Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	2	Maximum Rainfall (mm/hr)	0.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	17.000	Minimum Backdrop Height (m)	1.000
Ratio-R	0.400	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	✓

Adoptable Manhole Type

Max Width (mm)	Diameter (mm)	Max Width (mm)	Diameter (mm)	Max Width (mm)	Diameter (mm)	Max Width (mm)	Diameter (mm)
374	1200	499	1350	749	1500	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	Barrels	1	Auto Increment (mm)	75	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	0.078	5.00	68.330	1800	388206.910	397832.859	2.050
2	0.022	5.00	67.919	1800	388201.237	397768.746	1.800
3	0.000		68.065	1800	388208.232	397755.601	1.983
4	0.165	5.00	68.492	1200	388216.387	397755.171	2.272
5	0.000		68.071	1500	388212.665	397751.846	3.326
6			68.100	1500	388210.694	397729.564	3.452

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	64.363	0.600	66.280	66.119	0.161	400.0	600	5.89	0.0
1.001	2	3	14.890	0.600	66.119	66.082	0.037	400.0	600	6.09	0.0
1.002	3	5	5.810	0.600	66.082	66.024	0.058	100.0	150	6.19	0.0
2.000	4	5	4.991	0.600	66.220	66.024	0.196	25.5	150	5.04	0.0
1.003	5	6	22.369	0.600	64.745	64.648	0.097	230.0	300	6.55	0.0

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	1.211	342.4	0.0	1.450	1.200	0.078	0.0	0	0.000
1.001	1.211	342.4	0.0	1.200	1.383	0.100	0.0	0	0.000
1.002	1.005	17.8	0.0	1.833	1.897	0.100	0.0	0	0.000
2.000	2.003	35.4	0.0	2.122	1.897	0.165	0.0	0	0.000
1.003	1.032	73.0	0.0	3.026	3.152	0.265	0.0	0	0.000

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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	64.363	400.0	600	Circular_Default Sewer Type	68.330	66.280	1.450	67.919	66.119	1.200
1.001	14.890	400.0	600	Circular_Default Sewer Type	67.919	66.119	1.200	68.065	66.082	1.383
1.002	5.810	100.0	150	Circular_Default Sewer Type	68.065	66.082	1.833	68.071	66.024	1.897
2.000	4.991	25.5	150	Circular_Default Sewer Type	68.492	66.220	2.122	68.071	66.024	1.897
1.003	22.369	230.0	300	Circular_Default Sewer Type	68.071	64.745	3.026	68.100	64.648	3.152

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	1	1800	Manhole	Adoptable	2	1800	Manhole	Adoptable
1.001	2	1800	Manhole	Adoptable	3	1800	Manhole	Adoptable
1.002	3	1800	Manhole	Adoptable	5	1500	Manhole	Adoptable
2.000	4	1200	Manhole	Adoptable	5	1500	Manhole	Adoptable
1.003	5	1500	Manhole	Adoptable	6	1500	Manhole	Adoptable

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
1	388206.910	397832.859	68.330	2.050	1800	 0	1.000	66.280	600
2	388201.237	397768.746	67.919	1.800	1800	 1 0	1.000 1.001	66.119 66.119	600 600
3	388208.232	397755.601	68.065	1.983	1800	 1 0	1.001 1.002	66.082 66.082	600 150
4	388216.387	397755.171	68.492	2.272	1200	 0	2.000	66.220	150
5	388212.665	397751.846	68.071	3.326	1500	 1 2 0	2.000 1.002 1.003	66.024 66.024 64.745	150 150 300
6	388210.694	397729.564	68.100	3.452	1500	 1	1.003	64.648	300

Node 3 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	66.082	Product Number	CTL-SHE-0071-3000-1950-3000
Design Depth (m)	1.950	Min Outlet Diameter (m)	0.100
Design Flow (l/s)	3.0	Min Node Diameter (mm)	1200

Node 4 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	✓	Sump Available	✓
Invert Level (m)	66.220	Product Number	CTL-SHE-0057-2000-1958-2000
Design Depth (m)	1.958	Min Outlet Diameter (m)	0.075
Design Flow (l/s)	2.0	Min Node Diameter (mm)	1200

Node 4 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	66.220
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	0

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Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	100.0	0.0	1.040	100.0	0.0	1.041	0.0	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)	0.300

Approval Settings

Node Size	✓	Backdrops	✓	Maximum Surcharged Depth (m)	0.100
Node Losses	✓	Minimum Backdrop Height (m)	1.000	Flooding	✓
Link Size	✓	Maximum Backdrop Height (m)	1.500	Return Period (years)	30
Minimum Diameter (mm)	150	Full Bore Velocity	✓	Time to Half Empty	✓
Link Length	✓	Minimum Full Bore Velocity (m/s)	1.000	Return Period (years)	2
Maximum Length (m)	100.000	Maximum Full Bore Velocity (m/s)	3.000	Discharge Rates	✓
Coordinates	✓	Proportional Velocity	✓	1 year (l/s)	5.0
Accuracy (m)	1.000	Return Period (years)	2	2 year (l/s)	5.0
Crossings	✓	Minimum Proportional Velocity (m/s)	0.750	30 year (l/s)	5.0
Cover Depth	✓	Maximum Proportional Velocity (m/s)	3.000	100 year (l/s)	5.0
Minimum Cover Depth (m)	1.200	Surcharged Depth	✓	Discharge Volume	x
Maximum Cover Depth (m)	3.000	Return Period (years)	2		

Approval Results

The network has been designed for a 1 in 2 year storm using FSR rainfall
It contains 6 nodes (1 outfall) and 5 links
The total impermeable area is 0.265 ha
2 online controls have been defined
1 structure has been defined, providing 104m³ of storage below the flood risk level
Infiltration has not been utilised
Simulations have been completed using FSR summer and winter storms from 15 to 1440 minute duration

No manholes are smaller than that required by the library

No connections have combined exit and entry losses less than the recomended total

No circular links have diameters < 150mm

No links have lengths > 100.000m

No links have lengths that differ from their coordinated length by more than 1.000m

No links cross one or more other links

1 link has cover depth outside the range 1.200-3.000m

US Node	DS Node	Link	Minimum Depth (m)	Maximum Depth (m)
5	6	1.003	3.019	3.152

No nodes have backdrops outside the range 1.000-1.500m

No links have full bore velocity outside the range 1.000-3.000m/s

3 links have peak proportional velocity outside the range 0.750-3.000m/s during the 2 year return period

US Node	DS Node	Link	Velocity (m/s)	Event
1	2	1.000	0.521	2 year 15 minute summer
2	3	1.001	0.385	2 year 15 minute winter
5	6	1.003	0.538	2 year 60 minute winter

No links have a surcharged depth greater than 0.100m during the 2 year return period

No nodes flood during the 30 year return period

No infiltrating structures failed to half empty in 1440 minutes during the 2 year return period

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No outfalls have a discharge rate greater than 5.0l/s during the 1 year return period

No outfalls have a discharge rate greater than 5.0l/s during the 2 year return period

No outfalls have a discharge rate greater than 5.0l/s during the 30 year return period

No outfalls have a discharge rate greater than 5.0l/s during the 100 year return period

The discharge volume test has not been completed

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
1 year 15 minute summer	92.521	26.180	30 year 15 minute summer	226.195	64.005
1 year 15 minute winter	64.927	26.180	30 year 15 minute winter	158.733	64.005
1 year 30 minute summer	60.022	16.984	30 year 30 minute summer	147.452	41.724
1 year 30 minute winter	42.121	16.984	30 year 30 minute winter	103.475	41.724
1 year 60 minute summer	40.398	10.676	30 year 60 minute summer	98.615	26.061
1 year 60 minute winter	26.839	10.676	30 year 60 minute winter	65.517	26.061
1 year 120 minute summer	24.980	6.602	30 year 120 minute summer	59.946	15.842
1 year 120 minute winter	16.596	6.602	30 year 120 minute winter	39.827	15.842
1 year 180 minute summer	19.271	4.959	30 year 180 minute summer	45.598	11.734
1 year 180 minute winter	12.527	4.959	30 year 180 minute winter	29.640	11.734
1 year 240 minute summer	15.301	4.043	30 year 240 minute summer	35.759	9.450
1 year 240 minute winter	10.165	4.043	30 year 240 minute winter	23.758	9.450
1 year 360 minute summer	11.775	3.030	30 year 360 minute summer	26.939	6.932
1 year 360 minute winter	7.654	3.030	30 year 360 minute winter	17.511	6.932
1 year 480 minute summer	9.342	2.469	30 year 480 minute summer	20.981	5.545
1 year 480 minute winter	6.207	2.469	30 year 480 minute winter	13.940	5.545
1 year 600 minute summer	7.682	2.101	30 year 600 minute summer	17.039	4.661
1 year 600 minute winter	5.249	2.101	30 year 600 minute winter	11.642	4.661
1 year 720 minute summer	6.859	1.838	30 year 720 minute summer	15.093	4.045
1 year 720 minute winter	4.609	1.838	30 year 720 minute winter	10.143	4.045
1 year 960 minute summer	5.653	1.489	30 year 960 minute summer	12.278	3.233
1 year 960 minute winter	3.745	1.489	30 year 960 minute winter	8.133	3.233
1 year 1440 minute summer	4.127	1.106	30 year 1440 minute summer	8.788	2.355
1 year 1440 minute winter	2.773	1.106	30 year 1440 minute winter	5.906	2.355
2 year 15 minute summer	119.760	33.888	100 year +45% CC 15 minute summer	423.061	119.712
2 year 15 minute winter	84.042	33.888	100 year +45% CC 15 minute winter	296.885	119.712
2 year 30 minute summer	77.518	21.935	100 year +45% CC 30 minute summer	278.374	78.770
2 year 30 minute winter	54.399	21.935	100 year +45% CC 30 minute winter	195.350	78.770
2 year 60 minute summer	51.720	13.668	100 year +45% CC 60 minute summer	187.417	49.529
2 year 60 minute winter	34.361	13.668	100 year +45% CC 60 minute winter	124.515	49.529
2 year 120 minute summer	31.549	8.338	100 year +45% CC 120 minute summer	114.312	30.209
2 year 120 minute winter	20.961	8.338	100 year +45% CC 120 minute winter	75.946	30.209
2 year 180 minute summer	24.133	6.210	100 year +45% CC 180 minute summer	86.951	22.375
2 year 180 minute winter	15.687	6.210	100 year +45% CC 180 minute winter	56.520	22.375
2 year 240 minute summer	19.039	5.032	100 year +45% CC 240 minute summer	68.114	18.001
2 year 240 minute winter	12.649	5.032	100 year +45% CC 240 minute winter	45.253	18.001
2 year 360 minute summer	14.516	3.735	100 year +45% CC 360 minute summer	51.133	13.158
2 year 360 minute winter	9.436	3.735	100 year +45% CC 360 minute winter	33.238	13.158
2 year 480 minute summer	11.436	3.022	100 year +45% CC 480 minute summer	39.658	10.480
2 year 480 minute winter	7.598	3.022	100 year +45% CC 480 minute winter	26.348	10.480
2 year 600 minute summer	9.363	2.561	100 year +45% CC 600 minute summer	32.099	8.780
2 year 600 minute winter	6.398	2.561	100 year +45% CC 600 minute winter	21.932	8.780
2 year 720 minute summer	8.339	2.235	100 year +45% CC 720 minute summer	28.365	7.602
2 year 720 minute winter	5.605	2.235	100 year +45% CC 720 minute winter	19.063	7.602
2 year 960 minute summer	6.846	1.803	100 year +45% CC 960 minute summer	22.984	6.052
2 year 960 minute winter	4.535	1.803	100 year +45% CC 960 minute winter	15.225	6.052
2 year 1440 minute summer	4.967	1.331	100 year +45% CC 1440 minute summer	16.353	4.383
2 year 1440 minute winter	3.338	1.331	100 year +45% CC 1440 minute winter	10.990	4.383

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Results for 1 year Critical Storm Duration. Lowest mass balance: 99.70%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	11	66.345	0.065	9.3	0.2161	0.0000	OK
30 minute winter	2	28	66.299	0.180	8.9	0.5031	0.0000	OK
30 minute winter	3	28	66.300	0.218	4.0	0.5547	0.0000	SURCHARGED
180 minute winter	4	140	66.352	0.132	4.8	13.5120	0.0000	OK
60 minute winter	5	51	64.790	0.045	3.4	0.0787	0.0000	OK
60 minute winter	6	51	64.691	0.043	3.4	0.0000	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	8.9	0.493	0.026	2.2460	
30 minute winter	2	1.001	3	4.0	0.332	0.012	1.2180	
30 minute winter	3	Hydro-Brake®	5	2.2				
180 minute winter	4	Hydro-Brake®	5	1.3				
60 minute winter	5	1.003	6	3.4	0.533	0.046	0.1420	21.5

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Results for 2 year Critical Storm Duration. Lowest mass balance: 99.70%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	11	66.354	0.074	12.0	0.2439	0.0000	OK
30 minute winter	2	28	66.345	0.226	11.6	0.6299	0.0000	OK
30 minute winter	3	28	66.345	0.263	4.7	0.6701	0.0000	SURCHARGED
180 minute winter	4	144	66.390	0.170	6.0	17.4523	0.0000	SURCHARGED
60 minute winter	5	59	64.790	0.045	3.5	0.0800	0.0000	OK
60 minute winter	6	59	64.692	0.044	3.5	0.0000	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	11.5	0.504	0.034	3.1259	
30 minute winter	2	1.001	3	4.7	0.343	0.014	1.6073	
30 minute winter	3	Hydro-Brake®	5	2.2				
180 minute winter	4	Hydro-Brake®	5	1.3				
60 minute winter	5	1.003	6	3.5	0.538	0.048	0.1453	30.3

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Results for 30 year Critical Storm Duration. Lowest mass balance: 99.70%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	1	58	66.514	0.234	11.6	0.7747	0.0000	OK
60 minute winter	2	59	66.514	0.395	13.5	1.1009	0.0000	OK
60 minute winter	3	59	66.514	0.432	4.7	1.0993	0.0000	SURCHARGED
240 minute winter	4	228	66.594	0.374	9.1	38.3744	0.0000	SURCHARGED
240 minute summer	5	136	64.791	0.046	3.6	0.0807	0.0000	OK
240 minute summer	6	136	64.692	0.044	3.6	0.0000	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)
60 minute winter	1	1.000	2	10.4	0.338	0.030	9.5170	
60 minute winter	2	1.001	3	4.7	0.338	0.014	3.0805	
60 minute winter	3	Hydro-Brake®	5	2.2				
240 minute winter	4	Hydro-Brake®	5	1.3				
240 minute summer	5	1.003	6	3.6	0.541	0.049	0.1472	60.9

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Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.70%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	1	114	67.732	1.452	13.7	4.7989	0.0000	SURCHARGED
120 minute winter	2	114	67.732	1.613	12.1	4.4977	0.0000	FLOOD RISK
120 minute winter	3	114	67.732	1.650	5.4	4.1984	0.0000	SURCHARGED
480 minute winter	4	456	67.050	0.830	10.1	85.1127	0.0000	SURCHARGED
120 minute winter	5	116	64.794	0.049	4.1	0.0861	0.0000	OK
120 minute winter	6	116	64.695	0.047	4.1	0.0000	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)
120 minute winter	1	1.000	2	8.5	0.333	0.025	18.1296	
120 minute winter	2	1.001	3	5.4	0.346	0.016	4.1942	
120 minute winter	3	Hydro-Brake®	5	2.8				
480 minute winter	4	Hydro-Brake®	5	1.4				
120 minute winter	5	1.003	6	4.1	0.561	0.056	0.1622	70.5

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

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	11	66.344	0.064	8.8	0.2118	0.0000	OK
15 minute summer	2	18	66.268	0.149	10.9	0.4149	0.0000	OK
15 minute summer	3	16	66.269	0.187	5.6	0.4755	0.0000	SURCHARGED
15 minute summer	4	18	66.293	0.073	18.7	7.4947	0.0000	OK
15 minute summer	5	19	64.788	0.043	3.1	0.0757	0.0000	OK
15 minute summer	6	19	64.690	0.042	3.1	0.0000	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	8.5	0.488	0.025	1.9278	
15 minute summer	2	1.001	3	5.6	0.358	0.016	0.9512	
15 minute summer	3	Hydro-Brake®	5	2.1				
15 minute summer	4	Hydro-Brake®	5	1.0				
15 minute summer	5	1.003	6	3.1	0.521	0.043	0.1344	11.3

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

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	11	66.345	0.065	9.3	0.2161	0.0000	OK
15 minute winter	2	17	66.284	0.165	11.4	0.4592	0.0000	OK
15 minute winter	3	18	66.287	0.205	5.9	0.5225	0.0000	SURCHARGED
15 minute winter	4	18	66.303	0.083	19.7	8.4671	0.0000	OK
15 minute winter	5	18	64.789	0.044	3.3	0.0771	0.0000	OK
15 minute winter	6	18	64.690	0.042	3.2	0.0000	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	8.9	0.493	0.026	2.2460	
15 minute winter	2	1.001	3	5.9	0.375	0.017	1.0961	
15 minute winter	3	Hydro-Brake®	5	2.2				
15 minute winter	4	Hydro-Brake®	5	1.1				
15 minute winter	5	1.003	6	3.2	0.526	0.045	0.1380	12.7

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

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	1	18	66.341	0.061	7.9	0.2002	0.0000	OK
30 minute summer	2	27	66.280	0.161	9.7	0.4499	0.0000	OK
30 minute summer	3	26	66.281	0.199	3.9	0.5059	0.0000	SURCHARGED
30 minute summer	4	32	66.311	0.091	16.6	9.3147	0.0000	OK
30 minute summer	5	30	64.789	0.044	3.3	0.0775	0.0000	OK
30 minute summer	6	30	64.690	0.042	3.3	0.0000	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	7.6	0.405	0.022	2.1550	
30 minute summer	2	1.001	3	3.9	0.314	0.011	1.0597	
30 minute summer	3	Hydro-Brake®	5	2.1				
30 minute summer	4	Hydro-Brake®	5	1.2				
30 minute summer	5	1.003	6	3.3	0.528	0.045	0.1391	14.9

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

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	1	18	66.338	0.058	7.1	0.1917	0.0000	OK
30 minute winter	2	28	66.299	0.180	8.9	0.5031	0.0000	OK
30 minute winter	3	28	66.300	0.218	4.0	0.5547	0.0000	SURCHARGED
30 minute winter	4	32	66.323	0.103	15.0	10.5444	0.0000	OK
30 minute winter	5	31	64.789	0.044	3.4	0.0783	0.0000	OK
30 minute winter	6	31	64.691	0.043	3.4	0.0000	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	6.9	0.382	0.020	2.4823	
30 minute winter	2	1.001	3	4.0	0.332	0.012	1.2180	
30 minute winter	3	Hydro-Brake®	5	2.2				
30 minute winter	4	Hydro-Brake®	5	1.2				
30 minute winter	5	1.003	6	3.4	0.532	0.046	0.1411	16.8

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

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	1	34	66.333	0.053	5.9	0.1757	0.0000	OK
60 minute summer	2	43	66.278	0.159	7.4	0.4432	0.0000	OK
60 minute summer	3	43	66.278	0.196	3.3	0.4986	0.0000	SURCHARGED
60 minute summer	4	60	66.325	0.105	12.5	10.7543	0.0000	OK
60 minute summer	5	47	64.789	0.044	3.3	0.0780	0.0000	OK
60 minute summer	6	48	64.691	0.043	3.3	0.0000	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	5.7	0.331	0.017	2.1061	
60 minute summer	2	1.001	3	3.3	0.285	0.010	1.0384	
60 minute summer	3	Hydro-Brake®	5	2.1				
60 minute summer	4	Hydro-Brake®	5	1.2				
60 minute summer	5	1.003	6	3.3	0.530	0.046	0.1402	19.1

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

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	1	34	66.329	0.049	4.8	0.1607	0.0000	OK
60 minute winter	2	47	66.294	0.175	6.0	0.4869	0.0000	OK
60 minute winter	3	47	66.294	0.212	3.0	0.5385	0.0000	SURCHARGED
60 minute winter	4	60	66.339	0.119	10.1	12.2182	0.0000	OK
60 minute winter	5	51	64.790	0.045	3.4	0.0787	0.0000	OK
60 minute winter	6	51	64.691	0.043	3.4	0.0000	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	0.311	0.014	2.3742	
60 minute winter	2	1.001	3	3.0	0.297	0.009	1.1672	
60 minute winter	3	Hydro-Brake®	5	2.2				
60 minute winter	4	Hydro-Brake®	5	1.2				
60 minute winter	5	1.003	6	3.4	0.533	0.046	0.1420	21.5

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Results for 1 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	1	64	66.324	0.044	3.9	0.1461	0.0000	OK
120 minute summer	2	78	66.257	0.138	5.0	0.3849	0.0000	OK
120 minute summer	3	78	66.257	0.175	2.7	0.4452	0.0000	SURCHARGED
120 minute summer	4	92	66.334	0.114	8.2	11.6815	0.0000	OK
120 minute summer	5	80	64.789	0.044	3.3	0.0778	0.0000	OK
120 minute summer	6	80	64.691	0.043	3.3	0.0000	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	3.9	0.294	0.011	1.7500	
120 minute summer	2	1.001	3	2.7	0.258	0.008	0.8717	
120 minute summer	3	Hydro-Brake®	5	2.1				
120 minute summer	4	Hydro-Brake®	5	1.2				
120 minute summer	5	1.003	6	3.3	0.529	0.045	0.1398	24.0

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Results for 1 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	1	64	66.319	0.039	3.0	0.1303	0.0000	OK
120 minute winter	2	82	66.258	0.139	3.8	0.3890	0.0000	OK
120 minute winter	3	82	66.258	0.176	2.4	0.4490	0.0000	SURCHARGED
120 minute winter	4	98	66.348	0.128	6.3	13.1058	0.0000	OK
120 minute winter	5	86	64.789	0.044	3.3	0.0782	0.0000	OK
120 minute winter	6	86	64.691	0.043	3.3	0.0000	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	3.0	0.281	0.009	1.7673	
120 minute winter	2	1.001	3	2.4	0.260	0.007	0.8832	
120 minute winter	3	Hydro-Brake®	5	2.1				
120 minute winter	4	Hydro-Brake®	5	1.3				
120 minute winter	5	1.003	6	3.3	0.531	0.046	0.1408	26.8

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Results for 1 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	1	96	66.319	0.039	2.9	0.1284	0.0000	OK
180 minute summer	2	112	66.236	0.117	3.7	0.3273	0.0000	OK
180 minute summer	3	112	66.236	0.154	2.4	0.3926	0.0000	SURCHARGED
180 minute summer	4	128	66.338	0.118	6.2	12.0835	0.0000	OK
180 minute summer	5	112	64.789	0.044	3.3	0.0773	0.0000	OK
180 minute summer	6	112	64.690	0.042	3.3	0.0000	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	2.9	0.273	0.008	1.4191	
180 minute summer	2	1.001	3	2.4	0.201	0.007	0.7144	
180 minute summer	3	Hydro-Brake®	5	2.0				
180 minute summer	4	Hydro-Brake®	5	1.2				
180 minute summer	5	1.003	6	3.3	0.527	0.045	0.1384	27.5

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Results for 1 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	1	100	66.314	0.034	2.2	0.1125	0.0000	OK
180 minute winter	2	116	66.225	0.106	2.8	0.2958	0.0000	OK
180 minute winter	3	116	66.225	0.143	2.2	0.3639	0.0000	OK
180 minute winter	4	140	66.352	0.132	4.8	13.5120	0.0000	OK
180 minute winter	5	120	64.789	0.044	3.3	0.0772	0.0000	OK
180 minute winter	6	120	64.690	0.042	3.3	0.0000	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	0.269	0.006	1.2409	
180 minute winter	2	1.001	3	2.2	0.259	0.006	0.6317	
180 minute winter	3	Hydro-Brake®	5	2.0				
180 minute winter	4	Hydro-Brake®	5	1.3				
180 minute winter	5	1.003	6	3.3	0.527	0.045	0.1381	30.8

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

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	1	124	66.316	0.036	2.5	0.1178	0.0000	OK
240 minute summer	2	140	66.219	0.100	3.1	0.2796	0.0000	OK
240 minute summer	3	140	66.219	0.137	2.2	0.3490	0.0000	OK
240 minute summer	4	164	66.338	0.118	5.3	12.1449	0.0000	OK
240 minute summer	5	144	64.788	0.043	3.2	0.0766	0.0000	OK
240 minute summer	6	144	64.690	0.042	3.2	0.0000	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	2.4	0.273	0.007	1.1549	
240 minute summer	2	1.001	3	2.2	0.186	0.006	0.5904	
240 minute summer	3	Hydro-Brake®	5	2.0				
240 minute summer	4	Hydro-Brake®	5	1.2				
240 minute summer	5	1.003	6	3.2	0.524	0.044	0.1367	30.2

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

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	1	124	66.312	0.031	1.9	0.1041	0.0000	OK
240 minute winter	2	144	66.201	0.082	2.4	0.2289	0.0000	OK
240 minute winter	3	144	66.201	0.119	2.0	0.3026	0.0000	OK
240 minute winter	4	176	66.349	0.129	3.9	13.2397	0.0000	OK
240 minute winter	5	148	64.788	0.043	3.1	0.0759	0.0000	OK
240 minute winter	6	148	64.690	0.042	3.1	0.0000	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	1.9	0.262	0.005	0.9005	
240 minute winter	2	1.001	3	2.0	0.191	0.006	0.4657	
240 minute winter	3	Hydro-Brake®	5	1.9				
240 minute winter	4	Hydro-Brake®	5	1.3				
240 minute winter	5	1.003	6	3.1	0.521	0.043	0.1349	33.8

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

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	1	184	66.311	0.031	1.9	0.1041	0.0000	OK
360 minute summer	2	200	66.192	0.073	2.4	0.2035	0.0000	OK
360 minute summer	3	200	66.192	0.110	2.0	0.2792	0.0000	OK
360 minute summer	4	232	66.335	0.115	4.0	11.8186	0.0000	OK
360 minute summer	5	208	64.787	0.042	3.1	0.0749	0.0000	OK
360 minute summer	6	208	64.689	0.041	3.1	0.0000	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	1.9	0.260	0.005	0.7772	
360 minute summer	2	1.001	3	2.0	0.176	0.006	0.4066	
360 minute summer	3	Hydro-Brake®	5	1.9				
360 minute summer	4	Hydro-Brake®	5	1.2				
360 minute summer	5	1.003	6	3.1	0.517	0.042	0.1325	34.8

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

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	1	192	66.308	0.028	1.4	0.0916	0.0000	OK
360 minute winter	2	200	66.172	0.053	1.8	0.1475	0.0000	OK
360 minute winter	3	200	66.171	0.089	1.7	0.2274	0.0000	OK
360 minute winter	4	248	66.343	0.123	2.9	12.5993	0.0000	OK
360 minute winter	5	200	64.786	0.041	2.9	0.0729	0.0000	OK
360 minute winter	6	200	64.688	0.040	2.9	0.0000	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	1.4	0.257	0.004	0.5282	
360 minute winter	2	1.001	3	1.7	0.149	0.005	0.2841	
360 minute winter	3	Hydro-Brake®	5	1.7				
360 minute winter	4	Hydro-Brake®	5	1.2				
360 minute winter	5	1.003	6	2.9	0.508	0.040	0.1274	38.7

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Results for 1 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	1	248	66.309	0.029	1.5	0.0944	0.0000	OK
480 minute summer	2	256	66.172	0.053	1.9	0.1467	0.0000	OK
480 minute summer	3	256	66.171	0.089	1.7	0.2266	0.0000	OK
480 minute summer	4	296	66.330	0.110	3.2	11.3083	0.0000	OK
480 minute summer	5	256	64.786	0.041	2.9	0.0725	0.0000	OK
480 minute summer	6	256	64.688	0.040	2.9	0.0000	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	1.5	0.253	0.004	0.5267	
480 minute summer	2	1.001	3	1.7	0.149	0.005	0.2825	
480 minute summer	3	Hydro-Brake®	5	1.7				
480 minute summer	4	Hydro-Brake®	5	1.2				
480 minute summer	5	1.003	6	2.9	0.507	0.039	0.1264	37.4

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Results for 1 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	1	248	66.305	0.025	1.1	0.0822	0.0000	OK
480 minute winter	2	264	66.155	0.036	1.4	0.0993	0.0000	OK
480 minute winter	3	264	66.153	0.071	1.4	0.1816	0.0000	OK
480 minute winter	4	320	66.335	0.115	2.4	11.8360	0.0000	OK
480 minute winter	5	272	64.784	0.039	2.6	0.0689	0.0000	OK
480 minute winter	6	272	64.686	0.038	2.6	0.0000	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	0.250	0.003	0.3395	
480 minute winter	2	1.001	3	1.4	0.139	0.004	0.1900	
480 minute winter	3	Hydro-Brake®	5	1.4				
480 minute winter	4	Hydro-Brake®	5	1.2				
480 minute winter	5	1.003	6	2.6	0.494	0.035	0.1165	42.6

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Results for 1 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	1	315	66.306	0.026	1.2	0.0856	0.0000	OK
600 minute summer	2	315	66.160	0.041	1.6	0.1152	0.0000	OK
600 minute summer	3	315	66.159	0.077	1.5	0.1969	0.0000	OK
600 minute summer	4	360	66.324	0.104	2.6	10.6426	0.0000	OK
600 minute summer	5	330	64.785	0.040	2.6	0.0698	0.0000	OK
600 minute summer	6	330	64.686	0.038	2.6	0.0000	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	1.2	0.253	0.004	0.3996	
600 minute summer	2	1.001	3	1.5	0.136	0.004	0.2196	
600 minute summer	3	Hydro-Brake®	5	1.5				
600 minute summer	4	Hydro-Brake®	5	1.2				
600 minute summer	5	1.003	6	2.6	0.497	0.036	0.1190	39.5

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Results for 1 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	1	315	66.304	0.024	1.0	0.0787	0.0000	OK
600 minute winter	2	315	66.149	0.030	1.3	0.0850	0.0000	OK
600 minute winter	3	315	66.148	0.066	1.3	0.1674	0.0000	OK
600 minute winter	4	390	66.327	0.107	2.0	10.9883	0.0000	OK
600 minute winter	5	330	64.783	0.038	2.4	0.0669	0.0000	OK
600 minute winter	6	330	64.684	0.036	2.4	0.0000	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	1.0	0.243	0.003	0.2867	
600 minute winter	2	1.001	3	1.3	0.145	0.004	0.1634	
600 minute winter	3	Hydro-Brake®	5	1.3				
600 minute winter	4	Hydro-Brake®	5	1.2				
600 minute winter	5	1.003	6	2.4	0.487	0.033	0.1113	45.8

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Results for 1 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	1	375	66.305	0.025	1.1	0.0822	0.0000	OK
720 minute summer	2	375	66.153	0.034	1.4	0.0940	0.0000	OK
720 minute summer	3	375	66.151	0.069	1.4	0.1764	0.0000	OK
720 minute summer	4	435	66.320	0.100	2.4	10.2972	0.0000	OK
720 minute summer	5	390	64.783	0.038	2.5	0.0677	0.0000	OK
720 minute summer	6	390	64.685	0.037	2.5	0.0000	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	1.1	0.245	0.003	0.3230	
720 minute summer	2	1.001	3	1.4	0.135	0.004	0.1802	
720 minute summer	3	Hydro-Brake®	5	1.3				
720 minute summer	4	Hydro-Brake®	5	1.2				
720 minute summer	5	1.003	6	2.5	0.490	0.034	0.1134	41.6

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Results for 1 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	1	360	66.302	0.022	0.8	0.0711	0.0000	OK
720 minute winter	2	360	66.143	0.024	1.0	0.0665	0.0000	OK
720 minute winter	3	390	66.136	0.054	1.0	0.1381	0.0000	OK
720 minute winter	4	435	66.317	0.097	1.8	9.9710	0.0000	OK
720 minute winter	5	405	64.781	0.036	2.2	0.0634	0.0000	OK
720 minute winter	6	405	64.682	0.034	2.2	0.0000	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	0.240	0.002	0.2152	
720 minute winter	2	1.001	3	1.0	0.145	0.003	0.1201	
720 minute winter	3	Hydro-Brake®	5	1.0				
720 minute winter	4	Hydro-Brake®	5	1.2				
720 minute winter	5	1.003	6	2.2	0.473	0.030	0.1019	47.0

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Results for 1 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	1	495	66.303	0.023	0.9	0.0750	0.0000	OK
960 minute summer	2	495	66.146	0.027	1.2	0.0747	0.0000	OK
960 minute summer	3	495	66.144	0.062	1.2	0.1568	0.0000	OK
960 minute summer	4	555	66.310	0.090	1.9	9.2208	0.0000	OK
960 minute summer	5	495	64.781	0.036	2.2	0.0645	0.0000	OK
960 minute summer	6	495	64.683	0.035	2.2	0.0000	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	0.9	0.243	0.003	0.2462	
960 minute summer	2	1.001	3	1.2	0.135	0.003	0.1449	
960 minute summer	3	Hydro-Brake®	5	1.2				
960 minute summer	4	Hydro-Brake®	5	1.1				
960 minute summer	5	1.003	6	2.2	0.477	0.031	0.1049	45.6

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Results for 1 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	1	495	66.300	0.020	0.7	0.0670	0.0000	OK
960 minute winter	2	510	66.142	0.023	0.9	0.0634	0.0000	OK
960 minute winter	3	510	66.132	0.050	0.9	0.1282	0.0000	OK
960 minute winter	4	570	66.303	0.083	1.4	8.5468	0.0000	OK
960 minute winter	5	510	64.779	0.034	2.0	0.0605	0.0000	OK
960 minute winter	6	510	64.680	0.032	2.0	0.0000	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	0.7	0.228	0.002	0.1983	
960 minute winter	2	1.001	3	0.9	0.145	0.003	0.1086	
960 minute winter	3	Hydro-Brake®	5	0.9				
960 minute winter	4	Hydro-Brake®	5	1.1				
960 minute winter	5	1.003	6	2.0	0.461	0.027	0.0948	51.1

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Results for 1 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	1	750	66.300	0.020	0.7	0.0670	0.0000	OK
1440 minute summer	2	750	66.142	0.023	0.9	0.0634	0.0000	OK
1440 minute summer	3	750	66.132	0.050	0.9	0.1282	0.0000	OK
1440 minute summer	4	810	66.295	0.075	1.4	7.7348	0.0000	OK
1440 minute summer	5	750	64.779	0.034	1.9	0.0593	0.0000	OK
1440 minute summer	6	750	64.680	0.032	1.9	0.0000	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	0.7	0.228	0.002	0.1983	
1440 minute summer	2	1.001	3	0.9	0.130	0.003	0.1086	
1440 minute summer	3	Hydro-Brake®	5	0.9				
1440 minute summer	4	Hydro-Brake®	5	1.0				
1440 minute summer	5	1.003	6	1.9	0.456	0.026	0.0920	51.5

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Results for 1 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 99.78%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	1	690	66.297	0.017	0.5	0.0576	0.0000	OK
1440 minute winter	2	720	66.138	0.019	0.6	0.0528	0.0000	OK
1440 minute winter	3	720	66.121	0.039	0.6	0.0995	0.0000	OK
1440 minute winter	4	780	66.286	0.066	1.1	6.7914	0.0000	OK
1440 minute winter	5	780	64.775	0.030	1.5	0.0538	0.0000	OK
1440 minute winter	6	780	64.677	0.029	1.5	0.0000	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	0.210	0.001	0.1530	
1440 minute winter	2	1.001	3	0.6	0.123	0.002	0.0758	
1440 minute winter	3	Hydro-Brake®	5	0.6				
1440 minute winter	4	Hydro-Brake®	5	0.9				
1440 minute winter	5	1.003	6	1.5	0.428	0.021	0.0798	56.9

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Results for 2 year 15 minute summer. 1455 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	11	66.352	0.072	11.4	0.2392	0.0000	OK
15 minute summer	2	18	66.309	0.190	14.1	0.5296	0.0000	OK
15 minute summer	3	18	66.313	0.231	6.2	0.5868	0.0000	SURCHARGED
15 minute summer	4	19	66.315	0.095	24.2	9.7858	0.0000	OK
15 minute summer	5	19	64.789	0.044	3.3	0.0782	0.0000	OK
15 minute summer	6	19	64.691	0.043	3.3	0.0000	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	11.0	0.521	0.032	2.6682	
15 minute summer	2	1.001	3	6.2	0.368	0.018	1.3117	
15 minute summer	3	Hydro-Brake®	5	2.2				
15 minute summer	4	Hydro-Brake®	5	1.2				
15 minute summer	5	1.003	6	3.3	0.531	0.046	0.1408	16.7

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Results for 2 year 15 minute winter. 1455 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	11	66.354	0.074	12.0	0.2439	0.0000	OK
15 minute winter	2	17	66.330	0.211	14.7	0.5898	0.0000	OK
15 minute winter	3	17	66.324	0.242	7.6	0.6150	0.0000	SURCHARGED
15 minute winter	4	18	66.327	0.107	25.4	10.9892	0.0000	OK
15 minute winter	5	18	64.790	0.045	3.4	0.0788	0.0000	OK
15 minute winter	6	18	64.691	0.043	3.4	0.0000	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	11.5	0.504	0.034	3.1259	
15 minute winter	2	1.001	3	7.6	0.385	0.022	1.4506	
15 minute winter	3	Hydro-Brake®	5	2.2				
15 minute winter	4	Hydro-Brake®	5	1.2				
15 minute winter	5	1.003	6	3.4	0.534	0.047	0.1423	18.7

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Results for 2 year 30 minute summer. 1470 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	1	18	66.349	0.069	10.2	0.2268	0.0000	OK
30 minute summer	2	25	66.326	0.207	12.7	0.5782	0.0000	OK
30 minute summer	3	25	66.327	0.245	4.3	0.6234	0.0000	SURCHARGED
30 minute summer	4	33	66.339	0.119	21.5	12.2144	0.0000	OK
30 minute summer	5	30	64.790	0.045	3.4	0.0791	0.0000	OK
30 minute summer	6	31	64.691	0.043	3.4	0.0000	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	9.8	0.397	0.029	3.0551	
30 minute summer	2	1.001	3	4.3	0.335	0.013	1.4474	
30 minute summer	3	Hydro-Brake®	5	2.2				
30 minute summer	4	Hydro-Brake®	5	1.2				
30 minute summer	5	1.003	6	3.4	0.535	0.047	0.1431	21.7

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Results for 2 year 30 minute winter. 1470 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	1	30	66.346	0.066	9.2	0.2193	0.0000	OK
30 minute winter	2	28	66.345	0.226	11.6	0.6299	0.0000	OK
30 minute winter	3	28	66.345	0.263	4.7	0.6701	0.0000	SURCHARGED
30 minute winter	4	32	66.354	0.134	19.4	13.7952	0.0000	OK
30 minute winter	5	32	64.790	0.045	3.5	0.0796	0.0000	OK
30 minute winter	6	32	64.692	0.044	3.5	0.0000	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	9.0	0.379	0.026	3.5799	
30 minute winter	2	1.001	3	4.7	0.343	0.014	1.6073	
30 minute winter	3	Hydro-Brake®	5	2.2				
30 minute winter	4	Hydro-Brake®	5	1.3				
30 minute winter	5	1.003	6	3.5	0.537	0.048	0.1445	24.3

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Results for 2 year 60 minute summer. 1500 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	1	34	66.340	0.060	7.5	0.1971	0.0000	OK
60 minute summer	2	42	66.325	0.206	9.4	0.5739	0.0000	OK
60 minute summer	3	42	66.325	0.243	3.8	0.6181	0.0000	SURCHARGED
60 minute summer	4	61	66.357	0.137	16.0	14.0321	0.0000	OK
60 minute summer	5	53	64.790	0.045	3.5	0.0795	0.0000	OK
60 minute summer	6	53	64.692	0.043	3.5	0.0000	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	7.3	0.321	0.021	3.0382	
60 minute summer	2	1.001	3	3.8	0.296	0.011	1.4318	
60 minute summer	3	Hydro-Brake®	5	2.2				
60 minute summer	4	Hydro-Brake®	5	1.3				
60 minute summer	5	1.003	6	3.5	0.536	0.047	0.1441	27.0

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Results for 2 year 60 minute winter. 1500 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	1	47	66.342	0.062	6.1	0.2047	0.0000	OK
60 minute winter	2	45	66.340	0.221	7.7	0.6176	0.0000	OK
60 minute winter	3	45	66.341	0.259	3.4	0.6581	0.0000	SURCHARGED
60 minute winter	4	60	66.376	0.156	12.9	16.0318	0.0000	SURCHARGED
60 minute winter	5	59	64.790	0.045	3.5	0.0800	0.0000	OK
60 minute winter	6	59	64.692	0.044	3.5	0.0000	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	6.0	0.301	0.018	3.4917	
60 minute winter	2	1.001	3	3.4	0.318	0.010	1.5677	
60 minute winter	3	Hydro-Brake®	5	2.2				
60 minute winter	4	Hydro-Brake®	5	1.3				
60 minute winter	5	1.003	6	3.5	0.538	0.048	0.1453	30.3

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Results for 2 year 120 minute summer. 1560 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	1	64	66.329	0.049	4.9	0.1625	0.0000	OK
120 minute summer	2	80	66.309	0.190	6.3	0.5310	0.0000	OK
120 minute summer	3	80	66.309	0.227	3.1	0.5786	0.0000	SURCHARGED
120 minute summer	4	100	66.369	0.149	10.4	15.2678	0.0000	OK
120 minute summer	5	82	64.790	0.045	3.5	0.0795	0.0000	OK
120 minute summer	6	84	64.692	0.044	3.5	0.0000	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	4.9	0.283	0.014	2.6498	
120 minute summer	2	1.001	3	3.1	0.264	0.009	1.2995	
120 minute summer	3	Hydro-Brake®	5	2.2				
120 minute summer	4	Hydro-Brake®	5	1.3				
120 minute summer	5	1.003	6	3.5	0.537	0.047	0.1443	33.1

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Results for 2 year 120 minute winter. 1560 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	1	64	66.324	0.044	3.8	0.1449	0.0000	OK
120 minute winter	2	82	66.316	0.197	4.9	0.5490	0.0000	OK
120 minute winter	3	82	66.316	0.234	2.7	0.5952	0.0000	SURCHARGED
120 minute winter	4	114	66.389	0.169	8.0	17.2976	0.0000	SURCHARGED
120 minute winter	5	92	64.790	0.045	3.5	0.0799	0.0000	OK
120 minute winter	6	92	64.692	0.044	3.5	0.0000	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	3.8	0.278	0.011	2.8022	
120 minute winter	2	1.001	3	2.7	0.280	0.008	1.3548	
120 minute winter	3	Hydro-Brake®	5	2.2				
120 minute winter	4	Hydro-Brake®	5	1.3				
120 minute winter	5	1.003	6	3.5	0.538	0.048	0.1452	37.0

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Results for 2 year 180 minute summer. 1620 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	1	96	66.323	0.043	3.7	0.1433	0.0000	OK
180 minute summer	2	112	66.285	0.166	4.7	0.4626	0.0000	OK
180 minute summer	3	112	66.285	0.203	2.7	0.5163	0.0000	SURCHARGED
180 minute summer	4	132	66.371	0.151	7.7	15.4661	0.0000	SURCHARGED
180 minute summer	5	116	64.790	0.045	3.4	0.0792	0.0000	OK
180 minute summer	6	116	64.691	0.043	3.4	0.0000	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	3.7	0.273	0.011	2.2158	
180 minute summer	2	1.001	3	2.7	0.205	0.008	1.0953	
180 minute summer	3	Hydro-Brake®	5	2.1				
180 minute summer	4	Hydro-Brake®	5	1.3				
180 minute summer	5	1.003	6	3.4	0.535	0.047	0.1434	36.7

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Results for 2 year 180 minute winter. 1620 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	1	96	66.318	0.038	2.8	0.1263	0.0000	OK
180 minute winter	2	120	66.281	0.162	3.6	0.4522	0.0000	OK
180 minute winter	3	120	66.281	0.199	2.4	0.5068	0.0000	SURCHARGED
180 minute winter	4	144	66.390	0.170	6.0	17.4523	0.0000	SURCHARGED
180 minute winter	5	124	64.790	0.045	3.4	0.0794	0.0000	OK
180 minute winter	6	124	64.691	0.043	3.4	0.0000	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	2.8	0.263	0.008	2.1431	
180 minute winter	2	1.001	3	2.4	0.206	0.007	1.0646	
180 minute winter	3	Hydro-Brake®	5	2.1				
180 minute winter	4	Hydro-Brake®	5	1.3				
180 minute winter	5	1.003	6	3.4	0.536	0.047	0.1439	41.3

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Results for 2 year 240 minute summer. 1680 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	1	124	66.320	0.040	3.1	0.1312	0.0000	OK
240 minute summer	2	144	66.260	0.141	3.9	0.3934	0.0000	OK
240 minute summer	3	144	66.260	0.178	2.4	0.4530	0.0000	SURCHARGED
240 minute summer	4	168	66.371	0.151	6.5	15.5258	0.0000	SURCHARGED
240 minute summer	5	148	64.790	0.045	3.4	0.0787	0.0000	OK
240 minute summer	6	148	64.691	0.043	3.4	0.0000	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	3.0	0.267	0.009	1.7900	
240 minute summer	2	1.001	3	2.4	0.201	0.007	0.8957	
240 minute summer	3	Hydro-Brake®	5	2.1				
240 minute summer	4	Hydro-Brake®	5	1.3				
240 minute summer	5	1.003	6	3.4	0.533	0.046	0.1420	39.8

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Results for 2 year 240 minute winter. 1680 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	1	128	66.315	0.035	2.3	0.1149	0.0000	OK
240 minute winter	2	152	66.248	0.129	2.9	0.3596	0.0000	OK
240 minute winter	3	152	66.248	0.166	2.2	0.4222	0.0000	SURCHARGED
240 minute winter	4	180	66.389	0.169	4.9	17.3350	0.0000	SURCHARGED
240 minute winter	5	156	64.789	0.044	3.4	0.0786	0.0000	OK
240 minute winter	6	156	64.691	0.043	3.4	0.0000	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	2.3	0.262	0.007	1.5921	
240 minute winter	2	1.001	3	2.2	0.201	0.006	0.8019	
240 minute winter	3	Hydro-Brake®	5	2.1				
240 minute winter	4	Hydro-Brake®	5	1.3				
240 minute winter	5	1.003	6	3.4	0.533	0.046	0.1417	44.7

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Results for 2 year 360 minute summer. 1800 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	1	184	66.315	0.035	2.4	0.1155	0.0000	OK
360 minute summer	2	208	66.226	0.107	3.0	0.2990	0.0000	OK
360 minute summer	3	208	66.226	0.144	2.2	0.3668	0.0000	OK
360 minute summer	4	240	66.367	0.147	5.0	15.0336	0.0000	OK
360 minute summer	5	208	64.789	0.044	3.3	0.0775	0.0000	OK
360 minute summer	6	208	64.690	0.042	3.3	0.0000	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	2.3	0.263	0.007	1.2526	
360 minute summer	2	1.001	3	2.2	0.192	0.006	0.6399	
360 minute summer	3	Hydro-Brake®	5	2.0				
360 minute summer	4	Hydro-Brake®	5	1.3				
360 minute summer	5	1.003	6	3.3	0.528	0.045	0.1390	44.6

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Results for 2 year 360 minute winter. 1800 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	1	192	66.310	0.030	1.7	0.0999	0.0000	OK
360 minute winter	2	208	66.199	0.080	2.2	0.2222	0.0000	OK
360 minute winter	3	208	66.198	0.116	2.0	0.2965	0.0000	OK
360 minute winter	4	256	66.381	0.161	3.6	16.4891	0.0000	SURCHARGED
360 minute winter	5	216	64.788	0.043	3.2	0.0763	0.0000	OK
360 minute winter	6	216	64.690	0.042	3.2	0.0000	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	1.7	0.254	0.005	0.8668	
360 minute winter	2	1.001	3	2.0	0.195	0.006	0.4500	
360 minute winter	3	Hydro-Brake®	5	1.9				
360 minute winter	4	Hydro-Brake®	5	1.3				
360 minute winter	5	1.003	6	3.2	0.523	0.044	0.1360	49.5

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Results for 2 year 480 minute summer. 1920 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	1	248	66.312	0.032	1.9	0.1051	0.0000	OK
480 minute summer	2	264	66.199	0.080	2.4	0.2237	0.0000	OK
480 minute summer	3	264	66.199	0.117	2.0	0.2978	0.0000	OK
480 minute summer	4	304	66.362	0.142	3.9	14.5421	0.0000	OK
480 minute summer	5	264	64.788	0.043	3.2	0.0760	0.0000	OK
480 minute summer	6	264	64.690	0.042	3.2	0.0000	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	1.9	0.254	0.006	0.8680	
480 minute summer	2	1.001	3	2.0	0.176	0.006	0.4534	
480 minute summer	3	Hydro-Brake®	5	1.9				
480 minute summer	4	Hydro-Brake®	5	1.3				
480 minute summer	5	1.003	6	3.2	0.522	0.043	0.1352	48.2

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Results for 2 year 480 minute winter. 1920 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	1	248	66.308	0.028	1.4	0.0916	0.0000	OK
480 minute winter	2	264	66.171	0.052	1.8	0.1464	0.0000	OK
480 minute winter	3	264	66.171	0.089	1.7	0.2263	0.0000	OK
480 minute winter	4	328	66.370	0.150	2.9	15.3418	0.0000	OK
480 minute winter	5	264	64.787	0.042	2.9	0.0735	0.0000	OK
480 minute winter	6	264	64.688	0.040	2.9	0.0000	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	1.4	0.254	0.004	0.5230	
480 minute winter	2	1.001	3	1.7	0.190	0.005	0.2818	
480 minute winter	3	Hydro-Brake®	5	1.7				
480 minute winter	4	Hydro-Brake®	5	1.3				
480 minute winter	5	1.003	6	2.9	0.511	0.040	0.1288	53.4

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Results for 2 year 600 minute summer. 2040 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	1	315	66.309	0.029	1.5	0.0944	0.0000	OK
600 minute summer	2	315	66.173	0.054	1.9	0.1510	0.0000	OK
600 minute summer	3	315	66.173	0.091	1.8	0.2306	0.0000	OK
600 minute summer	4	375	66.353	0.133	3.2	13.6298	0.0000	OK
600 minute summer	5	330	64.787	0.042	3.0	0.0737	0.0000	OK
600 minute summer	6	330	64.688	0.040	3.0	0.0000	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	1.5	0.253	0.004	0.5560	
600 minute summer	2	1.001	3	1.8	0.136	0.005	0.2914	
600 minute summer	3	Hydro-Brake®	5	1.7				
600 minute summer	4	Hydro-Brake®	5	1.3				
600 minute summer	5	1.003	6	3.0	0.512	0.041	0.1293	50.4

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Results for 2 year 600 minute winter. 2040 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	1	315	66.306	0.026	1.2	0.0856	0.0000	OK
600 minute winter	2	315	66.158	0.039	1.5	0.1087	0.0000	OK
600 minute winter	3	315	66.157	0.075	1.5	0.1907	0.0000	OK
600 minute winter	4	390	66.358	0.138	2.5	14.1528	0.0000	OK
600 minute winter	5	330	64.785	0.040	2.7	0.0703	0.0000	OK
600 minute winter	6	330	64.686	0.038	2.7	0.0000	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	1.2	0.243	0.004	0.3767	
600 minute winter	2	1.001	3	1.5	0.157	0.004	0.2072	
600 minute winter	3	Hydro-Brake®	5	1.5				
600 minute winter	4	Hydro-Brake®	5	1.3				
600 minute winter	5	1.003	6	2.7	0.499	0.037	0.1203	57.1

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Results for 2 year 720 minute summer. 2160 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	1	375	66.308	0.028	1.4	0.0916	0.0000	OK
720 minute summer	2	375	66.168	0.049	1.8	0.1378	0.0000	OK
720 minute summer	3	375	66.168	0.086	1.7	0.2182	0.0000	OK
720 minute summer	4	435	66.348	0.128	2.9	13.1318	0.0000	OK
720 minute summer	5	390	64.786	0.041	2.8	0.0724	0.0000	OK
720 minute summer	6	390	64.688	0.040	2.9	0.0000	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	1.4	0.245	0.004	0.4981	
720 minute summer	2	1.001	3	1.7	0.135	0.005	0.2645	
720 minute summer	3	Hydro-Brake®	5	1.6				
720 minute summer	4	Hydro-Brake®	5	1.3				
720 minute summer	5	1.003	6	2.9	0.506	0.039	0.1261	52.3

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Results for 2 year 720 minute winter. 2160 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	1	375	66.304	0.024	1.0	0.0787	0.0000	OK
720 minute winter	2	390	66.150	0.031	1.3	0.0877	0.0000	OK
720 minute winter	3	390	66.149	0.067	1.3	0.1702	0.0000	OK
720 minute winter	4	465	66.347	0.127	2.2	13.0438	0.0000	OK
720 minute winter	5	390	64.783	0.038	2.5	0.0680	0.0000	OK
720 minute winter	6	390	64.685	0.037	2.5	0.0000	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	1.0	0.243	0.003	0.2953	
720 minute winter	2	1.001	3	1.3	0.145	0.004	0.1685	
720 minute winter	3	Hydro-Brake®	5	1.3				
720 minute winter	4	Hydro-Brake®	5	1.3				
720 minute winter	5	1.003	6	2.5	0.491	0.034	0.1142	59.8

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Results for 2 year 960 minute summer. 2400 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	1	495	66.305	0.025	1.1	0.0822	0.0000	OK
960 minute summer	2	495	66.153	0.034	1.4	0.0956	0.0000	OK
960 minute summer	3	495	66.152	0.070	1.4	0.1780	0.0000	OK
960 minute summer	4	570	66.336	0.116	2.4	11.9240	0.0000	OK
960 minute summer	5	510	64.784	0.039	2.5	0.0686	0.0000	OK
960 minute summer	6	510	64.685	0.037	2.6	0.0000	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	1.1	0.253	0.003	0.3280	
960 minute summer	2	1.001	3	1.4	0.136	0.004	0.1832	
960 minute summer	3	Hydro-Brake®	5	1.4				
960 minute summer	4	Hydro-Brake®	5	1.2				
960 minute summer	5	1.003	6	2.6	0.493	0.035	0.1158	56.0

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Results for 2 year 960 minute winter. 2400 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	1	480	66.302	0.022	0.8	0.0711	0.0000	OK
960 minute winter	2	480	66.143	0.024	1.0	0.0665	0.0000	OK
960 minute winter	3	510	66.136	0.054	1.0	0.1381	0.0000	OK
960 minute winter	4	585	66.329	0.109	1.7	11.1381	0.0000	OK
960 minute winter	5	525	64.781	0.036	2.2	0.0636	0.0000	OK
960 minute winter	6	525	64.682	0.034	2.2	0.0000	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	0.8	0.240	0.002	0.2152	
960 minute winter	2	1.001	3	1.0	0.145	0.003	0.1201	
960 minute winter	3	Hydro-Brake®	5	1.0				
960 minute winter	4	Hydro-Brake®	5	1.2				
960 minute winter	5	1.003	6	2.2	0.474	0.030	0.1027	62.2

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Results for 2 year 1440 minute summer. 2880 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	1	750	66.302	0.022	0.8	0.0711	0.0000	OK
1440 minute summer	2	750	66.143	0.024	1.0	0.0665	0.0000	OK
1440 minute summer	3	750	66.136	0.054	1.0	0.1381	0.0000	OK
1440 minute summer	4	810	66.313	0.093	1.7	9.4937	0.0000	OK
1440 minute summer	5	750	64.780	0.035	2.1	0.0627	0.0000	OK
1440 minute summer	6	750	64.682	0.034	2.1	0.0000	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	0.8	0.240	0.002	0.2152	
1440 minute summer	2	1.001	3	1.0	0.132	0.003	0.1201	
1440 minute summer	3	Hydro-Brake®	5	1.0				
1440 minute summer	4	Hydro-Brake®	5	1.2				
1440 minute summer	5	1.003	6	2.1	0.470	0.029	0.1003	63.5

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Results for 2 year 1440 minute winter. 2880 minute analysis at 30 minute timestep. Mass balance: 99.91%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	1	720	66.299	0.019	0.6	0.0625	0.0000	OK
1440 minute winter	2	750	66.141	0.022	0.8	0.0601	0.0000	OK
1440 minute winter	3	750	66.129	0.047	0.8	0.1187	0.0000	OK
1440 minute winter	4	840	66.300	0.080	1.3	8.2418	0.0000	OK
1440 minute winter	5	810	64.779	0.034	1.9	0.0596	0.0000	OK
1440 minute winter	6	810	64.680	0.032	1.9	0.0000	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	0.6	0.214	0.002	0.1806	
1440 minute winter	2	1.001	3	0.8	0.128	0.002	0.0977	
1440 minute winter	3	Hydro-Brake®	5	0.8				
1440 minute winter	4	Hydro-Brake®	5	1.1				
1440 minute winter	5	1.003	6	1.9	0.457	0.026	0.0926	70.2

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Results for 30 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 99.89%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	18	66.427	0.147	21.6	0.4863	0.0000	OK
15 minute summer	2	19	66.423	0.304	26.7	0.8472	0.0000	OK
15 minute summer	3	16	66.429	0.347	11.8	0.8833	0.0000	SURCHARGED
15 minute summer	4	19	66.404	0.184	45.7	18.8454	0.0000	SURCHARGED
15 minute summer	5	21	64.791	0.046	3.5	0.0804	0.0000	OK
15 minute summer	6	21	64.692	0.044	3.5	0.0000	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	20.9	0.548	0.061	6.1240	
15 minute summer	2	1.001	3	11.8	0.408	0.035	2.3221	
15 minute summer	3	Hydro-Brake®	5	2.2				
15 minute summer	4	Hydro-Brake®	5	1.3				
15 minute summer	5	1.003	6	3.5	0.540	0.049	0.1466	27.8

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Results for 30 year 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 99.88%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	17	66.455	0.175	22.7	0.5799	0.0000	OK
15 minute winter	2	18	66.448	0.329	27.8	0.9177	0.0000	OK
15 minute winter	3	18	66.449	0.367	7.5	0.9332	0.0000	SURCHARGED
15 minute winter	4	19	66.427	0.207	48.1	21.1991	0.0000	SURCHARGED
15 minute winter	5	29	64.791	0.046	3.5	0.0805	0.0000	OK
15 minute winter	6	30	64.692	0.044	3.5	0.0000	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	21.8	0.539	0.064	7.0157	
15 minute winter	2	1.001	3	7.5	0.418	0.022	2.5204	
15 minute winter	3	Hydro-Brake®	5	2.2				
15 minute winter	4	Hydro-Brake®	5	1.3				
15 minute winter	5	1.003	6	3.5	0.541	0.049	0.1469	30.6

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Results for 30 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 99.88%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	1	30	66.464	0.184	19.3	0.6088	0.0000	OK
30 minute summer	2	31	66.460	0.341	24.4	0.9500	0.0000	OK
30 minute summer	3	31	66.460	0.378	6.7	0.9620	0.0000	SURCHARGED
30 minute summer	4	34	66.455	0.235	40.9	24.0782	0.0000	SURCHARGED
30 minute summer	5	55	64.791	0.046	3.6	0.0806	0.0000	OK
30 minute summer	6	55	64.692	0.044	3.6	0.0000	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	18.9	0.375	0.055	7.4741	
30 minute summer	2	1.001	3	6.7	0.368	0.020	2.6212	
30 minute summer	3	Hydro-Brake®	5	2.2				
30 minute summer	4	Hydro-Brake®	5	1.3				
30 minute summer	5	1.003	6	3.6	0.541	0.049	0.1471	34.8

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Results for 30 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 99.87%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	1	31	66.494	0.214	17.5	0.7078	0.0000	OK
30 minute winter	2	30	66.494	0.375	21.4	1.0459	0.0000	OK
30 minute winter	3	30	66.494	0.412	7.9	1.0481	0.0000	SURCHARGED
30 minute winter	4	33	66.485	0.265	37.0	27.1474	0.0000	SURCHARGED
30 minute winter	5	70	64.791	0.046	3.6	0.0807	0.0000	OK
30 minute winter	6	70	64.692	0.044	3.6	0.0000	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	16.5	0.403	0.048	8.7224	
30 minute winter	2	1.001	3	7.9	0.376	0.023	2.9144	
30 minute winter	3	Hydro-Brake®	5	2.2				
30 minute winter	4	Hydro-Brake®	5	1.3				
30 minute winter	5	1.003	6	3.6	0.541	0.049	0.1472	37.5

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Results for 30 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.88%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	1	50	66.474	0.194	14.4	0.6416	0.0000	OK
60 minute summer	2	54	66.473	0.354	17.6	0.9878	0.0000	OK
60 minute summer	3	54	66.474	0.391	5.6	0.9964	0.0000	SURCHARGED
60 minute summer	4	63	66.501	0.281	30.4	28.8505	0.0000	SURCHARGED
60 minute summer	5	97	64.791	0.046	3.6	0.0807	0.0000	OK
60 minute summer	6	97	64.692	0.044	3.6	0.0000	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	13.5	0.313	0.040	7.9794	
60 minute summer	2	1.001	3	5.6	0.338	0.016	2.7385	
60 minute summer	3	Hydro-Brake®	5	2.2				
60 minute summer	4	Hydro-Brake®	5	1.3				
60 minute summer	5	1.003	6	3.6	0.541	0.049	0.1472	41.4

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Results for 30 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 99.89%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	1	58	66.514	0.234	11.6	0.7747	0.0000	OK
60 minute winter	2	59	66.514	0.395	13.5	1.1009	0.0000	OK
60 minute winter	3	59	66.514	0.432	4.7	1.0993	0.0000	SURCHARGED
60 minute winter	4	62	66.538	0.318	24.6	32.6420	0.0000	SURCHARGED
60 minute winter	5	115	64.791	0.046	3.6	0.0807	0.0000	OK
60 minute winter	6	115	64.692	0.044	3.6	0.0000	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	10.4	0.338	0.030	9.5170	
60 minute winter	2	1.001	3	4.7	0.338	0.014	3.0805	
60 minute winter	3	Hydro-Brake®	5	2.2				
60 minute winter	4	Hydro-Brake®	5	1.3				
60 minute winter	5	1.003	6	3.6	0.541	0.049	0.1472	44.2

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Results for 30 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.92%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	1	86	66.464	0.184	9.3	0.6091	0.0000	OK
120 minute summer	2	90	66.462	0.343	11.5	0.9571	0.0000	OK
120 minute summer	3	90	66.462	0.380	4.3	0.9679	0.0000	SURCHARGED
120 minute summer	4	122	66.532	0.312	19.7	32.0459	0.0000	SURCHARGED
120 minute summer	5	70	64.791	0.046	3.6	0.0806	0.0000	OK
120 minute summer	6	70	64.692	0.044	3.6	0.0000	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	8.9	0.270	0.026	7.6618	
120 minute summer	2	1.001	3	4.3	0.297	0.012	2.6423	
120 minute summer	3	Hydro-Brake®	5	2.2				
120 minute summer	4	Hydro-Brake®	5	1.3				
120 minute summer	5	1.003	6	3.6	0.541	0.049	0.1471	49.7

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Results for 30 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 99.91%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	1	96	66.499	0.219	7.2	0.7234	0.0000	OK
120 minute winter	2	92	66.498	0.379	8.4	1.0583	0.0000	OK
120 minute winter	3	92	66.499	0.417	3.6	1.0601	0.0000	SURCHARGED
120 minute winter	4	120	66.580	0.360	15.2	36.9051	0.0000	SURCHARGED
120 minute winter	5	68	64.791	0.046	3.6	0.0807	0.0000	OK
120 minute winter	6	68	64.692	0.044	3.6	0.0000	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	6.5	0.283	0.019	9.0007	
120 minute winter	2	1.001	3	3.6	0.270	0.010	2.9530	
120 minute winter	3	Hydro-Brake®	5	2.2				
120 minute winter	4	Hydro-Brake®	5	1.3				
120 minute winter	5	1.003	6	3.6	0.541	0.049	0.1472	52.6

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Results for 30 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 99.91%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	1	124	66.444	0.164	6.9	0.5436	0.0000	OK
180 minute summer	2	120	66.444	0.325	8.5	0.9053	0.0000	OK
180 minute summer	3	120	66.444	0.362	3.6	0.9206	0.0000	SURCHARGED
180 minute summer	4	180	66.542	0.322	14.6	32.9888	0.0000	SURCHARGED
180 minute summer	5	104	64.791	0.046	3.6	0.0807	0.0000	OK
180 minute summer	6	104	64.692	0.044	3.6	0.0000	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	6.6	0.257	0.019	6.9790	
180 minute summer	2	1.001	3	3.6	0.235	0.010	2.4798	
180 minute summer	3	Hydro-Brake®	5	2.2				
180 minute summer	4	Hydro-Brake®	5	1.3				
180 minute summer	5	1.003	6	3.6	0.541	0.049	0.1472	55.5

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Results for 30 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 99.89%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	1	132	66.470	0.190	5.3	0.6294	0.0000	OK
180 minute winter	2	136	66.470	0.351	6.4	0.9791	0.0000	OK
180 minute winter	3	136	66.470	0.388	3.1	0.9877	0.0000	SURCHARGED
180 minute winter	4	176	66.590	0.370	11.3	37.9970	0.0000	SURCHARGED
180 minute winter	5	100	64.791	0.046	3.6	0.0807	0.0000	OK
180 minute winter	6	100	64.692	0.044	3.6	0.0000	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	0.252	0.015	7.9756	
180 minute winter	2	1.001	3	3.1	0.285	0.009	2.7102	
180 minute winter	3	Hydro-Brake®	5	2.2				
180 minute winter	4	Hydro-Brake®	5	1.3				
180 minute winter	5	1.003	6	3.6	0.541	0.049	0.1472	59.4

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Results for 30 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 99.92%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	1	156	66.426	0.146	5.8	0.4835	0.0000	OK
240 minute summer	2	152	66.424	0.305	6.7	0.8519	0.0000	OK
240 minute summer	3	152	66.424	0.342	3.2	0.8716	0.0000	SURCHARGED
240 minute summer	4	208	66.544	0.324	12.3	33.1874	0.0000	SURCHARGED
240 minute summer	5	136	64.791	0.046	3.6	0.0807	0.0000	OK
240 minute summer	6	136	64.692	0.044	3.6	0.0000	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	5.2	0.257	0.015	6.3421	
240 minute summer	2	1.001	3	3.2	0.235	0.009	2.3103	
240 minute summer	3	Hydro-Brake®	5	2.2				
240 minute summer	4	Hydro-Brake®	5	1.3				
240 minute summer	5	1.003	6	3.6	0.541	0.049	0.1472	60.9

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Results for 30 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 99.92%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	1	168	66.444	0.164	4.3	0.5421	0.0000	OK
240 minute winter	2	172	66.444	0.325	5.2	0.9063	0.0000	OK
240 minute winter	3	172	66.444	0.362	2.9	0.9213	0.0000	SURCHARGED
240 minute winter	4	228	66.594	0.374	9.1	38.3744	0.0000	SURCHARGED
240 minute winter	5	136	64.791	0.046	3.6	0.0807	0.0000	OK
240 minute winter	6	136	64.692	0.044	3.6	0.0000	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	0.258	0.012	7.0172	
240 minute winter	2	1.001	3	2.9	0.218	0.008	2.4826	
240 minute winter	3	Hydro-Brake®	5	2.2				
240 minute winter	4	Hydro-Brake®	5	1.3				
240 minute winter	5	1.003	6	3.6	0.541	0.049	0.1472	65.0

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

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	1	224	66.390	0.110	4.4	0.3651	0.0000	OK
360 minute summer	2	224	66.390	0.271	5.5	0.7562	0.0000	OK
360 minute summer	3	224	66.390	0.308	2.9	0.7842	0.0000	SURCHARGED
360 minute summer	4	272	66.539	0.319	9.3	32.7674	0.0000	SURCHARGED
360 minute summer	5	208	64.791	0.046	3.6	0.0807	0.0000	OK
360 minute summer	6	208	64.692	0.044	3.6	0.0000	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	4.3	0.254	0.013	5.1212	
360 minute summer	2	1.001	3	2.9	0.219	0.009	2.0052	
360 minute summer	3	Hydro-Brake®	5	2.2				
360 minute summer	4	Hydro-Brake®	5	1.3				
360 minute summer	5	1.003	6	3.6	0.541	0.049	0.1472	70.5

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Results for 30 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 99.93%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	1	232	66.388	0.107	3.2	0.3554	0.0000	OK
360 minute winter	2	240	66.388	0.269	4.1	0.7491	0.0000	OK
360 minute winter	3	240	66.388	0.306	2.6	0.7777	0.0000	SURCHARGED
360 minute winter	4	288	66.583	0.363	6.7	37.2532	0.0000	SURCHARGED
360 minute winter	5	208	64.791	0.046	3.6	0.0806	0.0000	OK
360 minute winter	6	208	64.692	0.044	3.6	0.0000	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	3.2	0.257	0.009	5.0281	
360 minute winter	2	1.001	3	2.6	0.164	0.008	1.9827	
360 minute winter	3	Hydro-Brake®	5	2.2				
360 minute winter	4	Hydro-Brake®	5	1.3				
360 minute winter	5	1.003	6	3.6	0.541	0.049	0.1471	75.6

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Results for 30 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.93%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	1	288	66.357	0.077	3.4	0.2561	0.0000	OK
480 minute summer	2	288	66.358	0.239	4.4	0.6659	0.0000	OK
480 minute summer	3	288	66.358	0.276	2.7	0.7018	0.0000	SURCHARGED
480 minute summer	4	336	66.529	0.309	7.2	31.6664	0.0000	SURCHARGED
480 minute summer	5	272	64.791	0.046	3.6	0.0806	0.0000	OK
480 minute summer	6	272	64.692	0.044	3.6	0.0000	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	3.4	0.257	0.010	4.0444	
480 minute summer	2	1.001	3	2.7	0.216	0.008	1.7185	
480 minute summer	3	Hydro-Brake®	5	2.2				
480 minute summer	4	Hydro-Brake®	5	1.3				
480 minute summer	5	1.003	6	3.6	0.541	0.049	0.1470	79.0

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Results for 30 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 99.94%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	1	296	66.337	0.057	2.5	0.1871	0.0000	OK
480 minute winter	2	296	66.337	0.218	3.2	0.6070	0.0000	OK
480 minute winter	3	296	66.337	0.255	2.4	0.6480	0.0000	SURCHARGED
480 minute winter	4	368	66.569	0.349	5.4	35.7621	0.0000	SURCHARGED
480 minute winter	5	280	64.791	0.046	3.5	0.0805	0.0000	OK
480 minute winter	6	280	64.692	0.044	3.5	0.0000	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	2.5	0.254	0.007	3.3972	
480 minute winter	2	1.001	3	2.4	0.164	0.007	1.5339	
480 minute winter	3	Hydro-Brake®	5	2.2				
480 minute winter	4	Hydro-Brake®	5	1.3				
480 minute winter	5	1.003	6	3.5	0.540	0.049	0.1466	84.6

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Results for 30 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.95%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	1	345	66.325	0.045	2.8	0.1501	0.0000	OK
600 minute summer	2	345	66.326	0.207	3.6	0.5762	0.0000	OK
600 minute summer	3	345	66.326	0.244	2.5	0.6199	0.0000	SURCHARGED
600 minute summer	4	405	66.516	0.296	5.9	30.3441	0.0000	SURCHARGED
600 minute summer	5	345	64.791	0.046	3.5	0.0804	0.0000	OK
600 minute summer	6	345	64.692	0.044	3.5	0.0000	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	2.8	0.259	0.008	3.0743	
600 minute summer	2	1.001	3	2.5	0.138	0.007	1.4383	
600 minute summer	3	Hydro-Brake®	5	2.2				
600 minute summer	4	Hydro-Brake®	5	1.3				
600 minute summer	5	1.003	6	3.5	0.540	0.048	0.1466	86.4

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Results for 30 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 99.94%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	1	315	66.313	0.033	2.1	0.1101	0.0000	OK
600 minute winter	2	360	66.286	0.167	2.7	0.4660	0.0000	OK
600 minute winter	3	360	66.286	0.204	2.2	0.5193	0.0000	SURCHARGED
600 minute winter	4	450	66.552	0.332	4.5	34.0635	0.0000	SURCHARGED
600 minute winter	5	360	64.790	0.045	3.5	0.0799	0.0000	OK
600 minute winter	6	360	64.692	0.044	3.5	0.0000	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	2.1	0.250	0.006	2.2290	
600 minute winter	2	1.001	3	2.2	0.184	0.007	1.1051	
600 minute winter	3	Hydro-Brake®	5	2.1				
600 minute winter	4	Hydro-Brake®	5	1.3				
600 minute winter	5	1.003	6	3.5	0.538	0.048	0.1452	93.1

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

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	1	375	66.316	0.036	2.5	0.1196	0.0000	OK
720 minute summer	2	405	66.298	0.179	3.2	0.5002	0.0000	OK
720 minute summer	3	405	66.298	0.216	2.4	0.5506	0.0000	SURCHARGED
720 minute summer	4	480	66.503	0.283	5.2	29.0386	0.0000	SURCHARGED
720 minute summer	5	405	64.790	0.045	3.5	0.0801	0.0000	OK
720 minute summer	6	405	64.692	0.044	3.5	0.0000	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	2.5	0.246	0.007	2.4447	
720 minute summer	2	1.001	3	2.4	0.137	0.007	1.2068	
720 minute summer	3	Hydro-Brake®	5	2.2				
720 minute summer	4	Hydro-Brake®	5	1.3				
720 minute summer	5	1.003	6	3.5	0.539	0.048	0.1458	92.4

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Results for 30 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 99.96%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	1	375	66.311	0.031	1.8	0.1025	0.0000	OK
720 minute winter	2	420	66.240	0.121	2.3	0.3368	0.0000	OK
720 minute winter	3	420	66.240	0.158	2.1	0.4014	0.0000	SURCHARGED
720 minute winter	4	525	66.532	0.312	3.9	31.9995	0.0000	SURCHARGED
720 minute winter	5	420	64.790	0.045	3.4	0.0789	0.0000	OK
720 minute winter	6	420	64.691	0.043	3.4	0.0000	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	1.8	0.245	0.005	1.4593	
720 minute winter	2	1.001	3	2.1	0.184	0.006	0.7399	
720 minute winter	3	Hydro-Brake®	5	2.1				
720 minute winter	4	Hydro-Brake®	5	1.3				
720 minute winter	5	1.003	6	3.4	0.534	0.047	0.1425	100.8

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Results for 30 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	1	495	66.313	0.033	2.0	0.1076	0.0000	OK
960 minute summer	2	525	66.243	0.124	2.6	0.3448	0.0000	OK
960 minute summer	3	525	66.243	0.161	2.2	0.4086	0.0000	SURCHARGED
960 minute summer	4	615	66.481	0.261	4.2	26.7367	0.0000	SURCHARGED
960 minute summer	5	525	64.790	0.045	3.4	0.0789	0.0000	OK
960 minute summer	6	525	64.691	0.043	3.4	0.0000	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	2.0	0.253	0.006	1.5009	
960 minute summer	2	1.001	3	2.2	0.175	0.006	0.7614	
960 minute summer	3	Hydro-Brake®	5	2.1				
960 minute summer	4	Hydro-Brake®	5	1.3				
960 minute summer	5	1.003	6	3.4	0.534	0.047	0.1427	101.2

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Results for 30 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	1	495	66.309	0.029	1.5	0.0944	0.0000	OK
960 minute winter	2	510	66.183	0.064	1.9	0.1787	0.0000	OK
960 minute winter	3	510	66.183	0.101	1.8	0.2563	0.0000	OK
960 minute winter	4	645	66.500	0.280	3.1	28.7264	0.0000	SURCHARGED
960 minute winter	5	510	64.788	0.043	3.2	0.0761	0.0000	OK
960 minute winter	6	510	64.690	0.042	3.2	0.0000	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	1.5	0.243	0.004	0.6634	
960 minute winter	2	1.001	3	1.8	0.165	0.005	0.3508	
960 minute winter	3	Hydro-Brake®	5	1.8				
960 minute winter	4	Hydro-Brake®	5	1.3				
960 minute winter	5	1.003	6	3.2	0.522	0.043	0.1355	113.1

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Results for 30 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	1	750	66.308	0.028	1.4	0.0916	0.0000	OK
1440 minute summer	2	750	66.175	0.056	1.8	0.1564	0.0000	OK
1440 minute summer	3	750	66.175	0.093	1.8	0.2356	0.0000	OK
1440 minute summer	4	870	66.437	0.217	3.0	22.2484	0.0000	SURCHARGED
1440 minute summer	5	750	64.787	0.042	3.1	0.0748	0.0000	OK
1440 minute summer	6	750	64.689	0.041	3.1	0.0000	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	1.4	0.246	0.004	0.5707	
1440 minute summer	2	1.001	3	1.8	0.132	0.005	0.3026	
1440 minute summer	3	Hydro-Brake®	5	1.7				
1440 minute summer	4	Hydro-Brake®	5	1.3				
1440 minute summer	5	1.003	6	3.1	0.517	0.042	0.1321	108.6

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Results for 30 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	1	750	66.305	0.025	1.1	0.0822	0.0000	OK
1440 minute winter	2	750	66.155	0.036	1.4	0.0997	0.0000	OK
1440 minute winter	3	750	66.154	0.071	1.4	0.1820	0.0000	OK
1440 minute winter	4	930	66.434	0.214	2.3	21.9056	0.0000	SURCHARGED
1440 minute winter	5	750	64.785	0.040	2.7	0.0704	0.0000	OK
1440 minute winter	6	750	64.687	0.039	2.7	0.0000	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	1.1	0.243	0.003	0.3407	
1440 minute winter	2	1.001	3	1.4	0.133	0.004	0.1907	
1440 minute winter	3	Hydro-Brake®	5	1.4				
1440 minute winter	4	Hydro-Brake®	5	1.3				
1440 minute winter	5	1.003	6	2.7	0.499	0.037	0.1207	125.0

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Results for 100 year +45% CC 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 99.89%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	1	21	66.614	0.334	40.4	1.1040	0.0000	OK
15 minute summer	2	20	66.613	0.494	49.2	1.3769	0.0000	OK
15 minute summer	3	20	66.613	0.531	18.3	1.3520	0.0000	SURCHARGED
15 minute summer	4	20	66.570	0.350	85.4	35.9026	0.0000	SURCHARGED
15 minute summer	5	112	64.791	0.046	3.6	0.0807	0.0000	OK
15 minute summer	6	112	64.692	0.044	3.6	0.0000	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	37.8	0.548	0.110	13.0357	
15 minute summer	2	1.001	3	18.3	0.450	0.053	3.8107	
15 minute summer	3	Hydro-Brake®	5	2.2				
15 minute summer	4	Hydro-Brake®	5	1.3				
15 minute summer	5	1.003	6	3.6	0.541	0.049	0.1472	42.2

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Results for 100 year +45% CC 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 99.90%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	1	18	66.671	0.391	42.5	1.2914	0.0000	OK
15 minute winter	2	17	66.670	0.551	47.0	1.5370	0.0000	OK
15 minute winter	3	17	66.670	0.588	23.3	1.4954	0.0000	SURCHARGED
15 minute winter	4	19	66.613	0.393	89.8	40.3366	0.0000	SURCHARGED
15 minute winter	5	135	64.791	0.046	3.6	0.0806	0.0000	OK
15 minute winter	6	135	64.692	0.044	3.6	0.0000	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	35.7	0.580	0.104	14.8587	
15 minute winter	2	1.001	3	23.3	0.467	0.068	4.1029	
15 minute winter	3	Hydro-Brake®	5	2.2				
15 minute winter	4	Hydro-Brake®	5	1.3				
15 minute winter	5	1.003	6	3.6	0.541	0.049	0.1470	44.9

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Results for 100 year +45% CC 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 99.91%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	1	33	66.755	0.475	36.5	1.5707	0.0000	OK
30 minute summer	2	35	66.755	0.636	36.0	1.7735	0.0000	SURCHARGED
30 minute summer	3	35	66.756	0.674	12.5	1.7150	0.0000	SURCHARGED
30 minute summer	4	34	66.676	0.456	77.1	46.7708	0.0000	SURCHARGED
30 minute summer	5	18	64.791	0.046	3.5	0.0804	0.0000	OK
30 minute summer	6	18	64.692	0.044	3.5	0.0000	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	26.6	0.443	0.078	16.7682	
30 minute summer	2	1.001	3	12.5	0.399	0.036	4.1942	
30 minute summer	3	Hydro-Brake®	5	2.2				
30 minute summer	4	Hydro-Brake®	5	1.3				
30 minute summer	5	1.003	6	3.5	0.540	0.049	0.1466	49.7

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Results for 100 year +45% CC 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 99.86%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	1	32	67.021	0.741	33.0	2.4492	0.0000	SURCHARGED
30 minute winter	2	33	67.014	0.895	31.0	2.4963	0.0000	SURCHARGED
30 minute winter	3	33	67.015	0.933	9.4	2.3749	0.0000	SURCHARGED
30 minute winter	4	34	66.734	0.514	69.8	52.7045	0.0000	SURCHARGED
30 minute winter	5	17	64.791	0.046	3.5	0.0805	0.0000	OK
30 minute winter	6	17	64.692	0.044	3.5	0.0000	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	23.1	0.471	0.067	18.1296	
30 minute winter	2	1.001	3	9.4	0.422	0.027	4.1942	
30 minute winter	3	Hydro-Brake®	5	2.2				
30 minute winter	4	Hydro-Brake®	5	1.3				
30 minute winter	5	1.003	6	3.5	0.540	0.049	0.1467	51.9

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Results for 100 year +45% CC 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.83%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	1	61	67.083	0.803	27.3	2.6535	0.0000	SURCHARGED
60 minute summer	2	62	67.080	0.961	24.8	2.6795	0.0000	SURCHARGED
60 minute summer	3	62	67.080	0.998	6.8	2.5400	0.0000	SURCHARGED
60 minute summer	4	64	66.782	0.562	57.8	57.6579	0.0000	SURCHARGED
60 minute summer	5	31	64.791	0.046	3.6	0.0806	0.0000	OK
60 minute summer	6	31	64.692	0.044	3.5	0.0000	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	17.1	0.375	0.050	18.1296	
60 minute summer	2	1.001	3	6.8	0.379	0.020	4.1942	
60 minute summer	3	Hydro-Brake®	5	2.2				
60 minute summer	4	Hydro-Brake®	5	1.3				
60 minute summer	5	1.003	6	3.5	0.541	0.049	0.1469	56.4

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Results for 100 year +45% CC 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 99.70%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	1	60	67.550	1.270	22.1	4.1994	0.0000	SURCHARGED
60 minute winter	2	61	67.550	1.431	21.9	3.9917	0.0000	SURCHARGED
60 minute winter	3	61	67.550	1.468	6.9	3.7369	0.0000	SURCHARGED
60 minute winter	4	63	66.854	0.634	46.8	65.0137	0.0000	SURCHARGED
60 minute winter	5	61	64.792	0.047	3.8	0.0837	0.0000	OK
60 minute winter	6	61	64.694	0.046	3.8	0.0000	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	15.7	0.405	0.046	18.1296	
60 minute winter	2	1.001	3	6.9	0.385	0.020	4.1942	
60 minute winter	3	Hydro-Brake®	5	2.6				
60 minute winter	4	Hydro-Brake®	5	1.3				
60 minute winter	5	1.003	6	3.8	0.553	0.053	0.1554	57.3

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Results for 100 year +45% CC 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.83%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	1	110	67.197	0.917	17.8	3.0320	0.0000	SURCHARGED
120 minute summer	2	110	67.197	1.078	16.5	3.0063	0.0000	SURCHARGED
120 minute summer	3	110	67.197	1.115	5.1	2.8374	0.0000	SURCHARGED
120 minute summer	4	124	66.877	0.657	37.6	67.4222	0.0000	SURCHARGED
120 minute summer	5	58	64.791	0.046	3.6	0.0806	0.0000	OK
120 minute summer	6	58	64.692	0.044	3.6	0.0000	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	11.5	0.319	0.034	18.1296	
120 minute summer	2	1.001	3	5.1	0.341	0.015	4.1942	
120 minute summer	3	Hydro-Brake®	5	2.3				
120 minute summer	4	Hydro-Brake®	5	1.3				
120 minute summer	5	1.003	6	3.6	0.541	0.049	0.1471	67.3

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Results for 100 year +45% CC 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 99.77%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	1	114	67.732	1.452	13.7	4.7989	0.0000	SURCHARGED
120 minute winter	2	114	67.732	1.613	12.1	4.4977	0.0000	FLOOD RISK
120 minute winter	3	114	67.732	1.650	5.4	4.1984	0.0000	SURCHARGED
120 minute winter	4	122	66.962	0.742	29.0	76.1435	0.0000	SURCHARGED
120 minute winter	5	116	64.794	0.049	4.1	0.0861	0.0000	OK
120 minute winter	6	116	64.695	0.047	4.1	0.0000	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	8.5	0.333	0.025	18.1296	
120 minute winter	2	1.001	3	5.4	0.346	0.016	4.1942	
120 minute winter	3	Hydro-Brake®	5	2.8				
120 minute winter	4	Hydro-Brake®	5	1.3				
120 minute winter	5	1.003	6	4.1	0.561	0.056	0.1622	70.5

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Results for 100 year +45% CC 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 99.90%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	1	144	67.130	0.850	13.2	2.8089	0.0000	SURCHARGED
180 minute summer	2	148	67.127	1.008	12.5	2.8106	0.0000	SURCHARGED
180 minute summer	3	148	67.127	1.045	4.3	2.6601	0.0000	SURCHARGED
180 minute summer	4	184	66.920	0.700	27.9	71.7596	0.0000	SURCHARGED
180 minute summer	5	84	64.791	0.046	3.6	0.0806	0.0000	OK
180 minute summer	6	84	64.692	0.044	3.6	0.0000	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	8.8	0.285	0.026	18.1296	
180 minute summer	2	1.001	3	4.3	0.311	0.013	4.1942	
180 minute summer	3	Hydro-Brake®	5	2.3				
180 minute summer	4	Hydro-Brake®	5	1.3				
180 minute summer	5	1.003	6	3.6	0.541	0.049	0.1471	77.5

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Results for 100 year +45% CC 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 99.78%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	1	144	67.644	1.364	10.1	4.5093	0.0000	SURCHARGED
180 minute winter	2	144	67.644	1.525	9.0	4.2531	0.0000	FLOOD RISK
180 minute winter	3	144	67.644	1.562	4.3	3.9752	0.0000	SURCHARGED
180 minute winter	4	180	67.015	0.795	21.5	81.5115	0.0000	SURCHARGED
180 minute winter	5	152	64.793	0.048	4.0	0.0856	0.0000	OK
180 minute winter	6	152	64.695	0.047	4.0	0.0000	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	6.3	0.298	0.018	18.1296	
180 minute winter	2	1.001	3	4.3	0.262	0.013	4.1942	
180 minute winter	3	Hydro-Brake®	5	2.7				
180 minute winter	4	Hydro-Brake®	5	1.3				
180 minute winter	5	1.003	6	4.0	0.559	0.055	0.1606	82.0

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Results for 100 year +45% CC 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	1	180	67.025	0.745	11.1	2.4627	0.0000	SURCHARGED
240 minute summer	2	180	67.025	0.906	10.3	2.5260	0.0000	SURCHARGED
240 minute summer	3	180	67.025	0.943	3.9	2.3991	0.0000	SURCHARGED
240 minute summer	4	244	66.937	0.717	23.4	73.5148	0.0000	SURCHARGED
240 minute summer	5	112	64.791	0.046	3.6	0.0807	0.0000	OK
240 minute summer	6	112	64.692	0.044	3.6	0.0000	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	7.4	0.274	0.022	18.1296	
240 minute summer	2	1.001	3	3.9	0.236	0.011	4.1942	
240 minute summer	3	Hydro-Brake®	5	2.2				
240 minute summer	4	Hydro-Brake®	5	1.3				
240 minute summer	5	1.003	6	3.6	0.541	0.049	0.1472	86.0

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Results for 100 year +45% CC 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 99.86%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	1	184	67.510	1.230	8.2	4.0655	0.0000	SURCHARGED
240 minute winter	2	184	67.510	1.391	8.0	3.8787	0.0000	SURCHARGED
240 minute winter	3	184	67.510	1.428	4.1	3.6335	0.0000	SURCHARGED
240 minute winter	4	240	67.041	0.821	17.4	84.2463	0.0000	SURCHARGED
240 minute winter	5	188	64.793	0.048	3.9	0.0846	0.0000	OK
240 minute winter	6	188	64.694	0.046	3.9	0.0000	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	5.7	0.275	0.017	18.1296	
240 minute winter	2	1.001	3	4.1	0.293	0.012	4.1942	
240 minute winter	3	Hydro-Brake®	5	2.6				
240 minute winter	4	Hydro-Brake®	5	1.4				
240 minute winter	5	1.003	6	3.9	0.556	0.054	0.1577	92.4

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Results for 100 year +45% CC 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	1	256	66.824	0.544	8.3	1.7998	0.0000	OK
360 minute summer	2	256	66.825	0.706	7.5	1.9691	0.0000	SURCHARGED
360 minute summer	3	256	66.825	0.743	3.3	1.8911	0.0000	SURCHARGED
360 minute summer	4	360	66.944	0.724	17.6	74.2851	0.0000	SURCHARGED
360 minute summer	5	168	64.791	0.046	3.6	0.0806	0.0000	OK
360 minute summer	6	168	64.692	0.044	3.6	0.0000	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	5.4	0.250	0.016	17.7116	
360 minute summer	2	1.001	3	3.3	0.222	0.010	4.1942	
360 minute summer	3	Hydro-Brake®	5	2.2				
360 minute summer	4	Hydro-Brake®	5	1.3				
360 minute summer	5	1.003	6	3.6	0.541	0.049	0.1471	99.0

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Results for 100 year +45% CC 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 99.93%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	1	264	67.204	0.924	6.0	3.0555	0.0000	SURCHARGED
360 minute winter	2	264	67.204	1.085	5.6	3.0266	0.0000	SURCHARGED
360 minute winter	3	264	67.204	1.122	2.9	2.8560	0.0000	SURCHARGED
360 minute winter	4	352	67.037	0.817	12.8	83.8141	0.0000	SURCHARGED
360 minute winter	5	264	64.791	0.046	3.7	0.0817	0.0000	OK
360 minute winter	6	264	64.693	0.045	3.7	0.0000	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	4.1	0.254	0.012	18.1296	
360 minute winter	2	1.001	3	2.9	0.231	0.009	4.1942	
360 minute winter	3	Hydro-Brake®	5	2.3				
360 minute winter	4	Hydro-Brake®	5	1.3				
360 minute winter	5	1.003	6	3.7	0.545	0.050	0.1499	109.7

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Results for 100 year +45% CC 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	1	320	66.724	0.444	6.4	1.4665	0.0000	OK
480 minute summer	2	320	66.724	0.605	6.4	1.6875	0.0000	SURCHARGED
480 minute summer	3	320	66.724	0.642	3.1	1.6341	0.0000	SURCHARGED
480 minute summer	4	456	66.933	0.713	13.6	73.1798	0.0000	SURCHARGED
480 minute summer	5	224	64.791	0.046	3.6	0.0806	0.0000	OK
480 minute summer	6	232	64.692	0.044	3.6	0.0000	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	4.6	0.250	0.013	16.2514	
480 minute summer	2	1.001	3	3.1	0.227	0.009	4.1937	
480 minute summer	3	Hydro-Brake®	5	2.2				
480 minute summer	4	Hydro-Brake®	5	1.3				
480 minute summer	5	1.003	6	3.6	0.541	0.049	0.1470	110.2

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Results for 100 year +45% CC 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 99.96%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	1	344	66.887	0.607	4.8	2.0054	0.0000	SURCHARGED
480 minute winter	2	344	66.886	0.767	4.8	2.1404	0.0000	SURCHARGED
480 minute winter	3	344	66.886	0.804	2.7	2.0473	0.0000	SURCHARGED
480 minute winter	4	456	67.050	0.830	10.1	85.1127	0.0000	SURCHARGED
480 minute winter	5	208	64.791	0.046	3.6	0.0806	0.0000	OK
480 minute winter	6	216	64.692	0.044	3.6	0.0000	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	3.4	0.250	0.010	18.1290	
480 minute winter	2	1.001	3	2.7	0.166	0.008	4.1942	
480 minute winter	3	Hydro-Brake®	5	2.2				
480 minute winter	4	Hydro-Brake®	5	1.4				
480 minute winter	5	1.003	6	3.6	0.541	0.049	0.1470	120.2

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Results for 100 year +45% CC 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	1	390	66.644	0.364	5.2	1.2029	0.0000	OK
600 minute summer	2	390	66.644	0.525	5.1	1.4654	0.0000	OK
600 minute summer	3	390	66.644	0.562	2.8	1.4314	0.0000	SURCHARGED
600 minute summer	4	510	66.920	0.700	11.0	71.8420	0.0000	SURCHARGED
600 minute summer	5	285	64.791	0.046	3.5	0.0805	0.0000	OK
600 minute summer	6	285	64.692	0.044	3.5	0.0000	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	3.7	0.250	0.011	14.1731	
600 minute summer	2	1.001	3	2.8	0.135	0.008	3.9909	
600 minute summer	3	Hydro-Brake®	5	2.2				
600 minute summer	4	Hydro-Brake®	5	1.3				
600 minute summer	5	1.003	6	3.5	0.540	0.049	0.1468	119.0

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Results for 100 year +45% CC 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	1	435	66.702	0.422	4.0	1.3953	0.0000	OK
600 minute winter	2	435	66.702	0.583	4.0	1.6254	0.0000	OK
600 minute winter	3	435	66.702	0.620	2.6	1.5773	0.0000	SURCHARGED
600 minute winter	4	570	67.028	0.808	8.4	82.8558	0.0000	SURCHARGED
600 minute winter	5	270	64.791	0.046	3.5	0.0805	0.0000	OK
600 minute winter	6	270	64.692	0.044	3.5	0.0000	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	3.1	0.245	0.009	15.8107	
600 minute winter	2	1.001	3	2.6	0.178	0.008	4.1776	
600 minute winter	3	Hydro-Brake®	5	2.2				
600 minute winter	4	Hydro-Brake®	5	1.3				
600 minute winter	5	1.003	6	3.5	0.541	0.049	0.1468	130.2

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Results for 100 year +45% CC 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	1	450	66.598	0.318	4.6	1.0502	0.0000	OK
720 minute summer	2	450	66.598	0.479	4.4	1.3360	0.0000	OK
720 minute summer	3	450	66.598	0.516	2.7	1.3133	0.0000	SURCHARGED
720 minute summer	4	585	66.907	0.687	9.8	70.4835	0.0000	SURCHARGED
720 minute summer	5	345	64.791	0.046	3.5	0.0805	0.0000	OK
720 minute summer	6	345	64.692	0.044	3.5	0.0000	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	3.1	0.245	0.009	12.6361	
720 minute summer	2	1.001	3	2.7	0.135	0.008	3.7155	
720 minute summer	3	Hydro-Brake®	5	2.2				
720 minute summer	4	Hydro-Brake®	5	1.3				
720 minute summer	5	1.003	6	3.5	0.540	0.049	0.1468	128.3

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Results for 100 year +45% CC 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	1	495	66.606	0.326	3.5	1.0761	0.0000	OK
720 minute winter	2	495	66.606	0.487	3.8	1.3569	0.0000	OK
720 minute winter	3	495	66.606	0.524	2.5	1.3323	0.0000	SURCHARGED
720 minute winter	4	600	67.008	0.788	7.3	80.8083	0.0000	SURCHARGED
720 minute winter	5	330	64.791	0.046	3.5	0.0805	0.0000	OK
720 minute winter	6	330	64.692	0.044	3.5	0.0000	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	2.9	0.245	0.008	12.9005	
720 minute winter	2	1.001	3	2.5	0.196	0.007	3.7644	
720 minute winter	3	Hydro-Brake®	5	2.2				
720 minute winter	4	Hydro-Brake®	5	1.3				
720 minute winter	5	1.003	6	3.5	0.540	0.049	0.1466	140.6

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Results for 100 year +45% CC 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	1	570	66.516	0.236	3.7	0.7816	0.0000	OK
960 minute summer	2	570	66.517	0.398	3.9	1.1088	0.0000	OK
960 minute summer	3	570	66.517	0.435	2.6	1.1060	0.0000	SURCHARGED
960 minute summer	4	705	66.881	0.661	7.9	67.8184	0.0000	SURCHARGED
960 minute summer	5	480	64.791	0.046	3.5	0.0804	0.0000	OK
960 minute summer	6	480	64.692	0.044	3.5	0.0000	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	2.8	0.245	0.008	9.6962	
960 minute summer	2	1.001	3	2.6	0.135	0.007	3.1032	
960 minute summer	3	Hydro-Brake®	5	2.2				
960 minute summer	4	Hydro-Brake®	5	1.3				
960 minute summer	5	1.003	6	3.5	0.540	0.049	0.1466	145.3

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Results for 100 year +45% CC 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	1	615	66.492	0.212	2.8	0.7016	0.0000	OK
960 minute winter	2	615	66.492	0.373	3.2	1.0408	0.0000	OK
960 minute winter	3	615	66.492	0.410	2.4	1.0439	0.0000	SURCHARGED
960 minute winter	4	750	66.973	0.753	5.9	77.2057	0.0000	SURCHARGED
960 minute winter	5	450	64.790	0.045	3.5	0.0803	0.0000	OK
960 minute winter	6	450	64.692	0.044	3.5	0.0000	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	2.5	0.243	0.007	8.7954	
960 minute winter	2	1.001	3	2.4	0.184	0.007	2.8998	
960 minute winter	3	Hydro-Brake®	5	2.2				
960 minute winter	4	Hydro-Brake®	5	1.3				
960 minute winter	5	1.003	6	3.5	0.539	0.048	0.1461	159.0

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Results for 100 year +45% CC 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 99.97%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	1	810	66.392	0.112	2.7	0.3701	0.0000	OK
1440 minute summer	2	810	66.392	0.273	3.4	0.7612	0.0000	OK
1440 minute summer	3	810	66.392	0.310	2.4	0.7887	0.0000	SURCHARGED
1440 minute summer	4	990	66.825	0.605	5.6	62.0219	0.0000	SURCHARGED
1440 minute summer	5	750	64.790	0.045	3.5	0.0801	0.0000	OK
1440 minute summer	6	750	64.692	0.044	3.5	0.0000	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	2.7	0.246	0.008	5.1780	
1440 minute summer	2	1.001	3	2.4	0.132	0.007	2.0210	
1440 minute summer	3	Hydro-Brake®	5	2.2				
1440 minute summer	4	Hydro-Brake®	5	1.3				
1440 minute summer	5	1.003	6	3.5	0.539	0.048	0.1458	177.3

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Results for 100 year +45% CC 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 99.90%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	1	840	66.322	0.042	2.0	0.1391	0.0000	OK
1440 minute winter	2	840	66.322	0.203	2.6	0.5658	0.0000	OK
1440 minute winter	3	840	66.322	0.240	2.3	0.6104	0.0000	SURCHARGED
1440 minute winter	4	1050	66.893	0.673	4.2	69.0321	0.0000	SURCHARGED
1440 minute winter	5	750	64.790	0.045	3.5	0.0794	0.0000	OK
1440 minute winter	6	750	64.691	0.043	3.5	0.0000	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	2.0	0.250	0.006	2.9718	
1440 minute winter	2	1.001	3	2.3	0.133	0.007	1.4061	
1440 minute winter	3	Hydro-Brake®	5	2.2				
1440 minute winter	4	Hydro-Brake®	5	1.3				
1440 minute winter	5	1.003	6	3.5	0.536	0.047	0.1440	192.5

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