
240 minute winter	10	1.009	12	26.6	1.396	0.341	0.7668	
240 minute winter	11	1.008	8	2.3	0.362	0.064	0.0685	
240 minute winter	12	1.010	13	27.7	1.267	0.527	0.2131	
240 minute winter	13	Flow through pond	19	33.5	0.159	0.009	229.8179	
240 minute winter	15	Flow through pond	19	33.5	0.159	0.009	229.8179	
240 minute winter	16	1.011	15	1.2	0.537	0.072	0.0153	
240 minute winter	17	1.012	16	0.6	0.357	0.028	0.0265	
240 minute winter	19	1.014	20	10.0	0.822	0.288	0.0471	
240 minute winter	20	Hydro-Brake®		9.8				913.4
240 minute winter	21	1.020	27	21.6	3.270	0.145	0.0130	
240 minute winter	22	1.015	21	1.2	0.265	0.037	0.0259	
240 minute winter	23	1.016	26	12.2	0.540	0.177	0.2789	
240 minute winter	24	1.017	23	10.0	0.664	0.038	0.5229	
240 minute winter	25	1.018	26	2.9	0.416	0.110	0.1400	
240 minute winter	26	1.019	21	17.3	1.190	0.323	0.1233	
240 minute winter	27	Flow through pond	19	33.5	0.159	0.009	229.8179	

Results for 100 year +40% CC 360 minute summer. 10080 minute analysis at 8 minute timestep. Mass balance: -2532.51%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	1	184	46.310	0.060	4.9	0.0676	0.0000	OK
360 minute summer	2	184	46.191	0.041	8.9	0.0371	0.0000	OK
360 minute summer	3	184	45.332	0.032	4.3	0.0325	0.0000	OK
360 minute summer	4	8	45.870	0.000	0.0	0.0000	0.0000	OK
360 minute summer	5	8	45.430	0.000	0.0	0.0000	0.0000	OK
360 minute summer	6	8	45.350	0.000	0.0	0.0000	0.0000	OK
360 minute summer	9	184	43.313	0.063	17.3	0.0354	0.0000	OK
360 minute summer	7	192	43.579	0.022	1.2	0.0062	0.0000	OK
360 minute summer	8	192	43.540	0.040	1.3	0.0453	0.0000	OK
360 minute summer	10	184	42.821	0.071	17.3	0.0114	0.0000	OK
360 minute summer	11	192	43.579	0.029	1.4	0.0015	0.0000	OK
360 minute summer	12	184	41.948	0.098	17.9	0.0296	0.0000	OK
360 minute summer	13	9824	40.885	0.405	19.8	0.1571	0.0000	OK
360 minute summer	15	4944	40.810	0.330	3.2	0.1371	0.0000	OK
360 minute summer	16	184	41.813	0.023	0.8	0.0064	0.0000	OK
360 minute summer	17	184	42.024	0.014	0.4	0.0041	0.0000	OK
360 minute summer	19	5808	40.812	0.412	31.5	0.1165	0.0000	SURCHARGED
360 minute summer	20	5808	40.795	0.495	10.0	1.2605	0.0000	OK
360 minute summer	21	184	41.063	0.063	14.3	0.0429	0.0000	OK
360 minute summer	22	184	41.166	0.016	0.8	0.0057	0.0000	OK
360 minute summer	23	184	41.272	0.052	8.1	0.0422	0.0000	OK
360 minute summer	24	184	41.406	0.056	6.7	0.1541	0.0000	OK
360 minute summer	25	184	41.528	0.028	2.0	0.0278	0.0000	OK
360 minute summer	26	184	41.166	0.166	11.6	0.2453	0.0000	OK
360 minute summer	27	4944	41.037	0.557	446.5	0.6304	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	1	1.000	2	4.9	0.940	0.303	0.0634	
360 minute summer	2	1.001	9	8.8	1.830	0.070	0.2314	
360 minute summer	3	1.002	9	4.3	1.550	0.099	0.0926	
360 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
360 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
360 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
360 minute summer	9	1.007	10	17.3	1.731	0.165	0.1237	
360 minute summer	7	Flow through pond	11	1.0	0.004	0.000	1.7872	
360 minute summer	8	1.006	9	1.3	0.409	0.011	0.0246	
360 minute summer	10	1.009	12	17.2	1.263	0.220	0.5487	
360 minute summer	11	1.008	8	1.3	0.329	0.036	0.0422	
360 minute summer	12	1.010	13	17.8	1.139	0.337	0.1519	
360 minute summer	13	Flow through pond	19	31.5	0.153	0.009	194.2494	
360 minute summer	15	Flow through pond	19	31.5	0.153	0.009	194.2494	
360 minute summer	16	1.011	15	0.8	0.475	0.047	0.0112	
360 minute summer	17	1.012	16	0.4	0.318	0.019	0.0195	
360 minute summer	19	1.014	20	10.0	0.726	0.289	0.0471	
360 minute summer	20	Hydro-Brake®		9.8				5638.4
360 minute summer	21	1.020	27	14.3	1.902	0.096	0.0179	
360 minute summer	22	1.015	21	0.8	0.213	0.025	0.0187	
360 minute summer	23	1.016	26	8.1	0.424	0.117	0.2414	
360 minute summer	24	1.017	23	6.6	0.592	0.026	0.3891	
360 minute summer	25	1.018	26	2.0	0.367	0.076	0.1063	
360 minute summer	26	1.019	21	11.5	1.102	0.215	0.0887	
360 minute summer	27	Flow through pond	19	31.5	0.153	0.009	194.2494	

Results for 100 year +40% CC 360 minute winter. 10080 minute analysis at 8 minute timestep. Mass balance: -1367.63%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	1	184	46.313	0.063	5.3	0.0706	0.0000	OK
360 minute winter	2	184	46.192	0.042	9.7	0.0389	0.0000	OK
360 minute winter	3	184	45.334	0.034	4.7	0.0340	0.0000	OK
360 minute winter	4	8	45.870	0.000	0.0	0.0000	0.0000	OK
360 minute winter	5	8	45.430	0.000	0.0	0.0000	0.0000	OK
360 minute winter	6	8	45.350	0.000	0.0	0.0000	0.0000	OK
360 minute winter	9	184	43.317	0.067	19.4	0.0377	0.0000	OK
360 minute winter	7	192	43.583	0.026	1.3	0.0073	0.0000	OK
360 minute winter	8	200	43.548	0.048	1.6	0.0538	0.0000	OK
360 minute winter	10	184	42.826	0.076	19.4	0.0121	0.0000	OK
360 minute winter	11	192	43.583	0.033	1.7	0.0017	0.0000	OK
360 minute winter	12	184	41.955	0.105	20.2	0.0319	0.0000	OK
360 minute winter	13	264	40.851	0.371	22.3	0.1439	0.0000	OK
360 minute winter	15	280	40.846	0.366	3.0	0.1523	0.0000	OK
360 minute winter	16	168	41.813	0.023	0.8	0.0065	0.0000	OK
360 minute winter	17	168	42.024	0.014	0.4	0.0041	0.0000	OK
360 minute winter	19	272	40.844	0.444	25.4	0.1256	0.0000	SURCHARGED
360 minute winter	20	272	40.827	0.527	9.9	1.3416	0.0000	OK
360 minute winter	21	184	41.067	0.067	15.7	0.0454	0.0000	OK
360 minute winter	22	184	41.167	0.017	0.9	0.0061	0.0000	OK
360 minute winter	23	184	41.274	0.054	8.9	0.0442	0.0000	OK
360 minute winter	24	184	41.408	0.058	7.3	0.1608	0.0000	OK
360 minute winter	25	184	41.529	0.029	2.1	0.0285	0.0000	OK
360 minute winter	26	184	41.170	0.170	12.6	0.2508	0.0000	OK
360 minute winter	27	272	40.847	0.367	49.3	0.4147	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	1	1.000	2	5.3	0.960	0.329	0.0673	
360 minute winter	2	1.001	9	9.7	1.881	0.077	0.2472	
360 minute winter	3	1.002	9	4.7	1.593	0.109	0.0990	
360 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
360 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
360 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
360 minute winter	9	1.007	10	19.4	1.782	0.185	0.1348	
360 minute winter	7	Flow through pond	11	1.3	0.004	0.000	2.0600	
360 minute winter	8	1.006	9	1.6	0.483	0.014	0.0273	
360 minute winter	10	1.009	12	19.4	1.296	0.248	0.6013	
360 minute winter	11	1.008	8	1.6	0.344	0.047	0.0528	
360 minute winter	12	1.010	13	20.1	1.175	0.382	0.1669	
360 minute winter	13	Flow through pond	19	25.4	0.146	0.007	212.6148	
360 minute winter	15	Flow through pond	19	25.4	0.146	0.007	212.6148	
360 minute winter	16	1.011	15	0.8	0.479	0.048	0.0114	
360 minute winter	17	1.012	16	0.4	0.318	0.019	0.0198	
360 minute winter	19	1.014	20	9.9	0.818	0.286	0.0471	
360 minute winter	20	Hydro-Brake®		9.8				5485.2
360 minute winter	21	1.020	27	15.7	3.264	0.105	0.0101	
360 minute winter	22	1.015	21	0.9	0.222	0.028	0.0202	
360 minute winter	23	1.016	26	8.9	0.450	0.129	0.2489	
360 minute winter	24	1.017	23	7.3	0.608	0.028	0.4157	
360 minute winter	25	1.018	26	2.1	0.369	0.080	0.1123	
360 minute winter	26	1.019	21	12.6	1.120	0.235	0.0952	
360 minute winter	27	Flow through pond	19	25.4	0.146	0.007	212.6148	

Results for 100 year +40% CC 480 minute summer. 1920 minute analysis at 8 minute timestep. Mass balance: -306.06%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	1	248	46.303	0.053	3.8	0.0591	0.0000	OK
480 minute summer	2	248	46.186	0.036	6.9	0.0329	0.0000	OK
480 minute summer	3	248	45.329	0.029	3.4	0.0289	0.0000	OK
480 minute summer	4	8	45.870	0.000	0.0	0.0000	0.0000	OK
480 minute summer	5	8	45.430	0.000	0.0	0.0000	0.0000	OK
480 minute summer	6	8	45.350	0.000	0.0	0.0000	0.0000	OK
480 minute summer	9	248	43.306	0.056	13.7	0.0313	0.0000	OK
480 minute summer	7	256	43.577	0.020	0.9	0.0056	0.0000	OK
480 minute summer	8	256	43.536	0.036	1.1	0.0410	0.0000	OK
480 minute summer	10	248	42.814	0.064	13.7	0.0101	0.0000	OK
480 minute summer	11	256	43.577	0.027	1.1	0.0014	0.0000	OK
480 minute summer	12	248	41.936	0.086	14.2	0.0260	0.0000	OK
480 minute summer	13	1008	40.872	0.392	15.8	0.1522	0.0000	OK
480 minute summer	15	1440	40.787	0.307	2.2	0.1276	0.0000	OK
480 minute summer	16	248	41.810	0.020	0.6	0.0056	0.0000	OK
480 minute summer	17	240	42.023	0.013	0.3	0.0036	0.0000	OK
480 minute summer	19	584	40.790	0.390	30.7	0.1103	0.0000	SURCHARGED
480 minute summer	20	584	40.773	0.473	10.0	1.2029	0.0000	OK
480 minute summer	21	248	41.055	0.055	11.3	0.0372	0.0000	OK
480 minute summer	22	248	41.164	0.014	0.6	0.0050	0.0000	OK
480 minute summer	23	248	41.266	0.046	6.4	0.0376	0.0000	OK
480 minute summer	24	248	41.399	0.049	5.2	0.1368	0.0000	OK
480 minute summer	25	248	41.524	0.024	1.5	0.0242	0.0000	OK
480 minute summer	26	248	41.157	0.157	9.1	0.2319	0.0000	OK
480 minute summer	27	1440	40.999	0.519	49.2	0.5870	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	1	1.000	2	3.8	0.876	0.236	0.0530	
480 minute summer	2	1.001	9	6.9	1.704	0.055	0.1943	
480 minute summer	3	1.002	9	3.4	1.450	0.079	0.0787	
480 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
480 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
480 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
480 minute summer	9	1.007	10	13.7	1.628	0.131	0.1046	
480 minute summer	7	Flow through pond	11	0.8	0.004	0.000	1.6427	
480 minute summer	8	1.006	9	1.1	0.393	0.009	0.0209	
480 minute summer	10	1.009	12	13.7	1.194	0.176	0.4635	
480 minute summer	11	1.008	8	1.1	0.320	0.031	0.0372	
480 minute summer	12	1.010	13	14.2	1.078	0.270	0.1285	
480 minute summer	13	Flow through pond	19	30.7	0.162	0.009	181.6143	
480 minute summer	15	Flow through pond	19	30.7	0.162	0.009	181.6143	
480 minute summer	16	1.011	15	0.6	0.441	0.036	0.0093	
480 minute summer	17	1.012	16	0.3	0.293	0.014	0.0162	
480 minute summer	19	1.014	20	10.0	0.818	0.288	0.0471	
480 minute summer	20	Hydro-Brake®		9.8				1019.8
480 minute summer	21	1.020	27	11.3	1.813	0.076	0.0105	
480 minute summer	22	1.015	21	0.6	0.362	0.019	0.0154	
480 minute summer	23	1.016	26	6.4	0.368	0.093	0.2231	
480 minute summer	24	1.017	23	5.2	0.551	0.020	0.3274	
480 minute summer	25	1.018	26	1.5	0.356	0.057	0.0896	
480 minute summer	26	1.019	21	9.1	1.051	0.170	0.0735	
480 minute summer	27	Flow through pond	19	30.7	0.162	0.009	181.6143	

Results for 100 year +40% CC 480 minute winter. 1920 minute analysis at 8 minute timestep. Mass balance: -96.63%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	1	248	46.305	0.055	4.2	0.0623	0.0000	OK
480 minute winter	2	248	46.188	0.038	7.7	0.0347	0.0000	OK
480 minute winter	3	248	45.330	0.030	3.7	0.0302	0.0000	OK
480 minute winter	4	8	45.870	0.000	0.0	0.0000	0.0000	OK
480 minute winter	5	8	45.430	0.000	0.0	0.0000	0.0000	OK
480 minute winter	6	8	45.350	0.000	0.0	0.0000	0.0000	OK
480 minute winter	9	248	43.309	0.059	15.4	0.0333	0.0000	OK
480 minute winter	7	264	43.579	0.022	1.0	0.0063	0.0000	OK
480 minute winter	8	264	43.541	0.041	1.3	0.0459	0.0000	OK
480 minute winter	10	248	42.817	0.067	15.4	0.0107	0.0000	OK
480 minute winter	11	264	43.579	0.029	1.3	0.0015	0.0000	OK
480 minute winter	12	248	41.942	0.092	16.0	0.0278	0.0000	OK
480 minute winter	13	360	40.822	0.341	17.8	0.1325	0.0000	OK
480 minute winter	15	360	40.819	0.339	2.4	0.1408	0.0000	OK
480 minute winter	16	216	41.810	0.020	0.6	0.0056	0.0000	OK
480 minute winter	17	208	42.023	0.013	0.3	0.0036	0.0000	OK
480 minute winter	19	352	40.816	0.416	24.4	0.1178	0.0000	SURCHARGED
480 minute winter	20	352	40.799	0.499	9.9	1.2712	0.0000	OK
480 minute winter	21	248	41.059	0.058	12.6	0.0397	0.0000	OK
480 minute winter	22	240	41.165	0.015	0.7	0.0054	0.0000	OK
480 minute winter	23	248	41.269	0.049	7.1	0.0395	0.0000	OK
480 minute winter	24	248	41.402	0.052	5.8	0.1441	0.0000	OK
480 minute winter	25	240	41.526	0.026	1.7	0.0257	0.0000	OK
480 minute winter	26	248	41.161	0.161	10.1	0.2376	0.0000	OK
480 minute winter	27	352	41.042	0.562	46.8	0.6360	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	1	1.000	2	4.2	0.899	0.261	0.0571	
480 minute winter	2	1.001	9	7.7	1.759	0.061	0.2101	
480 minute winter	3	1.002	9	3.7	1.487	0.086	0.0835	
480 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
480 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
480 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
480 minute winter	9	1.007	10	15.4	1.677	0.146	0.1136	
480 minute winter	7	Flow through pond	11	1.0	0.005	0.000	1.8067	
480 minute winter	8	1.006	9	1.3	0.459	0.011	0.0230	
480 minute winter	10	1.009	12	15.4	1.226	0.197	0.5051	
480 minute winter	11	1.008	8	1.3	0.330	0.037	0.0430	
480 minute winter	12	1.010	13	16.0	1.110	0.303	0.1401	
480 minute winter	13	Flow through pond	19	24.4	0.151	0.007	197.7691	
480 minute winter	15	Flow through pond	19	24.4	0.151	0.007	197.7691	
480 minute winter	16	1.011	15	0.6	0.441	0.036	0.0093	
480 minute winter	17	1.012	16	0.3	0.293	0.014	0.0162	
480 minute winter	19	1.014	20	9.9	0.658	0.285	0.0471	
480 minute winter	20	Hydro-Brake®		9.8				1031.9
480 minute winter	21	1.020	27	12.6	3.135	0.085	0.0161	
480 minute winter	22	1.015	21	0.7	0.372	0.022	0.0169	
480 minute winter	23	1.016	26	7.1	0.392	0.103	0.2309	
480 minute winter	24	1.017	23	5.8	0.569	0.022	0.3536	
480 minute winter	25	1.018	26	1.7	0.350	0.065	0.0966	
480 minute winter	26	1.019	21	10.1	1.072	0.188	0.0800	
480 minute winter	27	Flow through pond	19	24.4	0.151	0.007	197.7691	

Results for 100 year +40% CC 600 minute summer. 2040 minute analysis at 15 minute timestep. Mass balance: 16.58%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	1	315	46.297	0.047	3.1	0.0531	0.0000	OK
600 minute summer	2	315	46.182	0.032	5.6	0.0297	0.0000	OK
600 minute summer	3	315	45.326	0.026	2.7	0.0259	0.0000	OK
600 minute summer	4	15	45.870	0.000	0.0	0.0000	0.0000	OK
600 minute summer	5	15	45.430	0.000	0.0	0.0000	0.0000	OK
600 minute summer	6	15	45.350	0.000	0.0	0.0000	0.0000	OK
600 minute summer	9	315	43.300	0.050	11.1	0.0280	0.0000	OK
600 minute summer	7	330	43.574	0.017	0.7	0.0048	0.0000	OK
600 minute summer	8	330	43.531	0.031	0.8	0.0350	0.0000	OK
600 minute summer	10	315	42.807	0.057	11.1	0.0091	0.0000	OK
600 minute summer	11	330	43.574	0.024	0.9	0.0012	0.0000	OK
600 minute summer	12	315	41.926	0.076	11.5	0.0231	0.0000	OK
600 minute summer	13	405	40.612	0.132	12.8	0.0514	0.0000	OK
600 minute summer	15	375	40.610	0.130	1.7	0.0540	0.0000	OK
600 minute summer	16	285	41.806	0.016	0.4	0.0046	0.0000	OK
600 minute summer	17	285	42.020	0.010	0.2	0.0030	0.0000	OK
600 minute summer	19	390	40.608	0.208	26.8	0.0589	0.0000	SURCHARGED
600 minute summer	20	390	40.594	0.294	9.1	0.7470	0.0000	OK
600 minute summer	21	315	41.048	0.048	9.0	0.0324	0.0000	OK
600 minute summer	22	315	41.163	0.013	0.5	0.0046	0.0000	OK
600 minute summer	23	315	41.261	0.041	5.1	0.0336	0.0000	OK
600 minute summer	24	315	41.395	0.045	4.2	0.1238	0.0000	OK
600 minute summer	25	315	41.522	0.022	1.2	0.0217	0.0000	OK
600 minute summer	26	315	41.149	0.149	7.2	0.2204	0.0000	OK
600 minute summer	27	390	40.698	0.218	9.0	0.2466	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	1	1.000	2	3.1	0.827	0.193	0.0458	
600 minute summer	2	1.001	9	5.6	1.602	0.044	0.1678	
600 minute summer	3	1.002	9	2.7	1.355	0.063	0.0669	
600 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
600 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
600 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
600 minute summer	9	1.007	10	11.1	1.539	0.106	0.0898	
600 minute summer	7	Flow through pond	11	0.7	0.003	0.000	1.4308	
600 minute summer	8	1.006	9	0.8	0.381	0.007	0.0179	
600 minute summer	10	1.009	12	11.1	1.132	0.143	0.3968	
600 minute summer	11	1.008	8	0.8	0.307	0.024	0.0301	
600 minute summer	12	1.010	13	11.5	1.022	0.219	0.1100	
600 minute summer	13	Flow through pond	19	26.8	0.166	0.007	88.5787	
600 minute summer	15	Flow through pond	19	26.8	0.166	0.007	88.5787	
600 minute summer	16	1.011	15	0.4	0.391	0.024	0.0070	
600 minute summer	17	1.012	16	0.2	0.260	0.009	0.0121	
600 minute summer	19	1.014	20	9.1	0.627	0.265	0.0471	
600 minute summer	20	Hydro-Brake®		9.1				414.2
600 minute summer	21	1.020	27	9.0	1.728	0.061	0.0065	
600 minute summer	22	1.015	21	0.5	0.201	0.016	0.0129	
600 minute summer	23	1.016	26	5.1	0.319	0.074	0.2075	
600 minute summer	24	1.017	23	4.2	0.521	0.016	0.2798	
600 minute summer	25	1.018	26	1.2	0.313	0.046	0.0762	
600 minute summer	26	1.019	21	7.2	0.998	0.134	0.0613	
600 minute summer	27	Flow through pond	19	26.8	0.166	0.007	88.5787	

Results for 100 year +40% CC 600 minute winter. 2040 minute analysis at 15 minute timestep. Mass balance: -122.08%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	1	315	46.300	0.050	3.5	0.0566	0.0000	OK
600 minute winter	2	315	46.185	0.035	6.4	0.0317	0.0000	OK
600 minute winter	3	315	45.328	0.028	3.1	0.0277	0.0000	OK
600 minute winter	4	15	45.870	0.000	0.0	0.0000	0.0000	OK
600 minute winter	5	15	45.430	0.000	0.0	0.0000	0.0000	OK
600 minute winter	6	15	45.350	0.000	0.0	0.0000	0.0000	OK
600 minute winter	9	315	43.304	0.054	13.0	0.0304	0.0000	OK
600 minute winter	7	315	43.578	0.021	0.9	0.0059	0.0000	OK
600 minute winter	8	315	43.538	0.038	1.2	0.0429	0.0000	OK
600 minute winter	10	315	42.812	0.062	13.0	0.0098	0.0000	OK
600 minute winter	11	315	43.578	0.028	1.2	0.0014	0.0000	OK
600 minute winter	12	315	41.933	0.083	13.5	0.0252	0.0000	OK
600 minute winter	13	1110	40.846	0.366	15.0	0.1420	0.0000	OK
600 minute winter	15	615	40.812	0.332	3.1	0.1383	0.0000	OK
600 minute winter	16	300	41.810	0.020	0.6	0.0056	0.0000	OK
600 minute winter	17	300	42.023	0.013	0.3	0.0036	0.0000	OK
600 minute winter	19	630	40.813	0.413	28.9	0.1169	0.0000	SURCHARGED
600 minute winter	20	630	40.796	0.496	10.0	1.2616	0.0000	OK
600 minute winter	21	315	41.052	0.052	10.5	0.0356	0.0000	OK
600 minute winter	22	315	41.164	0.014	0.6	0.0050	0.0000	OK
600 minute winter	23	315	41.264	0.044	5.9	0.0361	0.0000	OK
600 minute winter	24	315	41.397	0.047	4.8	0.1317	0.0000	OK
600 minute winter	25	315	41.524	0.024	1.4	0.0234	0.0000	OK
600 minute winter	26	315	41.154	0.154	8.4	0.2278	0.0000	OK
600 minute winter	27	615	41.042	0.562	10.5	0.6358	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	1	1.000	2	3.5	0.854	0.217	0.0501	
600 minute winter	2	1.001	9	6.4	1.668	0.051	0.1842	
600 minute winter	3	1.002	9	3.1	1.411	0.072	0.0737	
600 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
600 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
600 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
600 minute winter	9	1.007	10	13.0	1.602	0.123	0.1003	
600 minute winter	7	Flow through pond	11	0.9	0.004	0.000	1.7046	
600 minute winter	8	1.006	9	1.2	0.384	0.010	0.0204	
600 minute winter	10	1.009	12	13.0	1.175	0.166	0.4445	
600 minute winter	11	1.008	8	1.2	0.324	0.033	0.0393	
600 minute winter	12	1.010	13	13.5	1.063	0.255	0.1233	
600 minute winter	13	Flow through pond	19	28.9	0.155	0.008	195.6207	
600 minute winter	15	Flow through pond	19	28.9	0.155	0.008	195.6207	
600 minute winter	16	1.011	15	0.6	0.441	0.036	0.0093	
600 minute winter	17	1.012	16	0.3	0.293	0.014	0.0162	
600 minute winter	19	1.014	20	10.0	0.660	0.289	0.0471	
600 minute winter	20	Hydro-Brake®		9.8				1112.0
600 minute winter	21	1.020	27	10.5	1.785	0.071	0.0187	
600 minute winter	22	1.015	21	0.6	0.221	0.019	0.0146	
600 minute winter	23	1.016	26	5.9	0.350	0.086	0.2174	
600 minute winter	24	1.017	23	4.8	0.539	0.018	0.3087	
600 minute winter	25	1.018	26	1.4	0.326	0.053	0.0848	
600 minute winter	26	1.019	21	8.4	1.031	0.157	0.0692	
600 minute winter	27	Flow through pond	19	28.9	0.155	0.008	195.6207	

Results for 100 year +40% CC 720 minute summer. 2160 minute analysis at 15 minute timestep. Mass balance: 18.81%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	1	375	46.294	0.044	2.7	0.0494	0.0000	OK
720 minute summer	2	375	46.180	0.030	4.9	0.0279	0.0000	OK
720 minute summer	3	375	45.324	0.024	2.4	0.0244	0.0000	OK
720 minute summer	4	15	45.870	0.000	0.0	0.0000	0.0000	OK
720 minute summer	5	15	45.430	0.000	0.0	0.0000	0.0000	OK
720 minute summer	6	15	45.350	0.000	0.0	0.0000	0.0000	OK
720 minute summer	9	375	43.297	0.047	9.8	0.0262	0.0000	OK
720 minute summer	7	375	43.574	0.017	0.7	0.0047	0.0000	OK
720 minute summer	8	375	43.530	0.030	0.8	0.0343	0.0000	OK
720 minute summer	10	375	42.804	0.054	9.8	0.0085	0.0000	OK
720 minute summer	11	375	43.574	0.024	0.9	0.0012	0.0000	OK
720 minute summer	12	375	41.921	0.071	10.2	0.0216	0.0000	OK
720 minute summer	13	555	40.597	0.117	12.2	0.0453	0.0000	OK
720 minute summer	15	435	40.596	0.116	1.5	0.0483	0.0000	OK
720 minute summer	16	345	41.806	0.016	0.4	0.0046	0.0000	OK
720 minute summer	17	345	42.020	0.010	0.2	0.0030	0.0000	OK
720 minute summer	19	465	40.594	0.194	27.5	0.0548	0.0000	SURCHARGED
720 minute summer	20	465	40.579	0.279	9.0	0.7111	0.0000	OK
720 minute summer	21	375	41.044	0.044	7.9	0.0300	0.0000	OK
720 minute summer	22	360	41.162	0.012	0.4	0.0041	0.0000	OK
720 minute summer	23	375	41.259	0.039	4.5	0.0316	0.0000	OK
720 minute summer	24	375	41.392	0.042	3.7	0.1166	0.0000	OK
720 minute summer	25	375	41.521	0.021	1.1	0.0208	0.0000	OK
720 minute summer	26	375	41.146	0.146	6.4	0.2153	0.0000	OK
720 minute summer	27	450	40.674	0.194	7.9	0.2193	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	1	1.000	2	2.7	0.794	0.168	0.0416	
720 minute summer	2	1.001	9	4.9	1.540	0.039	0.1527	
720 minute summer	3	1.002	9	2.4	1.309	0.056	0.0615	
720 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
720 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
720 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
720 minute summer	9	1.007	10	9.8	1.487	0.094	0.0819	
720 minute summer	7	Flow through pond	11	0.7	0.003	0.000	1.4133	
720 minute summer	8	1.006	9	0.8	0.381	0.007	0.0165	
720 minute summer	10	1.009	12	9.8	1.093	0.126	0.3622	
720 minute summer	11	1.008	8	0.8	0.306	0.023	0.0294	
720 minute summer	12	1.010	13	10.2	0.990	0.194	0.1005	
720 minute summer	13	Flow through pond	19	27.5	0.171	0.008	80.9924	
720 minute summer	15	Flow through pond	19	27.5	0.171	0.008	80.9924	
720 minute summer	16	1.011	15	0.4	0.391	0.024	0.0070	
720 minute summer	17	1.012	16	0.2	0.260	0.009	0.0121	
720 minute summer	19	1.014	20	9.0	0.636	0.262	0.0471	
720 minute summer	20	Hydro-Brake®		9.0				425.4
720 minute summer	21	1.020	27	7.9	1.682	0.053	0.0058	
720 minute summer	22	1.015	21	0.4	0.201	0.012	0.0115	
720 minute summer	23	1.016	26	4.5	0.293	0.065	0.2002	
720 minute summer	24	1.017	23	3.7	0.501	0.014	0.2562	
720 minute summer	25	1.018	26	1.1	0.310	0.042	0.0706	
720 minute summer	26	1.019	21	6.4	0.977	0.119	0.0557	
720 minute summer	27	Flow through pond	19	27.5	0.171	0.008	80.9924	

Results for 100 year +40% CC 720 minute winter. 2160 minute analysis at 15 minute timestep. Mass balance: -119.22%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	1	375	46.297	0.047	3.1	0.0531	0.0000	OK
720 minute winter	2	375	46.182	0.032	5.6	0.0297	0.0000	OK
720 minute winter	3	375	45.326	0.026	2.7	0.0259	0.0000	OK
720 minute winter	4	15	45.870	0.000	0.0	0.0000	0.0000	OK
720 minute winter	5	15	45.430	0.000	0.0	0.0000	0.0000	OK
720 minute winter	6	15	45.350	0.000	0.0	0.0000	0.0000	OK
720 minute winter	9	375	43.300	0.050	11.2	0.0281	0.0000	OK
720 minute winter	7	405	43.575	0.018	0.7	0.0050	0.0000	OK
720 minute winter	8	405	43.532	0.032	0.9	0.0364	0.0000	OK
720 minute winter	10	375	42.807	0.057	11.2	0.0091	0.0000	OK
720 minute winter	11	405	43.575	0.025	0.9	0.0013	0.0000	OK
720 minute winter	12	375	41.927	0.077	11.6	0.0232	0.0000	OK
720 minute winter	13	1590	40.847	0.367	12.9	0.1423	0.0000	OK
720 minute winter	15	720	40.786	0.306	1.8	0.1273	0.0000	OK
720 minute winter	16	300	41.806	0.016	0.4	0.0046	0.0000	OK
720 minute winter	17	300	42.020	0.010	0.2	0.0030	0.0000	OK
720 minute winter	19	1605	40.783	0.383	30.6	0.1085	0.0000	SURCHARGED
720 minute winter	20	1605	40.767	0.467	9.9	1.1893	0.0000	OK
720 minute winter	21	375	41.048	0.048	9.0	0.0324	0.0000	OK
720 minute winter	22	360	41.163	0.013	0.5	0.0046	0.0000	OK
720 minute winter	23	375	41.261	0.041	5.1	0.0336	0.0000	OK
720 minute winter	24	375	41.395	0.045	4.2	0.1238	0.0000	OK
720 minute winter	25	360	41.522	0.022	1.2	0.0217	0.0000	OK
720 minute winter	26	375	41.149	0.149	7.2	0.2204	0.0000	OK
720 minute winter	27	1155	40.998	0.518	9.0	0.5856	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	1	1.000	2	3.1	0.827	0.193	0.0458	
720 minute winter	2	1.001	9	5.6	1.602	0.044	0.1678	
720 minute winter	3	1.002	9	2.7	1.355	0.063	0.0669	
720 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
720 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
720 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
720 minute winter	9	1.007	10	11.2	1.541	0.107	0.0901	
720 minute winter	7	Flow through pond	11	0.7	0.003	0.000	1.4860	
720 minute winter	8	1.006	9	0.9	0.353	0.008	0.0181	
720 minute winter	10	1.009	12	11.2	1.133	0.143	0.3984	
720 minute winter	11	1.008	8	0.9	0.310	0.026	0.0318	
720 minute winter	12	1.010	13	11.6	1.023	0.220	0.1104	
720 minute winter	13	Flow through pond	19	30.6	0.161	0.009	180.5560	
720 minute winter	15	Flow through pond	19	30.6	0.161	0.009	180.5560	
720 minute winter	16	1.011	15	0.4	0.391	0.024	0.0070	
720 minute winter	17	1.012	16	0.2	0.260	0.009	0.0121	
720 minute winter	19	1.014	20	9.9	0.627	0.288	0.0471	
720 minute winter	20	Hydro-Brake®		9.8				1156.6
720 minute winter	21	1.020	27	9.0	1.728	0.061	0.0102	
720 minute winter	22	1.015	21	0.5	0.200	0.016	0.0129	
720 minute winter	23	1.016	26	5.1	0.319	0.074	0.2075	
720 minute winter	24	1.017	23	4.2	0.521	0.016	0.2798	
720 minute winter	25	1.018	26	1.2	0.332	0.046	0.0762	
720 minute winter	26	1.019	21	7.2	0.998	0.134	0.0613	
720 minute winter	27	Flow through pond	19	30.6	0.161	0.009	180.5560	

Results for 100 year +40% CC 960 minute summer. 2400 minute analysis at 15 minute timestep. Mass balance: -285.87%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	1	495	46.290	0.040	2.2	0.0445	0.0000	OK
960 minute summer	2	495	46.178	0.028	4.0	0.0253	0.0000	OK
960 minute summer	3	495	45.322	0.022	1.9	0.0218	0.0000	OK
960 minute summer	4	15	45.870	0.000	0.0	0.0000	0.0000	OK
960 minute summer	5	15	45.430	0.000	0.0	0.0000	0.0000	OK
960 minute summer	6	15	45.350	0.000	0.0	0.0000	0.0000	OK
960 minute summer	9	495	43.292	0.042	8.0	0.0236	0.0000	OK
960 minute summer	7	510	43.572	0.015	0.5	0.0042	0.0000	OK
960 minute summer	8	510	43.527	0.027	0.7	0.0306	0.0000	OK
960 minute summer	10	495	42.798	0.048	8.0	0.0077	0.0000	OK
960 minute summer	11	510	43.572	0.022	0.7	0.0011	0.0000	OK
960 minute summer	12	495	41.914	0.064	8.3	0.0193	0.0000	OK
960 minute summer	13	930	40.679	0.199	9.2	0.0773	0.0000	OK
960 minute summer	15	855	40.678	0.198	1.3	0.0823	0.0000	OK
960 minute summer	16	480	41.806	0.016	0.4	0.0046	0.0000	OK
960 minute summer	17	480	42.020	0.010	0.2	0.0030	0.0000	OK
960 minute summer	19	810	40.675	0.275	27.8	0.0780	0.0000	SURCHARGED
960 minute summer	20	810	40.660	0.360	9.5	0.9158	0.0000	OK
960 minute summer	21	495	41.040	0.040	6.6	0.0270	0.0000	OK
960 minute summer	22	495	41.162	0.012	0.4	0.0041	0.0000	OK
960 minute summer	23	495	41.255	0.035	3.7	0.0287	0.0000	OK
960 minute summer	24	495	41.388	0.038	3.0	0.1058	0.0000	OK
960 minute summer	25	495	41.519	0.019	0.9	0.0189	0.0000	OK
960 minute summer	26	495	41.141	0.141	5.3	0.2077	0.0000	OK
960 minute summer	27	510	40.588	0.108	462.2	0.1227	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	1	1.000	2	2.2	0.748	0.137	0.0360	
960 minute summer	2	1.001	9	4.0	1.448	0.032	0.1326	
960 minute summer	3	1.002	9	1.9	1.222	0.044	0.0522	
960 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
960 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
960 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
960 minute summer	9	1.007	10	8.0	1.403	0.076	0.0704	
960 minute summer	7	Flow through pond	11	0.5	0.003	0.000	1.2735	
960 minute summer	8	1.006	9	0.7	0.273	0.006	0.0141	
960 minute summer	10	1.009	12	8.0	1.036	0.102	0.3099	
960 minute summer	11	1.008	8	0.7	0.297	0.020	0.0253	
960 minute summer	12	1.010	13	8.3	0.936	0.157	0.0860	
960 minute summer	13	Flow through pond	19	27.8	0.174	0.008	124.5767	
960 minute summer	15	Flow through pond	19	27.8	0.174	0.008	124.5767	
960 minute summer	16	1.011	15	0.4	0.391	0.024	0.0070	
960 minute summer	17	1.012	16	0.2	0.260	0.009	0.0121	
960 minute summer	19	1.014	20	9.5	0.644	0.275	0.0471	
960 minute summer	20	Hydro-Brake®		9.5				1167.7
960 minute summer	21	1.020	27	6.6	1.616	0.044	0.0051	
960 minute summer	22	1.015	21	0.4	0.202	0.012	0.0101	
960 minute summer	23	1.016	26	3.7	0.257	0.054	0.1894	
960 minute summer	24	1.017	23	3.0	0.469	0.012	0.2219	
960 minute summer	25	1.018	26	0.9	0.291	0.034	0.0617	
960 minute summer	26	1.019	21	5.3	0.933	0.099	0.0483	
960 minute summer	27	Flow through pond	19	27.8	0.174	0.008	124.5767	

Results for 100 year +40% CC 960 minute winter. 2400 minute analysis at 15 minute timestep. Mass balance: -129.58%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	1	480	46.291	0.041	2.4	0.0465	0.0000	OK
960 minute winter	2	480	46.179	0.029	4.4	0.0265	0.0000	OK
960 minute winter	3	495	45.323	0.023	2.2	0.0234	0.0000	OK
960 minute winter	4	15	45.870	0.000	0.0	0.0000	0.0000	OK
960 minute winter	5	15	45.430	0.000	0.0	0.0000	0.0000	OK
960 minute winter	6	15	45.350	0.000	0.0	0.0000	0.0000	OK
960 minute winter	9	495	43.295	0.045	9.0	0.0251	0.0000	OK
960 minute winter	7	525	43.573	0.016	0.6	0.0046	0.0000	OK
960 minute winter	8	525	43.530	0.030	0.8	0.0338	0.0000	OK
960 minute winter	10	495	42.801	0.051	9.0	0.0082	0.0000	OK
960 minute winter	11	525	43.573	0.023	0.8	0.0012	0.0000	OK
960 minute winter	12	495	41.918	0.068	9.4	0.0207	0.0000	OK
960 minute winter	13	1920	40.882	0.402	10.4	0.1559	0.0000	OK
960 minute winter	15	930	40.823	0.343	3.5	0.1428	0.0000	OK
960 minute winter	16	420	41.806	0.016	0.4	0.0046	0.0000	OK
960 minute winter	17	420	42.020	0.010	0.2	0.0030	0.0000	OK
960 minute winter	19	930	40.824	0.424	31.3	0.1199	0.0000	SURCHARGED
960 minute winter	20	930	40.807	0.507	10.0	1.2901	0.0000	OK
960 minute winter	21	930	41.045	0.045	7.1	0.0306	0.0000	OK
960 minute winter	22	450	41.162	0.012	0.4	0.0041	0.0000	OK
960 minute winter	23	480	41.257	0.037	4.0	0.0299	0.0000	OK
960 minute winter	24	480	41.390	0.040	3.3	0.1106	0.0000	OK
960 minute winter	25	480	41.520	0.020	1.0	0.0199	0.0000	OK
960 minute winter	26	480	41.143	0.143	5.7	0.2105	0.0000	OK
960 minute winter	27	930	41.064	0.584	70.1	0.6603	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	1	1.000	2	2.4	0.765	0.149	0.0384	
960 minute winter	2	1.001	9	4.4	1.491	0.035	0.1416	
960 minute winter	3	1.002	9	2.2	1.277	0.051	0.0578	
960 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
960 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
960 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
960 minute winter	9	1.007	10	9.0	1.451	0.086	0.0769	
960 minute winter	7	Flow through pond	11	0.6	0.003	0.000	1.3896	
960 minute winter	8	1.006	9	0.8	0.307	0.007	0.0155	
960 minute winter	10	1.009	12	9.0	1.067	0.115	0.3400	
960 minute winter	11	1.008	8	0.8	0.304	0.023	0.0288	
960 minute winter	12	1.010	13	9.4	0.969	0.178	0.0945	
960 minute winter	13	Flow through pond	19	31.3	0.174	0.009	201.7197	
960 minute winter	15	Flow through pond	19	31.3	0.174	0.009	201.7197	
960 minute winter	16	1.011	15	0.4	0.391	0.024	0.0070	
960 minute winter	17	1.012	16	0.2	0.260	0.009	0.0121	
960 minute winter	19	1.014	20	10.0	0.643	0.289	0.0471	
960 minute winter	20	Hydro-Brake®		9.8				1256.4
960 minute winter	21	1.020	27	7.1	1.642	0.048	0.0221	
960 minute winter	22	1.015	21	0.4	0.203	0.012	0.0110	
960 minute winter	23	1.016	26	4.0	0.271	0.058	0.1935	
960 minute winter	24	1.017	23	3.3	0.484	0.013	0.2362	
960 minute winter	25	1.018	26	1.0	0.328	0.038	0.0652	
960 minute winter	26	1.019	21	5.7	0.949	0.106	0.0511	
960 minute winter	27	Flow through pond	19	31.3	0.174	0.009	201.7197	

Results for 100 year +40% CC 1440 minute summer. 2880 minute analysis at 30 minute timestep. Mass balance: 26.32%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	1	750	46.284	0.034	1.6	0.0379	0.0000	OK
1440 minute summer	2	750	46.174	0.024	2.9	0.0217	0.0000	OK
1440 minute summer	3	750	45.319	0.019	1.4	0.0188	0.0000	OK
1440 minute summer	4	30	45.870	0.000	0.0	0.0000	0.0000	OK
1440 minute summer	5	30	45.430	0.000	0.0	0.0000	0.0000	OK
1440 minute summer	6	30	45.350	0.000	0.0	0.0000	0.0000	OK
1440 minute summer	9	750	43.286	0.036	5.8	0.0200	0.0000	OK
1440 minute summer	7	750	43.568	0.011	0.4	0.0032	0.0000	OK
1440 minute summer	8	750	43.522	0.022	0.5	0.0245	0.0000	OK
1440 minute summer	10	750	42.791	0.041	5.8	0.0066	0.0000	OK
1440 minute summer	11	750	43.568	0.018	0.5	0.0009	0.0000	OK
1440 minute summer	12	750	41.904	0.054	6.0	0.0162	0.0000	OK
1440 minute summer	13	120	40.580	0.100	6.7	0.0388	0.0000	OK
1440 minute summer	15	120	40.580	0.100	0.9	0.0418	0.0000	OK
1440 minute summer	16	630	41.802	0.012	0.2	0.0033	0.0000	OK
1440 minute summer	17	630	42.018	0.008	0.1	0.0022	0.0000	OK
1440 minute summer	19	810	40.520	0.120	26.7	0.0339	0.0000	OK
1440 minute summer	20	810	40.512	0.212	8.4	0.5389	0.0000	OK
1440 minute summer	21	750	41.033	0.033	4.7	0.0222	0.0000	OK
1440 minute summer	22	750	41.160	0.010	0.3	0.0036	0.0000	OK
1440 minute summer	23	750	41.250	0.030	2.6	0.0243	0.0000	OK
1440 minute summer	24	750	41.382	0.032	2.1	0.0901	0.0000	OK
1440 minute summer	25	750	41.516	0.016	0.6	0.0156	0.0000	OK
1440 minute summer	26	750	41.132	0.132	3.7	0.1953	0.0000	OK
1440 minute summer	27	750	40.527	0.047	4.7	0.0526	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	1	1.000	2	1.6	0.681	0.099	0.0287	
1440 minute summer	2	1.001	9	2.9	1.315	0.023	0.1059	
1440 minute summer	3	1.002	9	1.4	1.115	0.032	0.0421	
1440 minute summer	4	1.003	5	0.0	0.000	0.000	0.0000	
1440 minute summer	5	1.004	6	0.0	0.000	0.000	0.0000	
1440 minute summer	6	1.005	7	0.0	0.000	0.000	0.0000	
1440 minute summer	9	1.007	10	5.8	1.282	0.055	0.0560	
1440 minute summer	7	Flow through pond	11	0.4	0.003	0.000	1.0465	
1440 minute summer	8	1.006	9	0.5	0.240	0.004	0.0112	
1440 minute summer	10	1.009	12	5.8	0.951	0.074	0.2451	
1440 minute summer	11	1.008	8	0.5	0.280	0.014	0.0189	
1440 minute summer	12	1.010	13	6.0	0.858	0.114	0.0679	
1440 minute summer	13	Flow through pond	19	26.7	0.167	0.007	43.5790	
1440 minute summer	15	Flow through pond	19	26.7	0.167	0.007	43.5790	
1440 minute summer	16	1.011	15	0.2	0.317	0.012	0.0043	
1440 minute summer	17	1.012	16	0.1	0.213	0.005	0.0075	
1440 minute summer	19	1.014	20	8.4	0.674	0.244	0.0438	
1440 minute summer	20	Hydro-Brake®		8.4				464.6
1440 minute summer	21	1.020	27	4.7	1.498	0.032	0.0039	
1440 minute summer	22	1.015	21	0.3	0.202	0.009	0.0078	
1440 minute summer	23	1.016	26	2.6	0.202	0.038	0.1724	
1440 minute summer	24	1.017	23	2.1	0.421	0.008	0.1730	
1440 minute summer	25	1.018	26	0.6	0.356	0.023	0.0478	
1440 minute summer	26	1.019	21	3.7	0.853	0.069	0.0369	
1440 minute summer	27	Flow through pond	19	26.7	0.167	0.007	43.5790	

Results for 100 year +40% CC 1440 minute winter. 2880 minute analysis at 30 minute timestep. Mass balance: -119.21%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	1	750	46.286	0.036	1.8	0.0403	0.0000	OK
1440 minute winter	2	750	46.175	0.025	3.2	0.0228	0.0000	OK
1440 minute winter	3	750	45.320	0.020	1.6	0.0200	0.0000	OK
1440 minute winter	4	30	45.870	0.000	0.0	0.0000	0.0000	OK
1440 minute winter	5	30	45.430	0.000	0.0	0.0000	0.0000	OK
1440 minute winter	6	30	45.350	0.000	0.0	0.0000	0.0000	OK
1440 minute winter	9	750	43.288	0.038	6.4	0.0211	0.0000	OK
1440 minute winter	7	840	43.569	0.012	0.4	0.0033	0.0000	OK
1440 minute winter	8	840	43.522	0.022	0.5	0.0251	0.0000	OK
1440 minute winter	10	750	42.793	0.043	6.4	0.0069	0.0000	OK
1440 minute winter	11	840	43.569	0.019	0.5	0.0010	0.0000	OK
1440 minute winter	12	750	41.907	0.057	6.7	0.0172	0.0000	OK
1440 minute winter	13	990	40.761	0.281	7.4	0.1089	0.0000	OK
1440 minute winter	15	990	40.758	0.278	0.9	0.1155	0.0000	OK
1440 minute winter	16	480	41.802	0.012	0.2	0.0033	0.0000	OK
1440 minute winter	17	480	42.018	0.008	0.1	0.0022	0.0000	OK
1440 minute winter	19	990	40.755	0.355	38.2	0.1005	0.0000	SURCHARGED
1440 minute winter	20	990	40.739	0.439	9.7	1.1166	0.0000	OK
1440 minute winter	21	720	41.035	0.035	5.1	0.0239	0.0000	OK
1440 minute winter	22	690	41.160	0.010	0.3	0.0036	0.0000	OK
1440 minute winter	23	750	41.251	0.031	2.9	0.0256	0.0000	OK
1440 minute winter	24	750	41.385	0.035	2.4	0.0959	0.0000	OK
1440 minute winter	25	720	41.517	0.017	0.7	0.0168	0.0000	OK
1440 minute winter	26	750	41.134	0.134	4.1	0.1984	0.0000	OK
1440 minute winter	27	690	40.533	0.053	5.7	0.0596	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	1	1.000	2	1.8	0.708	0.112	0.0311	
1440 minute winter	2	1.001	9	3.2	1.355	0.025	0.1134	
1440 minute winter	3	1.002	9	1.6	1.162	0.037	0.0462	
1440 minute winter	4	1.003	5	0.0	0.000	0.000	0.0000	
1440 minute winter	5	1.004	6	0.0	0.000	0.000	0.0000	
1440 minute winter	6	1.005	7	0.0	0.000	0.000	0.0000	
1440 minute winter	9	1.007	10	6.4	1.319	0.061	0.0602	
1440 minute winter	7	Flow through pond	11	0.4	0.003	0.000	1.0663	
1440 minute winter	8	1.006	9	0.5	0.245	0.004	0.0120	
1440 minute winter	10	1.009	12	6.4	0.974	0.082	0.2652	
1440 minute winter	11	1.008	8	0.5	0.281	0.014	0.0195	
1440 minute winter	12	1.010	13	6.7	0.885	0.127	0.0738	
1440 minute winter	13	Flow through pond	19	38.2	0.110	0.011	166.3286	
1440 minute winter	15	Flow through pond	19	38.2	0.110	0.011	166.3286	
1440 minute winter	16	1.011	15	0.2	0.317	0.012	0.0043	
1440 minute winter	17	1.012	16	0.1	0.213	0.005	0.0075	
1440 minute winter	19	1.014	20	9.7	0.614	0.282	0.0471	
1440 minute winter	20	Hydro-Brake®		9.7				1404.6
1440 minute winter	21	1.020	27	5.6	3.239	0.038	0.0045	
1440 minute winter	22	1.015	21	0.3	0.204	0.009	0.0088	
1440 minute winter	23	1.016	26	2.9	0.219	0.042	0.1768	
1440 minute winter	24	1.017	23	2.4	0.444	0.009	0.1885	
1440 minute winter	25	1.018	26	0.7	0.274	0.027	0.0515	
1440 minute winter	26	1.019	21	4.1	0.873	0.076	0.0409	
1440 minute winter	27	Flow through pond	19	38.2	0.110	0.011	166.3286	