Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	2	Maximum Rainfall (mm/hr)	50.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	England and Wales	Connection Type	Level Soffits
M5-60 (mm)	19.000	Minimum Backdrop Height (m)	0.200
Ratio-R	0.365	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	x

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
SW1	0.080	5.00	47.900	1200	437434.168	410477.192	2.000
SW2	0.091	5.00	47.161	1350	437440.444	410432.906	1.561
SW3	0.020	5.00	47.000	1350	437442.470	410417.412	1.600
SW4	0.125	5.00	46.817	1500	437408.155	410411.704	1.667
SW5	0.074	5.00	46.402	1350	437362.024	410395.233	1.652
SW6	0.112	5.00	46.508	1350	437380.491	410351.527	1.608
SW7	0.165	5.00	46.337	1800	437365.441	410344.220	1.937
SW8	0.118	5.00	45.859	1350	437413.545	410311.620	1.709
SW9	0.100	5.00	47.042	1500	437466.070	410408.302	1.642
SW10	0.053	5.00	46.881	1350	437444.630	410405.147	1.631
SW11	0.070	5.00	46.165	1350	437480.351	410353.654	1.415
SW12	0.098	5.00	45.896	1500	437452.511	410349.151	1.596
SW13	0.057	5.00	45.544	1500	437457.526	410319.278	1.844
SW14	0.061	5.00	45.436	1350	437488.960	410301.894	1.486
SW15	0.130	5.00	45.222	1500	437461.135	410297.586	1.822
SW16	0.088	5.00	45.305	1350	437424.881	410249.715	1.405
SW17	0.126	5.00	44.791	1800	437468.442	410255.813	1.816
SW18	0.068	5.00	44.730	1350	437443.905	410217.443	1.380
SW19	0.199	5.00	43.918	1800	437474.215	410223.611	1.568
SW20	0.285	5.00	47.153	1350	437315.224	410438.627	1.753
SW21	0.080	5.00	46.556	1500	437332.227	410391.794	1.606
SW22	0.116	5.00	46.443	1350	437334.675	410384.846	1.593
SW23	0.139	5.00	46.795	1800	437259.991	410347.904	2.245
SW24	0.098	5.00	46.440	1350	437234.806	410409.645	1.540
SW24A	0.020	5.00	46.568	1200	437247.603	410376.048	1.818
SW24B	0.020	5.00	46.977	1500	437246.188	410359.178	2.477
SW25	0.074	5.00	47.106	1800	437252.234	410344.247	2.706
SW26	0.000		47.199	1200	437258.324	410334.027	2.849
SW27	0.233	5.00	47.131	1500	437283.894	410319.110	2.931
SW28	0.224	5.00	46.411	1500	437356.328	410272.690	2.661
SW29	0.076	5.00	46.030	1350	437381.102	410241.248	2.630
SW30	0.020	5.00	45.980	1200	437363.998	410206.625	2.180
SW30A	1.139	5.00	45.600	1350	437348.038	410203.983	1.600
SW31	0.144	5.00	45.895	1500	437390.259	410217.359	2.595
SW32	0.074	5.00	45.477	1500	437406.143	410176.143	2.327
SW33	0.113	5.00	43.949	1500	437476.323	410189.594	1.749
SW34			43.514	3000	437503.070	410192.299	1.664
SWHW1			45.850	450	437362.627	410380.978	1.297
SWHW2			45.850	450	437372.543	410358.771	1.297
SWHW3		5.00	45.850	450	437365.506	410358.414	1.300
SWHW4			43.550	450	437480.698	410217.302	1.497

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Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
SWHW5		5.00	43.550	450	437502.531	410199.221	1.500
SWHW6		5.00	45.950	450	437229.660	410362.482	1.400
SWHW7			42.885	450	437505.816	410187.579	1.085
SW1A	2.490	240.00	47.800	1800	437424.801	410519.219	1.800
SW24C	2.490	240.00	46.900	1800	437218.736	410446.410	1.900

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
S30A	SW30A	SW30	15.905	0.600	44.000	43.875	0.125	127.2	150	5.30	50.0
S24-1	SW24C	SW24	12.855	0.600	45.000	44.900	0.100	128.6	300	30.00	24.2
S1A	SW1A	SW1	17.487	0.600	46.000	45.900	0.100	174.9	300	30.00	24.2
S1	SW1	SW2	44.729	0.600	45.900	45.900	0.000	0.0	300	30.00	24.2
S2	SW2	SW3	15.626	0.600	45.600	45.400	0.200	78.1	300	30.00	24.2
S3	SW3	SW4	34.786	0.600	45.400	45.225	0.175	198.8	300	30.00	24.2
S4	SW4	SW5	48.984	0.600	45.150	44.750	0.400	122.5	375	30.00	24.2
S5	SW5	SWHW1	14.268	0.600	44.750	44.650	0.100	142.7	375	30.00	24.2
S6	SW6	SWHW2	10.753	0.600	44.900	44.650	0.250	43.0	225	5.09	50.0
S7	SW7	SW8	58.110	0.600	44.400	44.150	0.250	232.4	300	6.10	50.0
S8	SW8	SW13	44.642	0.600	44.150	43.850	0.300	148.8	300	6.68	50.0
S9	SW9	SW10	21.671	0.600	45.400	45.250	0.150	144.5	225	5.33	50.0
S10	SW10	SW12	56.547	0.600	45.250	44.375	0.875	64.6	225	5.91	50.0
S11	SW11	SW12	28.202	0.600	44.750	44.450	0.300	94.0	150	5.45	50.0
S12	SW12	SW13	30.291	0.600	44.300	43.850	0.450	67.3	300	6.17	50.0
S13	SW13	SW15	21.990	0.600	43.700	43.400	0.300	73.3	450	6.84	50.0
S14	SW14	SW15	28.156	0.600	43.950	43.700	0.250	112.6	150	5.50	50.0
S15	SW15	SW17	42.407	0.600	43.400	43.025	0.375	113.1	450	7.21	50.0
S16	SW16	SW17	43.986	0.600	43.900	43.250	0.650	67.7	225	5.46	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
S30A	0.889	15.7	154.4	1.450	1.955	1.139	0.0	150	0.906
S24-1	1.385	97.9	163.5	1.600	1.240	2.490	0.0	300	1.403
S1A	1.186	83.8	163.5	1.500	1.700	2.490	0.0	300	1.201
S1	1.000	70.7	168.8	1.700	0.961	2.570	0.0	0	∞
S2	1.780	125.8	174.8	1.261	1.300	2.661	0.0	300	1.803
S3	1.111	78.6	176.1	1.300	1.292	2.681	0.0	300	1.126
S4	1.636	180.7	184.3	1.292	1.277	2.806	0.0	318	1.849
S5	1.515	167.3	189.1	1.277	0.825	2.880	0.0	375	1.534
S6	2.000	79.5	15.2	1.383	0.975	0.112	0.0	66	1.550
S7	1.027	72.6	22.4	1.637	1.409	0.165	0.0	114	0.907
S8	1.286	90.9	38.4	1.409	1.394	0.283	0.0	136	1.233
S9	1.085	43.2	13.6	1.417	1.406	0.100	0.0	87	0.964
S10	1.629	64.8	20.7	1.406	1.296	0.153	0.0	87	1.454
S11	1.037	18.3	9.5	1.265	1.296	0.070	0.0	76	1.045
S12	1.919	135.6	43.5	1.296	1.394	0.321	0.0	116	1.713
S13	2.376	378.0	89.6	1.394	1.372	0.661	0.0	148	1.960
S14	0.946	16.7	8.3	1.336	1.372	0.061	0.0	75	0.944
S15	1.911	303.9	115.5	1.372	1.316	0.852	0.0	192	1.786
S16	1.592	63.3	11.9	1.180	1.316	0.088	0.0	66	1.233

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Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
S17	SW17	SW19	32.716	0.600	42.975	42.350	0.625	52.3	500	7.39	50.0
S18	SW18	SW19	30.931	0.600	43.350	42.700	0.650	47.6	150	5.35	50.0
S19	SW19	SWHW4	9.046	0.600	42.350	42.250	0.100	90.5	500	7.45	50.0
S20	SW20	SW21	49.824	0.600	45.400	45.025	0.375	132.9	300	5.61	50.0
S21	SW21	SW22	7.366	0.600	44.950	44.850	0.100	73.7	375	5.67	50.0
S22	SW22	SW23	83.321	0.600	44.850	44.550	0.300	277.7	375	6.95	50.0
S23	SW23	SW25	8.576	0.600	44.550	44.525	0.025	343.0	375	7.10	50.0
S24	SW24	SW24A	35.952	0.600	44.900	44.750	0.150	239.7	300	30.00	24.2
S24A	SW24A	SW24B	16.929	0.600	44.750	44.650	0.100	169.3	300	30.00	24.2
S24B	SW24B	SW25	16.109	0.600	44.500	44.450	0.050	322.2	450	30.00	24.2
S25	SW25	SW26	11.897	0.600	44.400	44.350	0.050	237.9	300	30.00	24.2
S26	SW26	SW27	29.603	0.600	44.350	44.200	0.150	197.4	300	30.00	24.2
S27	SW27	SW28	86.032	0.600	44.200	43.825	0.375	229.4	300	30.00	24.2
S28	SW28	SW29	40.030	0.600	43.750	43.475	0.275	145.6	375	30.00	24.2
S29	SW29	SW31	25.583	0.600	43.400	43.300	0.100	255.8	450	30.00	24.2
S30	SW30	SW31	28.371	0.600	43.800	43.525	0.275	103.2	225	5.67	50.0
S31	SW31	SW32	44.171	0.600	43.300	43.150	0.150	294.5	450	30.00	24.2
S32	SW32	SW33	71.458	0.600	43.150	42.200	0.950	75.2	450	30.00	24.2
S33	SW33	SW34	26.883	0.600	42.200	41.975	0.225	119.5	450	30.00	24.2
S34	SW34	SWHW7	5.460	0.600	41.850	41.800	0.050	109.2	450	30.00	24.2
S7A	SWHW3	SW7	13.351	0.600	44.550	44.450	0.100	133.5	300	5.16	50.0
S34A	SWHW5	SW34	6.943	0.600	42.050	41.900	0.150	46.3	500	5.04	50.0
S24C	SWHW6	SW24B	16.856	0.600	44.550	44.500	0.050	337.1	450	5.26	50.0

Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
S17	3.007	590.4	144.5	1.316	1.068	1.066	0.0	167	2.504
S18	1.462	25.8	9.2	1.230	1.068	0.068	0.0	62	1.341
S19	2.284	448.5	180.7	1.068	0.800	1.333	0.0	220	2.165
S20	1.362	96.3	38.6	1.453	1.231	0.285	0.0	132	1.290
S21	2.113	233.4	49.5	1.231	1.218	0.365	0.0	117	1.692
S22	1.082	119.5	65.2	1.218	1.870	0.481	0.0	197	1.104
S23	0.972	107.4	84.0	1.870	2.206	0.620	0.0	251	1.072
S24	1.011	71.5	170.0	1.240	1.518	2.588	0.0	300	1.024
S24A	1.205	85.2	171.3	1.518	2.027	2.608	0.0	300	1.221
S24B	1.127	179.2	172.6	2.027	2.206	2.628	0.0	357	1.275
S25	1.015	71.7	218.2	2.406	2.549	3.322	0.0	300	1.028
S26	1.115	78.8	218.2	2.549	2.631	3.322	0.0	300	1.130
S27	1.034	73.1	233.5	2.631	2.286	3.555	0.0	300	1.047
S28	1.499	165.6	248.2	2.286	2.180	3.779	0.0	375	1.519
S29	1.266	201.4	253.2	2.180	2.145	3.855	0.0	450	1.282
S30	1.287	51.2	157.1	1.955	2.145	1.159	0.0	225	1.311
S31	1.179	187.6	338.7	2.145	1.877	5.158	0.0	450	1.194
S32	2.346	373.1	343.6	1.877	1.299	5.232	0.0	342	2.644
S33	1.859	295.6	351.0	1.299	1.089	5.345	0.0	450	1.882
S34	1.945	309.3	351.0	1.214	0.635	5.345	0.0	450	1.969
S7A	1.359	96.0	0.0	1.000	1.587	0.000	0.0	0	0.000
S34A	3.199	628.1	0.0	1.000	1.114	0.000	0.0	0	0.000
S24C	1.101	175.2	0.0	0.950	2.027	0.000	0.0	0	0.000

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Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Detailed
Rainfall Events	Singular	Skip Steady State	✓
FSR Region	England and Wales	Drain Down Time (mins)	1440
M5-60 (mm)	19.000	Additional Storage (m³/ha)	20.0
Ratio-R	0.365	Starting Level (m)	
Summer CV	0.750	Check Discharge Rate(s)	x
Winter CV	0.840	Check Discharge Volume	x

Storm Durations

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

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
1	0	0	0
2	0	0	0
30	35	0	0
100	40	0	0

Node SW7 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	44.400	Product Number	CTL-SHE-0232-2900-1100-2900
Design Depth (m)	1.100	Min Outlet Diameter (m)	0.300
Design Flow (l/s)	29.0	Min Node Diameter (mm)	1800

Node SW25 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	44.400	Product Number	CTL-SHE-0218-2500-1100-2500
Design Depth (m)	1.100	Min Outlet Diameter (m)	0.300
Design Flow (l/s)	25.0	Min Node Diameter (mm)	1800

Node SW34 Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	41.850	Product Number	CTL-SHE-0379-9280-1250-9280
Design Depth (m)	1.250	Min Outlet Diameter (m)	0.450
Design Flow (l/s)	92.8	Min Node Diameter (mm)	3000

Node SW1A Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	46.000	Product Number	CTL-SHE-0225-2700-1100-2700
Design Depth (m)	1.100	Min Outlet Diameter (m)	0.300
Design Flow (l/s)	27.0	Min Node Diameter (mm)	1800

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Node SW24C Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	45.000	Product Number	CTL-SHE-0225-2700-1100-2700
Design Depth (m)	1.100	Min Outlet Diameter (m)	0.300
Design Flow (l/s)	27.0	Min Node Diameter (mm)	1800

Node SW30A Online Hydro-Brake® Control

Flap Valve	x	Objective	(HE) Minimise upstream storage
Replaces Downstream Link	x	Sump Available	✓
Invert Level (m)	44.000	Product Number	CTL-SHE-0119-6600-1100-6600
Design Depth (m)	1.100	Min Outlet Diameter (m)	0.150
Design Flow (l/s)	6.6	Min Node Diameter (mm)	1200

Node SWHW3 Flow through Pond Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Main Channel Length (m)	30.000
Side Inf Coefficient (m/hr)	0.00000	Invert Level (m)	44.550	Main Channel Slope (1:X)	10000.0
Safety Factor	2.0	Time to half empty (mins)	690	Main Channel n	0.035

Inlets

SWHW1 | SWHW2

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	345.0	0.0	1.000	600.0	0.0	1.001	0.0	0.0

Node SWHW6 Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	44.550
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	780

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	3.9	0.0	0.200	260.5	0.0	0.400	660.3	0.0	1.001	0.0	0.0
0.100	72.3	0.0	0.300	547.5	0.0	1.000	937.9	0.0			

Node SWHW5 Flow through Pond Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Main Channel Length (m)	30.000
Side Inf Coefficient (m/hr)	0.00000	Invert Level (m)	42.050	Main Channel Slope (1:X)	10000.0
Safety Factor	2.0	Time to half empty (mins)	276	Main Channel n	0.035

Inlets

SWHW4

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	749.0	0.0	1.100	1127.0	0.0	1.101	0.0	0.0

Node SW1A Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	46.100
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	465

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Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	1420.0	150.0	1.000	1420.0	193.4	1.001	0.0	193.4

Node SW24C Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	45.100
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	408

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	1650.0	165.0	1.000	1650.0	210.5	1.001	0.0	210.5

Node SW30A Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	44.100
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	1095

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	720.0	260.0	1.000	720.0	317.2	1.001	0.0	317.2

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Results for 1 year Critical Storm Duration. Lowest mass balance: 98.42%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	SW1	464	46.075	0.175	16.2	0.3371	0.0000	OK
15 minute winter	SW2	11	45.682	0.082	19.5	0.2133	0.0000	OK
15 minute winter	SW3	11	45.510	0.110	21.9	0.1844	0.0000	OK
15 minute winter	SW4	11	45.263	0.113	36.5	0.3696	0.0000	OK
15 minute winter	SW5	11	44.893	0.143	45.3	0.3316	0.0000	OK
15 minute winter	SW6	10	44.969	0.069	14.5	0.1945	0.0000	OK
120 minute winter	SW7	86	44.662	0.262	17.3	1.1133	0.0000	OK
15 minute winter	SW8	11	44.268	0.118	29.5	0.3306	0.0000	OK
15 minute winter	SW9	10	45.487	0.087	13.0	0.2596	0.0000	OK
15 minute winter	SW10	11	45.335	0.085	19.6	0.1770	0.0000	OK
15 minute winter	SW11	10	44.825	0.075	9.1	0.1816	0.0000	OK
15 minute winter	SW12	11	44.416	0.116	40.0	0.3483	0.0000	OK
15 minute winter	SW13	11	43.844	0.144	75.6	0.3427	0.0000	OK
15 minute winter	SW14	10	44.023	0.073	7.9	0.1635	0.0000	OK
15 minute winter	SW15	11	43.584	0.184	99.1	0.5867	0.0000	OK
15 minute winter	SW16	10	43.964	0.064	11.4	0.1720	0.0000	OK
15 minute winter	SW17	11	43.131	0.156	124.6	0.6119	0.0000	OK
15 minute winter	SW18	10	43.411	0.061	8.8	0.1469	0.0000	OK
15 minute winter	SW19	11	42.590	0.240	157.1	1.2197	0.0000	OK
15 minute winter	SW20	11	45.529	0.129	37.0	0.6048	0.0000	OK
15 minute winter	SW21	11	45.090	0.140	45.6	0.3866	0.0000	OK
15 minute winter	SW22	11	45.034	0.184	60.0	0.5304	0.0000	OK
15 minute winter	SW23	12	44.842	0.292	76.6	1.1051	0.0000	OK
480 minute winter	SW24	448	44.994	0.094	14.8	0.2553	0.0000	OK
480 minute winter	SW24A	448	44.838	0.088	14.9	0.1195	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	SW1	S1	SW2	16.1	0.523	0.228	1.3863	
15 minute winter	SW2	S2	SW3	19.5	1.007	0.155	0.3041	
15 minute winter	SW3	S3	SW4	21.4	0.945	0.273	0.7886	
15 minute winter	SW4	S4	SW5	36.3	1.096	0.201	1.6254	
15 minute winter	SW5	S5	SWHW1	44.3	1.233	0.265	0.5151	
15 minute winter	SW6	S6	SWHW2	14.3	1.459	0.180	0.1056	
120 minute winter	SW7	S7	SW8	17.3	0.868	0.238	1.1731	
15 minute winter	SW8	S8	SW13	28.3	1.132	0.312	1.1171	
15 minute winter	SW9	S9	SW10	12.7	0.927	0.295	0.2979	
15 minute winter	SW10	S10	SW12	19.2	1.419	0.297	0.7667	
15 minute winter	SW11	S11	SW12	8.8	1.015	0.478	0.2432	
15 minute winter	SW12	S12	SW13	40.2	1.647	0.297	0.7401	
15 minute winter	SW13	S13	SW15	75.6	1.452	0.200	1.1474	
15 minute winter	SW14	S14	SW15	7.6	0.916	0.455	0.2339	
15 minute winter	SW15	S15	SW17	98.2	1.685	0.323	2.4773	
15 minute winter	SW16	S16	SW17	11.0	1.195	0.174	0.4045	
15 minute winter	SW17	S17	SW19	124.3	1.727	0.211	2.3668	
15 minute winter	SW18	S18	SW19	8.5	1.299	0.330	0.2035	
15 minute winter	SW19	S19	SWHW4	155.8	1.884	0.347	0.7487	
15 minute winter	SW20	S20	SW21	35.8	1.261	0.372	1.4164	
15 minute winter	SW21	S21	SW22	45.9	1.023	0.197	0.3355	
15 minute winter	SW22	S22	SW23	59.6	0.856	0.499	5.9909	
15 minute winter	SW23	S23	SW25	71.8	0.785	0.669	0.7869	
480 minute winter	SW24	S24	SW24A	14.8	0.817	0.207	0.6525	
480 minute winter	SW24A	S24A	SW24B	14.9	0.891	0.175	0.2831	

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Results for 1 year Critical Storm Duration. Lowest mass balance: 98.42%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	SW24B	12	44.801	0.301	72.1	0.5810	0.0000	OK
15 minute winter	SW25	12	44.815	0.415	79.3	1.2823	0.0000	SURCHARGED
30 minute winter	SW26	34	44.468	0.118	24.5	0.1330	0.0000	OK
15 minute winter	SW27	12	44.386	0.186	54.1	0.6254	0.0000	OK
15 minute winter	SW28	11	43.935	0.185	76.5	0.6398	0.0000	OK
15 minute winter	SW29	11	43.624	0.224	84.3	0.4503	0.0000	OK
60 minute winter	SW30	40	43.856	0.056	6.8	0.0740	0.0000	OK
360 minute winter	SW30A	272	44.264	0.263	24.2	122.2086	0.0000	SURCHARGED
15 minute winter	SW31	11	43.542	0.242	107.3	0.6957	0.0000	OK
15 minute winter	SW32	12	43.318	0.168	114.5	0.4049	0.0000	OK
15 minute winter	SW33	12	42.428	0.228	126.3	0.6966	0.0000	OK
480 minute winter	SW34	320	42.307	0.457	117.2	3.2334	0.0000	SURCHARGED
15 minute winter	SWHW1	12	44.715	0.162	44.3	0.0257	0.0000	OK
120 minute winter	SWHW2	84	44.664	0.111	5.0	0.0176	0.0000	OK
120 minute winter	SWHW3	86	44.662	0.112	16.7	0.0179	0.0000	OK
180 minute winter	SWHW4	136	42.299	0.246	92.6	0.0391	0.0000	OK
180 minute winter	SWHW5	136	42.299	0.249	140.5	0.0396	0.0000	OK
60 minute winter	SWHW6	46	44.777	0.227	32.9	28.4347	0.0000	OK
480 minute winter	SWHW7	344	41.942	0.142	68.8	0.0000	0.0000	OK
480 minute winter	SW1A	488	46.245	0.245	27.3	213.3848	0.0000	OK
480 minute winter	SW24C	496	45.231	0.231	27.3	224.0560	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	SW24B	S24B	SW25	-54.7	-0.435	-0.305	2.0168	
15 minute winter	SW25	S25	SW26	24.7	0.931	0.344	0.3216	
30 minute winter	SW26	S26	SW27	24.5	0.929	0.310	0.9975	
15 minute winter	SW27	S27	SW28	50.4	1.141	0.690	3.8021	
15 minute winter	SW28	S28	SW29	75.1	1.449	0.453	2.0882	
15 minute winter	SW29	S29	SW31	83.9	1.017	0.416	2.1187	
60 minute winter	SW30	S30	SW31	6.8	0.891	0.133	0.2167	
360 minute winter	SW30A	S30A	SW30	6.3	0.826	0.402	0.1218	
15 minute winter	SW31	S31	SW32	107.0	1.522	0.571	3.1112	
15 minute winter	SW32	S32	SW33	114.9	1.720	0.308	4.8090	
15 minute winter	SW33	S33	SW34	125.2	1.336	0.424	2.5337	
480 minute winter	SW34	S34	SWHW7	68.8	1.432	0.223	0.2633	1928.5
15 minute winter	SWHW1	Flow through pond	SWHW3	45.5	0.091	0.019	26.5395	
120 minute winter	SWHW2	Flow through pond	SWHW3	16.7	0.026	0.007	39.9035	
120 minute winter	SWHW3	S7A	SW7	15.0	0.514	0.156	0.5163	
180 minute winter	SWHW4	Flow through pond	SWHW5	118.9	0.027	0.020	196.2979	
180 minute winter	SWHW5	S34A	SW34	74.6	0.772	0.119	0.9205	
60 minute winter	SWHW6	S24C	SW24B	-32.9	-0.460	-0.188	1.5324	
480 minute winter	SW1A	S1A	SW1	16.0	0.542	0.191	0.5218	
480 minute winter	SW24C	S24-1	SW24	14.7	0.844	0.150	0.2239	

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Results for 2 year Critical Storm Duration. Lowest mass balance: 98.42%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	SW1	456	46.091	0.191	19.8	0.3694	0.0000	OK
15 minute winter	SW2	11	45.696	0.096	25.7	0.2500	0.0000	OK
15 minute winter	SW3	11	45.528	0.128	28.8	0.2154	0.0000	OK
15 minute winter	SW4	11	45.281	0.131	47.7	0.4290	0.0000	OK
15 minute winter	SW5	11	44.917	0.167	59.3	0.3888	0.0000	OK
15 minute winter	SW6	10	44.980	0.080	18.8	0.2249	0.0000	OK
120 minute winter	SW7	86	44.690	0.290	20.3	1.2316	0.0000	OK
15 minute winter	SW8	11	44.283	0.133	36.6	0.3741	0.0000	OK
15 minute winter	SW9	10	45.501	0.101	16.8	0.3007	0.0000	OK
15 minute winter	SW10	11	45.348	0.098	25.4	0.2045	0.0000	OK
15 minute winter	SW11	10	44.838	0.088	11.7	0.2137	0.0000	OK
15 minute winter	SW12	11	44.435	0.135	51.8	0.4044	0.0000	OK
15 minute winter	SW13	11	43.866	0.166	96.4	0.3969	0.0000	OK
15 minute winter	SW14	10	44.035	0.085	10.2	0.1919	0.0000	OK
15 minute winter	SW15	11	43.613	0.213	127.0	0.6800	0.0000	OK
15 minute winter	SW16	10	43.974	0.074	14.8	0.1980	0.0000	OK
15 minute winter	SW17	11	43.156	0.181	160.8	0.7123	0.0000	OK
15 minute winter	SW18	10	43.421	0.071	11.4	0.1704	0.0000	OK
15 minute winter	SW19	11	42.631	0.281	203.0	1.4299	0.0000	OK
15 minute winter	SW20	10	45.550	0.150	47.8	0.7043	0.0000	OK
15 minute winter	SW21	11	45.116	0.166	59.0	0.4577	0.0000	OK
15 minute winter	SW22	11	45.065	0.215	77.8	0.6209	0.0000	OK
15 minute winter	SW23	12	44.905	0.355	99.2	1.3431	0.0000	OK
480 minute winter	SW24	456	45.006	0.106	18.3	0.2859	0.0000	OK
15 minute winter	SW24A	12	44.854	0.104	21.2	0.1406	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	SW1	S1	SW2	19.8	0.565	0.279	1.5634	
15 minute winter	SW2	S2	SW3	25.6	1.065	0.203	0.3765	
15 minute winter	SW3	S3	SW4	28.1	1.015	0.358	0.9685	
15 minute winter	SW4	S4	SW5	47.6	1.167	0.264	2.0033	
15 minute winter	SW5	S5	SWHW1	58.5	1.320	0.350	0.6335	
15 minute winter	SW6	S6	SWHW2	18.6	1.559	0.234	0.1281	
120 minute winter	SW7	S7	SW8	20.3	0.905	0.280	1.3244	
15 minute winter	SW8	S8	SW13	35.3	1.200	0.388	1.3142	
15 minute winter	SW9	S9	SW10	16.5	0.986	0.382	0.3626	
15 minute winter	SW10	S10	SW12	24.9	1.519	0.385	0.9281	
15 minute winter	SW11	S11	SW12	11.4	1.078	0.620	0.2971	
15 minute winter	SW12	S12	SW13	52.1	1.758	0.384	0.8983	
15 minute winter	SW13	S13	SW15	96.6	1.523	0.256	1.3969	
15 minute winter	SW14	S14	SW15	9.9	0.974	0.590	0.2849	
15 minute winter	SW15	S15	SW17	126.6	1.793	0.417	2.9958	
15 minute winter	SW16	S16	SW17	14.3	1.284	0.226	0.4892	
15 minute winter	SW17	S17	SW19	160.7	1.817	0.272	2.9006	
15 minute winter	SW18	S18	SW19	11.1	1.388	0.428	0.2468	
15 minute winter	SW19	S19	SWHW4	202.2	2.007	0.451	0.9112	
15 minute winter	SW20	S20	SW21	46.4	1.344	0.481	1.7182	
15 minute winter	SW21	S21	SW22	59.2	1.073	0.254	0.4134	
15 minute winter	SW22	S22	SW23	77.3	0.890	0.647	7.1860	
15 minute winter	SW23	S23	SW25	93.9	0.884	0.874	0.9175	
480 minute winter	SW24	S24	SW24A	18.3	0.864	0.256	0.7634	
15 minute winter	SW24A	S24A	SW24B	20.7	0.806	0.243	0.6046	

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Results for 2 year Critical Storm Duration. Lowest mass balance: 98.42%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	SW24B	12	44.849	0.349	102.1	0.6740	0.0000	OK
15 minute winter	SW25	12	44.869	0.469	105.3	1.4506	0.0000	SURCHARGED
30 minute winter	SW26	35	44.469	0.119	24.9	0.1345	0.0000	OK
15 minute winter	SW27	11	44.411	0.211	63.7	0.7079	0.0000	OK
15 minute winter	SW28	11	43.962	0.212	94.2	0.7315	0.0000	OK
15 minute winter	SW29	11	43.661	0.261	105.4	0.5238	0.0000	OK
30 minute winter	SW30	20	43.861	0.061	7.8	0.0796	0.0000	OK
360 minute winter	SW30A	280	44.312	0.312	29.5	158.2038	0.0000	SURCHARGED
15 minute winter	SW31	11	43.578	0.278	135.2	0.7996	0.0000	OK
15 minute winter	SW32	12	43.341	0.191	145.2	0.4589	0.0000	OK
15 minute winter	SW33	12	42.469	0.269	160.1	0.8241	0.0000	OK
180 minute winter	SW34	136	42.349	0.499	122.6	3.5251	0.0000	SURCHARGED
15 minute winter	SWHW1	12	44.747	0.194	58.5	0.0308	0.0000	OK
120 minute winter	SWHW2	86	44.693	0.140	6.2	0.0222	0.0000	OK
120 minute winter	SWHW3	86	44.692	0.142	19.7	0.0225	0.0000	OK
180 minute winter	SWHW4	136	42.349	0.296	84.9	0.0470	0.0000	OK
180 minute winter	SWHW5	136	42.349	0.299	133.1	0.0475	0.0000	OK
60 minute winter	SWHW6	48	44.815	0.265	47.4	43.6791	0.0000	OK
180 minute winter	SWHW7	136	41.951	0.151	77.6	0.0000	0.0000	OK
480 minute winter	SW1A	488	46.280	0.280	33.0	265.2238	0.0000	OK
480 minute winter	SW24C	496	45.264	0.264	33.0	279.6708	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	SW24B	S24B	SW25	-79.1	-0.553	-0.441	2.3023	
15 minute winter	SW25	S25	SW26	25.0	0.935	0.348	0.3261	
30 minute winter	SW26	S26	SW27	24.9	0.936	0.315	1.0840	
15 minute winter	SW27	S27	SW28	59.2	1.191	0.810	4.2841	
15 minute winter	SW28	S28	SW29	93.4	1.520	0.564	2.4658	
15 minute winter	SW29	S29	SW31	104.8	1.063	0.521	2.5320	
30 minute winter	SW30	S30	SW31	7.8	0.927	0.153	0.2398	
360 minute winter	SW30A	S30A	SW30	6.5	0.832	0.414	0.1245	
15 minute winter	SW31	S31	SW32	133.5	1.612	0.712	3.6750	
15 minute winter	SW32	S32	SW33	144.6	1.791	0.388	5.8258	
15 minute winter	SW33	S33	SW34	160.8	1.465	0.544	2.9475	
180 minute winter	SW34	S34	SWHW7	77.6	1.469	0.251	0.2888	1745.2
15 minute winter	SWHW1	Flow through pond	SWHW3	56.5	0.096	0.024	35.5920	
120 minute winter	SWHW2	Flow through pond	SWHW3	19.7	0.028	0.008	50.8737	
120 minute winter	SWHW3	S7A	SW7	17.6	0.515	0.183	0.6214	
180 minute winter	SWHW4	Flow through pond	SWHW5	109.9	0.027	0.019	238.1518	
180 minute winter	SWHW5	S34A	SW34	101.5	0.897	0.162	1.0662	
60 minute winter	SWHW6	S24C	SW24B	-47.4	-0.545	-0.271	1.8177	
480 minute winter	SW1A	S1A	SW1	19.6	0.578	0.234	0.5960	
480 minute winter	SW24C	S24-1	SW24	18.1	0.888	0.185	0.2635	

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Results for 30 year +35% CC Critical Storm Duration. Lowest mass balance: 98.42%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	SW1	11	46.137	0.237	34.3	0.4574	0.0000	OK
15 minute winter	SW2	11	45.779	0.179	67.1	0.4644	0.0000	OK
15 minute winter	SW3	11	45.650	0.250	75.5	0.4198	0.0000	OK
15 minute winter	SW4	11	45.386	0.236	125.3	0.7710	0.0000	OK
1440 minute winter	SW5	1410	45.167	0.417	33.9	0.9706	0.0000	SURCHARGED
1440 minute winter	SW6	1410	45.160	0.260	2.5	0.7340	0.0000	SURCHARGED
1440 minute winter	SW7	1410	45.147	0.747	29.1	3.1744	0.0000	SURCHARGED
15 minute winter	SW8	11	44.369	0.219	77.8	0.6163	0.0000	OK
15 minute winter	SW9	10	45.598	0.198	42.9	0.5906	0.0000	OK
15 minute winter	SW10	11	45.437	0.187	64.3	0.3900	0.0000	OK
15 minute winter	SW11	11	45.259	0.509	30.0	1.2333	0.0000	SURCHARGED
15 minute winter	SW12	11	44.564	0.264	129.7	0.7897	0.0000	OK
15 minute winter	SW13	11	44.004	0.304	228.3	0.7260	0.0000	OK
15 minute winter	SW14	11	44.347	0.397	26.2	0.8949	0.0000	SURCHARGED
15 minute winter	SW15	11	43.806	0.406	304.0	1.2953	0.0000	OK
15 minute winter	SW16	10	44.027	0.127	37.7	0.3411	0.0000	OK
15 minute winter	SW17	11	43.339	0.364	387.1	1.4297	0.0000	OK
15 minute winter	SW18	12	43.689	0.339	29.2	0.8183	0.0000	SURCHARGED
15 minute winter	SW19	11	43.007	0.657	490.1	3.3373	0.0000	SURCHARGED
15 minute winter	SW20	12	46.661	1.261	122.2	5.9048	0.0000	SURCHARGED
15 minute winter	SW21	12	46.185	1.235	131.6	3.4131	0.0000	SURCHARGED
15 minute winter	SW22	12	46.119	1.269	171.0	3.6644	0.0000	SURCHARGED
15 minute winter	SW23	12	45.442	0.892	219.7	3.3762	0.0000	SURCHARGED
960 minute winter	SW24	960	45.336	0.435	28.5	1.1776	0.0000	SURCHARGED
960 minute winter	SW24A	960	45.319	0.569	28.9	0.7686	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	SW1	S1	SW2	30.4	0.666	0.430	2.0135	
15 minute winter	SW2	S2	SW3	67.4	1.272	0.535	0.8317	
15 minute winter	SW3	S3	SW4	74.8	1.284	0.953	2.0231	
15 minute winter	SW4	S4	SW5	126.1	1.419	0.698	4.2930	
1440 minute winter	SW5	S5	SWHW1	33.6	1.055	0.201	1.5737	
1440 minute winter	SW6	S6	SWHW2	2.5	0.802	0.031	0.4277	
1440 minute winter	SW7	S7	SW8	29.0	1.025	0.399	1.6841	
15 minute winter	SW8	S8	SW13	75.8	1.421	0.834	2.3812	
15 minute winter	SW9	S9	SW10	41.6	1.174	0.964	0.7804	
15 minute winter	SW10	S10	SW12	64.1	1.816	0.990	2.0708	
15 minute winter	SW11	S11	SW12	25.9	1.474	1.416	0.4893	
15 minute winter	SW12	S12	SW13	129.6	2.100	0.955	1.8736	
15 minute winter	SW13	S13	SW15	228.4	1.703	0.604	2.9087	
15 minute winter	SW14	S14	SW15	23.1	1.312	1.380	0.4837	
15 minute winter	SW15	S15	SW17	299.8	2.125	0.986	6.0064	
15 minute winter	SW16	S16	SW17	36.6	1.632	0.578	0.9904	
15 minute winter	SW17	S17	SW19	385.6	2.057	0.653	5.6938	
15 minute winter	SW18	S18	SW19	25.2	1.571	0.975	0.5445	
15 minute winter	SW19	S19	SWHW4	488.9	2.500	1.090	1.7349	
15 minute winter	SW20	S20	SW21	100.6	1.471	1.045	3.5086	
15 minute winter	SW21	S21	SW22	129.2	1.172	0.554	0.8124	
15 minute winter	SW22	S22	SW23	170.0	1.541	1.422	9.1901	
15 minute winter	SW23	S23	SW25	218.4	1.981	2.034	0.9459	
960 minute winter	SW24	S24	SW24A	28.5	0.878	0.398	2.5317	
960 minute winter	SW24A	S24A	SW24B	28.7	0.824	0.337	1.1921	

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Results for 30 year +35% CC Critical Storm Duration. Lowest mass balance: 98.42%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	SW24B	975	45.310	0.810	29.1	1.5627	0.0000	SURCHARGED
960 minute winter	SW25	975	45.309	0.909	25.1	2.8104	0.0000	SURCHARGED
15 minute winter	SW26	11	45.143	0.793	29.5	0.8971	0.0000	SURCHARGED
15 minute winter	SW27	11	45.139	0.939	109.5	3.1506	0.0000	SURCHARGED
15 minute winter	SW28	11	44.470	0.720	182.4	2.4861	0.0000	SURCHARGED
15 minute winter	SW29	11	44.064	0.664	211.7	1.3331	0.0000	SURCHARGED
15 minute winter	SW30	12	43.921	0.121	14.7	0.1587	0.0000	OK
600 minute winter	SW30A	585	44.804	0.804	48.5	519.6931	0.0000	SURCHARGED
15 minute winter	SW31	11	43.906	0.606	279.1	1.7446	0.0000	SURCHARGED
15 minute winter	SW32	12	43.481	0.331	307.2	0.7950	0.0000	OK
15 minute winter	SW33	12	42.859	0.659	343.4	2.0159	0.0000	SURCHARGED
180 minute winter	SW34	172	42.819	0.969	119.7	6.8472	0.0000	SURCHARGED
1440 minute winter	SWHW1	1410	45.163	0.610	33.6	0.0970	0.0000	OK
1440 minute winter	SWHW2	1410	45.160	0.607	2.5	0.0965	0.0000	OK
1440 minute winter	SWHW3	1410	45.160	0.610	30.7	0.0970	0.0000	SURCHARGED
180 minute winter	SWHW4	176	42.821	0.768	150.0	0.1221	0.0000	OK
180 minute winter	SWHW5	176	42.821	0.771	140.9	0.1226	0.0000	SURCHARGED
960 minute winter	SWHW6	975	45.310	0.760	20.6	389.1524	0.0000	SURCHARGED
60 minute winter	SWHW7	43	41.966	0.166	92.8	0.0000	0.0000	OK
480 minute winter	SW1A	528	46.686	0.686	80.1	853.0070	0.0000	SURCHARGED
480 minute winter	SW24C	528	45.610	0.610	80.1	859.7559	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	SW24B	S24B	SW25	24.2	0.350	0.135	2.5524	
960 minute winter	SW25	S25	SW26	25.0	0.906	0.348	0.3318	
15 minute winter	SW26	S26	SW27	40.1	0.941	0.508	2.0846	
15 minute winter	SW27	S27	SW28	97.1	1.396	1.329	6.0583	
15 minute winter	SW28	S28	SW29	181.0	1.641	1.093	4.4152	
15 minute winter	SW29	S29	SW31	211.1	1.333	1.048	4.0535	
15 minute winter	SW30	S30	SW31	16.6	0.939	0.325	0.8718	
600 minute winter	SW30A	S30A	SW30	6.6	0.835	0.420	0.1258	
15 minute winter	SW31	S31	SW32	277.3	1.839	1.478	6.2582	
15 minute winter	SW32	S32	SW33	298.6	1.975	0.800	10.1243	
15 minute winter	SW33	S33	SW34	335.3	2.117	1.134	4.2594	
180 minute winter	SW34	S34	SWHW7	92.8	1.538	0.300	0.3297	4404.6
1440 minute winter	SWHW1	Flow through pond	SWHW3	30.7	0.015	0.013	257.0961	
1440 minute winter	SWHW2	Flow through pond	SWHW3	30.7	0.015	0.013	257.0961	
1440 minute winter	SWHW3	S7A	SW7	28.9	0.501	0.300	0.9402	
180 minute winter	SWHW4	Flow through pond	SWHW5	108.6	0.038	0.019	678.4224	
180 minute winter	SWHW5	S34A	SW34	84.3	0.795	0.134	1.3581	
960 minute winter	SWHW6	S24C	SW24B	-20.6	0.184	-0.117	2.6707	
480 minute winter	SW1A	S1A	SW1	26.9	0.620	0.321	0.7671	
480 minute winter	SW24C	S24-1	SW24	26.9	0.847	0.275	0.9028	

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Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 98.42%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	SW1	11	46.173	0.273	46.0	0.5281	0.0000	OK
15 minute winter	SW2	12	45.981	0.381	90.0	0.9882	0.0000	SURCHARGED
15 minute winter	SW3	12	45.856	0.456	95.8	0.7667	0.0000	SURCHARGED
15 minute winter	SW4	11	45.557	0.407	163.4	1.3289	0.0000	SURCHARGED
1440 minute winter	SW5	1440	45.486	0.736	37.6	1.7136	0.0000	SURCHARGED
1440 minute winter	SW6	1440	45.480	0.580	3.2	1.6367	0.0000	SURCHARGED
1440 minute winter	SW7	1440	45.468	1.068	29.1	4.5362	0.0000	SURCHARGED
15 minute winter	SW8	11	44.592	0.442	96.4	1.2418	0.0000	SURCHARGED
15 minute winter	SW9	12	46.290	0.890	57.5	2.6561	0.0000	SURCHARGED
15 minute winter	SW10	12	46.094	0.844	75.0	1.7560	0.0000	SURCHARGED
15 minute winter	SW11	12	45.980	1.230	40.3	2.9771	0.0000	FLOOD RISK
15 minute winter	SW12	12	45.010	0.710	149.1	2.1275	0.0000	SURCHARGED
15 minute winter	SW13	11	44.370	0.670	257.6	1.5968	0.0000	SURCHARGED
15 minute winter	SW14	12	44.985	1.035	35.1	2.3308	0.0000	SURCHARGED
15 minute winter	SW15	11	44.187	0.787	336.9	2.5145	0.0000	SURCHARGED
15 minute winter	SW16	10	44.051	0.151	50.6	0.4046	0.0000	OK
15 minute winter	SW17	11	43.619	0.644	446.3	2.5330	0.0000	SURCHARGED
15 minute winter	SW18	12	44.268	0.918	39.1	2.2185	0.0000	SURCHARGED
240 minute winter	SW19	232	43.140	0.790	164.0	4.0144	0.0000	SURCHARGED
15 minute winter	SW20	10	47.153	1.753	163.9	8.2093	6.3066	FLOOD
15 minute winter	SW21	10	46.556	1.606	159.3	4.4374	0.1799	FLOOD
15 minute winter	SW22	10	46.443	1.593	222.6	4.6006	6.7014	FLOOD
15 minute winter	SW23	11	45.735	1.185	263.1	4.4834	0.0000	SURCHARGED
960 minute winter	SW24	975	45.571	0.671	29.8	1.8151	0.0000	SURCHARGED
960 minute winter	SW24A	1005	45.549	0.799	30.3	1.0795	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	SW1	S1	SW2	39.8	0.741	0.562	2.3199	
15 minute winter	SW2	S2	SW3	84.3	1.325	0.670	1.1004	
15 minute winter	SW3	S3	SW4	94.2	1.338	1.199	2.4496	
15 minute winter	SW4	S4	SW5	154.3	1.448	0.854	5.4028	
1440 minute winter	SW5	S5	SWHW1	37.2	1.063	0.223	1.5737	
1440 minute winter	SW6	S6	SWHW2	3.2	0.802	0.040	0.4277	
1440 minute winter	SW7	S7	SW8	29.0	1.025	0.399	1.7049	
15 minute winter	SW8	S8	SW13	90.8	1.449	0.998	3.1437	
15 minute winter	SW9	S9	SW10	46.3	1.192	1.073	0.8619	
15 minute winter	SW10	S10	SW12	69.0	1.783	1.065	2.2489	
15 minute winter	SW11	S11	SW12	31.3	1.777	1.707	0.4965	
15 minute winter	SW12	S12	SW13	145.3	2.101	1.072	2.1331	
15 minute winter	SW13	S13	SW15	259.7	1.717	0.687	3.4842	
15 minute winter	SW14	S14	SW15	28.3	1.607	1.692	0.4957	
15 minute winter	SW15	S15	SW17	336.2	2.157	1.106	6.7191	
15 minute winter	SW16	S16	SW17	50.7	1.680	0.801	1.4965	
15 minute winter	SW17	S17	SW19	443.5	2.268	0.751	6.3996	
15 minute winter	SW18	S18	SW19	32.0	1.815	1.237	0.5445	
240 minute winter	SW19	S19	SWHW4	161.4	1.767	0.360	1.7695	
15 minute winter	SW20	S20	SW21	114.5	1.626	1.189	3.5086	
15 minute winter	SW21	S21	SW22	157.2	1.426	0.674	0.8124	
15 minute winter	SW22	S22	SW23	183.4	1.663	1.534	9.1901	
15 minute winter	SW23	S23	SW25	249.5	2.263	2.324	0.9459	
960 minute winter	SW24	S24	SW24A	29.5	0.874	0.413	2.5317	
960 minute winter	SW24A	S24A	SW24B	29.7	0.843	0.349	1.1921	

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Results for 100 year +40% CC Critical Storm Duration. Lowest mass balance: 98.42%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	SW24B	1020	45.538	1.038	32.0	2.0015	0.0000	SURCHARGED
960 minute winter	SW25	1020	45.536	1.136	26.2	3.5128	0.0000	SURCHARGED
15 minute winter	SW26	12	45.768	1.418	32.5	1.6039	0.0000	SURCHARGED
15 minute winter	SW27	12	45.775	1.575	134.0	5.2885	0.0000	SURCHARGED
15 minute winter	SW28	12	45.164	1.414	223.6	4.8784	0.0000	SURCHARGED
15 minute winter	SW29	12	44.694	1.294	249.9	2.6005	0.0000	SURCHARGED
15 minute winter	SW30	12	44.521	0.721	16.9	0.9468	0.0000	SURCHARGED
720 minute winter	SW30A	705	45.233	1.233	56.5	740.0474	0.0000	SURCHARGED
15 minute winter	SW31	12	44.507	1.207	329.7	3.4712	0.0000	SURCHARGED
15 minute winter	SW32	12	44.010	0.860	347.2	2.0654	0.0000	SURCHARGED
240 minute winter	SW33	232	43.142	0.942	133.2	2.8822	0.0000	SURCHARGED
240 minute winter	SW34	232	43.135	1.285	131.1	9.0861	0.0000	SURCHARGED
1440 minute winter	SWHW1	1440	45.483	0.930	37.2	0.1478	0.0000	OK
1440 minute winter	SWHW2	1440	45.480	0.927	3.2	0.1473	0.0000	OK
1440 minute winter	SWHW3	1440	45.480	0.930	32.2	0.1478	0.0000	SURCHARGED
240 minute winter	SWHW4	236	43.137	1.084	161.4	0.1724	0.0000	OK
240 minute winter	SWHW5	236	43.137	1.087	161.9	0.1729	0.0000	SURCHARGED
960 minute winter	SWHW6	1020	45.538	0.988	31.9	589.2552	0.0000	SURCHARGED
60 minute winter	SWHW7	35	41.966	0.166	92.8	0.0000	0.0000	OK
600 minute winter	SW1A	645	47.000	1.000	102.1	1309.2220	0.0000	SURCHARGED
480 minute winter	SW24C	552	45.881	0.881	107.3	1314.5170	0.0000	SURCHARGED

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	SW24B	S24B	SW25	24.2	0.329	0.135	2.5524	
960 minute winter	SW25	S25	SW26	25.0	0.912	0.348	0.3318	
15 minute winter	SW26	S26	SW27	39.0	0.941	0.494	2.0846	
15 minute winter	SW27	S27	SW28	96.4	1.369	1.320	6.0583	
15 minute winter	SW28	S28	SW29	206.2	1.870	1.245	4.4152	
15 minute winter	SW29	S29	SW31	235.4	1.486	1.169	4.0535	
15 minute winter	SW30	S30	SW31	23.8	0.931	0.464	1.1283	
720 minute winter	SW30A	S30A	SW30	6.8	0.840	0.431	0.1284	
15 minute winter	SW31	S31	SW32	306.4	1.934	1.634	6.9986	
15 minute winter	SW32	S32	SW33	341.7	2.157	0.916	11.3221	
240 minute winter	SW33	S33	SW34	131.1	1.028	0.444	4.2594	
240 minute winter	SW34	S34	SWHW7	92.8	1.538	0.300	0.3297	6156.1
1440 minute winter	SWHW1	Flow through pond	SWHW3	32.2	0.015	0.013	430.1420	
1440 minute winter	SWHW2	Flow through pond	SWHW3	32.2	0.015	0.013	430.1420	
1440 minute winter	SWHW3	S7A	SW7	28.8	0.499	0.300	0.9402	
240 minute winter	SWHW4	Flow through pond	SWHW5	127.1	0.038	0.022	1016.3241	
240 minute winter	SWHW5	S34A	SW34	94.1	0.798	0.150	1.3581	
960 minute winter	SWHW6	S24C	SW24B	-31.9	-0.201	-0.182	2.6707	
600 minute winter	SW1A	S1A	SW1	26.9	0.620	0.321	0.8092	
480 minute winter	SW24C	S24-1	SW24	26.9	0.791	0.275	0.9052	

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