



# Appendix D

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## Peak Discharges



**US Army Corps  
of Engineers**  
Norfolk District

**Chesapeake**  
VIRGINIA

Department of Public Works

**URS**

**Table D-1. Existing Conditions Peak Discharges (Scenario 1)**

Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
11011	20.33	30.76	35.80	36.91	36.99	36.78
11021	15.57	26.17	33.05	41.26	49.68	57.69
11031	19.34	29.74	34.63	35.41	34.75	34.37
11081	21.52	33.39	39.82	46.01	54.51	56.58
11101	21.10	28.74	33.88	42.42	49.30	50.01
11121	26.60	36.68	38.27	38.50	38.41	38.30
11161	23.68	34.73	34.11	34.00	33.65	33.13
11181	42.64	63.74	75.23	82.32	89.52	93.91
11182	42.64	63.73	75.23	82.32	89.52	93.91
11201	66.04	103.58	117.20	120.76	118.94	135.55
11231	112.49	179.19	207.01	232.25	260.20	267.83
11261	121.22	188.08	212.26	256.90	285.36	299.02
11281	17.84	28.78	35.14	42.49	50.90	58.71
11311	126.64	196.65	223.77	272.21	305.68	332.16
11331	126.08	194.69	220.90	271.62	304.49	330.57
11341	125.48	192.47	220.27	228.57	237.19	237.78
11361	2.04	1.97	2.09	2.28	2.41	2.48
11381	1.69	1.95	2.21	2.42	2.56	2.63
11401	6.56	7.75	8.95	9.86	10.55	10.91
11402	0.00	0.00	0.00	0.00	0.00	0.79
11411	6.60	7.82	9.02	9.93	10.63	11.00
11431	4.49	7.27	7.81	8.12	8.07	8.05
11451	12.85	13.37	16.10	17.67	18.29	18.75
11461	18.54	27.09	31.67	32.55	32.51	32.27
11471	146.71	218.53	244.36	257.37	267.03	270.43
11481	146.46	217.94	244.21	253.33	260.80	262.90
11491	56.85	67.24	69.53	72.12	74.35	75.03
11492	89.48	153.80	174.64	180.96	186.08	187.56
11501	184.21	232.42	263.70	277.04	283.51	284.86
11511	152.26	227.86	260.84	270.82	270.95	270.21
11531	10.62	10.37	9.96	9.64	9.49	9.44
11541	9.33	9.37	8.69	9.21	12.04	14.47
11561	32.25	44.18	46.58	57.78	62.41	62.13
11581	31.42	42.91	45.93	56.23	60.86	60.73
11591	16.56	24.90	28.25	34.06	38.76	42.42
11601	16.56	24.96	28.25	34.06	38.72	42.33
11621	14.79	23.83	28.69	33.59	39.82	40.82
11631	31.51	52.88	63.98	77.88	90.82	100.54
11641	52.23	86.20	104.22	125.32	147.07	157.60
11661	22.36	34.42	40.30	46.68	53.13	57.55
11662	22.36	34.42	40.30	46.68	53.13	57.55
11691	5.42	8.06	9.51	10.93	12.35	13.34
11711	30.43	43.98	50.47	58.72	64.71	72.71

**Table D-1. Existing Conditions Peak Discharges (Scenario 1)**

Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
11731	30.94	46.20	53.65	62.95	69.90	78.99
11761	15.56	25.79	31.05	36.39	39.16	42.70
11762	15.79	26.16	31.49	36.91	39.72	43.30
11781	19.07	29.29	35.06	41.10	42.00	41.07
11801	19.76	30.48	36.48	43.04	43.07	42.84
11831	24.72	38.87	47.27	56.48	66.99	72.12
11851	41.41	63.76	76.22	89.63	93.92	89.52
11871	54.76	84.93	101.84	120.26	131.85	133.29
11892	37.48	63.85	77.75	92.00	103.31	109.80
11931	3.07	5.67	6.60	7.32	8.29	8.90
11961	27.69	27.69	27.69	27.69	27.69	27.69
11971	29.11	29.11	29.11	29.11	29.11	29.11
11981	6.01	10.83	13.17	14.79	16.79	21.40
12001	27.13	36.91	39.32	43.25	50.22	74.11
12031	23.70	28.85	29.01	29.17	42.41	44.09
12051	17.82	19.05	22.58	27.38	44.06	45.51
12071	49.76	64.83	76.57	92.27	125.22	138.15
12081	40.65	50.93	56.24	61.58	66.78	69.30
12101	30.42	58.56	74.56	93.65	111.51	120.33
12121	33.42	63.88	81.24	102.21	118.54	132.22
12131	34.02	65.06	82.58	103.66	120.70	132.94
12161	39.60	74.59	94.55	118.84	137.43	160.02
12181	39.21	49.74	57.83	69.10	82.17	96.69
12182	4.68	31.91	45.00	59.67	76.45	92.13
12191	43.59	81.60	103.02	129.41	160.25	188.56
12201	7.43	39.07	39.03	39.33	39.72	39.64
12221	27.90	43.54	49.92	49.66	50.15	49.81
12241	3.13	3.13	3.13	3.13	3.13	3.13
12242	0.00	1.61	2.36	2.52	2.59	2.63
12243	0.00	0.00	0.00	0.97	1.86	2.39
12251	3.03	3.68	4.40	4.70	5.00	5.24
12261	2.89	5.27	5.33	6.00	6.32	6.56
12301	5.23	11.84	11.84	11.22	10.98	11.13
12311	23.12	31.20	31.16	30.60	30.52	30.51
12321	28.04	44.00	43.41	43.18	43.09	43.09
12341	68.11	88.71	90.58	89.94	88.81	88.09
12361	78.39	109.88	116.47	123.05	128.53	131.37
12371	114.99	177.37	200.42	223.27	239.14	245.90
12391	146.45	232.53	268.21	306.77	319.78	327.31
12421	26.97	31.24	32.80	32.88	31.75	30.19
12431	135.65	219.70	257.91	300.52	322.42	341.77
12471	28.01	44.64	53.44	63.19	74.47	80.27
12491	27.56	44.19	52.94	63.16	74.47	80.27

**Table D-1. Existing Conditions Peak Discharges (Scenario 1)**

Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
12511	21.29	36.82	44.14	50.91	59.32	69.85
12531	163.80	262.06	304.57	353.44	384.07	402.88
12551	183.28	295.71	345.57	398.76	443.30	472.02
12571	9.52	15.20	18.50	22.31	26.67	30.71
12591	6.85	12.23	14.90	17.84	21.41	23.54
12611	8.35	14.21	17.30	20.32	24.08	26.45
12621	11.40	18.00	21.49	25.41	27.64	28.09
12631	8.35	14.17	17.27	20.31	24.08	26.44
12641	8.35	14.16	17.26	20.31	24.08	26.44
12651	8.34	14.15	17.25	20.30	24.07	26.43
12661	8.34	14.16	17.22	20.29	24.07	26.42
12671	8.33	14.21	17.18	22.40	24.06	26.41
12681	17.97	28.19	33.12	37.88	40.82	46.86
12691	17.87	27.57	31.96	36.29	39.99	46.76
12701	17.71	26.64	30.60	40.65	41.28	46.72
12711	17.29	24.16	26.38	57.37	70.17	68.16
12721	15.38	19.03	24.47	83.73	88.02	87.13
12731	14.91	18.68	24.80	95.94	116.44	122.48
12741	13.78	18.80	25.20	91.54	104.12	109.21
12761	205.13	334.39	398.60	464.57	507.12	529.61
12781	202.43	331.03	395.64	456.74	488.16	488.16
12801	355.24	564.98	641.73	673.10	701.57	713.89
12821	338.41	529.40	581.84	606.58	620.01	622.06
12851	30.48	48.43	58.73	62.92	61.90	60.48
12881	10.98	19.03	23.91	26.83	28.33	29.75
12891	11.03	19.05	23.90	26.83	28.33	29.76
12901	340.30	538.68	584.61	592.69	600.08	607.04
12921	1.20	1.38	1.41	1.42	1.42	1.42
12922	0.00	3.91	5.96	7.54	8.38	8.68
12931	1.19	4.75	5.38	5.40	5.31	5.23
12951	8.88	14.32	17.16	22.14	28.01	31.42
12981	8.87	14.32	17.16	22.14	28.01	31.42
13001	6.19	10.64	13.36	16.70	20.21	27.21
13021	29.71	48.48	59.32	71.65	84.02	97.73
13031	29.64	48.42	59.28	71.59	84.08	97.74
13041	19.68	31.20	37.74	44.18	51.63	53.47
13061	49.13	79.27	96.70	115.58	135.54	149.21
13071	7.58	11.37	12.92	14.16	15.98	17.24
13081	7.03	10.64	11.57	12.02	13.13	13.76
13111	7.37	8.15	9.36	10.29	10.88	10.86
13112	0.00	0.00	0.00	0.00	0.00	2.31
13121	5.79	8.15	9.37	10.30	10.88	10.86
13131	5.10	8.14	9.39	10.35	10.95	10.92

**Table D-1. Existing Conditions Peak Discharges (Scenario 1)**

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Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
13141	5.09	8.12	9.45	10.43	10.99	11.01
13151	22.18	30.78	34.57	39.51	45.57	50.81
13171	7.91	12.54	14.84	16.18	17.06	17.69
13191	7.98	12.65	14.96	16.31	17.17	17.79
13211	345.78	538.82	589.42	596.97	604.05	612.24
13231	14.99	23.96	28.54	34.37	40.24	45.60
13241	13.88	22.27	26.54	31.22	36.24	40.16
13251	12.30	19.90	23.81	28.06	32.42	36.11
13261	10.56	17.38	20.86	25.04	28.73	32.59
13281	12.73	19.63	23.89	28.63	33.24	34.31
13301	5.42	7.29	7.94	8.38	8.50	8.79
13302	0.00	0.85	2.49	3.97	4.94	5.22
13303	0.00	0.00	0.00	2.43	7.76	9.33
13311	5.43	8.10	10.32	14.38	20.64	22.44
13321	15.71	25.89	32.04	39.48	46.99	51.95
13331	15.15	24.59	30.03	36.83	43.88	50.97
13341	15.05	24.13	31.30	35.68	43.66	50.26
13342	0.00	0.00	0.00	0.00	0.00	0.39
13351	15.19	24.06	31.53	35.84	43.71	50.69
13361	15.41	24.25	32.32	37.11	44.17	50.76
13381	18.26	27.31	33.07	36.93	42.32	47.73
13401	18.42	27.45	33.16	37.09	42.33	47.73
13431	32.92	54.12	63.37	65.22	65.19	64.89
13441	32.73	54.12	63.37	65.22	65.19	64.89
13451	64.55	106.81	134.97	154.25	172.78	187.94
13481	7.28	9.54	10.57	11.50	12.36	13.12
13531	7.65	9.90	10.94	11.86	12.76	13.84
13541	69.18	108.33	135.10	159.82	179.11	194.75
13561	68.97	107.82	133.80	157.84	176.25	191.06
13571	68.75	93.74	97.58	98.23	98.22	97.91
13601	404.98	641.58	688.52	701.08	716.30	731.14
13621	397.82	623.76	678.32	690.41	704.54	717.98
13641	390.73	603.99	666.32	684.87	694.26	703.49
13661	13.05	20.54	25.18	23.68	26.80	27.28
13681	38.61	53.01	53.23	63.48	58.44	58.72
13701	9.22	14.26	18.24	37.15	32.11	31.67
13711	46.68	64.60	69.05	70.12	76.79	77.38
13741	62.58	87.17	97.42	93.35	107.21	109.21
13761	6.30	10.01	12.16	14.74	17.70	20.46
13771	6.28	9.98	12.13	14.70	17.65	20.40
13791	34.35	52.23	53.58	56.26	58.03	61.09
13811	402.05	615.60	678.48	705.51	724.47	738.00
13831	63.99	87.30	87.71	88.15	88.43	88.50

**Table D-1. Existing Conditions Peak Discharges (Scenario 1)**

Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
13851	63.90	87.30	87.71	88.10	88.27	88.27
13861	64.70	88.89	89.74	89.77	91.81	94.23
13871	36.76	49.00	55.37	57.75	57.73	57.72
13891	426.89	637.50	710.83	744.52	761.75	770.08
13911	1.73	4.89	7.10	9.95	13.61	17.00
13941	2.99	7.64	11.17	15.81	22.03	28.25
13951	3.22	7.96	12.14	17.70	25.41	33.89
13971	12.28	19.76	24.10	29.70	38.61	47.71
13981	424.62	626.42	708.24	746.13	771.48	786.33
14001	421.81	618.63	670.73	710.91	734.44	755.92
14031	2.18	2.25	2.39	2.82	2.94	2.97
14041	3.31	3.60	3.62	4.18	5.36	5.98
14061	16.22	24.72	29.18	33.50	37.91	39.23
14081	16.04	24.44	28.74	33.12	37.48	38.46
14091	15.78	24.05	28.25	32.46	36.74	37.69
14111	414.60	596.81	653.27	710.28	730.50	756.43
14151	386.86	580.06	654.09	698.95	732.92	757.67
14171	417.45	623.72	690.82	728.70	755.34	776.49
14181	64.82	103.77	126.05	152.16	182.05	209.75
14191	112.45	168.50	201.36	236.00	276.19	312.04
14211	614.75	864.22	989.75	1,114.34	1,249.17	1,364.41
14231	705.86	996.53	1,144.81	1,297.65	1,463.95	1,606.69
14241	720.69	1,016.28	1,169.76	1,323.90	1,491.25	1,636.10
14341	15.08	15.74	15.88	15.95	15.98	15.99
14351	23.30	23.33	23.34	23.37	23.43	23.48
14371	23.21	23.36	23.39	23.44	23.49	23.55
14391	23.21	23.58	23.65	23.71	23.80	24.83
14411	23.51	23.95	24.08	24.21	24.33	32.60
14421	24.67	25.61	26.08	26.46	26.79	54.03
14441	4.25	6.58	7.77	8.99	10.12	10.96
14451	4.25	6.59	7.78	9.00	10.12	10.96
14471	9.89	17.23	21.30	25.24	28.89	33.38
14481	9.89	17.26	21.39	25.43	29.21	33.69
14491	30.75	53.08	65.75	78.90	90.73	95.30
14501	30.61	53.07	65.63	78.74	90.62	95.07
14521	64.33	106.51	130.57	157.01	184.76	203.94
14541	63.17	103.08	124.52	147.50	171.03	188.77
14551	166.33	245.19	288.62	336.61	389.54	434.47
14611	19.86	31.46	38.06	48.39	49.14	49.26
14631	34.10	47.99	55.50	62.56	72.92	87.56
14651	224.21	320.49	372.66	429.29	492.32	537.56
14671	962.83	1,407.24	1,648.05	1,899.24	2,173.60	2,412.39
14681	985.19	1,446.42	1,693.11	1,953.21	2,233.69	2,478.72

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Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
14691	3.29	4.32	4.85	4.90	4.93	4.95
14711	9.34	12.52	12.83	12.75	12.29	12.39
14721	7.75	9.45	9.47	9.44	9.34	9.37
14741	31.39	48.12	56.30	65.55	69.48	69.53
14761	23.82	28.53	28.43	30.40	27.94	28.77
14781	27.00	27.80	27.75	27.72	27.62	27.59
14801	26.08	25.95	27.30	27.55	27.23	27.25
14821	10.51	15.41	15.43	15.57	15.62	15.64
14841	61.49	72.70	81.53	83.19	90.05	96.96
14851	34.92	41.45	43.63	45.75	48.48	51.00
14881	45.53	56.98	61.23	65.25	69.85	74.28
14921	20.49	33.67	41.34	50.18	60.34	69.59
14931	20.41	33.60	41.27	50.12	60.21	69.44
14941	37.06	54.11	63.39	72.70	82.73	92.05
14961	149.13	213.40	247.76	291.47	337.80	379.00
14981	1,147.18	1,658.55	1,946.58	2,252.08	2,580.00	2,874.63
14991	1,188.51	1,724.71	2,026.20	2,347.07	2,695.59	3,006.90
15001	7.36	10.08	10.69	11.79	13.31	14.40
15011	9.20	17.94	22.82	24.25	24.74	24.92
15021	26.29	33.75	33.77	33.80	33.85	33.89
15041	11.27	13.51	14.03	14.50	14.79	14.90
15042	26.50	31.49	34.74	37.52	40.33	42.74
15081	40.40	60.18	71.42	83.58	96.49	107.68
15091	38.48	62.19	74.31	87.62	102.88	116.84
15101	44.77	76.34	92.60	110.49	134.98	158.43
15121	4.01	5.27	6.04	6.75	7.25	8.98
15122	0.00	0.09	0.84	2.83	6.81	10.13
15131	3.85	5.09	5.84	7.76	14.06	19.12
15141	1.32	3.59	5.39	6.98	7.14	7.21
15151	3.04	4.88	7.29	8.59	8.65	8.65
15171	0.74	2.90	3.33	3.54	3.57	3.55
15172	0.00	4.81	8.51	9.84	9.90	9.92
15191	0.74	5.16	7.68	8.29	8.37	8.40
15211	0.74	4.88	7.46	8.03	8.27	8.35
15231	3.77	4.99	5.63	6.24	6.82	7.30
15241	3.63	4.94	5.52	6.06	6.61	7.05
15261	3.05	7.97	11.14	12.63	13.59	14.32
15281	34.43	55.27	66.89	80.34	95.42	108.00
15291	33.56	54.37	65.97	79.24	92.35	107.80
15311	8.21	12.73	15.25	18.14	21.50	24.78
15321	10.51	18.42	22.82	27.60	33.24	36.14
15341	12.56	22.78	28.70	35.21	40.41	41.06
15351	10.75	18.25	22.66	27.87	34.01	36.45

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Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
15371	30.82	53.71	67.34	85.71	105.56	123.18
15372	25.67	40.29	47.81	52.93	57.98	67.72
15391	28.35	45.09	45.10	45.10	45.08	45.08
15421	27.63	42.54	44.00	44.28	40.13	40.79
15441	53.28	82.06	86.77	90.60	93.92	102.82
15451	84.16	135.88	154.46	175.56	197.38	226.85
15471	111.02	180.48	208.03	235.26	263.15	317.71
15491	108.51	177.30	204.01	222.09	239.89	255.16
15501	107.75	175.95	196.78	207.11	210.23	211.28
15521	22.58	33.58	39.77	42.46	44.21	44.58
15531	23.37	33.58	39.77	42.46	44.22	44.59
15541	17.41	25.15	28.22	27.91	26.23	25.10
15561	19.44	29.29	34.24	37.71	37.74	36.95
15581	6.92	9.42	17.80	25.17	32.68	36.43
15601	10.10	13.89	16.06	18.39	19.42	19.70
15611	8.89	11.16	12.24	12.49	12.54	12.57
15621	8.98	11.82	13.09	14.00	14.49	14.59
15651	11.28	17.92	21.73	26.39	31.52	36.22
15661	10.27	15.73	18.52	21.19	22.61	24.96
15681	9.13	12.75	13.43	13.50	14.33	18.10
15701	26.47	35.92	38.31	39.57	40.78	45.70
15721	14.27	22.45	25.94	28.66	32.27	35.41
15731	12.81	20.11	22.65	25.00	29.56	32.99
15751	41.31	58.96	64.04	67.47	72.74	85.27
15771	158.96	253.41	282.15	285.50	276.79	271.70
15791	164.56	267.07	280.08	280.08	280.08	280.08
15811	157.01	178.01	184.02	190.54	198.69	201.13
15831	156.37	180.78	187.41	193.88	200.49	202.65
15851	174.60	206.80	216.71	224.27	234.56	243.64
15871	246.89	327.85	367.36	402.60	451.20	495.74
15891	1,448.03	2,092.69	2,434.37	2,792.22	3,190.66	3,554.25
15911	11.38	17.56	21.76	26.73	31.87	36.48
15921	11.57	18.02	24.55	26.32	27.00	26.93
15931	11.81	18.03	24.55	26.32	27.00	26.93
15941	22.15	33.74	37.73	39.05	39.60	39.92
15961	22.51	33.96	36.59	36.69	36.88	37.13
16001	7.24	11.82	12.40	12.86	13.47	13.50
16011	12.59	24.03	25.20	26.65	29.25	29.96
16041	11.50	18.03	18.40	18.29	17.99	18.00
16081	31.99	49.96	53.66	53.80	54.11	54.49
16121	6.77	10.77	13.11	15.80	18.98	21.88
16131	6.78	10.75	13.09	15.78	18.92	21.88
16141	6.34	9.92	12.04	14.48	17.23	19.78



**Table D-1. Existing Conditions Peak Discharges (Scenario 1)**

Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
16161	19.74	27.15	30.01	30.96	24.30	26.68
16181	32.10	49.78	54.02	54.02	54.37	54.86
16201	44.43	66.65	77.49	82.96	88.98	94.37
16221	70.95	106.21	125.69	142.44	159.87	175.22
16241	69.78	107.99	129.33	145.40	155.65	170.39
16261	9.35	24.24	27.74	27.82	40.81	30.54
16271	24.86	41.47	50.21	51.34	53.96	60.19
16291	104.89	164.33	197.96	227.22	256.49	283.00
16331	1,621.08	2,366.26	2,765.56	3,173.60	3,625.20	4,029.70
16391	17.13	25.77	30.72	35.14	36.79	37.43
16401	16.87	25.02	25.95	29.16	29.26	29.27
16421	25.55	36.86	40.43	42.30	43.53	43.79
16431	24.29	36.07	38.90	40.07	40.03	40.00
16451	40.72	43.94	43.04	42.69	41.24	40.03
16461	39.79	41.13	39.97	38.59	38.64	37.40
16481	45.31	54.78	55.89	56.13	54.58	53.51
16511	2.41	2.97	3.46	3.89	4.21	4.30
16521	2.29	3.40	4.06	4.66	5.51	5.86
16531	2.24	3.78	4.73	5.87	8.57	11.48
16551	3.18	6.95	10.00	13.02	15.57	16.76
16561	7.48	10.81	11.27	20.77	24.31	25.31
16571	16.56	24.92	29.29	40.47	41.50	44.53
16581	20.34	26.17	29.32	34.68	35.61	35.85
16601	20.77	27.90	31.79	35.55	36.00	36.68
16621	38.05	51.66	59.87	68.01	67.46	67.33
16641	50.58	71.13	83.35	96.39	101.49	104.49
16671	52.10	59.02	60.22	60.27	58.63	57.76
16691	13.73	12.82	12.19	12.55	12.50	11.88
16711	21.82	27.73	28.84	29.76	30.42	30.62
16721	21.82	27.73	28.84	29.76	30.42	30.62
16731	59.46	74.06	75.92	76.08	75.88	75.79
16741	59.32	73.77	75.66	75.83	75.31	74.90
16751	13.09	20.08	23.86	28.32	31.97	32.10
16761	12.72	19.11	22.47	27.87	32.12	32.32
16771	21.48	33.12	39.43	46.84	47.76	46.44
16781	73.14	92.75	101.89	112.00	116.36	118.62
16831	8.42	8.27	8.19	8.08	7.94	7.81
16851	10.24	13.81	15.15	16.18	16.86	17.42
16852	6.30	8.49	9.31	9.95	10.37	10.71
16881	35.81	53.04	62.11	69.28	77.95	85.47
16901	1,753.34	2,570.47	3,013.71	3,461.00	3,969.64	4,423.13
16941	1,781.54	2,618.98	3,067.96	3,528.59	4,039.25	4,501.84
16971	12.82	19.96	21.38	21.45	21.75	22.18

**Table D-1. Existing Conditions Peak Discharges (Scenario 1)**

Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
16981	12.83	19.96	21.39	21.45	21.76	22.18
17001	21.01	31.84	34.16	35.85	37.59	38.93
17021	21.01	31.84	34.16	35.85	37.59	38.93
17041	13.59	21.76	24.46	24.46	24.72	25.26
17051	34.59	53.65	59.22	59.44	63.24	63.42
17061	32.51	49.40	55.74	77.04	90.51	96.29
17081	66.84	104.21	119.61	132.41	148.17	162.74
17091	66.62	103.53	118.95	131.54	147.66	162.12
17111	1,847.05	2,720.10	3,159.10	3,680.57	4,226.80	4,705.07
17141	7.88	8.03	8.31	8.30	8.38	8.73
17181	12.57	16.20	12.42	15.77	16.85	16.49
17191	15.48	18.03	15.40	19.37	20.78	19.60
17201	15.51	15.07	15.26	15.62	16.74	15.79
17221	19.39	19.55	19.70	19.86	20.06	20.29
17241	19.44	19.81	19.71	19.87	20.07	20.29
17251	19.53	20.01	19.71	20.05	20.10	20.29
17281	28.24	32.41	34.74	37.07	39.63	42.14
17301	8.98	10.14	10.06	9.69	10.07	10.15
17321	8.96	9.07	9.06	9.03	9.03	9.08
17341	6.70	7.00	6.97	7.05	7.21	7.62
17361	41.63	51.64	56.78	62.04	65.91	69.92
17381	43.95	60.19	68.77	80.77	90.85	100.77
17391	50.14	68.51	78.09	90.60	104.09	118.03
17411	57.33	82.92	99.69	113.38	129.51	143.76
17431	1,949.98	2,873.35	3,354.37	3,916.67	4,506.72	5,029.84
17461	6.06	10.19	12.63	15.29	18.06	20.47
17481	12.19	20.28	25.11	32.63	39.17	44.96
17501	4.93	5.96	6.44	7.48	8.61	9.58
17511	13.89	20.99	26.15	32.04	38.25	43.82
17541	14.22	21.03	26.09	31.88	38.07	43.20
17551	14.64	21.10	26.00	31.48	37.78	42.85
17571	14.87	24.47	29.87	35.98	42.83	45.37
17581	14.69	21.77	23.35	23.83	23.18	22.73
17591	22.99	32.23	33.18	34.12	36.49	43.47
17621	14.48	23.27	28.31	32.65	34.22	33.98
17631	5.67	7.52	8.45	9.83	10.45	11.31
17651	34.50	43.35	45.22	47.68	50.38	53.19
17671	10.53	16.80	20.77	24.84	29.71	34.27
17691	38.74	47.65	49.34	52.07	55.20	58.38
17731	38.10	55.05	62.99	70.24	78.35	85.90
17732	17.73	25.60	29.27	32.62	36.39	39.90
17741	55.91	80.71	92.33	102.86	114.77	125.83
17761	38.91	59.72	60.89	62.55	64.54	66.42

**Table D-1. Existing Conditions Peak Discharges (Scenario 1)**

Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
17771	38.91	59.72	60.90	62.54	64.52	66.40
17781	95.38	142.30	152.90	164.85	178.35	189.30
17831	2,041.46	3,014.21	3,531.70	4,135.13	4,752.29	5,299.61
18031	17.19	28.14	28.82	36.56	36.89	36.00
18071	40.46	64.83	62.76	85.70	91.47	98.33
18091	3.18	4.62	5.13	5.50	7.30	7.61
18111	13.06	23.30	25.17	25.28	22.19	24.27
18131	9.50	15.19	19.95	18.74	23.58	24.07
18151	9.28	15.19	19.95	18.74	23.59	24.08
18181	57.84	90.97	96.82	111.65	136.84	146.60
18182	0.00	3.38	4.27	5.01	5.94	6.37
18211	17.68	22.13	23.38	24.52	24.89	27.27
18231	13.61	19.37	22.93	26.41	27.32	27.75
18251	9.07	12.89	15.87	17.24	17.81	22.28
18252	4.88	6.93	8.55	9.27	9.58	11.99
18271	11.01	15.62	19.23	20.89	21.59	27.00
18272	2.96	4.20	5.19	5.62	5.80	7.27
18281	14.32	20.35	26.08	26.64	27.47	34.60
18311	74.97	131.37	152.68	171.17	188.93	202.74
18331	74.97	131.39	152.70	170.60	188.51	202.32
18351	1.87	3.26	4.12	4.98	5.72	6.35
18352	0.00	0.00	0.00	0.00	0.00	0.00
18361	1.96	4.43	5.37	5.25	5.76	6.36
18381	2.17	4.08	4.82	5.81	6.55	7.08
18401	76.65	132.49	154.41	172.94	191.89	206.00
18411	78.18	126.44	147.40	164.19	183.12	196.58
18421	59.02	75.99	86.24	92.40	107.13	119.98
18501	30.59	44.92	47.41	47.11	45.72	44.67
18531	58.00	84.64	89.57	91.54	91.46	91.95
18561	56.85	80.41	85.18	87.39	89.52	91.16
18601	65.98	98.67	116.26	128.80	138.62	146.83
18621	68.88	70.55	70.71	70.69	70.76	70.78
18622	7.53	23.83	36.83	48.28	68.43	83.34
18641	76.52	93.92	107.27	118.15	137.97	152.74
18681	17.56	28.56	34.92	42.29	50.69	58.47
18701	17.18	28.37	34.84	42.10	50.30	57.68
18721	14.74	15.02	14.32	13.49	12.55	12.51
18722	5.85	18.14	23.17	29.88	37.78	44.55
18723	0.00	0.00	0.00	0.00	0.00	0.00
18741	79.98	99.33	112.44	125.73	145.33	161.45
18771	70.89	89.86	101.02	112.94	129.67	144.43
18772	11.02	12.94	14.86	17.48	20.07	22.35
18791	84.09	106.84	119.74	135.48	153.59	171.20

**Table D-1. Existing Conditions Peak Discharges (Scenario 1)**

Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
18811	84.18	107.11	119.94	134.79	153.62	171.44
18821	105.51	156.52	184.03	212.49	243.69	270.74
18931	4.04	4.24	4.28	4.30	4.30	4.28
18932	1.01	9.17	12.92	17.52	17.72	17.94
18941	5.01	12.51	15.86	19.16	20.06	20.48
18951	4.94	11.88	14.23	15.76	16.02	16.13
18961	4.92	11.59	13.24	13.22	12.74	12.21
18971	4.26	8.21	9.27	10.37	11.17	11.35
18981	8.27	13.54	14.43	16.07	16.99	17.74
18991	8.27	14.23	14.43	16.05	16.99	17.73
19001	8.27	12.06	12.90	13.53	12.96	13.01
19011	8.25	11.84	12.90	12.90	12.96	13.01
19021	8.23	11.96	13.15	12.90	13.10	14.85
19031	10.42	17.83	22.53	27.70	32.04	63.97
19051	10.09	17.28	22.02	26.86	31.70	64.09
19071	15.95	23.58	24.58	27.20	30.69	38.26
19091	25.70	40.19	45.56	50.24	56.67	85.16
19151	39.36	61.85	73.68	86.29	99.84	106.89
19201	92.93	137.10	162.29	187.13	217.92	259.82
19211	30.70	49.32	60.12	72.49	86.42	98.29
19221	30.56	49.11	59.86	72.16	86.02	97.82
19251	30.85	49.55	59.91	71.88	83.78	95.95
19271	30.69	49.00	58.80	70.28	81.76	93.91
19281	29.77	47.57	56.91	67.84	78.73	90.48
19301	20.51	32.97	40.24	48.47	57.93	66.73
19311	19.72	31.37	38.15	45.71	54.66	63.13
19321	9.65	15.25	18.70	22.70	27.26	31.49
19331	24.13	49.93	68.23	76.19	81.34	85.44
19351	24.23	50.35	68.69	76.67	81.75	85.61
19381	14.51	23.50	30.00	35.03	41.06	48.18
19401	46.89	72.96	81.19	86.56	91.81	95.37
19431	77.15	114.49	123.78	134.33	145.44	157.14
19461	76.49	113.53	122.64	133.10	144.07	155.71
19481	31.76	62.42	80.53	94.81	105.82	115.19
19501	125.46	200.96	244.58	283.88	328.43	381.78
19531	130.90	211.95	259.61	304.21	355.27	415.43
19611	21.33	34.08	41.59	50.56	60.76	70.39
19631	181.08	269.44	320.11	378.57	445.17	514.24

**Table D-2. Future Conditions Peak Discharges (Scenario 3)**

Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
11011	20.71	31.90	35.71	36.36	36.23	35.83
11021	15.92	26.33	32.70	41.02	49.68	57.69
11031	19.96	28.93	31.13	29.51	34.71	35.70
11081	21.64	33.68	39.93	45.56	51.29	52.39
11101	21.52	29.47	33.77	40.77	43.95	42.99
11121	27.08	36.98	38.50	38.57	38.35	38.10
11161	26.11	35.00	32.53	29.86	29.70	31.74
11181	49.32	71.09	79.58	84.77	89.04	90.54
11182	49.32	70.33	79.58	84.77	89.04	90.54
11201	93.88	132.38	146.52	158.03	165.31	167.66
11231	95.27	149.04	176.77	201.77	228.71	235.60
11251	95.22	148.93	176.00	201.29	227.22	233.02
11261	95.35	149.24	175.66	200.90	225.83	231.12
11281	38.09	61.51	74.98	90.42	107.89	123.92
11311	106.35	166.08	195.28	225.20	260.79	288.07
11331	106.30	165.92	194.78	224.90	260.16	286.94
11341	106.34	165.95	194.11	215.60	251.84	263.43
11361	2.04	1.97	2.00	2.20	2.32	2.37
11381	1.69	1.88	2.12	2.34	2.47	2.53
11401	6.56	7.37	8.38	9.39	10.00	10.26
11402	0.00	0.00	0.00	0.00	0.00	0.73
11411	6.56	7.43	8.44	9.46	10.06	10.32
11431	4.49	7.27	8.24	8.65	8.66	8.57
11451	12.84	13.20	13.75	15.99	17.39	17.95
11461	24.90	34.69	34.91	34.72	34.36	34.02
11471	123.12	189.05	215.89	236.69	250.48	261.77
11481	123.06	189.00	215.49	235.43	246.68	255.02
11491	48.70	57.98	61.46	66.98	69.95	72.12
11492	74.35	132.18	153.96	167.79	175.11	180.03
11501	162.72	206.28	241.87	259.75	269.41	275.85
11511	133.25	204.87	240.51	255.51	261.62	262.61
11531	10.56	9.91	9.69	9.53	9.38	9.28
11541	8.09	8.85	9.00	9.16	11.13	13.18
11561	29.47	43.70	50.19	57.08	60.51	60.18
11581	28.62	42.27	48.58	55.30	58.74	58.55
11591	17.43	27.97	32.76	37.77	42.61	43.29
11601	17.43	27.99	32.76	37.75	42.58	43.27
11621	14.80	23.78	28.42	33.36	39.40	40.16
11631	31.84	54.17	66.39	79.18	91.88	99.91
11641	52.53	87.30	106.13	126.17	147.45	155.63
11661	26.37	40.39	47.44	54.53	61.67	66.40
11662	26.37	40.39	47.44	54.53	61.67	66.40
11691	5.41	8.25	9.65	11.12	12.49	13.43

**Table D-2. Future Conditions Peak Discharges (Scenario 3)**

Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
11711	34.33	49.67	57.72	64.27	71.90	79.88
11731	34.56	51.48	61.00	68.22	77.32	86.20
11761	17.12	27.75	33.49	38.13	42.10	46.04
11762	17.36	28.15	33.97	38.68	42.70	46.70
11781	19.05	29.30	35.05	40.91	41.67	40.78
11801	19.71	30.48	36.48	43.01	42.98	42.82
11831	24.71	38.92	47.20	56.48	66.97	71.57
11851	41.35	63.79	76.20	89.57	93.02	88.52
11871	54.83	85.18	102.12	120.58	131.34	132.69
11892	40.16	67.35	82.02	94.23	105.02	111.82
11931	2.75	5.00	6.03	6.83	7.63	8.33
11961	27.69	27.69	27.69	27.69	27.69	27.69
11971	29.11	29.11	29.11	29.11	29.11	29.11
11981	7.57	9.95	10.62	12.22	13.49	17.74
12001	7.45	9.62	10.70	12.29	13.56	17.75
12011	7.27	9.33	10.76	12.34	13.56	17.75
12031	7.15	9.13	10.77	12.35	13.56	17.75
12051	8.05	10.58	12.44	14.67	20.00	37.69
12071	44.89	67.93	79.22	91.21	105.13	117.53
12081	26.36	47.07	58.32	69.41	81.53	90.51
12101	26.60	47.49	58.92	70.08	82.34	91.32
12121	28.35	50.95	63.09	75.30	88.72	96.77
12131	28.65	51.50	64.01	76.35	90.59	100.15
12161	31.74	58.31	72.19	87.34	104.29	115.62
12181	33.78	45.75	48.61	54.56	63.11	72.38
12182	0.00	20.98	31.57	43.53	55.36	66.31
12191	33.95	63.65	78.97	98.51	126.38	146.45
12201	7.57	38.92	38.14	37.42	37.78	39.28
12221	28.33	44.55	50.65	50.87	51.30	50.94
12241	3.13	3.13	3.13	3.13	3.13	3.13
12242	0.00	1.52	2.35	2.53	2.61	2.63
12243	0.00	0.00	0.00	0.90	1.90	2.49
12251	3.03	3.63	4.38	4.71	5.05	5.30
12261	2.89	5.26	5.32	6.01	6.37	6.60
12301	5.23	11.81	11.81	11.20	10.94	11.09
12311	23.32	31.45	31.42	30.86	30.73	30.73
12321	28.78	44.16	42.80	41.56	41.98	42.27
12341	69.71	96.37	96.88	95.90	94.47	93.20
12361	80.63	118.36	124.22	128.95	135.76	137.48
12371	102.87	156.04	174.03	196.49	220.45	232.60
12391	135.41	210.60	243.36	280.94	316.03	325.47
12421	25.80	28.34	29.56	29.48	28.26	27.84
12431	124.29	202.03	235.93	277.18	315.85	335.51

**Table D-2. Future Conditions Peak Discharges (Scenario 3)**

Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
12471	28.01	44.64	53.44	63.20	74.47	80.27
12491	27.56	44.19	52.94	63.15	74.47	80.27
12511	21.36	36.86	44.69	51.98	59.23	68.76
12531	153.74	249.35	289.05	339.03	381.07	398.11
12551	173.31	283.07	330.65	386.33	440.81	467.43
12571	9.52	15.20	18.50	22.31	26.67	30.71
12591	6.85	12.26	15.15	17.88	21.39	23.51
12611	8.35	14.26	17.44	20.33	24.08	26.42
12621	11.40	18.00	21.47	25.34	27.44	27.79
12631	8.35	14.23	17.43	20.33	24.07	26.42
12641	8.35	14.21	17.43	20.33	24.07	26.41
12651	8.35	14.21	17.42	20.32	24.07	26.41
12661	8.35	14.21	17.41	20.32	24.06	26.40
12671	8.35	14.21	17.40	20.97	24.05	26.38
12681	17.97	28.12	33.03	37.63	40.40	46.95
12691	17.87	27.47	31.78	36.01	40.19	46.85
12701	17.70	26.52	30.40	37.64	40.34	46.81
12711	17.24	23.95	26.11	58.70	64.40	63.54
12721	15.29	18.90	22.94	77.96	87.13	90.29
12731	14.82	18.19	22.90	89.44	106.65	112.53
12741	13.75	18.24	22.85	84.92	96.82	101.53
12761	200.42	327.69	389.64	462.81	513.05	536.51
12781	197.00	324.12	387.40	454.74	488.16	488.16
12801	334.10	537.03	622.64	663.27	699.38	713.45
12821	321.72	510.07	570.58	599.75	618.06	620.77
12851	30.48	48.43	58.73	62.92	61.90	60.48
12881	10.98	19.03	23.91	26.83	28.33	29.75
12891	10.98	19.02	23.90	26.83	28.33	29.76
12901	327.04	524.44	583.77	591.94	599.22	606.44
12921	1.28	1.40	1.41	1.41	1.41	1.42
12922	0.38	5.40	6.94	8.08	8.41	8.63
12931	1.65	5.19	5.22	5.23	5.16	5.12
12951	9.12	14.53	18.56	24.68	29.05	32.62
12981	9.12	14.53	18.57	24.68	29.05	32.62
13001	30.29	46.98	58.25	55.50	53.91	53.86
13021	56.27	88.40	96.34	98.21	99.40	99.98
13031	56.25	88.41	96.35	98.28	99.36	99.96
13041	20.04	31.35	37.42	44.25	51.21	51.09
13061	75.86	119.39	133.72	141.89	149.35	150.35
13071	7.58	11.16	12.20	13.65	15.72	16.53
13081	7.08	9.68	10.18	11.02	12.90	13.11
13111	7.36	9.43	10.39	10.95	11.05	9.45
13112	0.00	0.00	0.00	0.00	2.73	7.47

**Table D-2. Future Conditions Peak Discharges (Scenario 3)**

Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
13121	6.38	9.43	10.40	10.95	11.06	12.30
13131	6.38	9.43	10.43	11.00	11.12	12.32
13141	6.37	9.42	10.48	11.06	11.19	12.40
13151	22.76	31.06	34.97	40.21	45.98	51.24
13171	8.52	13.14	15.04	16.42	17.46	17.72
13191	8.56	13.23	15.15	16.54	17.55	17.81
13211	333.72	531.39	589.01	601.27	604.31	610.54
13231	14.99	23.96	28.54	34.37	40.24	45.60
13241	13.88	22.27	26.54	31.22	36.24	40.16
13251	12.30	19.90	23.81	28.06	32.42	36.11
13261	10.56	17.38	20.86	25.04	28.73	32.59
13281	12.73	19.63	23.89	28.63	33.24	34.31
13301	5.42	7.29	7.94	8.39	8.50	8.79
13302	0.00	0.85	2.49	3.97	4.94	5.22
13303	0.00	0.00	0.00	2.43	7.76	9.33
13311	5.43	8.10	10.32	14.38	20.64	22.44
13321	15.70	25.89	32.04	39.48	47.02	51.95
13331	15.15	24.59	30.03	36.83	43.88	50.97
13341	15.05	24.13	31.30	35.68	43.66	50.26
13342	0.00	0.00	0.00	0.00	0.00	0.39
13351	15.19	24.06	31.53	36.07	43.71	50.70
13361	15.41	24.25	32.32	37.11	44.17	50.76
13381	18.26	27.31	33.08	37.07	42.33	47.73
13401	18.42	27.45	33.16	37.23	42.33	47.73
13431	32.92	54.12	63.37	65.22	65.19	64.89
13441	32.73	54.12	63.37	65.22	65.19	64.89
13451	64.55	106.81	134.97	154.25	172.79	187.95
13481	7.28	9.54	10.57	11.51	12.36	13.12
13531	7.64	9.90	10.94	11.87	12.77	13.83
13541	69.18	108.32	135.10	159.83	179.13	194.77
13561	68.97	107.82	133.81	157.87	176.30	191.05
13571	68.75	94.05	97.52	98.04	97.94	97.63
13601	391.28	626.87	688.00	701.25	716.27	730.87
13621	385.53	610.62	678.97	693.38	701.97	711.11
13641	380.62	596.52	669.53	685.04	692.46	697.59
13661	13.05	20.57	22.81	23.64	26.74	27.38
13681	38.59	51.72	58.66	63.89	66.44	58.36
13701	9.22	14.21	36.83	29.05	29.81	30.50
13711	46.59	63.91	67.49	68.74	71.64	74.69
13741	64.30	89.49	91.49	93.78	108.79	110.84
13761	6.30	10.01	12.16	14.74	17.70	20.46
13771	6.28	9.98	12.13	14.70	17.65	20.40
13791	36.42	51.98	53.34	55.43	57.58	61.94



**Table D-2. Future Conditions Peak Discharges (Scenario 3)**

Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
13811	393.06	610.95	687.37	704.81	703.69	711.17
13831	63.99	87.30	87.71	88.15	88.43	88.50
13851	63.90	87.30	87.71	88.10	88.27	88.27
13861	64.70	88.88	89.74	89.76	91.81	94.24
13871	36.76	49.00	55.37	56.35	55.80	55.53
13891	422.18	640.20	720.85	742.69	742.30	759.47
13941	64.09	102.55	122.50	135.44	152.17	167.59
13971	65.42	105.43	126.90	143.98	159.94	178.30
13981	451.92	654.13	739.75	783.27	813.47	824.90
14001	449.29	644.27	684.64	729.63	757.80	782.46
14031	2.19	2.24	2.65	2.86	2.94	2.96
14041	3.41	3.60	3.62	4.22	5.18	5.62
14061	16.17	24.65	28.92	33.27	37.33	38.13
14081	15.95	24.32	28.39	32.80	36.67	37.19
14091	15.63	23.81	27.72	31.98	35.59	36.15
14111	443.76	624.60	682.77	727.74	755.79	780.59
14151	416.49	611.96	684.01	719.86	757.57	783.75
14171	453.03	653.51	719.21	755.31	785.22	810.95
14181	66.30	105.97	128.57	155.12	185.36	213.44
14191	132.04	194.38	230.13	267.95	310.65	350.75
14211	699.22	971.03	1,107.89	1,242.37	1,387.00	1,506.25
14231	816.24	1,140.34	1,309.69	1,478.55	1,660.23	1,813.76
14241	831.21	1,163.82	1,334.99	1,506.56	1,694.13	1,855.28
14341	15.08	15.74	15.88	15.95	15.98	15.99
14351	23.30	23.33	23.34	23.37	23.42	23.48
14371	23.21	23.36	23.39	23.44	23.50	23.56
14391	23.20	23.58	23.65	23.73	23.82	25.07
14411	23.48	23.95	24.10	24.23	24.39	33.88
14421	24.55	25.58	26.02	26.44	26.86	58.77
14441	4.25	6.58	7.77	8.99	10.12	12.20
14451	4.25	6.59	7.78	9.00	10.12	11.15
14471	9.89	17.23	21.30	25.24	28.88	33.41
14481	9.89	17.26	21.39	25.43	29.21	33.72
14491	30.75	53.08	65.75	78.90	90.73	95.30
14501	30.61	53.07	65.63	78.74	90.62	95.07
14521	64.33	106.51	130.57	157.02	184.77	203.96
14541	62.47	102.13	123.51	146.39	169.67	188.26
14551	164.01	241.91	285.01	332.50	384.90	429.16
14611	19.86	31.46	38.06	48.35	49.16	49.28
14631	33.62	48.53	56.57	65.19	76.14	89.02
14651	219.53	316.39	368.68	425.72	488.86	538.72
14671	1,106.23	1,606.31	1,870.07	2,143.21	2,439.59	2,696.26
14681	1,140.38	1,655.61	1,927.15	2,211.25	2,515.87	2,780.19

**Table D-2. Future Conditions Peak Discharges (Scenario 3)**

Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
14691	3.34	4.42	4.86	4.90	4.93	4.95
14711	9.34	12.52	12.83	12.76	12.29	12.39
14721	7.76	9.45	9.47	9.43	9.36	9.37
14741	31.43	48.12	56.30	65.55	69.48	69.53
14761	28.31	29.60	29.16	29.95	29.70	29.84
14781	26.83	27.28	27.77	27.69	27.60	27.55
14801	25.06	26.61	27.08	26.91	27.31	27.37
14821	10.54	15.38	15.50	15.52	15.55	15.55
14841	61.50	73.13	81.45	83.54	90.03	96.96
14851	34.57	41.59	43.72	45.97	48.76	51.30
14881	46.30	58.24	63.47	67.56	72.90	77.39
14921	20.49	33.67	41.34	50.18	60.34	69.59
14931	20.41	33.60	41.27	50.11	60.21	69.44
14941	38.45	56.06	65.69	75.45	85.94	95.66
14961	160.72	229.54	267.94	314.73	364.58	408.90
14981	1,319.15	1,905.61	2,228.18	2,566.09	2,929.16	3,254.94
14991	1,374.62	1,984.28	2,328.06	2,685.92	3,072.57	3,412.95
15001	7.36	10.09	10.71	11.78	13.35	14.39
15011	9.20	17.94	22.76	24.30	24.76	24.93
15021	26.29	33.75	33.77	33.80	33.85	33.89
15031	4.38	6.34	6.93	7.72	8.51	9.11
15041	12.13	15.41	15.91	16.33	16.43	16.50
15042	26.85	32.04	35.54	38.20	41.04	43.45
15051	4.38	6.25	6.93	7.72	8.51	9.11
15061	4.37	6.30	6.99	7.84	8.71	9.28
15081	63.00	93.10	108.37	124.58	141.96	157.37
15091	62.03	94.79	111.49	129.13	148.33	165.63
15101	71.44	112.98	133.79	156.39	186.38	213.03
15121	4.01	5.27	6.04	6.75	7.25	8.98
15122	0.00	0.09	0.83	2.82	6.81	10.13
15131	3.85	5.09	5.84	7.76	14.06	19.12
15141	1.32	3.59	5.35	6.86	7.00	7.11
15151	3.04	4.88	7.26	8.58	8.62	8.63
15171	0.74	2.88	3.33	3.53	3.56	3.54
15172	0.00	4.91	8.28	9.91	10.01	10.02
15181	20.59	30.72	35.16	40.79	47.00	51.75
15191	0.74	5.14	7.55	8.21	8.28	8.32
15211	0.74	4.97	7.46	8.08	8.25	8.36
15231	3.77	4.99	5.63	6.24	6.82	7.29
15241	3.63	4.94	5.52	6.06	6.60	6.96
15251	25.12	37.14	42.22	48.87	56.04	61.19
15261	3.51	8.78	12.17	13.69	14.62	15.44
15281	36.88	58.97	71.65	87.03	104.14	119.31

**Table D-2. Future Conditions Peak Discharges (Scenario 3)**

Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
15291	36.67	58.62	71.51	86.76	104.57	120.22
15311	8.20	12.70	15.22	18.11	21.48	24.75
15321	10.53	18.43	22.86	27.62	33.15	36.02
15341	12.75	22.92	28.58	35.34	39.44	41.07
15351	10.55	18.31	22.90	27.52	33.55	36.23
15371	27.75	49.92	64.72	85.17	112.71	124.83
15372	25.14	42.06	48.09	52.14	58.10	71.50
15391	28.36	45.09	45.10	45.09	45.06	45.04
15421	27.80	43.33	41.93	40.97	40.46	41.04
15441	50.00	79.65	86.88	90.11	93.33	106.72
15451	77.83	129.25	151.74	174.33	206.25	233.16
15471	105.66	172.55	200.56	228.91	269.07	321.15
15491	103.32	169.71	196.85	214.83	234.33	249.83
15501	102.51	168.97	191.39	203.41	205.94	208.44
15521	22.58	33.57	39.77	42.46	44.21	44.59
15531	23.37	33.58	39.77	42.46	44.22	44.59
15541	17.41	25.15	28.22	27.91	26.23	25.10
15561	19.44	29.29	34.25	37.72	37.74	36.95
15581	6.92	9.43	17.81	25.18	32.71	36.43
15601	10.10	13.89	16.05	18.38	19.41	19.68
15611	8.89	11.15	12.22	12.32	12.27	12.31
15621	8.98	11.76	12.93	13.88	14.10	14.27
15651	11.28	17.92	21.73	26.44	31.52	36.22
15661	10.27	15.71	18.48	21.09	22.43	24.90
15681	9.13	12.92	13.33	13.51	14.35	18.20
15701	26.48	36.28	38.33	39.65	40.50	45.91
15721	14.27	22.45	25.90	28.42	32.19	35.52
15731	12.79	20.18	22.69	25.02	29.64	33.18
15751	41.57	59.75	64.75	67.81	73.29	85.69
15771	155.26	248.64	281.34	285.54	278.04	270.87
15791	161.47	263.20	280.08	280.08	280.08	280.08
15811	155.97	177.92	185.01	193.45	201.31	203.01
15831	155.34	180.71	188.23	196.01	202.18	203.11
15851	174.16	209.01	220.19	227.37	236.53	245.69
15871	269.92	363.16	412.24	455.61	506.38	554.34
15891	1,660.89	2,401.91	2,795.23	3,208.01	3,664.31	4,074.19
15911	11.38	17.59	21.76	26.73	31.87	36.48
15921	11.57	17.91	24.55	26.30	27.00	26.97
15931	11.81	17.92	24.55	26.30	27.00	26.97
15941	22.15	34.13	37.73	39.03	39.59	39.91
15961	22.51	33.62	36.58	36.66	36.85	37.14
16001	6.36	9.99	10.95	11.75	12.52	12.93
16011	10.68	20.33	22.85	25.10	25.70	26.84

**Table D-2. Future Conditions Peak Discharges (Scenario 3)**

Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
16041	11.50	18.03	18.40	18.28	17.99	18.00
16081	31.98	45.99	53.64	53.76	54.08	54.51
16121	6.77	10.77	13.11	15.80	18.98	21.88
16131	6.78	10.75	13.09	15.78	18.92	21.88
16141	6.33	9.90	12.02	14.46	17.21	19.76
16161	20.17	27.30	30.63	31.23	30.81	31.98
16181	32.09	46.50	53.99	53.97	54.35	54.97
16201	44.34	63.84	77.35	82.83	88.85	94.24
16221	70.23	106.94	124.59	141.21	158.63	173.94
16241	70.44	115.89	127.63	145.88	160.97	174.24
16261	9.35	24.08	28.66	23.09	26.61	30.54
16271	26.81	41.21	52.56	54.96	55.02	61.29
16291	104.37	167.42	198.73	228.46	257.64	284.19
16331	1,840.90	2,691.08	3,144.12	3,613.11	4,125.01	4,578.39
16391	17.14	25.76	30.70	35.06	36.66	37.32
16401	16.89	24.92	25.78	29.17	29.25	29.27
16421	25.75	37.11	40.58	42.42	43.59	43.82
16431	24.46	36.24	39.14	40.07	40.03	40.00
16451	40.82	43.72	42.83	42.44	40.94	39.58
16461	39.88	40.92	39.72	38.31	38.39	37.02
16481	45.34	54.55	55.57	55.78	54.00	52.93
16511	2.42	3.11	3.59	4.03	4.28	4.37
16521	2.31	3.58	4.63	4.93	5.76	6.02
16531	2.32	3.93	5.82	6.10	10.35	11.92
16551	3.84	8.68	11.96	14.67	16.78	18.10
16561	9.24	11.77	14.56	24.26	26.36	27.24
16571	18.73	27.96	33.29	42.12	45.16	46.52
16581	23.46	29.75	34.48	36.22	36.41	36.44
16601	24.03	31.64	36.45	36.65	36.65	37.12
16621	40.47	55.17	63.91	68.86	67.67	67.46
16641	52.67	74.40	87.04	97.90	102.33	104.67
16671	53.38	59.58	60.99	60.45	58.47	57.85
16691	13.75	12.78	12.15	12.56	12.43	11.80
16711	21.83	27.66	28.75	29.64	30.26	30.43
16721	21.83	27.66	28.75	29.64	30.26	30.43
16731	60.43	74.85	76.58	76.22	75.92	75.95
16741	60.29	74.55	76.33	75.97	75.33	75.35
16751	13.09	20.08	23.84	28.32	31.89	32.00
16761	12.72	19.11	22.45	27.97	32.12	32.33
16771	21.47	33.11	39.41	46.84	47.52	46.15
16781	73.59	93.00	102.21	112.26	116.43	118.33
16831	8.41	8.26	8.17	8.07	7.92	7.78
16851	10.36	13.94	15.24	16.23	16.90	17.47

**Table D-2. Future Conditions Peak Discharges (Scenario 3)**

Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
16852	6.37	8.57	9.37	9.98	10.40	10.74
16881	36.73	54.12	63.48	70.76	79.79	87.81
16901	1,982.11	2,904.76	3,402.23	3,913.75	4,478.84	4,985.01
16941	2,007.75	2,955.26	3,460.86	3,984.56	4,561.30	5,073.83
16971	13.34	20.82	21.52	21.69	21.94	22.32
16981	13.34	20.82	21.52	21.69	21.94	22.32
17001	21.49	32.15	34.16	35.85	37.58	38.92
17021	21.49	32.16	34.16	35.85	37.58	38.93
17041	13.59	21.77	24.44	24.44	24.65	25.28
17051	35.12	53.86	59.33	59.60	63.33	63.18
17061	32.16	47.84	54.60	76.45	91.05	97.38
17081	66.16	102.53	117.50	129.97	145.72	160.26
17091	65.75	101.73	116.87	129.12	145.27	159.60
17111	2,074.03	3,058.46	3,557.59	4,142.85	4,755.28	5,285.51
17141	8.28	8.40	8.22	8.38	8.38	8.44
17181	10.87	15.48	10.79	11.23	11.61	14.04
17191	16.17	23.15	16.07	16.46	16.89	21.54
17201	15.98	19.93	15.42	15.64	15.81	17.93
17221	19.39	19.42	19.72	19.89	20.11	20.28
17241	19.44	19.77	19.73	19.90	20.11	20.28
17251	19.53	20.05	19.73	19.90	20.11	20.28
17281	28.28	32.44	34.89	37.53	40.26	42.67
17301	8.97	10.15	10.05	9.69	10.06	10.15
17321	8.96	9.06	9.06	9.03	9.04	9.09
17341	6.74	7.15	7.04	7.21	7.31	7.67
17361	41.57	50.95	57.14	62.35	66.44	71.25
17381	46.85	65.18	78.31	91.04	104.67	115.49
17391	53.73	75.05	86.86	101.02	115.44	129.77
17411	62.71	90.65	106.83	121.70	139.82	157.33
17431	2,187.37	3,214.47	3,753.62	4,381.73	5,039.28	5,619.50
17461	6.09	10.21	12.63	15.28	18.04	20.44
17481	11.96	20.07	25.15	32.54	39.36	44.90
17501	4.96	5.95	6.42	7.46	8.57	9.54
17511	13.95	21.06	26.19	32.05	38.22	43.78
17541	14.28	21.08	26.08	31.89	38.03	43.12
17551	14.70	21.15	25.99	31.44	37.73	42.77
17571	14.87	24.48	29.87	35.98	42.83	45.36
17581	14.69	21.59	23.06	23.51	24.18	23.87
17591	23.06	32.30	33.29	34.54	37.54	50.12
17621	14.48	23.27	28.31	32.08	34.21	33.98
17631	5.68	7.53	8.45	9.57	10.44	11.31
17651	34.34	43.34	45.28	47.73	50.59	53.48
17671	10.52	16.79	20.73	24.82	29.71	34.27

**Table D-2. Future Conditions Peak Discharges (Scenario 3)**

Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
17691	38.58	47.01	49.30	52.15	55.40	58.65
17731	42.88	62.12	71.16	79.64	89.07	97.53
17732	19.94	28.87	33.06	36.98	41.36	45.29
17741	62.90	91.05	104.29	116.63	130.47	142.85
17761	38.91	59.60	60.81	62.47	64.46	66.33
17771	38.91	59.61	60.82	62.47	64.45	66.34
17781	102.25	152.54	164.76	178.78	194.06	206.31
17831	2,288.47	3,360.91	3,935.84	4,614.17	5,305.39	5,914.79
18031	19.26	30.97	36.97	37.42	36.84	36.27
18071	43.94	71.28	79.79	86.94	95.04	101.24
18091	3.26	6.33	5.44	6.58	6.90	7.69
18111	13.04	23.22	24.93	24.95	20.11	23.63
18131	9.39	19.16	19.63	22.83	23.24	24.15
18151	9.14	19.21	19.63	22.85	23.25	24.16
18181	60.53	95.02	114.39	127.48	138.31	149.05
18182	0.05	3.77	5.14	5.54	6.01	6.47
18211	19.21	23.68	24.65	26.23	26.11	27.44
18231	14.54	19.57	25.82	27.00	27.56	28.01
18251	9.68	13.00	16.88	17.61	17.96	22.86
18252	5.20	7.00	9.08	9.47	9.66	12.30
18271	11.74	15.76	20.46	21.35	21.77	27.70
18272	3.16	4.24	5.50	5.74	5.85	7.46
18281	15.27	20.62	26.16	27.18	27.69	35.51
18311	79.41	139.59	164.80	177.75	189.08	204.43
18331	79.41	139.62	164.61	177.22	188.68	203.97
18351	1.99	3.46	4.36	5.17	5.91	6.53
18352	0.00	0.00	0.00	0.00	0.00	0.00
18361	2.14	4.78	5.56	5.21	5.92	6.54
18381	2.33	4.14	5.32	6.04	6.74	7.17
18401	81.17	140.77	166.05	180.04	192.17	207.80
18411	82.48	134.36	158.36	171.52	183.67	198.43
18421	64.03	81.48	86.31	95.16	108.52	122.15
18501	30.56	44.74	47.19	46.74	45.45	44.35
18531	57.92	84.01	89.01	90.50	90.83	91.17
18561	56.49	79.53	84.35	87.38	89.52	91.50
18601	64.85	100.79	117.69	129.01	138.86	146.50
18621	68.57	70.40	70.46	70.54	70.57	70.61
18622	9.60	27.11	37.87	52.68	71.59	87.38
18641	78.08	96.94	106.80	120.65	139.34	155.15
18681	17.69	28.59	34.88	42.34	50.68	58.47
18701	17.19	28.50	34.68	41.96	50.08	56.97
18721	13.97	13.57	12.68	11.60	11.34	13.13
18722	7.80	18.82	23.79	30.62	38.27	43.03

**Table D-2. Future Conditions Peak Discharges (Scenario 3)**

Notes: Peak discharges usually occur at times other than the time of maximum computed water surface elevation. Peak discharges can occur in the upstream direction.

Conduit Number	Maximum Computed Discharge					
	2-Yr (cfs)	5-Yr (cfs)	10-Yr (cfs)	25-Yr (cfs)	50-Yr (cfs)	100-Yr (cfs)
18723	0.00	0.00	0.00	0.00	0.00	0.00
18741	82.22	102.17	113.70	128.76	147.92	163.76
18771	73.91	92.19	102.12	115.97	132.37	145.97
18772	10.76	13.80	15.59	17.96	20.49	22.60
18791	91.71	115.33	129.40	146.97	169.05	188.41
18811	91.95	115.75	128.74	146.23	168.85	188.10
18821	139.84	213.12	240.24	256.80	276.92	296.01
18931	4.05	4.24	4.28	4.30	4.30	4.28
18932	1.01	9.17	12.90	17.53	17.71	17.93
18941	5.01	12.51	15.84	19.14	20.04	20.46
18951	4.94	11.85	14.18	15.72	16.00	16.10
18961	4.91	11.56	13.10	13.13	12.45	12.12
18971	4.42	8.70	9.35	10.45	11.17	11.32
18981	8.43	12.83	14.52	15.95	16.99	17.73
18991	8.43	17.37	14.99	15.94	16.98	17.72
19001	8.43	12.88	12.92	12.95	13.01	13.06
19011	8.43	12.88	13.29	13.32	13.32	13.32
19021	8.48	13.74	15.91	15.67	16.29	15.92
19031	47.71	76.01	96.78	114.21	114.67	114.69
19051	47.33	75.98	102.94	231.59	114.67	246.94
19071	15.36	20.75	26.88	30.44	33.18	33.31
19091	61.51	89.32	98.30	101.61	110.37	100.73
19151	70.90	105.90	110.61	111.53	111.71	111.70
19201	115.07	172.04	216.49	247.24	280.49	300.59
19211	31.71	50.96	62.10	74.89	89.14	101.46
19221	31.57	50.75	61.82	74.55	88.73	100.97
19251	30.85	49.47	59.88	71.79	83.76	95.74
19271	30.67	48.81	58.83	70.14	81.68	93.73
19281	29.68	47.28	56.79	67.61	78.63	90.26
19301	20.88	33.49	40.87	49.23	58.85	67.85
19311	20.02	31.88	38.76	46.38	55.51	64.16
19321	9.65	15.25	18.70	22.70	27.26	31.49
19331	24.80	51.57	69.48	76.88	81.90	85.90
19351	24.92	52.06	69.96	77.37	82.23	86.07
19381	14.52	23.84	29.93	34.51	41.47	48.63
19401	48.35	73.85	81.84	87.18	92.30	95.92
19431	80.00	116.21	125.58	136.32	148.09	160.13
19461	79.33	115.22	124.44	135.08	146.74	158.70
19481	32.91	64.19	82.20	95.80	106.72	116.24
19501	147.76	235.07	293.96	341.98	388.60	424.45
19531	154.27	246.27	309.40	363.69	417.31	460.36
19611	35.29	56.39	68.69	82.75	98.95	113.61
19631	233.67	348.19	413.38	489.89	576.73	656.19



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