Drainage Design Report

Flow+

v5.0

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Network	Storm Network
Filename	Z:\Projects\18085 James Road, Crowland\06 Calculations\storm drainage.pfd
Username	Zoi Katsaouni (Zoi@parsonsengineers.co.uk)
Last analysed	20/12/2018 13:45:15
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Causeway Sales

Tel:	+44(0) 1628 552000
Fax:	+44(0) 1628 552001
Email:	marketing@causeway.com
Web:	www.causeway.com

Technical support web portal:

http://support.causeway.com

Rainfall Methodology	FSR
Return Period (years)	100
Additional Flow (%)	40
FSR Region	England and Wales
M5-60 (mm)	20.000
Ratio-R	0.400
CV	0.750
Time of Entry (mins)	10.00
Maximum Time of Concentration (mins)	30.00
Maximum Rainfall (mm/hr)	50.0
Minimum Velocity (m/s)	1.00
Connection Type	Level Inverts
Minimum Backdrop Height (m)	0.200
Preferred Cover Depth (m)	0.800
Enforce best practice design rules	x

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	Name	Area (ha)	T of E (mins)	Add Inflow (l/s)	Cover Level (m)	Node Type	Manhole Type	Diameter (mm)	Width (mm)	Easting (m)	Northing (m)	Depth (m)	Notes
	MHS01	0.043	10.00		2.870	Manhole	Adoptable	1200		3737.811	834.745	1.270	
	MHS02	0.056	10.00		2.875	Manhole	Adoptable	1200		3757.186	809.470	1.455	
	MHS03	0.044	10.00		2.450	Manhole	Adoptable	1200		3721.128	807.083	0.940	
	MHS04	0.081	10.00		2.995	Manhole	Adoptable	1200		3738.480	784.821	1.733	
	MHS05	0.105	10.00		2.950	Manhole	Adoptable	1200		3757.304	756.717	1.885	
	MHS06	0.080	10.00		2.650	Manhole	Adoptable	1200		3770.545	727.188	1.800	
	MHS07	0.044	10.00		2.190	Manhole	Adoptable	1200		3784.202	707.935	1.190	
	MHS08	0.095	10.00		2.170	Manhole	Adoptable	1200		3806.663	689.972	0.970	
	MHS09	0.014	10.00		2.600	Manhole	Adoptable	1200		3783.584	741.407	2.090	
	MHS10	0.193	10.00		2.450	Manhole	Adoptable	1200		3800.032	757.602	2.060	
	MHS11	0.077	10.00		2.420	Manhole	Adoptable	1200		3817.533	773.633	2.150	
	MHS12				0.600	Manhole	Adoptable	30000		3847.688	797.343	0.500	
	MHS13				0.700	Manhole	Adoptable	1200		3864.859	806.687	0.700	
	MHS14				0.600	Manhole	Adoptable	1200		3923.961	950.270	0.981	

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	Name	US Node	DS Node	Length (m)	ks (mm) / n	Velocity Equation	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	Link Type	T of C (mins)	Rain (mm/hr)	Con Offset (m)	Min DS IL (m)
?	PN001	MHS01	MHS02	31.847	0.600	Colebrook-White	1.600	1.420	0.180	176.9	150	Circular	10.71	50.0		
?	PN002	MHS02	MHS04	30.943	0.600	Colebrook-White	1.420	1.262	0.158	195.8	150	Circular	11.43	50.0		
?	PN003	MHS03	MHS04	28.226	0.600	Colebrook-White	1.510	1.262	0.248	113.8	150	Circular	10.50	50.0		
?	PN004	MHS04	MHS05	33.826	0.600	Colebrook-White	1.262	1.065	0.197	171.7	150	Circular	12.17	50.0		
?	PN005	MHS05	MHS06	32.362	0.600	Colebrook-White	1.065	0.850	0.215	150.5	225	Circular	12.67	50.0		
?	PN006	MHS07	MHS06	23.605	0.600	Colebrook-White	1.000	0.850	0.150	157.4	200	Circular	10.88	50.0		
?	PN007	MHS08	MHS07	28.760	0.600	Colebrook-White	1.200	1.000	0.200	143.8	200	Circular	10.48	50.0		
?	PN008	MHS06	MHS09	19.292	0.600	Colebrook-White	0.850	0.550	0.300	64.3	225	Circular	12.87	50.0		
?	PN009	MHS09	MHS10	23.083	0.600	Colebrook-White	0.510	0.390	0.120	192.4	225	Circular	13.28	50.0		
?	PN010	MHS10	MHS11	23.733	0.600	Colebrook-White	0.390	0.270	0.120	197.8	225	Circular	13.71	50.0		
?	PN011	MHS11	MHS12	38.360	0.600	Colebrook-White	0.270	0.100	0.170	225.6	225	Circular	14.44	50.0		
?	PN012	MHS12	MHS13	19.549	0.600	Colebrook-White	0.100	0.000	0.100	195.5	300	Circular	14.74	50.0		
?	PN013	MHS13	MHS14	155.271	0.600	Colebrook-White	0.000	-0.381	0.381	407.5	300	Circular	18.09	50.0		

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	Name	US Node	DS Node	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (ha)	Pro Depth (mm)	Pro Velocity (m/s)	Notes
?	PN001	MHS01	MHS02	0.752	13.3	8.2	1.120	1.305	0.043	0.0	85	0.791	Velocity is less than the specified minimum
?	PN002	MHS02	MHS04	0.714	12.6	18.8	1.305	1.583	0.099	0.0	150	0.728	Velocity is less than the specified minimum | Link has insufficient capacity
?	PN003	MHS03	MHS04	0.941	16.6	8.3	0.790	1.583	0.044	0.0	75	0.942	Velocity is less than the specified minimum | Upstream Depth is less than the specified minimum
?	PN004	MHS04	MHS05	0.764	13.5	42.5	1.583	1.735	0.224	0.0	150	0.778	Velocity is less than the specified minimum | Link has insufficient capacity | Downstream Depth is more than twice the specified minimum
?	PN005	MHS05	MHS06	1.063	42.3	62.4	1.660	1.575	0.329	0.0	225	1.083	Link has insufficient capacity | Upstream Depth is more than twice the specified minimum
?	PN006	MHS07	MHS06	0.963	30.3	26.4	0.990	1.600	0.139	0.0	145	1.082	Velocity is less than the specified minimum
?	PN007	MHS08	MHS07	1.008	31.7	18.0	0.770	0.990	0.095	0.0	108	1.040	Upstream Depth is less than the specified minimum
?	PN008	MHS06	MHS09	1.633	64.9	104.0	1.575	1.825	0.548	0.0	225	1.663	Link has insufficient capacity | Downstream Depth is more than twice the specified minimum
?	PN009	MHS09	MHS10	0.939	37.3	106.6	1.865	1.835	0.562	0.0	225	0.956	Velocity is less than the specified minimum | Link has insufficient capacity | Upstream Depth is more than twice the specified minimum | Downstream Depth is more than twice the specified minimum
?	PN010	MHS10	MHS11	0.926	36.8	143.2	1.835	1.925	0.755	0.0	225	0.943	Velocity is less than the specified minimum | Link has insufficient capacity | Upstream Depth is more than twice the specified minimum | Downstream Depth is more than twice the specified minimum
?	PN011	MHS11	MHS12	0.866	34.4	157.9	1.925	0.275	0.832	0.0	225	0.882	Velocity is less than the specified minimum | Link has insufficient capacity | Upstream Depth is more than twice the specified minimum | Downstream Depth is less than the specified minimum
?	PN012	MHS12	MHS13	1.121	79.2	157.9	0.200	0.400	0.832	0.0	300	1.135	Link has insufficient capacity | Upstream Depth is less than the specified minimum | Downstream Depth is less than the specified minimum
?	PN013	MHS13	MHS14	0.772	54.6	157.9	0.400	0.681	0.832	0.0	300	0.782	Velocity is less than the specified minimum | Link has insufficient capacity | Upstream Depth is less than the specified minimum | Downstream Depth is less than the specified minimum

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Link ID	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)	US Node ID	Dia (mm)	Width (mm)	Node Type	MH Type	DS Node ID	Dia (mm)	Width (mm)	Node Type	MH Type
PN001	31.847	176.9	150	Circular	2.870	1.600	1.120	2.875	1.420	1.305	MHS01	1200		Manhole	Adoptable	MHS02	1200		Manhole	Adoptable
PN002	30.943	195.8	150	Circular	2.875	1.420	1.305	2.995	1.262	1.583	MHS02	1200		Manhole	Adoptable	MHS04	1200		Manhole	Adoptable
PN003	28.226	113.8	150	Circular	2.450	1.510	0.790	2.995	1.262	1.583	MHS03	1200		Manhole	Adoptable	MHS04	1200		Manhole	Adoptable
PN004	33.826	171.7	150	Circular	2.995	1.262	1.583	2.950	1.065	1.735	MHS04	1200		Manhole	Adoptable	MHS05	1200		Manhole	Adoptable
PN005	32.362	150.5	225	Circular	2.950	1.065	1.660	2.650	0.850	1.575	MHS05	1200		Manhole	Adoptable	MHS06	1200		Manhole	Adoptable
PN006	23.605	157.4	200	Circular	2.190	1.000	0.990	2.650	0.850	1.600	MHS07	1200		Manhole	Adoptable	MHS06	1200		Manhole	Adoptable
PN007	28.760	143.8	200	Circular	2.170	1.200	0.770	2.190	1.000	0.990	MHS08	1200		Manhole	Adoptable	MHS07	1200		Manhole	Adoptable
PN008	19.292	64.3	225	Circular	2.650	0.850	1.575	2.600	0.550	1.825	MHS06	1200		Manhole	Adoptable	MHS09	1200		Manhole	Adoptable
PN009	23.083	192.4	225	Circular	2.600	0.510	1.865	2.450	0.390	1.835	MHS09	1200		Manhole	Adoptable	MHS10	1200		Manhole	Adoptable
PN010	23.733	197.8	225	Circular	2.450	0.390	1.835	2.420	0.270	1.925	MHS10	1200		Manhole	Adoptable	MHS11	1200		Manhole	Adoptable
PN011	38.360	225.6	225	Circular	2.420	0.270	1.925	0.600	0.100	0.275	MHS11	1200		Manhole	Adoptable	MHS12	30000		Manhole	Adoptable
PN012	19.549	195.5	300	Circular	0.600	0.100	0.200	0.700	0.000	0.400	MHS12	30000		Manhole	Adoptable	MHS13	1200		Manhole	Adoptable
PN013	155.271	407.5	300	Circular	0.700	0.000	0.400	0.600	-0.381	0.681	MHS13	1200		Manhole	Adoptable	MHS14	1200		Manhole	Adoptable

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Node ID	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Width (mm)	Node Type	MH Type		Link ID	IL (m)	Dia (mm)	Link Type
MHS01	3737.811	834.745	2.870	1.270	1200		Manhole	Adoptable					
									0	PN001	1.600	150	Circular
MHS02	3757.186	809.470	2.875	1.455	1200		Manhole	Adoptable	1	PN001	1.420	150	Circular
									0	PN002	1.420	150	Circular
MHS03	3721.128	807.083	2.450	0.940	1200		Manhole	Adoptable					
									0	PN003	1.510	150	Circular
MHS04	3738.480	784.821	2.995	1.733	1200		Manhole	Adoptable	1	PN003	1.262	150	Circular
									2	PN002	1.262	150	Circular
									0	PN004	1.262	150	Circular
MHS05	3757.304	756.717	2.950	1.885	1200		Manhole	Adoptable	1	PN004	1.065	150	Circular
									0	PN005	1.065	225	Circular
MHS06	3770.545	727.188	2.650	1.800	1200		Manhole	Adoptable	1	PN006	0.850	200	Circular
									2	PN005	0.850	225	Circular
									0	PN008	0.850	225	Circular
MHS07	3784.202	707.935	2.190	1.190	1200		Manhole	Adoptable	1	PN007	1.000	200	Circular
									0	PN006	1.000	200	Circular
MHS08	3806.663	689.972	2.170	0.970	1200		Manhole	Adoptable					

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									0	PN007	1.200	200	Circular
MHS09	3783.584	741.407	2.600	2.090	1200		Manhole	Adoptable	1	PN008	0.550	225	Circular
									0	PN009	0.510	225	Circular
MHS10	3800.032	757.602	2.450	2.060	1200		Manhole	Adoptable	1	PN009	0.390	225	Circular
									0	PN010	0.390	225	Circular
MHS11	3817.533	773.633	2.420	2.150	1200		Manhole	Adoptable	1	PN010	0.270	225	Circular
									0	PN011	0.270	225	Circular
MHS12	3847.688	797.343	0.600	0.500	30000		Manhole	Adoptable	1	PN011	0.100	225	Circular
									0	PN012	0.100	300	Circular
MHS13	3864.859	806.687	0.700	0.700	1200		Manhole	Adoptable	1	PN012	0.000	300	Circular
									0	PN013	0.000	300	Circular
MHS14	3923.961	950.270	0.600	0.981	1200		Manhole	Adoptable	1	PN013	-0.381	300	Circular

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Rainfall Methodology	FSR		Return Period (years)	Climate Change (%)
FSR Region	England and Wales		1	0
M5-60 (mm)	20.000		5	0
Ratio-R	0.400		10	0
Summer CV	0.750		30	0
Winter CV	0.840		100	0
Analysis Speed	Normal		100	40
Drain Down Time (mins)	240			
Additional Storage (m³/ha)	20.0			
Storm Durations (mins)	15			
	30			
	60			
	120			
	180			
	240			
	360			
	480			
	600			
	720			
	960			
	1440			
Check Discharge Rate(s)	x			
1 year (l/s)				
30 year (l/s)				
100 year (l/s)				
Check Discharge Volume	x			
100 year 360 minute (m³)				

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Hydro-Brake®

Node	Flap Valve	Online / Offline	Downstream Link	Replaces Downstream Link	Loop to Node	Invert Level (m)	Design Depth (m)	Design Flow (l/s)	Objective	Sump Available	Product Number	Min Outlet Diameter (m)	Min Node Diameter (mm)
MHS13	x	Online				0.000	1.500	8.2	(HE) Minimise upstream storage		CTL-SHE-0126-8200-1500-8200	0.150	1200
MHS12	x	Online				0.100	0.300	16.0	(HE) Minimise upstream storage		CTL-SHE-0190-1600-0300-1600	0.225	1200

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Depth/Area/Inf Area

Node	Base Inf Coefficient (m/hr)	Side Inf Coefficient (m/hr)	Safety Factor	Porosity	Invert Level (m)	Time to half empty (mins)	Depth (m)	Area (m²)	Inf. Area (m²)
MHS02	0.00000	0.00000	2.0	1.00	1.420	62	0.000	0.0	0.0
							0.370	0.0	0.0
							0.371	120.0	0.0
							0.570	120.0	0.0
							0.571	0.0	0.0
MHS03	0.00000	0.00000	2.0	1.00	1.510		0.000	0.0	0.0
							0.739	0.0	0.0
							0.740	177.0	0.0
							0.939	177.0	0.0
							0.940	0.0	0.0
MHS04	0.00000	0.00000	2.0	1.00	1.262		0.000	0.0	0.0
							1.532	0.0	0.0
							1.533	41.0	0.0
							1.732	41.0	0.0
							1.733	0.0	0.0
MHS05	0.00000	0.00000	2.0	1.00	1.065		0.000	0.0	0.0
							1.684	0.0	0.0
							1.685	124.0	0.0
							1.884	124.0	0.0
							1.885	0.0	0.0
MHS06	0.00000	0.00000	2.0	1.00	0.850		0.000	0.0	0.0
							1.599	0.0	0.0
							1.600	83.0	0.0
							1.799	83.0	0.0
							1.800	0.0	0.0
MHS10	0.00000	0.00000	2.0	1.00	0.390		0.000	0.0	0.0
							1.859	0.0	0.0

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							1.860	38.0	0.0
							2.059	38.0	0.0
							2.060	0.0	0.0
MHS07	0.00000	0.00000	2.0	1.00	1.000		0.000	0.0	0.0
							0.989	0.0	0.0
							0.990	49.0	0.0
							1.189	49.0	0.0
							1.190	0.0	0.0
MHS08	0.00000	0.00000	2.0	1.00	1.200		0.000	0.0	0.0
							0.769	0.0	0.0
							0.770	139.0	0.0
							0.969	139.0	0.0
							0.970	0.0	0.0
MHS02	0.00000	0.00000	2.0	1.00	1.420		0.000	0.0	0.0
							1.254	0.0	0.0
							1.255	27.0	0.0
							1.454	27.0	0.0
							1.455	0.0	0.0
MHS11	0.00000	0.00000	2.0	1.00	0.270		0.000	0.0	0.0
							1.949	0.0	0.0
							1.950	215.0	0.0
							2.149	215.0	0.0
							2.150	0.0	0.0
MHS09	0.00000	0.00000	2.0	1.00	0.510		0.000	0.0	0.0
							1.889	0.0	0.0
							1.890	26.0	0.0
							2.089	26.0	0.0
							2.090	0.0	0.0
Link Surround									

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Node	Base Inf Coefficient (m/hr)	Side Inf Coefficient (m/hr)	Safety Factor	Porosity	Invert Level (m)	Time to half empty (mins)	Link	Surround Shape	Diameter (mm)
MHS04	0.00000	0.00000	2.0	1.00	1.262	35	PN003	(Trench)	400
MHS05	0.00000	0.00000	2.0	1.00	1.065	22	PN004	(Trench)	400
MHS06	0.00000	0.00000	2.0	1.00	0.850	33	PN005	(Trench)	400
MHS07	0.00000	0.00000	2.0	1.00	1.000	42	PN007	(Trench)	400
MHS10	0.00000	0.00000	2.0	1.00	0.390	20	PN009	(Trench)	400
MHS11	0.00000	0.00000	2.0	1.00	0.270	11	PN010	(Trench)	400
MHS06	0.00000	0.00000	2.0	1.00	0.850	35	PN006	(Trench)	400

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Default Values			Overrides					
Entry Loss (manhole)	0.250		**Link**	**Entry Loss**	**Exit Loss**		**Node**	**Flood Risk (m)**
Exit Loss (manhole)	0.250							
Entry Loss (junction)	0.000							
Exit Loss (junction)	0.000							
Flood Risk (m)	0.300							

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

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100 year 360 minute (m³)	

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Results for 1 year Critical Storm Duration. Lowest mass balance: 98.95%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	MHS01	14	1.657	0.057	4.1	0.1029	0.0000	OK	PN001	MHS02	4.1	0.461	0.308	0.3687	
15 minute winter	MHS02	16	1.578	0.158	9.4	0.3004	0.0000	SURCHARGED	PN002	MHS04	8.8	0.561	0.699	0.5447	
15 minute winter	MHS03	14	1.561	0.051	4.2	0.1059	0.0000	OK	PN003	MHS04	4.2	0.353	0.253	0.3234	
15 minute winter	MHS04	17	1.524	0.262	20.7	1.8372	0.0000	SURCHARGED	PN004	MHS05	16.6	0.945	1.227	0.5955	
30 minute winter	MHS05	27	1.299	0.234	25.6	2.0082	0.0000	SURCHARGED	PN005	MHS06	25.0	0.959	0.590	1.2871	
15 minute winter	MHS06	19	1.261	0.411	46.4	5.9499	0.0000	SURCHARGED	PN008	MHS09	33.3	1.434	0.513	0.7673	
15 minute winter	MHS07	18	1.263	0.263	13.3	1.7856	0.0000	SURCHARGED	PN006	MHS06	13.0	0.676	0.430	0.7388	
15 minute winter	MHS08	12	1.273	0.073	9.1	0.2258	0.0000	OK	PN007	MHS07	9.1	0.751	0.288	0.5928	
15 minute winter	MHS09	18	1.215	0.705	34.6	0.8921	0.0000	SURCHARGED	PN009	MHS10	32.9	0.826	0.880	0.9180	
15 minute winter	MHS10	17	1.170	0.780	49.5	8.0698	0.0000	SURCHARGED	PN010	MHS11	39.8	1.002	1.082	0.9439	
15 minute winter	MHS11	16	1.066	0.796	39.8	7.5187	0.0000	SURCHARGED	PN011	MHS12	48.0	1.867	1.393	0.9453	
360 minute winter	MHS12	264	0.232	0.132	17.5	93.5936	0.0000	OK	Hydro-Brake®	MHS13	6.3				
360 minute winter	MHS13	264	0.135	0.135	6.3	0.1528	0.0000	OK	Hydro-Brake®	MHS14	6.3				121.4
15 minute summer	MHS14	1	-0.381	0.000	3.1	0.0000	0.0000	OK							

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Results for 5 year Critical Storm Duration. Lowest mass balance: 98.95%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	MHS01	14	1.848	0.248	6.9	0.4490	0.0000	SURCHARGED	PN001	MHS02	6.9	0.501	0.517	0.5607	
30 minute winter	MHS02	29	1.816	0.396	14.5	3.7846	0.0000	SURCHARGED	PN002	MHS04	10.1	0.574	0.801	0.5447	
30 minute winter	MHS03	25	1.824	0.314	6.7	0.6497	0.0000	SURCHARGED	PN003	MHS04	6.0	0.419	0.362	0.4969	
30 minute winter	MHS04	26	1.805	0.543	27.5	5.3487	0.0000	SURCHARGED	PN004	MHS05	16.0	0.908	1.184	0.5955	
30 minute winter	MHS05	28	1.596	0.531	31.5	6.4386	0.0000	SURCHARGED	PN005	MHS06	26.8	0.976	0.633	1.2871	
30 minute winter	MHS06	28	1.545	0.695	50.1	12.8219	0.0000	SURCHARGED	PN008	MHS09	40.6	1.338	0.626	0.7673	
30 minute winter	MHS07	28	1.559	0.559	19.5	5.4243	0.0000	SURCHARGED	PN006	MHS06	13.8	0.662	0.456	0.7388	
30 minute winter	MHS08	28	1.566	0.366	14.4	1.1304	0.0000	SURCHARGED	PN007	MHS07	13.2	0.791	0.418	0.9001	
15 minute winter	MHS09	18	1.474	0.964	39.2	1.2194	0.0000	SURCHARGED	PN009	MHS10	39.7	0.999	1.064	0.9180	
15 minute winter	MHS10	17	1.419	1.029	59.4	11.1186	0.0000	SURCHARGED	PN010	MHS11	46.0	1.156	1.248	0.9439	
15 minute winter	MHS11	16	1.262	0.992	46.7	9.7370	0.0000	SURCHARGED	PN011	MHS12	56.3	2.152	1.635	1.1406	
240 minute winter	MHS12	200	0.309	0.209	35.8	147.8679	0.0000	OK	Hydro-Brake®	MHS13	7.4				
240 minute winter	MHS13	200	0.202	0.202	7.4	0.2285	0.0000	OK	Hydro-Brake®	MHS14	7.4				149.5
15 minute summer	MHS14	1	-0.381	0.000	5.4	0.0000	0.0000	OK							

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Results for 10 year Critical Storm Duration. Lowest mass balance: 98.95%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	MHS01	15	1.872	0.272	7.9	0.4910	0.0000	SURCHARGED	PN001	MHS02	7.8	0.498	0.590	0.5607	
30 minute winter	MHS02	31	1.850	0.430	18.3	7.9509	0.0000	SURCHARGED	PN002	MHS04	12.2	0.692	0.965	0.5447	
15 minute winter	MHS03	16	1.880	0.370	8.1	0.7653	0.0000	SURCHARGED	PN003	MHS04	7.3	0.492	0.436	0.4969	
30 minute winter	MHS04	25	1.840	0.578	29.4	5.8233	0.0000	SURCHARGED	PN004	MHS05	16.6	0.990	1.233	0.5955	
30 minute winter	MHS05	28	1.702	0.637	33.9	8.1224	0.0000	SURCHARGED	PN005	MHS06	26.7	0.977	0.632	1.2871	
30 minute winter	MHS06	28	1.659	0.809	50.5	15.6173	0.0000	SURCHARGED	PN008	MHS09	42.2	1.396	0.649	0.7673	
30 minute winter	MHS07	28	1.677	0.677	21.2	7.0125	0.0000	SURCHARGED	PN006	MHS06	14.3	0.666	0.472	0.7388	
30 minute winter	MHS08	28	1.687	0.487	16.7	1.5040	0.0000	SURCHARGED	PN007	MHS07	14.1	0.791	0.444	0.9001	
15 minute winter	MHS09	18	1.571	1.061	40.6	1.3428	0.0000	SURCHARGED	PN009	MHS10	41.2	1.036	1.103	0.9180	
15 minute winter	MHS10	17	1.514	1.124	62.9	12.2815	0.0000	SURCHARGED	PN010	MHS11	47.8	1.203	1.299	0.9439	
15 minute winter	MHS11	16	1.331	1.061	50.8	10.5170	0.0000	SURCHARGED	PN011	MHS12	59.3	2.252	1.721	1.2231	
240 minute winter	MHS12	208	0.348	0.248	40.9	175.0325	0.0000	OK	Hydro-Brake®	MHS13	7.7				
240 minute winter	MHS13	208	0.238	0.238	7.7	0.2694	0.0000	OK	Hydro-Brake®	MHS14	7.7				163.5
15 minute summer	MHS14	1	-0.381	0.000	5.9	0.0000	0.0000	OK							

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Results for 30 year Critical Storm Duration. Lowest mass balance: 98.95%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	MHS01	15	1.937	0.337	10.1	0.6099	0.0000	SURCHARGED	PN001	MHS02	9.8	0.558	0.739	0.5607	
30 minute winter	MHS02	34	1.932	0.512	28.3	17.9708	0.0000	SURCHARGED	PN002	MHS04	15.0	0.850	1.185	0.5447	
30 minute winter	MHS03	25	2.007	0.497	9.9	1.0273	0.0000	SURCHARGED	PN003	MHS04	8.7	0.494	0.522	0.4969	
30 minute winter	MHS04	26	1.967	0.705	32.5	7.5134	0.0000	SURCHARGED	PN004	MHS05	19.2	1.110	1.422	0.5955	
30 minute winter	MHS05	28	1.921	0.856	38.8	11.5652	0.0000	SURCHARGED	PN005	MHS06	27.7	1.127	0.656	1.2871	
30 minute winter	MHS06	28	1.890	1.040	52.7	21.2469	0.0000	SURCHARGED	PN008	MHS09	44.7	1.405	0.689	0.7673	
30 minute winter	MHS07	28	1.918	0.918	27.0	10.2310	0.0000	FLOOD RISK	PN006	MHS06	14.7	0.676	0.486	0.7388	
30 minute winter	MHS08	28	1.933	0.733	21.4	2.2655	0.0000	FLOOD RISK	PN007	MHS07	17.2	0.807	0.543	0.9001	
30 minute winter	MHS09	27	1.795	1.285	44.7	1.6254	0.0000	SURCHARGED	PN009	MHS10	45.5	1.144	1.218	0.9180	
15 minute winter	MHS10	17	1.709	1.319	64.9	14.6684	0.0000	SURCHARGED	PN010	MHS11	51.2	1.288	1.391	0.9439	
15 minute winter	MHS11	17	1.477	1.207	58.2	12.1717	0.0000	SURCHARGED	PN011	MHS12	65.0	2.433	1.886	1.3544	
240 minute winter	MHS12	232	0.428	0.328	49.3	232.1873	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.0				
240 minute winter	MHS13	232	0.316	0.316	8.0	0.3574	0.0000	SURCHARGED	Hydro-Brake®	MHS14	8.0				180.2
15 minute summer	MHS14	1	-0.381	0.000	6.9	0.0000	0.0000	OK							

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Results for 100 year Critical Storm Duration. Lowest mass balance: 98.95%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	MHS01	30	2.284	0.684	12.7	1.2362	0.0000	SURCHARGED	PN001	MHS02	12.0	0.682	0.903	0.5607	
30 minute winter	MHS02	30	2.271	0.851	39.9	25.6170	0.0000	SURCHARGED	PN002	MHS04	15.5	0.879	1.225	0.5447	
30 minute winter	MHS03	26	2.250	0.740	13.0	1.5669	0.0000	FLOOD RISK	PN003	MHS04	11.0	0.624	0.661	0.4969	
30 minute winter	MHS04	32	2.232	0.970	34.9	11.0508	0.0000	SURCHARGED	PN004	MHS05	19.6	1.127	1.453	0.5955	
30 minute winter	MHS05	26	2.144	1.079	44.4	15.0841	0.0000	SURCHARGED	PN005	MHS06	29.0	1.137	0.685	1.2871	
30 minute winter	MHS06	27	2.071	1.221	53.3	25.6695	0.0000	SURCHARGED	PN008	MHS09	51.3	1.421	0.790	0.7673	
30 minute winter	MHS07	29	2.054	1.054	35.2	15.2372	0.0000	FLOOD RISK	PN006	MHS06	26.3	0.841	0.870	0.7388	
30 minute winter	MHS08	32	2.055	0.855	28.0	14.4620	0.0000	FLOOD RISK	PN007	MHS07	22.8	0.813	0.719	0.9001	
30 minute winter	MHS09	26	2.030	1.520	51.3	1.9234	0.0000	SURCHARGED	PN009	MHS10	51.8	1.302	1.387	0.9180	
30 minute winter	MHS10	25	1.982	1.592	71.0	18.0190	0.0000	SURCHARGED	PN010	MHS11	59.6	1.498	1.618	0.9439	
15 minute winter	MHS11	17	1.682	1.412	68.8	14.5079	0.0000	SURCHARGED	PN011	MHS12	71.8	2.652	2.084	1.4874	
240 minute winter	MHS12	240	0.548	0.448	53.9	316.5677	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.2				
240 minute winter	MHS13	240	0.434	0.434	8.2	0.4909	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				191.9
15 minute summer	MHS14	1	-0.381	0.000	7.3	0.0000	0.0000	OK							

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Results for 100 year +40% Critical Storm Duration. Lowest mass balance: 98.95%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	MHS01	25	2.855	1.255	17.7	2.2696	0.0000	FLOOD RISK	PN001	MHS02	16.6	0.945	1.251	0.5607	
30 minute winter	MHS02	29	2.764	1.344	56.4	28.9850	0.0000	FLOOD RISK	PN002	MHS04	-17.6	-0.998	-1.391	0.5447	
60 minute winter	MHS03	59	2.379	0.869	24.6	24.6871	0.0000	FLOOD RISK	PN003	MHS04	15.3	0.871	0.922	0.4969	
30 minute winter	MHS04	28	2.590	1.328	44.7	15.8409	0.0000	SURCHARGED	PN004	MHS05	20.1	1.154	1.492	0.5955	
30 minute winter	MHS05	27	2.484	1.419	53.5	20.4582	0.0000	SURCHARGED	PN005	MHS06	29.3	1.144	0.694	1.2871	
30 minute winter	MHS06	27	2.363	1.513	61.0	32.7988	0.0000	FLOOD RISK	PN008	MHS09	55.3	1.457	0.851	0.7673	
30 minute winter	MHS07	27	2.190	1.190	47.3	23.6352	7.2527	FLOOD	PN006	MHS06	-31.5	-1.005	-1.040	0.7388	
60 minute winter	MHS08	48	2.170	0.970	38.5	30.7973	6.1036	FLOOD	PN007	MHS07	24.4	0.778	0.769	0.9001	
30 minute winter	MHS09	27	2.340	1.830	55.3	2.3148	0.0000	FLOOD RISK	PN009	MHS10	55.6	1.398	1.489	0.9180	
30 minute winter	MHS10	26	2.308	1.918	84.1	24.2186	0.0000	FLOOD RISK	PN010	MHS11	67.2	1.691	1.826	0.9439	
15 minute winter	MHS11	16	1.993	1.723	81.2	18.0226	0.0000	SURCHARGED	PN011	MHS12	81.3	2.930	2.360	1.5256	
360 minute winter	MHS12	240	0.600	0.500	55.1	353.4290	124.9381	FLOOD	Hydro-Brake®	MHS13	8.3				
120 minute summer	MHS13	148	0.486	0.486	8.3	0.5500	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				152.5
15 minute summer	MHS14	1	-0.381	0.000	7.8	0.0000	0.0000	OK							

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Results for 1 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 99.91%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	MHS01	13	1.654	0.054	3.7	0.0973	0.0000	OK	PN001	MHS02	3.7	0.447	0.278	0.2884	
15 minute summer	MHS02	16	1.523	0.103	8.5	0.1950	0.0000	OK	PN002	MHS04	8.4	0.558	0.667	0.4710	
15 minute summer	MHS03	14	1.558	0.048	3.7	0.0992	0.0000	OK	PN003	MHS04	3.7	0.358	0.223	0.3169	
15 minute summer	MHS04	17	1.481	0.219	19.0	1.3269	0.0000	SURCHARGED	PN004	MHS05	16.3	0.934	1.205	0.5955	
15 minute summer	MHS05	19	1.249	0.184	24.9	1.2935	0.0000	OK	PN005	MHS06	24.6	0.979	0.583	1.2054	
15 minute summer	MHS06	19	1.221	0.371	43.0	5.0934	0.0000	SURCHARGED	PN008	MHS09	34.0	1.446	0.524	0.7673	
15 minute summer	MHS07	19	1.225	0.225	12.1	1.3684	0.0000	SURCHARGED	PN006	MHS06	11.8	0.675	0.389	0.7388	
15 minute summer	MHS08	13	1.269	0.069	8.1	0.2119	0.0000	OK	PN007	MHS07	8.1	0.729	0.256	0.5716	
15 minute summer	MHS09	18	1.177	0.667	35.2	0.8433	0.0000	SURCHARGED	PN009	MHS10	33.8	0.851	0.906	0.9180	
15 minute summer	MHS10	17	1.132	0.742	50.0	7.6070	0.0000	SURCHARGED	PN010	MHS11	38.2	0.960	1.037	0.9439	
15 minute summer	MHS11	17	1.033	0.763	38.4	7.1326	0.0000	SURCHARGED	PN011	MHS12	46.5	1.814	1.351	0.9200	
15 minute summer	MHS12	35	0.165	0.065	46.5	45.7117	0.0000	OK	Hydro-Brake®	MHS13	3.1				
15 minute summer	MHS13	35	0.077	0.077	3.1	0.0874	0.0000	OK	Hydro-Brake®	MHS14	3.1				23.9
15 minute summer	MHS14	1	-0.381	0.000	3.1	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	MHS01	14	1.657	0.057	4.1	0.1029	0.0000	OK	PN001	MHS02	4.1	0.461	0.308	0.3687	
15 minute winter	MHS02	16	1.578	0.158	9.4	0.3004	0.0000	SURCHARGED	PN002	MHS04	8.8	0.561	0.699	0.5447	
15 minute winter	MHS03	14	1.561	0.051	4.2	0.1059	0.0000	OK	PN003	MHS04	4.2	0.353	0.253	0.3234	
15 minute winter	MHS04	17	1.524	0.262	20.7	1.8372	0.0000	SURCHARGED	PN004	MHS05	16.6	0.945	1.227	0.5955	
15 minute winter	MHS05	19	1.299	0.234	26.5	1.9978	0.0000	SURCHARGED	PN005	MHS06	26.0	0.968	0.615	1.2871	
15 minute winter	MHS06	19	1.261	0.411	46.4	5.9499	0.0000	SURCHARGED	PN008	MHS09	33.3	1.434	0.513	0.7673	
15 minute winter	MHS07	18	1.263	0.263	13.3	1.7856	0.0000	SURCHARGED	PN006	MHS06	13.0	0.676	0.430	0.7388	
15 minute winter	MHS08	12	1.273	0.073	9.1	0.2258	0.0000	OK	PN007	MHS07	9.1	0.751	0.288	0.5928	
15 minute winter	MHS09	18	1.215	0.705	34.6	0.8921	0.0000	SURCHARGED	PN009	MHS10	32.9	0.826	0.880	0.9180	
15 minute winter	MHS10	17	1.170	0.780	49.5	8.0698	0.0000	SURCHARGED	PN010	MHS11	39.8	1.002	1.082	0.9439	
15 minute winter	MHS11	16	1.066	0.796	39.8	7.5187	0.0000	SURCHARGED	PN011	MHS12	48.0	1.867	1.393	0.9453	
15 minute winter	MHS12	36	0.172	0.072	48.0	51.0743	0.0000	OK	Hydro-Brake®	MHS13	3.7				
15 minute winter	MHS13	36	0.087	0.087	3.7	0.0989	0.0000	OK	Hydro-Brake®	MHS14	3.7				28.2
15 minute winter	MHS14	1	-0.381	0.000	3.7	0.0000	0.0000	OK							

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Results for 1 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 99.94%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	MHS01	20	1.654	0.054	3.8	0.0981	0.0000	OK	PN001	MHS02	3.7	0.450	0.282	0.2995	
30 minute summer	MHS02	24	1.530	0.110	8.6	0.2085	0.0000	OK	PN002	MHS04	8.5	0.536	0.671	0.4859	
30 minute summer	MHS03	20	1.559	0.049	3.9	0.1014	0.0000	OK	PN003	MHS04	3.9	0.323	0.232	0.3190	
30 minute summer	MHS04	25	1.493	0.231	19.4	1.4567	0.0000	SURCHARGED	PN004	MHS05	16.1	0.920	1.192	0.5955	
30 minute summer	MHS05	26	1.256	0.191	25.1	1.3934	0.0000	OK	PN005	MHS06	24.7	0.966	0.585	1.2255	
30 minute summer	MHS06	26	1.222	0.372	42.2	5.1087	0.0000	SURCHARGED	PN008	MHS09	32.5	1.357	0.500	0.7673	
30 minute summer	MHS07	26	1.230	0.230	12.2	1.4251	0.0000	SURCHARGED	PN006	MHS06	11.5	0.661	0.380	0.7388	
30 minute summer	MHS08	20	1.269	0.069	8.3	0.2142	0.0000	OK	PN007	MHS07	8.3	0.730	0.261	0.5779	
30 minute summer	MHS09	25	1.157	0.647	32.7	0.8181	0.0000	SURCHARGED	PN009	MHS10	33.2	0.835	0.889	0.9180	
30 minute summer	MHS10	24	1.086	0.696	42.7	7.0477	0.0000	SURCHARGED	PN010	MHS11	41.2	1.036	1.119	0.9439	
30 minute summer	MHS11	23	0.936	0.666	42.8	6.0368	0.0000	SURCHARGED	PN011	MHS12	48.5	1.845	1.408	0.9962	
30 minute summer	MHS12	43	0.183	0.083	48.5	58.4653	0.0000	OK	Hydro-Brake®	MHS13	4.6				
30 minute summer	MHS13	43	0.101	0.101	4.6	0.1146	0.0000	OK	Hydro-Brake®	MHS14	4.6				35.5
30 minute summer	MHS14	1	-0.381	0.000	4.6	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	MHS01	20	1.656	0.056	4.0	0.1008	0.0000	OK	PN001	MHS02	3.9	0.453	0.296	0.3562	
30 minute winter	MHS02	25	1.565	0.145	9.1	0.2755	0.0000	OK	PN002	MHS04	8.5	0.532	0.672	0.5420	
30 minute winter	MHS03	21	1.560	0.050	4.0	0.1033	0.0000	OK	PN003	MHS04	4.0	0.312	0.241	0.3208	
30 minute winter	MHS04	26	1.520	0.258	19.7	1.7920	0.0000	SURCHARGED	PN004	MHS05	15.9	0.914	1.180	0.5955	
30 minute winter	MHS05	27	1.299	0.234	25.6	2.0082	0.0000	SURCHARGED	PN005	MHS06	25.0	0.959	0.590	1.2871	
30 minute winter	MHS06	27	1.254	0.404	42.9	5.7981	0.0000	SURCHARGED	PN008	MHS09	34.3	1.375	0.528	0.7673	
30 minute winter	MHS07	27	1.262	0.262	12.7	1.7801	0.0000	SURCHARGED	PN006	MHS06	11.6	0.638	0.385	0.7388	
30 minute winter	MHS08	20	1.271	0.071	8.7	0.2195	0.0000	OK	PN007	MHS07	8.7	0.738	0.273	0.5894	
30 minute winter	MHS09	25	1.186	0.676	34.4	0.8552	0.0000	SURCHARGED	PN009	MHS10	35.0	0.879	0.937	0.9180	
30 minute winter	MHS10	24	1.114	0.724	41.5	7.3831	0.0000	SURCHARGED	PN010	MHS11	42.6	1.071	1.157	0.9439	
30 minute winter	MHS11	23	0.957	0.687	44.8	6.2748	0.0000	SURCHARGED	PN011	MHS12	50.1	1.886	1.456	1.0290	
30 minute winter	MHS12	44	0.192	0.092	50.1	65.3779	0.0000	OK	Hydro-Brake®	MHS13	4.9				
30 minute winter	MHS13	44	0.108	0.108	4.9	0.1217	0.0000	OK	Hydro-Brake®	MHS14	4.9				41.3
30 minute winter	MHS14	1	-0.381	0.000	4.9	0.0000	0.0000	OK							

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Results for 1 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.95%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	MHS01	36	1.651	0.051	3.3	0.0917	0.0000	OK	PN001	MHS02	3.3	0.437	0.248	0.2430	
60 minute summer	MHS02	36	1.503	0.083	7.6	0.1582	0.0000	OK	PN002	MHS04	7.6	0.519	0.600	0.4275	
60 minute summer	MHS03	35	1.556	0.046	3.4	0.0943	0.0000	OK	PN003	MHS04	3.4	0.303	0.202	0.3122	
60 minute summer	MHS04	38	1.444	0.182	17.1	0.9500	0.0000	SURCHARGED	PN004	MHS05	15.5	0.922	1.147	0.5522	
60 minute summer	MHS05	35	1.185	0.120	23.1	0.6040	0.0000	OK	PN005	MHS06	23.6	0.993	0.558	0.9752	
60 minute summer	MHS06	41	1.090	0.240	40.3	2.5324	0.0000	SURCHARGED	PN008	MHS09	34.6	1.449	0.534	0.7673	
60 minute summer	MHS07	41	1.097	0.097	10.6	0.3463	0.0000	OK	PN006	MHS06	10.6	0.640	0.349	0.5468	
60 minute summer	MHS08	35	1.265	0.065	7.3	0.2001	0.0000	OK	PN007	MHS07	7.3	0.706	0.229	0.3108	
60 minute summer	MHS09	41	1.004	0.494	35.6	0.6243	0.0000	SURCHARGED	PN009	MHS10	33.5	0.843	0.898	0.9180	
60 minute summer	MHS10	40	0.899	0.509	48.2	4.7573	0.0000	SURCHARGED	PN010	MHS11	41.7	1.048	1.132	0.9439	
60 minute summer	MHS11	40	0.712	0.442	46.8	3.4931	0.0000	SURCHARGED	PN011	MHS12	46.4	1.636	1.348	1.0351	
60 minute summer	MHS12	67	0.199	0.099	46.4	69.6528	0.0000	OK	Hydro-Brake®	MHS13	5.1				
60 minute summer	MHS13	68	0.112	0.112	5.1	0.1262	0.0000	OK	Hydro-Brake®	MHS14	5.1				49.9
60 minute summer	MHS14	1	-0.381	0.000	5.1	0.0000	0.0000	OK							

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Results for 1 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 99.97%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	MHS01	36	1.648	0.048	3.0	0.0872	0.0000	OK	PN001	MHS02	3.0	0.426	0.226	0.2253	
60 minute winter	MHS02	36	1.498	0.078	6.9	0.1484	0.0000	OK	PN002	MHS04	6.8	0.502	0.541	0.4155	
60 minute winter	MHS03	37	1.553	0.043	3.0	0.0890	0.0000	OK	PN003	MHS04	3.0	0.290	0.180	0.3073	
60 minute winter	MHS04	38	1.421	0.159	15.4	0.7411	0.0000	SURCHARGED	PN004	MHS05	14.6	0.911	1.084	0.5379	
60 minute winter	MHS05	34	1.179	0.114	21.6	0.5611	0.0000	OK	PN005	MHS06	21.8	0.984	0.517	0.9617	
60 minute winter	MHS06	42	1.089	0.239	36.8	2.5130	0.0000	SURCHARGED	PN008	MHS09	31.9	1.268	0.491	0.7673	
60 minute winter	MHS07	42	1.094	0.094	9.6	0.3339	0.0000	OK	PN006	MHS06	9.5	0.619	0.315	0.5409	
60 minute winter	MHS08	35	1.261	0.061	6.6	0.1898	0.0000	OK	PN007	MHS07	6.6	0.686	0.207	0.3085	
60 minute winter	MHS09	41	1.003	0.493	32.4	0.6238	0.0000	SURCHARGED	PN009	MHS10	32.5	0.818	0.872	0.9180	
60 minute winter	MHS10	40	0.900	0.510	44.0	4.7639	0.0000	SURCHARGED	PN010	MHS11	42.1	1.059	1.144	0.9439	
60 minute winter	MHS11	40	0.711	0.441	46.4	3.4812	0.0000	SURCHARGED	PN011	MHS12	47.1	1.630	1.368	1.0831	
60 minute winter	MHS12	67	0.211	0.111	47.1	78.4693	0.0000	OK	Hydro-Brake®	MHS13	5.6				
60 minute winter	MHS13	67	0.120	0.120	5.6	0.1357	0.0000	OK	Hydro-Brake®	MHS14	5.6				57.1
60 minute winter	MHS14	1	-0.381	0.000	5.6	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	MHS01	66	1.643	0.043	2.4	0.0777	0.0000	OK	PN001	MHS02	2.4	0.402	0.180	0.1916	
120 minute summer	MHS02	66	1.489	0.069	5.5	0.1307	0.0000	OK	PN002	MHS04	5.5	0.485	0.435	0.3512	
120 minute summer	MHS03	66	1.549	0.039	2.5	0.0811	0.0000	OK	PN003	MHS04	2.5	0.276	0.150	0.2610	
120 minute summer	MHS04	66	1.380	0.118	12.6	0.4592	0.0000	OK	PN004	MHS05	12.3	0.877	0.912	0.4741	
120 minute summer	MHS05	68	1.170	0.105	18.2	0.4968	0.0000	OK	PN005	MHS06	18.1	0.982	0.427	0.6036	
120 minute summer	MHS06	66	0.959	0.109	30.3	0.6489	0.0000	OK	PN008	MHS09	31.5	1.432	0.484	0.5632	
120 minute summer	MHS07	66	1.069	0.069	7.8	0.2173	0.0000	OK	PN006	MHS06	7.8	0.578	0.257	0.3193	
120 minute summer	MHS08	66	1.255	0.055	5.3	0.1701	0.0000	OK	PN007	MHS07	5.3	0.646	0.167	0.2376	
120 minute summer	MHS09	70	0.819	0.309	32.3	0.3911	0.0000	SURCHARGED	PN009	MHS10	30.3	0.814	0.812	0.9180	
120 minute summer	MHS10	70	0.728	0.338	40.8	2.6768	0.0000	SURCHARGED	PN010	MHS11	38.1	0.958	1.035	0.9439	
120 minute summer	MHS11	70	0.572	0.302	42.0	1.9675	0.0000	SURCHARGED	PN011	MHS12	41.4	1.553	1.204	1.0319	
120 minute summer	MHS12	112	0.210	0.110	41.4	77.9169	0.0000	OK	Hydro-Brake®	MHS13	5.5				
120 minute summer	MHS13	112	0.119	0.119	5.5	0.1351	0.0000	OK	Hydro-Brake®	MHS14	5.5				67.3
120 minute summer	MHS14	2	-0.381	0.000	5.5	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	MHS01	66	1.639	0.039	2.0	0.0708	0.0000	OK	PN001	MHS02	2.0	0.386	0.150	0.1663	
120 minute winter	MHS02	66	1.481	0.061	4.5	0.1168	0.0000	OK	PN002	MHS04	4.5	0.465	0.356	0.2980	
120 minute winter	MHS03	66	1.545	0.035	2.0	0.0725	0.0000	OK	PN003	MHS04	2.0	0.267	0.120	0.2201	
120 minute winter	MHS04	66	1.362	0.100	10.2	0.3629	0.0000	OK	PN004	MHS05	10.1	0.842	0.750	0.4068	
120 minute winter	MHS05	66	1.159	0.094	14.9	0.4191	0.0000	OK	PN005	MHS06	14.9	0.906	0.352	0.5314	
120 minute winter	MHS06	68	0.951	0.101	24.8	0.5719	0.0000	OK	PN008	MHS09	24.8	1.431	0.382	0.3383	
120 minute winter	MHS07	66	1.062	0.062	6.3	0.1877	0.0000	OK	PN006	MHS06	6.3	0.529	0.208	0.2826	
120 minute winter	MHS08	66	1.250	0.050	4.3	0.1531	0.0000	OK	PN007	MHS07	4.3	0.607	0.136	0.2042	
120 minute winter	MHS09	68	0.654	0.144	25.4	0.1819	0.0000	OK	PN009	MHS10	25.4	0.811	0.680	0.7234	
120 minute winter	MHS10	68	0.581	0.191	34.0	1.2430	0.0000	OK	PN010	MHS11	33.9	0.920	0.921	0.8770	
120 minute winter	MHS11	68	0.475	0.205	37.3	1.1370	0.0000	OK	PN011	MHS12	37.4	1.536	1.086	0.9624	
120 minute winter	MHS12	120	0.224	0.124	37.4	87.8828	0.0000	OK	Hydro-Brake®	MHS13	6.0				
120 minute winter	MHS13	120	0.129	0.129	6.0	0.1463	0.0000	OK	Hydro-Brake®	MHS14	6.0				76.5
120 minute winter	MHS14	2	-0.381	0.000	6.0	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	MHS01	96	1.638	0.038	1.9	0.0687	0.0000	OK	PN001	MHS02	1.9	0.376	0.142	0.1610	
180 minute summer	MHS02	96	1.480	0.060	4.4	0.1144	0.0000	OK	PN002	MHS04	4.3	0.466	0.342	0.2866	
180 minute summer	MHS03	96	1.544	0.034	1.9	0.0704	0.0000	OK	PN003	MHS04	1.9	0.261	0.113	0.2105	
180 minute summer	MHS04	96	1.358	0.096	9.8	0.3435	0.0000	OK	PN004	MHS05	9.6	0.831	0.709	0.3899	
180 minute summer	MHS05	100	1.156	0.091	14.2	0.3998	0.0000	OK	PN005	MHS06	14.1	0.895	0.333	0.5093	
180 minute summer	MHS06	100	0.948	0.098	23.5	0.5448	0.0000	OK	PN008	MHS09	23.4	1.426	0.360	0.3173	
180 minute summer	MHS07	96	1.060	0.060	6.1	0.1815	0.0000	OK	PN006	MHS06	6.0	0.523	0.198	0.2719	
180 minute summer	MHS08	96	1.249	0.049	4.2	0.1506	0.0000	OK	PN007	MHS07	4.2	0.605	0.131	0.1981	
180 minute summer	MHS09	100	0.647	0.137	23.9	0.1736	0.0000	OK	PN009	MHS10	24.0	0.812	0.644	0.6832	
180 minute summer	MHS10	100	0.569	0.179	32.1	1.1496	0.0000	OK	PN010	MHS11	32.2	0.917	0.876	0.8337	
180 minute summer	MHS11	100	0.464	0.194	35.4	1.0662	0.0000	OK	PN011	MHS12	35.7	1.490	1.036	0.9158	
180 minute summer	MHS12	144	0.215	0.115	35.7	81.6363	0.0000	OK	Hydro-Brake®	MHS13	5.7				
180 minute summer	MHS13	144	0.123	0.123	5.7	0.1393	0.0000	OK	Hydro-Brake®	MHS14	5.7				79.7
180 minute summer	MHS14	4	-0.381	0.000	5.7	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	MHS01	100	1.634	0.034	1.5	0.0613	0.0000	OK	PN001	MHS02	1.5	0.356	0.113	0.1357	
180 minute winter	MHS02	100	1.473	0.053	3.4	0.1006	0.0000	OK	PN002	MHS04	3.4	0.440	0.269	0.2404	
180 minute winter	MHS03	100	1.540	0.030	1.5	0.0628	0.0000	OK	PN003	MHS04	1.5	0.249	0.090	0.1769	
180 minute winter	MHS04	100	1.345	0.083	7.7	0.2806	0.0000	OK	PN004	MHS05	7.7	0.786	0.570	0.3314	
180 minute winter	MHS05	100	1.145	0.080	11.3	0.3356	0.0000	OK	PN005	MHS06	11.3	0.845	0.267	0.4330	
180 minute winter	MHS06	96	0.937	0.087	18.8	0.4557	0.0000	OK	PN008	MHS09	18.8	1.381	0.289	0.2623	
180 minute winter	MHS07	96	1.053	0.053	4.8	0.1560	0.0000	OK	PN006	MHS06	4.8	0.489	0.157	0.2323	
180 minute winter	MHS08	96	1.243	0.043	3.3	0.1338	0.0000	OK	PN007	MHS07	3.3	0.564	0.104	0.1679	
180 minute winter	MHS09	100	0.628	0.118	19.3	0.1488	0.0000	OK	PN009	MHS10	19.3	0.792	0.516	0.5611	
180 minute winter	MHS10	100	0.538	0.148	25.9	0.8983	0.0000	OK	PN010	MHS11	25.9	0.893	0.704	0.6885	
180 minute winter	MHS11	96	0.431	0.161	28.5	0.8367	0.0000	OK	PN011	MHS12	28.6	1.397	0.831	0.8573	
180 minute winter	MHS12	152	0.230	0.130	28.6	91.6374	0.0000	OK	Hydro-Brake®	MHS13	6.2				
180 minute winter	MHS13	152	0.133	0.133	6.2	0.1506	0.0000	OK	Hydro-Brake®	MHS14	6.2				90.5
180 minute winter	MHS14	4	-0.381	0.000	6.2	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	MHS01	128	1.635	0.035	1.6	0.0633	0.0000	OK	PN001	MHS02	1.6	0.359	0.120	0.1435	
240 minute summer	MHS02	128	1.475	0.055	3.7	0.1052	0.0000	OK	PN002	MHS04	3.7	0.450	0.293	0.2548	
240 minute summer	MHS03	128	1.541	0.031	1.6	0.0648	0.0000	OK	PN003	MHS04	1.6	0.256	0.096	0.1869	
240 minute summer	MHS04	128	1.349	0.087	8.3	0.2990	0.0000	OK	PN004	MHS05	8.3	0.801	0.613	0.3496	
240 minute summer	MHS05	128	1.149	0.084	12.2	0.3553	0.0000	OK	PN005	MHS06	12.1	0.861	0.287	0.4569	
240 minute summer	MHS06	128	0.940	0.090	20.1	0.4828	0.0000	OK	PN008	MHS09	20.1	1.405	0.309	0.2759	
240 minute summer	MHS07	128	1.055	0.055	5.1	0.1630	0.0000	OK	PN006	MHS06	5.1	0.500	0.169	0.2441	
240 minute summer	MHS08	128	1.245	0.045	3.5	0.1381	0.0000	OK	PN007	MHS07	3.5	0.574	0.111	0.1759	
240 minute summer	MHS09	128	0.633	0.123	20.6	0.1555	0.0000	OK	PN009	MHS10	20.6	0.801	0.551	0.5918	
240 minute summer	MHS10	128	0.545	0.155	27.7	0.9620	0.0000	OK	PN010	MHS11	27.5	0.902	0.747	0.7237	
240 minute summer	MHS11	128	0.438	0.168	30.3	0.8845	0.0000	OK	PN011	MHS12	30.1	1.398	0.875	0.8576	
240 minute summer	MHS12	176	0.219	0.119	30.1	84.3356	0.0000	OK	Hydro-Brake®	MHS13	5.9				
240 minute summer	MHS13	176	0.126	0.126	5.9	0.1423	0.0000	OK	Hydro-Brake®	MHS14	5.9				90.6
240 minute summer	MHS14	4	-0.381	0.000	5.9	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	MHS01	128	1.630	0.030	1.2	0.0549	0.0000	OK	PN001	MHS02	1.2	0.330	0.090	0.1173	
240 minute winter	MHS02	132	1.468	0.048	2.8	0.0908	0.0000	OK	PN002	MHS04	2.8	0.423	0.222	0.2068	
240 minute winter	MHS03	128	1.537	0.027	1.2	0.0563	0.0000	OK	PN003	MHS04	1.2	0.240	0.072	0.1513	
240 minute winter	MHS04	128	1.335	0.073	6.3	0.2378	0.0000	OK	PN004	MHS05	6.3	0.744	0.467	0.2865	
240 minute winter	MHS05	128	1.137	0.072	9.3	0.2895	0.0000	OK	PN005	MHS06	9.3	0.803	0.220	0.3746	
240 minute winter	MHS06	128	0.928	0.078	15.5	0.3892	0.0000	OK	PN008	MHS09	15.5	1.313	0.239	0.2276	
240 minute winter	MHS07	128	1.048	0.048	3.9	0.1369	0.0000	OK	PN006	MHS06	3.9	0.462	0.129	0.2014	
240 minute winter	MHS08	128	1.239	0.039	2.7	0.1214	0.0000	OK	PN007	MHS07	2.7	0.534	0.085	0.1458	
240 minute winter	MHS09	128	0.614	0.104	15.9	0.1320	0.0000	OK	PN009	MHS10	15.9	0.766	0.426	0.4789	
240 minute winter	MHS10	128	0.519	0.129	21.4	0.7430	0.0000	OK	PN010	MHS11	21.4	0.860	0.580	0.5895	
240 minute winter	MHS11	128	0.411	0.141	23.6	0.6946	0.0000	OK	PN011	MHS12	23.6	1.270	0.684	0.8030	
240 minute winter	MHS12	188	0.232	0.132	23.6	93.3944	0.0000	OK	Hydro-Brake®	MHS13	6.3				
240 minute winter	MHS13	188	0.135	0.135	6.3	0.1525	0.0000	OK	Hydro-Brake®	MHS14	6.3				102.0
240 minute winter	MHS14	4	-0.381	0.000	6.3	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	MHS01	192	1.630	0.030	1.2	0.0549	0.0000	OK	PN001	MHS02	1.2	0.335	0.090	0.1153	
360 minute summer	MHS02	192	1.467	0.047	2.7	0.0891	0.0000	OK	PN002	MHS04	2.7	0.416	0.214	0.2017	
360 minute summer	MHS03	192	1.537	0.027	1.2	0.0563	0.0000	OK	PN003	MHS04	1.2	0.239	0.072	0.1484	
360 minute summer	MHS04	192	1.334	0.072	6.1	0.2319	0.0000	OK	PN004	MHS05	6.1	0.737	0.452	0.2799	
360 minute summer	MHS05	192	1.136	0.071	9.0	0.2825	0.0000	OK	PN005	MHS06	9.0	0.797	0.213	0.3657	
360 minute summer	MHS06	192	0.926	0.076	15.0	0.3792	0.0000	OK	PN008	MHS09	15.0	1.302	0.231	0.2223	
360 minute summer	MHS07	192	1.048	0.048	3.8	0.1347	0.0000	OK	PN006	MHS06	3.8	0.461	0.126	0.1970	
360 minute summer	MHS08	192	1.239	0.039	2.6	0.1192	0.0000	OK	PN007	MHS07	2.6	0.526	0.082	0.1427	
360 minute summer	MHS09	192	0.612	0.102	15.4	0.1295	0.0000	OK	PN009	MHS10	15.4	0.761	0.412	0.4669	
360 minute summer	MHS10	192	0.516	0.126	20.7	0.7170	0.0000	OK	PN010	MHS11	20.7	0.854	0.562	0.5745	
360 minute summer	MHS11	192	0.408	0.138	22.8	0.6773	0.0000	OK	PN011	MHS12	22.8	1.212	0.662	0.7587	
360 minute summer	MHS12	248	0.221	0.121	22.8	85.4919	0.0000	OK	Hydro-Brake®	MHS13	5.9				
360 minute summer	MHS13	248	0.127	0.127	5.9	0.1437	0.0000	OK	Hydro-Brake®	MHS14	5.9				106.1
360 minute summer	MHS14	8	-0.381	0.000	5.9	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	MHS01	192	1.626	0.026	0.9	0.0477	0.0000	OK	PN001	MHS02	0.9	0.309	0.068	0.0956	
360 minute winter	MHS02	192	1.461	0.041	2.1	0.0783	0.0000	OK	PN002	MHS04	2.1	0.392	0.166	0.1667	
360 minute winter	MHS03	192	1.534	0.024	0.9	0.0490	0.0000	OK	PN003	MHS04	0.9	0.223	0.054	0.1217	
360 minute winter	MHS04	192	1.324	0.062	4.7	0.1907	0.0000	OK	PN004	MHS05	4.7	0.687	0.348	0.2313	
360 minute winter	MHS05	192	1.127	0.062	6.9	0.2331	0.0000	OK	PN005	MHS06	6.9	0.744	0.163	0.3002	
360 minute winter	MHS06	192	0.916	0.066	11.5	0.3076	0.0000	OK	PN008	MHS09	11.5	1.213	0.177	0.1829	
360 minute winter	MHS07	192	1.042	0.042	2.9	0.1135	0.0000	OK	PN006	MHS06	2.9	0.427	0.096	0.1622	
360 minute winter	MHS08	192	1.234	0.034	2.0	0.1049	0.0000	OK	PN007	MHS07	2.0	0.488	0.063	0.1182	
360 minute winter	MHS09	192	0.598	0.088	11.8	0.1108	0.0000	OK	PN009	MHS10	11.8	0.719	0.316	0.3792	
360 minute winter	MHS10	192	0.497	0.107	15.9	0.5692	0.0000	OK	PN010	MHS11	15.9	0.808	0.432	0.4667	
360 minute winter	MHS11	192	0.387	0.117	17.5	0.5134	0.0000	OK	PN011	MHS12	17.5	1.079	0.508	0.7338	
360 minute winter	MHS12	264	0.232	0.132	17.5	93.5936	0.0000	OK	Hydro-Brake®	MHS13	6.3				
360 minute winter	MHS13	264	0.135	0.135	6.3	0.1528	0.0000	OK	Hydro-Brake®	MHS14	6.3				121.4
360 minute winter	MHS14	8	-0.381	0.000	6.3	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	MHS01	248	1.628	0.028	1.0	0.0500	0.0000	OK	PN001	MHS02	1.0	0.315	0.074	0.1013	
480 minute summer	MHS02	248	1.463	0.043	2.3	0.0814	0.0000	OK	PN002	MHS04	2.3	0.398	0.179	0.1771	
480 minute summer	MHS03	248	1.535	0.025	1.0	0.0515	0.0000	OK	PN003	MHS04	1.0	0.232	0.060	0.1301	
480 minute summer	MHS04	248	1.327	0.065	5.2	0.2031	0.0000	OK	PN004	MHS05	5.1	0.704	0.379	0.2457	
480 minute summer	MHS05	248	1.129	0.064	7.5	0.2468	0.0000	OK	PN005	MHS06	7.5	0.759	0.177	0.3188	
480 minute summer	MHS06	248	0.919	0.069	12.6	0.3280	0.0000	OK	PN008	MHS09	12.5	1.240	0.192	0.1942	
480 minute summer	MHS07	248	1.044	0.044	3.2	0.1202	0.0000	OK	PN006	MHS06	3.2	0.440	0.105	0.1727	
480 minute summer	MHS08	248	1.236	0.036	2.2	0.1097	0.0000	OK	PN007	MHS07	2.2	0.501	0.069	0.1261	
480 minute summer	MHS09	248	0.602	0.092	12.8	0.1160	0.0000	OK	PN009	MHS10	12.8	0.732	0.342	0.4028	
480 minute summer	MHS10	248	0.502	0.112	17.3	0.6059	0.0000	OK	PN010	MHS11	17.1	0.820	0.466	0.4964	
480 minute summer	MHS11	248	0.393	0.123	18.9	0.5535	0.0000	OK	PN011	MHS12	18.8	1.084	0.547	0.7095	
480 minute summer	MHS12	320	0.221	0.121	18.8	85.5277	0.0000	OK	Hydro-Brake®	MHS13	5.9				
480 minute summer	MHS13	320	0.127	0.127	5.9	0.1437	0.0000	OK	Hydro-Brake®	MHS14	5.9				120.0
480 minute summer	MHS14	8	-0.381	0.000	5.9	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	MHS01	240	1.623	0.023	0.7	0.0422	0.0000	OK	PN001	MHS02	0.7	0.285	0.053	0.0815	
480 minute winter	MHS02	256	1.457	0.037	1.7	0.0704	0.0000	OK	PN002	MHS04	1.7	0.368	0.135	0.1444	
480 minute winter	MHS03	248	1.532	0.022	0.8	0.0462	0.0000	OK	PN003	MHS04	0.8	0.220	0.048	0.1072	
480 minute winter	MHS04	256	1.318	0.056	3.9	0.1671	0.0000	OK	PN004	MHS05	3.9	0.653	0.289	0.2020	
480 minute winter	MHS05	256	1.121	0.056	5.7	0.2042	0.0000	OK	PN005	MHS06	5.7	0.707	0.135	0.2609	
480 minute winter	MHS06	256	0.910	0.060	9.5	0.2660	0.0000	OK	PN008	MHS09	9.5	1.152	0.146	0.1592	
480 minute winter	MHS07	248	1.038	0.038	2.4	0.1010	0.0000	OK	PN006	MHS06	2.4	0.408	0.079	0.1414	
480 minute winter	MHS08	248	1.230	0.030	1.6	0.0941	0.0000	OK	PN007	MHS07	1.6	0.458	0.051	0.1023	
480 minute winter	MHS09	248	0.589	0.079	9.7	0.0993	0.0000	OK	PN009	MHS10	9.7	0.689	0.260	0.3256	
480 minute winter	MHS10	256	0.485	0.095	13.0	0.4861	0.0000	OK	PN010	MHS11	13.0	0.773	0.353	0.3997	
480 minute winter	MHS11	248	0.373	0.103	14.3	0.4315	0.0000	OK	PN011	MHS12	14.3	0.961	0.415	0.6806	
480 minute winter	MHS12	344	0.229	0.129	14.3	90.8895	0.0000	OK	Hydro-Brake®	MHS13	6.2				
480 minute winter	MHS13	344	0.132	0.132	6.2	0.1497	0.0000	OK	Hydro-Brake®	MHS14	6.2				134.6
480 minute winter	MHS14	8	-0.381	0.000	6.2	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	MHS01	315	1.625	0.025	0.8	0.0450	0.0000	OK	PN001	MHS02	0.8	0.291	0.060	0.0886	
600 minute summer	MHS02	315	1.459	0.039	1.9	0.0745	0.0000	OK	PN002	MHS04	1.9	0.385	0.151	0.1539	
600 minute summer	MHS03	315	1.532	0.022	0.8	0.0462	0.0000	OK	PN003	MHS04	0.8	0.212	0.048	0.1119	
600 minute summer	MHS04	315	1.320	0.058	4.2	0.1759	0.0000	OK	PN004	MHS05	4.2	0.665	0.311	0.2137	
600 minute summer	MHS05	315	1.123	0.058	6.2	0.2164	0.0000	OK	PN005	MHS06	6.2	0.724	0.147	0.2772	
600 minute summer	MHS06	315	0.912	0.062	10.3	0.2827	0.0000	OK	PN008	MHS09	10.3	1.177	0.159	0.1688	
600 minute summer	MHS07	315	1.039	0.039	2.6	0.1061	0.0000	OK	PN006	MHS06	2.6	0.415	0.086	0.1498	
600 minute summer	MHS08	315	1.232	0.032	1.8	0.0996	0.0000	OK	PN007	MHS07	1.8	0.474	0.057	0.1095	
600 minute summer	MHS09	315	0.592	0.082	10.6	0.1043	0.0000	OK	PN009	MHS10	10.6	0.702	0.284	0.3492	
600 minute summer	MHS10	315	0.490	0.100	14.3	0.5229	0.0000	OK	PN010	MHS11	14.3	0.788	0.388	0.4307	
600 minute summer	MHS11	315	0.380	0.110	15.8	0.4696	0.0000	OK	PN011	MHS12	15.8	0.991	0.459	0.6657	
600 minute summer	MHS12	375	0.219	0.119	15.8	84.0818	0.0000	OK	Hydro-Brake®	MHS13	5.8				
600 minute summer	MHS13	375	0.126	0.126	5.8	0.1421	0.0000	OK	Hydro-Brake®	MHS14	5.8				131.0
600 minute summer	MHS14	15	-0.381	0.000	5.8	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	MHS01	300	1.622	0.022	0.6	0.0392	0.0000	OK	PN001	MHS02	0.6	0.270	0.045	0.0717	
600 minute winter	MHS02	300	1.454	0.034	1.4	0.0639	0.0000	OK	PN002	MHS04	1.4	0.354	0.111	0.1252	
600 minute winter	MHS03	285	1.529	0.019	0.6	0.0403	0.0000	OK	PN003	MHS04	0.6	0.209	0.036	0.0916	
600 minute winter	MHS04	315	1.312	0.050	3.2	0.1459	0.0000	OK	PN004	MHS05	3.2	0.617	0.237	0.1754	
600 minute winter	MHS05	315	1.116	0.051	4.7	0.1789	0.0000	OK	PN005	MHS06	4.7	0.670	0.111	0.2272	
600 minute winter	MHS06	315	0.904	0.054	7.9	0.2321	0.0000	OK	PN008	MHS09	7.9	1.094	0.122	0.1393	
600 minute winter	MHS07	315	1.035	0.035	2.0	0.0905	0.0000	OK	PN006	MHS06	2.0	0.386	0.066	0.1239	
600 minute winter	MHS08	315	1.229	0.029	1.4	0.0882	0.0000	OK	PN007	MHS07	1.4	0.442	0.044	0.0914	
600 minute winter	MHS09	315	0.581	0.071	8.1	0.0899	0.0000	OK	PN009	MHS10	8.1	0.659	0.217	0.2843	
600 minute winter	MHS10	315	0.476	0.086	10.9	0.4262	0.0000	OK	PN010	MHS11	10.9	0.744	0.296	0.3486	
600 minute winter	MHS11	300	0.363	0.093	12.0	0.3715	0.0000	OK	PN011	MHS12	12.0	0.866	0.349	0.6440	
600 minute winter	MHS12	405	0.224	0.124	12.0	87.8342	0.0000	OK	Hydro-Brake®	MHS13	6.0				
600 minute winter	MHS13	405	0.129	0.129	6.0	0.1463	0.0000	OK	Hydro-Brake®	MHS14	6.0				147.5
600 minute winter	MHS14	15	-0.381	0.000	6.0	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	MHS01	375	1.623	0.023	0.7	0.0422	0.0000	OK	PN001	MHS02	0.7	0.278	0.053	0.0815	
720 minute summer	MHS02	375	1.457	0.037	1.7	0.0704	0.0000	OK	PN002	MHS04	1.7	0.367	0.135	0.1444	
720 minute summer	MHS03	375	1.532	0.022	0.8	0.0462	0.0000	OK	PN003	MHS04	0.8	0.220	0.048	0.1072	
720 minute summer	MHS04	375	1.318	0.056	3.9	0.1671	0.0000	OK	PN004	MHS05	3.9	0.653	0.289	0.2020	
720 minute summer	MHS05	375	1.121	0.056	5.7	0.2042	0.0000	OK	PN005	MHS06	5.7	0.707	0.135	0.2609	
720 minute summer	MHS06	375	0.910	0.060	9.5	0.2660	0.0000	OK	PN008	MHS09	9.5	1.152	0.146	0.1592	
720 minute summer	MHS07	375	1.038	0.038	2.4	0.1010	0.0000	OK	PN006	MHS06	2.4	0.406	0.079	0.1414	
720 minute summer	MHS08	375	1.230	0.030	1.6	0.0941	0.0000	OK	PN007	MHS07	1.6	0.451	0.051	0.1023	
720 minute summer	MHS09	375	0.589	0.079	9.7	0.0993	0.0000	OK	PN009	MHS10	9.7	0.689	0.260	0.3255	
720 minute summer	MHS10	375	0.485	0.095	13.0	0.4860	0.0000	OK	PN010	MHS11	13.0	0.772	0.353	0.3995	
720 minute summer	MHS11	375	0.373	0.103	14.3	0.4312	0.0000	OK	PN011	MHS12	14.3	0.924	0.415	0.6320	
720 minute summer	MHS12	450	0.216	0.116	14.3	82.1118	0.0000	OK	Hydro-Brake®	MHS13	5.7				
720 minute summer	MHS13	450	0.124	0.124	5.7	0.1398	0.0000	OK	Hydro-Brake®	MHS14	5.7				140.3
720 minute summer	MHS14	15	-0.381	0.000	5.7	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	MHS01	375	1.622	0.022	0.6	0.0392	0.0000	OK	PN001	MHS02	0.6	0.279	0.045	0.0693	
720 minute winter	MHS02	375	1.452	0.032	1.3	0.0616	0.0000	OK	PN002	MHS04	1.3	0.346	0.103	0.1172	
720 minute winter	MHS03	375	1.529	0.019	0.6	0.0403	0.0000	OK	PN003	MHS04	0.6	0.205	0.036	0.0864	
720 minute winter	MHS04	375	1.310	0.048	2.9	0.1365	0.0000	OK	PN004	MHS05	2.9	0.598	0.215	0.1641	
720 minute winter	MHS05	375	1.113	0.048	4.3	0.1689	0.0000	OK	PN005	MHS06	4.3	0.658	0.102	0.2117	
720 minute winter	MHS06	375	0.901	0.051	7.1	0.2145	0.0000	OK	PN008	MHS09	7.1	1.062	0.109	0.1289	
720 minute winter	MHS07	375	1.033	0.033	1.8	0.0849	0.0000	OK	PN006	MHS06	1.8	0.376	0.059	0.1148	
720 minute winter	MHS08	360	1.227	0.027	1.2	0.0820	0.0000	OK	PN007	MHS07	1.2	0.423	0.038	0.0836	
720 minute winter	MHS09	375	0.577	0.067	7.3	0.0850	0.0000	OK	PN009	MHS10	7.3	0.642	0.196	0.2629	
720 minute winter	MHS10	375	0.471	0.081	9.8	0.3950	0.0000	OK	PN010	MHS11	9.8	0.726	0.266	0.3202	
720 minute winter	MHS11	360	0.357	0.087	10.8	0.3390	0.0000	OK	PN011	MHS12	10.8	0.805	0.314	0.6121	
720 minute winter	MHS12	480	0.220	0.120	10.8	84.7346	0.0000	OK	Hydro-Brake®	MHS13	5.9				
720 minute winter	MHS13	480	0.126	0.126	5.9	0.1428	0.0000	OK	Hydro-Brake®	MHS14	5.9				158.3
720 minute winter	MHS14	15	-0.381	0.000	5.9	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	MHS01	495	1.622	0.022	0.6	0.0392	0.0000	OK	PN001	MHS02	0.6	0.270	0.045	0.0717	
960 minute summer	MHS02	495	1.454	0.034	1.4	0.0639	0.0000	OK	PN002	MHS04	1.4	0.354	0.111	0.1232	
960 minute summer	MHS03	495	1.529	0.019	0.6	0.0403	0.0000	OK	PN003	MHS04	0.6	0.198	0.036	0.0898	
960 minute summer	MHS04	495	1.311	0.049	3.1	0.1427	0.0000	OK	PN004	MHS05	3.1	0.609	0.230	0.1722	
960 minute summer	MHS05	495	1.115	0.050	4.6	0.1766	0.0000	OK	PN005	MHS06	4.6	0.670	0.109	0.2224	
960 minute summer	MHS06	495	0.903	0.053	7.6	0.2255	0.0000	OK	PN008	MHS09	7.6	1.083	0.117	0.1355	
960 minute summer	MHS07	495	1.034	0.034	1.9	0.0877	0.0000	OK	PN006	MHS06	1.9	0.379	0.063	0.1201	
960 minute summer	MHS08	495	1.228	0.028	1.3	0.0852	0.0000	OK	PN007	MHS07	1.3	0.429	0.041	0.0876	
960 minute summer	MHS09	495	0.580	0.070	7.8	0.0881	0.0000	OK	PN009	MHS10	7.8	0.653	0.209	0.2762	
960 minute summer	MHS10	495	0.474	0.084	10.5	0.4143	0.0000	OK	PN010	MHS11	10.5	0.733	0.285	0.3399	
960 minute summer	MHS11	495	0.362	0.092	11.6	0.3629	0.0000	OK	PN011	MHS12	11.6	0.811	0.337	0.5817	
960 minute summer	MHS12	585	0.212	0.112	11.6	79.0550	0.0000	OK	Hydro-Brake®	MHS13	5.6				
960 minute summer	MHS13	585	0.121	0.121	5.6	0.1364	0.0000	OK	Hydro-Brake®	MHS14	5.6				157.9
960 minute summer	MHS14	15	-0.381	0.000	5.6	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	MHS01	420	1.618	0.018	0.4	0.0323	0.0000	OK	PN001	MHS02	0.4	0.243	0.030	0.0557	
960 minute winter	MHS02	480	1.448	0.028	1.0	0.0541	0.0000	OK	PN002	MHS04	1.0	0.323	0.079	0.0984	
960 minute winter	MHS03	495	1.528	0.018	0.5	0.0370	0.0000	OK	PN003	MHS04	0.5	0.200	0.030	0.0737	
960 minute winter	MHS04	495	1.304	0.042	2.3	0.1175	0.0000	OK	PN004	MHS05	2.3	0.560	0.170	0.1389	
960 minute winter	MHS05	495	1.108	0.043	3.4	0.1447	0.0000	OK	PN005	MHS06	3.4	0.613	0.080	0.1796	
960 minute winter	MHS06	495	0.896	0.046	5.7	0.1830	0.0000	OK	PN008	MHS09	5.7	0.999	0.088	0.1101	
960 minute winter	MHS07	495	1.030	0.030	1.5	0.0762	0.0000	OK	PN006	MHS06	1.5	0.362	0.050	0.0989	
960 minute winter	MHS08	480	1.224	0.024	1.0	0.0752	0.0000	OK	PN007	MHS07	1.0	0.403	0.032	0.0736	
960 minute winter	MHS09	495	0.569	0.059	5.8	0.0752	0.0000	OK	PN009	MHS10	5.8	0.605	0.155	0.2218	
960 minute winter	MHS10	495	0.462	0.072	7.8	0.3372	0.0000	OK	PN010	MHS11	7.8	0.690	0.212	0.2682	
960 minute winter	MHS11	495	0.346	0.076	8.6	0.2798	0.0000	OK	PN011	MHS12	8.6	0.744	0.250	0.5588	
960 minute winter	MHS12	615	0.211	0.111	8.6	78.2800	0.0000	OK	Hydro-Brake®	MHS13	5.6				
960 minute winter	MHS13	615	0.120	0.120	5.6	0.1355	0.0000	OK	Hydro-Brake®	MHS14	5.6				178.3
960 minute winter	MHS14	15	-0.381	0.000	5.6	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	MHS01	720	1.618	0.018	0.4	0.0323	0.0000	OK	PN001	MHS02	0.4	0.243	0.030	0.0557	
1440 minute summer	MHS02	750	1.448	0.028	1.0	0.0541	0.0000	OK	PN002	MHS04	1.0	0.318	0.079	0.0984	
1440 minute summer	MHS03	750	1.528	0.018	0.5	0.0370	0.0000	OK	PN003	MHS04	0.5	0.200	0.030	0.0737	
1440 minute summer	MHS04	750	1.304	0.042	2.3	0.1175	0.0000	OK	PN004	MHS05	2.3	0.560	0.170	0.1389	
1440 minute summer	MHS05	750	1.108	0.043	3.4	0.1447	0.0000	OK	PN005	MHS06	3.4	0.613	0.080	0.1796	
1440 minute summer	MHS06	750	0.896	0.046	5.7	0.1830	0.0000	OK	PN008	MHS09	5.7	0.999	0.088	0.1101	
1440 minute summer	MHS07	750	1.030	0.030	1.5	0.0762	0.0000	OK	PN006	MHS06	1.5	0.362	0.050	0.0989	
1440 minute summer	MHS08	750	1.224	0.024	1.0	0.0752	0.0000	OK	PN007	MHS07	1.0	0.392	0.032	0.0736	
1440 minute summer	MHS09	750	0.569	0.059	5.8	0.0752	0.0000	OK	PN009	MHS10	5.8	0.605	0.155	0.2218	
1440 minute summer	MHS10	750	0.462	0.072	7.8	0.3372	0.0000	OK	PN010	MHS11	7.8	0.690	0.212	0.2682	
1440 minute summer	MHS11	720	0.346	0.076	8.6	0.2825	0.0000	OK	PN011	MHS12	8.6	0.697	0.250	0.5165	
1440 minute summer	MHS12	840	0.202	0.102	8.6	71.9393	0.0000	OK	Hydro-Brake®	MHS13	5.3				
1440 minute summer	MHS13	840	0.114	0.114	5.3	0.1287	0.0000	OK	Hydro-Brake®	MHS14	5.3				181.7
1440 minute summer	MHS14	30	-0.381	0.000	5.3	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	MHS01	630	1.616	0.016	0.3	0.0282	0.0000	OK	PN001	MHS02	0.3	0.234	0.023	0.0441	
1440 minute winter	MHS02	660	1.444	0.024	0.7	0.0455	0.0000	OK	PN002	MHS04	0.7	0.295	0.055	0.0761	
1440 minute winter	MHS03	630	1.524	0.014	0.3	0.0290	0.0000	OK	PN003	MHS04	0.3	0.172	0.018	0.0556	
1440 minute winter	MHS04	810	1.297	0.035	1.6	0.0939	0.0000	OK	PN004	MHS05	1.6	0.509	0.119	0.1078	
1440 minute winter	MHS05	720	1.101	0.036	2.4	0.1163	0.0000	OK	PN005	MHS06	2.4	0.557	0.057	0.1395	
1440 minute winter	MHS06	720	0.889	0.039	4.0	0.1432	0.0000	OK	PN008	MHS09	4.0	0.902	0.062	0.0856	
1440 minute winter	MHS07	690	1.025	0.025	1.0	0.0602	0.0000	OK	PN006	MHS06	1.0	0.318	0.033	0.0760	
1440 minute winter	MHS08	690	1.221	0.021	0.7	0.0635	0.0000	OK	PN007	MHS07	0.7	0.359	0.022	0.0563	
1440 minute winter	MHS09	720	0.560	0.050	4.1	0.0632	0.0000	OK	PN009	MHS10	4.1	0.552	0.110	0.1732	
1440 minute winter	MHS10	750	0.450	0.060	5.6	0.2693	0.0000	OK	PN010	MHS11	5.6	0.631	0.152	0.2107	
1440 minute winter	MHS11	750	0.334	0.064	6.2	0.2216	0.0000	OK	PN011	MHS12	6.2	0.687	0.180	0.4629	
1440 minute winter	MHS12	870	0.194	0.094	6.2	66.6336	0.0000	OK	Hydro-Brake®	MHS13	5.0				
1440 minute winter	MHS13	870	0.109	0.109	5.0	0.1230	0.0000	OK	Hydro-Brake®	MHS14	5.0				204.8
1440 minute winter	MHS14	30	-0.381	0.000	5.0	0.0000	0.0000	OK							

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Results for 5 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 99.75%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	MHS01	15	1.835	0.235	6.1	0.4254	0.0000	SURCHARGED	PN001	MHS02	6.0	0.499	0.450	0.5607	
15 minute summer	MHS02	18	1.798	0.378	13.9	1.6134	0.0000	SURCHARGED	PN002	MHS04	10.5	0.614	0.829	0.5447	
15 minute summer	MHS03	17	1.774	0.264	6.3	0.5465	0.0000	SURCHARGED	PN003	MHS04	6.1	0.426	0.368	0.4969	
15 minute summer	MHS04	18	1.763	0.501	27.0	4.7932	0.0000	SURCHARGED	PN004	MHS05	17.0	0.964	1.257	0.5955	
15 minute summer	MHS05	19	1.509	0.444	31.9	5.0720	0.0000	SURCHARGED	PN005	MHS06	30.3	0.974	0.717	1.2871	
15 minute summer	MHS06	19	1.465	0.615	56.6	10.8901	0.0000	SURCHARGED	PN008	MHS09	37.8	1.414	0.581	0.7673	
15 minute summer	MHS07	19	1.470	0.470	19.8	4.2283	0.0000	SURCHARGED	PN006	MHS06	17.0	0.747	0.563	0.7388	
15 minute summer	MHS08	19	1.471	0.271	13.5	0.8371	0.0000	SURCHARGED	PN007	MHS07	13.5	0.828	0.426	0.9001	
15 minute summer	MHS09	18	1.412	0.902	38.8	1.1414	0.0000	SURCHARGED	PN009	MHS10	38.3	0.964	1.026	0.9180	
15 minute summer	MHS10	17	1.362	0.972	58.1	10.4229	0.0000	SURCHARGED	PN010	MHS11	44.6	1.122	1.212	0.9439	
15 minute summer	MHS11	16	1.218	0.948	44.6	9.2365	0.0000	SURCHARGED	PN011	MHS12	54.1	2.082	1.572	1.0919	
15 minute summer	MHS12	42	0.206	0.106	54.1	74.9141	0.0000	OK	Hydro-Brake®	MHS13	5.4				
15 minute summer	MHS13	42	0.117	0.117	5.4	0.1319	0.0000	OK	Hydro-Brake®	MHS14	5.4				48.2
15 minute summer	MHS14	1	-0.381	0.000	5.4	0.0000	0.0000	OK							

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Results for 5 year 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 99.76%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	MHS01	14	1.848	0.248	6.9	0.4490	0.0000	SURCHARGED	PN001	MHS02	6.9	0.501	0.517	0.5607	
15 minute winter	MHS02	19	1.810	0.390	15.8	3.1124	0.0000	SURCHARGED	PN002	MHS04	10.9	0.621	0.866	0.5447	
15 minute winter	MHS03	17	1.820	0.310	7.0	0.6403	0.0000	SURCHARGED	PN003	MHS04	6.4	0.437	0.385	0.4969	
15 minute winter	MHS04	18	1.799	0.537	29.7	5.2716	0.0000	SURCHARGED	PN004	MHS05	17.0	0.964	1.257	0.5955	
15 minute winter	MHS05	19	1.574	0.509	33.8	6.1019	0.0000	SURCHARGED	PN005	MHS06	30.5	0.993	0.722	1.2871	
15 minute winter	MHS06	19	1.532	0.682	60.8	12.5137	0.0000	SURCHARGED	PN008	MHS09	39.2	1.474	0.603	0.7673	
15 minute winter	MHS07	19	1.539	0.539	22.1	5.1599	0.0000	SURCHARGED	PN006	MHS06	18.3	0.753	0.604	0.7388	
15 minute winter	MHS08	19	1.541	0.341	15.2	1.0531	0.0000	SURCHARGED	PN007	MHS07	15.1	0.842	0.478	0.9001	
15 minute winter	MHS09	18	1.474	0.964	39.2	1.2194	0.0000	SURCHARGED	PN009	MHS10	39.7	0.999	1.064	0.9180	
15 minute winter	MHS10	17	1.419	1.029	59.4	11.1186	0.0000	SURCHARGED	PN010	MHS11	46.0	1.156	1.248	0.9439	
15 minute winter	MHS11	16	1.262	0.992	46.7	9.7370	0.0000	SURCHARGED	PN011	MHS12	56.3	2.152	1.635	1.1406	
15 minute winter	MHS12	44	0.218	0.118	56.3	83.4525	0.0000	OK	Hydro-Brake®	MHS13	5.8				
15 minute winter	MHS13	44	0.125	0.125	5.8	0.1414	0.0000	OK	Hydro-Brake®	MHS14	5.8				55.0
15 minute winter	MHS14	1	-0.381	0.000	5.8	0.0000	0.0000	OK							

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Results for 5 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	MHS01	22	1.836	0.236	6.2	0.4266	0.0000	SURCHARGED	PN001	MHS02	5.8	0.483	0.438	0.5607	
30 minute summer	MHS02	27	1.803	0.383	13.5	2.1830	0.0000	SURCHARGED	PN002	MHS04	10.2	0.577	0.805	0.5447	
30 minute summer	MHS03	25	1.792	0.282	6.3	0.5824	0.0000	SURCHARGED	PN003	MHS04	5.9	0.414	0.355	0.4969	
30 minute summer	MHS04	26	1.778	0.516	27.0	4.9895	0.0000	SURCHARGED	PN004	MHS05	16.1	0.912	1.190	0.5955	
30 minute summer	MHS05	27	1.529	0.464	31.0	5.3973	0.0000	SURCHARGED	PN005	MHS06	27.8	0.974	0.657	1.2871	
30 minute summer	MHS06	27	1.477	0.627	52.7	11.1800	0.0000	SURCHARGED	PN008	MHS09	39.3	1.327	0.605	0.7673	
30 minute summer	MHS07	27	1.488	0.488	19.7	4.4626	0.0000	SURCHARGED	PN006	MHS06	14.7	0.672	0.487	0.7388	
30 minute summer	MHS08	27	1.493	0.293	13.7	0.9045	0.0000	SURCHARGED	PN007	MHS07	13.4	0.808	0.424	0.9001	
30 minute summer	MHS09	26	1.397	0.887	39.3	1.1218	0.0000	SURCHARGED	PN009	MHS10	40.0	1.005	1.070	0.9180	
30 minute summer	MHS10	25	1.315	0.925	47.3	9.8450	0.0000	SURCHARGED	PN010	MHS11	47.8	1.203	1.300	0.9439	
30 minute summer	MHS11	24	1.097	0.827	53.3	7.8588	0.0000	SURCHARGED	PN011	MHS12	56.9	2.096	1.652	1.2117	
30 minute summer	MHS12	52	0.234	0.134	56.9	94.9268	0.0000	OK	Hydro-Brake®	MHS13	6.4				
30 minute summer	MHS13	52	0.136	0.136	6.4	0.1543	0.0000	OK	Hydro-Brake®	MHS14	6.4				65.2
30 minute summer	MHS14	1	-0.381	0.000	6.4	0.0000	0.0000	OK							

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Results for 5 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 99.84%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	MHS01	21	1.842	0.242	6.5	0.4368	0.0000	SURCHARGED	PN001	MHS02	6.2	0.470	0.468	0.5607	
30 minute winter	MHS02	29	1.816	0.396	14.5	3.7846	0.0000	SURCHARGED	PN002	MHS04	10.1	0.574	0.801	0.5447	
30 minute winter	MHS03	25	1.824	0.314	6.7	0.6497	0.0000	SURCHARGED	PN003	MHS04	6.0	0.419	0.362	0.4969	
30 minute winter	MHS04	26	1.805	0.543	27.5	5.3487	0.0000	SURCHARGED	PN004	MHS05	16.0	0.908	1.184	0.5955	
30 minute winter	MHS05	28	1.596	0.531	31.5	6.4386	0.0000	SURCHARGED	PN005	MHS06	26.8	0.976	0.633	1.2871	
30 minute winter	MHS06	28	1.545	0.695	50.1	12.8219	0.0000	SURCHARGED	PN008	MHS09	40.6	1.338	0.626	0.7673	
30 minute winter	MHS07	28	1.559	0.559	19.5	5.4243	0.0000	SURCHARGED	PN006	MHS06	13.8	0.662	0.456	0.7388	
30 minute winter	MHS08	28	1.566	0.366	14.4	1.1304	0.0000	SURCHARGED	PN007	MHS07	13.2	0.791	0.418	0.9001	
30 minute winter	MHS09	27	1.456	0.946	40.6	1.1968	0.0000	SURCHARGED	PN009	MHS10	41.3	1.039	1.106	0.9180	
30 minute winter	MHS10	25	1.367	0.977	48.5	10.4836	0.0000	SURCHARGED	PN010	MHS11	49.6	1.248	1.348	0.9439	
30 minute winter	MHS11	23	1.131	0.861	55.1	8.2511	0.0000	SURCHARGED	PN011	MHS12	59.2	2.144	1.719	1.2794	
30 minute winter	MHS12	54	0.249	0.149	59.2	105.6075	0.0000	OK	Hydro-Brake®	MHS13	6.8				
30 minute winter	MHS13	55	0.148	0.148	6.8	0.1671	0.0000	OK	Hydro-Brake®	MHS14	6.8				73.1
30 minute winter	MHS14	1	-0.381	0.000	6.8	0.0000	0.0000	OK							

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Results for 5 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.93%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	MHS01	40	1.799	0.199	5.3	0.3593	0.0000	SURCHARGED	PN001	MHS02	5.2	0.467	0.391	0.5607	
60 minute summer	MHS02	40	1.783	0.363	12.0	0.6899	0.0000	SURCHARGED	PN002	MHS04	9.6	0.553	0.759	0.5447	
60 minute summer	MHS03	42	1.722	0.212	5.4	0.4384	0.0000	SURCHARGED	PN003	MHS04	5.3	0.379	0.320	0.4969	
60 minute summer	MHS04	42	1.713	0.451	24.4	4.1304	0.0000	SURCHARGED	PN004	MHS05	16.5	0.940	1.225	0.5955	
60 minute summer	MHS05	43	1.407	0.342	29.5	3.4710	0.0000	SURCHARGED	PN005	MHS06	28.1	0.995	0.665	1.2871	
60 minute summer	MHS06	43	1.342	0.492	50.0	7.8751	0.0000	SURCHARGED	PN008	MHS09	37.7	1.249	0.580	0.7673	
60 minute summer	MHS07	43	1.354	0.354	17.1	2.7639	0.0000	SURCHARGED	PN006	MHS06	14.2	0.668	0.468	0.7388	
60 minute summer	MHS08	43	1.358	0.158	11.7	0.4883	0.0000	OK	PN007	MHS07	11.7	0.780	0.368	0.8317	
60 minute summer	MHS09	42	1.241	0.731	38.0	0.9251	0.0000	SURCHARGED	PN009	MHS10	38.4	0.965	1.027	0.9180	
60 minute summer	MHS10	40	1.128	0.738	53.7	7.5609	0.0000	SURCHARGED	PN010	MHS11	48.2	1.211	1.308	0.9439	
60 minute summer	MHS11	40	0.878	0.608	56.1	5.3803	0.0000	SURCHARGED	PN011	MHS12	55.1	1.835	1.601	1.3231	
60 minute summer	MHS12	69	0.262	0.162	55.1	114.2446	0.0000	OK	Hydro-Brake®	MHS13	7.0				
60 minute summer	MHS13	69	0.158	0.158	7.0	0.1793	0.0000	OK	Hydro-Brake®	MHS14	7.0				83.9
60 minute summer	MHS14	1	-0.381	0.000	7.0	0.0000	0.0000	OK							

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Results for 5 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 99.82%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	MHS01	42	1.803	0.203	4.8	0.3664	0.0000	SURCHARGED	PN001	MHS02	4.7	0.454	0.357	0.5607	
60 minute winter	MHS02	43	1.790	0.370	10.9	0.7042	0.0000	SURCHARGED	PN002	MHS04	9.0	0.538	0.710	0.5447	
60 minute winter	MHS03	44	1.740	0.230	4.9	0.4749	0.0000	SURCHARGED	PN003	MHS04	4.9	0.350	0.292	0.4969	
60 minute winter	MHS04	44	1.731	0.469	22.7	4.3661	0.0000	SURCHARGED	PN004	MHS05	16.4	0.933	1.215	0.5955	
60 minute winter	MHS05	45	1.443	0.378	27.4	4.0302	0.0000	SURCHARGED	PN005	MHS06	25.7	0.964	0.609	1.2871	
60 minute winter	MHS06	45	1.377	0.527	44.0	8.7471	0.0000	SURCHARGED	PN008	MHS09	38.4	1.232	0.591	0.7673	
60 minute winter	MHS07	45	1.392	0.392	15.5	3.1962	0.0000	SURCHARGED	PN006	MHS06	12.1	0.619	0.400	0.7388	
60 minute winter	MHS08	44	1.399	0.199	10.6	0.6147	0.0000	OK	PN007	MHS07	10.6	0.745	0.333	0.8996	
60 minute winter	MHS09	43	1.270	0.760	38.8	0.9611	0.0000	SURCHARGED	PN009	MHS10	39.1	0.984	1.048	0.9180	
60 minute winter	MHS10	42	1.147	0.757	51.0	7.7976	0.0000	SURCHARGED	PN010	MHS11	49.6	1.246	1.346	0.9439	
60 minute winter	MHS11	41	0.886	0.616	56.1	5.4752	0.0000	SURCHARGED	PN011	MHS12	56.5	1.832	1.641	1.4000	
60 minute winter	MHS12	70	0.282	0.182	56.5	128.6564	0.0000	OK	Hydro-Brake®	MHS13	7.2				
60 minute winter	MHS13	70	0.177	0.177	7.2	0.2002	0.0000	OK	Hydro-Brake®	MHS14	7.2				92.5
60 minute winter	MHS14	1	-0.381	0.000	7.2	0.0000	0.0000	OK							

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Results for 5 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.97%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	MHS01	66	1.655	0.055	3.8	0.0988	0.0000	OK	PN001	MHS02	3.8	0.443	0.286	0.3636	
120 minute summer	MHS02	70	1.573	0.153	8.7	0.2907	0.0000	SURCHARGED	PN002	MHS04	7.9	0.509	0.623	0.5447	
120 minute summer	MHS03	66	1.559	0.049	3.9	0.1019	0.0000	OK	PN003	MHS04	3.9	0.290	0.235	0.3195	
120 minute summer	MHS04	72	1.520	0.258	18.7	1.7886	0.0000	SURCHARGED	PN004	MHS05	16.6	0.951	1.229	0.5955	
120 minute summer	MHS05	74	1.243	0.178	25.9	1.2148	0.0000	OK	PN005	MHS06	25.7	0.999	0.608	1.1883	
120 minute summer	MHS06	74	1.196	0.346	44.0	4.5840	0.0000	SURCHARGED	PN008	MHS09	35.5	1.428	0.547	0.7673	
120 minute summer	MHS07	74	1.209	0.209	12.3	1.1850	0.0000	SURCHARGED	PN006	MHS06	12.0	0.637	0.395	0.7388	
120 minute summer	MHS08	66	1.270	0.070	8.4	0.2160	0.0000	OK	PN007	MHS07	8.4	0.732	0.265	0.5722	
120 minute summer	MHS09	72	1.095	0.585	36.5	0.7404	0.0000	SURCHARGED	PN009	MHS10	35.8	0.899	0.958	0.9180	
120 minute summer	MHS10	72	0.975	0.585	49.9	5.6847	0.0000	SURCHARGED	PN010	MHS11	46.3	1.163	1.257	0.9439	
120 minute summer	MHS11	72	0.744	0.474	52.1	3.8655	0.0000	SURCHARGED	PN011	MHS12	51.5	1.567	1.495	1.3460	
120 minute summer	MHS12	122	0.278	0.178	51.5	125.7231	0.0000	OK	Hydro-Brake®	MHS13	7.1				
120 minute summer	MHS13	122	0.173	0.173	7.1	0.1959	0.0000	OK	Hydro-Brake®	MHS14	7.1				106.2
120 minute summer	MHS14	2	-0.381	0.000	7.1	0.0000	0.0000	OK							

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Results for 5 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 99.96%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	MHS01	66	1.649	0.049	3.1	0.0887	0.0000	OK	PN001	MHS02	3.1	0.428	0.233	0.2315	
120 minute winter	MHS02	66	1.500	0.080	7.1	0.1519	0.0000	OK	PN002	MHS04	7.1	0.491	0.562	0.4199	
120 minute winter	MHS03	66	1.554	0.044	3.1	0.0905	0.0000	OK	PN003	MHS04	3.1	0.273	0.186	0.3087	
120 minute winter	MHS04	70	1.442	0.180	16.0	0.9309	0.0000	SURCHARGED	PN004	MHS05	15.4	0.900	1.142	0.5453	
120 minute winter	MHS05	68	1.181	0.116	22.7	0.5776	0.0000	OK	PN005	MHS06	22.7	0.992	0.537	0.9778	
120 minute winter	MHS06	76	1.139	0.289	38.2	3.4847	0.0000	SURCHARGED	PN008	MHS09	33.5	1.435	0.515	0.7673	
120 minute winter	MHS07	76	1.148	0.148	9.9	0.6447	0.0000	OK	PN006	MHS06	9.9	0.610	0.327	0.6636	
120 minute winter	MHS08	66	1.263	0.063	6.8	0.1934	0.0000	OK	PN007	MHS07	6.8	0.692	0.215	0.4630	
120 minute winter	MHS09	74	1.039	0.529	34.2	0.6691	0.0000	SURCHARGED	PN009	MHS10	34.3	0.862	0.918	0.9180	
120 minute winter	MHS10	74	0.918	0.528	46.1	4.9901	0.0000	SURCHARGED	PN010	MHS11	45.2	1.137	1.228	0.9439	
120 minute winter	MHS11	74	0.697	0.427	49.9	3.3283	0.0000	SURCHARGED	PN011	MHS12	49.9	1.546	1.451	1.4156	
120 minute winter	MHS12	122	0.302	0.202	49.9	142.5677	0.0000	OK	Hydro-Brake®	MHS13	7.4				
120 minute winter	MHS13	122	0.195	0.195	7.4	0.2207	0.0000	OK	Hydro-Brake®	MHS14	7.4				115.8
120 minute winter	MHS14	2	-0.381	0.000	7.4	0.0000	0.0000	OK							

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Results for 5 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	MHS01	96	1.647	0.047	2.9	0.0855	0.0000	OK	PN001	MHS02	2.9	0.420	0.217	0.2200	
180 minute summer	MHS02	96	1.497	0.077	6.7	0.1459	0.0000	OK	PN002	MHS04	6.6	0.495	0.525	0.4100	
180 minute summer	MHS03	96	1.553	0.043	3.0	0.0886	0.0000	OK	PN003	MHS04	3.0	0.279	0.179	0.3048	
180 minute summer	MHS04	100	1.418	0.156	15.1	0.7155	0.0000	SURCHARGED	PN004	MHS05	14.5	0.903	1.072	0.5407	
180 minute summer	MHS05	96	1.181	0.116	21.3	0.5734	0.0000	OK	PN005	MHS06	21.2	0.979	0.502	0.9099	
180 minute summer	MHS06	104	1.051	0.201	36.0	1.8089	0.0000	OK	PN008	MHS09	33.0	1.423	0.508	0.7456	
180 minute summer	MHS07	96	1.076	0.076	9.5	0.2477	0.0000	OK	PN006	MHS06	9.3	0.603	0.309	0.4824	
180 minute summer	MHS08	96	1.261	0.061	6.5	0.1883	0.0000	OK	PN007	MHS07	6.5	0.683	0.204	0.2723	
180 minute summer	MHS09	104	0.972	0.462	33.9	0.5845	0.0000	SURCHARGED	PN009	MHS10	32.8	0.826	0.880	0.9180	
180 minute summer	MHS10	104	0.859	0.469	45.9	4.2715	0.0000	SURCHARGED	PN010	MHS11	43.3	1.088	1.176	0.9439	
180 minute summer	MHS11	104	0.657	0.387	48.2	2.8693	0.0000	SURCHARGED	PN011	MHS12	47.6	1.470	1.382	1.3420	
180 minute summer	MHS12	156	0.283	0.183	47.6	129.4179	0.0000	OK	Hydro-Brake®	MHS13	7.2				
180 minute summer	MHS13	156	0.178	0.178	7.2	0.2013	0.0000	OK	Hydro-Brake®	MHS14	7.2				122.6
180 minute summer	MHS14	4	-0.381	0.000	7.2	0.0000	0.0000	OK							

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Results for 5 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	MHS01	100	1.642	0.042	2.3	0.0760	0.0000	OK	PN001	MHS02	2.3	0.399	0.173	0.1861	
180 minute winter	MHS02	96	1.487	0.067	5.3	0.1279	0.0000	OK	PN002	MHS04	5.3	0.478	0.418	0.3386	
180 minute winter	MHS03	96	1.548	0.038	2.3	0.0778	0.0000	OK	PN003	MHS04	2.3	0.267	0.138	0.2496	
180 minute winter	MHS04	100	1.375	0.113	11.9	0.4324	0.0000	OK	PN004	MHS05	11.8	0.869	0.873	0.4583	
180 minute winter	MHS05	100	1.168	0.103	17.4	0.4794	0.0000	OK	PN005	MHS06	17.3	0.972	0.410	0.5788	
180 minute winter	MHS06	92	0.957	0.107	28.9	0.6287	0.0000	OK	PN008	MHS09	29.1	1.426	0.448	0.5574	
180 minute winter	MHS07	96	1.067	0.067	7.4	0.2092	0.0000	OK	PN006	MHS06	7.4	0.575	0.244	0.3078	
180 minute winter	MHS08	96	1.254	0.054	5.1	0.1666	0.0000	OK	PN007	MHS07	5.1	0.639	0.161	0.2294	
180 minute winter	MHS09	104	0.811	0.301	29.8	0.3808	0.0000	SURCHARGED	PN009	MHS10	29.4	0.812	0.787	0.9180	
180 minute winter	MHS10	104	0.724	0.334	39.5	2.6270	0.0000	SURCHARGED	PN010	MHS11	38.6	0.970	1.048	0.9439	
180 minute winter	MHS11	104	0.563	0.293	42.4	1.8951	0.0000	SURCHARGED	PN011	MHS12	42.5	1.443	1.233	1.3715	
180 minute winter	MHS12	176	0.307	0.207	42.5	145.9789	0.0000	OK	Hydro-Brake®	MHS13	7.4				
180 minute winter	MHS13	176	0.200	0.200	7.4	0.2257	0.0000	OK	Hydro-Brake®	MHS14	7.4				133.3
180 minute winter	MHS14	4	-0.381	0.000	7.4	0.0000	0.0000	OK							

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Results for 5 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 99.98%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	MHS01	128	1.643	0.043	2.4	0.0777	0.0000	OK	PN001	MHS02	2.4	0.401	0.181	0.1918	
240 minute summer	MHS02	128	1.489	0.069	5.5	0.1309	0.0000	OK	PN002	MHS04	5.5	0.480	0.436	0.3538	
240 minute summer	MHS03	128	1.549	0.039	2.5	0.0811	0.0000	OK	PN003	MHS04	2.5	0.274	0.150	0.2632	
240 minute summer	MHS04	128	1.381	0.119	12.5	0.4663	0.0000	OK	PN004	MHS05	12.4	0.877	0.921	0.4788	
240 minute summer	MHS05	128	1.171	0.106	18.3	0.5034	0.0000	OK	PN005	MHS06	18.3	0.984	0.433	0.6016	
240 minute summer	MHS06	124	0.960	0.110	30.6	0.6559	0.0000	OK	PN008	MHS09	30.5	1.432	0.470	0.5647	
240 minute summer	MHS07	128	1.069	0.069	7.8	0.2176	0.0000	OK	PN006	MHS06	7.8	0.585	0.258	0.3197	
240 minute summer	MHS08	128	1.255	0.055	5.3	0.1701	0.0000	OK	PN007	MHS07	5.3	0.644	0.167	0.2378	
240 minute summer	MHS09	132	0.844	0.334	31.3	0.4219	0.0000	SURCHARGED	PN009	MHS10	30.7	0.814	0.821	0.9180	
240 minute summer	MHS10	132	0.748	0.358	41.5	2.9144	0.0000	SURCHARGED	PN010	MHS11	39.6	0.996	1.076	0.9439	
240 minute summer	MHS11	132	0.578	0.308	43.5	2.0302	0.0000	SURCHARGED	PN011	MHS12	43.1	1.401	1.250	1.3099	
240 minute summer	MHS12	188	0.286	0.186	43.1	131.2364	0.0000	OK	Hydro-Brake®	MHS13	7.2				
240 minute summer	MHS13	188	0.180	0.180	7.2	0.2040	0.0000	OK	Hydro-Brake®	MHS14	7.2				136.8
240 minute summer	MHS14	4	-0.381	0.000	7.2	0.0000	0.0000	OK							

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Results for 5 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 99.99%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	MHS01	128	1.638	0.038	1.9	0.0690	0.0000	OK	PN001	MHS02	1.9	0.380	0.143	0.1609	
240 minute winter	MHS02	128	1.480	0.060	4.3	0.1141	0.0000	OK	PN002	MHS04	4.3	0.461	0.341	0.2878	
240 minute winter	MHS03	128	1.544	0.034	1.9	0.0706	0.0000	OK	PN003	MHS04	1.9	0.263	0.114	0.2122	
240 minute winter	MHS04	128	1.359	0.097	9.7	0.3472	0.0000	OK	PN004	MHS05	9.7	0.834	0.718	0.3931	
240 minute winter	MHS05	128	1.156	0.091	14.2	0.4028	0.0000	OK	PN005	MHS06	14.2	0.893	0.336	0.5139	
240 minute winter	MHS06	128	0.948	0.098	23.7	0.5517	0.0000	OK	PN008	MHS09	23.7	1.427	0.365	0.3214	
240 minute winter	MHS07	128	1.060	0.060	6.0	0.1817	0.0000	OK	PN006	MHS06	6.0	0.521	0.198	0.2740	
240 minute winter	MHS08	128	1.248	0.048	4.1	0.1495	0.0000	OK	PN007	MHS07	4.1	0.599	0.129	0.1973	
240 minute winter	MHS09	128	0.648	0.138	24.3	0.1750	0.0000	OK	PN009	MHS10	24.3	0.810	0.650	0.6886	
240 minute winter	MHS10	128	0.570	0.180	32.7	1.1574	0.0000	OK	PN010	MHS11	32.6	0.933	0.886	0.8331	
240 minute winter	MHS11	136	0.463	0.193	35.9	1.0603	0.0000	OK	PN011	MHS12	35.8	1.323	1.040	1.2330	
240 minute winter	MHS12	200	0.309	0.209	35.8	147.8679	0.0000	OK	Hydro-Brake®	MHS13	7.4				
240 minute winter	MHS13	200	0.202	0.202	7.4	0.2285	0.0000	OK	Hydro-Brake®	MHS14	7.4				149.5
240 minute winter	MHS14	4	-0.381	0.000	7.4	0.0000	0.0000	OK							

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Results for 5 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	MHS01	192	1.637	0.037	1.8	0.0672	0.0000	OK	PN001	MHS02	1.8	0.373	0.135	0.1552	
360 minute summer	MHS02	192	1.478	0.058	4.1	0.1112	0.0000	OK	PN002	MHS04	4.1	0.458	0.325	0.2781	
360 minute summer	MHS03	192	1.543	0.033	1.8	0.0688	0.0000	OK	PN003	MHS04	1.8	0.257	0.108	0.2049	
360 minute summer	MHS04	192	1.356	0.094	9.3	0.3333	0.0000	OK	PN004	MHS05	9.3	0.826	0.689	0.3810	
360 minute summer	MHS05	192	1.154	0.089	13.6	0.3890	0.0000	OK	PN005	MHS06	13.6	0.885	0.322	0.4975	
360 minute summer	MHS06	192	0.946	0.096	22.6	0.5316	0.0000	OK	PN008	MHS09	22.6	1.428	0.348	0.3062	
360 minute summer	MHS07	192	1.058	0.058	5.7	0.1756	0.0000	OK	PN006	MHS06	5.7	0.512	0.188	0.2650	
360 minute summer	MHS08	192	1.247	0.047	3.9	0.1458	0.0000	OK	PN007	MHS07	3.9	0.592	0.123	0.1903	
360 minute summer	MHS09	192	0.644	0.134	23.2	0.1690	0.0000	OK	PN009	MHS10	23.2	0.808	0.621	0.6597	
360 minute summer	MHS10	192	0.562	0.172	31.2	1.0982	0.0000	OK	PN010	MHS11	31.2	0.927	0.847	0.7973	
360 minute summer	MHS11	192	0.453	0.183	34.4	0.9828	0.0000	OK	PN011	MHS12	34.3	1.244	0.997	1.1366	
360 minute summer	MHS12	256	0.287	0.187	34.3	132.0577	0.0000	OK	Hydro-Brake®	MHS13	7.2				
360 minute summer	MHS13	256	0.181	0.181	7.2	0.2052	0.0000	OK	Hydro-Brake®	MHS14	7.2				161.2
360 minute summer	MHS14	8	-0.381	0.000	7.2	0.0000	0.0000	OK							

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Results for 5 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	MHS01	192	1.633	0.033	1.4	0.0592	0.0000	OK	PN001	MHS02	1.4	0.347	0.105	0.1297	
360 minute winter	MHS02	192	1.471	0.051	3.2	0.0974	0.0000	OK	PN002	MHS04	3.2	0.434	0.253	0.2288	
360 minute winter	MHS03	192	1.539	0.029	1.4	0.0607	0.0000	OK	PN003	MHS04	1.4	0.246	0.084	0.1680	
360 minute winter	MHS04	192	1.342	0.080	7.2	0.2652	0.0000	OK	PN004	MHS05	7.2	0.774	0.533	0.3148	
360 minute winter	MHS05	192	1.142	0.077	10.5	0.3172	0.0000	OK	PN005	MHS06	10.5	0.828	0.248	0.4104	
360 minute winter	MHS06	192	0.933	0.083	17.5	0.4297	0.0000	OK	PN008	MHS09	17.5	1.356	0.269	0.2490	
360 minute winter	MHS07	192	1.051	0.051	4.4	0.1480	0.0000	OK	PN006	MHS06	4.4	0.478	0.145	0.2201	
360 minute winter	MHS08	192	1.241	0.041	3.0	0.1279	0.0000	OK	PN007	MHS07	3.0	0.548	0.095	0.1581	
360 minute winter	MHS09	192	0.622	0.112	17.9	0.1420	0.0000	OK	PN009	MHS10	17.9	0.782	0.479	0.5277	
360 minute winter	MHS10	192	0.530	0.140	24.1	0.8387	0.0000	OK	PN010	MHS11	24.1	0.884	0.655	0.6507	
360 minute winter	MHS11	192	0.424	0.154	26.6	0.7894	0.0000	OK	PN011	MHS12	26.6	1.124	0.771	1.0874	
360 minute winter	MHS12	280	0.308	0.208	26.6	146.8319	0.0000	OK	Hydro-Brake®	MHS13	7.4				
360 minute winter	MHS13	280	0.201	0.201	7.4	0.2270	0.0000	OK	Hydro-Brake®	MHS14	7.4				177.5
360 minute winter	MHS14	8	-0.381	0.000	7.4	0.0000	0.0000	OK							

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Results for 5 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	MHS01	248	1.634	0.034	1.5	0.0611	0.0000	OK	PN001	MHS02	1.5	0.355	0.112	0.1350	
480 minute summer	MHS02	248	1.473	0.053	3.4	0.1001	0.0000	OK	PN002	MHS04	3.4	0.439	0.267	0.2380	
480 minute summer	MHS03	248	1.540	0.030	1.5	0.0627	0.0000	OK	PN003	MHS04	1.5	0.248	0.090	0.1752	
480 minute summer	MHS04	248	1.344	0.082	7.7	0.2770	0.0000	OK	PN004	MHS05	7.6	0.780	0.562	0.3285	
480 minute summer	MHS05	248	1.145	0.080	11.3	0.3336	0.0000	OK	PN005	MHS06	11.2	0.842	0.265	0.4308	
480 minute summer	MHS06	248	0.936	0.086	18.8	0.4530	0.0000	OK	PN008	MHS09	18.6	1.378	0.287	0.2609	
480 minute summer	MHS07	248	1.053	0.053	4.8	0.1558	0.0000	OK	PN006	MHS06	4.8	0.489	0.157	0.2314	
480 minute summer	MHS08	248	1.243	0.043	3.3	0.1338	0.0000	OK	PN007	MHS07	3.3	0.565	0.104	0.1678	
480 minute summer	MHS09	248	0.627	0.117	19.1	0.1481	0.0000	OK	PN009	MHS10	19.1	0.791	0.511	0.5562	
480 minute summer	MHS10	248	0.536	0.146	25.8	0.8870	0.0000	OK	PN010	MHS11	25.6	0.898	0.695	0.6760	
480 minute summer	MHS11	256	0.428	0.158	28.3	0.8191	0.0000	OK	PN011	MHS12	28.1	1.118	0.815	1.0527	
480 minute summer	MHS12	328	0.286	0.186	28.1	131.1929	0.0000	OK	Hydro-Brake®	MHS13	7.2				
480 minute summer	MHS13	328	0.180	0.180	7.2	0.2039	0.0000	OK	Hydro-Brake®	MHS14	7.2				181.6
480 minute summer	MHS14	8	-0.381	0.000	7.2	0.0000	0.0000	OK							

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Results for 5 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	MHS01	248	1.629	0.029	1.1	0.0526	0.0000	OK	PN001	MHS02	1.1	0.325	0.083	0.1089	
480 minute winter	MHS02	248	1.465	0.045	2.5	0.0857	0.0000	OK	PN002	MHS04	2.5	0.410	0.198	0.1913	
480 minute winter	MHS03	248	1.536	0.026	1.1	0.0540	0.0000	OK	PN003	MHS04	1.1	0.233	0.066	0.1407	
480 minute winter	MHS04	248	1.331	0.069	5.7	0.2201	0.0000	OK	PN004	MHS05	5.7	0.724	0.422	0.2663	
480 minute winter	MHS05	256	1.133	0.068	8.4	0.2685	0.0000	OK	PN005	MHS06	8.4	0.784	0.199	0.3479	
480 minute winter	MHS06	248	0.924	0.074	14.1	0.3603	0.0000	OK	PN008	MHS09	14.1	1.280	0.217	0.2120	
480 minute winter	MHS07	248	1.046	0.046	3.6	0.1296	0.0000	OK	PN006	MHS06	3.6	0.454	0.118	0.1883	
480 minute winter	MHS08	248	1.238	0.038	2.5	0.1168	0.0000	OK	PN007	MHS07	2.5	0.522	0.079	0.1375	
480 minute winter	MHS09	248	0.609	0.099	14.5	0.1247	0.0000	OK	PN009	MHS10	14.5	0.752	0.387	0.4442	
480 minute winter	MHS10	248	0.511	0.121	19.5	0.6740	0.0000	OK	PN010	MHS11	19.4	0.852	0.528	0.5456	
480 minute winter	MHS11	248	0.402	0.132	21.4	0.6333	0.0000	OK	PN011	MHS12	21.4	0.989	0.622	1.0203	
480 minute winter	MHS12	352	0.303	0.203	21.4	143.3427	0.0000	OK	Hydro-Brake®	MHS13	7.4				
480 minute winter	MHS13	352	0.196	0.196	7.4	0.2218	0.0000	OK	Hydro-Brake®	MHS14	7.4				202.4
480 minute winter	MHS14	8	-0.381	0.000	7.4	0.0000	0.0000	OK							

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Results for 5 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	MHS01	315	1.630	0.030	1.2	0.0549	0.0000	OK	PN001	MHS02	1.2	0.330	0.090	0.1173	
600 minute summer	MHS02	315	1.468	0.048	2.8	0.0908	0.0000	OK	PN002	MHS04	2.8	0.421	0.222	0.2068	
600 minute summer	MHS03	315	1.537	0.027	1.2	0.0563	0.0000	OK	PN003	MHS04	1.2	0.234	0.072	0.1514	
600 minute summer	MHS04	315	1.335	0.073	6.3	0.2379	0.0000	OK	PN004	MHS05	6.3	0.744	0.467	0.2866	
600 minute summer	MHS05	315	1.137	0.072	9.3	0.2895	0.0000	OK	PN005	MHS06	9.3	0.803	0.220	0.3748	
600 minute summer	MHS06	315	0.928	0.078	15.5	0.3893	0.0000	OK	PN008	MHS09	15.5	1.313	0.239	0.2277	
600 minute summer	MHS07	315	1.048	0.048	3.9	0.1370	0.0000	OK	PN006	MHS06	3.9	0.462	0.129	0.2014	
600 minute summer	MHS08	315	1.239	0.039	2.7	0.1214	0.0000	OK	PN007	MHS07	2.7	0.534	0.085	0.1458	
600 minute summer	MHS09	315	0.614	0.104	15.9	0.1320	0.0000	OK	PN009	MHS10	15.9	0.766	0.426	0.4793	
600 minute summer	MHS10	315	0.519	0.129	21.4	0.7443	0.0000	OK	PN010	MHS11	21.4	0.860	0.581	0.5908	
600 minute summer	MHS11	315	0.411	0.141	23.6	0.6967	0.0000	OK	PN011	MHS12	23.6	1.023	0.685	0.9679	
600 minute summer	MHS12	390	0.281	0.181	23.6	127.9883	0.0000	OK	Hydro-Brake®	MHS13	7.2				
600 minute summer	MHS13	390	0.176	0.176	7.2	0.1992	0.0000	OK	Hydro-Brake®	MHS14	7.2				196.8
600 minute summer	MHS14	15	-0.381	0.000	7.2	0.0000	0.0000	OK							

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Results for 5 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	MHS01	300	1.626	0.026	0.9	0.0477	0.0000	OK	PN001	MHS02	0.9	0.304	0.068	0.0956	
600 minute winter	MHS02	300	1.461	0.041	2.1	0.0783	0.0000	OK	PN002	MHS04	2.1	0.392	0.166	0.1700	
600 minute winter	MHS03	315	1.535	0.025	1.0	0.0515	0.0000	OK	PN003	MHS04	1.0	0.232	0.060	0.1268	
600 minute winter	MHS04	315	1.325	0.063	4.9	0.1966	0.0000	OK	PN004	MHS05	4.9	0.695	0.363	0.2385	
600 minute winter	MHS05	315	1.128	0.063	7.2	0.2402	0.0000	OK	PN005	MHS06	7.2	0.752	0.170	0.3098	
600 minute winter	MHS06	315	0.918	0.068	12.0	0.3179	0.0000	OK	PN008	MHS09	12.0	1.227	0.185	0.1887	
600 minute winter	MHS07	315	1.043	0.043	3.1	0.1183	0.0000	OK	PN006	MHS06	3.1	0.440	0.102	0.1683	
600 minute winter	MHS08	315	1.235	0.035	2.1	0.1075	0.0000	OK	PN007	MHS07	2.1	0.492	0.066	0.1232	
600 minute winter	MHS09	315	0.600	0.090	12.3	0.1134	0.0000	OK	PN009	MHS10	12.3	0.726	0.329	0.3915	
600 minute winter	MHS10	315	0.500	0.110	16.5	0.5887	0.0000	OK	PN010	MHS11	16.5	0.831	0.448	0.4750	
600 minute winter	MHS11	300	0.388	0.118	18.2	0.5203	0.0000	OK	PN011	MHS12	18.3	0.928	0.530	0.9700	
600 minute winter	MHS12	420	0.295	0.195	18.3	138.0981	0.0000	OK	Hydro-Brake®	MHS13	7.3				
600 minute winter	MHS13	420	0.189	0.189	7.3	0.2140	0.0000	OK	Hydro-Brake®	MHS14	7.3				223.0
600 minute winter	MHS14	15	-0.381	0.000	7.3	0.0000	0.0000	OK							

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Results for 5 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	MHS01	375	1.629	0.029	1.1	0.0526	0.0000	OK	PN001	MHS02	1.1	0.325	0.083	0.1089	
720 minute summer	MHS02	375	1.465	0.045	2.5	0.0857	0.0000	OK	PN002	MHS04	2.5	0.410	0.198	0.1897	
720 minute summer	MHS03	375	1.536	0.026	1.1	0.0540	0.0000	OK	PN003	MHS04	1.1	0.233	0.066	0.1392	
720 minute summer	MHS04	375	1.330	0.068	5.6	0.2172	0.0000	OK	PN004	MHS05	5.6	0.722	0.415	0.2624	
720 minute summer	MHS05	375	1.133	0.068	8.2	0.2637	0.0000	OK	PN005	MHS06	8.2	0.777	0.194	0.3415	
720 minute summer	MHS06	375	0.923	0.073	13.7	0.3529	0.0000	OK	PN008	MHS09	13.7	1.271	0.211	0.2079	
720 minute summer	MHS07	375	1.046	0.046	3.5	0.1277	0.0000	OK	PN006	MHS06	3.5	0.452	0.116	0.1849	
720 minute summer	MHS08	375	1.237	0.037	2.4	0.1146	0.0000	OK	PN007	MHS07	2.4	0.514	0.076	0.1347	
720 minute summer	MHS09	375	0.607	0.097	14.1	0.1228	0.0000	OK	PN009	MHS10	14.1	0.747	0.378	0.4359	
720 minute summer	MHS10	375	0.509	0.119	19.0	0.6609	0.0000	OK	PN010	MHS11	19.0	0.842	0.516	0.5358	
720 minute summer	MHS11	375	0.400	0.130	20.9	0.6153	0.0000	OK	PN011	MHS12	20.9	0.946	0.608	0.9147	
720 minute summer	MHS12	465	0.275	0.175	20.9	124.0437	0.0000	OK	Hydro-Brake®	MHS13	7.1				
720 minute summer	MHS13	465	0.171	0.171	7.1	0.1935	0.0000	OK	Hydro-Brake®	MHS14	7.1				210.5
720 minute summer	MHS14	15	-0.381	0.000	7.1	0.0000	0.0000	OK							

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Results for 5 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	MHS01	360	1.625	0.025	0.8	0.0450	0.0000	OK	PN001	MHS02	0.8	0.298	0.060	0.0886	
720 minute winter	MHS02	375	1.459	0.039	1.9	0.0745	0.0000	OK	PN002	MHS04	1.9	0.385	0.151	0.1539	
720 minute winter	MHS03	345	1.532	0.022	0.8	0.0462	0.0000	OK	PN003	MHS04	0.8	0.220	0.048	0.1119	
720 minute winter	MHS04	375	1.320	0.058	4.2	0.1759	0.0000	OK	PN004	MHS05	4.2	0.665	0.311	0.2137	
720 minute winter	MHS05	375	1.123	0.058	6.2	0.2164	0.0000	OK	PN005	MHS06	6.2	0.724	0.147	0.2772	
720 minute winter	MHS06	375	0.912	0.062	10.3	0.2827	0.0000	OK	PN008	MHS09	10.3	1.177	0.159	0.1688	
720 minute winter	MHS07	375	1.039	0.039	2.6	0.1061	0.0000	OK	PN006	MHS06	2.6	0.415	0.086	0.1498	
720 minute winter	MHS08	375	1.232	0.032	1.8	0.0996	0.0000	OK	PN007	MHS07	1.8	0.474	0.057	0.1095	
720 minute winter	MHS09	375	0.592	0.082	10.6	0.1042	0.0000	OK	PN009	MHS10	10.6	0.700	0.284	0.3498	
720 minute winter	MHS10	375	0.491	0.101	14.3	0.5251	0.0000	OK	PN010	MHS11	14.3	0.806	0.388	0.4213	
720 minute winter	MHS11	360	0.376	0.106	15.8	0.4473	0.0000	OK	PN011	MHS12	15.8	0.872	0.459	0.9248	
720 minute winter	MHS12	495	0.287	0.187	15.8	132.2033	0.0000	OK	Hydro-Brake®	MHS13	7.2				
720 minute winter	MHS13	495	0.182	0.182	7.2	0.2054	0.0000	OK	Hydro-Brake®	MHS14	7.2				238.9
720 minute winter	MHS14	15	-0.381	0.000	7.2	0.0000	0.0000	OK							

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Results for 5 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	MHS01	495	1.626	0.026	0.9	0.0477	0.0000	OK	PN001	MHS02	0.9	0.310	0.068	0.0934	
960 minute summer	MHS02	495	1.460	0.040	2.0	0.0764	0.0000	OK	PN002	MHS04	2.0	0.383	0.158	0.1628	
960 minute summer	MHS03	495	1.534	0.024	0.9	0.0490	0.0000	OK	PN003	MHS04	0.9	0.221	0.054	0.1201	
960 minute summer	MHS04	495	1.323	0.061	4.6	0.1876	0.0000	OK	PN004	MHS05	4.6	0.681	0.341	0.2284	
960 minute summer	MHS05	495	1.126	0.061	6.8	0.2309	0.0000	OK	PN005	MHS06	6.8	0.744	0.161	0.2958	
960 minute summer	MHS06	495	0.915	0.065	11.2	0.3014	0.0000	OK	PN008	MHS09	11.2	1.205	0.172	0.1794	
960 minute summer	MHS07	495	1.041	0.041	2.8	0.1110	0.0000	OK	PN006	MHS06	2.8	0.422	0.093	0.1588	
960 minute summer	MHS08	495	1.233	0.033	1.9	0.1023	0.0000	OK	PN007	MHS07	1.9	0.478	0.060	0.1147	
960 minute summer	MHS09	495	0.596	0.086	11.5	0.1091	0.0000	OK	PN009	MHS10	11.5	0.714	0.308	0.3721	
960 minute summer	MHS10	495	0.495	0.105	15.5	0.5588	0.0000	OK	PN010	MHS11	15.5	0.812	0.421	0.4529	
960 minute summer	MHS11	495	0.383	0.113	17.1	0.4896	0.0000	OK	PN011	MHS12	17.1	0.840	0.498	0.8481	
960 minute summer	MHS12	600	0.266	0.166	17.1	117.3144	0.0000	OK	Hydro-Brake®	MHS13	7.0				
960 minute summer	MHS13	600	0.162	0.162	7.0	0.1837	0.0000	OK	Hydro-Brake®	MHS14	7.0				234.2
960 minute summer	MHS14	15	-0.381	0.000	7.0	0.0000	0.0000	OK							

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Results for 5 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	MHS01	495	1.623	0.023	0.7	0.0422	0.0000	OK	PN001	MHS02	0.7	0.285	0.053	0.0792	
960 minute winter	MHS02	495	1.456	0.036	1.6	0.0683	0.0000	OK	PN002	MHS04	1.6	0.369	0.127	0.1351	
960 minute winter	MHS03	480	1.531	0.021	0.7	0.0434	0.0000	OK	PN003	MHS04	0.7	0.215	0.042	0.0987	
960 minute winter	MHS04	495	1.315	0.053	3.5	0.1551	0.0000	OK	PN004	MHS05	3.5	0.634	0.259	0.1868	
960 minute winter	MHS05	495	1.118	0.053	5.1	0.1895	0.0000	OK	PN005	MHS06	5.1	0.689	0.121	0.2396	
960 minute winter	MHS06	495	0.906	0.056	8.4	0.2428	0.0000	OK	PN008	MHS09	8.4	1.113	0.129	0.1456	
960 minute winter	MHS07	480	1.036	0.036	2.1	0.0932	0.0000	OK	PN006	MHS06	2.1	0.393	0.069	0.1291	
960 minute winter	MHS08	465	1.229	0.029	1.4	0.0882	0.0000	OK	PN007	MHS07	1.4	0.442	0.044	0.0932	
960 minute winter	MHS09	495	0.583	0.073	8.6	0.0929	0.0000	OK	PN009	MHS10	8.6	0.668	0.230	0.2973	
960 minute winter	MHS10	495	0.479	0.089	11.5	0.4449	0.0000	OK	PN010	MHS11	11.5	0.763	0.312	0.3576	
960 minute winter	MHS11	495	0.364	0.094	12.7	0.3747	0.0000	OK	PN011	MHS12	12.7	0.822	0.369	0.8347	
960 minute winter	MHS12	630	0.268	0.168	12.7	119.0226	0.0000	OK	Hydro-Brake®	MHS13	7.0				
960 minute winter	MHS13	630	0.165	0.165	7.0	0.1862	0.0000	OK	Hydro-Brake®	MHS14	7.0				262.4
960 minute winter	MHS14	15	-0.381	0.000	7.0	0.0000	0.0000	OK							

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Results for 5 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	MHS01	750	1.622	0.022	0.6	0.0392	0.0000	OK	PN001	MHS02	0.6	0.270	0.045	0.0717	
1440 minute summer	MHS02	750	1.454	0.034	1.4	0.0639	0.0000	OK	PN002	MHS04	1.4	0.345	0.111	0.1269	
1440 minute summer	MHS03	750	1.531	0.021	0.7	0.0434	0.0000	OK	PN003	MHS04	0.7	0.216	0.042	0.0953	
1440 minute summer	MHS04	750	1.313	0.051	3.3	0.1488	0.0000	OK	PN004	MHS05	3.3	0.620	0.245	0.1800	
1440 minute summer	MHS05	750	1.117	0.052	4.9	0.1841	0.0000	OK	PN005	MHS06	4.9	0.678	0.116	0.2339	
1440 minute summer	MHS06	750	0.905	0.055	8.2	0.2385	0.0000	OK	PN008	MHS09	8.2	1.106	0.126	0.1431	
1440 minute summer	MHS07	750	1.036	0.036	2.1	0.0932	0.0000	OK	PN006	MHS06	2.1	0.393	0.069	0.1276	
1440 minute summer	MHS08	750	1.229	0.029	1.4	0.0882	0.0000	OK	PN007	MHS07	1.4	0.434	0.044	0.0932	
1440 minute summer	MHS09	750	0.582	0.072	8.4	0.0916	0.0000	OK	PN009	MHS10	8.4	0.663	0.225	0.2927	
1440 minute summer	MHS10	750	0.478	0.088	11.3	0.4393	0.0000	OK	PN010	MHS11	11.3	0.762	0.307	0.3522	
1440 minute summer	MHS11	750	0.362	0.092	12.4	0.3678	0.0000	OK	PN011	MHS12	12.4	0.733	0.360	0.7351	
1440 minute summer	MHS12	840	0.245	0.145	12.4	102.8151	0.0000	OK	Hydro-Brake®	MHS13	6.7				
1440 minute summer	MHS13	840	0.145	0.145	6.7	0.1636	0.0000	OK	Hydro-Brake®	MHS14	6.7				264.3
1440 minute summer	MHS14	30	-0.381	0.000	6.7	0.0000	0.0000	OK							

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Results for 5 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	MHS01	720	1.620	0.020	0.5	0.0359	0.0000	OK	PN001	MHS02	0.5	0.262	0.038	0.0613	
1440 minute winter	MHS02	720	1.450	0.030	1.1	0.0567	0.0000	OK	PN002	MHS04	1.1	0.328	0.087	0.1049	
1440 minute winter	MHS03	720	1.528	0.018	0.5	0.0370	0.0000	OK	PN003	MHS04	0.5	0.192	0.030	0.0774	
1440 minute winter	MHS04	780	1.306	0.044	2.5	0.1242	0.0000	OK	PN004	MHS05	2.5	0.578	0.185	0.1474	
1440 minute winter	MHS05	750	1.110	0.045	3.7	0.1528	0.0000	OK	PN005	MHS06	3.7	0.628	0.088	0.1907	
1440 minute winter	MHS06	750	0.898	0.048	6.2	0.1943	0.0000	OK	PN008	MHS09	6.2	1.023	0.095	0.1170	
1440 minute winter	MHS07	750	1.031	0.031	1.6	0.0792	0.0000	OK	PN006	MHS06	1.6	0.366	0.053	0.1045	
1440 minute winter	MHS08	750	1.225	0.025	1.1	0.0787	0.0000	OK	PN007	MHS07	1.1	0.408	0.035	0.0777	
1440 minute winter	MHS09	750	0.573	0.063	6.4	0.0792	0.0000	OK	PN009	MHS10	6.4	0.621	0.171	0.2384	
1440 minute winter	MHS10	750	0.465	0.075	8.6	0.3609	0.0000	OK	PN010	MHS11	8.6	0.708	0.234	0.2883	
1440 minute winter	MHS11	750	0.350	0.080	9.5	0.3007	0.0000	OK	PN011	MHS12	9.5	0.732	0.276	0.7021	
1440 minute winter	MHS12	900	0.241	0.141	9.5	100.0104	0.0000	OK	Hydro-Brake®	MHS13	6.6				
1440 minute winter	MHS13	900	0.142	0.142	6.6	0.1601	0.0000	OK	Hydro-Brake®	MHS14	6.6				300.3
1440 minute winter	MHS14	30	-0.381	0.000	6.6	0.0000	0.0000	OK							

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Results for 10 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 99.57%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	MHS01	15	1.852	0.252	7.1	0.4557	0.0000	SURCHARGED	PN001	MHS02	7.0	0.509	0.528	0.5607	
15 minute summer	MHS02	19	1.817	0.397	16.1	3.9486	0.0000	SURCHARGED	PN002	MHS04	10.7	0.620	0.846	0.5447	
15 minute summer	MHS03	17	1.842	0.332	7.2	0.6865	0.0000	SURCHARGED	PN003	MHS04	6.7	0.462	0.405	0.4969	
15 minute summer	MHS04	17	1.816	0.554	29.5	5.4955	0.0000	SURCHARGED	PN004	MHS05	17.1	0.971	1.267	0.5955	
15 minute summer	MHS05	19	1.599	0.534	34.4	6.4869	0.0000	SURCHARGED	PN005	MHS06	31.6	1.001	0.747	1.2871	
15 minute summer	MHS06	19	1.559	0.709	63.9	13.1757	0.0000	SURCHARGED	PN008	MHS09	39.5	1.459	0.608	0.7673	
15 minute summer	MHS07	19	1.565	0.565	22.8	5.5001	0.0000	SURCHARGED	PN006	MHS06	19.6	0.776	0.648	0.7388	
15 minute summer	MHS08	19	1.568	0.368	15.6	1.1364	0.0000	SURCHARGED	PN007	MHS07	15.6	0.857	0.491	0.9001	
15 minute summer	MHS09	18	1.503	0.993	40.2	1.2560	0.0000	SURCHARGED	PN009	MHS10	40.1	1.008	1.074	0.9180	
15 minute summer	MHS10	17	1.451	1.061	60.6	11.5055	0.0000	SURCHARGED	PN010	MHS11	46.4	1.166	1.259	0.9439	
15 minute summer	MHS11	16	1.284	1.014	48.1	9.9936	0.0000	SURCHARGED	PN011	MHS12	56.9	2.177	1.652	1.1591	
15 minute summer	MHS12	45	0.222	0.122	56.9	86.0196	0.0000	OK	Hydro-Brake®	MHS13	5.9				
15 minute summer	MHS13	45	0.128	0.128	5.9	0.1443	0.0000	OK	Hydro-Brake®	MHS14	5.9				57.0
15 minute summer	MHS14	1	-0.381	0.000	5.9	0.0000	0.0000	OK							

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Results for 10 year 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 99.61%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	MHS01	15	1.872	0.272	7.9	0.4910	0.0000	SURCHARGED	PN001	MHS02	7.8	0.498	0.590	0.5607	
15 minute winter	MHS02	20	1.837	0.417	18.2	6.3260	0.0000	SURCHARGED	PN002	MHS04	11.0	0.625	0.872	0.5447	
15 minute winter	MHS03	16	1.880	0.370	8.1	0.7653	0.0000	SURCHARGED	PN003	MHS04	7.3	0.492	0.436	0.4969	
15 minute winter	MHS04	17	1.837	0.575	31.5	5.7746	0.0000	SURCHARGED	PN004	MHS05	17.1	0.969	1.264	0.5955	
15 minute winter	MHS05	19	1.668	0.603	36.5	7.5884	0.0000	SURCHARGED	PN005	MHS06	32.3	0.983	0.765	1.2871	
15 minute winter	MHS06	19	1.632	0.782	62.9	14.9593	0.0000	SURCHARGED	PN008	MHS09	40.6	1.445	0.625	0.7673	
15 minute winter	MHS07	19	1.643	0.643	25.1	6.5356	0.0000	SURCHARGED	PN006	MHS06	17.1	0.754	0.566	0.7388	
15 minute winter	MHS08	19	1.646	0.446	17.5	1.3790	0.0000	SURCHARGED	PN007	MHS07	17.1	0.859	0.540	0.9001	
15 minute winter	MHS09	18	1.571	1.061	40.6	1.3428	0.0000	SURCHARGED	PN009	MHS10	41.2	1.036	1.103	0.9180	
15 minute winter	MHS10	17	1.514	1.124	62.9	12.2815	0.0000	SURCHARGED	PN010	MHS11	47.8	1.203	1.299	0.9439	
15 minute winter	MHS11	16	1.331	1.061	50.8	10.5170	0.0000	SURCHARGED	PN011	MHS12	59.3	2.252	1.721	1.2231	
15 minute winter	MHS12	47	0.235	0.135	59.3	95.7660	0.0000	OK	Hydro-Brake®	MHS13	6.4				
15 minute winter	MHS13	47	0.137	0.137	6.4	0.1552	0.0000	OK	Hydro-Brake®	MHS14	6.4				64.5
15 minute winter	MHS14	1	-0.381	0.000	6.4	0.0000	0.0000	OK							

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Results for 10 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	MHS01	22	1.856	0.256	7.2	0.4620	0.0000	SURCHARGED	PN001	MHS02	7.1	0.487	0.537	0.5607	
30 minute summer	MHS02	29	1.829	0.409	16.4	5.4026	0.0000	SURCHARGED	PN002	MHS04	11.0	0.624	0.870	0.5447	
30 minute summer	MHS03	24	1.857	0.347	7.4	0.7175	0.0000	SURCHARGED	PN003	MHS04	6.2	0.433	0.375	0.4969	
30 minute summer	MHS04	24	1.824	0.562	29.2	5.6072	0.0000	SURCHARGED	PN004	MHS05	16.1	0.914	1.193	0.5955	
30 minute summer	MHS05	27	1.627	0.562	33.5	6.9425	0.0000	SURCHARGED	PN005	MHS06	27.5	0.960	0.651	1.2871	
30 minute summer	MHS06	27	1.581	0.731	53.1	13.7054	0.0000	SURCHARGED	PN008	MHS09	41.0	1.353	0.631	0.7673	
30 minute summer	MHS07	27	1.594	0.594	21.8	5.9026	0.0000	SURCHARGED	PN006	MHS06	15.1	0.653	0.498	0.7388	
30 minute summer	MHS08	27	1.601	0.401	15.9	1.2389	0.0000	SURCHARGED	PN007	MHS07	14.8	0.813	0.468	0.9001	
30 minute summer	MHS09	26	1.498	0.988	41.0	1.2495	0.0000	SURCHARGED	PN009	MHS10	41.6	1.045	1.113	0.9180	
30 minute summer	MHS10	25	1.413	1.023	51.0	11.0412	0.0000	SURCHARGED	PN010	MHS11	50.0	1.257	1.358	0.9439	
30 minute summer	MHS11	24	1.166	0.896	57.2	8.6520	0.0000	SURCHARGED	PN011	MHS12	60.1	2.186	1.744	1.2999	
30 minute summer	MHS12	56	0.255	0.155	60.1	109.3578	0.0000	OK	Hydro-Brake®	MHS13	6.9				
30 minute summer	MHS13	56	0.152	0.152	6.9	0.1722	0.0000	OK	Hydro-Brake®	MHS14	6.9				75.7
30 minute summer	MHS14	1	-0.381	0.000	6.9	0.0000	0.0000	OK							

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Results for 10 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 99.83%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	MHS01	22	1.864	0.264	7.6	0.4769	0.0000	SURCHARGED	PN001	MHS02	7.5	0.475	0.567	0.5607	
30 minute winter	MHS02	31	1.850	0.430	18.3	7.9509	0.0000	SURCHARGED	PN002	MHS04	12.2	0.692	0.965	0.5447	
30 minute winter	MHS03	24	1.878	0.368	7.8	0.7613	0.0000	SURCHARGED	PN003	MHS04	6.5	0.435	0.388	0.4969	
30 minute winter	MHS04	25	1.840	0.578	29.4	5.8233	0.0000	SURCHARGED	PN004	MHS05	16.6	0.990	1.233	0.5955	
30 minute winter	MHS05	28	1.702	0.637	33.9	8.1224	0.0000	SURCHARGED	PN005	MHS06	26.7	0.977	0.632	1.2871	
30 minute winter	MHS06	28	1.659	0.809	50.5	15.6173	0.0000	SURCHARGED	PN008	MHS09	42.2	1.396	0.649	0.7673	
30 minute winter	MHS07	28	1.677	0.677	21.2	7.0125	0.0000	SURCHARGED	PN006	MHS06	14.3	0.666	0.472	0.7388	
30 minute winter	MHS08	28	1.687	0.487	16.7	1.5040	0.0000	SURCHARGED	PN007	MHS07	14.1	0.791	0.444	0.9001	
30 minute winter	MHS09	27	1.568	1.058	42.2	1.3387	0.0000	SURCHARGED	PN009	MHS10	42.8	1.076	1.146	0.9180	
30 minute winter	MHS10	25	1.475	1.085	52.5	11.7965	0.0000	SURCHARGED	PN010	MHS11	52.0	1.308	1.412	0.9439	
30 minute winter	MHS11	24	1.207	0.937	59.3	9.1217	0.0000	SURCHARGED	PN011	MHS12	62.6	2.238	1.818	1.3673	
30 minute winter	MHS12	59	0.272	0.172	62.6	121.7003	0.0000	OK	Hydro-Brake®	MHS13	7.1				
30 minute winter	MHS13	59	0.168	0.168	7.1	0.1901	0.0000	OK	Hydro-Brake®	MHS14	7.1				83.5
30 minute winter	MHS14	1	-0.381	0.000	7.1	0.0000	0.0000	OK							

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Results for 10 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.82%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	MHS01	37	1.835	0.235	6.2	0.4243	0.0000	SURCHARGED	PN001	MHS02	6.1	0.469	0.455	0.5607	
60 minute summer	MHS02	44	1.809	0.389	13.8	2.9262	0.0000	SURCHARGED	PN002	MHS04	10.2	0.577	0.804	0.5447	
60 minute summer	MHS03	40	1.803	0.293	6.3	0.6061	0.0000	SURCHARGED	PN003	MHS04	5.8	0.408	0.351	0.4969	
60 minute summer	MHS04	41	1.786	0.524	27.0	5.1022	0.0000	SURCHARGED	PN004	MHS05	16.6	0.943	1.229	0.5955	
60 minute summer	MHS05	43	1.510	0.445	31.6	5.0966	0.0000	SURCHARGED	PN005	MHS06	28.5	0.982	0.675	1.2871	
60 minute summer	MHS06	43	1.447	0.597	51.3	10.4497	0.0000	SURCHARGED	PN008	MHS09	39.5	1.212	0.608	0.7673	
60 minute summer	MHS07	43	1.463	0.463	19.6	4.1274	0.0000	SURCHARGED	PN006	MHS06	14.6	0.654	0.483	0.7388	
60 minute summer	MHS08	43	1.471	0.271	13.7	0.8373	0.0000	SURCHARGED	PN007	MHS07	13.4	0.790	0.422	0.9001	
60 minute summer	MHS09	42	1.343	0.833	39.8	1.0535	0.0000	SURCHARGED	PN009	MHS10	40.2	1.010	1.076	0.9180	
60 minute summer	MHS10	41	1.225	0.835	56.1	8.7490	0.0000	SURCHARGED	PN010	MHS11	50.7	1.275	1.378	0.9439	
60 minute summer	MHS11	40	0.948	0.678	59.8	6.1761	0.0000	SURCHARGED	PN011	MHS12	58.5	1.905	1.700	1.4295	
60 minute summer	MHS12	72	0.289	0.189	58.5	133.6906	0.0000	OK	Hydro-Brake®	MHS13	7.3				
60 minute summer	MHS13	72	0.184	0.184	7.3	0.2076	0.0000	OK	Hydro-Brake®	MHS14	7.2				95.2
60 minute summer	MHS14	1	-0.381	0.000	7.2	0.0000	0.0000	OK							

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Results for 10 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 99.76%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	MHS01	41	1.828	0.228	5.6	0.4114	0.0000	SURCHARGED	PN001	MHS02	5.5	0.457	0.414	0.5607	
60 minute winter	MHS02	47	1.817	0.397	12.6	3.9791	0.0000	SURCHARGED	PN002	MHS04	10.0	0.568	0.792	0.5447	
60 minute winter	MHS03	41	1.816	0.306	5.7	0.6319	0.0000	SURCHARGED	PN003	MHS04	5.2	0.371	0.314	0.4969	
60 minute winter	MHS04	43	1.799	0.537	24.4	5.2677	0.0000	SURCHARGED	PN004	MHS05	16.3	0.930	1.207	0.5955	
60 minute winter	MHS05	45	1.560	0.495	29.0	5.8754	0.0000	SURCHARGED	PN005	MHS06	25.5	0.946	0.603	1.2871	
60 minute winter	MHS06	45	1.498	0.648	43.3	11.6889	0.0000	SURCHARGED	PN008	MHS09	40.2	1.267	0.620	0.7673	
60 minute winter	MHS07	45	1.516	0.516	17.3	4.8540	0.0000	SURCHARGED	PN006	MHS06	11.9	0.605	0.392	0.7388	
60 minute winter	MHS08	45	1.525	0.325	12.3	1.0058	0.0000	SURCHARGED	PN007	MHS07	11.7	0.744	0.371	0.9001	
60 minute winter	MHS09	44	1.384	0.874	40.6	1.1057	0.0000	SURCHARGED	PN009	MHS10	41.0	1.030	1.097	0.9180	
60 minute winter	MHS10	42	1.255	0.865	54.2	9.1073	0.0000	SURCHARGED	PN010	MHS11	52.5	1.319	1.425	0.9439	
60 minute winter	MHS11	41	0.961	0.691	60.0	6.3276	0.0000	SURCHARGED	PN011	MHS12	60.2	1.904	1.747	1.4977	
60 minute winter	MHS12	75	0.312	0.212	60.2	149.5181	0.0000	OK	Hydro-Brake®	MHS13	7.5				
60 minute winter	MHS13	75	0.204	0.204	7.5	0.2310	0.0000	OK	Hydro-Brake®	MHS14	7.4				102.4
60 minute winter	MHS14	1	-0.381	0.000	7.4	0.0000	0.0000	OK							

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Results for 10 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.91%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	MHS01	72	1.704	0.104	4.4	0.1875	0.0000	OK	PN001	MHS02	4.4	0.445	0.331	0.4871	
120 minute summer	MHS02	72	1.695	0.275	10.1	0.5232	0.0000	SURCHARGED	PN002	MHS04	8.8	0.510	0.700	0.5447	
120 minute summer	MHS03	74	1.647	0.137	4.5	0.2832	0.0000	OK	PN003	MHS04	4.5	0.325	0.268	0.4865	
120 minute summer	MHS04	74	1.639	0.377	21.6	3.1609	0.0000	SURCHARGED	PN004	MHS05	16.9	0.961	1.251	0.5955	
120 minute summer	MHS05	74	1.353	0.288	27.7	2.7229	0.0000	SURCHARGED	PN005	MHS06	26.2	0.995	0.621	1.2871	
120 minute summer	MHS06	74	1.287	0.437	46.5	6.5401	0.0000	SURCHARGED	PN008	MHS09	37.1	1.430	0.571	0.7673	
120 minute summer	MHS07	74	1.301	0.301	14.3	2.1943	0.0000	SURCHARGED	PN006	MHS06	12.9	0.635	0.426	0.7388	
120 minute summer	MHS08	74	1.307	0.107	9.8	0.3305	0.0000	OK	PN007	MHS07	9.8	0.752	0.309	0.6951	
120 minute summer	MHS09	74	1.180	0.670	37.5	0.8475	0.0000	SURCHARGED	PN009	MHS10	37.9	0.952	1.014	0.9180	
120 minute summer	MHS10	72	1.055	0.665	51.8	6.6612	0.0000	SURCHARGED	PN010	MHS11	48.6	1.222	1.320	0.9439	
120 minute summer	MHS11	72	0.800	0.530	55.3	4.4940	0.0000	SURCHARGED	PN011	MHS12	54.6	1.615	1.585	1.4660	
120 minute summer	MHS12	124	0.311	0.211	54.6	149.1018	0.0000	OK	Hydro-Brake®	MHS13	7.4				
120 minute summer	MHS13	124	0.204	0.204	7.4	0.2304	0.0000	OK	Hydro-Brake®	MHS14	7.4				118.3
120 minute summer	MHS14	2	-0.381	0.000	7.4	0.0000	0.0000	OK							

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Results for 10 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 99.87%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	MHS01	66	1.653	0.053	3.6	0.0960	0.0000	OK	PN001	MHS02	3.6	0.437	0.271	0.3659	
120 minute winter	MHS02	74	1.612	0.192	8.3	0.3652	0.0000	SURCHARGED	PN002	MHS04	7.6	0.494	0.602	0.5447	
120 minute winter	MHS03	76	1.568	0.058	3.7	0.1203	0.0000	OK	PN003	MHS04	3.7	0.279	0.223	0.3376	
120 minute winter	MHS04	76	1.562	0.300	17.9	2.2763	0.0000	SURCHARGED	PN004	MHS05	16.3	0.940	1.210	0.5955	
120 minute winter	MHS05	78	1.301	0.236	25.0	2.0231	0.0000	SURCHARGED	PN005	MHS06	24.8	0.996	0.587	1.2871	
120 minute winter	MHS06	78	1.239	0.389	40.2	5.4860	0.0000	SURCHARGED	PN008	MHS09	36.4	1.432	0.561	0.7673	
120 minute winter	MHS07	76	1.254	0.254	11.6	1.7049	0.0000	SURCHARGED	PN006	MHS06	10.7	0.617	0.354	0.7388	
120 minute winter	MHS08	66	1.268	0.068	7.9	0.2091	0.0000	OK	PN007	MHS07	7.9	0.710	0.249	0.5820	
120 minute winter	MHS09	76	1.133	0.623	36.9	0.7882	0.0000	SURCHARGED	PN009	MHS10	37.1	0.934	0.995	0.9180	
120 minute winter	MHS10	74	1.005	0.615	48.8	6.0576	0.0000	SURCHARGED	PN010	MHS11	48.0	1.208	1.304	0.9439	
120 minute winter	MHS11	74	0.758	0.488	53.3	4.0153	0.0000	SURCHARGED	PN011	MHS12	53.5	1.544	1.555	1.5245	
120 minute winter	MHS12	124	0.339	0.239	53.5	168.9607	0.0000	OK	Hydro-Brake®	MHS13	7.6				
120 minute winter	MHS13	124	0.230	0.230	7.6	0.2602	0.0000	OK	Hydro-Brake®	MHS14	7.6				126.8
120 minute winter	MHS14	2	-0.381	0.000	7.6	0.0000	0.0000	OK							

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Results for 10 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 99.94%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	MHS01	96	1.651	0.051	3.4	0.0928	0.0000	OK	PN001	MHS02	3.4	0.437	0.254	0.2698	
180 minute summer	MHS02	100	1.515	0.095	7.8	0.1811	0.0000	OK	PN002	MHS04	7.7	0.497	0.609	0.4549	
180 minute summer	MHS03	96	1.556	0.046	3.5	0.0960	0.0000	OK	PN003	MHS04	3.5	0.276	0.209	0.3139	
180 minute summer	MHS04	100	1.470	0.208	17.6	1.2064	0.0000	SURCHARGED	PN004	MHS05	16.2	0.937	1.201	0.5902	
180 minute summer	MHS05	104	1.208	0.143	24.0	0.8065	0.0000	OK	PN005	MHS06	23.8	0.967	0.562	1.0729	
180 minute summer	MHS06	104	1.164	0.314	40.9	3.9518	0.0000	SURCHARGED	PN008	MHS09	34.4	1.425	0.530	0.7673	
180 minute summer	MHS07	104	1.175	0.175	11.0	0.8448	0.0000	OK	PN006	MHS06	10.9	0.601	0.359	0.7129	
180 minute summer	MHS08	96	1.266	0.066	7.5	0.2030	0.0000	OK	PN007	MHS07	7.5	0.709	0.235	0.5289	
180 minute summer	MHS09	104	1.064	0.554	35.0	0.7007	0.0000	SURCHARGED	PN009	MHS10	35.3	0.887	0.944	0.9180	
180 minute summer	MHS10	104	0.941	0.551	47.8	5.2767	0.0000	SURCHARGED	PN010	MHS11	46.0	1.157	1.250	0.9439	
180 minute summer	MHS11	104	0.712	0.442	51.1	3.4969	0.0000	SURCHARGED	PN011	MHS12	51.0	1.468	1.481	1.4533	
180 minute summer	MHS12	164	0.316	0.216	51.0	152.8725	0.0000	OK	Hydro-Brake®	MHS13	7.5				
180 minute summer	MHS13	164	0.209	0.209	7.5	0.2360	0.0000	OK	Hydro-Brake®	MHS14	7.5				135.8
180 minute summer	MHS14	4	-0.381	0.000	7.5	0.0000	0.0000	OK							

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Results for 10 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 99.96%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	MHS01	96	1.646	0.046	2.7	0.0824	0.0000	OK	PN001	MHS02	2.7	0.413	0.202	0.2083	
180 minute winter	MHS02	96	1.493	0.073	6.2	0.1396	0.0000	OK	PN002	MHS04	6.1	0.481	0.487	0.3884	
180 minute winter	MHS03	96	1.551	0.041	2.7	0.0843	0.0000	OK	PN003	MHS04	2.7	0.273	0.162	0.2894	
180 minute winter	MHS04	100	1.396	0.134	13.8	0.5611	0.0000	OK	PN004	MHS05	13.7	0.899	1.016	0.5148	
180 minute winter	MHS05	96	1.176	0.111	20.1	0.5384	0.0000	OK	PN005	MHS06	20.2	0.994	0.479	0.8448	
180 minute winter	MHS06	104	1.028	0.178	33.8	1.4507	0.0000	OK	PN008	MHS09	31.9	1.431	0.491	0.7086	
180 minute winter	MHS07	96	1.072	0.072	8.6	0.2326	0.0000	OK	PN006	MHS06	8.6	0.599	0.283	0.4632	
180 minute winter	MHS08	96	1.258	0.058	5.9	0.1795	0.0000	OK	PN007	MHS07	5.9	0.665	0.186	0.2553	
180 minute winter	MHS09	104	0.960	0.450	32.8	0.5697	0.0000	SURCHARGED	PN009	MHS10	32.7	0.822	0.875	0.9180	
180 minute winter	MHS10	104	0.849	0.459	44.2	4.1427	0.0000	SURCHARGED	PN010	MHS11	43.6	1.096	1.184	0.9439	
180 minute winter	MHS11	104	0.643	0.373	48.0	2.7249	0.0000	SURCHARGED	PN011	MHS12	48.3	1.447	1.402	1.5130	
180 minute winter	MHS12	176	0.346	0.246	48.3	174.1442	0.0000	OK	Hydro-Brake®	MHS13	7.7				
180 minute winter	MHS13	176	0.237	0.237	7.7	0.2680	0.0000	OK	Hydro-Brake®	MHS14	7.7				145.9
180 minute winter	MHS14	4	-0.381	0.000	7.7	0.0000	0.0000	OK							

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Results for 10 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	MHS01	128	1.647	0.047	2.8	0.0841	0.0000	OK	PN001	MHS02	2.8	0.418	0.211	0.2146	
240 minute summer	MHS02	128	1.495	0.075	6.4	0.1429	0.0000	OK	PN002	MHS04	6.4	0.489	0.507	0.4063	
240 minute summer	MHS03	128	1.552	0.042	2.9	0.0874	0.0000	OK	PN003	MHS04	2.9	0.274	0.174	0.3035	
240 minute summer	MHS04	128	1.407	0.145	14.6	0.6341	0.0000	OK	PN004	MHS05	14.2	0.901	1.053	0.5340	
240 minute summer	MHS05	124	1.178	0.113	21.0	0.5506	0.0000	OK	PN005	MHS06	21.4	0.999	0.507	0.8658	
240 minute summer	MHS06	136	1.034	0.184	35.7	1.5387	0.0000	OK	PN008	MHS09	32.8	1.432	0.505	0.7185	
240 minute summer	MHS07	128	1.075	0.075	9.1	0.2428	0.0000	OK	PN006	MHS06	9.1	0.610	0.301	0.4718	
240 minute summer	MHS08	128	1.260	0.060	6.2	0.1844	0.0000	OK	PN007	MHS07	6.2	0.673	0.196	0.2658	
240 minute summer	MHS09	132	0.963	0.453	33.7	0.5727	0.0000	SURCHARGED	PN009	MHS10	33.0	0.830	0.884	0.9180	
240 minute summer	MHS10	132	0.851	0.461	45.5	4.1663	0.0000	SURCHARGED	PN010	MHS11	43.5	1.094	1.181	0.9439	
240 minute summer	MHS11	132	0.646	0.376	48.1	2.7591	0.0000	SURCHARGED	PN011	MHS12	48.0	1.389	1.395	1.4481	
240 minute summer	MHS12	196	0.319	0.219	48.0	154.8859	0.0000	OK	Hydro-Brake®	MHS13	7.5				
240 minute summer	MHS13	196	0.211	0.211	7.5	0.2390	0.0000	OK	Hydro-Brake®	MHS14	7.5				152.0
240 minute summer	MHS14	4	-0.381	0.000	7.5	0.0000	0.0000	OK							

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Results for 10 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 99.98%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	MHS01	128	1.641	0.041	2.2	0.0743	0.0000	OK	PN001	MHS02	2.2	0.394	0.165	0.1793	
240 minute winter	MHS02	128	1.485	0.065	5.0	0.1240	0.0000	OK	PN002	MHS04	5.0	0.472	0.396	0.3256	
240 minute winter	MHS03	128	1.547	0.037	2.2	0.0760	0.0000	OK	PN003	MHS04	2.2	0.268	0.132	0.2405	
240 minute winter	MHS04	128	1.371	0.109	11.3	0.4098	0.0000	OK	PN004	MHS05	11.3	0.862	0.836	0.4426	
240 minute winter	MHS05	128	1.165	0.100	16.6	0.4605	0.0000	OK	PN005	MHS06	16.5	0.958	0.391	0.5683	
240 minute winter	MHS06	124	0.956	0.106	27.5	0.6147	0.0000	OK	PN008	MHS09	28.2	1.429	0.434	0.5382	
240 minute winter	MHS07	128	1.065	0.065	7.0	0.2019	0.0000	OK	PN006	MHS06	7.0	0.566	0.231	0.3018	
240 minute winter	MHS08	128	1.252	0.052	4.8	0.1618	0.0000	OK	PN007	MHS07	4.8	0.627	0.152	0.2206	
240 minute winter	MHS09	132	0.760	0.250	28.9	0.3157	0.0000	SURCHARGED	PN009	MHS10	28.5	0.812	0.764	0.9180	
240 minute winter	MHS10	132	0.677	0.287	38.2	2.1343	0.0000	SURCHARGED	PN010	MHS11	37.1	0.938	1.008	0.9439	
240 minute winter	MHS11	132	0.528	0.258	40.9	1.5868	0.0000	SURCHARGED	PN011	MHS12	40.9	1.330	1.187	1.4591	
240 minute winter	MHS12	208	0.348	0.248	40.9	175.0325	0.0000	OK	Hydro-Brake®	MHS13	7.7				
240 minute winter	MHS13	208	0.238	0.238	7.7	0.2694	0.0000	OK	Hydro-Brake®	MHS14	7.7				163.5
240 minute winter	MHS14	4	-0.381	0.000	7.7	0.0000	0.0000	OK							

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Results for 10 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	MHS01	192	1.640	0.040	2.1	0.0726	0.0000	OK	PN001	MHS02	2.1	0.388	0.158	0.1738	
360 minute summer	MHS02	192	1.484	0.064	4.8	0.1212	0.0000	OK	PN002	MHS04	4.8	0.473	0.380	0.3142	
360 minute summer	MHS03	192	1.546	0.036	2.1	0.0743	0.0000	OK	PN003	MHS04	2.1	0.264	0.126	0.2316	
360 minute summer	MHS04	192	1.367	0.105	10.8	0.3893	0.0000	OK	PN004	MHS05	10.8	0.855	0.800	0.4270	
360 minute summer	MHS05	192	1.162	0.097	15.8	0.4413	0.0000	OK	PN005	MHS06	15.8	0.924	0.374	0.5534	
360 minute summer	MHS06	192	0.953	0.103	26.2	0.5953	0.0000	OK	PN008	MHS09	26.3	1.419	0.404	0.3754	
360 minute summer	MHS07	192	1.063	0.063	6.6	0.1939	0.0000	OK	PN006	MHS06	6.6	0.535	0.218	0.2926	
360 minute summer	MHS08	192	1.251	0.051	4.5	0.1566	0.0000	OK	PN007	MHS07	4.5	0.615	0.142	0.2112	
360 minute summer	MHS09	192	0.668	0.158	27.0	0.2001	0.0000	OK	PN009	MHS10	26.6	0.812	0.712	0.8030	
360 minute summer	MHS10	192	0.615	0.225	35.8	1.5300	0.0000	SURCHARGED	PN010	MHS11	34.4	0.940	0.934	0.9435	
360 minute summer	MHS11	192	0.499	0.229	37.8	1.3270	0.0000	SURCHARGED	PN011	MHS12	37.8	1.245	1.098	1.3518	
360 minute summer	MHS12	264	0.320	0.220	37.8	155.8235	0.0000	OK	Hydro-Brake®	MHS13	7.5				
360 minute summer	MHS13	264	0.213	0.213	7.5	0.2405	0.0000	OK	Hydro-Brake®	MHS14	7.5				180.6
360 minute summer	MHS14	8	-0.381	0.000	7.5	0.0000	0.0000	OK							

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Results for 10 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 99.99%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	MHS01	192	1.635	0.035	1.6	0.0633	0.0000	OK	PN001	MHS02	1.6	0.359	0.120	0.1435	
360 minute winter	MHS02	192	1.475	0.055	3.7	0.1052	0.0000	OK	PN002	MHS04	3.7	0.449	0.293	0.2552	
360 minute winter	MHS03	184	1.541	0.031	1.6	0.0648	0.0000	OK	PN003	MHS04	1.6	0.255	0.096	0.1872	
360 minute winter	MHS04	192	1.349	0.087	8.3	0.2997	0.0000	OK	PN004	MHS05	8.3	0.801	0.615	0.3505	
360 minute winter	MHS05	192	1.149	0.084	12.2	0.3564	0.0000	OK	PN005	MHS06	12.2	0.861	0.289	0.4584	
360 minute winter	MHS06	192	0.940	0.090	20.2	0.4848	0.0000	OK	PN008	MHS09	20.2	1.407	0.311	0.2770	
360 minute winter	MHS07	192	1.055	0.055	5.1	0.1631	0.0000	OK	PN006	MHS06	5.1	0.498	0.169	0.2448	
360 minute winter	MHS08	192	1.245	0.045	3.5	0.1381	0.0000	OK	PN007	MHS07	3.5	0.574	0.111	0.1760	
360 minute winter	MHS09	192	0.633	0.123	20.7	0.1560	0.0000	OK	PN009	MHS10	20.7	0.800	0.554	0.5958	
360 minute winter	MHS10	192	0.546	0.156	27.8	0.9718	0.0000	OK	PN010	MHS11	27.8	0.902	0.755	0.7363	
360 minute winter	MHS11	192	0.443	0.173	30.6	0.9190	0.0000	OK	PN011	MHS12	30.6	1.134	0.888	1.2496	
360 minute winter	MHS12	280	0.346	0.246	30.6	173.8603	0.0000	OK	Hydro-Brake®	MHS13	7.7				
360 minute winter	MHS13	280	0.237	0.237	7.7	0.2676	0.0000	OK	Hydro-Brake®	MHS14	7.7				195.0
360 minute winter	MHS14	8	-0.381	0.000	7.7	0.0000	0.0000	OK							

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Results for 10 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	MHS01	248	1.636	0.036	1.7	0.0651	0.0000	OK	PN001	MHS02	1.7	0.366	0.127	0.1487	
480 minute summer	MHS02	248	1.477	0.057	3.9	0.1078	0.0000	OK	PN002	MHS04	3.9	0.450	0.307	0.2669	
480 minute summer	MHS03	248	1.543	0.033	1.8	0.0685	0.0000	OK	PN003	MHS04	1.8	0.260	0.107	0.1982	
480 minute summer	MHS04	248	1.353	0.091	9.0	0.3178	0.0000	OK	PN004	MHS05	8.8	0.814	0.655	0.3671	
480 minute summer	MHS05	248	1.152	0.087	13.0	0.3739	0.0000	OK	PN005	MHS06	12.9	0.871	0.306	0.4808	
480 minute summer	MHS06	248	0.944	0.094	21.7	0.5129	0.0000	OK	PN008	MHS09	21.6	1.427	0.332	0.2915	
480 minute summer	MHS07	248	1.058	0.058	5.6	0.1725	0.0000	OK	PN006	MHS06	5.5	0.511	0.183	0.2580	
480 minute summer	MHS08	248	1.246	0.046	3.8	0.1436	0.0000	OK	PN007	MHS07	3.8	0.585	0.120	0.1866	
480 minute summer	MHS09	248	0.639	0.129	22.2	0.1632	0.0000	OK	PN009	MHS10	22.1	0.807	0.591	0.6293	
480 minute summer	MHS10	248	0.554	0.164	29.8	1.0267	0.0000	OK	PN010	MHS11	29.5	0.912	0.801	0.7669	
480 minute summer	MHS11	256	0.449	0.179	32.6	0.9628	0.0000	OK	PN011	MHS12	32.2	1.124	0.934	1.2051	
480 minute summer	MHS12	328	0.317	0.217	32.2	153.5905	0.0000	OK	Hydro-Brake®	MHS13	7.5				
480 minute summer	MHS13	328	0.210	0.210	7.5	0.2371	0.0000	OK	Hydro-Brake®	MHS14	7.5				205.6
480 minute summer	MHS14	8	-0.381	0.000	7.5	0.0000	0.0000	OK							

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Results for 10 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 99.99%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	MHS01	248	1.632	0.032	1.3	0.0571	0.0000	OK	PN001	MHS02	1.3	0.343	0.098	0.1234	
480 minute winter	MHS02	248	1.469	0.049	3.0	0.0940	0.0000	OK	PN002	MHS04	3.0	0.429	0.237	0.2165	
480 minute winter	MHS03	240	1.538	0.028	1.3	0.0586	0.0000	OK	PN003	MHS04	1.3	0.245	0.078	0.1586	
480 minute winter	MHS04	248	1.338	0.076	6.7	0.2492	0.0000	OK	PN004	MHS05	6.7	0.757	0.494	0.2981	
480 minute winter	MHS05	248	1.139	0.074	9.8	0.3003	0.0000	OK	PN005	MHS06	9.8	0.813	0.231	0.3884	
480 minute winter	MHS06	248	0.930	0.080	16.3	0.4045	0.0000	OK	PN008	MHS09	16.3	1.330	0.250	0.2358	
480 minute winter	MHS07	256	1.049	0.049	4.1	0.1414	0.0000	OK	PN006	MHS06	4.1	0.470	0.135	0.2087	
480 minute winter	MHS08	248	1.240	0.040	2.8	0.1236	0.0000	OK	PN007	MHS07	2.8	0.537	0.088	0.1505	
480 minute winter	MHS09	256	0.617	0.107	16.7	0.1357	0.0000	OK	PN009	MHS10	16.7	0.773	0.446	0.4976	
480 minute winter	MHS10	248	0.523	0.133	22.4	0.7855	0.0000	OK	PN010	MHS11	22.4	0.881	0.609	0.6115	
480 minute winter	MHS11	248	0.415	0.145	24.7	0.7214	0.0000	OK	PN011	MHS12	24.7	1.012	0.719	1.1520	
480 minute winter	MHS12	360	0.340	0.240	24.7	169.7574	0.0000	OK	Hydro-Brake®	MHS13	7.6				
480 minute winter	MHS13	360	0.231	0.231	7.6	0.2614	0.0000	OK	Hydro-Brake®	MHS14	7.6				223.8
480 minute winter	MHS14	8	-0.381	0.000	7.6	0.0000	0.0000	OK							

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Results for 10 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	MHS01	315	1.633	0.033	1.4	0.0592	0.0000	OK	PN001	MHS02	1.4	0.347	0.105	0.1297	
600 minute summer	MHS02	315	1.471	0.051	3.2	0.0974	0.0000	OK	PN002	MHS04	3.2	0.434	0.253	0.2288	
600 minute summer	MHS03	315	1.539	0.029	1.4	0.0607	0.0000	OK	PN003	MHS04	1.4	0.245	0.084	0.1680	
600 minute summer	MHS04	315	1.342	0.080	7.2	0.2651	0.0000	OK	PN004	MHS05	7.2	0.772	0.533	0.3157	
600 minute summer	MHS05	315	1.143	0.078	10.6	0.3194	0.0000	OK	PN005	MHS06	10.6	0.830	0.251	0.4136	
600 minute summer	MHS06	315	0.934	0.084	17.7	0.4338	0.0000	OK	PN008	MHS09	17.7	1.360	0.273	0.2511	
600 minute summer	MHS07	315	1.052	0.052	4.5	0.1502	0.0000	OK	PN006	MHS06	4.5	0.483	0.149	0.2225	
600 minute summer	MHS08	315	1.242	0.042	3.1	0.1300	0.0000	OK	PN007	MHS07	3.1	0.555	0.098	0.1612	
600 minute summer	MHS09	315	0.623	0.113	18.2	0.1435	0.0000	OK	PN009	MHS10	18.2	0.784	0.487	0.5350	
600 minute summer	MHS10	315	0.532	0.142	24.5	0.8499	0.0000	OK	PN010	MHS11	24.5	0.883	0.665	0.6603	
600 minute summer	MHS11	315	0.426	0.156	27.0	0.8046	0.0000	OK	PN011	MHS12	27.0	1.022	0.785	1.1009	
600 minute summer	MHS12	405	0.312	0.212	27.0	149.7149	0.0000	OK	Hydro-Brake®	MHS13	7.4				
600 minute summer	MHS13	405	0.205	0.205	7.4	0.2313	0.0000	OK	Hydro-Brake®	MHS14	7.4				224.7
600 minute summer	MHS14	15	-0.381	0.000	7.4	0.0000	0.0000	OK							

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Results for 10 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%															
Event	**US Node ID**	**Peak (mins)**	**Level (m)**	**Depth (m)**	**Inflow (l/s)**	**Node Vol (m³)**	**Flood (m³)**	**Status**	**Link ID**	**DS Node ID**	**Outflow (l/s)**	**Velocity (m/s)**	**Flow/Cap**	**Link Vol (m³)**	**Discharge Vol (m³)**
600 minute winter	MHS01	315	1.629	0.029	1.1	0.0526	0.0000	OK	PN001	MHS02	1.1	0.325	0.083	0.1089	
600 minute winter	MHS02	315	1.465	0.045	2.5	0.0857	0.0000	OK	PN002	MHS04	2.5	0.410	0.198	0.1897	
600 minute winter	MHS03	315	1.536	0.026	1.1	0.0540	0.0000	OK	PN003	MHS04	1.1	0.232	0.066	0.1392	
600 minute winter	MHS04	315	1.330	0.068	5.6	0.2172	0.0000	OK	PN004	MHS05	5.6	0.722	0.415	0.2624	
600 minute winter	MHS05	315	1.133	0.068	8.2	0.2637	0.0000	OK	PN005	MHS06	8.2	0.777	0.194	0.3415	
600 minute winter	MHS06	315	0.923	0.073	13.7	0.3529	0.0000	OK	PN008	MHS09	13.7	1.271	0.211	0.2079	
600 minute winter	MHS07	315	1.046	0.046	3.5	0.1277	0.0000	OK	PN006	MHS06	3.5	0.452	0.116	0.1849	
600 minute winter	MHS08	315	1.237	0.037	2.4	0.1146	0.0000	OK	PN007	MHS07	2.4	0.514	0.076	0.1347	
600 minute winter	MHS09	315	0.607	0.097	14.1	0.1229	0.0000	OK	PN009	MHS10	14.1	0.747	0.378	0.4357	
600 minute winter	MHS10	315	0.509	0.119	18.9	0.6601	0.0000	OK	PN010	MHS11	18.9	0.861	0.513	0.5233	
600 minute winter	MHS11	300	0.396	0.126	20.8	0.5834	0.0000	OK	PN011	MHS12	20.8	0.962	0.604	1.0982	
600 minute winter	MHS12	435	0.332	0.232	20.8	163.8241	0.0000	OK	Hydro-Brake®	MHS13	7.6				
600 minute winter	MHS13	435	0.223	0.223	7.6	0.2525	0.0000	OK	Hydro-Brake®	MHS14	7.6				250.3
600 minute winter	MHS14	15	-0.381	0.000	7.6	0.0000	0.0000	OK							

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Results for 10 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	MHS01	375	1.630	0.030	1.2	0.0549	0.0000	OK	PN001	MHS02	1.2	0.330	0.090	0.1173	
720 minute summer	MHS02	375	1.468	0.048	2.8	0.0908	0.0000	OK	PN002	MHS04	2.8	0.418	0.222	0.2085	
720 minute summer	MHS03	375	1.538	0.028	1.3	0.0586	0.0000	OK	PN003	MHS04	1.3	0.247	0.078	0.1546	
720 minute summer	MHS04	375	1.336	0.074	6.4	0.2410	0.0000	OK	PN004	MHS05	6.4	0.748	0.474	0.2894	
720 minute summer	MHS05	375	1.138	0.073	9.4	0.2917	0.0000	OK	PN005	MHS06	9.4	0.803	0.222	0.3789	
720 minute summer	MHS06	375	0.929	0.079	15.8	0.3954	0.0000	OK	PN008	MHS09	15.8	1.320	0.243	0.2309	
720 minute summer	MHS07	375	1.049	0.049	4.1	0.1414	0.0000	OK	PN006	MHS06	4.1	0.475	0.135	0.2058	
720 minute summer	MHS08	375	1.240	0.040	2.8	0.1236	0.0000	OK	PN007	MHS07	2.8	0.537	0.088	0.1505	
720 minute summer	MHS09	375	0.616	0.106	16.2	0.1335	0.0000	OK	PN009	MHS10	16.2	0.768	0.434	0.4866	
720 minute summer	MHS10	375	0.521	0.131	21.8	0.7614	0.0000	OK	PN010	MHS11	21.8	0.867	0.592	0.5969	
720 minute summer	MHS11	375	0.412	0.142	24.0	0.7006	0.0000	OK	PN011	MHS12	24.0	0.945	0.698	1.0511	
720 minute summer	MHS12	465	0.308	0.208	24.0	147.2091	0.0000	OK	Hydro-Brake®	MHS13	7.4				
720 minute summer	MHS13	465	0.201	0.201	7.4	0.2275	0.0000	OK	Hydro-Brake®	MHS14	7.4				242.7
720 minute summer	MHS14	15	-0.381	0.000	7.4	0.0000	0.0000	OK							

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Results for 10 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	MHS01	360	1.626	0.026	0.9	0.0477	0.0000	OK	PN001	MHS02	0.9	0.304	0.068	0.0956	
720 minute winter	MHS02	360	1.461	0.041	2.1	0.0783	0.0000	OK	PN002	MHS04	2.1	0.392	0.166	0.1700	
720 minute winter	MHS03	375	1.535	0.025	1.0	0.0515	0.0000	OK	PN003	MHS04	1.0	0.232	0.060	0.1268	
720 minute winter	MHS04	375	1.325	0.063	4.9	0.1966	0.0000	OK	PN004	MHS05	4.9	0.695	0.363	0.2385	
720 minute winter	MHS05	375	1.128	0.063	7.2	0.2402	0.0000	OK	PN005	MHS06	7.2	0.752	0.170	0.3098	
720 minute winter	MHS06	375	0.918	0.068	12.0	0.3179	0.0000	OK	PN008	MHS09	12.0	1.227	0.185	0.1887	
720 minute winter	MHS07	375	1.043	0.043	3.1	0.1183	0.0000	OK	PN006	MHS06	3.1	0.440	0.102	0.1683	
720 minute winter	MHS08	375	1.235	0.035	2.1	0.1075	0.0000	OK	PN007	MHS07	2.1	0.492	0.066	0.1232	
720 minute winter	MHS09	375	0.600	0.090	12.3	0.1134	0.0000	OK	PN009	MHS10	12.3	0.726	0.329	0.3916	
720 minute winter	MHS10	375	0.500	0.110	16.5	0.5890	0.0000	OK	PN010	MHS11	16.5	0.834	0.448	0.4696	
720 minute winter	MHS11	375	0.385	0.115	18.2	0.5027	0.0000	OK	PN011	MHS12	18.2	0.932	0.529	1.0490	
720 minute winter	MHS12	510	0.323	0.223	18.2	157.7063	0.0000	OK	Hydro-Brake®	MHS13	7.5				
720 minute winter	MHS13	510	0.215	0.215	7.5	0.2433	0.0000	OK	Hydro-Brake®	MHS14	7.5				272.5
720 minute winter	MHS14	15	-0.381	0.000	7.5	0.0000	0.0000	OK							

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Results for 10 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	MHS01	495	1.628	0.028	1.0	0.0502	0.0000	OK	PN001	MHS02	1.0	0.315	0.075	0.1023	
960 minute summer	MHS02	495	1.463	0.043	2.3	0.0821	0.0000	OK	PN002	MHS04	2.3	0.400	0.182	0.1790	
960 minute summer	MHS03	495	1.535	0.025	1.0	0.0515	0.0000	OK	PN003	MHS04	1.0	0.225	0.060	0.1313	
960 minute summer	MHS04	495	1.327	0.065	5.2	0.2052	0.0000	OK	PN004	MHS05	5.2	0.705	0.385	0.2495	
960 minute summer	MHS05	495	1.130	0.065	7.7	0.2521	0.0000	OK	PN005	MHS06	7.7	0.766	0.182	0.3253	
960 minute summer	MHS06	495	0.920	0.070	12.8	0.3344	0.0000	OK	PN008	MHS09	12.8	1.249	0.197	0.1978	
960 minute summer	MHS07	495	1.044	0.044	3.2	0.1207	0.0000	OK	PN006	MHS06	3.2	0.437	0.106	0.1750	
960 minute summer	MHS08	495	1.236	0.036	2.2	0.1099	0.0000	OK	PN007	MHS07	2.2	0.502	0.069	0.1265	
960 minute summer	MHS09	495	0.603	0.093	13.1	0.1175	0.0000	OK	PN009	MHS10	13.1	0.734	0.351	0.4123	
960 minute summer	MHS10	495	0.504	0.114	17.7	0.6238	0.0000	OK	PN010	MHS11	17.7	0.842	0.481	0.4986	
960 minute summer	MHS11	480	0.392	0.122	19.5	0.5480	0.0000	OK	PN011	MHS12	19.6	0.845	0.568	0.9730	
960 minute summer	MHS12	600	0.296	0.196	19.6	138.3845	0.0000	OK	Hydro-Brake®	MHS13	7.3				
960 minute summer	MHS13	600	0.190	0.190	7.3	0.2145	0.0000	OK	Hydro-Brake®	MHS14	7.3				269.2
960 minute summer	MHS14	15	-0.381	0.000	7.3	0.0000	0.0000	OK							

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Results for 10 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	MHS01	495	1.625	0.025	0.8	0.0450	0.0000	OK	PN001	MHS02	0.8	0.298	0.060	0.0864	
960 minute winter	MHS02	495	1.458	0.038	1.8	0.0725	0.0000	OK	PN002	MHS04	1.8	0.378	0.143	0.1484	
960 minute winter	MHS03	480	1.532	0.022	0.8	0.0462	0.0000	OK	PN003	MHS04	0.8	0.220	0.048	0.1089	
960 minute winter	MHS04	495	1.319	0.057	4.0	0.1702	0.0000	OK	PN004	MHS05	4.0	0.660	0.296	0.2051	
960 minute winter	MHS05	495	1.121	0.056	5.8	0.2066	0.0000	OK	PN005	MHS06	5.8	0.710	0.137	0.2646	
960 minute winter	MHS06	495	0.911	0.061	9.7	0.2702	0.0000	OK	PN008	MHS09	9.7	1.158	0.149	0.1616	
960 minute winter	MHS07	495	1.039	0.039	2.5	0.1036	0.0000	OK	PN006	MHS06	2.5	0.414	0.083	0.1442	
960 minute winter	MHS08	495	1.231	0.031	1.7	0.0969	0.0000	OK	PN007	MHS07	1.7	0.463	0.054	0.1059	
960 minute winter	MHS09	495	0.589	0.079	9.9	0.1003	0.0000	OK	PN009	MHS10	9.9	0.690	0.265	0.3315	
960 minute winter	MHS10	495	0.486	0.096	13.3	0.4965	0.0000	OK	PN010	MHS11	13.3	0.791	0.361	0.3989	
960 minute winter	MHS11	495	0.372	0.102	14.7	0.4206	0.0000	OK	PN011	MHS12	14.7	0.835	0.427	0.9651	
960 minute winter	MHS12	645	0.302	0.202	14.7	142.9972	0.0000	OK	Hydro-Brake®	MHS13	7.4				
960 minute winter	MHS13	645	0.196	0.196	7.4	0.2213	0.0000	OK	Hydro-Brake®	MHS14	7.4				301.3
960 minute winter	MHS14	15	-0.381	0.000	7.4	0.0000	0.0000	OK							

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Results for 10 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	MHS01	750	1.623	0.023	0.7	0.0422	0.0000	OK	PN001	MHS02	0.7	0.277	0.053	0.0815	
1440 minute summer	MHS02	750	1.457	0.037	1.7	0.0704	0.0000	OK	PN002	MHS04	1.7	0.372	0.135	0.1426	
1440 minute summer	MHS03	750	1.531	0.021	0.7	0.0434	0.0000	OK	PN003	MHS04	0.7	0.201	0.042	0.1035	
1440 minute summer	MHS04	750	1.317	0.055	3.8	0.1640	0.0000	OK	PN004	MHS05	3.8	0.647	0.282	0.1988	
1440 minute summer	MHS05	750	1.120	0.055	5.6	0.2018	0.0000	OK	PN005	MHS06	5.6	0.705	0.132	0.2572	
1440 minute summer	MHS06	750	0.909	0.059	9.3	0.2618	0.0000	OK	PN008	MHS09	9.3	1.145	0.143	0.1568	
1440 minute summer	MHS07	750	1.037	0.037	2.3	0.0985	0.0000	OK	PN006	MHS06	2.3	0.397	0.076	0.1385	
1440 minute summer	MHS08	750	1.230	0.030	1.6	0.0941	0.0000	OK	PN007	MHS07	1.6	0.459	0.051	0.1006	
1440 minute summer	MHS09	750	0.587	0.077	9.5	0.0980	0.0000	OK	PN009	MHS10	9.5	0.683	0.254	0.3216	
1440 minute summer	MHS10	750	0.484	0.094	12.8	0.4823	0.0000	OK	PN010	MHS11	12.8	0.785	0.348	0.3871	
1440 minute summer	MHS11	750	0.369	0.099	14.1	0.4068	0.0000	OK	PN011	MHS12	14.1	0.738	0.409	0.8429	
1440 minute summer	MHS12	870	0.269	0.169	14.1	119.6093	0.0000	OK	Hydro-Brake®	MHS13	7.0				
1440 minute summer	MHS13	870	0.165	0.165	7.0	0.1870	0.0000	OK	Hydro-Brake®	MHS14	7.0				304.1
1440 minute summer	MHS14	30	-0.381	0.000	7.0	0.0000	0.0000	OK							

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Results for 10 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	MHS01	750	1.622	0.022	0.6	0.0392	0.0000	OK	PN001	MHS02	0.6	0.279	0.045	0.0693	
1440 minute winter	MHS02	750	1.452	0.032	1.3	0.0616	0.0000	OK	PN002	MHS04	1.3	0.346	0.103	0.1174	
1440 minute winter	MHS03	750	1.529	0.019	0.6	0.0403	0.0000	OK	PN003	MHS04	0.6	0.205	0.036	0.0866	
1440 minute winter	MHS04	750	1.310	0.048	2.9	0.1368	0.0000	OK	PN004	MHS05	2.9	0.602	0.215	0.1629	
1440 minute winter	MHS05	750	1.113	0.048	4.2	0.1661	0.0000	OK	PN005	MHS06	4.2	0.652	0.099	0.2088	
1440 minute winter	MHS06	750	0.901	0.051	7.0	0.2123	0.0000	OK	PN008	MHS09	7.0	1.058	0.108	0.1276	
1440 minute winter	MHS07	750	1.033	0.033	1.8	0.0849	0.0000	OK	PN006	MHS06	1.8	0.378	0.059	0.1140	
1440 minute winter	MHS08	720	1.227	0.027	1.2	0.0820	0.0000	OK	PN007	MHS07	1.2	0.423	0.038	0.0836	
1440 minute winter	MHS09	750	0.577	0.067	7.2	0.0843	0.0000	OK	PN009	MHS10	7.2	0.639	0.193	0.2607	
1440 minute winter	MHS10	750	0.471	0.081	9.7	0.3929	0.0000	OK	PN010	MHS11	9.7	0.731	0.263	0.3149	
1440 minute winter	MHS11	750	0.355	0.085	10.7	0.3285	0.0000	OK	PN011	MHS12	10.7	0.777	0.311	0.8144	
1440 minute winter	MHS12	900	0.266	0.166	10.7	117.4785	0.0000	OK	Hydro-Brake®	MHS13	7.0				
1440 minute winter	MHS13	900	0.163	0.163	7.0	0.1839	0.0000	OK	Hydro-Brake®	MHS14	7.0				342.2
1440 minute winter	MHS14	30	-0.381	0.000	7.0	0.0000	0.0000	OK							

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Results for 30 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 99.18%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	MHS01	16	1.909	0.309	9.0	0.5587	0.0000	SURCHARGED	PN001	MHS02	8.8	0.517	0.663	0.5607	
15 minute summer	MHS02	21	1.867	0.447	24.9	10.0649	0.0000	SURCHARGED	PN002	MHS04	12.4	0.705	0.983	0.5447	
15 minute summer	MHS03	16	1.943	0.433	9.2	0.8940	0.0000	SURCHARGED	PN003	MHS04	8.0	0.502	0.482	0.4969	
15 minute summer	MHS04	17	1.891	0.629	34.1	6.4982	0.0000	SURCHARGED	PN004	MHS05	17.4	1.005	1.290	0.5955	
15 minute summer	MHS05	19	1.768	0.703	39.1	9.1607	0.0000	SURCHARGED	PN005	MHS06	31.2	0.980	0.738	1.2871	
15 minute summer	MHS06	19	1.738	0.888	66.0	17.5482	0.0000	SURCHARGED	PN008	MHS09	41.7	1.382	0.642	0.7673	
15 minute summer	MHS07	19	1.749	0.749	28.4	7.9647	0.0000	SURCHARGED	PN006	MHS06	20.3	0.782	0.670	0.7388	
15 minute summer	MHS08	19	1.753	0.553	19.8	1.7103	0.0000	SURCHARGED	PN007	MHS07	19.3	0.888	0.610	0.9001	
15 minute summer	MHS09	18	1.679	1.169	41.7	1.4788	0.0000	SURCHARGED	PN009	MHS10	42.4	1.066	1.135	0.9180	
15 minute summer	MHS10	17	1.621	1.231	66.9	13.5943	0.0000	SURCHARGED	PN010	MHS11	49.5	1.245	1.345	0.9439	
15 minute summer	MHS11	17	1.410	1.140	55.2	11.4135	0.0000	SURCHARGED	PN011	MHS12	62.1	2.349	1.802	1.2900	
15 minute summer	MHS12	51	0.253	0.153	62.1	108.0844	0.0000	OK	Hydro-Brake®	MHS13	6.9				
15 minute summer	MHS13	51	0.151	0.151	6.9	0.1703	0.0000	OK	Hydro-Brake®	MHS14	6.9				73.1
15 minute summer	MHS14	1	-0.381	0.000	6.9	0.0000	0.0000	OK							

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Results for 30 year 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 99.42%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	MHS01	15	1.937	0.337	10.1	0.6099	0.0000	SURCHARGED	PN001	MHS02	9.8	0.558	0.739	0.5607	
15 minute winter	MHS02	22	1.894	0.474	28.9	13.2603	0.0000	SURCHARGED	PN002	MHS04	13.7	0.778	1.085	0.5447	
15 minute winter	MHS03	16	1.995	0.485	10.3	1.0025	0.0000	SURCHARGED	PN003	MHS04	8.9	0.526	0.538	0.4969	
15 minute winter	MHS04	17	1.938	0.676	35.2	7.1245	0.0000	SURCHARGED	PN004	MHS05	18.7	1.071	1.384	0.5955	
15 minute winter	MHS05	19	1.863	0.798	41.5	10.6553	0.0000	SURCHARGED	PN005	MHS06	33.6	1.006	0.795	1.2871	
15 minute winter	MHS06	19	1.836	0.986	69.5	19.9502	0.0000	SURCHARGED	PN008	MHS09	42.8	1.462	0.659	0.7673	
15 minute winter	MHS07	19	1.853	0.853	29.9	9.3552	0.0000	SURCHARGED	PN006	MHS06	20.5	0.777	0.678	0.7388	
15 minute winter	MHS08	19	1.861	0.661	22.3	2.0429	0.0000	SURCHARGED	PN007	MHS07	20.2	0.892	0.638	0.9001	
15 minute winter	MHS09	18	1.772	1.262	42.8	1.5964	0.0000	SURCHARGED	PN009	MHS10	43.5	1.093	1.164	0.9180	
15 minute winter	MHS10	17	1.709	1.319	64.9	14.6684	0.0000	SURCHARGED	PN010	MHS11	51.2	1.288	1.391	0.9439	
15 minute winter	MHS11	17	1.477	1.207	58.2	12.1717	0.0000	SURCHARGED	PN011	MHS12	65.0	2.433	1.886	1.3544	
15 minute winter	MHS12	55	0.270	0.170	65.0	119.8973	0.0000	OK	Hydro-Brake®	MHS13	7.0				
15 minute winter	MHS13	55	0.166	0.166	7.0	0.1875	0.0000	OK	Hydro-Brake®	MHS14	7.0				80.4
15 minute winter	MHS14	1	-0.381	0.000	7.0	0.0000	0.0000	OK							

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Results for 30 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 99.80%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	MHS01	23	1.915	0.315	9.2	0.5692	0.0000	SURCHARGED	PN001	MHS02	8.9	0.507	0.672	0.5607	
30 minute summer	MHS02	32	1.892	0.472	26.1	13.0310	0.0000	SURCHARGED	PN002	MHS04	14.1	0.802	1.118	0.5447	
30 minute summer	MHS03	24	1.963	0.453	9.4	0.9364	0.0000	SURCHARGED	PN003	MHS04	8.3	0.470	0.497	0.4969	
30 minute summer	MHS04	25	1.915	0.653	32.0	6.8188	0.0000	SURCHARGED	PN004	MHS05	18.9	1.085	1.400	0.5955	
30 minute summer	MHS05	27	1.822	0.757	38.1	10.0059	0.0000	SURCHARGED	PN005	MHS06	27.5	1.054	0.649	1.2871	
30 minute summer	MHS06	27	1.787	0.937	53.3	18.7310	0.0000	SURCHARGED	PN008	MHS09	43.5	1.344	0.669	0.7673	
30 minute summer	MHS07	27	1.808	0.808	25.8	8.7502	0.0000	SURCHARGED	PN006	MHS06	15.0	0.646	0.495	0.7388	
30 minute summer	MHS08	27	1.820	0.620	20.4	1.9167	0.0000	SURCHARGED	PN007	MHS07	17.3	0.815	0.548	0.9001	
30 minute summer	MHS09	26	1.700	1.190	43.5	1.5057	0.0000	SURCHARGED	PN009	MHS10	44.1	1.109	1.181	0.9180	
30 minute summer	MHS10	25	1.612	1.222	58.6	13.4767	0.0000	SURCHARGED	PN010	MHS11	54.1	1.360	1.469	0.9439	
30 minute summer	MHS11	25	1.309	1.039	64.9	10.2725	0.0000	SURCHARGED	PN011	MHS12	66.1	2.350	1.919	1.4436	
30 minute summer	MHS12	64	0.295	0.195	66.1	137.5990	0.0000	OK	Hydro-Brake®	MHS13	7.3				
30 minute summer	MHS13	64	0.189	0.189	7.3	0.2133	0.0000	OK	Hydro-Brake®	MHS14	7.3				91.4
30 minute summer	MHS14	1	-0.381	0.000	7.3	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	MHS01	23	1.935	0.335	9.7	0.6050	0.0000	SURCHARGED	PN001	MHS02	9.3	0.527	0.698	0.5607	
30 minute winter	MHS02	34	1.932	0.512	28.3	17.9708	0.0000	SURCHARGED	PN002	MHS04	15.0	0.850	1.185	0.5447	
30 minute winter	MHS03	25	2.007	0.497	9.9	1.0273	0.0000	SURCHARGED	PN003	MHS04	8.7	0.494	0.522	0.4969	
30 minute winter	MHS04	26	1.967	0.705	32.5	7.5134	0.0000	SURCHARGED	PN004	MHS05	19.2	1.110	1.422	0.5955	
30 minute winter	MHS05	28	1.921	0.856	38.8	11.5652	0.0000	SURCHARGED	PN005	MHS06	27.7	1.127	0.656	1.2871	
30 minute winter	MHS06	28	1.890	1.040	52.7	21.2469	0.0000	SURCHARGED	PN008	MHS09	44.7	1.405	0.689	0.7673	
30 minute winter	MHS07	28	1.918	0.918	27.0	10.2310	0.0000	FLOOD RISK	PN006	MHS06	14.7	0.676	0.486	0.7388	
30 minute winter	MHS08	28	1.933	0.733	21.4	2.2655	0.0000	FLOOD RISK	PN007	MHS07	17.2	0.807	0.543	0.9001	
30 minute winter	MHS09	27	1.795	1.285	44.7	1.6254	0.0000	SURCHARGED	PN009	MHS10	45.5	1.144	1.218	0.9180	
30 minute winter	MHS10	26	1.694	1.304	60.3	14.4862	0.0000	SURCHARGED	PN010	MHS11	56.6	1.423	1.537	0.9439	
30 minute winter	MHS11	25	1.367	1.097	67.2	10.9314	0.0000	SURCHARGED	PN011	MHS12	69.2	2.408	2.009	1.4956	
30 minute winter	MHS12	70	0.316	0.216	69.2	152.7589	0.0000	OK	Hydro-Brake®	MHS13	7.5				
30 minute winter	MHS13	70	0.209	0.209	7.5	0.2359	0.0000	OK	Hydro-Brake®	MHS14	7.5				97.5
30 minute winter	MHS14	1	-0.381	0.000	7.5	0.0000	0.0000	OK							

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Results for 30 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.80%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	MHS01	39	1.884	0.284	8.0	0.5138	0.0000	SURCHARGED	PN001	MHS02	7.8	0.470	0.587	0.5607	
60 minute summer	MHS02	48	1.871	0.451	20.8	10.5343	0.0000	SURCHARGED	PN002	MHS04	13.1	0.746	1.040	0.5447	
60 minute summer	MHS03	38	1.902	0.392	8.1	0.8107	0.0000	SURCHARGED	PN003	MHS04	7.2	0.441	0.434	0.4969	
60 minute summer	MHS04	41	1.860	0.598	29.5	6.0871	0.0000	SURCHARGED	PN004	MHS05	18.8	1.088	1.391	0.5955	
60 minute summer	MHS05	44	1.706	0.641	35.6	8.1883	0.0000	SURCHARGED	PN005	MHS06	28.1	0.996	0.665	1.2871	
60 minute summer	MHS06	44	1.656	0.806	49.0	15.5438	0.0000	SURCHARGED	PN008	MHS09	41.9	1.253	0.645	0.7673	
60 minute summer	MHS07	44	1.679	0.679	22.7	7.0256	0.0000	SURCHARGED	PN006	MHS06	13.8	0.629	0.455	0.7388	
60 minute summer	MHS08	43	1.691	0.491	17.6	1.5174	0.0000	SURCHARGED	PN007	MHS07	15.3	0.781	0.484	0.9001	
60 minute summer	MHS09	42	1.546	1.036	42.3	1.3105	0.0000	SURCHARGED	PN009	MHS10	42.8	1.075	1.145	0.9180	
60 minute summer	MHS10	41	1.423	1.033	61.9	11.1765	0.0000	SURCHARGED	PN010	MHS11	55.5	1.396	1.508	0.9439	
60 minute summer	MHS11	41	1.091	0.821	67.0	7.7987	0.0000	SURCHARGED	PN011	MHS12	65.1	2.039	1.890	1.5256	
60 minute summer	MHS12	81	0.341	0.241	65.1	170.4106	0.0000	OK	Hydro-Brake®	MHS13	7.7				
60 minute summer	MHS13	81	0.232	0.232	7.7	0.2624	0.0000	OK	Hydro-Brake®	MHS14	7.6				110.2
60 minute summer	MHS14	1	-0.381	0.000	7.6	0.0000	0.0000	OK							

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Results for 30 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 99.64%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	MHS01	48	1.905	0.305	7.2	0.5515	0.0000	SURCHARGED	PN001	MHS02	7.0	0.460	0.524	0.5607	
60 minute winter	MHS02	51	1.901	0.481	19.9	14.1339	0.0000	SURCHARGED	PN002	MHS04	14.6	0.828	1.155	0.5447	
60 minute winter	MHS03	42	1.910	0.400	7.3	0.8277	0.0000	SURCHARGED	PN003	MHS04	6.9	0.392	0.414	0.4969	
60 minute winter	MHS04	48	1.890	0.628	27.8	6.4922	0.0000	SURCHARGED	PN004	MHS05	18.8	1.095	1.391	0.5955	
60 minute winter	MHS05	45	1.777	0.712	32.9	9.2985	0.0000	SURCHARGED	PN005	MHS06	25.4	1.099	0.600	1.2871	
60 minute winter	MHS06	45	1.730	0.880	44.9	17.3378	0.0000	SURCHARGED	PN008	MHS09	43.1	1.313	0.664	0.7673	
60 minute winter	MHS07	45	1.758	0.758	20.7	8.0922	0.0000	SURCHARGED	PN006	MHS06	12.1	0.582	0.400	0.7388	
60 minute winter	MHS08	45	1.774	0.574	15.8	1.7737	0.0000	SURCHARGED	PN007	MHS07	13.4	0.732	0.424	0.9001	
60 minute winter	MHS09	44	1.610	1.100	43.5	1.3912	0.0000	SURCHARGED	PN009	MHS10	43.9	1.104	1.176	0.9180	
60 minute winter	MHS10	42	1.472	1.082	60.8	11.7684	0.0000	SURCHARGED	PN010	MHS11	57.6	1.449	1.566	0.9439	
60 minute winter	MHS11	42	1.117	0.847	67.4	8.0811	0.0000	SURCHARGED	PN011	MHS12	67.2	2.044	1.950	1.5256	
60 minute winter	MHS12	87	0.368	0.268	67.2	189.2544	0.0000	OK	Hydro-Brake®	MHS13	7.8				
60 minute winter	MHS13	87	0.257	0.257	7.8	0.2911	0.0000	OK	Hydro-Brake®	MHS14	7.8				115.5
60 minute winter	MHS14	1	-0.381	0.000	7.8	0.0000	0.0000	OK							

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Results for 30 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.85%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	MHS01	66	1.832	0.232	5.7	0.4201	0.0000	SURCHARGED	PN001	MHS02	5.7	0.453	0.426	0.5607	
120 minute summer	MHS02	78	1.820	0.400	13.1	4.3510	0.0000	SURCHARGED	PN002	MHS04	9.9	0.563	0.784	0.5447	
120 minute summer	MHS03	72	1.816	0.306	5.8	0.6324	0.0000	SURCHARGED	PN003	MHS04	4.8	0.344	0.286	0.4969	
120 minute summer	MHS04	72	1.798	0.536	24.3	5.2591	0.0000	SURCHARGED	PN004	MHS05	16.7	0.949	1.235	0.5955	
120 minute summer	MHS05	76	1.544	0.479	30.1	5.6201	0.0000	SURCHARGED	PN005	MHS06	27.6	0.994	0.654	1.2871	
120 minute summer	MHS06	76	1.478	0.628	45.9	11.2016	0.0000	SURCHARGED	PN008	MHS09	40.7	1.436	0.628	0.7673	
120 minute summer	MHS07	76	1.497	0.497	17.5	4.6002	0.0000	SURCHARGED	PN006	MHS06	12.4	0.643	0.410	0.7388	
120 minute summer	MHS08	76	1.507	0.307	12.5	0.9485	0.0000	SURCHARGED	PN007	MHS07	11.7	0.748	0.371	0.9001	
120 minute summer	MHS09	74	1.357	0.847	41.1	1.0714	0.0000	SURCHARGED	PN009	MHS10	41.5	1.044	1.112	0.9180	
120 minute summer	MHS10	72	1.218	0.828	56.4	8.6543	0.0000	SURCHARGED	PN010	MHS11	53.3	1.340	1.448	0.9439	
120 minute summer	MHS11	72	0.913	0.643	61.5	5.7723	0.0000	SURCHARGED	PN011	MHS12	60.5	1.700	1.757	1.5256	
120 minute summer	MHS12	126	0.377	0.277	60.5	195.6711	0.0000	OK	Hydro-Brake®	MHS13	7.8				
120 minute summer	MHS13	126	0.266	0.266	7.8	0.3009	0.0000	OK	Hydro-Brake®	MHS14	7.8				134.1
120 minute summer	MHS14	2	-0.381	0.000	7.8	0.0000	0.0000	OK							

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Results for 30 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 99.88%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	MHS01	78	1.821	0.221	4.6	0.4004	0.0000	SURCHARGED	PN001	MHS02	4.5	0.446	0.337	0.5607	
120 minute winter	MHS02	82	1.812	0.392	10.4	3.3632	0.0000	SURCHARGED	PN002	MHS04	9.5	0.537	0.749	0.5447	
120 minute winter	MHS03	76	1.795	0.285	4.7	0.5882	0.0000	SURCHARGED	PN003	MHS04	4.4	0.319	0.262	0.4969	
120 minute winter	MHS04	76	1.781	0.519	21.0	5.0376	0.0000	SURCHARGED	PN004	MHS05	16.7	0.953	1.237	0.5955	
120 minute winter	MHS05	80	1.521	0.456	26.7	5.2603	0.0000	SURCHARGED	PN005	MHS06	25.1	0.996	0.593	1.2871	
120 minute winter	MHS06	80	1.452	0.602	42.2	10.5784	0.0000	SURCHARGED	PN008	MHS09	39.6	1.433	0.610	0.7673	
120 minute winter	MHS07	80	1.472	0.472	14.4	4.2640	0.0000	SURCHARGED	PN006	MHS06	11.0	0.621	0.362	0.7388	
120 minute winter	MHS08	78	1.483	0.283	10.1	0.8733	0.0000	SURCHARGED	PN007	MHS07	9.8	0.724	0.311	0.9001	
120 minute winter	MHS09	78	1.327	0.817	40.3	1.0330	0.0000	SURCHARGED	PN009	MHS10	40.5	1.018	1.084	0.9180	
120 minute winter	MHS10	76	1.178	0.788	53.8	8.1673	0.0000	SURCHARGED	PN010	MHS11	53.8	1.353	1.461	0.9439	
120 minute winter	MHS11	74	0.873	0.603	59.8	5.3240	0.0000	SURCHARGED	PN011	MHS12	60.6	1.595	1.760	1.5256	
120 minute winter	MHS12	124	0.414	0.314	60.6	221.9487	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.0				
120 minute winter	MHS13	124	0.302	0.302	8.0	0.3414	0.0000	SURCHARGED	Hydro-Brake®	MHS14	8.0				140.0
120 minute winter	MHS14	2	-0.381	0.000	8.0	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	MHS01	104	1.759	0.159	4.3	0.2872	0.0000	SURCHARGED	PN001	MHS02	4.2	0.436	0.318	0.5607	
180 minute summer	MHS02	104	1.747	0.327	9.9	0.6216	0.0000	SURCHARGED	PN002	MHS04	8.6	0.494	0.683	0.5447	
180 minute summer	MHS03	108	1.705	0.195	4.4	0.4027	0.0000	SURCHARGED	PN003	MHS04	4.1	0.304	0.248	0.4969	
180 minute summer	MHS04	108	1.696	0.434	20.6	3.8945	0.0000	SURCHARGED	PN004	MHS05	16.5	0.947	1.226	0.5955	
180 minute summer	MHS05	108	1.404	0.339	26.5	3.4299	0.0000	SURCHARGED	PN005	MHS06	26.1	0.958	0.617	1.2871	
180 minute summer	MHS06	108	1.336	0.486	40.7	7.7249	0.0000	SURCHARGED	PN008	MHS09	38.2	1.424	0.588	0.7673	
180 minute summer	MHS07	108	1.352	0.352	13.9	2.7360	0.0000	SURCHARGED	PN006	MHS06	10.6	0.595	0.350	0.7388	
180 minute summer	MHS08	108	1.358	0.158	9.6	0.4887	0.0000	OK	PN007	MHS07	9.6	0.713	0.302	0.8320	
180 minute summer	MHS09	108	1.217	0.707	38.8	0.8940	0.0000	SURCHARGED	PN009	MHS10	39.0	0.980	1.043	0.9180	
180 minute summer	MHS10	104	1.081	0.691	51.9	6.9911	0.0000	SURCHARGED	PN010	MHS11	50.8	1.278	1.381	0.9439	
180 minute summer	MHS11	104	0.807	0.537	56.7	4.5780	0.0000	SURCHARGED	PN011	MHS12	57.1	1.509	1.659	1.5256	
180 minute summer	MHS12	180	0.386	0.286	57.1	201.9869	0.0000	OK	Hydro-Brake®	MHS13	7.9				
180 minute summer	MHS13	180	0.275	0.275	7.9	0.3106	0.0000	OK	Hydro-Brake®	MHS14	7.9				153.4
180 minute summer	MHS14	4	-0.381	0.000	7.9	0.0000	0.0000	OK							

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Results for 30 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 99.95%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	MHS01	96	1.652	0.052	3.4	0.0931	0.0000	OK	PN001	MHS02	3.4	0.435	0.256	0.3644	
180 minute winter	MHS02	108	1.618	0.198	7.8	0.3763	0.0000	SURCHARGED	PN002	MHS04	7.4	0.490	0.589	0.5447	
180 minute winter	MHS03	112	1.575	0.065	3.5	0.1346	0.0000	OK	PN003	MHS04	3.5	0.269	0.210	0.3519	
180 minute winter	MHS04	112	1.568	0.306	17.1	2.3547	0.0000	SURCHARGED	PN004	MHS05	15.9	0.918	1.175	0.5955	
180 minute winter	MHS05	112	1.308	0.243	24.1	2.1301	0.0000	SURCHARGED	PN005	MHS06	23.9	0.991	0.565	1.2871	
180 minute winter	MHS06	112	1.245	0.395	38.5	5.6018	0.0000	SURCHARGED	PN008	MHS09	35.2	1.424	0.542	0.7673	
180 minute winter	MHS07	112	1.261	0.261	11.0	1.7667	0.0000	SURCHARGED	PN006	MHS06	10.0	0.602	0.331	0.7388	
180 minute winter	MHS08	112	1.267	0.067	7.5	0.2062	0.0000	OK	PN007	MHS07	7.5	0.698	0.236	0.5815	
180 minute winter	MHS09	112	1.132	0.622	36.1	0.7873	0.0000	SURCHARGED	PN009	MHS10	36.1	0.908	0.968	0.9180	
180 minute winter	MHS10	108	0.996	0.606	49.2	5.9343	0.0000	SURCHARGED	PN010	MHS11	49.2	1.237	1.336	0.9439	
180 minute winter	MHS11	116	0.748	0.478	54.5	3.9153	0.0000	SURCHARGED	PN011	MHS12	54.5	1.445	1.583	1.5256	
180 minute winter	MHS12	180	0.426	0.326	54.5	230.1767	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.0				
180 minute winter	MHS13	180	0.313	0.313	8.0	0.3543	0.0000	SURCHARGED	Hydro-Brake®	MHS14	8.0				160.4
180 minute winter	MHS14	4	-0.381	0.000	8.0	0.0000	0.0000	OK							

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Results for 30 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 99.93%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	MHS01	128	1.653	0.053	3.6	0.0960	0.0000	OK	PN001	MHS02	3.6	0.436	0.271	0.3643	
240 minute summer	MHS02	136	1.593	0.173	8.2	0.3296	0.0000	SURCHARGED	PN002	MHS04	7.5	0.492	0.591	0.5447	
240 minute summer	MHS03	128	1.557	0.047	3.6	0.0977	0.0000	OK	PN003	MHS04	3.6	0.276	0.217	0.3155	
240 minute summer	MHS04	136	1.544	0.282	17.7	2.0706	0.0000	SURCHARGED	PN004	MHS05	16.0	0.923	1.185	0.5955	
240 minute summer	MHS05	136	1.276	0.211	24.7	1.6874	0.0000	OK	PN005	MHS06	24.4	0.995	0.577	1.2705	
240 minute summer	MHS06	136	1.220	0.370	39.0	5.0696	0.0000	SURCHARGED	PN008	MHS09	35.6	1.425	0.549	0.7673	
240 minute summer	MHS07	136	1.236	0.236	11.5	1.5038	0.0000	SURCHARGED	PN006	MHS06	10.1	0.614	0.335	0.7388	
240 minute summer	MHS08	128	1.268	0.068	7.9	0.2091	0.0000	OK	PN007	MHS07	7.9	0.704	0.249	0.5763	
240 minute summer	MHS09	136	1.112	0.602	36.3	0.7621	0.0000	SURCHARGED	PN009	MHS10	36.4	0.916	0.976	0.9180	
240 minute summer	MHS10	136	0.981	0.591	49.3	5.7630	0.0000	SURCHARGED	PN010	MHS11	48.4	1.218	1.316	0.9439	
240 minute summer	MHS11	132	0.732	0.462	53.7	3.7192	0.0000	SURCHARGED	PN011	MHS12	54.0	1.400	1.568	1.5256	
240 minute summer	MHS12	212	0.388	0.288	54.0	203.7686	0.0000	OK	Hydro-Brake®	MHS13	7.9				
240 minute summer	MHS13	212	0.277	0.277	7.9	0.3133	0.0000	OK	Hydro-Brake®	MHS14	7.9				171.9
240 minute summer	MHS14	4	-0.381	0.000	7.9	0.0000	0.0000	OK							

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Results for 30 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	MHS01	128	1.646	0.046	2.7	0.0826	0.0000	OK	PN001	MHS02	2.7	0.413	0.203	0.2110	
240 minute winter	MHS02	128	1.494	0.074	6.3	0.1415	0.0000	OK	PN002	MHS04	6.3	0.482	0.499	0.4033	
240 minute winter	MHS03	128	1.552	0.042	2.8	0.0859	0.0000	OK	PN003	MHS04	2.8	0.271	0.168	0.3008	
240 minute winter	MHS04	132	1.406	0.144	14.3	0.6239	0.0000	OK	PN004	MHS05	14.2	0.901	1.049	0.5285	
240 minute winter	MHS05	120	1.177	0.112	20.9	0.5452	0.0000	OK	PN005	MHS06	20.8	0.994	0.493	0.9514	
240 minute winter	MHS06	140	1.083	0.233	34.8	2.4053	0.0000	SURCHARGED	PN008	MHS09	32.4	1.427	0.500	0.7673	
240 minute winter	MHS07	140	1.091	0.091	8.9	0.3196	0.0000	OK	PN006	MHS06	8.9	0.595	0.294	0.5340	
240 minute winter	MHS08	128	1.259	0.059	6.1	0.1828	0.0000	OK	PN007	MHS07	6.1	0.671	0.193	0.3030	
240 minute winter	MHS09	140	0.992	0.482	33.2	0.6098	0.0000	SURCHARGED	PN009	MHS10	33.2	0.835	0.889	0.9180	
240 minute winter	MHS10	140	0.878	0.488	45.2	4.5003	0.0000	SURCHARGED	PN010	MHS11	44.7	1.125	1.216	0.9439	
240 minute winter	MHS11	148	0.683	0.413	49.5	3.1725	0.0000	SURCHARGED	PN011	MHS12	49.3	1.342	1.432	1.5256	
240 minute winter	MHS12	232	0.428	0.328	49.3	232.1873	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.0				
240 minute winter	MHS13	232	0.316	0.316	8.0	0.3574	0.0000	SURCHARGED	Hydro-Brake®	MHS14	8.0				180.2
240 minute winter	MHS14	4	-0.381	0.000	8.0	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	MHS01	192	1.645	0.045	2.6	0.0810	0.0000	OK	PN001	MHS02	2.6	0.408	0.196	0.2041	
360 minute summer	MHS02	192	1.492	0.072	6.0	0.1376	0.0000	OK	PN002	MHS04	6.0	0.483	0.475	0.3842	
360 minute summer	MHS03	192	1.551	0.041	2.7	0.0843	0.0000	OK	PN003	MHS04	2.7	0.272	0.162	0.2864	
360 minute summer	MHS04	192	1.394	0.132	13.6	0.5462	0.0000	OK	PN004	MHS05	13.6	0.896	1.005	0.5086	
360 minute summer	MHS05	184	1.174	0.109	20.0	0.5239	0.0000	OK	PN005	MHS06	20.2	0.992	0.478	0.7422	
360 minute summer	MHS06	192	0.994	0.144	33.6	1.0074	0.0000	OK	PN008	MHS09	31.9	1.429	0.492	0.6434	
360 minute summer	MHS07	192	1.072	0.072	8.5	0.2312	0.0000	OK	PN006	MHS06	8.5	0.601	0.281	0.4056	
360 minute summer	MHS08	192	1.258	0.058	5.8	0.1781	0.0000	OK	PN007	MHS07	5.8	0.661	0.183	0.2532	
360 minute summer	MHS09	192	0.929	0.419	32.7	0.5305	0.0000	SURCHARGED	PN009	MHS10	32.5	0.818	0.872	0.9180	
360 minute summer	MHS10	200	0.820	0.430	44.2	3.7887	0.0000	SURCHARGED	PN010	MHS11	43.1	1.085	1.172	0.9439	
360 minute summer	MHS11	200	0.623	0.353	47.8	2.4984	0.0000	SURCHARGED	PN011	MHS12	47.2	1.235	1.370	1.5256	
360 minute summer	MHS12	272	0.388	0.288	47.2	203.4205	0.0000	OK	Hydro-Brake®	MHS13	7.9				
360 minute summer	MHS13	272	0.277	0.277	7.9	0.3128	0.0000	OK	Hydro-Brake®	MHS14	7.9				206.0
360 minute summer	MHS14	8	-0.381	0.000	7.9	0.0000	0.0000	OK							

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Results for 30 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 99.96%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	MHS01	192	1.639	0.039	2.0	0.0708	0.0000	OK	PN001	MHS02	2.0	0.382	0.150	0.1682	
360 minute winter	MHS02	192	1.482	0.062	4.6	0.1184	0.0000	OK	PN002	MHS04	4.6	0.464	0.364	0.3059	
360 minute winter	MHS03	192	1.546	0.036	2.1	0.0743	0.0000	OK	PN003	MHS04	2.1	0.265	0.126	0.2271	
360 minute winter	MHS04	192	1.365	0.103	10.5	0.3772	0.0000	OK	PN004	MHS05	10.5	0.849	0.778	0.4182	
360 minute winter	MHS05	192	1.161	0.096	15.4	0.4320	0.0000	OK	PN005	MHS06	15.4	0.921	0.364	0.5411	
360 minute winter	MHS06	184	0.952	0.102	25.6	0.5815	0.0000	OK	PN008	MHS09	25.7	1.427	0.395	0.4237	
360 minute winter	MHS07	192	1.063	0.063	6.5	0.1919	0.0000	OK	PN006	MHS06	6.5	0.540	0.215	0.2875	
360 minute winter	MHS08	192	1.250	0.050	4.4	0.1549	0.0000	OK	PN007	MHS07	4.4	0.609	0.139	0.2084	
360 minute winter	MHS09	208	0.698	0.188	26.4	0.2382	0.0000	OK	PN009	MHS10	26.2	0.808	0.701	0.8688	
360 minute winter	MHS10	208	0.651	0.261	35.2	1.8740	0.0000	SURCHARGED	PN010	MHS11	34.6	0.915	0.940	0.9439	
360 minute winter	MHS11	208	0.538	0.268	38.2	1.6650	0.0000	SURCHARGED	PN011	MHS12	38.0	1.152	1.103	1.5256	
360 minute winter	MHS12	296	0.424	0.324	38.0	229.3166	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.0				
360 minute winter	MHS13	296	0.312	0.312	8.0	0.3529	0.0000	SURCHARGED	Hydro-Brake®	MHS14	8.0				217.2
360 minute winter	MHS14	8	-0.381	0.000	8.0	0.0000	0.0000	OK							

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Results for 30 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.98%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	MHS01	248	1.641	0.041	2.2	0.0741	0.0000	OK	PN001	MHS02	2.2	0.393	0.164	0.1782	
480 minute summer	MHS02	248	1.485	0.065	5.0	0.1234	0.0000	OK	PN002	MHS04	5.0	0.473	0.392	0.3221	
480 minute summer	MHS03	248	1.547	0.037	2.2	0.0759	0.0000	OK	PN003	MHS04	2.2	0.266	0.132	0.2379	
480 minute summer	MHS04	248	1.370	0.108	11.2	0.4027	0.0000	OK	PN004	MHS05	11.1	0.859	0.823	0.4375	
480 minute summer	MHS05	248	1.164	0.099	16.4	0.4543	0.0000	OK	PN005	MHS06	16.3	0.952	0.386	0.5648	
480 minute summer	MHS06	248	0.955	0.105	27.4	0.6060	0.0000	OK	PN008	MHS09	27.3	1.428	0.420	0.5134	
480 minute summer	MHS07	248	1.065	0.065	7.0	0.2008	0.0000	OK	PN006	MHS06	6.9	0.557	0.229	0.2992	
480 minute summer	MHS08	248	1.252	0.052	4.8	0.1615	0.0000	OK	PN007	MHS07	4.8	0.627	0.151	0.2197	
480 minute summer	MHS09	256	0.744	0.234	28.0	0.2954	0.0000	SURCHARGED	PN009	MHS10	27.3	0.807	0.731	0.9180	
480 minute summer	MHS10	256	0.667	0.277	36.8	2.0380	0.0000	SURCHARGED	PN010	MHS11	36.5	0.920	0.992	0.9439	
480 minute summer	MHS11	264	0.524	0.254	40.1	1.5554	0.0000	SURCHARGED	PN011	MHS12	40.0	1.114	1.160	1.5256	
480 minute summer	MHS12	344	0.385	0.285	40.0	201.7002	0.0000	OK	Hydro-Brake®	MHS13	7.9				
480 minute summer	MHS13	344	0.274	0.274	7.9	0.3101	0.0000	OK	Hydro-Brake®	MHS14	7.9				238.7
480 minute summer	MHS14	8	-0.381	0.000	7.9	0.0000	0.0000	OK							

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Results for 30 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 99.98%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	MHS01	248	1.635	0.035	1.6	0.0633	0.0000	OK	PN001	MHS02	1.6	0.359	0.120	0.1435	
480 minute winter	MHS02	248	1.475	0.055	3.7	0.1052	0.0000	OK	PN002	MHS04	3.7	0.449	0.293	0.2578	
480 minute winter	MHS03	248	1.542	0.032	1.7	0.0667	0.0000	OK	PN003	MHS04	1.7	0.256	0.102	0.1911	
480 minute winter	MHS04	248	1.350	0.088	8.5	0.3050	0.0000	OK	PN004	MHS05	8.5	0.805	0.627	0.3555	
480 minute winter	MHS05	248	1.150	0.085	12.5	0.3618	0.0000	OK	PN005	MHS06	12.4	0.864	0.294	0.4657	
480 minute winter	MHS06	248	0.941	0.091	20.7	0.4943	0.0000	OK	PN008	MHS09	20.7	1.415	0.318	0.2817	
480 minute winter	MHS07	248	1.056	0.056	5.3	0.1667	0.0000	OK	PN006	MHS06	5.3	0.503	0.174	0.2495	
480 minute winter	MHS08	248	1.245	0.045	3.6	0.1399	0.0000	OK	PN007	MHS07	3.6	0.576	0.113	0.1798	
480 minute winter	MHS09	248	0.635	0.125	21.2	0.1583	0.0000	OK	PN009	MHS10	21.1	0.802	0.566	0.6069	
480 minute winter	MHS10	248	0.549	0.159	28.4	0.9910	0.0000	OK	PN010	MHS11	28.4	0.900	0.771	0.7478	
480 minute winter	MHS11	256	0.445	0.175	31.3	0.9367	0.0000	OK	PN011	MHS12	31.2	1.079	0.906	1.3961	
480 minute winter	MHS12	368	0.419	0.319	31.2	225.1411	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.0				
480 minute winter	MHS13	368	0.306	0.306	8.0	0.3464	0.0000	SURCHARGED	Hydro-Brake®	MHS14	8.0				253.5
480 minute winter	MHS14	8	-0.381	0.000	8.0	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	MHS01	315	1.637	0.037	1.8	0.0672	0.0000	OK	PN001	MHS02	1.8	0.373	0.135	0.1552	
600 minute summer	MHS02	315	1.478	0.058	4.1	0.1112	0.0000	OK	PN002	MHS04	4.1	0.459	0.325	0.2765	
600 minute summer	MHS03	315	1.543	0.033	1.8	0.0688	0.0000	OK	PN003	MHS04	1.8	0.258	0.108	0.2035	
600 minute summer	MHS04	315	1.355	0.093	9.2	0.3298	0.0000	OK	PN004	MHS05	9.2	0.823	0.682	0.3783	
600 minute summer	MHS05	315	1.154	0.089	13.5	0.3866	0.0000	OK	PN005	MHS06	13.5	0.882	0.319	0.4954	
600 minute summer	MHS06	315	0.946	0.096	22.5	0.5299	0.0000	OK	PN008	MHS09	22.5	1.427	0.346	0.3047	
600 minute summer	MHS07	315	1.058	0.058	5.7	0.1756	0.0000	OK	PN006	MHS06	5.7	0.513	0.188	0.2645	
600 minute summer	MHS08	315	1.247	0.047	3.9	0.1458	0.0000	OK	PN007	MHS07	3.9	0.591	0.123	0.1903	
600 minute summer	MHS09	315	0.643	0.133	23.1	0.1684	0.0000	OK	PN009	MHS10	23.1	0.807	0.619	0.6593	
600 minute summer	MHS10	315	0.563	0.173	31.0	1.1015	0.0000	OK	PN010	MHS11	31.0	0.902	0.842	0.8194	
600 minute summer	MHS11	315	0.464	0.194	34.2	1.0652	0.0000	OK	PN011	MHS12	34.2	1.021	0.992	1.3843	
600 minute summer	MHS12	405	0.380	0.280	34.2	198.2227	0.0000	OK	Hydro-Brake®	MHS13	7.9				
600 minute summer	MHS13	405	0.269	0.269	7.9	0.3048	0.0000	OK	Hydro-Brake®	MHS14	7.9				268.4
600 minute summer	MHS14	15	-0.381	0.000	7.9	0.0000	0.0000	OK							

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Results for 30 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 99.98%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	MHS01	315	1.633	0.033	1.4	0.0592	0.0000	OK	PN001	MHS02	1.4	0.347	0.105	0.1297	
600 minute winter	MHS02	315	1.471	0.051	3.2	0.0974	0.0000	OK	PN002	MHS04	3.2	0.434	0.253	0.2288	
600 minute winter	MHS03	315	1.539	0.029	1.4	0.0607	0.0000	OK	PN003	MHS04	1.4	0.243	0.084	0.1680	
600 minute winter	MHS04	315	1.342	0.080	7.2	0.2652	0.0000	OK	PN004	MHS05	7.2	0.774	0.533	0.3148	
600 minute winter	MHS05	315	1.142	0.077	10.5	0.3173	0.0000	OK	PN005	MHS06	10.5	0.830	0.248	0.4095	
600 minute winter	MHS06	315	0.933	0.083	17.4	0.4277	0.0000	OK	PN008	MHS09	17.4	1.354	0.268	0.2479	
600 minute winter	MHS07	315	1.051	0.051	4.4	0.1480	0.0000	OK	PN006	MHS06	4.4	0.478	0.145	0.2195	
600 minute winter	MHS08	315	1.241	0.041	3.0	0.1279	0.0000	OK	PN007	MHS07	3.0	0.547	0.095	0.1581	
600 minute winter	MHS09	315	0.622	0.112	17.8	0.1415	0.0000	OK	PN009	MHS10	17.8	0.782	0.477	0.5252	
600 minute winter	MHS10	315	0.529	0.139	23.9	0.8347	0.0000	OK	PN010	MHS11	23.9	0.901	0.649	0.6294	
600 minute winter	MHS11	390	0.422	0.152	26.3	0.7728	0.0000	OK	PN011	MHS12	26.3	1.012	0.765	1.3082	
600 minute winter	MHS12	450	0.409	0.309	26.3	218.2422	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.0				
600 minute winter	MHS13	450	0.297	0.297	8.0	0.3357	0.0000	OK	Hydro-Brake®	MHS14	8.0				287.4
600 minute winter	MHS14	15	-0.381	0.000	8.0	0.0000	0.0000	OK							

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Results for 30 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 99.99%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	MHS01	375	1.635	0.035	1.6	0.0633	0.0000	OK	PN001	MHS02	1.6	0.363	0.120	0.1417	
720 minute summer	MHS02	375	1.475	0.055	3.6	0.1037	0.0000	OK	PN002	MHS04	3.6	0.444	0.285	0.2519	
720 minute summer	MHS03	375	1.541	0.031	1.6	0.0648	0.0000	OK	PN003	MHS04	1.6	0.251	0.096	0.1858	
720 minute summer	MHS04	375	1.348	0.086	8.2	0.2966	0.0000	OK	PN004	MHS05	8.2	0.800	0.608	0.3468	
720 minute summer	MHS05	375	1.148	0.083	12.0	0.3517	0.0000	OK	PN005	MHS06	12.0	0.856	0.284	0.4538	
720 minute summer	MHS06	375	0.940	0.090	20.0	0.4807	0.0000	OK	PN008	MHS09	20.0	1.404	0.308	0.2749	
720 minute summer	MHS07	375	1.055	0.055	5.1	0.1631	0.0000	OK	PN006	MHS06	5.1	0.499	0.169	0.2436	
720 minute summer	MHS08	375	1.245	0.045	3.5	0.1381	0.0000	OK	PN007	MHS07	3.5	0.574	0.111	0.1760	
720 minute summer	MHS09	375	0.633	0.123	20.5	0.1550	0.0000	OK	PN009	MHS10	20.5	0.799	0.549	0.5906	
720 minute summer	MHS10	375	0.545	0.155	27.5	0.9611	0.0000	OK	PN010	MHS11	27.5	0.897	0.747	0.7267	
720 minute summer	MHS11	375	0.440	0.170	30.3	0.8966	0.0000	OK	PN011	MHS12	30.3	0.952	0.881	1.2936	
720 minute summer	MHS12	480	0.373	0.273	30.3	192.7334	0.0000	OK	Hydro-Brake®	MHS13	7.8				
720 minute summer	MHS13	480	0.262	0.262	7.8	0.2964	0.0000	OK	Hydro-Brake®	MHS14	7.8				294.6
720 minute summer	MHS14	15	-0.381	0.000	7.8	0.0000	0.0000	OK							

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Results for 30 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 99.99%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	MHS01	375	1.630	0.030	1.2	0.0549	0.0000	OK	PN001	MHS02	1.2	0.335	0.090	0.1153	
720 minute winter	MHS02	375	1.467	0.047	2.7	0.0891	0.0000	OK	PN002	MHS04	2.7	0.416	0.214	0.2017	
720 minute winter	MHS03	360	1.537	0.027	1.2	0.0563	0.0000	OK	PN003	MHS04	1.2	0.241	0.072	0.1484	
720 minute winter	MHS04	375	1.334	0.072	6.1	0.2319	0.0000	OK	PN004	MHS05	6.1	0.737	0.452	0.2799	
720 minute winter	MHS05	375	1.136	0.071	9.0	0.2825	0.0000	OK	PN005	MHS06	9.0	0.797	0.213	0.3657	
720 minute winter	MHS06	375	0.926	0.076	15.0	0.3793	0.0000	OK	PN008	MHS09	15.0	1.302	0.231	0.2223	
720 minute winter	MHS07	375	1.048	0.048	3.8	0.1347	0.0000	OK	PN006	MHS06	3.8	0.460	0.126	0.1970	
720 minute winter	MHS08	375	1.239	0.039	2.6	0.1192	0.0000	OK	PN007	MHS07	2.6	0.526	0.082	0.1427	
720 minute winter	MHS09	375	0.612	0.102	15.4	0.1294	0.0000	OK	PN009	MHS10	15.4	0.760	0.412	0.4677	
720 minute winter	MHS10	375	0.516	0.126	20.7	0.7202	0.0000	OK	PN010	MHS11	20.7	0.878	0.562	0.5598	
720 minute winter	MHS11	480	0.409	0.139	22.8	0.6806	0.0000	OK	PN011	MHS12	22.8	0.977	0.662	1.2547	
720 minute winter	MHS12	525	0.398	0.298	22.8	210.6616	0.0000	OK	Hydro-Brake®	MHS13	7.9				
720 minute winter	MHS13	525	0.286	0.286	7.9	0.3240	0.0000	OK	Hydro-Brake®	MHS14	7.9				318.9
720 minute winter	MHS14	15	-0.381	0.000	7.9	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	MHS01	495	1.632	0.032	1.3	0.0571	0.0000	OK	PN001	MHS02	1.3	0.339	0.098	0.1236	
960 minute summer	MHS02	495	1.470	0.050	3.0	0.0942	0.0000	OK	PN002	MHS04	3.0	0.429	0.238	0.2171	
960 minute summer	MHS03	495	1.538	0.028	1.3	0.0586	0.0000	OK	PN003	MHS04	1.3	0.240	0.078	0.1590	
960 minute summer	MHS04	495	1.338	0.076	6.7	0.2500	0.0000	OK	PN004	MHS05	6.7	0.758	0.496	0.2989	
960 minute summer	MHS05	495	1.139	0.074	9.8	0.3012	0.0000	OK	PN005	MHS06	9.8	0.815	0.232	0.3894	
960 minute summer	MHS06	495	0.930	0.080	16.3	0.4054	0.0000	OK	PN008	MHS09	16.3	1.331	0.251	0.2363	
960 minute summer	MHS07	495	1.049	0.049	4.1	0.1414	0.0000	OK	PN006	MHS06	4.1	0.469	0.135	0.2090	
960 minute summer	MHS08	495	1.240	0.040	2.8	0.1236	0.0000	OK	PN007	MHS07	2.8	0.537	0.088	0.1505	
960 minute summer	MHS09	495	0.618	0.108	16.7	0.1360	0.0000	OK	PN009	MHS10	16.7	0.773	0.447	0.4985	
960 minute summer	MHS10	495	0.523	0.133	22.4	0.7864	0.0000	OK	PN010	MHS11	22.4	0.888	0.608	0.5990	
960 minute summer	MHS11	480	0.410	0.140	24.7	0.6913	0.0000	OK	PN011	MHS12	24.8	0.857	0.719	1.1763	
960 minute summer	MHS12	615	0.358	0.258	24.8	182.0463	0.0000	OK	Hydro-Brake®	MHS13	7.7				
960 minute summer	MHS13	615	0.248	0.248	7.7	0.2800	0.0000	OK	Hydro-Brake®	MHS14	7.7				333.2
960 minute summer	MHS14	15	-0.381	0.000	7.7	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	MHS01	465	1.626	0.026	0.9	0.0477	0.0000	OK	PN001	MHS02	0.9	0.304	0.068	0.0956	
960 minute winter	MHS02	465	1.461	0.041	2.1	0.0783	0.0000	OK	PN002	MHS04	2.1	0.393	0.166	0.1700	
960 minute winter	MHS03	495	1.535	0.025	1.0	0.0515	0.0000	OK	PN003	MHS04	1.0	0.232	0.060	0.1268	
960 minute winter	MHS04	495	1.325	0.063	4.9	0.1966	0.0000	OK	PN004	MHS05	4.9	0.695	0.363	0.2384	
960 minute winter	MHS05	495	1.128	0.063	7.2	0.2400	0.0000	OK	PN005	MHS06	7.2	0.750	0.170	0.3107	
960 minute winter	MHS06	495	0.918	0.068	12.1	0.3200	0.0000	OK	PN008	MHS09	12.1	1.230	0.186	0.1898	
960 minute winter	MHS07	495	1.043	0.043	3.1	0.1183	0.0000	OK	PN006	MHS06	3.1	0.438	0.102	0.1690	
960 minute winter	MHS08	495	1.235	0.035	2.1	0.1075	0.0000	OK	PN007	MHS07	2.1	0.492	0.066	0.1232	
960 minute winter	MHS09	495	0.600	0.090	12.4	0.1140	0.0000	OK	PN009	MHS10	12.4	0.727	0.332	0.3938	
960 minute winter	MHS10	495	0.500	0.110	16.6	0.5919	0.0000	OK	PN010	MHS11	16.6	0.835	0.451	0.4717	
960 minute winter	MHS11	495	0.385	0.115	18.3	0.5051	0.0000	OK	PN011	MHS12	18.3	0.911	0.531	1.1525	
960 minute winter	MHS12	660	0.376	0.276	18.3	194.7978	0.0000	OK	Hydro-Brake®	MHS13	7.8				
960 minute winter	MHS13	660	0.265	0.265	7.8	0.2995	0.0000	OK	Hydro-Brake®	MHS14	7.8				372.5
960 minute winter	MHS14	15	-0.381	0.000	7.8	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	MHS01	750	1.626	0.026	0.9	0.0477	0.0000	OK	PN001	MHS02	0.9	0.304	0.068	0.0956	
1440 minute summer	MHS02	750	1.461	0.041	2.1	0.0783	0.0000	OK	PN002	MHS04	2.1	0.392	0.166	0.1667	
1440 minute summer	MHS03	750	1.534	0.024	0.9	0.0490	0.0000	OK	PN003	MHS04	0.9	0.218	0.054	0.1217	
1440 minute summer	MHS04	750	1.324	0.062	4.7	0.1907	0.0000	OK	PN004	MHS05	4.7	0.687	0.348	0.2313	
1440 minute summer	MHS05	750	1.127	0.062	6.9	0.2331	0.0000	OK	PN005	MHS06	6.9	0.744	0.163	0.3002	
1440 minute summer	MHS06	750	0.916	0.066	11.5	0.3076	0.0000	OK	PN008	MHS09	11.5	1.213	0.177	0.1829	
1440 minute summer	MHS07	750	1.042	0.042	2.9	0.1135	0.0000	OK	PN006	MHS06	2.9	0.427	0.096	0.1622	
1440 minute summer	MHS08	750	1.234	0.034	2.0	0.1049	0.0000	OK	PN007	MHS07	2.0	0.488	0.063	0.1182	
1440 minute summer	MHS09	750	0.598	0.088	11.8	0.1107	0.0000	OK	PN009	MHS10	11.8	0.718	0.316	0.3799	
1440 minute summer	MHS10	750	0.497	0.107	15.9	0.5715	0.0000	OK	PN010	MHS11	15.9	0.827	0.432	0.4561	
1440 minute summer	MHS11	750	0.382	0.112	17.5	0.4861	0.0000	OK	PN011	MHS12	17.5	0.790	0.508	1.0387	
1440 minute summer	MHS12	870	0.325	0.225	17.5	158.6994	0.0000	OK	Hydro-Brake®	MHS13	7.5				
1440 minute summer	MHS13	870	0.216	0.216	7.5	0.2447	0.0000	OK	Hydro-Brake®	MHS14	7.5				380.0
1440 minute summer	MHS14	30	-0.381	0.000	7.5	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	MHS01	720	1.623	0.023	0.7	0.0422	0.0000	OK	PN001	MHS02	0.7	0.285	0.053	0.0792	
1440 minute winter	MHS02	720	1.456	0.036	1.6	0.0683	0.0000	OK	PN002	MHS04	1.6	0.369	0.127	0.1369	
1440 minute winter	MHS03	720	1.531	0.021	0.7	0.0434	0.0000	OK	PN003	MHS04	0.7	0.210	0.042	0.1003	
1440 minute winter	MHS04	750	1.315	0.053	3.6	0.1580	0.0000	OK	PN004	MHS05	3.6	0.637	0.267	0.1912	
1440 minute winter	MHS05	750	1.119	0.054	5.3	0.1944	0.0000	OK	PN005	MHS06	5.3	0.695	0.125	0.2471	
1440 minute winter	MHS06	750	0.907	0.057	8.8	0.2513	0.0000	OK	PN008	MHS09	8.8	1.127	0.136	0.1506	
1440 minute winter	MHS07	720	1.036	0.036	2.2	0.0959	0.0000	OK	PN006	MHS06	2.2	0.400	0.073	0.1335	
1440 minute winter	MHS08	720	1.230	0.030	1.5	0.0912	0.0000	OK	PN007	MHS07	1.5	0.446	0.047	0.0970	
1440 minute winter	MHS09	750	0.585	0.075	9.0	0.0952	0.0000	OK	PN009	MHS10	9.0	0.675	0.241	0.3084	
1440 minute winter	MHS10	750	0.481	0.091	12.1	0.4623	0.0000	OK	PN010	MHS11	12.1	0.774	0.329	0.3709	
1440 minute winter	MHS11	750	0.366	0.096	13.3	0.3885	0.0000	OK	PN011	MHS12	13.3	0.793	0.386	1.0225	
1440 minute winter	MHS12	930	0.330	0.230	13.3	162.3025	0.0000	OK	Hydro-Brake®	MHS13	7.6				
1440 minute winter	MHS13	930	0.221	0.221	7.6	0.2502	0.0000	OK	Hydro-Brake®	MHS14	7.6				429.0
1440 minute winter	MHS14	30	-0.381	0.000	7.6	0.0000	0.0000	OK							

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Results for 100 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 99.23%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	MHS01	16	2.000	0.400	11.6	0.7223	0.0000	SURCHARGED	PN001	MHS02	11.2	0.635	0.840	0.5607	
15 minute summer	MHS02	24	1.940	0.520	35.4	18.9552	0.0000	SURCHARGED	PN002	MHS04	15.0	0.850	1.185	0.5447	
15 minute summer	MHS03	17	2.117	0.607	11.9	1.2550	0.0000	SURCHARGED	PN003	MHS04	10.3	0.585	0.619	0.4969	
15 minute summer	MHS04	18	2.049	0.787	39.1	8.6141	0.0000	SURCHARGED	PN004	MHS05	19.0	1.107	1.410	0.5955	
15 minute summer	MHS05	19	2.009	0.944	45.2	12.9658	0.0000	SURCHARGED	PN005	MHS06	34.8	1.125	0.823	1.2871	
15 minute summer	MHS06	19	1.982	1.132	73.1	23.4985	0.0000	SURCHARGED	PN008	MHS09	44.5	1.475	0.685	0.7673	
15 minute summer	MHS07	19	1.982	0.982	34.2	11.0787	0.0000	FLOOD RISK	PN006	MHS06	19.4	0.791	0.641	0.7388	
15 minute summer	MHS08	21	1.981	0.781	25.7	4.0154	0.0000	FLOOD RISK	PN007	MHS07	22.7	0.923	0.717	0.9001	
15 minute summer	MHS09	18	1.929	1.419	44.5	1.7955	0.0000	SURCHARGED	PN009	MHS10	45.2	1.136	1.210	0.9180	
15 minute summer	MHS10	17	1.869	1.479	71.3	16.6321	0.0000	SURCHARGED	PN010	MHS11	53.7	1.350	1.458	0.9439	
15 minute summer	MHS11	17	1.600	1.330	65.2	13.5726	0.0000	SURCHARGED	PN011	MHS12	68.8	2.561	1.998	1.4332	
15 minute summer	MHS12	62	0.294	0.194	68.8	137.2831	0.0000	OK	Hydro-Brake®	MHS13	7.3				
15 minute summer	MHS13	62	0.188	0.188	7.3	0.2128	0.0000	OK	Hydro-Brake®	MHS14	7.3				88.6
15 minute summer	MHS14	1	-0.381	0.000	7.3	0.0000	0.0000	OK							

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Results for 100 year 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 99.48%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	MHS01	15	2.047	0.447	13.1	0.8088	0.0000	SURCHARGED	PN001	MHS02	12.5	0.711	0.941	0.5607	
15 minute winter	MHS02	25	1.973	0.553	40.2	23.0030	0.0000	SURCHARGED	PN002	MHS04	15.2	0.866	1.208	0.5447	
15 minute winter	MHS03	17	2.207	0.697	13.4	1.4400	0.0000	FLOOD RISK	PN003	MHS04	11.4	0.645	0.683	0.4969	
15 minute winter	MHS04	18	2.134	0.872	40.0	9.7532	0.0000	SURCHARGED	PN004	MHS05	19.6	1.118	1.449	0.5955	
15 minute winter	MHS05	18	2.095	1.030	48.6	14.3123	0.0000	SURCHARGED	PN005	MHS06	32.0	1.131	0.756	1.2871	
15 minute winter	MHS06	18	2.041	1.191	69.0	24.9363	0.0000	SURCHARGED	PN008	MHS09	48.0	1.387	0.739	0.7673	
15 minute winter	MHS07	20	2.022	1.022	35.5	13.2197	0.0000	FLOOD RISK	PN006	MHS06	23.6	0.790	0.779	0.7388	
15 minute winter	MHS08	23	2.017	0.817	28.9	9.0565	0.0000	FLOOD RISK	PN007	MHS07	22.9	0.900	0.724	0.9001	
15 minute winter	MHS09	18	2.012	1.502	48.0	1.8996	0.0000	SURCHARGED	PN009	MHS10	48.7	1.225	1.305	0.9180	
15 minute winter	MHS10	17	1.976	1.586	71.1	17.9265	0.0000	SURCHARGED	PN010	MHS11	55.0	1.383	1.494	0.9439	
15 minute winter	MHS11	17	1.682	1.412	68.8	14.5079	0.0000	SURCHARGED	PN011	MHS12	71.8	2.652	2.084	1.4874	
15 minute winter	MHS12	68	0.315	0.215	71.8	152.2830	0.0000	OK	Hydro-Brake®	MHS13	7.5				
15 minute winter	MHS13	68	0.208	0.208	7.5	0.2352	0.0000	OK	Hydro-Brake®	MHS14	7.5				94.2
15 minute winter	MHS14	1	-0.381	0.000	7.5	0.0000	0.0000	OK							

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Results for 100 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 99.65%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	MHS01	23	2.016	0.416	12.1	0.7520	0.0000	SURCHARGED	PN001	MHS02	11.5	0.651	0.862	0.5607	
30 minute summer	MHS02	35	1.990	0.570	37.3	24.9805	0.0000	SURCHARGED	PN002	MHS04	15.5	0.879	1.226	0.5447	
30 minute summer	MHS03	24	2.172	0.662	12.3	1.3675	0.0000	FLOOD RISK	PN003	MHS04	10.5	0.598	0.633	0.4969	
30 minute summer	MHS04	26	2.111	0.849	36.4	9.4391	0.0000	SURCHARGED	PN004	MHS05	19.5	1.135	1.442	0.5955	
30 minute summer	MHS05	26	2.071	1.006	44.3	13.9451	0.0000	SURCHARGED	PN005	MHS06	27.7	1.138	0.654	1.2871	
30 minute summer	MHS06	26	2.015	1.165	52.0	24.3088	0.0000	SURCHARGED	PN008	MHS09	48.7	1.372	0.750	0.7673	
30 minute summer	MHS07	28	2.009	1.009	33.5	12.3784	0.0000	FLOOD RISK	PN006	MHS06	22.8	0.730	0.755	0.7388	
30 minute summer	MHS08	30	2.012	0.812	26.6	8.4535	0.0000	FLOOD RISK	PN007	MHS07	21.3	0.811	0.673	0.9001	
30 minute summer	MHS09	25	1.963	1.453	48.7	1.8378	0.0000	SURCHARGED	PN009	MHS10	49.4	1.241	1.322	0.9180	
30 minute summer	MHS10	25	1.895	1.505	68.6	16.9401	0.0000	SURCHARGED	PN010	MHS11	58.6	1.475	1.593	0.9439	
30 minute summer	MHS11	25	1.523	1.253	75.5	12.6987	0.0000	SURCHARGED	PN011	MHS12	73.8	2.555	2.144	1.5256	
30 minute summer	MHS12	79	0.349	0.249	73.8	176.0920	0.0000	OK	Hydro-Brake®	MHS13	7.7				
30 minute summer	MHS13	79	0.240	0.240	7.7	0.2710	0.0000	OK	Hydro-Brake®	MHS14	7.7				104.5
30 minute summer	MHS14	1	-0.381	0.000	7.7	0.0000	0.0000	OK							

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Results for 100 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 99.65%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	MHS01	30	2.284	0.684	12.7	1.2362	0.0000	SURCHARGED	PN001	MHS02	12.0	0.682	0.903	0.5607	
30 minute winter	MHS02	30	2.271	0.851	39.9	25.6170	0.0000	SURCHARGED	PN002	MHS04	15.5	0.879	1.225	0.5447	
30 minute winter	MHS03	26	2.250	0.740	13.0	1.5669	0.0000	FLOOD RISK	PN003	MHS04	11.0	0.624	0.661	0.4969	
30 minute winter	MHS04	32	2.232	0.970	34.9	11.0508	0.0000	SURCHARGED	PN004	MHS05	19.6	1.127	1.453	0.5955	
30 minute winter	MHS05	26	2.144	1.079	44.4	15.0841	0.0000	SURCHARGED	PN005	MHS06	29.0	1.137	0.685	1.2871	
30 minute winter	MHS06	27	2.071	1.221	53.3	25.6695	0.0000	SURCHARGED	PN008	MHS09	51.3	1.421	0.790	0.7673	
30 minute winter	MHS07	29	2.054	1.054	35.2	15.2372	0.0000	FLOOD RISK	PN006	MHS06	26.3	0.841	0.870	0.7388	
30 minute winter	MHS08	32	2.055	0.855	28.0	14.4620	0.0000	FLOOD RISK	PN007	MHS07	22.8	0.813	0.719	0.9001	
30 minute winter	MHS09	26	2.030	1.520	51.3	1.9234	0.0000	SURCHARGED	PN009	MHS10	51.8	1.302	1.387	0.9180	
30 minute winter	MHS10	25	1.982	1.592	71.0	18.0190	0.0000	SURCHARGED	PN010	MHS11	59.6	1.498	1.618	0.9439	
30 minute winter	MHS11	25	1.599	1.329	78.0	13.5512	0.0000	SURCHARGED	PN011	MHS12	76.9	2.622	2.233	1.5256	
30 minute winter	MHS12	85	0.379	0.279	76.9	196.9170	0.0000	OK	Hydro-Brake®	MHS13	7.9				
30 minute winter	MHS13	85	0.268	0.268	7.9	0.3028	0.0000	OK	Hydro-Brake®	MHS14	7.9				108.2
30 minute winter	MHS14	1	-0.381	0.000	7.9	0.0000	0.0000	OK							

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Results for 100 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.84%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	MHS01	53	1.991	0.391	10.5	0.7068	0.0000	SURCHARGED	PN001	MHS02	9.9	0.565	0.748	0.5607	
60 minute summer	MHS02	54	1.988	0.568	31.8	24.7600	0.0000	SURCHARGED	PN002	MHS04	15.6	0.886	1.235	0.5447	
60 minute summer	MHS03	40	2.088	0.578	10.7	1.1953	0.0000	SURCHARGED	PN003	MHS04	9.5	0.539	0.570	0.4969	
60 minute summer	MHS04	42	2.039	0.777	32.6	8.4848	0.0000	SURCHARGED	PN004	MHS05	19.7	1.140	1.462	0.5955	
60 minute summer	MHS05	43	1.993	0.928	40.8	12.7080	0.0000	SURCHARGED	PN005	MHS06	25.8	1.140	0.611	1.2871	
60 minute summer	MHS06	43	1.952	1.102	52.6	22.7602	0.0000	SURCHARGED	PN008	MHS09	45.4	1.354	0.699	0.7673	
60 minute summer	MHS07	44	1.970	0.970	29.7	10.9213	0.0000	FLOOD RISK	PN006	MHS06	17.1	0.566	0.564	0.7388	
60 minute summer	MHS08	46	1.979	0.779	23.1	3.7248	0.0000	FLOOD RISK	PN007	MHS07	19.0	0.742	0.599	0.9001	
60 minute summer	MHS09	42	1.844	1.334	45.9	1.6872	0.0000	SURCHARGED	PN009	MHS10	46.4	1.166	1.242	0.9180	
60 minute summer	MHS10	41	1.719	1.329	71.0	14.7855	0.0000	SURCHARGED	PN010	MHS11	61.9	1.556	1.681	0.9439	
60 minute summer	MHS11	41	1.304	1.034	77.2	10.2237	0.0000	SURCHARGED	PN011	MHS12	74.0	2.217	2.148	1.5256	
60 minute summer	MHS12	99	0.410	0.310	74.0	219.1624	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.0				
60 minute summer	MHS13	100	0.298	0.298	8.0	0.3372	0.0000	OK	Hydro-Brake®	MHS14	8.0				121.0
60 minute summer	MHS14	1	-0.381	0.000	8.0	0.0000	0.0000	OK							

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Results for 100 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 99.57%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	MHS01	51	2.262	0.662	10.7	1.1963	0.0000	SURCHARGED	PN001	MHS02	9.0	0.509	0.675	0.5607	
60 minute winter	MHS02	51	2.254	0.834	30.1	25.5864	0.0000	SURCHARGED	PN002	MHS04	15.6	0.887	1.237	0.5447	
60 minute winter	MHS03	52	2.223	0.713	9.6	1.4728	0.0000	FLOOD RISK	PN003	MHS04	8.6	0.489	0.517	0.4969	
60 minute winter	MHS04	52	2.216	0.954	29.3	10.8450	0.0000	SURCHARGED	PN004	MHS05	19.9	1.138	1.471	0.5955	
60 minute winter	MHS05	43	2.054	0.989	36.4	13.6719	0.0000	SURCHARGED	PN005	MHS06	25.5	1.140	0.603	1.2871	
60 minute winter	MHS06	43	1.996	1.146	50.0	23.8561	0.0000	SURCHARGED	PN008	MHS09	49.5	1.351	0.762	0.7673	
60 minute winter	MHS07	47	2.003	1.003	27.1	11.9989	0.0000	FLOOD RISK	PN006	MHS06	20.6	0.660	0.682	0.7388	
60 minute winter	MHS08	49	2.012	0.812	20.8	8.4207	0.0000	FLOOD RISK	PN007	MHS07	17.5	0.704	0.553	0.9001	
60 minute winter	MHS09	42	1.903	1.393	49.9	1.7619	0.0000	SURCHARGED	PN009	MHS10	50.3	1.264	1.347	0.9180	
60 minute winter	MHS10	42	1.783	1.393	69.6	15.5768	0.0000	SURCHARGED	PN010	MHS11	63.8	1.604	1.733	0.9439	
60 minute winter	MHS11	42	1.343	1.073	77.6	10.6551	0.0000	SURCHARGED	PN011	MHS12	76.4	2.229	2.219	1.5256	
60 minute winter	MHS12	106	0.446	0.346	76.4	244.5987	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.1				
60 minute winter	MHS13	106	0.333	0.333	8.1	0.3768	0.0000	SURCHARGED	Hydro-Brake®	MHS14	8.1				124.0
60 minute winter	MHS14	1	-0.381	0.000	8.1	0.0000	0.0000	OK							

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Results for 100 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.81%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	MHS01	82	1.928	0.328	7.4	0.5928	0.0000	SURCHARGED	PN001	MHS02	7.1	0.452	0.538	0.5607	
120 minute summer	MHS02	84	1.923	0.503	20.6	16.8391	0.0000	SURCHARGED	PN002	MHS04	13.9	0.789	1.100	0.5447	
120 minute summer	MHS03	72	1.927	0.417	7.6	0.8619	0.0000	SURCHARGED	PN003	MHS04	7.2	0.407	0.431	0.4969	
120 minute summer	MHS04	80	1.912	0.650	27.1	6.7835	0.0000	SURCHARGED	PN004	MHS05	19.3	1.107	1.428	0.5955	
120 minute summer	MHS05	76	1.790	0.725	34.4	9.5026	0.0000	SURCHARGED	PN005	MHS06	26.9	1.001	0.637	1.2871	
120 minute summer	MHS06	76	1.739	0.889	48.5	17.5803	0.0000	SURCHARGED	PN008	MHS09	43.1	1.433	0.664	0.7673	
120 minute summer	MHS07	76	1.770	0.770	21.6	8.2484	0.0000	SURCHARGED	PN006	MHS06	13.0	0.643	0.428	0.7388	
120 minute summer	MHS08	76	1.787	0.587	16.4	1.8150	0.0000	SURCHARGED	PN007	MHS07	14.0	0.768	0.443	0.9001	
120 minute summer	MHS09	74	1.608	1.098	43.7	1.3896	0.0000	SURCHARGED	PN009	MHS10	44.1	1.108	1.180	0.9180	
120 minute summer	MHS10	74	1.458	1.068	63.8	11.5897	0.0000	SURCHARGED	PN010	MHS11	59.6	1.499	1.619	0.9439	
120 minute summer	MHS11	72	1.079	0.809	70.0	7.6543	0.0000	SURCHARGED	PN011	MHS12	69.1	1.820	2.005	1.5256	
120 minute summer	MHS12	132	0.471	0.371	69.1	262.3288	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.2				
120 minute summer	MHS13	132	0.358	0.358	8.2	0.4047	0.0000	SURCHARGED	Hydro-Brake®	MHS14	8.1				145.0
120 minute summer	MHS14	2	-0.381	0.000	8.1	0.0000	0.0000	OK							

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Results for 100 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 99.80%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	MHS01	88	1.945	0.345	6.0	0.6239	0.0000	SURCHARGED	PN001	MHS02	5.8	0.446	0.437	0.5607	
120 minute winter	MHS02	90	1.940	0.520	15.6	18.8953	0.0000	SURCHARGED	PN002	MHS04	14.3	0.813	1.133	0.5447	
120 minute winter	MHS03	84	1.937	0.427	6.2	0.8825	0.0000	SURCHARGED	PN003	MHS04	6.0	0.343	0.363	0.4969	
120 minute winter	MHS04	84	1.926	0.664	23.2	6.9769	0.0000	SURCHARGED	PN004	MHS05	19.3	1.101	1.429	0.5955	
120 minute winter	MHS05	80	1.787	0.722	30.3	9.4537	0.0000	SURCHARGED	PN005	MHS06	26.6	1.051	0.630	1.2871	
120 minute winter	MHS06	80	1.732	0.882	44.1	17.3971	0.0000	SURCHARGED	PN008	MHS09	41.7	1.431	0.643	0.7673	
120 minute winter	MHS07	80	1.765	0.765	17.9	8.1672	0.0000	SURCHARGED	PN006	MHS06	13.0	0.633	0.428	0.7388	
120 minute winter	MHS08	80	1.782	0.582	13.3	1.7988	0.0000	SURCHARGED	PN007	MHS07	11.7	0.736	0.370	0.9001	
120 minute winter	MHS09	78	1.590	1.080	42.4	1.3661	0.0000	SURCHARGED	PN009	MHS10	42.7	1.074	1.144	0.9180	
120 minute winter	MHS10	76	1.423	1.033	61.1	11.1747	0.0000	SURCHARGED	PN010	MHS11	60.5	1.521	1.643	0.9439	
120 minute winter	MHS11	74	1.035	0.765	68.9	7.1521	0.0000	SURCHARGED	PN011	MHS12	69.7	1.754	2.024	1.5256	
120 minute winter	MHS12	138	0.515	0.415	69.7	293.3904	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.2				
120 minute winter	MHS13	138	0.401	0.401	8.2	0.4539	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				149.1
120 minute winter	MHS14	2	-0.381	0.000	8.2	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	MHS01	112	1.868	0.268	5.7	0.4840	0.0000	SURCHARGED	PN001	MHS02	5.6	0.447	0.419	0.5607	
180 minute summer	MHS02	116	1.861	0.441	13.0	9.3357	0.0000	SURCHARGED	PN002	MHS04	12.0	0.681	0.949	0.5447	
180 minute summer	MHS03	108	1.856	0.346	5.8	0.7151	0.0000	SURCHARGED	PN003	MHS04	5.3	0.328	0.316	0.4969	
180 minute summer	MHS04	108	1.842	0.580	22.6	5.8488	0.0000	SURCHARGED	PN004	MHS05	17.0	0.964	1.257	0.5955	
180 minute summer	MHS05	108	1.639	0.574	30.0	7.1314	0.0000	SURCHARGED	PN005	MHS06	24.9	0.988	0.588	1.2871	
180 minute summer	MHS06	108	1.576	0.726	43.0	13.6036	0.0000	SURCHARGED	PN008	MHS09	40.0	1.419	0.617	0.7673	
180 minute summer	MHS07	108	1.602	0.602	16.5	5.9927	0.0000	SURCHARGED	PN006	MHS06	11.3	0.618	0.374	0.7388	
180 minute summer	MHS08	108	1.617	0.417	12.6	1.2881	0.0000	SURCHARGED	PN007	MHS07	10.7	0.726	0.338	0.9001	
180 minute summer	MHS09	108	1.443	0.933	40.8	1.1805	0.0000	SURCHARGED	PN009	MHS10	41.0	1.031	1.098	0.9180	
180 minute summer	MHS10	104	1.285	0.895	58.4	9.4908	0.0000	SURCHARGED	PN010	MHS11	56.7	1.427	1.541	0.9439	
180 minute summer	MHS11	104	0.937	0.667	64.7	6.0441	0.0000	SURCHARGED	PN011	MHS12	65.0	1.647	1.888	1.5256	
180 minute summer	MHS12	184	0.488	0.388	65.0	274.4576	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.2				
180 minute summer	MHS13	188	0.375	0.375	8.2	0.4239	0.0000	SURCHARGED	Hydro-Brake®	MHS14	8.2				165.8
180 minute summer	MHS14	4	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 99.92%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	MHS01	120	1.851	0.251	4.5	0.4541	0.0000	SURCHARGED	PN001	MHS02	4.6	0.442	0.346	0.5607	
180 minute winter	MHS02	124	1.843	0.423	10.4	7.1206	0.0000	SURCHARGED	PN002	MHS04	10.9	0.619	0.863	0.5447	
180 minute winter	MHS03	112	1.829	0.319	4.6	0.6600	0.0000	SURCHARGED	PN003	MHS04	4.2	0.288	0.254	0.4969	
180 minute winter	MHS04	116	1.817	0.555	20.0	5.5127	0.0000	SURCHARGED	PN004	MHS05	16.2	0.918	1.197	0.5955	
180 minute winter	MHS05	116	1.590	0.525	26.6	6.3571	0.0000	SURCHARGED	PN005	MHS06	23.8	0.984	0.563	1.2871	
180 minute winter	MHS06	116	1.526	0.676	41.2	12.3684	0.0000	SURCHARGED	PN008	MHS09	38.2	1.432	0.588	0.7673	
180 minute winter	MHS07	116	1.547	0.547	13.6	5.2564	0.0000	SURCHARGED	PN006	MHS06	10.9	0.606	0.361	0.7388	
180 minute winter	MHS08	116	1.558	0.358	9.9	1.1060	0.0000	SURCHARGED	PN007	MHS07	9.1	0.714	0.288	0.9001	
180 minute winter	MHS09	116	1.397	0.887	39.0	1.1224	0.0000	SURCHARGED	PN009	MHS10	39.1	0.983	1.047	0.9180	
180 minute winter	MHS10	112	1.241	0.851	56.0	8.9407	0.0000	SURCHARGED	PN010	MHS11	54.1	1.360	1.469	0.9439	
180 minute winter	MHS11	116	0.936	0.666	61.9	6.0286	0.0000	SURCHARGED	PN011	MHS12	60.6	1.527	1.761	1.5256	
180 minute winter	MHS12	184	0.541	0.441	60.6	311.7484	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.2				
180 minute winter	MHS13	184	0.427	0.427	8.2	0.4832	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				170.6
180 minute winter	MHS14	4	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 99.95%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	MHS01	140	1.822	0.222	4.6	0.4017	0.0000	SURCHARGED	PN001	MHS02	4.6	0.443	0.347	0.5607	
240 minute summer	MHS02	144	1.814	0.394	9.9	3.5356	0.0000	SURCHARGED	PN002	MHS04	8.8	0.502	0.700	0.5447	
240 minute summer	MHS03	136	1.795	0.285	4.8	0.5889	0.0000	SURCHARGED	PN003	MHS04	4.2	0.311	0.255	0.4969	
240 minute summer	MHS04	136	1.781	0.519	21.5	5.0326	0.0000	SURCHARGED	PN004	MHS05	15.8	0.915	1.174	0.5955	
240 minute summer	MHS05	140	1.519	0.454	27.0	5.2235	0.0000	SURCHARGED	PN005	MHS06	24.3	0.965	0.575	1.2871	
240 minute summer	MHS06	140	1.450	0.600	42.4	10.5166	0.0000	SURCHARGED	PN008	MHS09	37.9	1.433	0.583	0.7673	
240 minute summer	MHS07	140	1.469	0.469	14.3	4.2196	0.0000	SURCHARGED	PN006	MHS06	11.3	0.586	0.372	0.7388	
240 minute summer	MHS08	140	1.480	0.280	10.3	0.8655	0.0000	SURCHARGED	PN007	MHS07	9.5	0.726	0.299	0.9001	
240 minute summer	MHS09	140	1.325	0.815	38.6	1.0305	0.0000	SURCHARGED	PN009	MHS10	38.7	0.973	1.036	0.9180	
240 minute summer	MHS10	140	1.171	0.781	55.0	8.0842	0.0000	SURCHARGED	PN010	MHS11	53.5	1.344	1.452	0.9439	
240 minute summer	MHS11	144	0.875	0.605	61.1	5.3468	0.0000	SURCHARGED	PN011	MHS12	60.0	1.511	1.743	1.5256	
240 minute summer	MHS12	240	0.491	0.391	60.0	276.6476	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.2				
240 minute summer	MHS13	240	0.378	0.378	8.2	0.4273	0.0000	SURCHARGED	Hydro-Brake®	MHS14	8.2				185.9
240 minute summer	MHS14	4	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 99.98%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	MHS01	144	1.764	0.164	3.6	0.2967	0.0000	SURCHARGED	PN001	MHS02	3.6	0.432	0.270	0.5607	
240 minute winter	MHS02	144	1.754	0.334	8.3	0.6347	0.0000	SURCHARGED	PN002	MHS04	7.5	0.485	0.594	0.5447	
240 minute winter	MHS03	148	1.710	0.200	3.7	0.4134	0.0000	SURCHARGED	PN003	MHS04	3.7	0.276	0.222	0.4969	
240 minute winter	MHS04	148	1.702	0.440	18.0	3.9722	0.0000	SURCHARGED	PN004	MHS05	15.9	0.923	1.182	0.5955	
240 minute winter	MHS05	148	1.429	0.364	24.1	3.8151	0.0000	SURCHARGED	PN005	MHS06	24.0	0.995	0.567	1.2871	
240 minute winter	MHS06	148	1.364	0.514	38.7	8.4127	0.0000	SURCHARGED	PN008	MHS09	35.4	1.428	0.544	0.7673	
240 minute winter	MHS07	148	1.379	0.379	11.6	3.0465	0.0000	SURCHARGED	PN006	MHS06	10.0	0.604	0.332	0.7388	
240 minute winter	MHS08	148	1.388	0.188	7.9	0.5794	0.0000	OK	PN007	MHS07	7.9	0.695	0.249	0.8886	
240 minute winter	MHS09	148	1.251	0.741	36.2	0.9378	0.0000	SURCHARGED	PN009	MHS10	36.2	0.910	0.970	0.9180	
240 minute winter	MHS10	148	1.114	0.724	50.6	7.3811	0.0000	SURCHARGED	PN010	MHS11	48.9	1.230	1.329	0.9439	
240 minute winter	MHS11	152	0.862	0.592	55.2	5.2018	0.0000	SURCHARGED	PN011	MHS12	53.9	1.355	1.565	1.5256	
240 minute winter	MHS12	240	0.548	0.448	53.9	316.5677	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.2				
240 minute winter	MHS13	240	0.434	0.434	8.2	0.4909	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				191.9
240 minute winter	MHS14	4	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	MHS01	192	1.652	0.052	3.4	0.0931	0.0000	OK	PN001	MHS02	3.4	0.437	0.256	0.3569	
360 minute summer	MHS02	200	1.607	0.187	7.8	0.3557	0.0000	SURCHARGED	PN002	MHS04	7.6	0.485	0.600	0.5447	
360 minute summer	MHS03	200	1.564	0.054	3.5	0.1122	0.0000	OK	PN003	MHS04	3.5	0.271	0.211	0.3295	
360 minute summer	MHS04	200	1.558	0.296	17.4	2.2301	0.0000	SURCHARGED	PN004	MHS05	15.8	0.914	1.169	0.5955	
360 minute summer	MHS05	208	1.300	0.235	24.1	2.0171	0.0000	SURCHARGED	PN005	MHS06	23.8	0.963	0.564	1.2871	
360 minute summer	MHS06	208	1.243	0.393	37.7	5.5493	0.0000	SURCHARGED	PN008	MHS09	33.9	1.429	0.521	0.7673	
360 minute summer	MHS07	208	1.256	0.256	11.0	1.7261	0.0000	SURCHARGED	PN006	MHS06	9.0	0.580	0.297	0.7388	
360 minute summer	MHS08	192	1.266	0.066	7.5	0.2035	0.0000	OK	PN007	MHS07	7.5	0.677	0.237	0.5791	
360 minute summer	MHS09	208	1.138	0.628	34.6	0.7949	0.0000	SURCHARGED	PN009	MHS10	34.7	0.873	0.929	0.9180	
360 minute summer	MHS10	200	1.014	0.624	49.0	6.1557	0.0000	SURCHARGED	PN010	MHS11	47.1	1.184	1.279	0.9439	
360 minute summer	MHS11	208	0.786	0.516	53.2	4.3440	0.0000	SURCHARGED	PN011	MHS12	51.6	1.298	1.498	1.5256	
360 minute summer	MHS12	304	0.489	0.389	51.6	274.6874	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.2				
360 minute summer	MHS13	304	0.375	0.375	8.2	0.4242	0.0000	SURCHARGED	Hydro-Brake®	MHS14	8.2				224.3
360 minute summer	MHS14	8	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 99.98%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	MHS01	192	1.645	0.045	2.6	0.0810	0.0000	OK	PN001	MHS02	2.6	0.408	0.196	0.2041	
360 minute winter	MHS02	192	1.492	0.072	6.0	0.1376	0.0000	OK	PN002	MHS04	6.0	0.479	0.475	0.3848	
360 minute winter	MHS03	192	1.551	0.041	2.7	0.0843	0.0000	OK	PN003	MHS04	2.7	0.267	0.162	0.2869	
360 minute winter	MHS04	192	1.394	0.132	13.6	0.5488	0.0000	OK	PN004	MHS05	13.6	0.899	1.007	0.5077	
360 minute winter	MHS05	192	1.173	0.108	20.0	0.5155	0.0000	OK	PN005	MHS06	20.0	0.990	0.473	0.9414	
360 minute winter	MHS06	208	1.108	0.258	33.3	2.8984	0.0000	SURCHARGED	PN008	MHS09	31.2	1.425	0.481	0.7673	
360 minute winter	MHS07	208	1.116	0.116	8.5	0.4477	0.0000	OK	PN006	MHS06	8.5	0.592	0.281	0.5922	
360 minute winter	MHS08	192	1.258	0.058	5.8	0.1781	0.0000	OK	PN007	MHS07	5.8	0.660	0.183	0.3709	
360 minute winter	MHS09	208	1.025	0.515	32.0	0.6519	0.0000	SURCHARGED	PN009	MHS10	31.7	0.812	0.848	0.9180	
360 minute winter	MHS10	208	0.924	0.534	43.2	5.0647	0.0000	SURCHARGED	PN010	MHS11	41.8	1.052	1.137	0.9439	
360 minute winter	MHS11	216	0.745	0.475	46.4	3.8749	0.0000	SURCHARGED	PN011	MHS12	45.7	1.222	1.328	1.5256	
360 minute winter	MHS12	344	0.544	0.444	45.7	313.8973	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.2				
360 minute winter	MHS13	344	0.430	0.430	8.2	0.4866	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				232.6
360 minute winter	MHS14	8	-0.381	0.000	8.2	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	MHS01	248	1.646	0.046	2.8	0.0839	0.0000	OK	PN001	MHS02	2.8	0.415	0.210	0.2150	
480 minute summer	MHS02	248	1.495	0.075	6.5	0.1434	0.0000	OK	PN002	MHS04	6.4	0.481	0.510	0.4055	
480 minute summer	MHS03	248	1.552	0.042	2.9	0.0873	0.0000	OK	PN003	MHS04	2.9	0.265	0.174	0.3020	
480 minute summer	MHS04	256	1.407	0.145	14.6	0.6313	0.0000	OK	PN004	MHS05	14.2	0.895	1.051	0.5293	
480 minute summer	MHS05	248	1.176	0.111	21.0	0.5378	0.0000	OK	PN005	MHS06	21.0	0.995	0.496	0.9550	
480 minute summer	MHS06	264	1.104	0.254	35.2	2.8193	0.0000	SURCHARGED	PN008	MHS09	32.1	1.425	0.495	0.7673	
480 minute summer	MHS07	264	1.112	0.112	9.1	0.4266	0.0000	OK	PN006	MHS06	9.0	0.600	0.298	0.5832	
480 minute summer	MHS08	248	1.260	0.060	6.2	0.1840	0.0000	OK	PN007	MHS07	6.2	0.673	0.195	0.3576	
480 minute summer	MHS09	264	1.017	0.507	33.0	0.6409	0.0000	SURCHARGED	PN009	MHS10	32.4	0.814	0.867	0.9180	
480 minute summer	MHS10	264	0.910	0.520	44.7	4.8898	0.0000	SURCHARGED	PN010	MHS11	42.9	1.078	1.165	0.9439	
480 minute summer	MHS11	264	0.718	0.448	47.7	3.5585	0.0000	SURCHARGED	PN011	MHS12	46.7	1.175	1.357	1.5256	
480 minute summer	MHS12	360	0.484	0.384	46.7	271.2164	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.2				
480 minute summer	MHS13	360	0.370	0.370	8.2	0.4187	0.0000	SURCHARGED	Hydro-Brake®	MHS14	8.2				262.8
480 minute summer	MHS14	8	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 99.97%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	MHS01	248	1.640	0.040	2.1	0.0726	0.0000	OK	PN001	MHS02	2.1	0.388	0.158	0.1738	
480 minute winter	MHS02	248	1.484	0.064	4.8	0.1212	0.0000	OK	PN002	MHS04	4.8	0.471	0.380	0.3142	
480 minute winter	MHS03	248	1.546	0.036	2.1	0.0743	0.0000	OK	PN003	MHS04	2.1	0.259	0.126	0.2316	
480 minute winter	MHS04	256	1.367	0.105	10.8	0.3892	0.0000	OK	PN004	MHS05	10.8	0.854	0.800	0.4284	
480 minute winter	MHS05	248	1.163	0.098	15.9	0.4452	0.0000	OK	PN005	MHS06	15.9	0.951	0.376	0.5407	
480 minute winter	MHS06	232	0.951	0.101	26.5	0.5772	0.0000	OK	PN008	MHS09	26.8	1.426	0.413	0.5465	
480 minute winter	MHS07	248	1.064	0.064	6.7	0.1959	0.0000	OK	PN006	MHS06	6.7	0.561	0.221	0.2851	
480 minute winter	MHS08	248	1.251	0.051	4.6	0.1584	0.0000	OK	PN007	MHS07	4.6	0.620	0.145	0.2139	
480 minute winter	MHS09	264	0.841	0.331	27.5	0.4181	0.0000	SURCHARGED	PN009	MHS10	27.0	0.807	0.723	0.9180	
480 minute winter	MHS10	264	0.767	0.377	36.4	3.1499	0.0000	SURCHARGED	PN010	MHS11	35.7	0.901	0.969	0.9439	
480 minute winter	MHS11	272	0.638	0.368	39.4	2.6598	0.0000	SURCHARGED	PN011	MHS12	38.9	1.149	1.129	1.5256	
480 minute winter	MHS12	384	0.535	0.435	38.9	307.4051	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.2				
480 minute winter	MHS13	384	0.421	0.421	8.2	0.4763	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				273.7
480 minute winter	MHS14	8	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.95%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	MHS01	315	1.642	0.042	2.3	0.0760	0.0000	OK	PN001	MHS02	2.3	0.396	0.173	0.1864	
600 minute summer	MHS02	315	1.487	0.067	5.3	0.1281	0.0000	OK	PN002	MHS04	5.3	0.479	0.420	0.3410	
600 minute summer	MHS03	315	1.548	0.038	2.3	0.0778	0.0000	OK	PN003	MHS04	2.3	0.262	0.138	0.2516	
600 minute summer	MHS04	315	1.376	0.114	11.9	0.4383	0.0000	OK	PN004	MHS05	11.9	0.870	0.882	0.4621	
600 minute summer	MHS05	315	1.168	0.103	17.5	0.4840	0.0000	OK	PN005	MHS06	17.5	0.976	0.414	0.5802	
600 minute summer	MHS06	300	0.955	0.105	29.0	0.6115	0.0000	OK	PN008	MHS09	29.4	1.427	0.452	0.5578	
600 minute summer	MHS07	315	1.066	0.066	7.3	0.2078	0.0000	OK	PN006	MHS06	7.3	0.571	0.241	0.3035	
600 minute summer	MHS08	315	1.253	0.053	5.0	0.1652	0.0000	OK	PN007	MHS07	5.0	0.635	0.158	0.2273	
600 minute summer	MHS09	315	0.881	0.371	30.1	0.4690	0.0000	SURCHARGED	PN009	MHS10	29.5	0.809	0.790	0.9180	
600 minute summer	MHS10	315	0.789	0.399	39.7	3.4110	0.0000	SURCHARGED	PN010	MHS11	38.7	0.974	1.052	0.9439	
600 minute summer	MHS11	330	0.630	0.360	42.8	2.5661	0.0000	SURCHARGED	PN011	MHS12	41.9	1.053	1.216	1.5256	
600 minute summer	MHS12	435	0.476	0.376	41.9	266.0009	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.1				
600 minute summer	MHS13	435	0.363	0.363	8.1	0.4105	0.0000	SURCHARGED	Hydro-Brake®	MHS14	8.1				299.2
600 minute summer	MHS14	15	-0.381	0.000	8.1	0.0000	0.0000	OK							

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Results for 100 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 99.98%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	MHS01	300	1.636	0.036	1.7	0.0653	0.0000	OK	PN001	MHS02	1.7	0.366	0.128	0.1512	
600 minute winter	MHS02	315	1.478	0.058	4.0	0.1097	0.0000	OK	PN002	MHS04	4.0	0.455	0.317	0.2732	
600 minute winter	MHS03	315	1.543	0.033	1.8	0.0688	0.0000	OK	PN003	MHS04	1.8	0.257	0.108	0.2020	
600 minute winter	MHS04	315	1.355	0.093	9.1	0.3263	0.0000	OK	PN004	MHS05	9.1	0.819	0.674	0.3760	
600 minute winter	MHS05	315	1.154	0.089	13.4	0.3853	0.0000	OK	PN005	MHS06	13.4	0.897	0.317	0.4904	
600 minute winter	MHS06	300	0.945	0.095	22.3	0.5236	0.0000	OK	PN008	MHS09	22.4	1.427	0.344	0.4033	
600 minute winter	MHS07	315	1.058	0.058	5.7	0.1756	0.0000	OK	PN006	MHS06	5.7	0.527	0.188	0.2625	
600 minute winter	MHS08	315	1.247	0.047	3.9	0.1458	0.0000	OK	PN007	MHS07	3.9	0.591	0.123	0.1903	
600 minute winter	MHS09	330	0.696	0.186	23.0	0.2349	0.0000	OK	PN009	MHS10	22.7	0.804	0.609	0.8636	
600 minute winter	MHS10	330	0.657	0.267	30.5	1.9315	0.0000	SURCHARGED	PN010	MHS11	30.2	0.900	0.821	0.9439	
600 minute winter	MHS11	345	0.573	0.303	33.3	1.9794	0.0000	SURCHARGED	PN011	MHS12	32.6	1.086	0.947	1.5256	
600 minute winter	MHS12	465	0.524	0.424	32.6	300.0161	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.2				
600 minute winter	MHS13	465	0.411	0.411	8.2	0.4645	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				314.1
600 minute winter	MHS14	15	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 99.95%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	MHS01	375	1.639	0.039	2.0	0.0708	0.0000	OK	PN001	MHS02	2.0	0.382	0.150	0.1682	
720 minute summer	MHS02	375	1.482	0.062	4.6	0.1184	0.0000	OK	PN002	MHS04	4.6	0.465	0.364	0.3059	
720 minute summer	MHS03	375	1.546	0.036	2.1	0.0743	0.0000	OK	PN003	MHS04	2.1	0.266	0.126	0.2271	
720 minute summer	MHS04	375	1.365	0.103	10.5	0.3771	0.0000	OK	PN004	MHS05	10.5	0.848	0.778	0.4188	
720 minute summer	MHS05	375	1.161	0.096	15.4	0.4336	0.0000	OK	PN005	MHS06	15.4	0.944	0.364	0.5362	
720 minute summer	MHS06	360	0.951	0.101	25.6	0.5769	0.0000	OK	PN008	MHS09	25.6	1.417	0.394	0.5344	
720 minute summer	MHS07	375	1.063	0.063	6.5	0.1919	0.0000	OK	PN006	MHS06	6.5	0.556	0.215	0.2857	
720 minute summer	MHS08	375	1.250	0.050	4.4	0.1549	0.0000	OK	PN007	MHS07	4.4	0.609	0.139	0.2084	
720 minute summer	MHS09	375	0.763	0.253	26.3	0.3200	0.0000	SURCHARGED	PN009	MHS10	26.1	0.803	0.698	0.9180	
720 minute summer	MHS10	375	0.691	0.301	35.0	2.2755	0.0000	SURCHARGED	PN010	MHS11	34.3	0.900	0.932	0.9439	
720 minute summer	MHS11	390	0.571	0.301	37.9	1.9599	0.0000	SURCHARGED	PN011	MHS12	37.1	0.973	1.078	1.5256	
720 minute summer	MHS12	495	0.468	0.368	37.1	260.4052	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.1				
720 minute summer	MHS13	495	0.355	0.355	8.1	0.4017	0.0000	SURCHARGED	Hydro-Brake®	MHS14	8.1				335.1
720 minute summer	MHS14	15	-0.381	0.000	8.1	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	MHS01	360	1.634	0.034	1.5	0.0613	0.0000	OK	PN001	MHS02	1.5	0.355	0.113	0.1376	
720 minute winter	MHS02	375	1.474	0.054	3.5	0.1021	0.0000	OK	PN002	MHS04	3.5	0.443	0.277	0.2453	
720 minute winter	MHS03	360	1.540	0.030	1.5	0.0628	0.0000	OK	PN003	MHS04	1.5	0.249	0.090	0.1798	
720 minute winter	MHS04	375	1.346	0.084	7.9	0.2869	0.0000	OK	PN004	MHS05	7.9	0.791	0.585	0.3378	
720 minute winter	MHS05	375	1.147	0.082	11.6	0.3426	0.0000	OK	PN005	MHS06	11.6	0.851	0.274	0.4412	
720 minute winter	MHS06	375	0.938	0.088	19.2	0.4643	0.0000	OK	PN008	MHS09	19.2	1.389	0.296	0.2667	
720 minute winter	MHS07	375	1.054	0.054	4.8	0.1567	0.0000	OK	PN006	MHS06	4.8	0.486	0.159	0.2352	
720 minute winter	MHS08	375	1.243	0.043	3.3	0.1341	0.0000	OK	PN007	MHS07	3.3	0.565	0.104	0.1686	
720 minute winter	MHS09	360	0.629	0.119	19.7	0.1505	0.0000	OK	PN009	MHS10	19.7	0.794	0.528	0.6238	
720 minute winter	MHS10	420	0.577	0.187	26.5	1.2077	0.0000	OK	PN010	MHS11	26.3	0.903	0.716	0.8904	
720 minute winter	MHS11	435	0.537	0.267	29.0	1.6542	0.0000	SURCHARGED	PN011	MHS12	28.6	1.035	0.832	1.5256	
720 minute winter	MHS12	540	0.513	0.413	28.6	291.6183	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.2				
720 minute winter	MHS13	540	0.399	0.399	8.2	0.4511	0.0000	SURCHARGED	Hydro-Brake®	MHS14	8.2				353.5
720 minute winter	MHS14	15	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 99.96%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	MHS01	495	1.635	0.035	1.6	0.0633	0.0000	OK	PN001	MHS02	1.6	0.359	0.120	0.1435	
960 minute summer	MHS02	495	1.475	0.055	3.7	0.1052	0.0000	OK	PN002	MHS04	3.7	0.444	0.293	0.2584	
960 minute summer	MHS03	495	1.542	0.032	1.7	0.0668	0.0000	OK	PN003	MHS04	1.7	0.258	0.102	0.1918	
960 minute summer	MHS04	495	1.350	0.088	8.5	0.3062	0.0000	OK	PN004	MHS05	8.5	0.806	0.630	0.3567	
960 minute summer	MHS05	495	1.150	0.085	12.5	0.3633	0.0000	OK	PN005	MHS06	12.5	0.865	0.296	0.4678	
960 minute summer	MHS06	495	0.942	0.092	20.8	0.4972	0.0000	OK	PN008	MHS09	20.8	1.418	0.320	0.2832	
960 minute summer	MHS07	495	1.056	0.056	5.3	0.1673	0.0000	OK	PN006	MHS06	5.3	0.504	0.175	0.2506	
960 minute summer	MHS08	495	1.245	0.045	3.6	0.1400	0.0000	OK	PN007	MHS07	3.6	0.576	0.114	0.1803	
960 minute summer	MHS09	495	0.636	0.126	21.3	0.1590	0.0000	OK	PN009	MHS10	21.3	0.801	0.571	0.6117	
960 minute summer	MHS10	495	0.550	0.160	28.6	1.0001	0.0000	OK	PN010	MHS11	28.6	0.903	0.776	0.8129	
960 minute summer	MHS11	510	0.490	0.220	31.5	1.2515	0.0000	OK	PN011	MHS12	31.1	0.909	0.902	1.5204	
960 minute summer	MHS12	630	0.451	0.351	31.1	248.1566	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.1				
960 minute summer	MHS13	630	0.338	0.338	8.1	0.3824	0.0000	SURCHARGED	Hydro-Brake®	MHS14	8.1				400.4
960 minute summer	MHS14	15	-0.381	0.000	8.1	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	MHS01	480	1.630	0.030	1.2	0.0549	0.0000	OK	PN001	MHS02	1.2	0.335	0.090	0.1173	
960 minute winter	MHS02	495	1.468	0.048	2.8	0.0908	0.0000	OK	PN002	MHS04	2.8	0.421	0.222	0.2069	
960 minute winter	MHS03	465	1.537	0.027	1.2	0.0563	0.0000	OK	PN003	MHS04	1.2	0.241	0.072	0.1514	
960 minute winter	MHS04	495	1.335	0.073	6.3	0.2380	0.0000	OK	PN004	MHS05	6.3	0.746	0.467	0.2856	
960 minute winter	MHS05	495	1.137	0.072	9.2	0.2872	0.0000	OK	PN005	MHS06	9.2	0.802	0.218	0.3715	
960 minute winter	MHS06	495	0.927	0.077	15.3	0.3853	0.0000	OK	PN008	MHS09	15.3	1.309	0.236	0.2255	
960 minute winter	MHS07	495	1.048	0.048	3.9	0.1370	0.0000	OK	PN006	MHS06	3.9	0.465	0.129	0.2002	
960 minute winter	MHS08	495	1.239	0.039	2.7	0.1214	0.0000	OK	PN007	MHS07	2.7	0.534	0.085	0.1458	
960 minute winter	MHS09	495	0.614	0.104	15.7	0.1311	0.0000	OK	PN009	MHS10	15.7	0.774	0.420	0.4737	
960 minute winter	MHS10	480	0.518	0.128	21.1	0.7320	0.0000	OK	PN010	MHS11	21.1	0.880	0.574	0.7248	
960 minute winter	MHS11	645	0.498	0.228	23.3	1.3126	0.0000	SURCHARGED	PN011	MHS12	23.2	0.968	0.673	1.5255	
960 minute winter	MHS12	690	0.483	0.383	23.2	270.4334	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.2				
960 minute winter	MHS13	690	0.369	0.369	8.2	0.4175	0.0000	SURCHARGED	Hydro-Brake®	MHS14	8.2				426.6
960 minute winter	MHS14	15	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 99.99%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	MHS01	750	1.630	0.030	1.2	0.0549	0.0000	OK	PN001	MHS02	1.2	0.335	0.090	0.1153	
1440 minute summer	MHS02	750	1.467	0.047	2.7	0.0891	0.0000	OK	PN002	MHS04	2.7	0.416	0.214	0.2018	
1440 minute summer	MHS03	750	1.537	0.027	1.2	0.0563	0.0000	OK	PN003	MHS04	1.2	0.237	0.072	0.1485	
1440 minute summer	MHS04	750	1.334	0.072	6.1	0.2321	0.0000	OK	PN004	MHS05	6.1	0.740	0.452	0.2789	
1440 minute summer	MHS05	750	1.136	0.071	8.9	0.2802	0.0000	OK	PN005	MHS06	8.9	0.795	0.211	0.3624	
1440 minute summer	MHS06	750	0.926	0.076	14.8	0.3753	0.0000	OK	PN008	MHS09	14.8	1.298	0.228	0.2201	
1440 minute summer	MHS07	750	1.048	0.048	3.8	0.1347	0.0000	OK	PN006	MHS06	3.8	0.463	0.126	0.1958	
1440 minute summer	MHS08	750	1.239	0.039	2.6	0.1192	0.0000	OK	PN007	MHS07	2.6	0.526	0.082	0.1427	
1440 minute summer	MHS09	750	0.612	0.102	15.2	0.1285	0.0000	OK	PN009	MHS10	15.2	0.759	0.407	0.4626	
1440 minute summer	MHS10	750	0.515	0.125	20.4	0.7092	0.0000	OK	PN010	MHS11	20.4	0.875	0.554	0.5537	
1440 minute summer	MHS11	870	0.420	0.150	22.5	0.7593	0.0000	OK	PN011	MHS12	22.5	0.809	0.653	1.3017	
1440 minute summer	MHS12	900	0.410	0.310	22.5	219.3519	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.0				
1440 minute summer	MHS13	900	0.298	0.298	8.0	0.3374	0.0000	OK	Hydro-Brake®	MHS14	8.0				478.5
1440 minute summer	MHS14	30	-0.381	0.000	8.0	0.0000	0.0000	OK							

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Results for 100 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 99.99%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	MHS01	750	1.626	0.026	0.9	0.0477	0.0000	OK	PN001	MHS02	0.9	0.310	0.068	0.0934	
1440 minute winter	MHS02	750	1.460	0.040	2.0	0.0764	0.0000	OK	PN002	MHS04	2.0	0.387	0.158	0.1612	
1440 minute winter	MHS03	720	1.534	0.024	0.9	0.0490	0.0000	OK	PN003	MHS04	0.9	0.226	0.054	0.1187	
1440 minute winter	MHS04	750	1.322	0.060	4.5	0.1848	0.0000	OK	PN004	MHS05	4.5	0.679	0.333	0.2241	
1440 minute winter	MHS05	750	1.125	0.060	6.6	0.2259	0.0000	OK	PN005	MHS06	6.6	0.735	0.156	0.2905	
1440 minute winter	MHS06	750	0.915	0.065	11.0	0.2972	0.0000	OK	PN008	MHS09	11.0	1.199	0.169	0.1770	
1440 minute winter	MHS07	750	1.041	0.041	2.8	0.1110	0.0000	OK	PN006	MHS06	2.8	0.425	0.093	0.1574	
1440 minute winter	MHS08	750	1.233	0.033	1.9	0.1023	0.0000	OK	PN007	MHS07	1.9	0.478	0.060	0.1147	
1440 minute winter	MHS09	750	0.595	0.085	11.3	0.1081	0.0000	OK	PN009	MHS10	11.3	0.716	0.303	0.3671	
1440 minute winter	MHS10	750	0.494	0.104	15.2	0.5511	0.0000	OK	PN010	MHS11	15.2	0.817	0.413	0.5090	
1440 minute winter	MHS11	960	0.433	0.163	16.8	0.8473	0.0000	OK	PN011	MHS12	16.8	0.837	0.488	1.3545	
1440 minute winter	MHS12	990	0.424	0.324	16.8	229.0979	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.0				
1440 minute winter	MHS13	990	0.312	0.312	8.0	0.3526	0.0000	SURCHARGED	Hydro-Brake®	MHS14	8.0				536.7
1440 minute winter	MHS14	30	-0.381	0.000	8.0	0.0000	0.0000	OK							

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Results for 100 year +40% 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 98.95%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	MHS01	20	2.385	0.785	16.3	1.4194	0.0000	SURCHARGED	PN001	MHS02	15.5	0.879	1.164	0.5607	
15 minute summer	MHS02	20	2.381	0.961	51.7	25.8276	0.0000	SURCHARGED	PN002	MHS04	-16.7	-0.946	-1.319	0.5447	
15 minute summer	MHS03	23	2.277	0.767	16.7	6.3926	0.0000	FLOOD RISK	PN003	MHS04	13.3	0.757	0.802	0.4969	
15 minute summer	MHS04	20	2.298	1.036	45.4	11.9315	0.0000	SURCHARGED	PN004	MHS05	19.8	1.135	1.465	0.5955	
15 minute summer	MHS05	18	2.295	1.230	56.0	17.4749	0.0000	SURCHARGED	PN005	MHS06	36.0	1.139	0.852	1.2871	
15 minute summer	MHS06	18	2.238	1.388	79.8	29.7546	0.0000	SURCHARGED	PN008	MHS09	52.2	1.441	0.804	0.7673	
15 minute summer	MHS07	21	2.124	1.124	43.8	19.5699	0.0000	FLOOD RISK	PN006	MHS06	27.9	0.892	0.922	0.7388	
15 minute summer	MHS08	25	2.095	0.895	41.8	20.2072	0.0000	FLOOD RISK	PN007	MHS07	27.1	0.954	0.854	0.9001	
15 minute summer	MHS09	18	2.222	1.712	52.2	2.1653	0.0000	SURCHARGED	PN009	MHS10	52.7	1.325	1.412	0.9180	
15 minute summer	MHS10	17	2.205	1.815	82.0	20.7395	0.0000	FLOOD RISK	PN010	MHS11	57.8	1.452	1.569	0.9439	
15 minute summer	MHS11	17	1.899	1.629	77.9	16.9536	0.0000	SURCHARGED	PN011	MHS12	77.7	2.852	2.256	1.5256	
15 minute summer	MHS12	79	0.368	0.268	77.7	189.6890	0.0000	OK	Hydro-Brake®	MHS13	7.8				
15 minute summer	MHS13	80	0.258	0.258	7.8	0.2917	0.0000	OK	Hydro-Brake®	MHS14	7.8				102.6
15 minute summer	MHS14	1	-0.381	0.000	7.8	0.0000	0.0000	OK							

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Results for 100 year +40% 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 99.04%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	MHS01	19	2.665	1.065	18.3	1.9252	0.0000	FLOOD RISK	PN001	MHS02	17.3	0.984	1.303	0.5607	
15 minute winter	MHS02	19	2.639	1.219	57.3	26.3166	0.0000	FLOOD RISK	PN002	MHS04	-17.5	-0.995	-1.387	0.5447	
15 minute winter	MHS03	25	2.309	0.799	21.8	12.2107	0.0000	FLOOD RISK	PN003	MHS04	14.0	0.793	0.839	0.4969	
15 minute winter	MHS04	20	2.456	1.194	48.4	14.0437	0.0000	SURCHARGED	PN004	MHS05	19.8	1.138	1.469	0.5955	
15 minute winter	MHS05	17	2.381	1.316	60.0	18.8247	0.0000	SURCHARGED	PN005	MHS06	33.0	1.139	0.781	1.2871	
15 minute winter	MHS06	17	2.317	1.467	75.5	31.6699	0.0000	SURCHARGED	PN008	MHS09	53.6	1.482	0.826	0.7673	
15 minute winter	MHS07	22	2.181	1.181	47.5	23.0974	0.0000	FLOOD RISK	PN006	MHS06	-32.1	-1.027	-1.062	0.7388	
15 minute winter	MHS08	26	2.137	0.937	48.6	26.1702	0.0000	FLOOD RISK	PN007	MHS07	29.0	0.936	0.916	0.9001	
15 minute winter	MHS09	18	2.308	1.798	53.6	2.2739	0.0000	FLOOD RISK	PN009	MHS10	54.0	1.358	1.446	0.9180	
15 minute winter	MHS10	18	2.291	1.901	82.1	23.3892	0.0000	FLOOD RISK	PN010	MHS11	60.3	1.515	1.637	0.9439	
15 minute winter	MHS11	16	1.993	1.723	81.2	18.0226	0.0000	SURCHARGED	PN011	MHS12	81.3	2.930	2.360	1.5256	
15 minute winter	MHS12	86	0.399	0.299	81.3	211.4227	0.0000	OK	Hydro-Brake®	MHS13	7.9				
15 minute winter	MHS13	86	0.287	0.287	7.9	0.3251	0.0000	OK	Hydro-Brake®	MHS14	7.9				105.6
15 minute winter	MHS14	1	-0.381	0.000	7.9	0.0000	0.0000	OK							

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Results for 100 year +40% 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 99.88%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	MHS01	27	2.733	1.133	16.9	2.0491	0.0000	FLOOD RISK	PN001	MHS02	15.9	0.904	1.198	0.5607	
30 minute summer	MHS02	28	2.680	1.260	53.5	26.5409	0.0000	FLOOD RISK	PN002	MHS04	-17.0	-0.968	-1.350	0.5447	
30 minute summer	MHS03	36	2.327	0.817	20.6	15.3358	0.0000	FLOOD RISK	PN003	MHS04	13.5	0.766	0.811	0.4969	
30 minute summer	MHS04	28	2.479	1.217	44.9	14.3600	0.0000	SURCHARGED	PN004	MHS05	19.9	1.138	1.471	0.5955	
30 minute summer	MHS05	27	2.372	1.307	53.4	18.6907	0.0000	SURCHARGED	PN005	MHS06	27.2	1.140	0.644	1.2871	
30 minute summer	MHS06	26	2.286	1.436	60.6	30.9107	0.0000	SURCHARGED	PN008	MHS09	54.9	1.419	0.846	0.7673	
30 minute summer	MHS07	30	2.182	1.182	43.1	23.1810	0.0000	FLOOD RISK	PN006	MHS06	30.0	0.960	0.993	0.7388	
30 minute summer	MHS08	35	2.159	0.959	44.8	29.3534	0.0000	FLOOD RISK	PN007	MHS07	26.6	0.849	0.839	0.9001	
30 minute summer	MHS09	25	2.273	1.763	54.9	2.2298	0.0000	SURCHARGED	PN009	MHS10	55.2	1.389	1.480	0.9180	
30 minute summer	MHS10	25	2.252	1.862	82.8	21.3914	0.0000	FLOOD RISK	PN010	MHS11	62.1	1.563	1.688	0.9439	
30 minute summer	MHS11	25	1.838	1.568	89.5	16.2692	0.0000	SURCHARGED	PN011	MHS12	84.0	2.824	2.439	1.5256	
30 minute summer	MHS12	100	0.447	0.347	84.0	245.3141	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.1				
30 minute summer	MHS13	100	0.334	0.334	8.1	0.3779	0.0000	SURCHARGED	Hydro-Brake®	MHS14	8.1				113.9
30 minute summer	MHS14	1	-0.381	0.000	8.1	0.0000	0.0000	OK							

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Results for 100 year +40% 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 99.93%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	MHS01	25	2.855	1.255	17.7	2.2696	0.0000	FLOOD RISK	PN001	MHS02	16.6	0.945	1.251	0.5607	
30 minute winter	MHS02	29	2.764	1.344	56.4	28.9850	0.0000	FLOOD RISK	PN002	MHS04	-17.6	-0.998	-1.391	0.5447	
30 minute winter	MHS03	39	2.364	0.854	27.1	22.0793	0.0000	FLOOD RISK	PN003	MHS04	-16.4	-0.929	-0.984	0.4969	
30 minute winter	MHS04	28	2.590	1.328	44.7	15.8409	0.0000	SURCHARGED	PN004	MHS05	20.1	1.154	1.492	0.5955	
30 minute winter	MHS05	27	2.484	1.419	53.5	20.4582	0.0000	SURCHARGED	PN005	MHS06	29.3	1.144	0.694	1.2871	
30 minute winter	MHS06	27	2.363	1.513	61.0	32.7988	0.0000	FLOOD RISK	PN008	MHS09	55.3	1.457	0.851	0.7673	
30 minute winter	MHS07	27	2.190	1.190	47.3	23.6352	7.2527	FLOOD	PN006	MHS06	-31.5	-1.005	-1.040	0.7388	
30 minute winter	MHS08	31	2.170	0.970	48.9	30.7973	4.9896	FLOOD	PN007	MHS07	26.1	0.833	0.823	0.9001	
30 minute winter	MHS09	27	2.340	1.830	55.3	2.3148	0.0000	FLOOD RISK	PN009	MHS10	55.6	1.398	1.489	0.9180	
30 minute winter	MHS10	26	2.308	1.918	84.1	24.2186	0.0000	FLOOD RISK	PN010	MHS11	67.2	1.691	1.826	0.9439	
30 minute winter	MHS11	24	1.899	1.629	91.3	16.9569	0.0000	SURCHARGED	PN011	MHS12	86.8	2.875	2.521	1.5256	
30 minute winter	MHS12	107	0.471	0.371	86.8	262.3172	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.1				
30 minute winter	MHS13	107	0.358	0.358	8.1	0.4047	0.0000	SURCHARGED	Hydro-Brake®	MHS14	8.1				115.4
30 minute winter	MHS14	1	-0.381	0.000	8.1	0.0000	0.0000	OK							

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Results for 100 year +40% 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 99.59%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	MHS01	43	2.731	1.131	19.1	2.0452	0.0000	FLOOD RISK	PN001	MHS02	13.8	0.785	1.039	0.5607	
60 minute summer	MHS02	44	2.677	1.257	47.7	26.4713	0.0000	FLOOD RISK	PN002	MHS04	-16.1	-0.915	-1.276	0.5447	
60 minute summer	MHS03	54	2.326	0.816	19.4	15.3111	0.0000	FLOOD RISK	PN003	MHS04	13.7	0.779	0.825	0.4969	
60 minute summer	MHS04	44	2.455	1.193	39.4	14.0409	0.0000	SURCHARGED	PN004	MHS05	19.5	1.134	1.446	0.5955	
60 minute summer	MHS05	43	2.302	1.237	47.3	17.5806	0.0000	SURCHARGED	PN005	MHS06	28.2	1.138	0.667	1.2871	
60 minute summer	MHS06	42	2.196	1.346	61.6	28.7279	0.0000	SURCHARGED	PN008	MHS09	52.7	1.340	0.812	0.7673	
60 minute summer	MHS07	46	2.148	1.148	38.6	21.0580	0.0000	FLOOD RISK	PN006	MHS06	27.3	0.873	0.903	0.7388	
60 minute summer	MHS08	51	2.142	0.942	38.4	26.8895	0.0000	FLOOD RISK	PN007	MHS07	24.4	0.778	0.769	0.9001	
60 minute summer	MHS09	41	2.159	1.649	52.7	2.0856	0.0000	SURCHARGED	PN009	MHS10	53.1	1.335	1.422	0.9180	
60 minute summer	MHS10	40	2.116	1.726	85.6	19.6507	0.0000	SURCHARGED	PN010	MHS11	67.6	1.701	1.837	0.9439	
60 minute summer	MHS11	40	1.631	1.361	92.6	13.9159	0.0000	SURCHARGED	PN011	MHS12	85.7	2.476	2.488	1.5256	
60 minute summer	MHS12	123	0.529	0.429	85.7	303.5358	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.2				
60 minute summer	MHS13	123	0.416	0.416	8.2	0.4701	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				128.4
60 minute summer	MHS14	1	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year +40% 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 99.54%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	MHS01	42	2.824	1.224	13.2	2.2138	0.0000	FLOOD RISK	PN001	MHS02	12.5	0.709	0.938	0.5607	
60 minute winter	MHS02	47	2.763	1.343	45.0	28.9281	0.0000	FLOOD RISK	PN002	MHS04	15.9	0.902	1.258	0.5447	
60 minute winter	MHS03	59	2.379	0.869	24.6	24.6871	0.0000	FLOOD RISK	PN003	MHS04	15.3	0.871	0.922	0.4969	
60 minute winter	MHS04	45	2.554	1.292	35.8	15.3507	0.0000	SURCHARGED	PN004	MHS05	20.0	1.148	1.478	0.5955	
60 minute winter	MHS05	44	2.391	1.326	41.1	18.9920	0.0000	SURCHARGED	PN005	MHS06	30.5	1.141	0.722	1.2871	
60 minute winter	MHS06	44	2.259	1.409	56.4	30.2618	0.0000	SURCHARGED	PN008	MHS09	53.3	1.383	0.822	0.7673	
60 minute winter	MHS07	45	2.190	1.190	34.7	23.6352	2.6487	FLOOD	PN006	MHS06	29.0	0.927	0.958	0.7388	
60 minute winter	MHS08	48	2.170	0.970	38.5	30.7973	6.1036	FLOOD	PN007	MHS07	24.4	0.778	0.769	0.9001	
60 minute winter	MHS09	42	2.209	1.699	53.3	2.1488	0.0000	SURCHARGED	PN009	MHS10	53.7	1.350	1.438	0.9180	
60 minute winter	MHS10	41	2.152	1.762	81.9	20.0829	0.0000	FLOOD RISK	PN010	MHS11	68.2	1.716	1.853	0.9439	
60 minute winter	MHS11	41	1.652	1.382	90.6	14.1523	0.0000	SURCHARGED	PN011	MHS12	87.5	2.478	2.540	1.5256	
60 minute winter	MHS12	133	0.568	0.468	87.5	331.0474	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.2				
60 minute winter	MHS13	133	0.455	0.455	8.2	0.5141	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				129.4
60 minute winter	MHS14	1	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year +40% 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.73%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	MHS01	76	2.529	0.929	10.4	1.6803	0.0000	SURCHARGED	PN001	MHS02	9.9	0.563	0.745	0.5607	
120 minute summer	MHS02	76	2.497	1.077	34.2	26.0473	0.0000	SURCHARGED	PN002	MHS04	15.5	0.882	1.230	0.5447	
120 minute summer	MHS03	86	2.290	0.780	13.7	8.7422	0.0000	FLOOD RISK	PN003	MHS04	9.5	0.537	0.569	0.4969	
120 minute summer	MHS04	78	2.335	1.073	29.0	12.4330	0.0000	SURCHARGED	PN004	MHS05	19.5	1.118	1.448	0.5955	
120 minute summer	MHS05	76	2.134	1.069	38.6	14.9315	0.0000	SURCHARGED	PN005	MHS06	26.9	1.130	0.637	1.2871	
120 minute summer	MHS06	78	2.041	1.191	54.0	24.9347	0.0000	SURCHARGED	PN008	MHS09	48.5	1.431	0.746	0.7673	
120 minute summer	MHS07	80	2.051	1.051	30.1	15.0275	0.0000	FLOOD RISK	PN006	MHS06	20.9	0.668	0.691	0.7388	
120 minute summer	MHS08	84	2.060	0.860	23.0	15.2147	0.0000	FLOOD RISK	PN007	MHS07	19.4	0.763	0.613	0.9001	
120 minute summer	MHS09	72	1.950	1.440	49.0	1.8215	0.0000	SURCHARGED	PN009	MHS10	49.2	1.237	1.317	0.9180	
120 minute summer	MHS10	72	1.844	1.454	76.0	16.3211	0.0000	SURCHARGED	PN010	MHS11	67.3	1.692	1.828	0.9439	
120 minute summer	MHS11	72	1.354	1.084	83.8	10.7727	0.0000	SURCHARGED	PN011	MHS12	82.5	2.081	2.397	1.5256	
120 minute summer	MHS12	148	0.600	0.500	82.5	353.4290	10.0411	FLOOD	Hydro-Brake®	MHS13	8.3				
120 minute summer	MHS13	148	0.486	0.486	8.3	0.5500	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				152.5
120 minute summer	MHS14	2	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year +40% 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 99.84%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	MHS01	78	2.645	1.045	8.4	1.8885	0.0000	FLOOD RISK	PN001	MHS02	8.0	0.454	0.601	0.5607	
120 minute winter	MHS02	78	2.603	1.183	29.1	26.2480	0.0000	FLOOD RISK	PN002	MHS04	15.7	0.891	1.242	0.5447	
120 minute winter	MHS03	92	2.329	0.819	16.4	15.6911	0.0000	FLOOD RISK	PN003	MHS04	13.0	0.739	0.783	0.4969	
120 minute winter	MHS04	80	2.392	1.130	27.9	13.1925	0.0000	SURCHARGED	PN004	MHS05	19.1	1.118	1.416	0.5955	
120 minute winter	MHS05	80	2.161	1.096	32.9	15.3584	0.0000	SURCHARGED	PN005	MHS06	27.5	1.133	0.650	1.2871	
120 minute winter	MHS06	82	2.064	1.214	49.4	25.5070	0.0000	SURCHARGED	PN008	MHS09	48.1	1.271	0.740	0.7673	
120 minute winter	MHS07	86	2.076	1.076	24.7	16.5804	0.0000	FLOOD RISK	PN006	MHS06	21.2	0.678	0.701	0.7388	
120 minute winter	MHS08	90	2.085	0.885	19.4	18.7853	0.0000	FLOOD RISK	PN007	MHS07	17.6	0.736	0.555	0.9001	
120 minute winter	MHS09	78	1.936	1.426	48.6	1.8041	0.0000	SURCHARGED	PN009	MHS10	48.7	1.225	1.305	0.9180	
120 minute winter	MHS10	74	1.799	1.409	71.9	15.7647	0.0000	SURCHARGED	PN010	MHS11	67.7	1.704	1.840	0.9439	
120 minute winter	MHS11	76	1.324	1.054	82.0	10.4403	0.0000	SURCHARGED	PN011	MHS12	79.3	1.995	2.303	1.5256	
120 minute winter	MHS12	132	0.600	0.500	79.3	353.4290	57.6296	FLOOD	Hydro-Brake®	MHS13	8.3				
120 minute winter	MHS13	134	0.486	0.486	8.3	0.5500	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				153.8
120 minute winter	MHS14	2	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year +40% 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 99.93%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	MHS01	116	2.347	0.747	10.3	1.3498	0.0000	SURCHARGED	PN001	MHS02	7.6	0.434	0.571	0.5607	
180 minute summer	MHS02	116	2.331	0.911	24.7	25.7327	0.0000	SURCHARGED	PN002	MHS04	14.2	0.807	1.126	0.5447	
180 minute summer	MHS03	120	2.259	0.749	8.1	3.2540	0.0000	FLOOD RISK	PN003	MHS04	7.4	0.419	0.444	0.4969	
180 minute summer	MHS04	116	2.255	0.993	25.0	11.3630	0.0000	SURCHARGED	PN004	MHS05	18.7	1.087	1.386	0.5955	
180 minute summer	MHS05	112	2.030	0.965	33.4	13.2908	0.0000	SURCHARGED	PN005	MHS06	25.9	0.986	0.612	1.2871	
180 minute summer	MHS06	112	1.960	1.110	48.7	22.9592	0.0000	SURCHARGED	PN008	MHS09	45.8	1.424	0.706	0.7673	
180 minute summer	MHS07	112	1.981	0.981	23.3	11.0634	0.0000	FLOOD RISK	PN006	MHS06	15.7	0.620	0.518	0.7388	
180 minute summer	MHS08	116	1.993	0.793	17.6	5.6555	0.0000	FLOOD RISK	PN007	MHS07	15.2	0.741	0.479	0.9001	
180 minute summer	MHS09	108	1.827	1.317	46.4	1.6662	0.0000	SURCHARGED	PN009	MHS10	46.8	1.176	1.252	0.9180	
180 minute summer	MHS10	108	1.664	1.274	69.0	14.1196	0.0000	SURCHARGED	PN010	MHS11	64.0	1.609	1.738	0.9439	
180 minute summer	MHS11	108	1.231	0.961	76.8	9.3861	0.0000	SURCHARGED	PN011	MHS12	73.3	1.844	2.129	1.5256	
180 minute summer	MHS12	168	0.600	0.500	73.3	353.4290	45.7737	FLOOD	Hydro-Brake®	MHS13	8.3				
180 minute summer	MHS13	168	0.486	0.486	8.3	0.5500	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				173.7
180 minute summer	MHS14	4	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year +40% 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 99.95%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	MHS01	116	2.400	0.800	6.3	1.4458	0.0000	SURCHARGED	PN001	MHS02	6.0	0.434	0.452	0.5607	
180 minute winter	MHS02	116	2.379	0.959	19.0	25.8226	0.0000	SURCHARGED	PN002	MHS04	15.0	0.854	1.190	0.5447	
180 minute winter	MHS03	128	2.274	0.764	8.5	5.9590	0.0000	FLOOD RISK	PN003	MHS04	8.3	0.471	0.499	0.4969	
180 minute winter	MHS04	116	2.272	1.010	21.5	11.5864	0.0000	SURCHARGED	PN004	MHS05	19.1	1.089	1.416	0.5955	
180 minute winter	MHS05	120	2.038	0.973	29.2	13.4121	0.0000	SURCHARGED	PN005	MHS06	24.9	0.986	0.590	1.2871	
180 minute winter	MHS06	120	1.959	1.109	45.0	22.9433	0.0000	SURCHARGED	PN008	MHS09	44.7	1.431	0.688	0.7673	
180 minute winter	MHS07	120	1.979	0.979	18.9	11.0460	0.0000	FLOOD RISK	PN006	MHS06	14.9	0.606	0.492	0.7388	
180 minute winter	MHS08	124	1.990	0.790	13.8	5.3003	0.0000	FLOOD RISK	PN007	MHS07	12.5	0.704	0.394	0.9001	
180 minute winter	MHS09	116	1.813	1.303	45.3	1.6482	0.0000	SURCHARGED	PN009	MHS10	45.5	1.143	1.218	0.9180	
180 minute winter	MHS10	112	1.635	1.245	64.5	13.7631	0.0000	SURCHARGED	PN010	MHS11	61.9	1.557	1.681	0.9439	
180 minute winter	MHS11	116	1.224	0.954	71.7	9.3159	0.0000	SURCHARGED	PN011	MHS12	70.3	1.768	2.042	1.5256	
180 minute winter	MHS12	156	0.600	0.500	70.3	353.4290	92.4255	FLOOD	Hydro-Brake®	MHS13	8.3				
180 minute winter	MHS13	156	0.486	0.486	8.3	0.5500	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				176.3
180 minute winter	MHS14	4	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year +40% 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 99.98%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	MHS01	152	2.092	0.492	6.5	0.8904	0.0000	SURCHARGED	PN001	MHS02	6.2	0.439	0.469	0.5607	
240 minute summer	MHS02	152	2.084	0.664	18.3	25.2631	0.0000	SURCHARGED	PN002	MHS04	14.2	0.806	1.123	0.5447	
240 minute summer	MHS03	152	2.051	0.541	6.7	1.1174	0.0000	SURCHARGED	PN003	MHS04	6.4	0.362	0.383	0.4969	
240 minute summer	MHS04	152	2.044	0.782	22.2	8.5441	0.0000	SURCHARGED	PN004	MHS05	18.5	1.077	1.369	0.5955	
240 minute summer	MHS05	144	1.882	0.817	30.5	10.9571	0.0000	SURCHARGED	PN005	MHS06	24.7	0.966	0.585	1.2871	
240 minute summer	MHS06	144	1.834	0.984	45.9	19.8828	0.0000	SURCHARGED	PN008	MHS09	41.5	1.432	0.638	0.7673	
240 minute summer	MHS07	144	1.867	0.867	19.5	9.5431	0.0000	SURCHARGED	PN006	MHS06	13.4	0.596	0.441	0.7388	
240 minute summer	MHS08	140	1.889	0.689	14.4	2.1281	0.0000	FLOOD RISK	PN007	MHS07	12.8	0.729	0.405	0.9001	
240 minute summer	MHS09	140	1.699	1.189	42.2	1.5040	0.0000	SURCHARGED	PN009	MHS10	42.4	1.067	1.136	0.9180	
240 minute summer	MHS10	140	1.533	1.143	63.8	12.5141	0.0000	SURCHARGED	PN010	MHS11	59.9	1.506	1.627	0.9439	
240 minute summer	MHS11	140	1.148	0.878	70.0	8.4502	0.0000	SURCHARGED	PN011	MHS12	68.2	1.714	1.979	1.5256	
240 minute summer	MHS12	196	0.600	0.500	68.2	353.4290	53.4983	FLOOD	Hydro-Brake®	MHS13	8.3				
240 minute summer	MHS13	196	0.486	0.486	8.3	0.5500	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				195.4
240 minute summer	MHS14	4	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year +40% 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	MHS01	164	2.043	0.443	5.0	0.8018	0.0000	SURCHARGED	PN001	MHS02	4.8	0.430	0.364	0.5607	
240 minute winter	MHS02	164	2.036	0.616	12.2	25.1702	0.0000	SURCHARGED	PN002	MHS04	13.8	0.781	1.089	0.5447	
240 minute winter	MHS03	164	2.003	0.493	5.1	1.0187	0.0000	SURCHARGED	PN003	MHS04	4.9	0.288	0.295	0.4969	
240 minute winter	MHS04	164	1.996	0.734	20.0	7.9023	0.0000	SURCHARGED	PN004	MHS05	18.9	1.080	1.403	0.5955	
240 minute winter	MHS05	152	1.827	0.762	27.3	10.0866	0.0000	SURCHARGED	PN005	MHS06	24.3	0.995	0.574	1.2871	
240 minute winter	MHS06	148	1.773	0.923	41.8	18.3936	0.0000	SURCHARGED	PN008	MHS09	39.3	1.427	0.605	0.7673	
240 minute winter	MHS07	148	1.802	0.802	15.4	8.6710	0.0000	SURCHARGED	PN006	MHS06	12.4	0.606	0.410	0.7388	
240 minute winter	MHS08	148	1.819	0.619	11.1	1.9129	0.0000	SURCHARGED	PN007	MHS07	10.3	0.696	0.324	0.9001	
240 minute winter	MHS09	148	1.641	1.131	40.1	1.4309	0.0000	SURCHARGED	PN009	MHS10	40.2	1.011	1.077	0.9180	
240 minute winter	MHS10	148	1.478	1.088	58.6	11.8375	0.0000	SURCHARGED	PN010	MHS11	57.1	1.435	1.550	0.9439	
240 minute winter	MHS11	152	1.131	0.861	65.3	8.2453	0.0000	SURCHARGED	PN011	MHS12	64.2	1.614	1.863	1.5256	
240 minute winter	MHS12	180	0.600	0.500	64.2	353.4290	117.9034	FLOOD	Hydro-Brake®	MHS13	8.3				
240 minute winter	MHS13	180	0.486	0.486	8.3	0.5500	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				198.7
240 minute winter	MHS14	4	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year +40% 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	MHS01	216	1.890	0.290	4.7	0.5247	0.0000	SURCHARGED	PN001	MHS02	4.6	0.434	0.346	0.5607	
360 minute summer	MHS02	224	1.882	0.462	10.8	11.8741	0.0000	SURCHARGED	PN002	MHS04	10.9	0.620	0.864	0.5447	
360 minute summer	MHS03	208	1.871	0.361	4.8	0.7470	0.0000	SURCHARGED	PN003	MHS04	4.6	0.300	0.276	0.4969	
360 minute summer	MHS04	208	1.860	0.598	21.5	6.0829	0.0000	SURCHARGED	PN004	MHS05	16.2	0.922	1.203	0.5955	
360 minute summer	MHS05	208	1.675	0.610	27.0	7.6955	0.0000	SURCHARGED	PN005	MHS06	23.0	0.992	0.544	1.2871	
360 minute summer	MHS06	208	1.617	0.767	40.7	14.5995	0.0000	SURCHARGED	PN008	MHS09	37.7	1.414	0.581	0.7673	
360 minute summer	MHS07	208	1.640	0.640	14.3	6.5073	0.0000	SURCHARGED	PN006	MHS06	10.8	0.603	0.357	0.7388	
360 minute summer	MHS08	208	1.652	0.452	10.5	1.3978	0.0000	SURCHARGED	PN007	MHS07	9.5	0.701	0.301	0.9001	
360 minute summer	MHS09	208	1.492	0.982	38.6	1.2418	0.0000	SURCHARGED	PN009	MHS10	38.8	0.975	1.038	0.9180	
360 minute summer	MHS10	208	1.337	0.947	55.9	10.1113	0.0000	SURCHARGED	PN010	MHS11	53.9	1.356	1.465	0.9439	
360 minute summer	MHS11	208	1.029	0.759	61.3	7.0956	0.0000	SURCHARGED	PN011	MHS12	60.4	1.519	1.754	1.5256	
360 minute summer	MHS12	256	0.600	0.500	60.4	353.4290	53.9940	FLOOD	Hydro-Brake®	MHS13	8.3				
360 minute summer	MHS13	256	0.486	0.486	8.3	0.5500	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				237.4
360 minute summer	MHS14	8	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year +40% 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 99.97%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	MHS01	224	1.839	0.239	3.6	0.4325	0.0000	SURCHARGED	PN001	MHS02	3.7	0.429	0.276	0.5607	
360 minute winter	MHS02	232	1.831	0.411	8.4	5.6292	0.0000	SURCHARGED	PN002	MHS04	9.3	0.526	0.734	0.5447	
360 minute winter	MHS03	216	1.809	0.299	3.7	0.6189	0.0000	SURCHARGED	PN003	MHS04	3.6	0.269	0.216	0.4969	
360 minute winter	MHS04	216	1.800	0.538	17.5	5.2799	0.0000	SURCHARGED	PN004	MHS05	15.6	0.885	1.153	0.5955	
360 minute winter	MHS05	216	1.582	0.517	23.9	6.2172	0.0000	SURCHARGED	PN005	MHS06	21.7	0.978	0.512	1.2871	
360 minute winter	MHS06	216	1.523	0.673	37.1	12.2910	0.0000	SURCHARGED	PN008	MHS09	35.1	1.425	0.541	0.7673	
360 minute winter	MHS07	216	1.541	0.541	11.4	5.1772	0.0000	SURCHARGED	PN006	MHS06	9.6	0.584	0.316	0.7388	
360 minute winter	MHS08	216	1.551	0.351	8.1	1.0844	0.0000	SURCHARGED	PN007	MHS07	7.7	0.684	0.244	0.9001	
360 minute winter	MHS09	216	1.411	0.901	36.1	1.1397	0.0000	SURCHARGED	PN009	MHS10	36.1	0.907	0.966	0.9180	
360 minute winter	MHS10	216	1.274	0.884	50.9	9.3362	0.0000	SURCHARGED	PN010	MHS11	49.8	1.252	1.352	0.9439	
360 minute winter	MHS11	224	1.017	0.747	56.0	6.9565	0.0000	SURCHARGED	PN011	MHS12	55.1	1.387	1.601	1.5256	
360 minute winter	MHS12	240	0.600	0.500	55.1	353.4290	124.9381	FLOOD	Hydro-Brake®	MHS13	8.3				
360 minute winter	MHS13	240	0.486	0.486	8.3	0.5500	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				242.6
360 minute winter	MHS14	8	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year +40% 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.96%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	MHS01	272	1.815	0.215	3.9	0.3894	0.0000	SURCHARGED	PN001	MHS02	3.7	0.430	0.276	0.5607	
480 minute summer	MHS02	272	1.807	0.387	8.5	2.7195	0.0000	SURCHARGED	PN002	MHS04	7.6	0.481	0.606	0.5447	
480 minute summer	MHS03	264	1.782	0.272	4.0	0.5614	0.0000	SURCHARGED	PN003	MHS04	3.8	0.281	0.227	0.4969	
480 minute summer	MHS04	264	1.770	0.508	17.8	4.8930	0.0000	SURCHARGED	PN004	MHS05	15.2	0.888	1.129	0.5955	
480 minute summer	MHS05	272	1.527	0.462	24.3	5.3643	0.0000	SURCHARGED	PN005	MHS06	22.8	0.971	0.540	1.2871	
480 minute summer	MHS06	272	1.465	0.615	37.3	10.8880	0.0000	SURCHARGED	PN008	MHS09	35.4	1.419	0.545	0.7673	
480 minute summer	MHS07	272	1.482	0.482	11.8	4.3846	0.0000	SURCHARGED	PN006	MHS06	9.2	0.581	0.305	0.7388	
480 minute summer	MHS08	272	1.490	0.290	8.7	0.8969	0.0000	SURCHARGED	PN007	MHS07	8.0	0.668	0.254	0.9001	
480 minute summer	MHS09	272	1.351	0.841	36.3	1.0642	0.0000	SURCHARGED	PN009	MHS10	36.3	0.914	0.973	0.9180	
480 minute summer	MHS10	272	1.212	0.822	50.8	8.5810	0.0000	SURCHARGED	PN010	MHS11	49.7	1.249	1.349	0.9439	
480 minute summer	MHS11	272	0.954	0.684	55.9	6.2329	0.0000	SURCHARGED	PN011	MHS12	54.8	1.379	1.592	1.5256	
480 minute summer	MHS12	312	0.600	0.500	54.8	353.4290	53.5875	FLOOD	Hydro-Brake®	MHS13	8.3				
480 minute summer	MHS13	312	0.486	0.486	8.3	0.5500	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				280.2
480 minute summer	MHS14	8	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year +40% 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 99.97%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	MHS01	248	1.647	0.047	2.9	0.0857	0.0000	OK	PN001	MHS02	2.9	0.420	0.218	0.3560	
480 minute winter	MHS02	272	1.631	0.211	6.7	0.4002	0.0000	SURCHARGED	PN002	MHS04	6.7	0.478	0.528	0.5447	
480 minute winter	MHS03	280	1.597	0.087	3.0	0.1801	0.0000	OK	PN003	MHS04	3.0	0.267	0.180	0.3982	
480 minute winter	MHS04	280	1.592	0.330	15.1	2.6144	0.0000	SURCHARGED	PN004	MHS05	14.2	0.898	1.052	0.5955	
480 minute winter	MHS05	280	1.375	0.310	21.0	3.0196	0.0000	SURCHARGED	PN005	MHS06	20.9	0.972	0.495	1.2871	
480 minute winter	MHS06	280	1.323	0.473	33.5	7.4074	0.0000	SURCHARGED	PN008	MHS09	31.6	1.428	0.486	0.7673	
480 minute winter	MHS07	280	1.335	0.335	9.5	2.5629	0.0000	SURCHARGED	PN006	MHS06	8.5	0.579	0.282	0.7388	
480 minute winter	MHS08	280	1.340	0.140	6.5	0.4338	0.0000	OK	PN007	MHS07	6.5	0.665	0.205	0.7877	
480 minute winter	MHS09	288	1.233	0.723	32.4	0.9146	0.0000	SURCHARGED	PN009	MHS10	32.4	0.814	0.867	0.9180	
480 minute winter	MHS10	288	1.124	0.734	44.9	7.5223	0.0000	SURCHARGED	PN010	MHS11	44.2	1.110	1.199	0.9439	
480 minute winter	MHS11	296	0.934	0.664	49.2	6.0107	0.0000	SURCHARGED	PN011	MHS12	48.5	1.241	1.409	1.5256	
480 minute winter	MHS12	304	0.600	0.500	48.5	353.4290	112.0541	FLOOD	Hydro-Brake®	MHS13	8.3				
480 minute winter	MHS13	304	0.486	0.486	8.3	0.5500	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				287.2
480 minute winter	MHS14	8	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year +40% 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.97%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	MHS01	330	1.669	0.069	3.2	0.1249	0.0000	OK	PN001	MHS02	3.2	0.430	0.241	0.4064	
600 minute summer	MHS02	330	1.662	0.242	7.4	0.4603	0.0000	SURCHARGED	PN002	MHS04	7.3	0.483	0.579	0.5447	
600 minute summer	MHS03	330	1.625	0.115	3.3	0.2372	0.0000	OK	PN003	MHS04	3.3	0.267	0.197	0.4526	
600 minute summer	MHS04	330	1.619	0.357	16.6	2.9263	0.0000	SURCHARGED	PN004	MHS05	15.6	0.896	1.152	0.5955	
600 minute summer	MHS05	330	1.381	0.316	23.4	3.1030	0.0000	SURCHARGED	PN005	MHS06	21.3	0.980	0.503	1.2871	
600 minute summer	MHS06	330	1.324	0.474	34.9	7.4382	0.0000	SURCHARGED	PN008	MHS09	33.0	1.412	0.508	0.7673	
600 minute summer	MHS07	330	1.337	0.337	10.3	2.5844	0.0000	SURCHARGED	PN006	MHS06	8.3	0.584	0.275	0.7388	
600 minute summer	MHS08	330	1.343	0.143	7.0	0.4417	0.0000	OK	PN007	MHS07	7.0	0.659	0.220	0.7944	
600 minute summer	MHS09	330	1.225	0.715	33.8	0.9047	0.0000	SURCHARGED	PN009	MHS10	33.8	0.849	0.904	0.9180	
600 minute summer	MHS10	330	1.105	0.715	46.9	7.2819	0.0000	SURCHARGED	PN010	MHS11	45.6	1.147	1.239	0.9439	
600 minute summer	MHS11	345	0.885	0.615	51.3	5.4686	0.0000	SURCHARGED	PN011	MHS12	50.3	1.265	1.461	1.5256	
600 minute summer	MHS12	375	0.600	0.500	50.3	353.4290	51.2362	FLOOD	Hydro-Brake®	MHS13	8.3				
600 minute summer	MHS13	375	0.486	0.486	8.3	0.5500	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				321.4
600 minute summer	MHS14	15	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year +40% 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 99.96%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	MHS01	315	1.643	0.043	2.4	0.0777	0.0000	OK	PN001	MHS02	2.4	0.398	0.181	0.1935	
600 minute winter	MHS02	315	1.490	0.070	5.6	0.1322	0.0000	OK	PN002	MHS04	5.6	0.484	0.444	0.3606	
600 minute winter	MHS03	315	1.549	0.039	2.5	0.0811	0.0000	OK	PN003	MHS04	2.5	0.273	0.150	0.2678	
600 minute winter	MHS04	315	1.384	0.122	12.7	0.4827	0.0000	OK	PN004	MHS05	12.7	0.894	0.941	0.5114	
600 minute winter	MHS05	345	1.193	0.128	18.7	0.6736	0.0000	OK	PN005	MHS06	18.7	0.953	0.442	1.0208	
600 minute winter	MHS06	345	1.166	0.316	30.9	3.9791	0.0000	SURCHARGED	PN008	MHS09	28.8	1.422	0.444	0.7673	
600 minute winter	MHS07	345	1.174	0.174	7.9	0.8321	0.0000	OK	PN006	MHS06	7.9	0.565	0.260	0.7105	
600 minute winter	MHS08	315	1.256	0.056	5.4	0.1717	0.0000	OK	PN007	MHS07	5.4	0.648	0.170	0.5081	
600 minute winter	MHS09	345	1.094	0.584	29.6	0.7393	0.0000	SURCHARGED	PN009	MHS10	29.6	0.802	0.792	0.9180	
600 minute winter	MHS10	345	1.007	0.617	40.6	6.0890	0.0000	SURCHARGED	PN010	MHS11	39.8	1.001	1.081	0.9439	
600 minute winter	MHS11	360	0.858	0.588	44.2	5.1523	0.0000	SURCHARGED	PN011	MHS12	43.5	1.164	1.262	1.5256	
600 minute winter	MHS12	360	0.600	0.500	43.5	353.4290	121.8932	FLOOD	Hydro-Brake®	MHS13	8.3				
600 minute winter	MHS13	360	0.486	0.486	8.3	0.5500	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				331.2
600 minute winter	MHS14	15	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year +40% 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 99.97%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	MHS01	375	1.647	0.047	2.8	0.0841	0.0000	OK	PN001	MHS02	2.8	0.415	0.211	0.2162	
720 minute summer	MHS02	375	1.496	0.076	6.5	0.1442	0.0000	OK	PN002	MHS04	6.5	0.474	0.515	0.4105	
720 minute summer	MHS03	375	1.552	0.042	2.9	0.0874	0.0000	OK	PN003	MHS04	2.9	0.267	0.174	0.3059	
720 minute summer	MHS04	390	1.464	0.202	14.7	1.1455	0.0000	SURCHARGED	PN004	MHS05	14.1	0.892	1.042	0.5955	
720 minute summer	MHS05	390	1.260	0.195	21.0	1.4495	0.0000	OK	PN005	MHS06	20.8	0.970	0.493	1.2356	
720 minute summer	MHS06	390	1.219	0.369	34.5	5.0593	0.0000	SURCHARGED	PN008	MHS09	31.0	1.423	0.477	0.7673	
720 minute summer	MHS07	390	1.231	0.231	9.1	1.4473	0.0000	SURCHARGED	PN006	MHS06	8.5	0.582	0.281	0.7388	
720 minute summer	MHS08	375	1.260	0.060	6.2	0.1844	0.0000	OK	PN007	MHS07	6.2	0.669	0.196	0.5623	
720 minute summer	MHS09	390	1.132	0.622	31.8	0.7869	0.0000	SURCHARGED	PN009	MHS10	31.8	0.803	0.851	0.9180	
720 minute summer	MHS10	390	1.025	0.635	44.0	6.3100	0.0000	SURCHARGED	PN010	MHS11	43.1	1.083	1.170	0.9439	
720 minute summer	MHS11	405	0.835	0.565	48.1	4.8887	0.0000	SURCHARGED	PN011	MHS12	47.3	1.189	1.373	1.5256	
720 minute summer	MHS12	435	0.600	0.500	47.3	353.4290	51.0574	FLOOD	Hydro-Brake®	MHS13	8.2				
720 minute summer	MHS13	450	0.486	0.486	8.2	0.5500	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				364.0
720 minute summer	MHS14	15	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year +40% 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 99.98%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	MHS01	375	1.640	0.040	2.1	0.0726	0.0000	OK	PN001	MHS02	2.1	0.384	0.158	0.1755	
720 minute winter	MHS02	375	1.485	0.065	4.9	0.1226	0.0000	OK	PN002	MHS04	4.9	0.470	0.388	0.3211	
720 minute winter	MHS03	375	1.547	0.037	2.2	0.0760	0.0000	OK	PN003	MHS04	2.2	0.264	0.132	0.2379	
720 minute winter	MHS04	375	1.370	0.108	11.1	0.4024	0.0000	OK	PN004	MHS05	11.1	0.872	0.822	0.4351	
720 minute winter	MHS05	360	1.164	0.099	16.3	0.4522	0.0000	OK	PN005	MHS06	16.3	0.946	0.386	0.7442	
720 minute winter	MHS06	405	1.012	0.162	27.1	1.2327	0.0000	OK	PN008	MHS09	26.5	1.427	0.409	0.6783	
720 minute winter	MHS07	375	1.065	0.065	6.9	0.1999	0.0000	OK	PN006	MHS06	6.9	0.558	0.228	0.4176	
720 minute winter	MHS08	375	1.252	0.052	4.7	0.1601	0.0000	OK	PN007	MHS07	4.7	0.622	0.148	0.2179	
720 minute winter	MHS09	405	0.973	0.463	27.2	0.5859	0.0000	SURCHARGED	PN009	MHS10	27.1	0.805	0.726	0.9180	
720 minute winter	MHS10	405	0.905	0.515	36.6	4.8343	0.0000	SURCHARGED	PN010	MHS11	36.0	0.905	0.978	0.9439	
720 minute winter	MHS11	420	0.791	0.521	39.8	4.3906	0.0000	SURCHARGED	PN011	MHS12	39.3	1.116	1.142	1.5256	
720 minute winter	MHS12	435	0.600	0.500	39.3	353.4290	97.0410	FLOOD	Hydro-Brake®	MHS13	8.2				
720 minute winter	MHS13	435	0.486	0.486	8.2	0.5500	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				375.3
720 minute winter	MHS14	15	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year +40% 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 99.97%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	MHS01	495	1.642	0.042	2.3	0.0760	0.0000	OK	PN001	MHS02	2.3	0.396	0.173	0.1864	
960 minute summer	MHS02	495	1.487	0.067	5.3	0.1281	0.0000	OK	PN002	MHS04	5.3	0.478	0.420	0.3414	
960 minute summer	MHS03	495	1.548	0.038	2.3	0.0778	0.0000	OK	PN003	MHS04	2.3	0.266	0.138	0.2519	
960 minute summer	MHS04	495	1.376	0.114	11.9	0.4392	0.0000	OK	PN004	MHS05	11.9	0.884	0.882	0.4559	
960 minute summer	MHS05	480	1.167	0.102	17.5	0.4769	0.0000	OK	PN005	MHS06	17.5	0.971	0.414	0.7420	
960 minute summer	MHS06	510	1.009	0.159	29.0	1.1955	0.0000	OK	PN008	MHS09	28.3	1.427	0.436	0.6734	
960 minute summer	MHS07	495	1.066	0.066	7.3	0.2078	0.0000	OK	PN006	MHS06	7.3	0.572	0.241	0.4148	
960 minute summer	MHS08	495	1.253	0.053	5.0	0.1652	0.0000	OK	PN007	MHS07	5.0	0.634	0.158	0.2273	
960 minute summer	MHS09	510	0.965	0.455	29.0	0.5753	0.0000	SURCHARGED	PN009	MHS10	28.8	0.805	0.772	0.9180	
960 minute summer	MHS10	510	0.885	0.495	39.0	4.5861	0.0000	SURCHARGED	PN010	MHS11	38.1	0.957	1.034	0.9439	
960 minute summer	MHS11	510	0.739	0.469	42.2	3.7991	0.0000	SURCHARGED	PN011	MHS12	41.6	1.046	1.208	1.5256	
960 minute summer	MHS12	585	0.600	0.500	41.6	353.4290	28.4837	FLOOD	Hydro-Brake®	MHS13	8.2				
960 minute summer	MHS13	585	0.486	0.486	8.2	0.5500	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				446.2
960 minute summer	MHS14	15	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year +40% 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 99.98%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	MHS01	480	1.636	0.036	1.7	0.0653	0.0000	OK	PN001	MHS02	1.7	0.370	0.128	0.1494	
960 minute winter	MHS02	495	1.477	0.057	3.9	0.1082	0.0000	OK	PN002	MHS04	3.9	0.453	0.309	0.2666	
960 minute winter	MHS03	480	1.542	0.032	1.7	0.0668	0.0000	OK	PN003	MHS04	1.7	0.255	0.102	0.1960	
960 minute winter	MHS04	495	1.353	0.091	8.8	0.3161	0.0000	OK	PN004	MHS05	8.8	0.812	0.652	0.3666	
960 minute winter	MHS05	495	1.152	0.087	12.9	0.3749	0.0000	OK	PN005	MHS06	12.9	0.903	0.305	0.4622	
960 minute winter	MHS06	450	0.940	0.090	21.4	0.4813	0.0000	OK	PN008	MHS09	21.4	1.404	0.330	0.5225	
960 minute winter	MHS07	495	1.057	0.057	5.4	0.1694	0.0000	OK	PN006	MHS06	5.4	0.527	0.178	0.2437	
960 minute winter	MHS08	495	1.246	0.046	3.7	0.1420	0.0000	OK	PN007	MHS07	3.7	0.582	0.117	0.1832	
960 minute winter	MHS09	540	0.807	0.297	22.0	0.3760	0.0000	SURCHARGED	PN009	MHS10	21.9	0.794	0.587	0.9180	
960 minute winter	MHS10	555	0.769	0.379	29.5	3.1704	0.0000	SURCHARGED	PN010	MHS11	29.1	0.901	0.790	0.9439	
960 minute winter	MHS11	570	0.708	0.438	32.1	3.4616	0.0000	SURCHARGED	PN011	MHS12	31.8	1.033	0.922	1.5256	
960 minute winter	MHS12	570	0.600	0.500	31.8	353.4290	85.1686	FLOOD	Hydro-Brake®	MHS13	8.2				
960 minute winter	MHS13	585	0.486	0.486	8.2	0.5500	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				461.6
960 minute winter	MHS14	15	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year +40% 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 99.97%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	MHS01	750	1.635	0.035	1.6	0.0633	0.0000	OK	PN001	MHS02	1.6	0.359	0.120	0.1435	
1440 minute summer	MHS02	750	1.475	0.055	3.7	0.1052	0.0000	OK	PN002	MHS04	3.7	0.447	0.293	0.2568	
1440 minute summer	MHS03	750	1.542	0.032	1.7	0.0668	0.0000	OK	PN003	MHS04	1.7	0.259	0.102	0.1903	
1440 minute summer	MHS04	750	1.350	0.088	8.4	0.3029	0.0000	OK	PN004	MHS05	8.4	0.803	0.622	0.3538	
1440 minute summer	MHS05	750	1.149	0.084	12.3	0.3604	0.0000	OK	PN005	MHS06	12.3	0.886	0.291	0.4591	
1440 minute summer	MHS06	720	0.941	0.091	20.6	0.4878	0.0000	OK	PN008	MHS09	20.6	1.409	0.317	0.4036	
1440 minute summer	MHS07	750	1.056	0.056	5.3	0.1673	0.0000	OK	PN006	MHS06	5.3	0.526	0.175	0.2475	
1440 minute summer	MHS08	750	1.245	0.045	3.6	0.1400	0.0000	OK	PN007	MHS07	3.6	0.576	0.114	0.1803	
1440 minute summer	MHS09	750	0.698	0.188	21.1	0.2378	0.0000	OK	PN009	MHS10	20.9	0.778	0.561	0.8681	
1440 minute summer	MHS10	750	0.662	0.272	28.2	1.9883	0.0000	SURCHARGED	PN010	MHS11	27.9	0.899	0.758	0.9439	
1440 minute summer	MHS11	900	0.603	0.333	30.8	2.2806	0.0000	SURCHARGED	PN011	MHS12	30.5	0.897	0.886	1.5256	
1440 minute summer	MHS12	960	0.588	0.488	30.5	344.9408	0.0000	FLOOD RISK	Hydro-Brake®	MHS13	8.2				
1440 minute summer	MHS13	960	0.474	0.474	8.2	0.5364	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				596.3
1440 minute summer	MHS14	30	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Results for 100 year +40% 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 99.98%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	MHS01	720	1.630	0.030	1.2	0.0549	0.0000	OK	PN001	MHS02	1.2	0.335	0.090	0.1173	
1440 minute winter	MHS02	750	1.468	0.048	2.8	0.0908	0.0000	OK	PN002	MHS04	2.8	0.421	0.222	0.2068	
1440 minute winter	MHS03	720	1.537	0.027	1.2	0.0563	0.0000	OK	PN003	MHS04	1.2	0.237	0.072	0.1514	
1440 minute winter	MHS04	750	1.335	0.073	6.3	0.2379	0.0000	OK	PN004	MHS05	6.3	0.744	0.467	0.2866	
1440 minute winter	MHS05	750	1.137	0.072	9.3	0.2895	0.0000	OK	PN005	MHS06	9.3	0.806	0.220	0.3748	
1440 minute winter	MHS06	750	0.928	0.078	15.5	0.3893	0.0000	OK	PN008	MHS09	15.5	1.313	0.239	0.2846	
1440 minute winter	MHS07	750	1.048	0.048	3.9	0.1370	0.0000	OK	PN006	MHS06	3.9	0.464	0.129	0.2014	
1440 minute winter	MHS08	750	1.239	0.039	2.7	0.1214	0.0000	OK	PN007	MHS07	2.7	0.534	0.085	0.1458	
1440 minute winter	MHS09	900	0.667	0.157	15.9	0.1990	0.0000	OK	PN009	MHS10	15.9	0.769	0.426	0.8011	
1440 minute winter	MHS10	900	0.659	0.269	21.4	1.9542	0.0000	SURCHARGED	PN010	MHS11	21.1	0.862	0.574	0.9439	
1440 minute winter	MHS11	900	0.637	0.367	23.3	2.6407	0.0000	SURCHARGED	PN011	MHS12	23.1	0.933	0.672	1.5256	
1440 minute winter	MHS12	930	0.600	0.500	23.1	353.4290	23.5906	FLOOD	Hydro-Brake®	MHS13	8.2				
1440 minute winter	MHS13	930	0.486	0.486	8.2	0.5500	0.0000	FLOOD RISK	Hydro-Brake®	MHS14	8.2				624.1
1440 minute winter	MHS14	30	-0.381	0.000	8.2	0.0000	0.0000	OK							

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Adoptable						
Max Width (mm)	**Diameter (mm)**	**Width (mm)**		**Max Depth (m)**	**Diameter (mm)**	**Width (mm)**
374	1200			1.500	1050	
499	1350			99.999	1200	
749	1500					
900	1800					
>900	Link+900 mm					
Short Name						

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Circular						
Shape	Circular		**Dia (mm)**			
Barrels	1		100			
Height (mm)			150			
Width (mm)						
Side Slope (1:X)						
Auto Increment (mm)	75					
Preferred Cover (m)						
Steep Slope (1:X)						
Follow Ground	x					
Short Name						

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