

APPENDIX 1.2

OPTIONS 26-28

The above models were discarded since these iterations did not demonstrate significant change in results.

APPENDIX 1.2

OPTION 25 – SWMM MODEL OUTPUT

Option Description

Modeling Approach

The BR21 pond (southeast intersection of Lomas and Medical Arts) was simulated to drain into the Marble-Arno pond. The Broadway-Lomas detention pond was deleted from the model. Alternatively, a 12 foot deep pond at the intersection of Marble and Arno was simulated. This facility also includes a new 54-in. RCP storm drain from the Lomas Blvd. - Arno intersection (COA manhole 7861) that will drain north in Arno and outfall into the pond. The Lomas storm drain west of Arno was disconnected at the Lomas-Arno intersection to divert all Lomas storm drain flow east of Arno into the Marble Arno Pond. The 54-inch storm drain in Broadway between the inlet and outlet to the existing Broadway-Lomas Pond) that was abandoned to divert the Broadway storm drain flows into the existing pond was simulated as functional. The pond outfall pipe would be a 24-in. storm drain in Marble that would drain west to join the Broadway storm drain at the Broadway-Marble intersection (COA manhole 32865).

The storm drain on Commercial at McKnight that drained south to Baca was eliminated and a new 54-in. storm drain from that intersection was re-routed to the McKnight- Broadway intersection. From that intersection, the 54-in. storm drain continued south on Broadway where it would outfall into the Santa Barbara Park Pond. The topography indicates that the runoff from Sub-catchment BR16 will follow the natural street slopes along Edith to McKnight. The existing 21-in. storm drain that increases to a 36-in. storm drain west along McKnight between Edith and Broadway will convey the runoff to the intersection of Broadway and McKnight and will join the 54-in. storm drain in Broadway that will outfall to the Santa Barbara Park Pond.

However, to drain Sub-catchment BR12 to the Santa Barbara Park Pond, a new 24-in. storm drain system will be required in Edith that will drain north against the street grade to the intersection with Hannett. Then the storm drain will drain west on Hannett and outfall into the Santa Barbara Park Pond. The Santa Barbara Park Pond outfall pipe will be a 24-in. pipe that will join the Broadway storm drain.

Upsized storm drain from 36-in. to 48-in., from the Broadway-Odelia intersection and continue west on Baca to Commercial.

A new 10 foot deep detention pond called the McKnight Pond was added to collect runoff from Sub-catchments B35 and B40. Storm drains from Cutler to McKnight were upsized from 36-in. to 54-in. that connected to the McKnight Pond. A 24-in. outlet pipe will drain this into the 3rd St. storm drain. The storm drain from 3rd St. and McKnight to 3rd St. and Constitution was upsized from 48-in. to 54-in.

Storm drains were added west on Constitution from 3rd St. to 5th St. and south on 5th St. to Mountain then south to drain into the North Wells Park Pond located at Summer and 5th St., the pond outfall

pipe is a 36-in. RCP storm drain that continues south on 5th St. to Mountain, then east to 3rd St. where it joins the existing storm drain. The storm drain between Constitution and Mountain along 3rd St. was deleted to direct storm drain flows to the North Wells Park Pond.

Storm drains were upsized from 24-in. to 54-in. on Rio Grande Blvd. from Carson to Chacoma, then to San Pasquale then to Laguna ending at Kit Carson.

The Barelás 24-in. storm drain (north of Pacific) and Barelás 30-in. storm drain (south of Pacific) were simulated to cross connect into the Pacific storm drain at the Pacific-Barelás intersection with a 36-in. storm drain between manholes COA22168 and COA22169. This will allow Sub-catchment B5 an additional outfall pipe.

TABLE 6-43

SUMMARY OF OPTION 25 STREET PONDING AND MAN-HOLE FLOODING

Note- negative numbers imply that the HGL did not reach the manhole rim

Represents flooding depth over 1 ft

Represents flooding between 0.5ft - 0.99 ft

Represents flooding depth between 0 - 0.5 ft

INPUT DATA								
MH Name	Manhole Invert Elev.	Max. Depth of Manhole	Manhole Rim Elev.	Maximum HGL	Node Flood Depth Above Manhole Rim	Flood Volume	Flood Volume	Hours Flooded
	(ft)	(ft)	(ft)	(ft)	(ft)	(10 ⁶ gal)	(acre-ft)	
	(a)	(a)	(b)	(c)	(d)	(e)	(f)	
COA25349	4945.26	11.07	4956.33	4956.34	0.01	0.062	0.190271	0.19
COA25656	4948.86	10.32	4959.18	4959.32	0.14	0.243	0.74574	1.9
COA25622	4948.24	9.58	4957.82	4957.83	0.01	0.058	0.177996	0.79
COA7476	4950.32	7.85	4958.17	4958.18	0.01	0.054	0.16572	0.59
COA7518	4947.94	8.89	4956.83	4956.89	0.06	0.104	0.319164	0.18
COA24834	4944.52	7.06	4951.58	4951.82	0.24	1.11	3.406466	2.89
COA25105	4946.31	10.2	4956.51	4956.52	0.01	0.04	0.122756	0.35
COA32878	4946.6	9.16	4955.76	4955.78	0.02	0.018	0.05524	0.06
COA32878.A	4947.19	8.39	4955.58	4955.6	0.02	0.032	0.098204	0.12
COA32878.B	4946.27	9.58	4955.85	4955.87	0.02	0.01	0.030689	0.05
COA9229	4913.15	27	4940.15	4940.45	0.3	0.024	0.073653	0.52
(a) Manhole invert elevation from SWMM input under Node Summary Table (b) Rim elevation = MH invert elevation + Max depth of manhole (c) Max HGL from SWMM output table under Node Depth Summary (d) Node Flood Depth above Manhole Rim = HGL Elev-Rim Elev (e) Flood volume from SWMM output table under Node Flooding Summary (f) 1 gallon = 3.06888 E-6 acre-ft								

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.0 (Build 5.0.022)

COA Mid Valley Existing Conditions SWMM 5.0.022 Model
Results Printed on August 4th, 2011

NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.

Analysis Options

Flow Units CFS
Process Models:
 Rainfall/Runoff YES
 Snowmelt NO
 Groundwater NO
 Flow Routing YES
 Ponding Allowed YES
 Water Quality NO
Infiltration Method CURVE NUMBER
Flow Routing Method DYNWAVE
Starting Date JUL-01-2011 00:00:00
Ending Date JUL-06-2011 23:00:00
Antecedent Dry Days 0.0
Report Time Step 00:00:15
Wet Time Step 00:00:15
Dry Time Step 00:00:15
Routing Time Step 1.00 sec

WARNING 04: minimum elevation drop used for Conduit ESWMM126

Element Count

Number of rain gages 1
Number of subcatchments ... 70
Number of nodes 131
Number of links 136
Number of pollutants 0
Number of land uses 0

Raingage Summary

Name	Data Source	Data Type	Recording Interval
Gage1	Rain100hr24hr	CUMULATIVE	3 min.

Subcatchment Summary

Name	Area	Width	%Imperv	%Slope	Rain Gage	Outlet
A1	32.38	400.00	60.00	0.0800	Gage1	COA24916
A10	50.08	400.00	56.00	0.1351	Gage1	COA25048
A11	36.32	400.00	67.00	0.2105	Gage1	COA7518
A12	107.39	400.00	53.00	0.0702	Gage1	COA25656
A13	123.40	400.00	70.00	0.1177	Gage1	COA24834
A15	46.43	400.00	70.00	0.1835	Gage1	COA7444
A18	42.12	400.00	54.00	0.1802	Gage1	COA7476
A2	11.08	400.00	55.00	0.0000	Gage1	COA9083
A3	88.49	400.00	40.00	0.2000	Gage1	COA9069
A4	12.42	400.00	50.00	0.1071	Gage1	COA24859

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A5	78.59	400.00	55.00	0.1563	Gage1	COA9045
A6	47.22	400.00	42.00	0.1277	Gage1	COA8985
A7	38.26	400.00	52.00	0.1667	Gage1	COA25034
A8	22.07	400.00	57.00	0.2778	Gage1	COA25105
A9	29.10	400.00	58.00	0.2128	Gage1	COA25622
B1	40.10	400.00	67.00	0.2778	Gage1	COA22127
B10	13.89	400.00	64.00	0.1905	Gage1	COA22155
B11	12.41	400.00	19.00	0.9091	Gage1	TINGLEYPARKSURGEPOND
B12	9.50	400.00	70.00	0.1852	Gage1	COA9407
B13	20.03	400.00	61.00	0.1942	Gage1	COA13866
B14	28.24	400.00	85.00	0.3889	Gage1	COA22429
B15	41.75	400.00	90.00	0.1523	Gage1	COA9344
B16	29.92	400.00	86.00	0.2308	Gage1	COA9348
B17	17.56	400.00	90.00	0.0000	Gage1	COA9310
B18	13.98	400.00	98.00	0.0000	Gage1	COA9310
B20	16.96	400.00	85.00	0.2500	Gage1	COA22517
B21	30.91	400.00	70.00	0.3571	Gage1	COA24930
B22	33.42	400.00	70.00	0.1482	Gage1	COA9260
B23	9.35	400.00	99.00	0.1111	Gage1	COA9260
B24	18.44	400.00	90.00	0.0000	Gage1	COA22584
B25	39.65	400.00	96.00	0.1290	Gage1	COA7865
B26	59.34	400.00	75.00	0.0000	Gage1	COA25253
B27	51.52	400.00	88.00	0.1299	Gage1	COA7740
B28	64.91	400.00	70.00	0.1072	Gage1	COA7816
B29	105.31	400.00	65.00	0.1127	Gage1	COA25349
B3	5.08	400.00	64.00	0.1754	Gage1	COA9141
B30	51.79	400.00	82.00	0.1379	Gage1	NORTHWELLSPOND
B31	43.60	400.00	85.00	0.1149	Gage1	COA7654
B32	39.96	400.00	72.00	0.1709	Gage1	COA7638
B33	51.09	400.00	68.00	0.1010	Gage1	COA6231
B34	53.33	400.00	76.00	0.2010	Gage1	COA15184
B35	32.09	400.00	82.00	0.4008	Gage1	McknightPond
B36	25.33	400.00	77.00	0.3150	Gage1	COA6045
B4	5.98	400.00	47.00	0.1205	Gage1	COA22174
B40	36.44	400.00	84.00	0.8037	Gage1	McknightPond
B41	24.82	400.00	94.00	0.5333	Gage1	COA6149
B5	65.56	400.00	68.00	0.1553	Gage1	COA22168
B6	7.04	400.00	65.00	0.0917	Gage1	COA9431
B7	11.54	400.00	56.00	0.3529	Gage1	COA9426
B8	23.57	400.00	64.00	0.1478	Gage1	MHB22410
BR1	28.93	400.00	75.00	3.8667	Gage1	COA29178
BR10	36.43	400.00	31.00	5.1034	Gage1	COA7963.05M
BR11	9.74	400.00	65.00	4.5106	Gage1	COA33027
BR12	22.29	400.00	10.00	4.7826	Gage1	MH1
BR13	29.14	400.00	70.00	1.6667	Gage1	COA7656
BR14	19.80	400.00	89.00	0.4000	Gage1	COA7635
BR16	25.89	400.00	13.00	3.1858	Gage1	COA29132
BR17	49.17	400.00	59.00	1.4286	Gage1	COA29132
BR18	33.13	400.00	75.00	1.4000	Gage1	COA6195
BR19	26.21	400.00	75.00	1.0370	Gage1	COA32878
BR2	5.67	400.00	50.00	0.5405	Gage1	COA32878.B
BR20	24.15	400.00	90.00	0.2222	Gage1	COA7848
BR21	23.81	400.00	80.00	3.2594	Gage1	COA7870
BR3	37.23	400.00	66.00	2.3529	Gage1	MARBLEARNOPOND
BR4	39.56	400.00	75.00	3.0586	Gage1	COA7861
BR5	10.73	400.00	59.00	4.1071	Gage1	COA7963.05A
BR6	28.63	400.00	82.00	0.6154	Gage1	COA7766JB
BR9	55.23	400.00	86.00	0.2353	Gage1	COA7717
B19.1	15.30	400.00	85.00	2.6286	Gage1	COA9152
B19.2	12.03	400.00	85.00	2.7942	Gage1	COA9248

Node Summary

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
COA6149	JUNCTION	4956.51	6.87	130067.0	
COA6231	JUNCTION	4955.06	7.35	130067.0	
COA6045	JUNCTION	4957.51	7.82	309545.0	
COA15184	JUNCTION	4954.19	10.04	224607.0	

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COA6218	JUNCTION	4953.66	9.34	224607.0	
COA6195	JUNCTION	4962.97	6.74	79450.0	
COA6246	JUNCTION	4962.06	7.85	79450.0	
COA29163	JUNCTION	4962.01	8.38	79450.0	
COA7635	JUNCTION	4957.34	7.29	27461.0	
COA7650	JUNCTION	4954.93	8.35	27461.0	
COA7656	JUNCTION	4953.17	9.45	27118.0	
COA7628	JUNCTION	4960.44	11.03	27118.0	
COA29132	JUNCTION	4961.85	12.41	18581.0	
COA33027	JUNCTION	4957.15	8.20	0.0	
COA33007	JUNCTION	4994.87	10.60	0.0	Yes
COA7717	JUNCTION	4949.54	9.19	36488.0	
O24MH1	JUNCTION	4951.70	10.30	188061.0	
COA7654	JUNCTION	4951.67	8.59	228852.0	
COA7714	JUNCTION	4950.14	7.86	296083.3	
COA6259	JUNCTION	4953.72	10.36	64850.0	
COA7638	JUNCTION	4952.62	8.10	64850.0	
COA25807	JUNCTION	4953.18	7.28	64850.0	
COA25349	JUNCTION	4945.26	11.07	166821.0	
COA25656	JUNCTION	4948.86	10.32	197750.0	
COA25677	JUNCTION	4948.59	10.97	197750.0	
COA25622	JUNCTION	4948.24	9.58	159436.0	
COA7444	JUNCTION	4952.87	7.72	292160.0	Yes
COA7476	JUNCTION	4950.32	7.85	181489.0	
COA7518	JUNCTION	4947.94	8.89	167547.7	
COA24834	JUNCTION	4944.52	7.06	612333.2	
COA8985	JUNCTION	4940.76	11.38	241168.0	
COA24859	JUNCTION	4938.64	12.00	25798.0	
COA9015	JUNCTION	4942.91	8.45	25798.0	
COA25105	JUNCTION	4946.31	10.20	50544.0	
COA25117	JUNCTION	4945.26	11.29	50544.0	
COA25048	JUNCTION	4944.92	11.36	401053.0	
COA25034	JUNCTION	4943.82	10.70	171143.0	
COA9045	JUNCTION	4941.61	8.65	171143.0	
COA25352	JUNCTION	4945.06	11.31	166821.0	
COA7815	JUNCTION	4943.48	13.40	166821.0	
COA25253	JUNCTION	4941.66	12.95	84189.0	
COA7977	JUNCTION	4941.94	13.08	84189.0	
COA25238	JUNCTION	4941.20	13.47	84189.0	
COA25240	JUNCTION	4941.15	13.87	84189.0	
COA22584	JUNCTION	4940.18	14.49	117610.0	
COA9260	JUNCTION	4938.02	14.78	208149.0	
COA7740	JUNCTION	4949.69	8.25	166203.0	
COA7830	JUNCTION	4944.87	12.00	166203.0	
COA7865	JUNCTION	4946.34	10.46	45527.0	
COA7908	JUNCTION	4946.15	10.00	45527.0	
COA7912	JUNCTION	4945.61	10.68	45527.0	
COA7955	JUNCTION	4943.49	12.00	45527.0	
COA22517	JUNCTION	4943.59	11.00	97896.0	
COA7716	JUNCTION	4948.88	9.23	36488.0	
COA7766JB	JUNCTION	4943.95	12.33	40457.3	
COA7769JB	JUNCTION	4944.52	11.81	0.0	
COA32865	JUNCTION	4945.49	11.62	21867.0	
COA32878	JUNCTION	4946.60	9.16	26441.0	
COA7848	JUNCTION	4947.67	8.71	75622.0	
COA7861	JUNCTION	4947.76	10.18	0.0	
COA7870	JUNCTION	4957.75	12.84	0.0	Yes
COA29178	JUNCTION	4956.78	9.45	0.0	
COA7816	JUNCTION	4944.19	13.17	362909.0	
COA25109	JUNCTION	4945.87	10.67	50544.0	
BPSINLET	JUNCTION	4938.89	21.00	0.0	
COA9310	JUNCTION	4942.40	11.55	187810.0	
COA9348	JUNCTION	4939.63	11.79	195274.4	
COA9344	JUNCTION	4935.83	15.71	94192.0	
COA9340	JUNCTION	4935.64	16.65	94192.0	
COA22250	JUNCTION	4937.56	13.58	94192.0	
COA22429	JUNCTION	4937.26	13.07	183374.0	
COA13866	JUNCTION	4935.36	12.08	73420.0	
COA24930	JUNCTION	4937.17	11.05	174484.0	
COA24916	JUNCTION	4938.25	10.36	85713.0	
COA9248	JUNCTION	4947.65	10.07	11689.0	
COA32981	JUNCTION	4931.39	17.86	18760.0	

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COA9121	JUNCTION	4931.16	17.50	33447.0
COA24902	JUNCTION	4939.07	10.00	85713.0
COA24902A	JUNCTION	4939.73	8.82	140992.0
COA9069	JUNCTION	4940.85	8.80	140992.0
COA24997	JUNCTION	4936.14	13.35	140992.0
COA9083	JUNCTION	4935.33	12.62	0.0
UPSINLET	JUNCTION	4930.49	28.66	0.0
COA9407	JUNCTION	4944.40	6.42	79526.0
COA9426	JUNCTION	4943.03	6.39	22812.0
COA22194	JUNCTION	4942.00	7.04	22812.0
COA22191	JUNCTION	4940.79	8.13	22812.0
COA9431	JUNCTION	4939.27	9.59	22229.0
COA22176	JUNCTION	4938.45	10.72	22229.0
COA22168	JUNCTION	4936.56	9.92	117391.0
COA22174	JUNCTION	4928.49	16.58	35030.0
COA22155	JUNCTION	4928.35	16.89	33447.0
COA9141	JUNCTION	4928.21	17.88	20203.1
COA22410	JUNCTION	4928.36	18.75	45178.0
COA9129	JUNCTION	4930.24	16.01	45178.0
COA9143	JUNCTION	4927.28	20.70	0.0
COA22144	JUNCTION	4924.79	22.45	0.0
COA22145	JUNCTION	4925.85	24.38	0.0
COA22143	JUNCTION	4923.99	22.50	0.0
COA10456	JUNCTION	4922.76	20.45	0.0
BaPSINLET	JUNCTION	4922.01	26.60	0.0
COA7963.05A	JUNCTION	4971.98	7.11	0.0
COA7963.05M	JUNCTION	4952.69	10.31	0.0
COA7963.11A	JUNCTION	4951.67	9.48	36488.0
COA7963.T	JUNCTION	4932.21	9.25	0.0
COA32878.A	JUNCTION	4947.19	8.39	21867.0
COA32878.B	JUNCTION	4946.27	9.58	21867.0
APSINLET	JUNCTION	4929.66	14.10	0.0
IRON14TH	JUNCTION	4939.07	10.00	0.0
BLDWEIR	JUNCTION	4946.60	9.16	0.0
BLUWEIR	JUNCTION	4946.60	9.16	0.0
COA22169	JUNCTION	4939.35	6.75	117391.0
COA22127	JUNCTION	4937.86	7.66	226362.0
COA32823	JUNCTION	4933.09	27.00	0.0
COA9453	JUNCTION	4939.07	7.51	117391.0
MHB22410	JUNCTION	4928.42	18.75	90355.0
COA9152	JUNCTION	4929.67	27.00	0.0
COA9229	JUNCTION	4913.15	27.00	8870.0
MHB19A	JUNCTION	4933.00	27.00	0.0
MH3	JUNCTION	4964.00	10.00	0.0
MH2	JUNCTION	4970.50	19.50	0.0
MH1	JUNCTION	4974.00	6.00	0.0
APSOUTLET	OUTFALL	4960.84	0.00	0.0
BPSOUTLET	OUTFALL	5106.00	0.00	0.0
BaPSOUTLET	OUTFALL	4941.69	0.00	0.0
AIRQUALITYPOND	STORAGE	4952.26	12.40	0.0
TINGLEYPARKSURGEONPOND	STORAGE	4932.21	16.45	0.0
NORTHWELLSPOND	STORAGE	4951.00	9.00	0.0
SANTABARBOND	STORAGE	4961.00	11.00	0.0
McknightPond	STORAGE	4952.00	10.00	0.0
MARBLEARNOPOND	STORAGE	4946.00	12.00	0.0

Yes

Link Summary

Name	From Node	To Node	Type	Length	%Slope	Roughness
ESWMM57	COA6149	COA6231	CONDUIT	733.0	0.1378	0.0140
1FOSWMM6	COA6045	COA15184	CONDUIT	802.0	0.3915	0.0140
1FOSWMM7	COA15184	COA6218	CONDUIT	622.0	0.0096	0.0140
1FOSWMM17	COA6195	COA6246	CONDUIT	636.0	0.1431	0.0140
1FOSWMM18	COA6246	COA29163	CONDUIT	120.0	0.0417	0.0140
1FOSWMM19	COA7635	COA7650	CONDUIT	613.0	0.3932	0.0140
1FOSWMM20	COA7650	COA7656	CONDUIT	386.0	0.4041	0.0140
ESWMM41	COA33027	COA7656	CONDUIT	416.0	0.7428	0.0140
1FOSWMM22	COA7628	COA7656	CONDUIT	831.0	0.7618	0.0140
ESWMM42	COA33007	COA33027	CONDUIT	1096.0	3.4235	0.0140

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1FQSWMM4	COA7656	COA7963.11A	CONDUIT	319.0	0.4702	0.0140
1FQSWMM9	O24MH1	COA7654	CONDUIT	1795.0	0.0017	0.0140
ESWMM58	COA6231	COA6259	CONDUIT	298.0	0.2349	0.0140
ESWMM59	COA6259	COA7638	CONDUIT	930.0	0.1183	0.0140
ESWMM60	COA25807	COA7638	CONDUIT	310.0	0.1806	0.0140
ESWMM91	COA25656	COA25677	CONDUIT	670.0	0.0403	0.0140
ESWMM92	COA25677	COA25622	CONDUIT	914.0	0.0306	0.0140
1FQSWMM10	COA7444	COA7476	CONDUIT	1361.0	0.1874	0.0140
1FQSWMM11	COA7476	COA7518	CONDUIT	895.0	0.2659	0.0140
1FQSWMM12	COA7518	COA24834	CONDUIT	1804.0	0.1896	0.0140
1FQSWMM13	COA24834	COA8985	CONDUIT	1437.0	0.2617	0.0140
1FQSWMM14	COA8985	COA24859	CONDUIT	442.0	0.4796	0.0140
ESWMM6	COA24859	COA9015	CONDUIT	670.0	0.0343	0.0140
ESWMM93	COA25622	COA25105	CONDUIT	752.0	0.2354	0.0140
ESWMM94	COA25105	COA25109	CONDUIT	280.0	0.1571	0.0140
ESWMM96	COA25117	COA25048	CONDUIT	342.0	0.0848	0.0140
ESWMM97	COA25048	COA25034	CONDUIT	747.0	0.1473	0.0140
ESWMM98	COA25034	COA9045	CONDUIT	1976.0	0.1088	0.0140
ESWMM61	COA25807	COA25349	CONDUIT	2789.0	0.2840	0.0140
ESWMM62	COA25349	COA25352	CONDUIT	60.0	0.3333	0.0140
ESWMM63	COA25352	COA7815	CONDUIT	305.0	0.3639	0.0140
ESWMM64	COA7815	COA25253	CONDUIT	1481.0	0.1229	0.0140
ESWMM65	COA7977	COA25253	CONDUIT	20.0	1.4001	0.0140
ESWMM66	COA7977	COA25238	CONDUIT	137.0	0.3723	0.0140
ESWMM67	COA25238	COA25240	CONDUIT	23.0	0.2174	0.0140
ESWMM68	COA25240	COA22584	CONDUIT	490.0	0.2612	0.0140
ESWMM69	COA22584	COA9260	CONDUIT	560.0	0.2268	0.0140
ESWMM30	COA7714	COA7740	CONDUIT	405.0	0.1111	0.0140
ESWMM29	COA7740	COA7830	CONDUIT	1028.0	0.1566	0.0140
ESWMM28	COA7830	COA7865	CONDUIT	391.0	0.1611	0.0140
ESWMM27	COA7865	COA7908	CONDUIT	355.0	0.0535	0.0140
ESWMM26	COA7912	COA7908	CONDUIT	13.0	5.2379	0.0140
ESWMM25	COA7912	COA7955	CONDUIT	360.0	0.1083	0.0140
ESWMM24	COA7955	COA22517	CONDUIT	968.0	0.1333	0.0140
ESWMM50	COA7870	COA29178	CONDUIT	441.0	0.1020	0.0140
ESWMM51	COA7870	COA7861	CONDUIT	517.0	1.8901	0.0140
BLUPIPE	COA32878	BLUWEIR	CONDUIT	300.0	0.0067	0.0140
1FQSWMM6	COA7717	COA7716	CONDUIT	11.0	4.3678	0.0140
ESWMM47	COA7716	COA7766JB	CONDUIT	725.0	0.5821	0.0140
ESWMM48	COA7769JB	COA7766JB	CONDUIT	78.0	0.6026	0.0140
ESWMM49	COA32865	COA7769JB	CONDUIT	307.0	0.3225	0.0140
ESWMM54	COA7848	COA7830	CONDUIT	1435.0	0.1951	0.0140
ESWMM55	COA7830	COA7816	CONDUIT	1092.0	0.0778	0.0140
ESWMM56	COA7816	COA7815	CONDUIT	739.0	0.0825	0.0140
ESWMM95	COA25109	COA25117	CONDUIT	389.0	0.1517	0.0140
48SDTOBPS	COA7766JB	BPSINLET	CONDUIT	60.0	0.1000	0.0140
ESWMM23	COA9248	COA22517	CONDUIT	821.0	0.4592	0.0140
ESWMM22	COA22517	COA9310	CONDUIT	1089.0	0.1093	0.0140
ESWMM21	COA9310	COA9348	CONDUIT	1101.0	0.2516	0.0140
ESWMM20	COA9348	COA9344	CONDUIT	373.0	0.1287	0.0140
ESWMM19	COA9344	COA9340	CONDUIT	375.0	0.1493	0.0140
ESWMM18	COA9340	COA22250	CONDUIT	346.0	0.1532	0.0140
ESWMM17	COA22250	COA22429	CONDUIT	366.0	0.0820	0.0140
ESWMM16	COA22429	COA13866	CONDUIT	361.0	0.4017	0.0140
ESWMM70	COA9260	COA13866	CONDUIT	1622.0	0.1178	0.0140
ESWMM15	COA24930	COA13866	CONDUIT	713.0	0.0898	0.0140
ESWMM71	COA13866	COA7963.T	CONDUIT	1026.0	0.3068	0.0140
ESWMM72	COA32981	COA9121	CONDUIT	80.0	0.2875	0.0130
ESWMM7	COA9015	COA9069	CONDUIT	1428.0	0.1366	0.0140
ESWMM12	COA24902	COA24902A	CONDUIT	479.0	0.0271	0.0140
ESWMM9	COA9069	COA24902A	CONDUIT	514.0	0.2218	0.0140
ESWMM99	COA9045	COA24902	CONDUIT	740.0	0.1649	0.0140
ESWMM8	COA9069	COA24997	CONDUIT	19.0	4.5838	0.0140
ESWMM10	COA24997	COA9083	CONDUIT	384.0	0.2109	0.0140
ESWMM11	COA24902A	COA9083	CONDUIT	376.0	1.2474	0.0140
ESWMM90	COA9407	COA9426	CONDUIT	393.0	0.3384	0.0140
ESWMM89	COA9426	COA22194	CONDUIT	356.0	0.2865	0.0140
ESWMM88	COA22194	COA22191	CONDUIT	296.0	0.4088	0.0140
ESWMM87	COA22191	COA9431	CONDUIT	328.0	0.4634	0.0140
ESWMM86	COA9431	COA22176	CONDUIT	172.0	0.5523	0.0140
ESWMM85	COA22176	COA22168	CONDUIT	612.0	0.3088	0.0140
ESWMM84	COA22168	COA22174	CONDUIT	337.0	2.3953	0.0140

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ESWMM83	COA22174	COA22155	CONDUIT	386.0	0.0363	0.0140	
ESWMM82	COA22155	COA9141	CONDUIT	510.0	0.0275	0.0240	
ESWMM73	COA9121	COA9129	CONDUIT	327.0	0.2813	0.0130	
ESWMM76	COA9141	COA9143	CONDUIT	210.0	0.4429	0.0130	
ESWMM77	COA9143	COA22145	CONDUIT	377.0	0.3793	0.0130	
ESWMM78	COA22145	COA22144	CONDUIT	370.0	0.2865	0.0130	
ESWMM79	COA22144	COA22143	CONDUIT	202.0	0.3960	0.0130	
ESWMM80	COA22143	COA10456	CONDUIT	301.0	0.4086	0.0130	
ESWMM81	COA10456	BaPSINLET	CONDUIT	243.0	0.3086	0.0130	
ESWMM14	COA24916	COA24930	CONDUIT	717.0	0.1325	0.0140	
ESWMM13	IRON14TH	COA24916	CONDUIT	659.0	0.1199	0.0140	
ESWMM125	COA7963.05A	COA7963.05M	CONDUIT	1793.0	1.0759	0.0140	
1FQSWMM5	COA7963.11A	COA7717	CONDUIT	1219.0	0.1829	0.0140	
ESWMM71A	COA7963.T	COA32981	CONDUIT	149.0	0.5517	0.0140	
ESWMM126	TINGLEYPARKSURGE	POND	COA7963.T	CONDUIT	50.0	0.0020	0.0140
ESWMM127	AIRQUALITYPOND	COA7963.11A	CONDUIT	240.0	0.2458	0.0140	
ESWMM128	COA33027	AIRQUALITYPOND	CONDUIT	149.0	3.2836	0.0140	
ESWMM129	COA7963.05M	AIRQUALITYPOND	CONDUIT	69.0	0.6232	0.0140	
ESWMM132	COA32878.A	COA32878	CONDUIT	60.0	0.9834	0.0140	
60SDTOBPS	COA7769JB	BPSINLET	CONDUIT	60.0	0.8834	0.0140	
ESWMM135	COA9083	APSINLET	CONDUIT	150.7	0.0730	0.0140	
ESWMM53	COA7848	BLDWEIR	CONDUIT	308.0	0.3474	0.0140	
ESWMM75	COA22410	COA9141	CONDUIT	196.0	0.0765	0.0130	
1FOSWMM13	COA22169	COA9453	CONDUIT	194.0	0.1443	0.0140	
1FOSWMM14	COA9453	COA22127	CONDUIT	870.0	0.1486	0.0140	
1FOSWMM15	COA22127	COA10456	CONDUIT	1157.0	0.5272	0.0140	
ESWMM201	COA9229	COA32823	CONDUIT	230.0	0.0261	0.0140	
ESWMM203	COA32823	UPSINLET	CONDUIT	103.0	2.5251	0.0140	
ESWMM200	COA9152	COA9229	CONDUIT	1665.0	0.0913	0.0140	
ESWMM202	COA32823	MHB19A	CONDUIT	426.0	0.0211	0.0140	
ESWMM500	COA24859	COA24997	CONDUIT	2116.0	0.1181	0.0140	
ESWMM74	COA9129	MHB22410	CONDUIT	501.0	0.3633	0.0130	
ESWMM74A	MHB22410	COA22410	CONDUIT	24.0	0.2500	0.0240	
1FOSWMM4	COA7654	NORTHWELLSPOND	CONDUIT	1500.0	0.0447	0.0140	
1FOSWMM5	NORTHWELLSPOND	COA7714	CONDUIT	1080.0	0.0796	0.0140	
1FQSWMM1	COA29163	COA29132	CONDUIT	365.0	0.0438	0.0100	
1FQSWMM2	COA29132	SANTABARBSPOND	CONDUIT	450.0	0.1889	0.0100	
1FQSWMM3	SANTABARBSPOND	COA7628	CONDUIT	100.0	0.5600	0.0100	
1FQSWMM7	COA6218	McknightPond	CONDUIT	400.0	0.4150	0.0140	
1FQSWMM8	McknightPond	O24MH1	CONDUIT	100.0	0.3000	0.0100	
O17SWMM200	MH1	MH2	CONDUIT	700.0	0.5000	0.0140	
O17SWMM201	MH2	MH3	CONDUIT	852.0	0.7629	0.0100	
O17SWMM202	MH3	SANTABARBSPOND	CONDUIT	150.0	1.3335	0.0140	
ESWMM134	COA32878.B	COA7769JB	CONDUIT	595.0	0.2941	0.0140	
O24LINK1	COA22168	COA22169	CONDUIT	150.0	0.0067	0.0140	
O24LINK2	COA7861	MARBLEARNOPOND	CONDUIT	100.0	1.7603	0.0140	
O24LINK3	MARBLEARNOPOND	COA32865	CONDUIT	250.0	0.2040	0.0140	
O24LINK4	COA32878.A	COA32878.B	CONDUIT	400.0	0.2300	0.0140	
BROADWAYPUMPSTATIONBPSINLET			BPSOUTLET	TYPE4 PUMP			
ALCALDEPUMPSTATIONAPSINLET			APSOUTLET	TYPE4 PUMP			
URBANPUMPSTATIONUPSINLET			COA9248	TYPE4 PUMP			
BARELASPUMPSTATIONBaPSINLET			BaPSOUTLET	TYPE4 PUMP			
WEIRIRON14TH	IRON14TH	COA24902	WEIR				
WEIRBROADWAY	BLUWEIR	BLDWEIR	WEIR				

***** Cross Section Summary *****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
ESWMM57	CIRCULAR	3.50	9.62	0.88	3.50	1	34.68
1FOSWMM6	CIRCULAR	4.50	15.90	1.13	4.50	1	114.26
1FOSWMM7	CIRCULAR	4.50	15.90	1.13	4.50	1	17.93
1FQSWMM17	CIRCULAR	4.50	15.90	1.13	4.50	1	69.07
1FQSWMM18	CIRCULAR	4.50	15.90	1.13	4.50	1	37.27
1FOSWMM19	CIRCULAR	3.00	7.07	0.75	3.00	1	38.83
1FOSWMM20	CIRCULAR	4.00	12.57	1.00	4.00	1	84.80
ESWMM41	CIRCULAR	2.00	3.14	0.50	2.00	1	18.10
1FOSWMM22	CIRCULAR	4.00	12.57	1.00	4.00	1	116.41
ESWMM42	CIRCULAR	4.00	12.57	1.00	4.00	1	246.80

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1FQSWMM4	CIRCULAR	4.00	12.57	1.00	4.00	1	91.46
1FQSWMM9	CIRCULAR	4.50	15.90	1.13	4.50	1	7.47
ESWMM58	CIRCULAR	4.00	12.57	1.00	4.00	1	64.65
ESWMM59	CIRCULAR	4.50	15.90	1.13	4.50	1	62.80
ESWMM60	CIRCULAR	4.50	15.90	1.13	4.50	1	77.61
ESWMM91	CIRCULAR	3.00	7.07	0.75	3.00	1	12.43
ESWMM92	CIRCULAR	3.00	7.07	0.75	3.00	1	10.84
1FQSWMM10	CIRCULAR	4.50	15.90	1.13	4.50	1	79.04
1FQSWMM11	CIRCULAR	4.50	15.90	1.13	4.50	1	94.16
1FQSWMM12	CIRCULAR	4.50	15.90	1.13	4.50	1	79.51
1FQSWMM13	CIRCULAR	4.50	15.90	1.13	4.50	1	93.41
1FQSWMM14	CIRCULAR	4.50	15.90	1.13	4.50	1	126.46
ESWMM6	CIRCULAR	3.00	7.07	0.75	3.00	1	11.48
ESWMM93	CIRCULAR	3.00	7.07	0.75	3.00	1	30.05
ESWMM94	CIRCULAR	4.00	12.57	1.00	4.00	1	52.87
ESWMM96	CIRCULAR	4.00	12.57	1.00	4.00	1	38.84
ESWMM97	CIRCULAR	5.00	19.63	1.25	5.00	1	92.80
ESWMM98	CIRCULAR	5.00	19.63	1.25	5.00	1	79.77
ESWMM61	CIRCULAR	5.50	23.76	1.38	5.50	1	166.17
ESWMM62	CIRCULAR	5.50	23.76	1.38	5.50	1	180.03
ESWMM63	CIRCULAR	5.50	23.76	1.38	5.50	1	188.11
ESWMM64	CIRCULAR	6.00	28.27	1.50	6.00	1	137.86
ESWMM65	CIRCULAR	6.00	28.27	1.50	6.00	1	465.33
ESWMM66	CIRCULAR	6.00	28.27	1.50	6.00	1	239.94
ESWMM67	CIRCULAR	6.00	28.27	1.50	6.00	1	183.36
ESWMM68	CIRCULAR	6.00	28.27	1.50	6.00	1	200.99
ESWMM69	CIRCULAR	6.00	28.27	1.50	6.00	1	187.28
ESWMM30	CIRCULAR	4.00	12.57	1.00	4.00	1	44.46
ESWMM29	CIRCULAR	4.50	15.90	1.13	4.50	1	72.26
ESWMM28	CIRCULAR	4.50	15.90	1.13	4.50	1	73.30
ESWMM27	CIRCULAR	5.00	19.63	1.25	5.00	1	55.95
ESWMM26	CIRCULAR	5.00	19.63	1.25	5.00	1	553.49
ESWMM25	CIRCULAR	5.00	19.63	1.25	5.00	1	79.60
ESWMM24	CIRCULAR	5.50	23.76	1.38	5.50	1	113.83
ESWMM50	CIRCULAR	3.00	7.07	0.75	3.00	1	19.78
ESWMM51	CIRCULAR	4.00	12.57	1.00	4.00	1	183.38
BLUPIPE	CIRCULAR	6.00	28.27	1.50	6.00	1	32.11
1FQSWMM6	CIRCULAR	4.00	12.57	1.00	4.00	2	278.76
ESWMM47	CIRCULAR	4.00	12.57	1.00	4.00	2	101.76
ESWMM48	CIRCULAR	4.00	12.57	1.00	4.00	1	103.54
ESWMM49	CIRCULAR	3.50	9.62	0.88	3.50	1	53.05
ESWMM54	CIRCULAR	6.00	28.27	1.50	6.00	1	173.71
ESWMM55	CIRCULAR	6.00	28.27	1.50	6.00	1	109.72
ESWMM56	CIRCULAR	6.00	28.27	1.50	6.00	1	112.98
ESWMM95	CIRCULAR	4.00	12.57	1.00	4.00	1	51.95
48SDTOBPS	CIRCULAR	4.00	12.57	1.00	4.00	1	42.18
ESWMM23	CIRCULAR	4.00	12.57	1.00	4.00	1	90.39
ESWMM22	CIRCULAR	5.50	23.76	1.38	5.50	1	103.08
ESWMM21	CIRCULAR	5.50	23.76	1.38	5.50	1	156.41
ESWMM20	CIRCULAR	6.00	28.27	1.50	6.00	1	141.07
ESWMM19	CIRCULAR	6.00	28.27	1.50	6.00	1	151.97
ESWMM18	CIRCULAR	6.00	28.27	1.50	6.00	1	153.91
ESWMM17	CIRCULAR	6.00	28.27	1.50	6.00	1	112.59
ESWMM16	CIRCULAR	6.00	28.27	1.50	6.00	1	249.24
ESWMM70	CIRCULAR	7.00	38.48	1.75	7.00	1	203.56
ESWMM15	CIRCULAR	6.00	28.27	1.50	6.00	1	117.82
ESWMM71	CIRCULAR	8.00	50.27	2.00	8.00	1	469.13
ESWMM72	CIRCULAR	7.50	44.18	1.88	7.50	1	411.73
ESWMM7	CIRCULAR	3.00	7.07	0.75	3.00	1	22.89
ESWMM12	CIRCULAR	6.00	28.27	1.50	6.00	1	64.79
ESWMM9	CIRCULAR	3.00	7.07	0.75	3.00	1	29.17
ESWMM99	CIRCULAR	5.00	19.63	1.25	5.00	1	98.20
ESWMM8	CIRCULAR	3.00	7.07	0.75	3.00	1	132.60
ESWMM10	CIRCULAR	4.00	12.57	1.00	4.00	1	61.26
ESWMM11	CIRCULAR	5.00	19.63	1.25	5.00	1	270.11
ESWMM90	CIRCULAR	3.50	9.62	0.88	3.50	1	54.35
ESWMM89	CIRCULAR	4.00	12.57	1.00	4.00	1	71.40
ESWMM88	CIRCULAR	4.50	15.90	1.13	4.50	1	116.75
ESWMM87	CIRCULAR	4.50	15.90	1.13	4.50	1	124.31
ESWMM86	CIRCULAR	4.50	15.90	1.13	4.50	1	135.71
ESWMM85	CIRCULAR	4.50	15.90	1.13	4.50	1	101.48
ESWMM84	CIRCULAR	5.00	19.63	1.25	5.00	1	374.29

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ESWMM83	CIRCULAR	5.00	19.63	1.25	5.00	1	46.06
ESWMM82	CIRCULAR	5.00	19.63	1.25	5.00	1	23.37
ESWMM73	CIRCULAR	7.50	44.18	1.88	7.50	1	407.30
ESWMM76	CIRCULAR	7.50	44.18	1.88	7.50	1	511.00
ESWMM77	CIRCULAR	7.50	44.18	1.88	7.50	1	472.92
ESWMM78	CIRCULAR	7.50	44.18	1.88	7.50	1	411.00
ESWMM79	CIRCULAR	7.50	44.18	1.88	7.50	1	483.24
ESWMM80	CIRCULAR	7.50	44.18	1.88	7.50	1	490.86
ESWMM81	CIRCULAR	7.50	44.18	1.88	7.50	1	426.60
ESWMM14	CIRCULAR	5.50	23.76	1.38	5.50	1	113.50
ESWMM13	CIRCULAR	5.50	23.76	1.38	5.50	1	107.96
ESWMM125	CIRCULAR	5.00	19.63	1.25	5.00	1	250.85
1FQSWMM5	CIRCULAR	4.00	12.57	1.00	4.00	1	57.05
ESWMM71A	CIRCULAR	8.00	50.27	2.00	8.00	1	629.06
ESWMM126	CIRCULAR	8.00	50.27	2.00	8.00	1	37.88
ESWMM127	CIRCULAR	4.00	12.57	1.00	4.00	1	66.13
ESWMM128	CIRCULAR	4.00	12.57	1.00	4.00	1	241.70
ESWMM129	CIRCULAR	5.00	19.63	1.25	5.00	1	190.92
ESWMM132	CIRCULAR	4.50	15.90	1.13	4.50	1	181.08
60SDTOBPS	CIRCULAR	5.00	19.63	1.25	5.00	1	227.30
ESWMM135	CIRCULAR	5.50	23.76	1.38	5.50	1	84.26
ESWMM53	CIRCULAR	6.00	28.27	1.50	6.00	1	231.79
ESWMM75	CIRCULAR	7.50	44.18	1.88	7.50	1	212.43
1FOSWMM13	CIRCULAR	2.50	4.91	0.63	2.50	1	14.47
1FOSWMM14	CIRCULAR	2.50	4.91	0.63	2.50	1	14.68
1FOSWMM15	CIRCULAR	2.25	3.98	0.56	2.25	1	20.88
ESWMM201	CIRCULAR	1.50	1.77	0.38	1.50	1	1.58
ESWMM203	CIRCULAR	3.50	9.62	0.88	3.50	1	148.45
ESWMM200	CIRCULAR	6.00	28.27	1.50	6.00	1	118.82
ESWMM202	CIRCULAR	6.50	33.18	1.63	6.50	1	70.76
ESWMM500	CIRCULAR	4.00	12.57	1.00	4.00	1	45.85
ESWMM74	CIRCULAR	7.50	44.18	1.88	7.50	1	462.81
ESWMM74A	RECT_CLOSED	8.00	54.96	1.85	6.87	1	256.23
1FOSWMM4	CIRCULAR	4.50	15.90	1.13	4.50	1	38.59
1FOSWMM5	CIRCULAR	3.00	7.07	0.75	3.00	1	17.48
1FQSWMM1	CIRCULAR	4.50	15.90	1.13	4.50	1	53.52
1FQSWMM2	CIRCULAR	4.50	15.90	1.13	4.50	1	111.11
1FQSWMM3	CIRCULAR	2.00	3.14	0.50	2.00	1	22.01
1FQSWMM7	CIRCULAR	4.50	15.90	1.13	4.50	1	117.63
1FQSWMM8	CIRCULAR	2.50	4.91	0.63	2.50	1	29.21
O17SWMM200	CIRCULAR	2.00	3.14	0.50	2.00	1	14.85
O17SWMM201	CIRCULAR	2.00	3.14	0.50	2.00	1	25.69
O17SWMM202	CIRCULAR	2.00	3.14	0.50	2.00	1	24.26
ESWMM134	CIRCULAR	4.50	15.90	1.13	4.50	1	99.03
O24LINK1	CIRCULAR	3.00	7.07	0.75	3.00	1	5.06
O24LINK2	CIRCULAR	4.50	15.90	1.13	4.50	1	242.27
O24LINK3	CIRCULAR	2.00	3.14	0.50	2.00	1	9.49
O24LINK4	CIRCULAR	4.50	15.90	1.13	4.50	1	87.57

***** Control Actions Taken *****

	Volume acre-feet	Depth inches

Runoff Quantity Continuity		

Total Precipitation	527.113	2.600
Evaporation Loss	0.000	0.000
Infiltration Loss	127.079	0.627
Surface Runoff	360.760	1.779
Final Surface Storage	39.276	0.194
Continuity Error (%)	-0.000	

	Volume acre-feet	Volume 10^6 gal

Flow Routing Continuity		

Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	360.760	117.559

O25

```

Groundwater Inflow ..... 0.000      0.000
RDII Inflow ..... 0.000      0.000
External Inflow ..... 6.751      2.200
External Outflow ..... 363.841    118.563
Internal Outflow ..... 0.000      0.000
Storage Losses ..... 0.000      0.000
Initial Stored Volume .... 0.000      0.000
Final Stored Volume ..... 0.440      0.143
Continuity Error (%) ..... 0.879
  
```

***** Highest Continuity Errors *****

```

Node COA9453 (-2.83%)
Node COA7654 (2.60%)
Node COA9348 (2.19%)
Node COA9229 (-1.94%)
Node COA9015 (-1.70%)
  
```

***** Time-Step Critical Elements *****

```

Link ESWMM74A (1.35%)
  
```

***** Highest Flow Instability Indexes *****

```

Link ESWMM81 (4)
Link BARELASPUMPSTATION (2)
Link 024LINK2 (2)
Link BROADWAYPUMPSTATION (1)
Link 60SDTOBPS (1)
  
```

***** Routing Time Step Summary *****

```

Minimum Time Step      : 0.50 sec
Average Time Step      : 1.00 sec
Maximum Time Step      : 1.00 sec
Percent in Steady State : 0.00
Average Iterations per Step : 2.18
  
```

***** Subcatchment Runoff Summary *****

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
A1	2.60	0.00	0.00	0.87	1.66	1.46	18.12	0.640
A10	2.60	0.00	0.00	0.87	1.65	2.25	24.64	0.635
A11	2.60	0.00	0.00	0.68	1.85	1.83	31.47	0.712
A12	2.60	0.00	0.00	1.01	1.51	4.41	31.40	0.581
A13	2.60	0.00	0.00	0.66	1.85	6.20	42.35	0.712
A15	2.60	0.00	0.00	0.62	1.90	2.39	34.15	0.731
A18	2.60	0.00	0.00	0.99	1.54	1.77	24.46	0.594
A2	2.60	0.00	0.00	1.15	0.00	0.00	0.00	0.000
A3	2.60	0.00	0.00	1.34	1.19	2.86	30.31	0.458
A4	2.60	0.00	0.00	1.03	1.52	0.51	13.38	0.584
A5	2.60	0.00	0.00	1.02	1.51	3.22	30.62	0.581
A6	2.60	0.00	0.00	1.24	1.30	1.67	20.90	0.500
A7	2.60	0.00	0.00	0.93	1.60	1.66	24.08	0.614
A8	2.60	0.00	0.00	0.79	1.73	1.04	23.40	0.665
A9	2.60	0.00	0.00	0.79	1.73	1.37	22.71	0.665
B1	2.60	0.00	0.00	0.62	1.90	2.06	29.88	0.729

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B10	2.60	0.00	0.00	0.64	1.88	0.71	17.34	0.722
B11	2.60	0.00	0.00	1.43	1.15	0.39	11.10	0.443
B12	2.60	0.00	0.00	0.54	1.97	0.51	15.14	0.759
B13	2.60	0.00	0.00	0.71	1.81	0.98	19.53	0.694
B14	2.60	0.00	0.00	0.28	2.24	1.71	39.76	0.860
B15	2.60	0.00	0.00	0.18	2.32	2.63	36.32	0.892
B16	2.60	0.00	0.00	0.26	2.25	1.83	33.26	0.865
B17	2.60	0.00	0.00	0.20	0.00	0.00	0.00	0.000
B18	2.60	0.00	0.00	0.04	0.00	0.00	0.00	0.000
B20	2.60	0.00	0.00	0.26	2.24	1.03	29.73	0.863
B21	2.60	0.00	0.00	0.59	1.93	1.62	29.60	0.744
B22	2.60	0.00	0.00	0.56	1.97	1.79	29.56	0.757
B23	2.60	0.00	0.00	0.02	2.48	0.63	19.50	0.954
B24	2.60	0.00	0.00	0.24	0.00	0.00	0.00	0.000
B25	2.60	0.00	0.00	0.07	2.43	2.62	36.35	0.934
B26	2.60	0.00	0.00	0.60	0.00	0.00	0.00	0.000
B27	2.60	0.00	0.00	0.22	2.28	3.20	39.07	0.879
B28	2.60	0.00	0.00	0.59	1.92	3.38	31.67	0.738
B29	2.60	0.00	0.00	0.73	1.78	5.09	34.99	0.684
B3	2.60	0.00	0.00	0.64	1.90	0.26	10.25	0.731
B30	2.60	0.00	0.00	0.33	2.18	3.06	38.80	0.837
B31	2.60	0.00	0.00	0.27	2.23	2.64	34.75	0.858
B32	2.60	0.00	0.00	0.52	1.99	2.16	33.49	0.765
B33	2.60	0.00	0.00	0.62	1.90	2.63	29.54	0.730
B34	2.60	0.00	0.00	0.45	2.06	2.99	40.56	0.793
B35	2.60	0.00	0.00	0.33	2.18	1.90	41.36	0.839
B36	2.60	0.00	0.00	0.41	2.10	1.45	34.23	0.809
B4	2.60	0.00	0.00	0.95	1.58	0.26	8.48	0.607
B40	2.60	0.00	0.00	0.29	2.22	2.20	54.14	0.854
B41	2.60	0.00	0.00	0.10	1.15	0.77	11.31	0.442
B5	2.60	0.00	0.00	0.64	1.88	3.34	31.12	0.722
B6	2.60	0.00	0.00	0.62	1.90	0.36	10.61	0.729
B7	2.60	0.00	0.00	0.78	1.74	0.54	18.58	0.660
B8	2.60	0.00	0.00	0.65	1.87	1.20	22.18	0.710
BR1	2.60	0.00	0.00	0.38	2.15	1.69	70.88	0.820
BR10	2.60	0.00	0.00	1.08	1.49	1.47	42.40	0.572
BR11	2.60	0.00	0.00	0.53	2.00	0.53	31.84	0.769
BR12	2.60	0.00	0.00	1.40	1.19	0.72	5.47	0.457
BR13	2.60	0.00	0.00	0.46	2.06	1.63	55.48	0.794
BR14	2.60	0.00	0.00	0.19	2.31	1.24	37.01	0.889
BR16	2.60	0.00	0.00	1.45	1.14	0.80	4.82	0.437
BR17	2.60	0.00	0.00	0.65	1.89	2.52	60.64	0.726
BR18	2.60	0.00	0.00	0.39	2.14	1.92	57.19	0.822
BR19	2.60	0.00	0.00	0.40	2.12	1.51	42.71	0.815
BR2	2.60	0.00	0.00	0.89	1.64	0.25	13.33	0.630
BR20	2.60	0.00	0.00	0.18	2.33	1.53	33.72	0.895
BR21	2.60	0.00	0.00	0.26	2.26	1.46	64.21	0.868
BR3	2.60	0.00	0.00	0.53	2.00	2.02	55.96	0.770
BR4	2.60	0.00	0.00	0.35	2.17	2.33	78.00	0.836
BR5	2.60	0.00	0.00	0.47	2.07	0.60	32.53	0.797
BR6	2.60	0.00	0.00	0.32	2.19	1.70	42.89	0.841
BR9	2.60	0.00	0.00	0.26	2.25	3.37	45.33	0.864
B19.1	2.60	0.00	0.00	0.24	2.27	0.94	52.47	0.874
B19.2	2.60	0.00	0.00	0.24	2.27	0.74	44.71	0.874

Node Depth Summary

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min
COA6149	JUNCTION	0.11	1.98	4958.49	0 02:05
COA6231	JUNCTION	0.19	3.11	4958.17	0 02:05
COA6045	JUNCTION	0.15	3.48	4960.99	0 03:05
COA15184	JUNCTION	0.53	6.82	4961.01	0 03:10
COA6218	JUNCTION	0.45	7.22	4960.88	0 03:19
COA6195	JUNCTION	0.11	3.92	4966.89	0 01:32
COA6246	JUNCTION	0.14	3.73	4965.79	0 01:32

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COA29163	JUNCTION	0.13	3.45	4965.46	0	01:32
COA7635	JUNCTION	0.09	4.51	4961.85	0	01:32
COA7650	JUNCTION	0.14	4.78	4959.71	0	02:04
COA7656	JUNCTION	0.35	6.41	4959.58	0	02:05
COA7628	JUNCTION	0.20	1.41	4961.85	0	02:26
COA29132	JUNCTION	0.16	3.42	4965.27	0	01:34
COA33027	JUNCTION	0.04	1.57	4958.72	0	02:36
COA33007	JUNCTION	0.01	1.21	4996.08	0	00:16
COA7717	JUNCTION	0.25	8.92	4958.46	0	01:34
O24MH1	JUNCTION	0.85	10.30	4962.00	0	08:43
COA7654	JUNCTION	0.72	8.59	4960.26	0	05:48
COA7714	JUNCTION	0.61	4.56	4954.70	0	02:14
COA6259	JUNCTION	0.21	3.98	4957.70	0	02:06
COA7638	JUNCTION	0.78	4.45	4957.07	0	02:06
COA25807	JUNCTION	0.18	3.00	4956.18	0	02:06
COA25349	JUNCTION	0.39	11.08	4956.34	0	02:09
COA25656	JUNCTION	0.56	10.46	4959.32	0	02:24
COA25677	JUNCTION	0.66	10.97	4959.56	0	01:40
COA25622	JUNCTION	0.40	9.59	4957.83	0	01:56
COA7444	JUNCTION	0.17	7.72	4960.59	0	01:48
COA7476	JUNCTION	0.23	7.86	4958.18	0	01:54
COA7518	JUNCTION	0.32	8.95	4956.89	0	02:06
COA24834	JUNCTION	0.46	7.30	4951.82	0	02:47
COA8985	JUNCTION	0.45	11.38	4952.14	0	02:16
COA24859	JUNCTION	0.58	12.01	4950.65	0	01:49
COA9015	JUNCTION	0.08	8.45	4951.36	0	01:56
COA25105	JUNCTION	0.38	10.21	4956.52	0	01:49
COA25117	JUNCTION	0.44	11.29	4956.55	0	01:54
COA25048	JUNCTION	0.38	11.36	4956.28	0	01:54
COA25034	JUNCTION	0.43	10.70	4954.52	0	01:42
COA9045	JUNCTION	0.49	8.65	4950.26	0	01:40
COA25352	JUNCTION	0.40	11.31	4956.37	0	02:09
COA7815	JUNCTION	0.71	13.40	4956.88	0	02:06
COA25253	JUNCTION	0.90	12.95	4954.61	0	02:00
COA7977	JUNCTION	0.58	13.08	4955.02	0	02:04
COA25238	JUNCTION	0.88	13.47	4954.67	0	02:04
COA25240	JUNCTION	0.88	13.64	4954.79	0	02:04
COA22584	JUNCTION	0.64	14.49	4954.67	0	02:04
COA9260	JUNCTION	0.80	14.78	4952.80	0	02:00
COA7740	JUNCTION	0.64	8.25	4957.94	0	01:59
COA7830	JUNCTION	0.80	12.00	4956.87	0	02:00
COA7865	JUNCTION	0.63	10.46	4956.80	0	02:01
COA7908	JUNCTION	0.80	10.00	4956.15	0	02:03
COA7912	JUNCTION	0.25	10.68	4956.29	0	02:00
COA7955	JUNCTION	1.59	12.00	4955.49	0	01:57
COA22517	JUNCTION	0.29	11.00	4954.59	0	02:00
COA7716	JUNCTION	0.31	9.23	4958.11	0	01:34
COA7766JB	JUNCTION	0.62	12.33	4956.28	0	02:03
COA7769JB	JUNCTION	0.43	11.48	4956.00	0	02:03
COA32865	JUNCTION	0.47	11.62	4957.11	0	01:29
COA32878	JUNCTION	0.80	9.18	4955.78	0	02:03
COA7848	JUNCTION	0.15	8.71	4956.38	0	01:57
COA7861	JUNCTION	0.45	9.35	4957.11	0	03:01
COA7870	JUNCTION	0.07	3.28	4961.03	0	01:30
COA29178	JUNCTION	4.81	19.71	4976.49	0	01:22
COA7816	JUNCTION	0.72	13.17	4957.36	0	02:04
COA25109	JUNCTION	0.37	10.67	4956.54	0	01:51
BPSINLET	JUNCTION	0.72	16.90	4955.79	0	02:03
COA9310	JUNCTION	0.23	11.55	4953.95	0	01:57
COA9348	JUNCTION	0.37	11.79	4951.42	0	01:57
COA9344	JUNCTION	3.38	15.71	4951.54	0	01:59
COA9340	JUNCTION	2.76	16.65	4952.29	0	01:59
COA22250	JUNCTION	0.37	13.58	4951.14	0	02:02
COA22429	JUNCTION	0.31	13.07	4950.33	0	02:08
COA13866	JUNCTION	0.66	12.08	4947.44	0	02:00
COA24930	JUNCTION	0.33	11.05	4948.22	0	02:05
COA24916	JUNCTION	0.23	10.36	4948.61	0	02:00
COA9248	JUNCTION	0.09	10.07	4957.72	0	02:00
COA32981	JUNCTION	0.64	8.98	4940.37	0	02:00
COA9121	JUNCTION	0.61	8.78	4939.94	0	02:00
COA24902	JUNCTION	1.35	5.51	4944.58	0	01:54
COA24902A	JUNCTION	0.54	3.56	4943.29	0	01:56

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COA9069	JUNCTION	0.13	5.96	4946.81	0	01:54
COA24997	JUNCTION	0.53	10.27	4946.41	0	01:54
COA9083	JUNCTION	0.64	6.20	4941.53	0	01:56
UPSINLET	JUNCTION	0.24	5.66	4936.15	0	02:23
COA9407	JUNCTION	0.05	1.30	4945.70	0	01:30
COA9426	JUNCTION	0.07	2.03	4945.06	0	01:31
COA22194	JUNCTION	0.06	1.77	4943.77	0	01:31
COA22191	JUNCTION	0.06	1.81	4942.60	0	01:32
COA9431	JUNCTION	0.19	2.23	4941.50	0	01:33
COA22176	JUNCTION	0.07	2.26	4940.71	0	01:34
COA22168	JUNCTION	0.10	2.27	4938.83	0	01:57
COA22174	JUNCTION	0.52	10.77	4939.26	0	01:32
COA22155	JUNCTION	0.57	9.41	4937.76	0	01:57
COA9141	JUNCTION	0.60	8.02	4936.23	0	02:00
COA22410	JUNCTION	0.75	8.77	4937.13	0	02:00
COA9129	JUNCTION	0.59	8.89	4939.13	0	02:00
COA9143	JUNCTION	0.59	7.40	4934.68	0	02:00
COA22144	JUNCTION	0.69	6.87	4931.66	0	02:03
COA22145	JUNCTION	0.66	7.22	4933.07	0	02:02
COA22143	JUNCTION	0.73	6.58	4930.57	0	02:04
COA10456	JUNCTION	0.88	7.50	4930.26	0	05:43
BaPSINLET	JUNCTION	0.24	5.19	4927.20	0	02:04
COA7963.05A	JUNCTION	0.04	1.63	4973.61	0	00:13
COA7963.05M	JUNCTION	0.27	5.99	4958.68	0	02:37
COA7963.11A	JUNCTION	0.74	6.96	4958.63	0	02:33
COA7963.T	JUNCTION	0.58	8.59	4940.80	0	02:00
COA32878.A	JUNCTION	0.21	8.41	4955.60	0	01:57
COA32878.B	JUNCTION	0.26	9.60	4955.87	0	02:05
APSINLET	JUNCTION	0.27	8.44	4938.10	0	01:56
IRON14TH	JUNCTION	0.10	6.58	4945.65	0	01:54
BLDWEIR	JUNCTION	1.22	10.28	4956.88	0	01:56
BLUWEIR	JUNCTION	0.80	10.48	4957.08	0	01:56
COA22169	JUNCTION	0.01	1.08	4940.43	0	01:46
COA22127	JUNCTION	0.13	7.66	4945.52	0	01:45
COA32823	JUNCTION	0.07	3.06	4936.15	0	02:23
COA9453	JUNCTION	0.09	1.73	4940.80	0	01:46
MHB22410	JUNCTION	0.73	9.18	4937.60	0	02:00
COA9152	JUNCTION	5.08	10.84	4940.51	0	02:02
COA9229	JUNCTION	20.03	27.30	4940.45	0	02:05
MHB19A	JUNCTION	0.15	3.15	4936.15	0	02:24
MH3	JUNCTION	0.07	0.69	4964.69	0	02:05
MH2	JUNCTION	0.06	0.63	4971.13	0	02:05
MH1	JUNCTION	0.09	0.89	4974.89	0	02:03
APSOUTLET	OUTFALL	0.00	0.00	4960.84	0	00:00
BPSOUTLET	OUTFALL	0.00	0.00	5106.00	0	00:00
BaPSOUTLET	OUTFALL	0.00	0.00	4941.69	0	00:00
AIRQUALITYPOND	STORAGE	0.34	6.41	4958.67	0	02:37
TINGLEYPARKSURGEPOND	STORAGE	0.58	8.47	4940.68	0	02:27
NORTHWELLSPOND	STORAGE	0.82	6.93	4957.93	0	05:30
SANTABARBOND	STORAGE	0.22	2.01	4963.01	0	02:48
McknightPond	STORAGE	0.72	8.79	4960.79	0	03:22
MARBLEARNOPOND	STORAGE	0.69	11.07	4957.07	0	03:01

Node Inflow Summary

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal
COA6149	JUNCTION	11.31	11.31	0 02:03	0.774	0.777
COA6231	JUNCTION	29.54	39.82	0 02:03	2.632	3.410
COA6045	JUNCTION	34.23	34.23	0 01:33	1.448	1.448
COA15184	JUNCTION	40.56	72.15	0 01:42	2.986	4.435
COA6218	JUNCTION	0.00	71.63	0 01:42	0.000	4.399
COA6195	JUNCTION	57.19	57.19	0 01:30	1.922	1.922
COA6246	JUNCTION	0.00	55.97	0 01:32	0.000	1.923
COA29163	JUNCTION	0.00	56.28	0 01:33	0.000	1.922

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COA7635	JUNCTION	37.01	37.01	0	01:32	1.242	1.242
COA7650	JUNCTION	0.00	37.31	0	01:31	0.000	1.241
COA7656	JUNCTION	55.48	92.35	0	01:31	1.634	9.009
COA7628	JUNCTION	0.00	31.10	0	03:15	0.000	5.921
COA29132	JUNCTION	63.83	119.54	0	01:33	3.317	5.239
COA33027	JUNCTION	31.84	42.12	0	00:16	0.529	1.634
COA33007	JUNCTION	43.49	43.49	0	00:15	0.809	0.809
COA7717	JUNCTION	45.33	91.44	0	02:09	3.367	16.210
O24MH1	JUNCTION	0.00	45.84	0	02:34	0.000	8.543
COA7654	JUNCTION	34.75	70.11	0	02:10	2.641	11.176
COA7714	JUNCTION	0.00	35.70	0	05:42	0.000	14.206
COA6259	JUNCTION	0.00	39.19	0	02:05	0.000	3.405
COA7638	JUNCTION	33.49	69.28	0	01:59	2.159	5.565
COA25807	JUNCTION	0.00	69.11	0	02:04	0.000	5.560
COA25349	JUNCTION	34.99	158.46	0	02:15	5.088	10.651
COA25656	JUNCTION	31.40	31.40	0	02:03	4.407	4.407
COA25677	JUNCTION	0.00	76.04	0	01:39	0.000	4.538
COA25622	JUNCTION	22.71	45.96	0	01:38	1.367	5.835
COA7444	JUNCTION	36.85	36.85	0	01:48	2.893	2.893
COA7476	JUNCTION	24.46	70.61	0	01:48	1.767	4.646
COA7518	JUNCTION	31.47	89.98	0	01:44	1.826	6.456
COA24834	JUNCTION	42.35	120.44	0	02:03	6.199	12.697
COA8985	JUNCTION	20.90	102.17	0	01:39	1.667	14.365
COA24859	JUNCTION	13.38	123.85	0	01:39	0.512	14.799
COA9015	JUNCTION	0.00	38.21	0	01:44	0.000	1.884
COA25105	JUNCTION	23.40	67.43	0	01:36	1.036	6.856
COA25117	JUNCTION	0.00	77.93	0	01:43	0.000	6.675
COA25048	JUNCTION	24.64	100.39	0	01:39	2.246	8.843
COA25034	JUNCTION	24.08	115.95	0	01:50	1.659	10.581
COA9045	JUNCTION	30.62	124.76	0	01:49	3.221	13.735
COA25352	JUNCTION	0.00	256.73	0	02:15	0.000	10.623
COA7815	JUNCTION	0.00	244.65	0	01:56	0.000	31.752
COA25253	JUNCTION	0.00	172.02	0	02:07	0.000	31.541
COA7977	JUNCTION	0.00	189.71	0	02:07	0.000	31.583
COA25238	JUNCTION	0.00	166.28	0	02:04	0.000	31.668
COA25240	JUNCTION	0.00	162.84	0	02:04	0.000	31.732
COA22584	JUNCTION	0.00	167.37	0	02:04	0.000	31.735
COA9260	JUNCTION	47.72	200.43	0	02:00	2.416	34.156
COA7740	JUNCTION	39.07	48.96	0	02:38	3.196	17.261
COA7830	JUNCTION	0.00	118.62	0	02:04	0.000	20.372
COA7865	JUNCTION	36.35	94.39	0	02:04	2.616	5.047
COA7908	JUNCTION	0.00	162.96	0	02:03	0.000	5.024
COA7912	JUNCTION	0.00	155.60	0	02:03	0.000	5.015
COA7955	JUNCTION	0.00	96.16	0	02:11	0.000	5.037
COA22517	JUNCTION	29.72	140.64	0	02:12	1.033	7.728
COA7716	JUNCTION	0.00	91.45	0	02:09	0.000	16.205
COA7766JB	JUNCTION	42.89	131.92	0	01:34	1.700	18.301
COA7769JB	JUNCTION	0.00	74.15	0	01:28	0.000	13.329
COA32865	JUNCTION	0.00	29.55	0	06:43	0.000	7.961
COA32878	JUNCTION	42.70	126.98	0	02:05	1.509	2.364
COA7848	JUNCTION	33.72	79.74	0	01:49	1.525	3.223
COA7861	JUNCTION	77.99	211.66	0	01:30	2.334	5.747
COA7870	JUNCTION	64.21	135.08	0	01:30	1.729	3.415
COA29178	JUNCTION	70.87	70.87	0	01:30	1.688	1.688
COA7816	JUNCTION	31.67	148.59	0	02:31	3.382	21.382
COA25109	JUNCTION	0.00	87.53	0	01:44	0.000	6.779
BPSINLET	JUNCTION	0.00	130.84	0	02:03	0.000	25.755
COA9310	JUNCTION	0.00	114.04	0	02:00	0.000	7.603
COA9348	JUNCTION	33.26	152.74	0	01:57	1.828	9.406
COA9344	JUNCTION	36.32	227.88	0	01:57	2.630	11.830
COA9340	JUNCTION	0.00	171.78	0	02:02	0.000	11.818
COA22250	JUNCTION	0.00	165.58	0	01:57	0.000	11.841
COA22429	JUNCTION	39.76	191.27	0	02:00	1.715	13.511
COA13866	JUNCTION	19.53	413.42	0	02:08	0.982	51.941
COA24930	JUNCTION	29.60	64.67	0	01:54	1.623	3.126
COA24916	JUNCTION	18.12	44.84	0	01:53	1.463	1.610
COA9248	JUNCTION	44.71	49.07	0	01:30	0.742	1.696
COA32981	JUNCTION	0.00	318.45	0	02:41	0.000	52.296
COA9121	JUNCTION	0.00	318.45	0	02:41	0.000	52.296
COA24902	JUNCTION	0.00	133.04	0	01:40	0.000	13.753
COA24902A	JUNCTION	0.00	138.18	0	01:56	0.000	15.210
COA9069	JUNCTION	30.31	57.15	0	02:00	2.864	4.775

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COA24997	JUNCTION	0.00	92.70	0	01:54	0.000	16.144
COA9083	JUNCTION	0.00	226.01	0	01:56	0.000	31.351
UPSINLET	JUNCTION	0.00	11.39	0	02:23	0.000	0.956
COA9407	JUNCTION	15.13	15.13	0	01:30	0.509	0.509
COA9426	JUNCTION	18.58	32.99	0	01:30	0.545	1.054
COA22194	JUNCTION	0.00	32.75	0	01:31	0.000	1.048
COA22191	JUNCTION	0.00	32.66	0	01:32	0.000	1.052
COA9431	JUNCTION	10.61	42.43	0	01:32	0.363	1.414
COA22176	JUNCTION	0.00	42.16	0	01:33	0.000	1.414
COA22168	JUNCTION	31.12	67.89	0	01:35	3.340	4.838
COA22174	JUNCTION	8.48	74.04	0	01:35	0.256	5.094
COA22155	JUNCTION	17.34	90.35	0	01:35	0.708	5.802
COA9141	JUNCTION	10.25	385.10	0	02:00	0.262	59.557
COA22410	JUNCTION	0.00	325.92	0	02:35	0.000	53.494
COA9129	JUNCTION	0.00	318.45	0	02:41	0.000	52.296
COA9143	JUNCTION	0.00	386.69	0	01:53	0.000	59.558
COA22144	JUNCTION	0.00	383.73	0	01:59	0.000	59.559
COA22145	JUNCTION	0.00	383.93	0	01:58	0.000	59.558
COA22143	JUNCTION	0.00	383.61	0	01:59	0.000	59.559
COA10456	JUNCTION	0.00	408.51	0	01:56	0.000	61.573
BaPSINLET	JUNCTION	0.00	406.42	0	01:56	0.000	61.619
COA7963.05A	JUNCTION	48.69	48.69	0	00:12	1.226	1.226
COA7963.05M	JUNCTION	42.40	74.22	0	01:30	1.472	2.707
COA7963.11A	JUNCTION	0.00	85.14	0	01:33	0.000	13.318
COA7963.T	JUNCTION	0.00	351.69	0	02:00	0.000	52.467
COA32878.A	JUNCTION	0.00	110.85	0	02:09	0.000	1.425
COA32878.B	JUNCTION	13.33	50.90	0	02:05	0.252	1.484
APSINLET	JUNCTION	0.00	226.63	0	01:56	0.000	31.351
IRON14TH	JUNCTION	0.00	40.73	0	01:53	0.000	0.122
BLDWEIR	JUNCTION	0.00	52.93	0	01:49	0.000	1.726
BLUWEIR	JUNCTION	0.00	55.33	0	02:06	0.000	1.732
COA22169	JUNCTION	0.00	5.89	0	01:46	0.000	0.084
COA22127	JUNCTION	29.88	29.88	0	01:41	2.064	2.072
COA32823	JUNCTION	0.00	13.58	0	01:45	0.000	0.982
COA9453	JUNCTION	0.00	10.52	0	01:45	0.000	0.090
MHB22410	JUNCTION	22.18	325.90	0	02:36	1.198	53.494
COA9152	JUNCTION	52.47	52.47	0	01:30	0.944	0.944
COA9229	JUNCTION	0.00	47.33	0	01:30	0.000	0.938
MHB19A	JUNCTION	0.00	2.06	0	01:46	0.000	0.026
MH3	JUNCTION	0.00	5.41	0	02:05	0.000	0.719
MH2	JUNCTION	0.00	5.44	0	02:03	0.000	0.719
MH1	JUNCTION	5.47	5.47	0	02:03	0.719	0.719
APSOUTLET	OUTFALL	0.00	226.46	0	01:56	0.000	31.351
BPSOUTLET	OUTFALL	0.00	130.00	0	01:56	0.000	25.755
BaPSOUTLET	OUTFALL	0.00	405.00	0	01:56	0.000	61.449
AIRQUALITYPOND	STORAGE	0.00	114.72	0	01:31	0.000	4.610
TINGLEYPARKSURGEPOD	STORAGE	11.10	70.17	0	02:00	0.388	0.554
NORTHWELLSPOND	STORAGE	38.79	125.18	0	02:02	3.059	14.057
SANTABARBOND	STORAGE	0.00	133.74	0	01:34	0.000	5.960
McknightPond	STORAGE	95.40	163.77	0	01:39	4.099	8.524
MARBLEARNOPOND	STORAGE	55.96	280.53	0	01:30	2.024	7.875

***** Node Surcharge Summary *****

Surcharging occurs when water rises above the top of the highest conduit.

Node	Type	Hours Surcharged	Max. Height Above Crown Feet	Min. Depth Below Rim Feet
COA15184	JUNCTION	4.47	2.135	3.225
COA6218	JUNCTION	4.66	2.251	2.119
COA7635	JUNCTION	0.51	1.513	2.777
COA7650	JUNCTION	0.86	0.776	3.574
COA7656	JUNCTION	2.01	1.473	3.037
COA7717	JUNCTION	1.59	4.796	0.274
O24MH1	JUNCTION	8.41	5.800	0.000
COA7654	JUNCTION	5.92	4.091	0.000
COA7714	JUNCTION	0.29	0.556	3.304

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COA25349	JUNCTION	1.71	5.577	0.000
COA25656	JUNCTION	3.51	7.462	0.000
COA25677	JUNCTION	1.95	7.904	0.000
COA25622	JUNCTION	1.61	6.448	0.000
COA7444	JUNCTION	0.32	3.220	0.000
COA7476	JUNCTION	0.66	3.359	0.000
COA7518	JUNCTION	1.80	4.451	0.000
COA24834	JUNCTION	2.90	2.801	0.000
COA8985	JUNCTION	3.01	6.881	0.000
COA24859	JUNCTION	2.68	4.507	0.000
COA9015	JUNCTION	0.03	5.451	0.000
COA25105	JUNCTION	1.76	6.206	0.000
COA25117	JUNCTION	1.60	7.274	0.000
COA25048	JUNCTION	0.82	6.360	0.000
COA25034	JUNCTION	0.84	5.701	0.000
COA9045	JUNCTION	0.35	3.591	0.000
COA25352	JUNCTION	1.80	5.812	0.000
COA7815	JUNCTION	1.89	7.302	0.000
COA25253	JUNCTION	1.79	6.952	0.000
COA7977	JUNCTION	1.50	7.080	0.000
COA25238	JUNCTION	1.59	7.240	0.000
COA25240	JUNCTION	1.15	7.328	0.232
COA22584	JUNCTION	1.51	8.490	0.000
COA9260	JUNCTION	1.48	7.780	0.000
COA7740	JUNCTION	0.20	3.750	0.000
COA7830	JUNCTION	0.57	4.291	0.000
COA7865	JUNCTION	0.69	4.980	0.000
COA7908	JUNCTION	0.76	5.002	0.000
COA7912	JUNCTION	0.57	4.460	0.000
COA7955	JUNCTION	0.72	5.114	0.000
COA22517	JUNCTION	1.22	5.504	0.000
COA7716	JUNCTION	2.18	5.050	0.000
COA7766JB	JUNCTION	4.90	7.620	0.000
COA7769JB	JUNCTION	4.29	6.480	0.330
COA32865	JUNCTION	4.97	8.100	0.000
COA32878	JUNCTION	0.75	3.159	0.000
COA7848	JUNCTION	0.13	2.712	0.000
COA7861	JUNCTION	5.81	4.852	0.828
COA29178	JUNCTION	0.76	12.436	0.000
COA7816	JUNCTION	1.82	7.171	0.000
COA25109	JUNCTION	1.82	6.674	0.000
BPSINLET	JUNCTION	4.56	6.803	4.097
COA9310	JUNCTION	1.23	6.051	0.000
COA9348	JUNCTION	1.58	5.753	0.000
COA9344	JUNCTION	1.74	6.353	0.000
COA9340	JUNCTION	1.86	7.981	0.000
COA22250	JUNCTION	1.87	7.581	0.000
COA22429	JUNCTION	1.82	7.071	0.000
COA13866	JUNCTION	1.20	4.081	0.000
COA24930	JUNCTION	1.27	5.050	0.000
COA24916	JUNCTION	0.97	4.830	0.000
COA9248	JUNCTION	0.02	6.074	0.000
COA32981	JUNCTION	1.09	0.982	8.878
COA9121	JUNCTION	1.32	1.275	8.725
COA9069	JUNCTION	0.11	2.850	2.840
COA24997	JUNCTION	0.76	3.431	3.079
COA9083	JUNCTION	0.35	0.699	6.421
UPSINLET	JUNCTION	2.22	2.163	22.997
COA22174	JUNCTION	2.64	5.771	5.809
COA22155	JUNCTION	2.69	4.405	7.485
COA9141	JUNCTION	0.38	0.524	9.856
COA22410	JUNCTION	0.77	0.768	9.982
COA9129	JUNCTION	1.36	1.390	7.120
COA7963.05M	JUNCTION	1.89	0.988	4.322
COA7963.11A	JUNCTION	3.41	2.736	2.524
COA7963.T	JUNCTION	1.00	0.589	0.659
COA32878.A	JUNCTION	1.89	3.906	0.000
COA32878.B	JUNCTION	3.44	5.097	0.000
BLDWEIR	JUNCTION	0.64	4.284	0.000
BLUWEIR	JUNCTION	0.74	4.478	0.000
COA22127	JUNCTION	0.51	5.160	0.000
MHB22410	JUNCTION	1.11	1.183	9.567

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COA9229	JUNCTION	0.82	1.296	0.000
AIRQUALITYPOND	STORAGE	2.28	1.414	5.986
TINGLEYPARKSURGEPOND	STORAGE	1.00	0.473	7.977
NORTHWELLSPOND	STORAGE	8.62	2.430	2.070
McKnightPond	STORAGE	8.10	4.291	1.209
MARBLEARNOPOND	STORAGE	7.10	6.575	0.925

***** Node Flooding Summary *****

Flooding refers to all water that overflows a node, whether it ponds or not.

Node	Hours Flooded	Maximum Rate CFS	Time of Max Occurrence days hr:min	Total Flood Volume 10^6 gal	Maximum Ponded Depth Feet
COA7654	2.94	21.56	0 05:48	0.326	8.59
COA25349	0.19	135.17	0 02:15	0.062	11.08
COA25656	1.90	22.33	0 01:57	0.243	10.46
COA25677	0.73	65.27	0 01:40	0.063	10.97
COA25622	0.79	28.90	0 01:40	0.058	9.59
COA7444	0.21	14.61	0 01:44	0.014	7.72
COA7476	0.59	27.92	0 01:45	0.054	7.86
COA7518	0.80	27.00	0 01:43	0.104	8.95
COA24834	2.89	68.66	0 01:56	1.110	7.30
COA8985	0.43	52.38	0 02:16	0.077	11.38
COA24859	0.14	44.61	0 02:01	0.026	12.01
COA9015	0.01	12.48	0 01:54	0.001	8.45
COA25105	0.35	37.69	0 02:11	0.040	10.21
COA25117	0.12	69.81	0 01:54	0.020	11.29
COA25048	0.10	37.89	0 01:43	0.018	11.36
COA25034	0.14	41.10	0 01:44	0.023	10.70
COA9045	0.05	31.63	0 01:39	0.005	8.65
COA25352	0.09	155.67	0 02:15	0.017	11.31
COA7815	0.17	92.36	0 02:24	0.079	13.40
COA25253	0.01	21.08	0 02:00	0.003	12.95
COA7977	0.01	8.58	0 02:04	0.000	13.08
COA25238	0.01	20.39	0 02:04	0.000	13.47
COA22584	0.01	22.93	0 02:04	0.001	14.49
COA9260	0.01	31.93	0 02:04	0.003	14.78
COA7830	0.01	58.14	0 02:00	0.003	12.00
COA7865	0.01	21.05	0 02:04	0.001	10.46
COA7908	0.01	135.10	0 02:03	0.002	10.00
COA7912	0.01	20.14	0 02:00	0.001	10.68
COA7955	0.05	35.21	0 02:00	0.010	12.00
COA22517	0.22	50.17	0 02:00	0.051	11.00
COA7716	0.01	6.14	0 01:34	0.000	9.23
COA7766JB	0.01	0.53	0 02:03	0.000	12.33
COA32878	0.06	91.45	0 02:00	0.018	9.18
COA7848	0.01	31.84	0 01:59	0.003	8.71
COA7816	0.22	78.99	0 01:57	0.073	13.17
COA25109	0.21	48.77	0 02:14	0.028	10.67
COA9310	0.05	42.04	0 01:53	0.010	11.55
COA9348	0.06	59.16	0 01:56	0.014	11.79
COA9344	0.02	57.59	0 01:56	0.006	15.71
COA9340	0.01	57.28	0 02:02	0.003	16.65
COA22250	0.01	86.35	0 02:02	0.004	13.58
COA22429	0.02	97.60	0 02:08	0.008	13.07
COA13866	0.01	32.81	0 02:00	0.001	12.08
COA24930	0.06	27.10	0 02:05	0.012	11.05
COA24916	0.01	27.53	0 02:00	0.003	10.36
COA9248	0.02	13.89	0 01:56	0.001	10.07
COA32878.A	0.12	82.67	0 02:06	0.032	8.41
COA32878.B	0.05	47.89	0 02:05	0.010	9.60
COA22127	0.03	4.08	0 01:45	0.001	7.66
COA9229	0.52	9.60	0 01:51	0.024	27.30

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Storage Volume Summary

Storage Unit	Average Volume 1000 ft3	Avg Pcnt Full	E&I Pcnt Loss	Maximum Volume 1000 ft3	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS
AIRQUALITYPOND	7.947	1	0	272.478	39	0 02:37	33.54
TINGLEYPARKSURGEPOND	0.211	0	0	24.912	1	0 02:27	23.35
NORTHWELLSPOND	60.781	8	0	537.784	75	0 05:30	35.70
SANTABARBOND	28.483	2	0	260.254	16	0 02:48	31.10
McknightPond	32.620	7	0	419.218	86	0 03:22	45.84
MARBLEARNOPOND	35.174	5	0	588.286	91	0 03:01	29.55

Outfall Loading Summary

Outfall Node	Flow Freq. Pcnt.	Avg. Flow CFS	Max. Flow CFS	Total Volume 10^6 gal
APSOUTLET	99.35	8.89	226.46	31.351
BPSOUTLET	99.77	7.16	130.00	25.755
BaPSOUTLET	94.83	18.30	405.00	61.449
System	97.98	34.35	756.52	118.554

Link Flow Summary

Link	Type	Maximum Flow CFS	Time of Max Occurrence days hr:min	Maximum Veloc ft/sec	Max/ Full Flow	Max/ Full Depth
ESWMM57	CONDUIT	10.90	0 02:06	1.97	0.31	0.66
1FOSWMM6	CONDUIT	33.50	0 01:37	3.67	0.29	0.89
1FOSWMM7	CONDUIT	71.63	0 01:42	5.49	3.99	1.00
1FQSWMM17	CONDUIT	55.97	0 01:32	3.92	0.81	0.85
1FQSWMM18	CONDUIT	56.28	0 01:33	4.15	1.51	0.80
1FOSWMM19	CONDUIT	37.31	0 01:31	5.49	0.96	1.00
1FOSWMM20	CONDUIT	36.16	0 01:37	2.92	0.43	1.00
ESWMM41	CONDUIT	9.41	0 00:16	5.67	0.52	0.89
1FOSWMM22	CONDUIT	31.09	0 02:26	6.27	0.27	0.68
ESWMM42	CONDUIT	42.12	0 00:16	13.85	0.17	0.29
1FQSWMM4	CONDUIT	85.14	0 01:33	6.77	0.93	1.00
1FQSWMM9	CONDUIT	45.83	0 02:34	2.88	6.14	1.00
ESWMM58	CONDUIT	39.19	0 02:05	4.44	0.61	0.81
ESWMM59	CONDUIT	39.91	0 02:10	2.64	0.64	0.94
ESWMM60	CONDUIT	69.11	0 02:04	5.44	0.89	0.83
ESWMM91	CONDUIT	52.36	0 02:06	7.41	4.21	1.00
ESWMM92	CONDUIT	35.76	0 02:50	5.06	3.30	1.00
1FQSWMM10	CONDUIT	46.72	0 01:48	3.78	0.59	1.00
1FQSWMM11	CONDUIT	66.29	0 02:21	4.17	0.70	1.00
1FQSWMM12	CONDUIT	78.37	0 01:48	4.93	0.99	1.00
1FQSWMM13	CONDUIT	84.74	0 02:16	5.33	0.91	1.00
1FQSWMM14	CONDUIT	115.56	0 02:16	7.27	0.91	1.00
ESWMM6	CONDUIT	38.21	0 01:44	6.75	3.33	1.00
ESWMM93	CONDUIT	49.41	0 02:01	6.99	1.64	1.00
ESWMM94	CONDUIT	87.53	0 01:44	6.97	1.66	1.00
ESWMM96	CONDUIT	76.51	0 01:39	6.09	1.97	1.00
ESWMM97	CONDUIT	93.11	0 01:50	4.74	1.00	1.00
ESWMM98	CONDUIT	95.78	0 01:39	4.95	1.20	1.00
ESWMM61	CONDUIT	89.88	0 02:08	4.80	0.54	0.77
ESWMM62	CONDUIT	256.73	0 02:15	10.81	1.43	1.00
ESWMM63	CONDUIT	150.48	0 02:12	6.33	0.80	1.00

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ESWMM64	CONDUIT	172.02	0	02:07	6.08	1.25	1.00
ESWMM65	CONDUIT	189.71	0	02:07	6.71	0.41	1.00
ESWMM66	CONDUIT	166.28	0	02:04	5.88	0.69	1.00
ESWMM67	CONDUIT	162.84	0	02:04	5.76	0.89	1.00
ESWMM68	CONDUIT	167.37	0	02:04	5.92	0.83	1.00
ESWMM69	CONDUIT	163.72	0	02:04	5.79	0.87	1.00
ESWMM30	CONDUIT	35.72	0	05:43	2.99	0.80	1.00
ESWMM29	CONDUIT	52.16	0	02:32	4.35	0.72	1.00
ESWMM28	CONDUIT	59.32	0	02:04	3.75	0.81	1.00
ESWMM27	CONDUIT	94.01	0	02:02	4.79	1.68	1.00
ESWMM26	CONDUIT	155.60	0	02:03	7.92	0.28	1.00
ESWMM25	CONDUIT	96.16	0	02:11	4.90	1.21	1.00
ESWMM24	CONDUIT	93.87	0	02:12	3.95	0.82	1.00
ESWMM50	CONDUIT	70.87	0	01:30	10.25	3.58	0.94
ESWMM51	CONDUIT	134.17	0	01:30	12.66	0.73	0.79
BLUPIPE	CONDUIT	55.33	0	02:06	1.96	1.72	1.00
1FQSWMM6	CONDUIT	91.45	0	02:09	7.86	0.16	1.00
ESWMM47	CONDUIT	91.80	0	02:06	5.08	0.45	1.00
ESWMM48	CONDUIT	59.81	0	01:34	4.76	0.58	1.00
ESWMM49	CONDUIT	29.75	0	06:41	5.71	0.56	1.00
ESWMM54	CONDUIT	69.66	0	01:43	3.91	0.40	1.00
ESWMM55	CONDUIT	125.25	0	02:31	4.43	1.14	1.00
ESWMM56	CONDUIT	124.44	0	01:57	4.40	1.10	1.00
ESWMM95	CONDUIT	77.93	0	01:43	6.20	1.50	1.00
48SDTOBPS	CONDUIT	72.63	0	01:34	5.78	1.72	1.00
ESWMM23	CONDUIT	48.85	0	01:30	5.30	0.54	1.00
ESWMM22	CONDUIT	114.04	0	02:00	4.80	1.11	1.00
ESWMM21	CONDUIT	122.26	0	01:57	5.15	0.78	1.00
ESWMM20	CONDUIT	191.73	0	01:57	6.78	1.36	1.00
ESWMM19	CONDUIT	171.78	0	02:02	6.08	1.13	1.00
ESWMM18	CONDUIT	165.58	0	01:57	5.86	1.08	1.00
ESWMM17	CONDUIT	160.32	0	02:00	5.67	1.42	1.00
ESWMM16	CONDUIT	191.07	0	02:00	6.76	0.77	1.00
ESWMM70	CONDUIT	191.44	0	02:00	4.97	0.94	1.00
ESWMM15	CONDUIT	64.00	0	01:55	3.28	0.54	1.00
ESWMM71	CONDUIT	351.69	0	02:00	7.00	0.75	1.00
ESWMM72	CONDUIT	318.45	0	02:41	7.21	0.77	1.00
ESWMM7	CONDUIT	28.03	0	02:00	4.25	1.22	1.00
ESWMM12	CONDUIT	114.95	0	01:54	6.74	1.77	0.69
ESWMM9	CONDUIT	23.75	0	01:48	3.36	0.81	1.00
ESWMM99	CONDUIT	133.04	0	01:40	7.63	1.35	0.92
ESWMM8	CONDUIT	34.46	0	01:48	10.27	0.26	1.00
ESWMM10	CONDUIT	92.80	0	01:56	7.38	1.51	1.00
ESWMM11	CONDUIT	134.69	0	01:56	7.77	0.50	0.83
ESWMM90	CONDUIT	15.00	0	01:31	3.38	0.28	0.47
ESWMM89	CONDUIT	32.75	0	01:31	5.60	0.46	0.47
ESWMM88	CONDUIT	32.66	0	01:32	5.58	0.28	0.40
ESWMM87	CONDUIT	32.49	0	01:33	4.71	0.26	0.45
ESWMM86	CONDUIT	42.16	0	01:33	5.56	0.31	0.48
ESWMM85	CONDUIT	41.98	0	01:34	6.83	0.41	0.42
ESWMM84	CONDUIT	67.85	0	01:35	5.08	0.18	0.73
ESWMM83	CONDUIT	74.04	0	01:35	3.77	1.61	1.00
ESWMM82	CONDUIT	90.34	0	01:35	4.92	3.87	1.00
ESWMM73	CONDUIT	318.45	0	02:41	7.21	0.78	1.00
ESWMM76	CONDUIT	386.69	0	01:53	8.81	0.76	0.99
ESWMM77	CONDUIT	383.93	0	01:58	8.82	0.81	0.97
ESWMM78	CONDUIT	383.73	0	01:59	8.95	0.93	0.94
ESWMM79	CONDUIT	383.61	0	01:59	9.24	0.79	0.90
ESWMM80	CONDUIT	383.41	0	01:57	9.63	0.78	0.91
ESWMM81	CONDUIT	406.42	0	01:56	15.45	0.95	0.76
ESWMM14	CONDUIT	39.71	0	01:54	1.67	0.35	1.00
ESWMM13	CONDUIT	40.73	0	01:53	1.75	0.38	1.00
ESWMM125	CONDUIT	47.63	0	00:14	7.68	0.19	0.57
1FQSWMM5	CONDUIT	67.21	0	03:33	5.52	1.18	1.00
ESWMM71A	CONDUIT	318.45	0	02:41	6.36	0.51	1.00
ESWMM126	CONDUIT	66.95	0	02:00	1.71	1.77	1.00
ESWMM127	CONDUIT	40.94	0	01:35	3.93	0.62	1.00
ESWMM128	CONDUIT	32.77	0	00:16	8.70	0.14	0.70
ESWMM129	CONDUIT	66.52	0	01:30	6.86	0.35	1.00
ESWMM132	CONDUIT	98.19	0	02:09	6.17	0.54	1.00
60SDTOBPS	CONDUIT	68.05	0	02:04	6.37	0.30	1.00
ESWMM135	CONDUIT	226.63	0	01:56	10.21	2.69	0.88

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ESWMM53	CONDUIT	54.18	0	02:10	2.73	0.23	1.00
ESWMM75	CONDUIT	325.95	0	02:38	7.43	1.53	1.00
1FOSWMM13	CONDUIT	5.89	0	01:46	2.09	0.41	0.56
1FOSWMM14	CONDUIT	10.52	0	01:45	2.76	0.72	0.82
1FOSWMM15	CONDUIT	26.36	0	01:45	7.01	1.26	0.90
ESWMM201	CONDUIT	13.58	0	01:45	7.79	8.62	1.00
ESWMM203	CONDUIT	11.39	0	02:23	9.58	0.08	0.94
ESWMM200	CONDUIT	47.33	0	01:30	3.40	0.40	0.99
ESWMM202	CONDUIT	2.06	0	01:46	1.08	0.03	0.48
ESWMM500	CONDUIT	66.90	0	01:40	5.32	1.46	1.00
ESWMM74	CONDUIT	318.46	0	02:41	7.21	0.69	1.00
ESWMM74A	CONDUIT	325.92	0	02:35	6.00	1.27	1.00
1FOSWMM4	CONDUIT	70.23	0	02:34	5.56	1.82	1.00
1FOSWMM5	CONDUIT	35.70	0	05:42	5.05	2.04	1.00
1FQSWMM1	CONDUIT	56.64	0	01:33	4.40	1.06	0.76
1FQSWMM2	CONDUIT	130.91	0	01:34	20.85	1.18	0.47
1FQSWMM3	CONDUIT	31.10	0	03:15	11.29	1.41	0.85
1FQSWMM7	CONDUIT	70.24	0	01:40	8.64	0.60	1.00
1FQSWMM8	CONDUIT	45.84	0	02:34	9.34	1.57	1.00
O17SWMM200	CONDUIT	5.44	0	02:03	4.97	0.37	0.38
O17SWMM201	CONDUIT	5.41	0	02:05	6.01	0.21	0.33
O17SWMM202	CONDUIT	5.44	0	02:06	5.86	0.22	0.40
ESWMM134	CONDUIT	26.27	0	01:27	3.39	0.27	1.00
O24LINK1	CONDUIT	5.69	0	01:47	3.15	1.12	0.30
O24LINK2	CONDUIT	211.49	0	01:30	20.61	0.87	1.00
O24LINK3	CONDUIT	29.55	0	06:43	9.41	3.11	1.00
O24LINK4	CONDUIT	45.88	0	02:04	4.04	0.52	1.00
BROADWAYPUMPSTATION	PUMP	130.00	0	01:56		1.00	
ALCALDEPUMPSTATION	PUMP	226.46	0	01:56		0.84	
URBANPUMPSTATION	PUMP	11.38	0	02:23		0.95	
BARELASPUMPSTATION	PUMP	405.00	0	01:56		1.00	
WEIRIRON14TH	WEIR	13.82	0	01:54			0.15
WEIRBROADWAY	WEIR	52.93	0	01:49			1.00

***** Flow Classification Summary *****

Conduit	Adjusted /Actual Length	--- Fraction of Time in Flow Class ---							Avg. Froude Number	Avg. Flow Change
		Dry	Up Dry	Down Dry	Sub Crit	Sup Crit	Up Crit	Down Crit		
ESWMM57	1.00	0.01	0.00	0.00	0.05	0.00	0.00	0.94	0.32	0.0000
1FOSWMM6	1.00	0.01	0.00	0.00	0.37	0.00	0.00	0.63	0.31	0.0000
1FOSWMM7	1.00	0.01	0.00	0.00	0.09	0.00	0.00	0.90	0.18	0.0000
1FQSWMM17	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.24	0.0000
1FQSWMM18	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.21	0.0000
1FOSWMM19	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.43	0.0000
1FOSWMM20	1.00	0.00	0.00	0.00	0.26	0.00	0.00	0.73	0.39	0.0000
ESWMM41	1.00	0.10	0.00	0.00	0.05	0.00	0.00	0.85	0.27	0.0000
1FOSWMM22	1.00	0.00	0.01	0.00	0.03	0.00	0.00	0.95	1.26	0.0000
ESWMM42	1.00	0.00	0.00	0.00	0.02	0.01	0.00	0.98	0.04	0.0000
1FQSWMM4	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.17	0.0000
1FQSWMM9	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.10	0.0026
ESWMM58	1.00	0.01	0.00	0.00	0.02	0.00	0.00	0.97	0.58	0.0000
ESWMM59	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.05	0.0000
ESWMM60	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.08	0.0000
ESWMM91	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.13	0.0005
ESWMM92	1.00	0.01	0.00	0.00	0.21	0.00	0.00	0.78	0.29	0.0006
1FQSWMM10	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.34	0.0000
1FQSWMM11	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.44	0.0001
1FQSWMM12	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.28	0.0000
1FQSWMM13	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.63	0.0001
1FQSWMM14	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.55	0.0002
ESWMM6	1.00	0.88	0.09	0.00	0.03	0.00	0.00	0.00	0.01	0.0002
ESWMM93	1.00	0.01	0.00	0.00	0.17	0.00	0.00	0.82	0.65	0.0002
ESWMM94	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.45	0.0002
ESWMM96	1.00	0.01	0.00	0.00	0.73	0.00	0.00	0.26	0.40	0.0003
ESWMM97	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.40	0.0001
ESWMM98	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.38	0.0000

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ESWMM61	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.26	0.0000
ESWMM62	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.53	0.0001
ESWMM63	1.00	0.01	0.00	0.00	0.21	0.00	0.00	0.79	0.75	0.0001
ESWMM64	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.22	0.0001
ESWMM65	1.52	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.26	0.0000
ESWMM66	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.55	0.0000
ESWMM67	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.17	0.0000
ESWMM68	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.52	0.0000
ESWMM69	1.00	0.01	0.00	0.00	0.08	0.00	0.00	0.91	0.77	0.0000
ESWMM30	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.28	0.0000
ESWMM29	1.00	0.01	0.00	0.00	0.02	0.00	0.00	0.98	0.51	0.0000
ESWMM28	1.00	0.95	0.00	0.00	0.03	0.00	0.00	0.02	0.02	0.0000
ESWMM27	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.03	0.0000
ESWMM26	3.14	0.01	0.00	0.00	0.02	0.00	0.97	0.00	0.07	0.0000
ESWMM25	1.00	0.01	0.00	0.00	0.03	0.00	0.00	0.96	0.35	0.0001
ESWMM24	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.25	0.0001
ESWMM50	1.00	0.01	0.00	0.00	0.00	0.00	0.99	0.00	0.05	0.0000
ESWMM51	1.00	0.00	0.00	0.00	0.07	0.00	0.00	0.93	1.26	0.0000
BLUPIPE	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.0001
1FQSWMM6	3.05	0.00	0.00	0.00	0.03	0.11	0.00	0.86	2.12	0.0000
ESWMM47	1.00	0.00	0.00	0.00	0.08	0.00	0.00	0.92	1.10	0.0000
ESWMM48	1.00	0.80	0.08	0.00	0.11	0.00	0.01	0.00	0.02	0.0000
ESWMM49	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.63	0.0000
ESWMM54	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.01	0.0000
ESWMM55	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.25	0.0001
ESWMM56	1.00	0.01	0.00	0.00	0.69	0.00	0.00	0.31	0.37	0.0002
ESWMM95	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.35	0.0002
48SDTOBPS	1.00	0.00	0.00	0.00	0.05	0.00	0.00	0.95	0.68	0.0000
ESWMM23	1.00	0.00	0.00	0.00	0.17	0.00	0.00	0.82	0.41	0.0001
ESWMM22	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.33	0.0001
ESWMM21	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.17	0.0000
ESWMM20	1.00	0.01	0.00	0.00	0.08	0.00	0.00	0.92	0.39	0.0001
ESWMM19	1.00	0.01	0.00	0.00	0.06	0.00	0.00	0.93	0.45	0.0000
ESWMM18	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.32	0.0000
ESWMM17	1.00	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.32	0.0000
ESWMM16	1.00	0.00	0.00	0.00	0.24	0.02	0.00	0.74	0.65	0.0000
ESWMM70	1.00	0.00	0.00	0.00	0.05	0.00	0.00	0.95	0.47	0.0000
ESWMM15	1.00	0.00	0.00	0.00	0.12	0.00	0.00	0.87	0.30	0.0000
ESWMM71	1.00	0.00	0.00	0.00	0.89	0.00	0.00	0.10	0.70	0.0000
ESWMM72	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.68	0.0000
ESWMM7	1.00	0.70	0.18	0.00	0.11	0.00	0.00	0.01	0.02	0.0000
ESWMM12	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.18	0.0000
ESWMM9	1.00	0.01	0.14	0.00	0.85	0.00	0.00	0.00	0.04	0.0000
ESWMM99	1.00	0.00	0.00	0.00	0.08	0.00	0.00	0.91	0.57	0.0000
ESWMM8	1.50	0.00	0.00	0.00	0.02	0.00	0.00	0.97	2.28	0.0000
ESWMM10	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.32	0.0000
ESWMM11	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.37	0.0000
ESWMM90	1.00	0.01	0.00	0.00	0.25	0.00	0.00	0.74	0.36	0.0000
ESWMM89	1.00	0.01	0.00	0.00	0.27	0.00	0.00	0.73	0.41	0.0000
ESWMM88	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.46	0.0000
ESWMM87	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.10	0.0000
ESWMM86	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.47	0.0000
ESWMM85	1.00	0.01	0.03	0.00	0.96	0.00	0.00	0.00	0.16	0.0000
ESWMM84	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.35	0.0000
ESWMM83	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.12	0.0000
ESWMM82	1.00	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.08	0.0000
ESWMM73	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.73	0.0000
ESWMM76	1.00	0.00	0.00	0.00	0.93	0.06	0.00	0.00	0.83	0.0000
ESWMM77	1.00	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.74	0.0000
ESWMM78	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.72	0.0000
ESWMM79	1.00	0.00	0.00	0.00	0.88	0.12	0.00	0.00	0.79	0.0000
ESWMM80	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.68	0.0000
ESWMM81	1.00	0.01	0.00	0.00	0.55	0.45	0.00	0.00	1.02	0.0013
ESWMM14	1.00	0.00	0.00	0.00	0.36	0.00	0.00	0.63	0.33	0.0000
ESWMM13	1.00	0.10	0.83	0.00	0.07	0.00	0.00	0.00	0.00	0.0000
ESWMM125	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.10	0.0000
1FQSWMM5	1.00	0.00	0.00	0.00	0.03	0.00	0.00	0.97	0.58	0.0000
ESWMM71A	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.75	0.0000
ESWMM126	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.01	0.0002
ESWMM127	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.04	0.0000
ESWMM128	1.00	0.00	0.10	0.00	0.90	0.00	0.00	0.00	0.04	0.0000
ESWMM129	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.41	0.0000

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ESWMM132	1.00	0.00	0.01	0.00	0.99	0.00	0.00	0.00	0.02	0.0001
6OSDTOBPS	1.00	0.00	0.00	0.00	0.05	0.00	0.00	0.95	1.19	0.0000
ESWMM135	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.62	0.0000
ESWMM53	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.0000
ESWMM75	1.00	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.51	0.0000
1FOSWMM13	1.00	0.01	0.96	0.00	0.03	0.00	0.00	0.00	0.00	0.0000
1FOSWMM14	1.00	0.01	0.87	0.00	0.12	0.00	0.00	0.00	0.00	0.0000
1FOSWMM15	1.00	0.01	0.00	0.00	0.00	0.00	0.00	0.99	0.74	0.0000
ESWMM201	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.21	0.0000
ESWMM203	1.00	0.01	0.02	0.00	0.84	0.14	0.00	0.00	0.32	0.0000
ESWMM200	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.05	0.0000
ESWMM202	1.00	0.01	0.01	0.00	0.98	0.00	0.00	0.00	0.00	0.0000
ESWMM500	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.43	0.0000
ESWMM74	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.65	0.0000
ESWMM74A	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.14	0.0000
1FOSWMM4	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.13	0.0008
1FOSWMM5	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.34	0.0000
1FQSWMM1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.16	0.0000
1FQSWMM2	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.39	0.0001
1FQSWMM3	1.00	0.01	0.00	0.00	0.00	0.99	0.00	0.00	1.24	0.0002
1FQSWMM7	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.22	0.0000
1FQSWMM8	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.17	0.0007
O17SWMM200	1.00	0.00	0.00	0.00	0.80	0.19	0.00	0.00	0.78	0.0000
O17SWMM201	1.00	0.00	0.00	0.00	0.58	0.41	0.00	0.00	1.01	0.0000
O17SWMM202	1.00	0.00	0.00	0.00	0.02	0.01	0.00	0.97	1.37	0.0000
ESWMM134	1.00	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.13	0.0000
O24LINK1	1.00	0.97	0.02	0.00	0.00	0.00	0.01	0.00	0.01	0.0000
O24LINK2	1.00	0.00	0.00	0.00	0.99	0.01	0.00	0.00	0.18	0.0000
O24LINK3	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.45	0.0001
O24LINK4	1.00	0.01	0.00	0.00	0.99	0.00	0.00	0.00	0.38	0.0000

***** Conduit Surcharge Summary *****

Conduit	Hours Full			Hours Above Full Normal Flow	Hours Capacity Limited
	Both Ends	Upstream	Dnstream		
1FQSWMM7	4.59	4.59	4.59	2.02	1.87
1FQSWMM18	0.01	0.01	0.01	0.46	0.01
1FQSWMM19	0.49	0.49	0.49	0.01	0.17
1FQSWMM20	0.86	0.86	0.87	0.01	0.01
1FQSWMM4	2.68	2.68	2.68	0.01	0.18
1FQSWMM9	5.92	5.92	6.02	13.68	2.82
ESWMM91	2.13	2.13	2.13	3.39	1.31
ESWMM92	1.59	1.59	1.63	3.54	1.49
1FQSWMM10	0.30	0.30	0.31	0.01	0.01
1FQSWMM11	0.61	0.61	0.62	0.01	0.01
1FQSWMM12	1.80	1.80	1.81	0.01	0.82
1FQSWMM13	2.71	2.71	2.75	0.01	0.19
1FQSWMM14	3.01	3.01	3.05	0.01	0.40
ESWMM6	0.02	0.02	0.02	2.98	0.01
ESWMM93	1.90	1.90	1.90	1.62	1.14
ESWMM94	1.68	1.68	1.71	0.22	1.10
ESWMM96	1.19	1.19	1.19	1.23	0.51
ESWMM97	0.70	0.70	0.72	0.01	0.12
ESWMM98	0.28	0.28	0.28	0.13	0.25
ESWMM62	1.70	1.70	1.70	0.01	0.33
ESWMM63	1.80	1.80	1.80	0.01	0.30
ESWMM64	1.79	1.79	1.79	0.17	1.38
ESWMM65	1.50	1.50	1.50	0.01	0.01
ESWMM66	1.50	1.50	1.50	0.01	0.10
ESWMM67	1.55	1.55	1.55	0.01	1.54
ESWMM68	1.15	1.15	1.15	0.01	0.08
ESWMM69	1.50	1.50	1.50	0.01	0.40
ESWMM30	0.29	0.29	0.29	0.01	0.01
ESWMM29	0.19	0.19	0.19	0.01	0.01
ESWMM28	0.60	0.60	0.60	0.01	0.05
ESWMM27	0.76	0.76	0.76	1.02	0.73

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ESWMM26	0.57	0.57	0.57	0.01	0.01
ESWMM25	0.81	0.81	0.81	0.04	0.61
ESWMM24	0.42	0.42	0.46	0.01	0.17
ESWMM50	0.01	0.01	0.01	0.80	0.01
BLUPIPE	0.72	0.72	0.73	0.40	0.32
1FQSWMM6	1.76	1.76	1.76	0.01	0.01
ESWMM47	2.26	2.26	2.26	0.01	0.01
ESWMM48	4.63	4.63	4.63	0.01	0.01
ESWMM49	4.97	4.97	4.97	0.01	0.01
ESWMM54	0.13	0.13	0.13	0.01	0.01
ESWMM55	1.27	1.27	1.30	0.03	0.23
ESWMM56	1.67	1.67	1.70	0.01	0.36
ESWMM95	1.57	1.57	1.59	0.18	0.80
48SDTOBPS	5.22	5.22	5.23	3.52	5.22
ESWMM23	0.02	0.02	0.02	0.01	0.01
ESWMM22	0.95	0.95	0.98	0.03	0.76
ESWMM21	1.23	1.23	1.23	0.01	0.08
ESWMM20	1.58	1.58	1.59	0.01	0.20
ESWMM19	1.82	1.82	1.82	0.03	1.57
ESWMM18	1.87	1.87	1.87	0.01	0.53
ESWMM17	1.81	1.81	1.82	1.38	1.72
ESWMM16	1.82	1.82	1.83	0.01	0.05
ESWMM70	1.40	1.40	1.40	0.01	0.51
ESWMM15	1.27	1.27	1.29	0.01	0.08
ESWMM71	0.99	0.99	1.00	0.01	0.98
ESWMM72	1.32	1.32	1.32	0.01	1.32
ESWMM7	0.01	0.01	0.01	1.35	0.01
ESWMM12	0.01	0.01	0.01	1.94	0.01
ESWMM9	0.23	0.23	0.23	0.01	0.01
ESWMM99	0.01	0.01	0.01	0.52	0.01
ESWMM8	0.26	0.26	0.26	0.01	0.01
ESWMM10	2.94	2.94	2.94	3.37	2.94
ESWMM83	2.63	2.63	2.63	0.76	0.95
ESWMM82	2.62	2.62	2.62	1.78	1.74
ESWMM73	1.32	1.32	1.32	0.01	0.57
ESWMM14	1.00	1.00	1.00	0.01	0.13
ESWMM13	0.24	0.24	0.24	0.01	0.01
1FQSWMM5	1.59	1.59	1.59	2.35	1.08
ESWMM71A	1.00	1.00	1.00	0.01	0.01
ESWMM126	0.99	0.99	1.00	0.03	0.56
ESWMM127	3.18	3.18	3.18	0.01	0.01
ESWMM129	1.89	1.89	1.89	0.01	0.01
ESWMM132	1.89	1.89	1.89	0.01	0.04
60SDTOBPS	4.29	4.29	4.29	0.01	0.01
ESWMM135	0.01	0.01	0.01	3.65	0.01
ESWMM53	0.12	0.12	0.12	0.01	0.01
ESWMM75	0.38	0.38	0.38	2.64	0.38
1FOSWMM15	0.01	0.01	0.01	0.86	0.01
ESWMM201	1.76	1.76	1.76	3.30	1.76
ESWMM500	3.36	3.36	3.36	3.59	3.28
ESWMM74	1.36	1.36	1.36	0.01	0.01
ESWMM74A	0.77	0.77	0.77	2.21	0.77
1FOSWMM4	5.36	5.36	5.46	2.28	3.10
1FOSWMM5	9.11	9.11	9.11	13.28	8.81
1FQSWMM1	0.01	0.01	0.01	0.11	0.01
1FQSWMM2	0.01	0.01	0.01	0.13	0.01
1FQSWMM3	0.01	0.01	0.01	2.57	0.01
1FQSWMM7	5.42	5.42	5.42	0.01	0.01
1FQSWMM8	12.33	12.33	12.33	2.89	5.85
ESWMM134	3.44	3.44	3.44	0.01	0.02
024LINK1	0.01	0.01	0.01	0.16	0.01
024LINK2	5.81	5.81	5.82	0.01	0.01
024LINK3	6.68	6.68	6.68	10.16	6.25
024LINK4	1.87	1.87	1.88	0.01	0.01

Pumping Summary

Min Avg Max Total Power % Time Off

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Pump	Percent Utilized	Number of Start-Ups	Flow CFS	Flow CFS	Flow CFS	Volume 10^6 gal	Usage Kw-hr	Pump Low	Curve High
BROADWAYPUMPSTATION	99.76	488	0.00	7.16	130.00	25.755	12881.70	94.5	0.1
ALCALDEPUMPSTATION	99.35	22	0.00	8.89	226.46	31.351	2793.47	98.1	0.0
URBANPUMPSTATION	3.49	1645	0.00	7.37	11.38	0.954	46.29	42.2	0.0
BARELASPUMPSTATION	94.81	6593	0.00	18.30	405.00	61.448	3348.07	96.5	0.2

Analysis begun on: Mon Feb 13 11:15:30 2012
 Analysis ended on: Mon Feb 13 11:18:15 2012
 Total elapsed time: 00:02:45

APPENDIX 1.2

OPTIONS 26-28

The above models were discarded since these iterations did not demonstrate significant change in results.