

**Results for 1 year Critical Storm Duration. Lowest mass balance: 99.15%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
30 minute summer	SPPIC1	18	210.930	0.030	1.2	0.0207	0.0000	OK
30 minute summer	SPPIC2	20	210.870	0.028	1.2	0.1136	0.0000	OK
15 minute winter	SMH3	12	210.816	0.063	7.0	0.1451	0.0000	OK
60 minute winter	SMH2	44	210.746	0.119	6.7	0.1734	0.0000	OK
60 minute winter	SMH1 HYDRO	44	210.746	0.211	7.1	0.2851	0.0000	OK
60 minute winter	CMH1	44	210.562	0.062	4.7	0.0698	0.0000	OK
60 minute winter	OUTFALL	45	210.502	0.058	4.7	0.0000	0.0000	OK
15 minute summer	SPPIC3	11	210.961	0.026	0.9	0.0157	0.0000	OK
30 minute summer	SPPIC4	21	210.868	0.025	0.9	0.1202	0.0000	OK
15 minute summer	SPPIC5	10	210.856	0.018	0.4	0.0069	0.0000	OK
15 minute winter	SPPIC6	13	210.820	0.016	0.4	0.0402	0.0000	OK
15 minute summer	SPPIC7	12	210.805	0.018	0.4	0.0269	0.0000	OK
60 minute winter	SPPIC8	44	210.747	0.036	0.5	0.0944	0.0000	OK
60 minute winter	SPPIC9	44	210.746	0.125	1.9	1.0452	0.0000	OK
60 minute winter	SPPIC10	44	210.746	0.185	3.0	1.4404	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
30 minute summer	SPPIC1	1.000	SPPIC2	1.2	0.537	0.083	0.0206	
30 minute summer	SPPIC2	1.001	SMH3	1.1	0.258	0.076	0.0610	
15 minute winter	SMH3	1.002	SMH2	6.9	0.729	0.163	0.1923	
15 minute winter	SMH2	1.003	SMH1 HYDRO	8.9	0.497	0.211	0.3388	
60 minute winter	SMH1 HYDRO	Hydro-Brake®	CMH1	4.7				
60 minute winter	CMH1	1.005	OUTFALL	4.7	0.708	0.322	0.0553	14.0
15 minute summer	SPPIC3	2.000	SPPIC4	0.9	0.505	0.063	0.0263	
30 minute summer	SPPIC4	2.001	SMH3	0.8	0.213	0.053	0.0593	
15 minute summer	SPPIC5	3.000	SPPIC6	0.4	0.414	0.028	0.0056	
15 minute winter	SPPIC6	3.001	SMH3	0.4	0.108	0.025	0.0299	
15 minute summer	SPPIC7	4.000	SPPIC8	0.4	0.383	0.028	0.0126	
60 minute summer	SPPIC8	4.001	SPPIC9	0.5	0.225	0.032	0.1131	
15 minute winter	SPPIC9	4.002	SPPIC10	-3.4	-0.298	-0.233	0.1329	
15 minute winter	SPPIC10	4.003	SMH1 HYDRO	-5.1	-0.274	-0.120	0.1195	

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60 minute winter	SPPIC11	44	210.746	0.053	0.4	0.0208	0.0000	OK
60 minute winter	SPPIC12	44	210.746	0.088	1.5	0.6085	0.0000	OK

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute winter	SPPIC11	5.000	SPPIC12	0.5	0.384	0.035	0.0219	
30 minute winter	SPPIC12	5.001	SMH2	-1.5	0.234	-0.102	0.0545	

**Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 99.15%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
180 minute winter	SPPIC1	136	211.118	0.218	1.6	0.1490	0.0000	SURCHARGED
180 minute winter	SPPIC2	136	211.118	0.276	2.2	4.0961	0.0000	SURCHARGED
180 minute winter	SMH3	136	211.118	0.365	7.6	0.8437	0.0000	SURCHARGED
180 minute winter	SMH2	136	211.117	0.490	8.9	0.7133	0.0000	SURCHARGED
180 minute winter	SMH1 HYDRO	136	211.116	0.581	8.1	0.7859	0.0000	SURCHARGED
60 minute winter	CMH1	116	210.564	0.064	5.0	0.0727	0.0000	OK
60 minute winter	OUTFALL	116	210.505	0.061	5.0	0.0000	0.0000	OK
180 minute winter	SPPIC3	136	211.118	0.183	1.2	0.1100	0.0000	SURCHARGED
180 minute winter	SPPIC4	136	211.118	0.276	3.3	5.8394	0.0000	SURCHARGED
180 minute winter	SPPIC5	136	211.118	0.280	0.5	0.1086	0.0000	SURCHARGED
180 minute winter	SPPIC6	136	211.118	0.315	1.5	3.0642	0.0000	SURCHARGED
180 minute winter	SPPIC7	136	211.117	0.329	0.9	1.3849	0.0000	SURCHARGED
180 minute winter	SPPIC8	136	211.117	0.406	1.2	1.6909	0.0000	SURCHARGED
180 minute winter	SPPIC9	136	211.116	0.495	2.6	4.3324	0.0000	SURCHARGED
180 minute winter	SPPIC10	136	211.116	0.555	3.7	4.5796	0.0000	SURCHARGED

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
15 minute winter	SPPIC1	1.000	SPPIC2	4.2	0.759	0.290	0.0753	
15 minute winter	SPPIC2	1.001	SMH3	3.5	0.326	0.243	0.2032	
15 minute winter	SMH3	1.002	SMH2	20.9	0.847	0.493	0.7091	
15 minute winter	SMH2	1.003	SMH1 HYDRO	15.4	0.579	0.365	0.5506	
30 minute winter	SMH1 HYDRO	Hydro-Brake®	CMH1	5.0				
60 minute winter	CMH1	1.005	OUTFALL	5.0	0.721	0.346	0.0583	46.7
15 minute winter	SPPIC3	2.000	SPPIC4	3.1	0.713	0.215	0.0999	
60 minute summer	SPPIC4	2.001	SMH3	-5.3	-0.317	-0.366	0.2415	
30 minute winter	SPPIC5	3.000	SPPIC6	1.4	0.419	0.099	0.0914	
60 minute summer	SPPIC6	3.001	SMH3	-4.9	-0.357	-0.342	0.1315	
15 minute summer	SPPIC7	4.000	SPPIC8	-2.7	0.510	-0.190	0.1975	
30 minute summer	SPPIC8	4.001	SPPIC9	-5.5	-0.312	-0.380	0.2356	
15 minute winter	SPPIC9	4.002	SPPIC10	-10.0	-0.566	-0.690	0.1587	
15 minute winter	SPPIC10	4.003	SMH1 HYDRO	-14.3	-0.359	-0.337	0.1497	

**Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 99.15%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
180 minute winter	SPPIC11	136	211.117	0.424	0.7	0.1667	0.0000	SURCHARGED
180 minute winter	SPPIC12	136	211.117	0.459	1.7	3.7060	0.0000	SURCHARGED

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
30 minute winter	SPPIC11	5.000	SPPIC12	1.4	0.372	0.096	0.0919	
15 minute winter	SPPIC12	5.001	SMH2	-8.8	-0.497	-0.605	0.0810	

**Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.15%**

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m <sup>3</sup> )	Flood (m <sup>3</sup> )	Status
240 minute winter	SPPIC1	188	211.355	0.455	1.8	0.3105	0.0000	FLOOD RISK
240 minute winter	SPPIC2	188	211.355	0.513	2.5	8.0372	0.0000	FLOOD RISK
240 minute winter	SMH3	188	211.355	0.601	7.5	1.3906	0.0000	FLOOD RISK
240 minute winter	SMH2	188	211.354	0.727	8.2	1.0578	0.0000	SURCHARGED
240 minute winter	SMH1 HYDRO	188	211.353	0.818	7.5	1.1063	0.0000	SURCHARGED
15 minute summer	CMH1	43	210.564	0.064	5.0	0.0727	0.0000	OK
15 minute summer	OUTFALL	43	210.505	0.061	5.0	0.0000	0.0000	OK
240 minute winter	SPPIC3	188	211.355	0.420	1.4	0.2522	0.0000	FLOOD RISK
240 minute winter	SPPIC4	188	211.355	0.513	3.8	11.5565	0.0000	FLOOD RISK
240 minute winter	SPPIC5	188	211.355	0.516	0.6	0.2004	0.0000	FLOOD RISK
240 minute winter	SPPIC6	188	211.355	0.551	2.0	5.5153	0.0000	FLOOD RISK
240 minute winter	SPPIC7	188	211.353	0.566	0.7	2.4250	0.0000	SURCHARGED
240 minute winter	SPPIC8	188	211.353	0.643	1.0	2.7127	0.0000	SURCHARGED
240 minute winter	SPPIC9	188	211.353	0.732	2.3	6.4358	0.0000	SURCHARGED
240 minute winter	SPPIC10	188	211.353	0.792	3.1	6.5879	0.0000	SURCHARGED

Link Event (Outflow)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m <sup>3</sup> )	Discharge Vol (m <sup>3</sup> )
30 minute summer	SPPIC1	1.000	SPPIC2	5.6	0.803	0.389	0.1540	
30 minute summer	SPPIC2	1.001	SMH3	-5.3	-0.308	-0.369	0.2344	
15 minute winter	SMH3	1.002	SMH2	22.9	0.850	0.540	0.7462	
15 minute summer	SMH2	1.003	SMH1 HYDRO	17.4	0.575	0.411	0.5506	
240 minute winter	SMH1 HYDRO	Hydro-Brake®	CMH1	5.0				
15 minute summer	CMH1	1.005	OUTFALL	5.0	0.721	0.346	0.0583	27.2
30 minute summer	SPPIC3	2.000	SPPIC4	4.3	0.742	0.296	0.2453	
30 minute summer	SPPIC4	2.001	SMH3	-8.5	-0.489	-0.588	0.2415	
60 minute summer	SPPIC5	3.000	SPPIC6	1.7	0.406	0.115	0.0914	
30 minute summer	SPPIC6	3.001	SMH3	-6.8	-0.407	-0.468	0.1315	
15 minute summer	SPPIC7	4.000	SPPIC8	-3.1	0.551	-0.217	0.2035	
15 minute summer	SPPIC8	4.001	SPPIC9	-6.3	-0.358	-0.436	0.2356	
15 minute summer	SPPIC9	4.002	SPPIC10	-11.4	-0.648	-0.789	0.1587	
15 minute summer	SPPIC10	4.003	SMH1 HYDRO	-16.9	-0.424	-0.399	0.1497	

**Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.15%**

<b>Node Event</b>	<b>US Node</b>	<b>Peak (mins)</b>	<b>Level (m)</b>	<b>Depth (m)</b>	<b>Inflow (l/s)</b>	<b>Node Vol (m³)</b>	<b>Flood (m³)</b>	<b>Status</b>
240 minute winter	SPPIC11	188	211.354	0.661	0.8	0.2598	0.0000	FLOOD RISK
240 minute winter	SPPIC12	188	211.354	0.696	1.4	5.6821	0.0000	FLOOD RISK

  

<b>Link Event (Outflow)</b>	<b>US Node</b>	<b>Link</b>	<b>DS Node</b>	<b>Outflow (l/s)</b>	<b>Velocity (m/s)</b>	<b>Flow/Cap</b>	<b>Link Vol (m³)</b>	<b>Discharge Vol (m³)</b>
15 minute summer	SPPIC11	5.000	SPPIC12	2.0	0.416	0.138	0.0919	
15 minute summer	SPPIC12	5.001	SMH2	-11.2	-0.637	-0.775	0.0810	