

Appendix C: Existing Conditions - 250 MGD Treatment Plant - Individual Sewershed Typical Year Overflow Results

Sewershed	Existing Conditions		No GI Implemented			1285 Impervious Acres of GI Management			1835 Impervious Acres of GI Management		
	Annual Wet Weather Volume (MG)	Annual CSO Volume (MG)	Annual CSO Volume (MG)	Annual CSO Volume Reduced (MG)	Percent Wet Weather Capture (%)	Annual CSO Volume (MG)	Annual CSO Volume Reduced by GI (MG)	Percent Wet Weather Capture (%)	Annual CSO Volume (MG)	Annual CSO Volume Reduced by GI (MG)	Percent Wet Weather Capture (%)
A-22-OF	1594.8	580.5	580.5	0	63.6%	425.9	154.6	73.3%	356.4	224.1	77.7%
A-41-OF	664.5	338.6	338.6	0	49.0%	300.6	37.9	54.8%	278.2	60.3	58.1%
A-42-OF	2175.9	783.0	783.0	0	64.0%	576.3	206.7	73.5%	520.1	262.9	76.1%
A-47-OF	32.7	0.9	0.9	0	97.2%	0.9	0.0	97.2%	0.8	0.1	97.6%
A-48-OF	546.0	49.1	49.1	0	91.0%	36.4	12.7	93.3%	28.3	20.8	94.8%
A-51-OF	119.8	13.1	13.1	0	89.1%	12.9	0.2	89.2%	12.5	0.6	89.6%
A-58-OF	1007.8	174.2	174.2	0	82.7%	152.1	22.1	84.9%	149.4	24.8	85.2%
A-60-OF	801.5	209.8	209.8	0	73.8%	157.7	52.0	80.3%	153.6	56.1	80.8%
A-61-OF	14.1	5.1	5.1	0	63.9%	5.0	0.1	64.3%	3.2	2.0	77.7%
A-62-OF	8.3	8.4	8.4	0	-1.1%	8.0	0.4	3.6%	7.9	0.5	5.5%
A-63-OF	2.9	0.2	0.2	0	93.7%	0.2	0.0	93.7%	0.2	0.0	93.7%
A-64-OF	30.3	4.0	4.0	0	86.6%	3.9	0.1	87.0%	3.7	0.3	87.7%
A-65-OF	11.8	20.9	20.9	0	-77.8%	20.7	0.2	-76.5%	20.3	0.6	-73.1%
M-15-OF	7.9	4.6	4.6	0	40.9%	4.6	0.1	41.7%	3.2	1.5	59.5%
M-15Z-OF	10.4	0.6	0.6	0	94.1%	0.6	0.0	94.2%	0.6	0.0	94.3%
M-16-OF	249.0	102.9	102.9	0	58.7%	86.0	16.9	65.5%	46.4	56.4	81.4%
M-17-OF	8.8	0.5	0.5	0	93.9%	0.5	0.0	93.9%	0.5	0.0	94.0%
M-18-OF	8.9	0.7	0.7	0	91.9%	0.7	0.0	91.9%	0.7	0.0	92.0%
M-19A-OF	318.2	83.5	83.5	0	73.8%	55.0	28.4	82.7%	50.1	33.3	84.2%
M-19B-OF	75.5	17.0	17.0	0	77.5%	10.7	6.2	85.8%	11.6	5.4	84.7%
M-19-OF	265.9	146.0	146.0	0	45.1%	126.0	20.0	52.6%	92.5	53.6	65.2%
M-20-OF	13.4	1.7	1.7	0	87.3%	1.6	0.1	87.8%	1.5	0.2	88.7%
M-21-OF	62.6	11.1	11.1	0	82.2%	11.0	0.1	82.4%	9.9	1.2	84.2%
M-22-OF	72.0	6.5	6.5	0	91.0%	6.4	0.1	91.1%	6.2	0.3	91.4%
M-29-OF	1426.3	402.0	402.0	0	71.8%	337.6	64.4	76.3%	271.0	131.0	81.0%
O-27-OF	696.9	79.6	79.6	0	88.6%	45.0	34.5	93.5%	43.2	36.3	93.8%
O-39-OF	29.3	7.5	7.5	0	74.5%	7.5	0.0	74.5%	5.3	2.2	81.8%
O-40-OF	3.2	0.2	0.2	0	93.9%	0.2	0.0	94.3%	0.2	0.0	94.3%
O-41-OF	33.3	14.5	14.5	0	56.3%	5.5	9.1	83.6%	5.4	9.1	83.8%
O-43-OF	35.3	0.2	0.2	0	99.6%	0.1	0.0	99.6%	0.1	0.0	99.6%
Aggregate =	10327.21	3066.84	3066.84	0	70%	2400.04	666.81	77%	2083.15	983.69	80%

Notes:

CSO Sewersheds >99.5% Capture Highlighted in Green

The results presented above represent the localized overflow reduction benefits and do not include systemwide overflow reductions at other neighboring sewersheds. Refer to Table 3-6 in Section 3 to view the full systemwide overflow reductions.

Appendix C: 480 MGD Treatment Plant - Individual Sewershed Typical Year Overflow Results

Sewershed	Existing Conditions		No GI Implemented			1285 Impervious Acres of GI Management			1835 Impervious Acres of GI Management		
	Annual Wet Weather Volume (MG)	Annual CSO Volume (MG)	Annual CSO Volume (MG)	Annual CSO Volume Reduced (MG)	Percent Wet Weather Capture (%)	Annual CSO Volume (MG)	Annual CSO Volume Reduced by GI (MG)	Percent Wet Weather Capture (%)	Annual CSO Volume (MG)	Annual CSO Volume Reduced by GI (MG)	Percent Wet Weather Capture (%)
A-22-OF	1594.8	580.5	486.4	94.1	69.5%	330.7	155.7	79.3%	266.3	220.1	83.3%
A-41-OF	664.5	338.6	292.6	45.9	56.0%	243.6	49.0	63.3%	224.9	67.7	66.2%
A-42-OF	2175.9	783.0	716.4	66.6	67.1%	472.9	243.5	78.3%	435.5	280.9	80.0%
A-47-OF	32.7	0.9	0.1	0.9	99.8%	0.0	0.1	100.0%	0.1	0.0	99.8%
A-48-OF	546.0	49.1	27.4	21.7	95.0%	15.2	12.2	97.2%	14.2	13.2	97.4%
A-51-OF	119.8	13.1	8.1	5.0	93.2%	8.1	0.0	93.2%	8.1	0.0	93.2%
A-58-OF	1007.8	174.2	111.2	63.0	89.0%	90.1	21.1	91.1%	90.6	20.6	91.0%
A-60-OF	801.5	209.8	79.8	129.9	90.0%	47.7	32.1	94.0%	47.8	32.0	94.0%
A-61-OF	14.1	5.1	3.8	1.3	73.1%	3.8	0.0	72.8%	1.9	1.9	86.4%
A-62-OF	8.3	8.4	0.8	7.6	90.3%	0.8	0.1	90.9%	0.7	0.1	91.4%
A-63-OF	2.9	0.2	0.2	0.0	93.7%	0.2	0.0	93.7%	0.2	0.0	93.7%
A-64-OF	30.3	4.0	2.9	1.2	90.5%	2.9	0.0	90.5%	2.9	0.0	90.5%
A-65-OF	11.8	20.9	2.5	18.4	79.1%	2.3	0.1	80.2%	2.1	0.3	82.0%
M-15-OF	7.9	4.6	3.7	0.9	52.9%	3.7	0.0	52.9%	1.9	1.8	75.7%
M-15Z-OF	10.4	0.6	0.6	0.0	94.1%	0.6	0.0	94.1%	0.6	0.0	94.2%
M-16-OF	249.0	102.9	101.3	1.6	59.3%	84.8	16.5	66.0%	45.9	55.4	81.6%
M-17-OF	8.8	0.5	0.4	0.1	95.3%	0.4	0.0	95.3%	0.4	0.0	95.2%
M-18-OF	8.9	0.7	0.7	0.0	91.9%	0.7	0.0	91.9%	0.7	0.0	91.9%
M-19A-OF	318.2	83.5	83.5	0.0	73.8%	55.1	28.3	82.7%	50.6	32.8	84.1%
M-19B-OF	75.5	17.0	16.9	0.0	77.6%	10.7	6.2	85.8%	11.8	5.2	84.4%
M-19-OF	265.9	146.0	91.4	54.6	65.6%	74.4	17.0	72.0%	48.5	42.9	81.8%
M-20-OF	13.4	1.7	0.4	1.3	96.7%	0.4	0.0	96.7%	0.4	0.0	96.7%
M-21-OF	62.6	11.1	10.8	0.4	82.8%	10.8	0.0	82.8%	9.6	1.2	84.7%
M-22-OF	72.0	6.5	5.5	1.0	92.3%	5.5	0.0	92.3%	5.5	0.0	92.4%
M-29-OF	1426.3	402.0	338.0	64.0	76.3%	276.8	61.2	80.6%	212.6	125.4	85.1%
O-27-OF	696.9	79.6	73.5	6.1	89.5%	40.2	33.3	94.2%	40.0	33.5	94.3%
O-39-OF	29.3	7.5	6.5	0.9	77.7%	6.5	0.0	77.7%	4.7	1.8	84.0%
O-40-OF	3.2	0.2	0.2	0.0	94.0%	0.2	0.0	94.3%	0.2	0.0	94.4%
O-41-OF	33.3	14.5	14.5	0.0	56.4%	5.5	9.0	83.6%	5.4	9.1	83.6%
O-43-OF	35.3	0.2	0.1	0.1	99.8%	0.1	0.0	99.8%	0.1	0.0	99.8%
Aggregate =	10327.21	3066.84	2480.20	586.64	76%	1794.86	685.34	83%	1534.13	946.08	85%

Notes:

CSO Sewersheds >99.5% Capture Highlighted in Green

The results presented above represent the localized overflow reduction benefits and do not include systemwide overflow reductions at other neighboring sewersheds. Refer to Table 3-6 in Section 3 to view the full systemwide overflow reductions.

Appendix C: 600 MGD Treatment Plant - No Sediment - Open 19 CSOs - Individual Sewershed Typical Year Overflow Results

Sewershed	Existing Conditions		No GI Implemented			1285 Impervious Acres of GI Management			1835 Impervious Acres of GI Management		
	Annual Wet Weather Volume (MG)	Annual CSO Volume (MG)	Annual CSO Volume (MG)	Annual CSO Volume Reduced (MG)	Percent Wet Weather Capture (%)	Annual CSO Volume (MG)	Annual CSO Volume Reduced by GI (MG)	Percent Wet Weather Capture (%)	Annual CSO Volume (MG)	Annual CSO Volume Reduced by GI (MG)	Percent Wet Weather Capture (%)
A-22-OF	1594.8	580.5	310.6	269.9	80.5%	209.4	101.2	86.9%	161.6	149.0	89.9%
A-41-OF	664.5	338.6	240.6	97.9	63.8%	160.8	79.8	75.8%	132.6	108.1	80.1%
A-42-OF	2175.9	783.0	586.4	196.6	73.0%	359.3	227.1	83.5%	309.0	277.4	85.8%
A-47-OF	32.7	0.9	0.0	0.9	99.9%	0.0	0.0	100.0%	0.0	0.0	100.0%
A-48-OF	546.0	49.1	13.8	35.3	97.5%	5.3	8.6	99.0%	5.4	8.4	99.0%
A-51-OF	119.8	13.1	2.0	11.0	98.3%	2.1	-0.1	98.2%	2.1	-0.1	98.2%
A-58-OF	1007.8	174.2	101.2	73.0	90.0%	82.6	18.6	91.8%	82.6	18.6	91.8%
A-60-OF	801.5	209.8	34.9	174.8	95.6%	17.2	17.7	97.9%	16.9	18.0	97.9%
A-61-OF	14.1	5.1	1.4	3.7	89.9%	1.4	0.0	90.2%	0.6	0.8	95.8%
A-62-OF	8.3	8.4	0.4	8.0	95.2%	0.4	0.0	95.1%	0.4	0.0	95.1%
A-63-OF	2.9	0.2	0.2	0.0	94.0%	0.2	0.0	93.7%	0.2	0.0	93.7%
A-64-OF	30.3	4.0	2.8	1.2	90.7%	2.9	-0.1	90.5%	2.9	-0.1	90.6%
A-65-OF	11.8	20.9	1.1	19.8	90.6%	1.1	0.0	90.6%	0.9	0.2	92.2%
M-15-OF	7.9	4.6	0.0	4.6	99.5%	0.0	0.0	99.6%	0.0	0.0	99.6%
M-15Z-OF	10.4	0.6	0.6	0.0	93.9%	0.6	0.0	94.2%	0.6	0.0	94.2%
M-16-OF	249.0	102.9	36.3	66.5	85.4%	25.7	10.6	89.7%	5.6	30.7	97.7%
M-17-OF	8.8	0.5	0.4	0.2	96.0%	0.4	-0.1	95.3%	0.4	-0.1	95.3%
M-18-OF	8.9	0.7	0.7	0.0	92.1%	0.7	0.0	91.9%	0.7	0.0	91.9%
M-19A-OF	318.2	83.5	78.8	4.7	75.2%	50.0	28.8	84.3%	45.4	33.4	85.7%
M-19B-OF	75.5	17.0	18.5	-1.5	75.5%	11.9	6.6	84.3%	13.0	5.4	82.7%
M-19-OF	265.9	146.0	26.5	119.5	90.0%	24.3	2.3	90.9%	10.3	16.2	96.1%
M-20-OF	13.4	1.7	0.4	1.3	96.9%	0.4	0.0	96.7%	0.4	0.0	96.7%
M-21-OF	62.6	11.1	2.8	8.3	95.5%	3.2	-0.4	94.9%	2.8	0.1	95.6%
M-22-OF	72.0	6.5	5.5	1.0	92.4%	5.5	0.0	92.3%	5.5	0.0	92.3%
M-29-OF	1426.3	402.0	194.2	207.8	86.4%	145.2	49.0	89.8%	96.6	97.7	93.2%
O-27-OF	696.9	79.6	27.9	51.7	96.0%	8.0	19.9	98.8%	8.0	19.9	98.9%
O-39-OF	29.3	7.5	0.7	6.8	97.6%	0.9	-0.2	96.8%	0.6	0.1	98.0%
O-40-OF	3.2	0.2	0.3	-0.1	90.1%	0.2	0.1	92.8%	0.2	0.1	92.8%
O-41-OF	33.3	14.5	11.4	3.1	65.6%	4.5	7.0	86.6%	4.5	7.0	86.6%
O-43-OF	35.3	0.2	0.0	0.1	99.9%	0.1	0.0	99.9%	0.1	0.0	99.9%

Aggregate = 10327.21 3066.84 1700.79 1366.05 84% 1124.42 576.37 89% 909.88 790.91 91%

Notes:

CSO Sewersheds >99.5% Capture Highlighted in Green

The results presented above represent the localized overflow reduction benefits and do not include systemwide overflow reductions at other neighboring sewersheds. Refer to Table 3-6 in Section 3 to view the full systemwide overflow reductions.

Appendix C: Lowered HGL Operation during Rain Events - No Sediment - Open 19 CSOs - Individual Sewershed Typical Year Overflow Results

Sewershed	Existing Conditions		No GI Implemented			1285 Impervious Acres of GI Management			1835 Impervious Acres of GI Management		
	Annual Wet Weather Volume (MG)	Annual CSO Volume (MG)	Annual CSO Volume (MG)	Annual CSO Volume Reduced (MG)	Percent Wet Weather Capture (%)	Annual CSO Volume (MG)	Annual CSO Volume Reduced by GI (MG)	Percent Wet Weather Capture (%)	Annual CSO Volume (MG)	Annual CSO Volume Reduced by GI (MG)	Percent Wet Weather Capture (%)
A-22-OF	1594.8	580.5	273.8	306.7	82.8%	167.5	106.3	89.5%	124.5	149.4	92.2%
A-41-OF	664.5	338.6	192.9	145.7	71.0%	116.6	76.3	82.5%	91.0	101.9	86.3%
A-42-OF	2175.9	783.0	537.7	245.3	75.3%	322.6	215.1	85.2%	271.8	265.8	87.5%
A-47-OF	32.7	0.9	0.1	0.9	99.8%	0.0	0.1	100.0%	0.0	0.1	100.0%
A-48-OF	546.0	49.1	17.7	31.5	96.8%	4.5	13.2	99.2%	4.4	13.3	99.2%
A-51-OF	119.8	13.1	2.2	10.9	98.2%	2.1	0.1	98.3%	2.1	0.1	98.2%
A-58-OF	1007.8	174.2	101.4	72.8	89.9%	82.3	19.1	91.8%	80.9	20.5	92.0%
A-60-OF	801.5	209.8	23.9	185.8	97.0%	8.4	15.6	99.0%	8.4	15.6	99.0%
A-61-OF	14.1	5.1	1.3	3.8	90.5%	1.4	0.0	90.3%	0.6	0.7	95.7%
A-62-OF	8.3	8.4	0.3	8.1	96.5%	0.3	0.0	96.5%	0.3	0.0	96.5%
A-63-OF	2.9	0.2	0.2	0.0	93.7%	0.2	0.0	93.7%	0.2	0.0	93.7%
A-64-OF	30.3	4.0	2.9	1.2	90.5%	2.9	0.0	90.5%	2.9	0.0	90.5%
A-65-OF	11.8	20.9	0.1	20.8	99.1%	0.1	0.0	99.1%	0.1	0.0	99.4%
M-15-OF	7.9	4.6	0.0	4.6	99.6%	0.0	0.0	99.6%	0.0	0.0	99.6%
M-15Z-OF	10.4	0.6	0.6	0.0	94.2%	0.6	0.0	94.2%	0.6	0.0	94.3%
M-16-OF	249.0	102.9	36.8	66.1	85.2%	25.7	11.0	89.7%	5.6	31.2	97.8%
M-17-OF	8.8	0.5	0.4	0.1	95.3%	0.4	0.0	95.3%	0.4	0.0	95.4%
M-18-OF	8.9	0.7	0.7	0.0	91.9%	0.7	0.0	91.9%	0.7	0.0	92.0%
M-19A-OF	318.2	83.5	78.6	4.9	75.3%	50.0	28.6	84.3%	44.8	33.7	85.9%
M-19B-OF	75.5	17.0	18.3	-1.3	75.8%	11.8	6.4	84.4%	12.7	5.5	83.1%
M-19-OF	265.9	146.0	21.4	124.6	91.9%	13.7	7.7	94.9%	5.3	16.1	98.0%
M-20-OF	13.4	1.7	0.4	1.3	96.7%	0.4	0.0	96.7%	0.4	0.0	96.7%
M-21-OF	62.6	11.1	3.2	7.9	94.9%	3.2	0.0	94.9%	2.8	0.5	95.6%
M-22-OF	72.0	6.5	5.5	1.0	92.3%	5.5	0.0	92.3%	5.3	0.2	92.6%
M-29-OF	1426.3	402.0	180.6	221.4	87.3%	135.1	45.4	90.5%	87.2	93.4	93.9%
O-27-OF	696.9	79.6	27.7	51.8	96.0%	8.0	19.7	98.9%	8.0	19.8	98.9%
O-39-OF	29.3	7.5	0.9	6.6	96.8%	0.9	0.0	96.8%	0.6	0.3	98.0%
O-40-OF	3.2	0.2	0.4	-0.2	88.2%	0.2	0.1	92.8%	0.2	0.1	92.8%
O-41-OF	33.3	14.5	11.6	2.9	65.0%	4.5	7.2	86.6%	4.3	7.3	87.0%
O-43-OF	35.3	0.2	0.1	0.1	99.9%	0.1	0.0	99.9%	0.1	0.0	99.9%
Aggregate =	10327.21	3066.84	1541.67	1525.17	85%	969.81	571.87	91%	766.28	775.40	93%

Notes:

CSO Sewersheds >99.5% Capture Highlighted in Green

The results presented above represent the localized overflow reduction benefits and do not include systemwide overflow reductions at other neighboring sewersheds. Refer to Table 3-6 in Section 3 to view the full systemwide overflow reductions.