FLOOD INSURANCE STUDY

VOLUME 2 OF 6

ERIE COUNTY, NEW YORK
(ALL JURISDICTIONS)

Community Name	Community Number	Community Name	Community Number	Community Name	Community Number
Akron, Village of	361553	Depew, Village of	360236	Marilla, Town of	360250
Alden, Town of	360225	East Aurora, Village of	365335	Newstead, Town of	360251
Alden, Village of	360224	Eden, Town of	360238	North Collins, Town of[1]	360252
Amherst, Town of	360226	Elma, Town of	360239	North Collins, Village of[1]	360789
Angola, Village of	360982	Evans, Town of	360240	Orchard Park, Town of	360255
Aurora, Town of	360227	Farnham, Village of[1]	361588	Orchard Park, Village of	360254
Blasdell, Village of	361489	Gowanda, Village of	360075	Sardinia, Town of	360256
Boston, Town of	360228	Grand Island, Town of	360242	Sloan, Village of [1]	361589
Brant, Town of	360229	Hamburg, Town of	360244	Springville, Village of	360258
Buffalo, City of	360230	Hamburg, Village of	360243	Tonawanda, City of	360259
Cheektowaga, Town of	360231	Holland, Town of	360245	Tonawanda, Town of	360260
Clarence, Town of	360232	Kenmore, Village of [1]	361590	Wales, Town of	360261
Colden, Town of	360233	Lackawanna, City of	360247	West Seneca, Town of	360262
Collins, Town of	360234	Lancaster, Town of	360249	Williamsville, Village of	360263
Concord, Town of	360235	Lancaster, Village of	360248		

[1] No Special Flood Hazard Areas identified

REVISED:
To Be Determined

Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
36029CV002B

NOTICE TO
FLOOD INSURANCE STUDY USERS

Communities participating in the National Flood Insurance Program have established repositories of flood hazard data for floodplain management and flood insurance purposes. This Flood Insurance Study (FIS) may not contain all data available within the repository. It is advisable to contact the community repository for any additional data.

Selected Flood Insurance Rate Map (FIRM) panels for the communities within Erie County contain information that was previously shown separately on the corresponding Flood Boundary and Floodway Map panels (e.g., floodways, cross sections). In addition, former flood hazard zone designations have been changed as follows:

Old Zone	New Zone
A1 through A30	AE
V1 through V30	VE
B	X
C	X

Part or all of this FIS may be revised and republished at any time. In addition, part of this FIS may be revised by the Letter of Map Revision process, which does not involve republication or redistribution of the FIS. It is, therefore, the responsibility of the user to consult with community officials and to check the community repository to obtain the most current FIS components.

Initial Countywide FIS Effective Date: September 26, 2008

Revised Countywide FIS Dates: To Be Determined

ATTENTION: On FIRM panels 36029C0207G, 36029C0219G and 36029C0243G, the Ellicott Creek FCP @ Amherst Levee, the Cayuga Creek Right Bank Levees and Floodwall, and the Cayuga Creek Left Bank Levee and Floodwall, have not been demonstrated by the community or levee owner to meet the requirements of Section 65.10 of the NFIP regulations in 44 CFR as it relates to the levee's ability to provide 1-percent-annual-chance flood protection. The subject areas are identified on FIRM panels (with notes and bounding lines) and in the FIS report as potential areas of flood hazard data changes based on further review.

FEMA has updated levee analysis and mapping protocols. Until such time as FEMA is able to initiate a new flood risk project to apply the new protocols, the flood hazard information on the aforementioned FIRM panels that are affected by the Ellicott Creek FCP @ Amherst Levee, the Cayuga Creek Right Bank Levees and Floodwall, and the Cayuga Creek Left Bank Levee and Floodwall, are being added as a snapshot of the prior effective information presented on the FIRMs and FIS reports dated October 16, 1992 for the Town of Amherst, July 2, 1979 and January 1, 1979 for the Village of Lancaster, August 3, 1981 and February 3, 1981 for the Village of Depew, and March 15, 1984 for the Town of Cheektowaga. As indicated above, it is expected that affected flood hazard data within the subject area could be significantly revised. This may result in floodplain boundary changes, 1-percent-annual-chance flood elevation changes, and/or changes to flood hazard zone designations.

The effective FIRM panels (and the FIS) will again be revised to update the flood hazard information associated with the Ellicott Creek FCP @ Amherst, the Cayuga Creek Right Bank Levees and Floodwall, and the Cayuga Creek Left Bank Levee and Floodwall when FEMA is able to initiate and complete a new flood risk project to apply the new levee analysis and mapping procedures.

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EXHIBITS

Exhibit 1 – Flood Profiles (continued)

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Exhibit 2 – Flood Insurance Rate Map

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Buttermilk Falls Creek								
A	340[1]	25	85	6.7	695.4	695.4	696.4	1.0
B	482[1]	30	171	3.3	706.1	706.1	706.6	0.5
C	703[1]	45	133	4.3	714.6	714.6	715.4	0.8
D	930[1]	45	262	2.2	715.2	715.2	716.2	1.0
E	2390[1]	65	107	5.3	721.4	721.4	721.6	0.2
F	4140[1]	36	148	3.8	726.7	726.7	727.0	0.3
G	4530[1]	22	84	1.7	727.2	727.2	727.5	0.3
H	4680[1]	14	47	3.0	727.3	727.3	727.6	0.3
I	5330[1]	24	76	1.8	727.8	727.8	728.1	0.3
J	5440[1]	30	104	0.7	727.8	727.8	728.1	0.3
K	5645[1]	25	116	0.6	727.8	727.8	728.1	0.3
L	5846[1]	118	689	0.1	727.8	727.8	728.1	0.3
M	6600[1]	180	1670	0.0	727.8	727.8	728.1	0.3
N	7570[1]	108	467	0.4	727.8	727.8	728.1	0.3
O	8190[1]	16	44	4.1	733.0	733.0	733.4	0.4
P	8640[1]	11	36	5.0	735.2	735.2	736.2	1.0
Q	9320[1]	15	33	3.6	740.3	740.3	740.9	0.6
Cattaraugus Creek								
A	88100[2]	294	3120	14.0	745.7	745.7	745.7	0.0
B	88400[2]	382	4160	10.5	748.5	748.5	748.5	0.0
C	89300[2]	415	4230	10.0	750.9	750.9	750.9	0.0
D	89810[2]	278	3660	11.2	751.5	751.5	751.9	0.4
E	90400[2]	250	3170	12.9	752.3	752.3	753.1	0.8
F	90900[2]	144	2130	19.2	753.3	753.3	753.9	0.6
G	91220[2]	210	2960	13.8	757.8	757.8	757.9	0.1

[1] Feet above confluence with Eighteenmile Creek
[2] Feet above mouth

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

BUTTERMILK FALLS CREEK - CATTARAUGUS CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Cattaraugus Creek (Continued)								
H	92060[1]	245	4140	9.9	762.9	762.9	762.9	0.0
I	92550[1]	272	4530	9.0	763.9	763.9	764.2	0.3
J	92950[1]	350	5320	7.7	764.7	764.7	765.2	0.5
K	93770[1]	#	#	#	766.5	766.5	766.5	0.0
L	91180[1]	#	#	#	768.9	768.9	768.9	0.0
M	94680[1]	#	#	#	775.5	775.5	775.5	0.0
N	95320[1]	239[3]	3250	12.6	778.7	778.7	778.7	0.0
O	96020[1]	240[3]	3570	11.4	782.3	782.3	782.3	0.0
P	96820[1]	348[3]	4300	9.5	785.5	785.5	785.6	0.1
Q	97460[1]	392[3]	4200	9.7	787.5	787.5	787.5	0.0
R	98180[1]	211[3]	2860	14.3	789.7	789.7	789.8	0.1
S	98680[1]	247[3]	3320	12.3	792.7	792.7	792.8	0.1
T	99080[1]	545[3]	5880	7.0	795.3	795.3	795.3	0.0
U	99400[1]	575[3]	5640	7.2	795.7	795.7	795.7	0.0
Cayuga Creek								
A	641[2]	488	4816	3.1	592.7	592.7	593.7	1.0
B	1266[2]	112	1986	7.5	592.9	592.9	593.8	0.9
C	1940[2]	140	2167	6.9	593.9	593.9	594.7	0.8
D	2913[2]	316	3841	3.9	595.0	595.0	595.9	0.9
E	4422[2]	150	2483	6.0	595.9	595.9	596.8	0.9
F	5331[2]	125	2219	6.7	596.5	596.5	597.4	0.9
G	6336[2]	180	2661	5.8	597.4	597.4	598.3	0.9
H	7763[2]	475	7093	2.6	598.3	598.3	599.1	0.8
I	8993[2]	318	4673	3.2	598.4	598.4	599.3	0.9

[1] Feet above mouth
[2] Feet above confluence with Buffalo River
[3] Width extends beyond Erie County corporate limits
Supercritical flow

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

CATTARAUGUS CREEK - CAYUGA CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Cayuga Creek (Continued)								
J	10583	522	5976	2.5	598.9	598.9	599.7	0.8
K	12138	478	5526	2.7	599.2	599.2	600.2	1.0
L	13152	905	7219	2.1	599.6	599.6	600.6	1.0
M	15076	99	1677	8.9	600.1	600.1	601.1	1.0
N	16361	196	2493	6.0	602.6	602.6	603.4	0.8
O	17618	128	1424	10.5	603.7	603.7	604.7	1.0
P	18798	181	1954	7.6	610.4	610.4	610.6	0.2
Q	19812	326	3405	4.4	611.7	611.7	612.3	0.6
R	21080	711	6127	2.4	612.6	612.6	613.4	0.8
S	22089	336	3243	4.6	613.2	613.2	613.9	0.7
T	23454	815	7632	2.0	614.3	614.3	615.3	1.0
U	25061	693	3289	4.5	614.7	614.7	615.7	1.0
V	26350	745	4638	3.2	616.7	616.7	617.7	1.0
W	27139	441	3255	4.6	617.4	617.4	618.4	1.0
X	27838	146	1328	11.2	617.6	617.6	618.6	1.0
Y	28197	219	2277	6.5	622.5	622.5	622.5	0.0
Z	28540	206	2427	6.1	625.6	625.6	625.6	0.0
AA	29103	324	3422	4.4	626.2	626.2	626.4	0.2
AB	30074	151	1769	8.4	626.6	626.6	626.9	0.3
AC	31041	378	3968	3.8	628.2	628.2	628.9	0.7
AD	31792	482	4843	3.1	628.6	628.6	629.4	0.8
AE	32258	125	1920	7.8	628.6	628.6	629.4	0.8
AF	32692	226	2759	5.4	629.5	629.5	630.3	0.8
AG	33382	740	8210	1.8	630.4	630.4	631.4	1.0
AH	34347	662	6196	2.4	630.7	630.7	631.6	0.9

[1] Feet above confluence with Buffalo River

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

CAYUGA CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Cayuga Creek (Continued)								
AI	35847	547	3509	4.3	633.3	633.3	634.1	0.8
AJ	37161	241	1769	8.4	634.3	634.3	635.1	0.8
AK	37528	199	2397	6.2	637.8	637.8	637.8	0.0
AL	38079	176	2253	6.6	638.4	638.4	638.4	0.0
AM	38883	108	1611	9.3	639.0	639.0	639.2	0.2
AN	39582	214	2716	5.5	640.5	640.5	641.0	0.5
AO	40499	384	3150	4.7	641.4	641.4	642.1	0.7
AP	41509	201	2329	6.1	642.0	642.0	642.9	0.9
AQ	42170	118	1419	9.9	642.5	642.5	643.5	1.0
AR	43125	131	1879	7.5	646.7	646.7	647.0	0.3
AS	43959	610	5081	2.8	647.9	647.9	648.4	0.5
AT	44760	947	7386	1.9	648.1	648.1	648.6	0.5
AU	46223	316	2966	4.8	648.3	648.3	648.7	0.4
AV	46562	172	2211	6.4	648.6	648.6	649.2	0.6
G[2]	47323	170	2443	5.5	649.3	649.3	650.3	1.0
AW	47959	158	2225	6.3	650.1	650.1	651.1	1.0
H[2]	48381	403	4041	3.3	650.7	650.7	651.6	0.9
AX	48700	241	2749	5.1	651.1	651.1	651.9	0.8
AY	49624	263	2582	5.5	651.8	651.8	652.6	0.8
A[2]	49624	523	3038	5.5	650.9	650.9	650.9	0.0
AZ	51354	140	1695	8.3	654.0	654.0	654.8	0.8
B[2]	51474	180	1788	7.0	654.6	654.6	654.6	0.0
BA	51929	161	1928	7.3	655.9	655.9	656.4	0.5
C[2]	52100	193	2117	6.0	656.0	656.0	656.0	0.0
D[2]	53200	209	1437	8.8	657.0	657.0	657.0	0.0
BB	53346	157	1604	8.8	658.1	658.1	658.5	0.4
BC	55027	146	1825	7.7	666.2	666.2	666.6	0.4
BD	55451	391	5127	2.8	670.8	670.8	671.8	1.0
BE	56468	643	5020	2.6	671.5	671.5	672.4	0.9

[1] Feet above confluence with Buffalo River

[2] This cross section lies within an area that has not been updated on the FIRM at this time due to the presence of levees that have not been demonstrated to meet the requirements of 44CFR Part 65.10 of the NFIP regulations. Please refer to the Notice to Flood Insurance Study Users page at the front of this FIS for more information.

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

CAYUGA CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Cayuga Creek (Continued)								
BF	57191	621	4668	2.8	672.0	672.0	672.7	0.7
BG	57910	266	2204	5.9	672.3	672.3	672.8	0.5
BH	58984	191	1777	7.3	674.4	674.4	675.0	0.6
BI	59875	167	1965	6.6	676.3	676.3	677.3	1.0
BJ	60700	680	4041	3.2	677.7	677.7	678.5	0.8
BK	61534	534	3248	4.0	678.5	678.5	679.4	0.9
BL	62422	547	3095	4.2	680.3	680.3	681.1	0.8
BM	63711	388	2446	5.3	683.0	683.0	684.0	1.0
BN	64679	267	2986	4.2	688.1	688.1	688.5	0.4
BO	65999	592	2901	4.3	689.4	689.4	689.8	0.4
BP	66854	515	3582	2.5	690.8	690.8	691.7	0.9
BQ	67466	356	2308	3.9	691.5	691.5	692.4	0.9
BR	68051	349	2215	4.1	692.6	692.6	693.4	0.8
BS	69206	351	2027	4.5	695.0	695.0	695.9	0.9
BT	69718	393	2382	3.8	696.2	696.2	697.0	0.8
BU	70617	384	2476	3.6	697.0	697.0	697.9	0.9
BV	71165	292	1729	5.2	697.8	697.8	698.8	1.0
BW	71740	152	1259	7.2	700.1	700.1	701.0	0.9
BX	71975	246	1844	4.9	701.6	701.6	702.6	1.0
BY	72566	317	2337	3.9	702.3	702.3	703.3	1.0
BZ	73648	340	1927	4.7	703.9	703.9	704.9	1.0
CA	75015	237	1628	5.5	708.0	708.0	709.0	1.0
CB	76541	222	1501	6.0	712.0	712.0	712.8	0.8
CC	76962	339	1977	4.6	713.8	713.8	714.3	0.5
CD	77758	321	2224	4.1	715.7	715.7	716.5	0.8
CE	78930	355	1643	4.9	718.4	718.4	719.0	0.6
CF	79758	300	1469	5.4	720.1	720.1	720.4	0.3

[1] Feet above confluence with Buffalo River

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK
(ALL JURISDICTIONS)

FLOODWAY DATA

CAYUGA CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Cayuga Creek (Continued)								
CG	80481	244	1469	5.4	721.2	721.2	722.2	1.0
CH	81190	215	1405	5.7	723.3	723.3	724.2	0.9
CI	81514	300	1978	4.0	724.4	724.4	725.3	0.9
CJ	81982	130	1227	6.5	724.8	724.8	725.7	0.9
CK	82984	86	792	10.1	727.9	727.9	728.4	0.5
CL	83928	148	1250	6.4	732.1	732.1	732.6	0.5
CM	84651	215	1553	5.1	734.0	734.0	734.5	0.5
CN	85667	290	1531	5.2	735.8	735.8	736.7	0.9
CO	86387	124	1162	6.9	737.5	737.5	738.5	1.0
CP	87350	200	1652	4.8	740.1	740.1	740.7	0.6
CQ	87873	119	960	8.3	740.7	740.7	741.4	0.7
CR	88577	163	814	10.8	743.3	743.3	743.3	0.0
CS	90592	240	1693	5.2	749.2	749.2	750.2	1.0
CT	91777	295	1066	8.3	752.0	752.0	752.2	0.2
CU	93152	143	1058	8.3	756.4	756.4	757.1	0.7
CV	94752	220	882	10.0	762.3	762.3	762.3	0.0
CW	96112	273	1735	4.9	767.3	767.3	767.8	0.5
CX	97222	277	1674	5.1	768.6	768.6	769.3	0.7
CY	98137	130	862	9.9	769.9	769.9	770.7	0.8
CZ	98347	135	930	8.9	772.4	772.4	772.4	0.0
DA	99387	159	743	11.2	775.9	775.9	776.0	0.1
DB	100432	134	715	11.6	782.4	782.4	782.6	0.2
DC	102072	362	1946	4.3	788.1	788.1	789.0	0.9
DD	103172	205	867	9.6	791.0	791.0	791.2	0.2
DE	103352	105	605	13.7	793.5	793.5	793.8	0.3

[1] Feet above confluence with Buffalo River

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK
(ALL JURISDICTIONS)

FLOODWAY DATA

CAYUGA CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Cayuga Creek (Continued)								
DF	104922	185	1210	6.9	800.0	800.0	801.0	1.0
DG	106762	278	1224	6.8	805.0	805.0	805.0	0.0
DH	107782	133	719	11.6	808.7	808.7	808.7	0.0
DI	107927	160	1129	7.4	810.8	810.8	810.9	0.1
DJ	108662	192	879	9.4	813.5	813.5	813.5	0.0
DK	110062	191	1027	8.1	819.7	819.7	820.1	0.4
DL	111522	273	845	9.8	827.1	827.1	827.1	0.0
DM	112872	268	1588	5.2	830.7	830.7	831.7	1.0
DN	116030	88	739	10.4	843.5	843.5	844.4	0.9
DO	118905	94	731	10.5	855.5	855.5	856.3	0.8
DP	119530	70	603	12.7	859.5	859.5	859.5	0.0
DQ	120655	110	899	8.9	878.1	878.1	878.1	0.0
DR	123555	120	1002	7.8	885.6	885.6	886.6	1.0
DS	126505	102	792	8.8	896.0	896.0	897.0	1.0
Cazenovia Creek								
A	226	192	2670	6.1	583.9	580.9[2]	581.2[2]	0.3
B	436	172	2468	6.6	583.9	581.0[2]	581.3[2]	0.3
C	701	172	2741	6.0	583.9	582.2[2]	582.4[2]	0.2
D	996	157	2346	7.0	583.9	582.3[2]	582.6[2]	0.3
E	1296	138	2224	7.4	583.9	582.6[2]	582.9[2]	0.3
F	1483	136	2398	6.8	584.7	584.7	584.7	0.0
G	1659	155	2686	6.1	585.0	585.0	585.0	0.0
H	2288	153	2321	7.1	585.3	585.3	585.3	0.0
I	2836	154	2463	6.7	585.8	585.8	585.8	0.0

[1] Feet above confluence with Buffalo River
[2] Elevation computed without consideration of backwater effects from Buffalo River

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

CAYUGA CREEK - CAZENOVIA CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Cazenovia Creek (Continued)								
J	3211	156	2452	6.7	586.0	586.0	586.1	0.1
K	3466	156	2552	6.4	587.2	587.2	587.2	0.0
L	3752	152	2554	6.4	587.3	587.3	587.4	0.1
M	4531	149	2462	6.7	587.8	587.8	587.8	0.0
N	5525	119	2163	7.6	588.4	588.4	588.4	0.0
O	5869	119	2194	7.5	588.7	588.7	588.8	0.1
P	6088	108	1711	9.6	588.7	588.7	588.7	0.0
Q	6228	118	2095	7.8	589.7	589.7	589.8	0.1
R	6328	136	2152	7.6	589.9	589.9	590.0	0.1
S	6513	151	2004	8.2	590.1	590.1	590.1	0.0
T	6840	191	1812	9.1	590.6	590.6	590.8	0.2
U	7973	239	2771	5.9	593.2	593.2	593.4	0.2
V	8152	189	2223	7.4	593.2	593.2	593.5	0.3
W	8,366	174	2032	8.1	595.0	595.0	595.3	0.3
X	8484	263	2711	6.1	596.1	596.1	596.1	0.0
Y	8959	310	2586	6.3	596.5	596.5	596.6	0.1
Z	9642	629	4854	3.4	596.8	596.8	597.6	0.8
AA	9879	767	5079	3.2	596.8	596.8	597.8	1.0
AB	10092	791	6725	2.4	597.1	597.1	598.1	1.0
AC	10244	748	5067	3.2	597.1	597.1	598.1	1.0
AD	10908	703	4255	3.9	597.4	597.4	598.3	0.9
AE	11567	556	2846	5.8	598.0	598.0	598.7	0.7
AF	12061	446	2910	5.6	598.8	598.8	599.5	0.7
AG	12581	308	3903	4.0	601.1	601.1	602.1	1.0
AH	13506	250	2629	6.0	601.2	601.2	602.1	0.9

[1] Feet above confluence with Buffalo River

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK
(ALL JURISDICTIONS)

FLOODWAY DATA

CAZENOVIA CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Cazenovia Creek (Continued)								
AI	15826[1]	260	2451	6.4	611.5	611.5	611.7	0.2
AJ	17236[1]	146	2048	7.7	612.9	612.9	613.5	0.6
AK	20016[1]	130	1567	10.0	616.6	616.6	616.9	0.3
AL	21881[1]	130	1951	8.0	620.7	620.7	621.5	0.8
AM	26211[1]	240	1937	8.1	623.8	623.8	624.7	0.9
AN	29291[1]	140	1619	9.6	630.5	630.5	631.1	0.6
AO	32251[1]	120	1342	11.6	635.6	635.6	636.2	0.6
AP	35626[1]	242	2364	6.6	645.8	645.8	646.1	0.3
AQ	38201[1]	312	3210	4.9	651.5	651.5	652.3	0.8
AR	40211[1]	230	2341	6.7	655.2	655.2	655.8	0.6
AS	41246[1]	231	2982	5.2	658.1	658.1	659.0	0.9
AT	42871[1]	450	2589	6.5	660.7	660.7	661.6	0.9
AU	48121[1]	450	1748	9.6	674.9	674.9	675.0	0.1
AV	55866[1]	350	1035	13.8	706.6	706.6	706.4	-0.2
AW	59456[1]	300	1205	11.9	723.5	723.5	723.3	-0.2
AX	65739[1]	300	1326	11.5	742.1	742.1	742.8	0.7
AY	70175[1]	300	1294	12.2	755.9	755.9	756.5	0.6
Cazenovia Creek East Branch								
A	741[2]	985	2973	4.7	818.8	818.8	819.3	0.5
B	1497[2]	107	825	8.1	822.6	822.6	822.6	0.0
C	3847[2]	97	803	8.3	830.6	830.6	830.9	0.3
D	14347[2]	93	1199	5.6	874.6	874.6	875.4	0.8
E	16847	281	2902	4.2	875.7	875.7	876.6	0.9
F	18957	958	7733	1.4	876.0	876.0	876.9	0.9

[1] Feet above confluence with Buffalo River
[2] Feet above confluence with Cazenovia Creek West Branch

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK
(ALL JURISDICTIONS)

FLOODWAY DATA

CAZENOVIA CREEK -
CAZENOVIA CREEK EAST BRANCH

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Cazenovia Creek East Branch (Continued)								
G	21697	541	4450	2.1	876.7	876.7	877.6	0.9
H	26647	836	3459	5.1	879.6	879.6	880.6	1.0
I	28397	132	973	8.6	881.1	881.1	881.6	0.5
J	30772	218	1664	5.7	883.9	883.9	884.7	0.8
K	32793	156	1388	5.7	885.5	885.5	886.2	0.7
L	34743	232	1589	4.6	888.0	888.0	888.6	0.6
M	37433	127	945	8.5	889.9	889.9	890.5	0.6
N	39893	172	1136	7.3	893.4	893.4	894.2	0.8
O	42741	99	831	7.2	898.4	898.4	898.8	0.4
P	43741	90	667	9.0	900.7	900.7	901.0	0.3
Q	45966	127	987	5.7	913.9	913.9	913.9	0.0
R	47141	96	668	8.4	915.6	915.6	916.2	0.6
S	48747	137	882	6.4	921.5	921.5	921.8	0.3
T	49685	100	797	7.4	923.4	923.4	924.4	1.0
U	51320	109	728	7.8	927.3	927.3	928.0	0.7
V	53880	90	547	10.3	937.1	937.1	938.1	1.0
W	56230	156	927	8.1	946.9	946.9	947.9	1.0
X	58165	172	1027	5.1	953.7	953.7	954.0	0.3
Y	60265	81	460	11.5	961.0	961.0	961.0	0.0
Z	62065	105	643	8.2	970.1	970.1	971.0	0.9
AA	63950	160	1209	4.4	981.2	981.2	981.9	0.7
AB	65200	72	421	12.3	984.2	984.2	984.4	0.2
AC	66800	170	901	8.3	992.1	992.1	993.1	1.0
AD	68900	74	499	9.3	1000.2	1000.2	1001.1	0.9
AE	70000	114	669	9.2	1004.9	1004.9	1005.7	0.8

[1] Feet above confluence with Cazenovia Creek West Branch

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK
(ALL JURISDICTIONS)

FLOODWAY DATA

CAZENOVIA CREEK EAST BRANCH

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Cazenovia Creek East Branch (Continued)								
AF	72600[1]	172	949	8.3	1016.2	1016.2	1016.6	0.4
AG	73966[1]	221	896	6.5	1021.9	1021.9	1022.3	0.4
AH	75416[1]	99	486	8.0	1027.0	1027.0	1027.3	0.3
AI	77216[1]	45	275	14.0	1034.9	1034.9	1035.0	0.1
AJ	79616[1]	60	348	10.2	1045.8	1045.8	1046.5	0.7
AK	81383[1]	85	492	6.8	1056.5	1056.5	1056.6	0.1
AL	83333[1]	77	465	7.1	1076.3	1076.3	1076.3	0.0
AM	84069[1]	63	443	7.5	1084.7	1084.7	1084.9	0.2
AN	85369[1]	98	414	8.0	1091.1	1091.1	1091.1	0.0
AO	86929[1]	63	336	8.2	1099.5	1099.5	1099.5	0.0
AP	89229[1]	100	429	6.4	1110.3	1110.3	1111.1	0.8
Cazenovia Creek West Branch								
A	1761[2]	157	1717	8.2	815.9	815.9	816.4	0.5
B	2956[2]	985	2973	4.7	818.8	818.8	819.3	0.5
C	5505[2]	146	1093	6.7	824.5	824.5	824.5	0.0
D	34256[2]	89	756	9.2	934.1	934.1	934.2	0.1
E	36555[2]	102	641	10.8	940.2	940.2	940.3	0.1
F	37401[2]	86	567	10.5	944.2	944.2	944.5	0.3
G	38521[2]	100	633	9.4	949.6	949.6	949.8	0.2
H	39117[2]	109	731	8.2	968.8	968.8	969.2	0.4
I	40667[2]	122	952	6.3	972.7	972.7	973.4	0.7
J	42567[2]	205	1081	5.6	977.3	977.3	978.0	0.7
K	44867[2]	98	564	9.6	984.9	984.9	985.1	0.2
L	46867[2]	138	799	6.8	993.3	993.3	993.3	0.0

[1] Feet above confluence with Cazenovia Creek West Branch
[2] Feet above confluence with Cazenovia Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

CAZENOVIA CREEK EAST BRANCH - CAZENOVIA CREEK WEST BRANCH

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Cazenovia Creek West Branch (Continued)								
M	49317[1]	82	456	11.8	1003.4	1003.4	1003.7	0.3
N	51217[1]	91	546	9.9	1011.0	1011.0	1011.6	0.6
O	53217[1]	126	641	8.5	1020.6	1020.6	1021.6	1.0
P	55467[1]	105	671	8.0	1033.4	1033.4	1033.4	0.0
Q	57617[1]	91	588	7.9	1044.3	1044.3	1044.8	0.5
R	59327[1]	86	469	9.9	1057.2	1057.2	1057.3	0.1
S	59457[1]	91	685	6.8	1060.5	1060.5	1060.5	0.0
T	59997[1]	74	367	12.7	1076.6	1076.6	1076.6	0.0
U	60686[1]	187	1057	4.4	1083.5	1083.5	1083.5	0.0
V	63536[1]	90	494	9.4	1096.3	1096.3	1096.5	0.2
W	65536[1]	85	479	9.7	1107.2	1107.2	1107.3	0.1
X	67699[1]	81	576	8.1	1121.0	1121.0	1121.0	0.0
Y	69449[1]	108	486	9.6	1130.2	1130.2	1130.2	0.0
Z	71549[1]	97	492	9.5	1146.4	1146.4	1146.5	0.1
AA	73549[1]	93	470	8.0	1162.7	1162.7	1162.8	0.1
AB	74549[1]	90	469	8.0	1169.5	1169.5	1169.5	0.0
AC	75479[1]	90	420	8.9	1174.4	1174.4	1174.7	0.3
AD	76779[1]	90	442	8.4	1181.8	1181.8	1182.0	0.2
Clear Creek								
A	38808[2]	150	650	8.8	747.5	747.5	747.9	0.4
B	39283[2]	380	840	6.8	750.8	750.8	750.9	0.1
C	40920[2]	160	870	6.6	760.8	760.8	761.6	0.8
D	41342[2]	160	1120	5.1	761.8	761.8	762.8	1.0
E	42082[2]	#	#	#	764.0	764.0	764.0	0.0

[1] Feet above confluence with Cazenovia Creek
[2] Feet above mouth
Supercritical flow

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK
(ALL JURISDICTIONS)

FLOODWAY DATA

CAZENOVIA CREEK WEST BRANCH - CLEAR CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Clear Creek (Continued)								
F	42715	#	#	#	770.3	770.3	770.3	0.0
G	44458	190	820	7.0	780.2	780.2	780.9	0.7
H	46042	70	660	8.7	789.9	789.9	790.8	0.9
I	46517	100	830	6.9	792.5	792.5	793.3	0.8
J	47414	100	730	7.8	797.9	797.9	798.6	0.7
K	47731	80	600	9.5	799.4	799.4	799.8	0.4
L	48734	140	860	6.6	804.8	804.8	805.2	0.4
M	51322	270	1330	4.1	828.7	828.7	828.8	0.1
N	52219	260	970	5.6	829.9	829.9	830.4	0.5
O	53698	350	1240	4.4	836.8	836.8	837.4	0.6
P	56796	290	660	8.2	850.5	850.5	850.6	0.1
Q	57446	70	470	11.4	856.2	856.2	856.9	0.7
R	57868	*	*	*	868.4	868.4	*	*
S	59611	*	*	*	877.5	877.5	*	*
T	61301	*	*	*	897.0	897.0	*	*
U	62832	*	*	*	911.5	911.5	*	*
V	65683	*	*	*	916.0	916.0	*	*
W	68534	*	*	*	925.1	925.1	*	*
X	69485	*	*	*	927.5	927.5	*	*
Y	70699	*	*	*	930.5	930.5	*	*
Z	73181	*	*	*	941.0	941.0	*	*
AA	75662	*	*	*	954.9	954.9	*	*
AB	77458	*	*	*	966.5	966.5	*	*
AC	78566	*	*	*	976.9	976.9	*	*
AD	80626	*	*	*	993.0	993.0	*	*

[1] Feet above mouth
Supercritical flow
* Floodway not computed

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

CLEAR CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Clear Creek (Continued)								
AE	82685[1]	*	*	*	1009.0	1009.0	*	*
AF	85308[1]	*	*	*	1042.1	1042.1	*	*
AG	87912[1]	*	*	*	1067.5	1067.5	*	*
AH	87965[1]	*	*	*	1071.4	1071.4	*	*
AI	88862[1]	*	*	*	1085.4	1085.4	*	*
AJ	90235[1]	*	*	*	1102.4	1102.4	*	*
AK	93158[1]	*	*	*	1127.2	1127.2	*	*
Delaware Creek								
A	1020[2]	50	350	8.0	583.7	583.7	584.7	1.0
B	1410[2]	80	430	6.5	586.0	586.0	586.2	0.2
C	1800[2]	120	770	3.6	587.0	587.0	587.0	0.0
D	2980[2]	340	1880	1.5	587.5	587.5	587.6	0.1
E	3410[2]	330	510	5.5	587.5	587.5	587.6	0.1
F	4080[2]	150	850	3.3	589.1	589.1	589.4	0.3
G	4640[2]	110	580	4.8	589.4	589.4	589.7	0.3
H	5450[2]	110	350	8.0	590.9	590.9	591.5	0.6
I	5890[2]	120	390	7.1	593.5	593.5	594.0	0.5
J	6510[2]	110	350	8.1	597.0	597.0	597.0	0.0
K	6910[2]	140	500	5.6	599.0	599.0	599.6	0.6
L	7350[2]	50	290	9.6	600.8	600.8	600.8	0.0
M	8000[2]	130	520	5.4	603.4	603.4	604.1	0.7
N	8520[2]	100	740	3.8	611.4	611.4	612.4	1.0
O	8830[2]	80	530	5.3	611.6	611.6	612.5	0.9
P	9080[2]	50	260	10.6	612.9	612.9	613.8	0.9

[1] Feet above mouth
[2] Feet above confluence with Lake Erie
* Floodway not computed

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

CLEAR CREEK - DELAWARE CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Delaware Creek (Continued)								
Q	9230	210	1500	1.7	615.6	615.6	616.6	1.0
R	9850	141	660	3.8	615.9	615.9	616.9	1.0
S	11180	150	920	2.7	622.3	622.3	623.2	0.9
T	11620	160	740	3.4	622.6	622.6	623.4	0.8
U	11970	130	540	4.7	622.8	622.8	623.6	0.8
V	12530	140	360	6.9	624.2	624.2	625.0	0.8
W	12880	80	380	6.5	625.6	625.6	626.6	1.0
X	13220	60	270	9.4	627.1	627.1	627.4	0.3
Y	14200	190	2100	1.2	644.9	644.9	645.9	1.0
Z	14700	200	1740	1.4	644.9	644.9	645.9	1.0
AA	15020	290	2350	1.1	644.9	644.9	645.9	1.0
AB	15330	140	800	3.1	644.9	644.9	645.9	1.0
AC	15650	230	2800	0.9	652.6	652.6	653.4	0.8
AD	16000	220	2490	1.0	652.6	652.6	653.4	0.8
AE	16400	150	1810	1.4	652.6	652.6	653.4	0.8
AF	16760	230	2320	1.1	652.6	652.6	653.4	0.8
AG	17340	180	1490	1.7	652.6	652.6	653.4	0.8
AH	17760	120	740	3.4	652.6	652.6	653.4	0.8
AI	18260	130	780	3.7	653.2	653.2	654.0	0.8
AJ	18860	90	480	5.2	653.7	653.7	654.5	0.8
AK	19180	160	410	6.2	654.7	654.7	655.5	0.8
AL	19600	190	1000	2.5	655.8	655.8	656.8	1.0
AM	20120	100	520	4.9	656.3	656.3	657.3	1.0
AN	20500	120	530	4.7	657.3	657.3	658.3	1.0
AO	21080	170	630	4.0	658.8	658.8	659.7	0.9
AP	21870	210	740	2.7	659.8	659.8	660.6	0.8

[1] Feet above confluence with Lake Erie

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK
(ALL JURISDICTIONS)

FLOODWAY DATA

DELAWARE CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Ebenezer Brook								
A	90[1]	8	83	7.0	615.2	611.7[3]	612.7[3]	1.0
B	1630[1]	22	215	2.7	625.6	625.6	625.9	0.3
C	3340[1]	22	149	3.9	630.7	630.7	631.7	1.0
D	4295[1]	35	243	2.4	633.4	633.4	634.4	1.0
E	4880[1]	50	334	1.7	635.2	635.2	636.2	1.0
F	5804[1]	68	163	3.6	637.2	637.2	637.6	0.4
Eighteenmile Creek								
A	2290[2]	184	1710	9.6	580.4	580.3[4]	581.3[4]	1.0
B	3190[2]	180	1570	10.4	582.8	582.8	583.2	0.4
C	3890[2]	230	2560	6.4	584.9	584.9	585.9	1.0
D	4800[2]	450	3480	4.7	587.6	587.6	588.3	0.7
E	5490[2]	150	1350	12.1	588.1	588.1	588.8	0.7
F	6180[2]	160	1600	10.3	591.4	591.4	591.8	0.4
G	6630[2]	220	2300	7.1	592.6	592.6	593.3	0.7
H	7200[2]	340	3120	5.3	593.4	593.4	594.1	0.7
I	7640[2]	240	2100	7.8	593.6	593.6	594.3	0.7
J	8260[2]	220	2580	6.4	594.6	594.6	595.6	1.0
K	8780[2]	220	2320	7.1	595.1	595.1	596.1	1.0
L	9320[2]	170	1300	12.6	596.0	596.0	596.6	0.6
M	9730[2]	340	3030	5.4	599.0	599.0	600.0	1.0
N	10210[2]	220	2080	7.9	599.5	599.5	600.3	0.8
O	10550[2]	150	1410	11.7	599.7	599.7	600.6	0.9
P	10750[2]	180	1650	9.9	600.7	600.7	601.6	0.9
Q	11920[2]	370	4420	3.4	609.4	609.4	610.4	1.0
R	12460[2]	470	4860	3.4	609.7	609.7	610.7	1.0

[1] Feet above confluence with Cazenovia Creek
[2] Feet above confluence with Lake Erie
[3] Elevation computed without consideration of backwater effects from Cazenovia Creek
[4] Elevation computed without consideration of backwater effects from Lake Erie

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK
(ALL JURISDICTIONS)

FLOODWAY DATA

EBENEZER BROOK - EIGHTEENMILE CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Eighteenmile Creek (Continued)								
S	13080	460	4000	4.4	609.9	609.9	610.9	1.0
T	13560	430	3130	5.3	609.9	609.9	610.9	1.0
U	14020	280	2160	7.6	610.2	610.2	611.2	1.0
V	14390	180	1380	11.9	610.4	610.4	611.4	1.0
W	14700	140	1120	14.7	611.4	611.4	612.2	0.8
X	15460	370	3500	4.7	617.3	617.3	618.2	0.9
Y	16380	220	2080	7.9	617.5	617.5	618.4	0.9
Z	16680	90	1080	15.2	617.5	617.5	618.5	1.0
AA	17290	220	2430	6.8	621.5	621.5	622.5	1.0
AB	29173	185	1130	7.0	650.3	650.3	650.4	0.1
AC	29691	259	1358	5.9	652.6	652.6	652.7	0.1
AD	30585	147	1012	7.9	656.7	656.7	656.8	0.1
AE	31203	183	1289	6.2	659.0	659.0	659.3	0.3
AF	32251	198	1338	6.0	662.2	662.2	662.3	0.1
AG	33379	233	1248	6.4	665.1	665.1	665.2	0.1
AH	34776	182	956	8.3	669.6	669.6	669.6	0.0
AI	35351	126	827	9.6	672.5	672.5	672.6	0.1
AJ	35899	250	1432	5.6	675.1	675.1	675.2	0.1
AK	36634	248	1071	7.4	677.5	677.5	677.6	0.1
AL	37589	253	1169	6.6	682.4	682.4	682.4	0.0
AM	38124	207	1126	6.8	685.2	685.2	685.3	0.1
AN	38952	149	1127	6.8	688.0	688.0	688.2	0.2
AO	39966	238	1224	6.3	691.5	691.5	691.6	0.1
AP	40816	160	1065	7.2	694.8	694.8	694.9	0.1
AQ	41344	112	853	9.0	696.7	696.7	696.8	0.1

[1] Feet above confluence with Lake Erie

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

EIGHTEENMILE CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Eighteenmile Creek (Continued)								
AR	42237	175	1285	6.0	699.7	699.7	699.7	0.0
AS	43222	123	712	10.8	702.0	702.0	702.0	0.0
AT	43885	162	1372	5.6	705.2	705.2	705.4	0.2
AU	43951	170	674	11.4	709.5	709.5	709.5	0.0
AV	44350	147	872	8.8	713.8	713.8	713.9	0.1
AW	44715	114	836	12.0	714.5	714.5	715.5	1.0
AX	44838	104	790	12.7	717.0	717.0	717.0	0.0
AY	45815	100	803	12.5	720.9	720.9	721.6	0.7
AZ	46900	112	1044	9.6	725.8	725.8	726.2	0.4
BA	47610	125	728	13.8	728.1	728.1	728.1	0.0
BB	48815	116	918	10.9	735.0	735.0	735.5	0.5
BC	49790	154	939	10.7	739.3	739.3	739.5	0.2
BD	50631	143	1083	9.3	743.7	743.7	743.8	0.1
BE	51623	158	1092	9.2	746.2	746.2	746.4	0.2
BF	51702	97	1107	9.1	754.3	754.3	754.3	0.0
BG	52000	92	1097	9.2	756.2	756.2	756.6	0.4
BH	52880	78	881	11.4	757.3	757.3	757.9	0.6
BI	54000	207	1378	7.3	760.2	760.2	760.6	0.4
BJ	55435	220	1748	5.0	763.0	763.0	764.0	1.0
BK	56050	129	1082	8.0	763.7	763.7	764.7	1.0
BL	57590	100	721	12.0	767.3	767.3	767.3	0.0
BM	68819	195	975	7.4	790.8	790.8	791.5	0.7
BN	69860	238	1880	3.8	793.5	793.5	794.5	1.0
BO	72110	250	1627	4.4	795.0	795.0	796.0	1.0
BP	75060	418	2229	3.2	797.8	797.8	798.8	1.0

[1] Feet above confluence with Lake Erie

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

EIGHTEENMILE CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Eighteenmile Creek (Continued)								
BQ	75860	296	1755	4.1	798.3	798.3	799.3	1.0
BR	76780	174	1194	6.0	799.1	799.1	800.1	1.0
BS	77895	147	158	6.2	800.8	800.8	801.7	0.9
BT	78150	340	1471	4.3	801.8	801.8	802.1	0.3
BU	78375	218	1321	4.8	802.2	802.2	802.4	0.2
BV	80455	220	1657	3.8	803.2	803.2	804.0	0.8
BW	81230	150	784	8.1	803.2	803.2	804.0	0.8
BX	81990	139	1318	4.8	804.8	804.8	805.8	1.0
BY	82160	121	1015	6.3	804.9	804.9	805.8	0.9
BZ	83180	120	636	10.0	806.4	806.4	806.6	0.2
CA	84360	112	923	6.9	809.6	809.6	810.6	1.0
CB	85524	87	819	7.8	812.0	812.0	812.7	0.7
CC	86025	80	619	10.3	812.4	812.4	813.4	1.0
CD	86889	140	838	7.3	816.2	816.2	816.2	0.0
CE	87585	84	623	9.8	817.9	817.9	818.1	0.2
CF	88320	84	810	7.5	820.2	820.2	820.4	0.2
CG	89195	88	845	7.2	821.4	821.4	821.9	0.5
CH	90550	141	1200	5.1	823.3	823.3	823.8	0.5
CI	91240	227	1284	4.8	824.2	824.2	824.9	0.7
CJ	93105	90	661	9.2	827.7	827.7	828.7	1.0
CK	93965	117	1016	6.0	830.7	830.7	831.2	0.5
CL	94840	73	757	9.4	831.4	831.4	832.2	0.8
CM	95385	234	1327	4.6	833.2	833.2	834.0	0.8
CN	96625	50	407	12.6	834.9	834.9	835.5	0.6
CO	97575	70	651	7.9	839.5	839.5	840.3	0.8

[1] Feet above confluence with Lake Erie

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK
(ALL JURISDICTIONS)

FLOODWAY DATA

EIGHTEENMILE CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Eighteenmile Creek (Continued)								
CP	98190	120	538	9.5	841.0	841.0	841.5	0.5
CQ	99575	200	1244	4.1	845.5	845.5	845.9	0.4
CR	100830	120	683	7.5	847.1	847.1	847.9	0.8
CS	102480	90	694	7.4	850.9	850.9	851.8	0.9
CT	103514	108	616	8.3	855.0	855.0	855.0	0.0
CU	104260	82	595	7.6	856.8	856.8	857.1	0.3
CV	105218	88	593	7.6	859.0	859.0	859.3	0.3
CW	105580	45	339	13.4	859.0	859.0	859.3	0.3
CX	106250	100	1425	3.2	862.4	862.4	862.5	0.1
CY	106470	112	382	11.9	862.4	862.4	862.5	0.1
CZ	107180	55	483	9.4	866.0	866.0	866.3	0.3
DA	107510	168	1076	4.2	867.4	867.4	868.3	0.9
DB	108840	150	521	8.7	870.6	870.6	870.7	0.1
DC	109530	135	630	7.2	873.7	873.7	874.0	0.3
DD	110730	85	524	8.6	877.0	877.0	878.0	1.0
DE	111380	113	613	7.4	880.4	880.4	880.5	0.1
DF	112393	65	391	11.6	883.4	883.4	883.7	0.3
DG	112600	87	496	9.1	885.4	885.4	885.4	0.0
DH	113660	95	522	8.7	889.7	889.7	890.1	0.4
DI	115020	66	440	10.3	894.8	894.8	895.5	0.7
DJ	115875	161	944	4.8	897.4	897.4	898.4	1.0
DK	116430	80	444	10.2	899.1	899.1	899.9	0.8
DL	117340	180	636	7.1	904.6	904.6	904.6	0.0
DM	118580	84	484	9.4	908.7	908.7	909.4	0.7
DN	119090	140	502	9.0	911.9	911.9	911.9	0.0

[1] Feet above confluence with Lake Erie

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

EIGHTEENMILE CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Eighteenmile Creek (Continued)								
DO	119960[1]	79	552	8.2	916.2	916.2	916.3	0.1
DP	120730[1]	70	650	7.0	923.4	923.4	923.4	0.0
DQ	121190[1]	91	673	5.3	924.4	924.4	924.4	0.0
DR	122050[1]	200	540	6.6	925.5	925.5	925.5	0.0
DS	123240[1]	106	535	6.6	930.5	930.5	931.2	0.7
DT	123700[1]	89	435	8.2	932.1	932.1	932.5	0.4
DU	124482[1]	125	375	9.5	936.7	936.7	936.7	0.0
DV	125010[1]	80	427	8.3	940.1	940.1	940.5	0.4
DW	125810[1]	78	371	9.6	944.1	944.1	944.2	0.1
DX	126410[1]	117	609	5.8	949.1	949.1	949.1	0.0
DY	127210[1]	80	417	8.5	951.4	951.4	951.4	0.0
DZ	128040[1]	137	594	6.0	956.0	956.0	956.7	0.7
EA	129070[1]	98	418	8.5	961.3	961.3	962.0	0.7
EB	129500[1]	147	452	7.9	965.1	965.1	965.1	0.0
EC	130110[1]	98	291	8.1	969.3	969.3	969.6	0.3
ED	130950[1]	55	269	8.8	975.0	975.0	975.2	0.2
Eighteenmile Creek North Branch								
A	700[2]	27	89	5.7	798.0	792.9[3]	792.9[3]	0.0
B	950[2]	29	86	5.9	798.0	797.2[3]	797.2[3]	0.0
C	1093[2]	34	103	4.9	798.0	797.6[3]	797.6[3]	0.0
D	1970[2]	34	97	5.3	801.0	801.0	801.1	0.1

[1] Feet above confluence with Lake Erie
[2] Feet above confluence with Eighteenmile Creek
[3] Elevation computed without consideration of backwater effects from Eighteenmile Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

EIGHTEENMILE CREEK - EIGHTEENMILE CREEK NORTH BRANCH

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Eighteenmile Creek South Branch								
A	100[1]	33	100	3.8	798.5	793.9[3]	794.9[3]	1.0
B	635[1]	23	58	6.6	798.5	796.4[3]	796.4[3]	0.0
C	981[1]	27	124	3.1	798.5	797.7[3]	798.3[3]	0.6
D	1765[1]	20	48	7.9	799.3	799.3	799.5	0.2
E	1987[1]	156	648	0.6	804.7	804.7	805.6	0.9
Ellicott Creek								
A	285[2]	140	1684	2.9	570.3	568.0[4]	569.0[4]	1.0
B	870[2]	110	1246	3.9	570.3	568.4[4]	569.3[4]	0.9
C	1420[2]	97	1111	4.4	570.3	568.8[4]	569.6[4]	0.8
D	2460[2]	95	919	5.3	570.3	569.2[4]	570.1[4]	0.9
E	2960[2]	124	1449	3.4	570.3	569.8[4]	570.7[4]	0.9
F	3780[2]	184	2783	1.8	570.4	570.1[4]	571.1[4]	1.0
G	4680[2]	156	1711	2.9	570.4	570.3[4]	571.2[4]	0.9
H	5200[2]	141	1485	3.3	570.4	570.4	571.4	1.0
I	6700[2]	132	1412	3.5	571.0	571.0	571.8	0.8
J	8100[2]	129	1463	3.4	571.5	571.5	572.2	0.7
K	9356[2]	160	1627	3.1	571.7	571.7	572.4	0.7
L	9694[2]	125	1306	3.8	571.8	571.8	572.4	0.6
M	11503[2]	124	1484	3.4	572.1	572.1	572.7	0.6
N	14337[2]	194	1824	2.7	572.5	572.5	573.1	0.6
O	15387[2]	155	1674	3.0	572.7	572.7	573.3	0.6
P	17126[2]	101	1182	4.2	572.9	572.9	573.5	0.6
Q	17647[2]	194	2462	3.8	573.0	573.0	573.7	0.7
R	18135[2]	156	2195	4.3	573.4	573.4	573.8	0.4

[1] Feet above confluence with Eighteenmile Creek
[2] Feet above confluence with Tonawanda Creek
[3] Elevation computed without consideration of backwater effects from Eighteenmile Creek
[4] Elevation computed without consideration of backwater effects from Tonawanda Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK
(ALL JURISDICTIONS)

FLOODWAY DATA

EIGHTEENMILE CREEK SOUTH BRANCH - ELLICOTT CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Ellicott Creek (Continued)								
S	20640	180	1467	1.8	573.4	573.4	573.4	0.0
T	29390	299	1515	1.0	574.7	574.7	574.7	0.0
U	37290	231	2304	3.4	577.2	577.2	577.2	0.0
V	41090	235	1788	2.0	583.1	583.1	583.1	0.0
W	54236	220	1829	3.8	594.9	594.9	595.8	0.9
X	58880	676	6117	1.2	599.6	599.6	600.5	0.9
Y	65515	503	4629	1.5	602.7	602.9	603.7	0.8
Z	69608	218	782	9.3	609.1	609.1	609.5	0.4
AA	70312	152	711	10.2	617.9	617.9	618.0	0.1
AB	70549	58	454	16.0	624.8	624.8	624.8	0.0
AC	70907	111	743	9.8	630.8	630.8	630.8	0.0
AD	71069	77	502	14.4	659.3	659.3	659.3	0.0
AE	71251	91	622	11.6	662.6	662.6	662.6	0.0
AF	71468	85	712	10.2	668.0	668.0	668.0	0.0
AG	71942	590	2939	2.5	672.2	672.2	673.0	0.8
AH	72306	409	2482	2.9	672.4	672.4	673.2	0.8
AI	72962	368	2264	3.2	673.2	673.2	674.0	0.8
AJ	73746	336	2384	3.4	674.7	674.7	675.7	1.0
AK	74698	221	1636	4.4	675.8	675.8	676.5	0.7
AL	75555	427	3602	2.0	676.9	676.9	677.7	0.8
AM	77009	110	798	9.0	677.4	677.4	678.4	1.0
AN	77842	220	1347	5.3	680.9	680.9	681.4	0.5
AO	79100	138	1227	5.8	683.3	683.3	684.3	1.0
AP	82051	272	1775	3.8	688.4	688.4	689.2	0.8
AQ	84586	297	2454	2.8	695.1	695.1	695.2	0.1

[1] Feet above confluence with Tonawanda Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

ELLICOTT CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Ellicott Creek (Continued)								
AR	87278	102	1175	5.8	696.3	696.3	696.8	0.5
AS	90024	338	2354	2.9	697.9	697.9	698.7	0.8
AT	92506	231	2362	2.9	699.6	699.6	700.5	0.9
AU	93350	120	2014	3.4	699.8	699.8	700.7	0.9
AV	94190	171	1608	4.2	700.0	700.0	701.0	1.0
AW	95785	498	4514	1.5	701.5	701.5	702.3	0.8
AX	96910	672	4724	1.4	701.7	701.7	702.5	0.8
AY	98560	570	1085	6.3	704.0	704.0	704.0	0.0
AZ	99660	463	2074	3.3	707.7	707.7	707.7	0.0
BA	109785	1399	10924	0.6	715.0	715.0	716.0	1.0
BB	119360	1500	7498	0.9	720.4	720.4	721.4	1.0
BC	121190	1565	5119	1.3	720.8	720.8	721.8	1.0
BD	123250	1049	2969	2.2	723.4	723.4	724.1	0.7
BE	124910	884	2676	2.4	725.0	725.0	725.4	0.4
BF	126510	112	1095	5.9	728.6	728.6	729.0	0.4
BG	142160	80	578	9.3	746.5	746.5	747.4	0.9
BH	142385	87	651	8.3	748.1	748.1	748.1	0.0
BI	142770	160	1126	4.8	748.6	748.6	749.2	0.6
BJ	143820	239	1527	3.5	749.5	749.5	750.3	0.8
BK	145660	180	927	5.8	751.4	751.4	752.1	0.7
BL	146700	110	768	6.9	753.7	753.7	754.0	0.3
BM	146850	85	418	12.7	753.7	753.7	754.0	0.3
BN	147580	125	853	6.2	757.2	757.2	757.4	0.2
BO	148990	252	1977	2.7	758.0	758.0	758.8	0.8
BP	149550	220	1299	3.4	758.2	758.2	759.1	0.9

[1] Feet above confluence with Tonawanda Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK
(ALL JURISDICTIONS)

FLOODWAY DATA

ELLICOTT CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Ellicott Creek (Continued)								
BQ	150165	160	679	6.6	758.6	758.6	759.4	0.8
BR	151145	91	651	6.9	761.2	761.2	761.7	0.5
BS	151320	206	1116	4.0	762.0	762.0	762.2	0.2
BT	151610	287	1243	3.6	762.4	762.4	762.5	0.1
BU	152810	100	686	6.5	763.3	763.3	764.0	0.7
BV	154535	87	644	7.0	765.9	765.9	766.4	0.5
BW	154705	135	1087	4.1	767.0	767.0	767.5	0.5
BX	156005	293	435	10.3	768.4	768.4	768.5	0.1
BY	157070	94	739	6.1	771.5	771.5	772.2	0.7
BZ	157185	97	627	7.1	771.9	771.9	772.2	0.3
CA	158200	72	557	8.0	773.7	773.7	774.0	0.3
CB	158400	140	1076	4.2	774.8	774.8	774.9	0.1
CC	159260	290	1764	2.5	775.4	775.4	775.8	0.4
CD	160285	285	1067	4.2	775.4	775.4	776.4	1.0
CE	160885	112	582	7.7	777.0	777.0	777.2	0.2
CF	161170	120	688	6.5	778.0	778.0	778.1	0.1
CG	163160	330	721	6.2	783.0	783.0	783.2	0.2
CH	164820	207	806	5.6	788.7	788.7	789.4	0.7
CI	165855	189	807	5.4	791.1	791.1	792.1	1.0
CJ	167580	189	960	4.6	796.4	796.4	796.4	0.0
CK	168865	219	1031	4.2	797.4	797.4	797.8	0.4
CL	170030	155	619	7.1	799.2	799.2	799.7	0.5
CM	170780	121	442	9.9	803.2	803.2	803.2	0.0
CN	171025	240	1662	2.6	805.5	805.5	805.5	0.0
CO	171615	335	1626	2.7	805.5	805.5	805.6	0.1

[1] Feet above confluence with Tonawanda Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

ELLICOTT CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Ellicott Creek (Continued)								
CP	172485	117	711	6.2	805.8	805.8	805.8	0.0
CQ	173785	148	895	4.9	807.5	807.5	807.6	0.1
CR	175185	183	1201	3.9	808.7	808.7	808.8	0.1
CS	176140	187	1404	2.9	809.1	809.1	809.4	0.3
CT	178640	250	1454	2.8	809.9	809.9	810.5	0.6
CU	185550	750	3429	1.0	814.6	814.6	815.3	0.7
CV	187265	354	1034	3.4	814.7	814.7	815.7	1.0
CW	188215	160	803	4.4	816.9	816.9	816.9	0.0
CX	188410	190	640	5.5	816.9	816.9	816.9	0.0
CY	188475	178[2]	*	*	816.9	816.9	*	*
CZ	191375	205[2]	*	*	818.5	818.5	*	*
DA	193195	329[2]	*	*	820.5	820.5	*	*
DB	194750	285[2]	*	*	821.4	821.4	*	*
DC	195835	100[2]	*	*	823.1	823.1	*	*
DD	196390	86[2]	*	*	823.9	823.9	*	*
DE	197825	112[2]	*	*	825.8	825.8	*	*
DF	198445	311[2]	*	*	826.6	826.6	*	*
DG	199355	343[2]	*	*	827.3	827.3	*	*
DH	200320	157[2]	*	*	828.4	828.4	*	*
DI	200685	205[2]	*	*	828.7	828.7	*	*
DJ	201280	105[2]	*	*	829.7	829.7	*	*
DK	202200	150[2]	*	*	831.6	831.6	*	*
DL	202974	84[2]	*	*	833.4	833.4	*	*

[1] Feet above confluence with Tonawanda Creek
[2] Data extrapolated from FIRM Panel 3602250005C dated February 6, 1991
*Floodway not computed

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

ELLICOTT CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Ellicott Creek - North Diversion Channel								
A	1330[1]	151	1489	4.0	573.0	573.0	573.0	0.0
B	6330[1]	163	1761	3.4	574.3	574.3	574.3	0.0
Ellicott Creek - Pfohl Park Diversion								
A	680[1]	209	1076	4.3	575.3	575.3	575.4	0.1
Ellicott Creek - Upper Diversion Channel								
A	700[1]	186	1128	3.8	583.0	583.0	583.0	0.0
B	4700[1]	155	811	5.3	586.2	586.2	586.2	0.0
Fern Brook								
A	120[2]	125	786	0.9	579.4	579.4	580.4	1.0
B	1381[2]	162	1078	0.6	584.5	584.5	585.5	1.0
C	1920[2]	115	831	0.8	584.6	584.6	585.6	1.0
D	2760[2]	147	793	0.8	584.7	584.7	585.7	1.0
E	3000[2]	200	736	0.9	584.8	584.8	585.8	1.0
F	3171[2]	195	913	0.7	584.9	584.9	585.9	1.0
G	3826[2]	62	220	3.0	585.7	585.7	586.7	1.0
H	5660[2]	80	267	2.5	589.7	589.7	590.7	1.0
I	5810[2]	85	335	2.0	591.4	591.4	592.3	0.9
J	6001[2]	119	478	1.4	591.6	591.6	592.5	0.9
K	7060[2]	68	334	2.0	594.3	594.3	595.3	1.0
L	7521[2]	199	923	0.7	594.5	594.5	595.5	1.0

[1] Feet above confluence with Ellicott Creek
[2] Feet above confluence with Lake Erie

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

ELLICOTT CREEK NORTH DIVERSION CHANNEL - ELLICOTT CREEK PFOHL PARK DIVERSION CHANNEL - ELLICOTT CREEK UPPER DIVERSION CHANNEL - FERN BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Fern Brook (Continued)								
M	8125	72	228	2.9	594.6	594.6	595.6	1.0
N	8290	181	772	0.9	597.4	597.4	598.4	1.0
O	8900	163	588	1.1	597.5	597.5	598.5	1.0
P	9201	107	291	0.8	598.5	598.5	599.5	1.0
Q	9351	112	264	0.9	598.5	598.5	599.5	1.0
R	9860	152	614	0.4	598.5	598.5	599.5	1.0
S	10021	128	453	0.5	598.6	598.6	599.6	1.0
Foster Brook								
A	250	19	107	6.6	581.1	579.4[2]	580.4[2]	1.0
B	1079	80	470	1.5	589.0	589.0	589.1	0.1
C	1869	120	441	1.6	590.0	590.0	590.4	0.4
D	3579	110	1069	0.7	609.1	609.1	609.4	0.3
E	4949	104	918	0.8	621.4	621.4	622.3	0.9
F	6449	40	85	8.2	631.1	631.1	631.1	0.0
G	8199	30	81	8.7	668.4	668.4	668.5	0.1
H	9099	98	265	2.7	683.2	683.2	683.2	0.0
I	10159	163	254	2.8	688.1	688.1	688.1	0.0
J	11559	115	128	5.5	696.4	696.4	696.4	0.0
K	13649	66	47	5.1	716.6	716.6	716.6	0.0
L	15149	130	86	2.8	729.8	729.8	729.8	0.0
M	15909	51	44	5.5	737.7	737.7	737.7	0.0
N	17281	16	38	6.3	746.4	746.4	746.5	0.1
O	18546	20	48	5.0	755.7	755.7	755.8	0.1
P	20299	38	39	6.2	779.9	779.9	779.9	0.0
Q	20929	17	31	7.9	787.9	787.9	787.9	0.0

[1] Feet above confluence with Lake Erie
[2] Elevation computed without consideration of backwater effects from Lake Erie

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

FERN BROOK - FOSTER BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Gott Creek								
A	475[1]	53	354	2.8	582.9	582.1[3]	582.3[3]	0.2
B	6018[1]	39	201	4.9	585.0	585.0	585.1	0.1
C	7871[1]	25	112	8.6	587.3	587.3	587.8	0.5
D	11073[1]	100	543	1.9	592.8	592.8	593.4	0.6
E	12098[1]	160	677	1.5	593.2	593.2	594.1	0.9
F	13773[1]	190	844	1.2	594.0	594.0	594.9	0.9
G	14806[1]	115	473	2.1	595.8	595.8	596.6	0.8
H	15831[1]	100	297	3.4	596.9	596.9	597.5	0.6
I	18121[1]	110	472	2.2	600.0	600.0	600.8	0.8
J	20096[1]	110	525	1.9	603.9	603.9	604.1	0.2
K	21520[1]	38	229	3.7	606.4	606.4	607.2	0.8
L	22214[1]	70	306	2.8	607.8	607.8	608.3	0.5
M	23452[1]	109	516	1.6	611.0	611.0	611.0	0.0
N	26679[1]	155	435	2.0	612.0	612.0	612.4	0.4
O	27509[1]	155	429	2.0	612.6	612.6	613.3	0.7
P	33094[1]	135	474	1.1	626.9	626.9	627.6	0.7
Q	33989[1]	130	408	1.3	626.9	626.9	627.9	1.0
R	35012[1]	45	108	4.9	629.0	629.0	629.6	0.6
Gott Creek Tributary								
A	1030[2]	70	228	1.4	620.3	620.3	620.9	0.6
B	1680[2]	78	171	1.9	620.7	620.7	621.4	0.7
C	2305[2]	87	147	2.2	622.5	622.5	623.2	0.7

[1] Feet above confluence with Ransom Creek
[2] Feet above confluence with Gott Creek
[3] Elevation computed without consideration of backwater effects from Ransom Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

GOTT CREEK - GOTT CREEK TRIBUTARY

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Grannis Creek								
A	81[1]	*	*	*	751.2	751.2	*	*
B	416[1]	*	*	*	751.7	751.7	*	*
C	991[1]	*	*	*	765.1	765.1	*	*
D	1250[1]	*	*	*	769.3	769.3	*	*
E	2020[1]	*	*	*	778.4	778.4	*	*
F	2608[1]	*	*	*	789.2	789.2	*	*
G	2708[1]	*	*	*	791.6	791.6	*	*
H	3050[1]	*	*	*	800.1	800.1	*	*
Gun Creek								
A	175[2]	55	311	1.4	569.1	567.5[4]	568.4[4]	0.9
B	325[2]	63	336	1.2	569.1	567.5[4]	568.3[4]	0.8
C	2875[2]	31	153	2.7	569.1	568.2[4]	568.8[4]	0.6
D	4175[2]	26	74	5.7	570.1	570.1	570.4	0.3
E	5575[2]	62	184	1.5	572.1	572.1	572.4	0.3
F	5782[2]	54	239	1.2	573.5	573.5	574.0	0.5
G	5932[2]	63	226	1.3	573.5	573.5	574.0	0.5
H	7532[2]	50	118	2.4	573.9	573.9	574.5	0.6
Hampton Brook								
A	1700[3]	34	193	9.6	766.8	766.8	767.3	0.5
B	2550[3]	55	336	5.5	770.7	770.7	771.7	1.0
C	4075[3]	50	203	9.1	777.3	777.3	777.3	0.0
D	4635[3]	50	219	8.5	781.6	781.6	781.8	0.2

[1] Feet above confluence with Cattaraugus Creek
[2] Feet above confluence with Niagara River - Tonawanda Channel
[3] Feet above confluence with Eighteenmile Creek
[4] Elevation computed without consideration of backwater effects from Niagara River - Tonawanda Channel

*Floodway not computed

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

GRANNIS CREEK - GUN CREEK - HAMPTON BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Hosmer Brook								
A	2500[1]	48	200	9.2	1319.4	1319.4	1319.4	0.0
B	6150[1]	165	413	4.5	1349.7	1349.7	1349.7	0.0
C	6760[1]	62	271	6.5	1359.0	1359.0	1359.0	0.0
D	9625[1]	57	198	8.9	1378.0	1378.0	1378.6	0.6
E	13555[1]	79	324	5.4	1405.6	1405.6	1406.3	0.7
F	13805[1]	79	282	5.8	1407.7	1407.7	1407.7	0.0
Hunter Creek								
A	684[2]	114	451	8.1	898.3	898.3	898.4	0.1
B	1650[2]	121	413	8.6	903.3	903.3	903.3	0.0
C	2450[2]	95	515	6.6	911.0	911.0	911.0	0.0
Ledge Creek								
A	3000[3]	213	296	3.3	604.4	604.4	605.0	0.6
B	4800[3]	389	764	1.3	606.6	606.6	607.4	0.8
C	6200[3]	119	378	2.6	613.3	613.3	614.3	1.0
D	7500[3]	117	437	2.2	617.7	617.7	617.9	0.2
E	8800[3]	142	330	2.9	619.6	619.6	620.3	0.7
F	10000[3]	106	253	3.8	624.7	624.7	624.8	0.1
G	11100[3]	363	491	2.0	626.6	626.6	627.1	0.5
H	11985[3]	188	498	1.9	631.1	631.1	631.8	0.7
Little Buffalo Creek								
A	610[4]	123	825	4.4	691.6	691.6	692.3	0.7
B	2000[4]	338	1252	2.9	693.1	693.1	693.5	0.4
C	3780[4]	183	798	4.4	695.9	695.9	696.7	0.8

[1] Feet above confluence with Cattaraugus Creek
[2] Feet above confluence with Buffalo Creek
[3] Feet above confluence with Murder Creek
[4] Feet above confluence with Cayuga Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK
(ALL JURISDICTIONS)

FLOODWAY DATA

HOSMER BROOK - HUNTER CREEK - LEDGE CREEK - LITTLE BUFFALO CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Little Buffalo Creek (Continued)								
D	5490[1]	200	681	5.2	698.0	698.0	699.0	1.0
E	7000[1]	361	1830	1.9	702.3	702.3	702.3	0.0
F	8590[1]	449	800	4.4	705.2	705.2	705.4	0.2
G	10130[1]	499	2131	1.7	710.7	710.7	711.6	0.9
H	11688[1]	151	1253	2.7	714.7	714.7	714.9	0.2
I	12970[1]	275	1192	2.8	715.9	715.9	716.4	0.5
J	14500[1]	172	846	4.0	720.0	720.0	720.1	0.1
K	16420[1]	198	889	3.8	722.8	722.8	723.5	0.7
L	60[2]	210	1563	2.0	744.1	744.1	745.0	0.9
M	5680[2]	75	496	6.4	748.9	748.9	749.5	0.6
N	6840[2]	135	893	3.5	751.2	751.2	751.9	0.7
O	9300[2]	95	566	5.6	756.6	756.6	757.4	0.8
P	12180[2]	70	437	7.2	765.9	765.9	766.8	0.9
Q	14345[2]	145	767	4.0	770.8	770.8	771.6	0.8
R	15825[2]	220	840	3.6	775.9	775.9	776.8	0.9
S	600[3]	55	260	11.5	818.8	818.8	818.8	0.0
T	2940[3]	56	386	7.5	832.2	832.2	832.2	0.0
U	5380[3]	64	387	5.9	841.8	841.8	841.8	0.0
V	6530[3]	130	528	4.7	845.4	845.4	846.2	0.8
W	7900[3]	77	444	5.2	856.9	856.9	856.9	0.0

[1] Feet above confluence with Cayuga Creek
[2] Feet above Hall Road
[3] Feet above limit of detailed study (Limit of detailed study is approximately 2,920 feet downstream of Two Rod Road)

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

LITTLE BUFFALO CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Little Buffalo Creek Tributary								
A	0[1]	28	62	4.6	818.8	815.3[3]	816.3[3]	1.0
B	1330[1]	27	106	2.7	844.7	844.7	844.7	0.0
C	2180[1]	100	125	2.3	848.6	848.6	848.7	0.1
Little Sister Creek								
A	160[2]	75	242	9.8	579.1	576.9[4]	577.4[4]	0.5
B	190[2]	92	431	5.5	579.1	577.9[4]	578.9[4]	1.0
C	330[2]	93	436	5.5	579.1	579.0[4]	579.6[4]	0.6
D	850[2]	130	780	3.1	580.1	580.1	580.9	0.8
E	1230[2]	160	829	2.9	580.3	580.3	581.3	1.0
F	1860[2]	80	478	5.0	581.6	581.6	582.4	0.8
G	2090[2]	100	663	3.6	583.1	583.1	583.7	0.6
H	2610[2]	300	1912	1.2	583.3	583.3	584.3	1.0
I	3060[2]	352	2053	1.2	583.4	583.4	584.4	1.0
J	5990[2]	260	914	2.6	585.5	585.5	586.5	1.0
K	6690[2]	294	1711	1.4	589.3	589.3	590.3	1.0
L	7080[2]	110	454	5.2	589.5	589.5	590.4	0.9
M	7390[2]	78	330	7.2	592.0	592.0	593.0	1.0
N	8130[2]	101	497	4.8	596.1	596.1	597.1	1.0
O	8450[2]	95	495	4.8	597.3	597.3	598.1	0.8
P	8960[2]	172	1250	1.9	602.8	602.8	603.0	0.2
Q	9190[2]	200	1138	2.1	602.9	602.9	603.2	0.3
R	9870[2]	100	539	3.5	603.4	603.4	604.3	0.9
S	10400[2]	128	479	4.0	604.8	604.8	605.8	1.0
T	11840[2]	130	635	3.0	610.7	610.7	611.6	0.9
U	12490[2]	185	875	2.2	611.8	611.8	612.8	1.0

[1] Feet above confluence with Little Buffalo Creek
[2] Feet above confluence with Lake Erie
[3] Elevation computed without consideration of backwater effects from Little Buffalo Creek
[4] Elevation computed without consideration of backwater effects from Lake Erie

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

LITTLE BUFFALO CREEK TRIBUTARY - LITTLE SISTER CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Little Sister Creek (Continued)								
V	12960[1]	162	866	2.2	612.4	612.4	613.4	1.0
W	13150[1]	333	1955	1.0	614.7	614.7	615.7	1.0
X	14210[1]	204	1088	1.8	615.0	615.0	615.9	0.9
Y	16130[1]	140	439	4.1	617.6	617.6	618.5	0.9
Z	16830[1]	141	603	3.0	621.3	621.3	622.2	0.9
AA	18940[1]	200	914	2.0	625.6	625.6	626.4	0.8
AB	21310[1]	120	292	6.2	634.0	634.0	634.2	0.2
AC	22550[1]	122	570	2.8	639.8	639.8	640.8	1.0
AD	22710[1]	190	755	2.1	642.5	642.5	643.5	1.0
Little Sister Creek Tributary 2								
A	30[2]	120	258	2.8	603.0	599.7[3]	600.7[3]	1.0
B	650[2]	65	164	4.5	604.6	604.6	605.6	1.0
C	2190[2]	105	374	2.0	610.5	610.5	611.5	1.0
D	3010[2]	117	532	1.4	614.3	614.3	615.3	1.0
E	4110[2]	118	443	1.6	615.4	615.4	616.4	1.0
F	4940[2]	80	156	4.7	618.4	618.4	619.2	0.8
G	6530[2]	147	417	1.8	627.5	627.5	628.1	0.6
H	8080[2]	160	239	3.1	635.0	635.0	635.9	0.9
I	9100[2]	90	371	2.0	641.9	641.9	642.0	0.1
J	9810[2]	41	126	5.8	643.8	643.8	644.8	1.0
K	10320[2]	36	129	5.7	650.3	650.3	650.8	0.5
L	10700[2]	54	196	3.7	652.2	652.2	653.2	1.0
M	11000[2]	58	211	3.5	653.6	653.6	654.3	0.7
N	11370[2]	120	371	2.0	654.5	654.5	655.5	1.0

[1] Feet above confluence with Lake Erie
[2] Feet above confluence with Little Sister Creek
[3] Elevation computed without consideration of backwater effects from Little Sister Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

LITTLE SISTER CREEK - LITTLE SISTER CREEK TRIBUTARY 2

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Little Sister Creek Tributary 2 (Continued)								
O	12080[1]	60	176	4.2	655.9	655.9	656.8	0.9
P	12485[1]	18	95	2.5	662.3	662.3	662.3	0.0
Q	12971[1]	58	33	7.2	667.2	667.2	667.8	0.6
Muddy Creek								
A	1160[2]	190	930	3.3	582.9	582.9	582.9	0.0
B	1730[2]	130	590	5.3	583.2	583.2	583.2	0.0
C	2220[2]	70	450	6.9	583.8	583.8	584.2	0.4
D	2820[2]	220	900	3.4	585.1	585.1	585.7	0.6
E	3150[2]	90	550	5.7	585.6	585.6	586.2	0.6
F	3920[2]	140	800	3.9	586.6	586.6	587.5	0.9
G	4340[2]	90	540	5.8	586.9	586.9	587.8	0.9
H	5020[2]	190	1080	2.9	587.7	587.7	588.7	1.0
I	5680[2]	500	2190	1.4	588.0	588.0	589.0	1.0
J	6180[2]	430	1250	2.5	588.2	588.2	589.2	1.0
K	7120[2]	300	1690	1.8	588.7	588.7	589.7	1.0
L	7680[2]	610	3370	0.9	588.7	589.0	590.0	1.0
M	8110[2]	370	2110	1.5	589.0	589.0	590.0	1.0
N	8540[2]	290	1480	2.1	589.0	589.0	590.0	1.0
O	8960[2]	290	1160	2.7	589.2	589.2	590.2	1.0
P	9710[2]	200	860	3.6	590.0	590.0	590.8	0.8
Q	10310[2]	180	730	4.2	590.7	590.7	591.5	0.8

[1] Feet above confluence with Little Sister Creek
[2] Feet above confluence with Lake Erie

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

LITTLE SISTER CREEK TRIBUTARY 2 - MUDDY CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Murder Creek								
A	4900[1]	249	1064	3.4	609.0	609.0	609.5	0.5
B	6300[1]	983	2489	1.5	610.6	610.6	611.4	0.8
C	7900[1]	211	693	5.2	612.8	612.8	613.0	0.2
D	9000[1]	445	1892	1.9	616.2	616.2	617.1	0.9
E	10900[1]	210	1283	2.8	618.7	618.7	619.7	1.0
F	12300[1]	336	1760	2.1	621.5	621.5	622.3	0.8
G	14445[1]	109	594	5.0	626.2	626.2	627.0	0.8
H	16056[1]	77	440	6.8	631.0	631.0	631.9	0.9
I	18406[1]	60	313	9.5	639.3	639.3	640.2	0.9
J	23186[1]	151	600	5.0	649.3	649.3	650.2	0.9
K	25186[1]	807	3977	0.8	652.8	652.8	653.8	1.0
L	26946[1]	179	822	3.6	657.7	657.7	658.5	0.8
M	28346[1]	300	1249	2.4	662.2	662.2	663.1	0.9
N	29566[1]	91	649	4.6	671.2	671.2	671.7	0.5
O	30336[1]	78	325	9.2	675.7	675.7	675.7	0.0
P	30956[1]	70	532	5.6	679.5	679.5	679.6	0.1
Q	31861[1]	48	323	9.3	682.8	682.8	683.2	0.4
R	37135[1]	100	667	4.0	805.7	805.7	806.6	0.9
S	37675[1]	132	1108	2.4	806.3	806.3	807.0	0.7
T	40131[1]	365	2317	1.1	807.6	807.6	808.5	0.9
U	43721[1]	130	844	3.2	809.1	809.1	810.0	0.9
Pike Creek								
A	40[2]	33	246	7.0	579.7	579.4[3]	580.3[3]	0.9
B	150[2]	60	249	6.9	579.7	579.7	580.7	1.0
C	370[2]	53	169	10.2	586.6	586.6	586.6	0.0

[1] Feet above mouth
[2] Feet above confluence with Lake Erie
[3] Elevation computed without consideration of backwater effects from Lake Erie

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

MURDER CREEK - PIKE CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Pike Creek (Continued)								
D	690	98	843	2.0	594.2	594.2	594.4	0.2
E	1180	70	314	5.5	594.2	594.2	594.4	0.2
F	1430	120	709	2.4	598.7	598.7	598.7	0.0
G	2010	35	147	11.7	602.7	602.7	602.7	0.0
H	2230	59	179	9.6	608.4	608.4	608.4	0.0
I	3070	76	364	4.7	614.1	614.1	614.8	0.7
J	3870	110	250	6.9	618.6	618.6	618.8	0.2
K	4150	108	270	6.4	623.2	623.2	623.8	0.6
L	5240	50	237	7.3	632.6	632.6	633.6	1.0
M	5530	33	310	5.5	639.5	639.5	639.8	0.3
N	5760	88	718	2.4	641.3	641.3	641.4	0.1
O	5950	88	632	2.7	641.3	641.3	641.5	0.2
P	6670	85	347	5.0	641.5	641.5	642.0	0.5
Q	7300	53	169	10.1	646.7	646.7	646.8	0.1
R	7700	60	647	2.7	657.1	657.1	657.1	0.0
S	8110	60	521	3.3	657.3	657.3	657.6	0.3
T	8720	128	786	2.2	657.4	657.4	658.4	1.0
U	9100	90	305	5.6	658.2	658.2	658.9	0.7
V	10600	70	391	4.4	669.9	669.9	670.7	0.8
W	12720	90	482	3.6	680.6	680.6	681.6	1.0
X	15000	270	1306	1.3	684.0	684.0	684.9	0.9
Y	16030	105	176	6.3	687.1	687.1	687.6	0.5
Z	16470	70	370	3.0	693.5	693.5	694.5	1.0
AA	17030	171	2012	0.5	703.4	703.4	704.4	1.0
AB	17190	161	1614	0.7	703.4	703.4	704.4	1.0

[1] Feet above confluence with Lake Erie

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

PIKE CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Plum Bottom Creek								
A	1165[1]	22	214	8.0	660.4	660.4	660.4	0.0
B	1831[1]	25	205	6.4	662.5	662.5	663.2	0.7
C	2411[1]	76	399	3.5	667.2	667.2	667.2	0.0
D	2861[1]	26	214	6.2	669.2	669.2	669.2	0.0
E	3231[1]	125	627	3.8	669.6	669.6	669.7	0.1
F	4071[1]	52	277	4.8	676.0	676.0	676.0	0.0
G	8150[1]	101	532	1.2	685.5	685.5	685.6	0.1
H	9650[1]	43	152	4.1	687.2	687.2	687.4	0.2
I	11050[1]	71	196	2.3	695.1	695.1	695.6	0.5
J	11970[1]	85	340	1.3	701.1	701.1	701.4	0.3
Plum Bottom Creek North Branch								
A	700[2]	67	317	2.7	682.8	682.8	683.8	1.0
B	2676[2]	222	2141	0.4	694.3	694.3	694.5	0.2
Pond Brook								
A	1415[3]	40	131	6.1	722.1	722.1	722.4	0.3
B	3670[3]	40	124	6.5	738.1	738.1	738.2	0.1
C	4810[3]	22	87	9.2	743.2	743.2	743.8	0.6
D	5760[3]	20	92	8.7	750.8	750.8	751.8	1.0
E	7700[3]	95	134	6.0	761.9	761.9	761.9	0.0
F	8680[3]	38	179	4.5	766.9	766.9	767.7	0.8
G	10585[3]	63	116	6.9	777.4	777.4	777.4	0.0
H	12245[3]	84	455	1.6	790.1	790.1	790.1	0.0
I	13360[3]	32	107	6.7	791.9	791.9	792.3	0.4

[1] Feet above mouth
[2] Feet above confluence with Plum Bottom Creek
[3] Feet above confluence with Buffalo Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK
(ALL JURISDICTIONS)

FLOODWAY DATA

PLUM BOTTOM CREEK - PLUM BOTTOM CREEK NORTH BRANCH - POND BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Pond Brook (Continued)								
J	14460[1]	38	157	4.6	797.3	797.3	797.4	0.1
K	15790[1]	24	74	9.7	807.0	807.0	807.1	0.1
Ransom Creek								
A	43[2]	967	7766	0.5	578.9	578.9	579.4	0.5
B	1306[2]	819	3031	1.3	578.9	578.9	579.4	0.5
C	4804[2]	644	3291	1.2	579.1	579.1	579.7	0.6
D	8897[2]	731	4625	1.1	579.3	579.3	579.9	0.6
E	10592[2]	707	4226	1.2	579.5	579.5	580.2	0.7
F	13607[2]	1111	6397	0.8	579.9	579.9	580.7	0.8
G	13968[2]	1093	4206	1.2	580.1	580.1	581.0	0.9
H	15163[2]	1041	6138	0.8	580.3	580.3	581.3	1.0
I	15537[2]	506	4208	1.2	580.4	580.4	581.4	1.0
J	16508[2]	600	3683	1.4	580.4	580.4	581.4	1.0
K	18008[2]	829	3841	1.3	580.6	580.6	581.6	1.0
L	18594[2]	1269	4181	1.2	580.7	580.7	581.7	1.0
M	18790[2]	1196	5261	1.0	580.8	580.8	581.8	1.0
N	19271[2]	1037	6132	0.6	580.8	580.8	581.8	1.0
O	19736[2]	847	3989	0.7	580.8	580.8	581.8	1.0
P	20243[2]	920	3029	0.9	580.8	580.8	581.8	1.0
Q	20907[2]	824	2450	1.1	580.9	580.9	581.9	1.0
R	21347[2]	704	2454	1.1	581.0	581.0	581.9	0.9
S	21917[2]	437	2296	1.1	581.0	581.0	582.0	1.0
T	23375[2]	324	1769	1.5	582.4	582.4	583.1	0.7
U	24476[2]	592	2688	1.0	582.7	582.7	583.4	0.7

[1] Feet above confluence with Buffalo Creek
[2] Feet above confluence with Tonawanda Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK
(ALL JURISDICTIONS)

FLOODWAY DATA

POND BROOK - RANSOM CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Ransom Creek (Continued)								
V	24823	646	2644	1.0	582.9	582.9	583.5	0.6
W	26070	525	2240	0.7	583.0	583.0	583.7	0.7
X	27258	311	698	2.3	583.0	583.0	583.9	0.9
Y	28351	273	765	2.1	584.4	584.4	585.2	0.8
Z	29107	158	435	3.7	585.2	585.2	585.9	0.7
AA	29344	207	768	2.1	586.9	586.9	587.0	0.1
AB	30305	340	1124	1.5	587.1	587.1	587.5	0.4
AC	30515	150	913	1.7	587.8	587.8	588.8	1.0
AD	31259	376	1877	0.8	588.0	588.0	589.0	1.0
AE	32113	272	1198	1.3	588.2	588.2	589.2	1.0
AF	33447	152	538	2.9	589.2	589.2	590.1	0.9
AG	34673	105	581	2.7	593.3	593.3	594.0	0.7
AH	34963	72	451	3.4	595.5	595.5	595.9	0.4
AI	35794	150	727	2.1	596.1	596.1	596.5	0.4
AJ	37316	176	792	1.9	596.6	596.6	597.3	0.7
AK	38538	42	304	5.1	597.2	597.2	598.2	1.0
AL	39260	101	574	2.7	598.7	598.7	599.7	1.0
AM	40509	288	1375	1.1	599.7	599.7	600.6	0.9
AN	41751	281	800	1.9	600.4	600.4	601.3	0.9
AO	42574	189	846	1.8	601.5	601.5	602.1	0.6
AP	43507	180	729	2.1	602.5	602.5	603.0	0.5
AQ	44026	279	900	1.7	603.2	603.2	603.7	0.5
AR	44253	225	944	1.6	605.1	605.1	605.7	0.6
AS	45120	168	746	2.1	605.4	605.4	606.1	0.7
AT	45987	178	673	2.3	606.6	606.6	607.3	0.7

[1] Feet above confluence with Tonawanda Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

RANSOM CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Ransom Creek (Continued)								
AU	46848	83	412	3.7	608.6	608.6	609.2	0.6
AV	47892	176	696	2.2	610.8	610.8	611.4	0.6
AW	48110	373	1737	0.9	611.5	611.5	612.4	0.9
AX	48787	213	923	1.7	611.8	611.8	612.6	0.8
AY	49742	68	369	4.2	613.1	613.1	614.0	0.9
AZ	51085	140	789	2.0	616.2	616.2	617.2	1.0
BA	51268	121	601	2.6	616.4	616.4	617.4	1.0
BB	51667	208	931	1.7	616.6	616.6	617.6	1.0
BC	51970	120	601	2.6	617.4	617.4	618.0	0.6
BD	52719	194	983	1.6	617.5	617.5	618.5	1.0
BE	53427	158	315	4.9	621.2	621.2	621.2	0.0
BF	54157	83	331	4.7	624.8	624.8	625.2	0.4
BG	54525	107	405	3.8	626.1	626.1	626.6	0.5
BH	54911	195	866	1.8	627.3	627.3	627.9	0.6
BI	55364	196	642	2.4	627.6	627.6	628.6	1.0
BJ	55876	66	241	6.3	629.3	629.3	629.3	0.0
BK	56082	30	255	5.9	631.3	631.3	632.0	0.7
BL	56902	103	546	2.8	632.9	632.9	633.7	0.8
BM	57166	174	862	1.8	633.2	633.2	634.0	0.8
BN	58032	144	571	2.6	634.5	634.5	635.1	0.6
BO	58751	90	439	3.4	636.5	636.5	636.6	0.1
BP	59485	79	439	3.4	638.3	638.3	638.6	0.3
BQ	59650	72	503	3.0	641.1	641.1	641.2	0.1
BR	60327	200	1229	1.2	641.4	641.4	641.7	0.3
BS	61825	230	801	1.9	642.0	642.0	642.4	0.4

[1] Feet above confluence with Tonawanda Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK
(ALL JURISDICTIONS)

FLOODWAY DATA

RANSOM CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Ransom Creek (Continued)								
BT	62593[1]	252	881	1.7	643.0	643.0	643.4	0.4
BU	62694[1]	259	896	1.7	643.6	643.6	644.0	0.4
BV	63783[1]	230	779	1.9	645.0	645.0	645.4	0.4
BW	64540[1]	209	653	2.3	646.5	646.5	646.8	0.3
BX	65977[1]	155	585	2.6	648.7	648.7	648.8	0.1
BY	67196[1]	298	668	2.3	650.0	650.0	650.2	0.2
BZ	67379[1]	258	815	3.3	652.0	652.0	652.5	0.5
Reisch Creek								
A	100[2]	41	114	3.4	588.6	588.6	589.6	1.0
B	1370[2]	29	155	2.5	612.5	612.5	612.6	0.1
C	2650[2]	135	158	2.5	624.3	624.3	624.4	0.1
D	3800[2]	20	45	8.6	631.5	631.5	631.5	0.0
E	5520[2]	22	47	8.4	650.6	650.6	650.6	0.0
F	6880[2]	19	37	7.9	669.0	669.0	669.0	0.0
G	7815[2]	35	206	1.2	680.2	680.2	681.0	0.8
H	8400[2]	24	140	1.7	680.2	680.2	681.2	1.0
Rush Creek								
A	12537[3]	85	1025	1.9	627.0	627.0	627.6	0.6
B	13330[3]	51	647	3.0	635.5	635.5	635.5	0.0
C	14390[3]	44	170	11.2	637.6	637.6	637.6	0.0
D	14700[3]	46	446	4.3	647.7	647.7	647.8	0.1
E	16385[3]	33	156	12.3	649.5	649.5	649.5	0.0
F	16740[3]	45	382	5.0	654.0	654.0	654.0	0.0

[1] Feet above confluence with Tonawanda Creek
[2] Feet above confluence with Little Sister Creek
[3] Feet above confluence with Lake Erie

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

RANSOM CREEK - REISCH CREEK - RUSH CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Rush Creek (Continued)								
G	17310	60	388	4.9	654.3	654.3	654.5	0.2
H	18240	59	410	4.7	655.7	655.7	656.2	0.5
I	19035	84	262	7.3	658.1	658.1	658.1	0.0
J	20660	65	339	5.6	664.9	664.9	665.8	0.9
K	21257	80	274	7.0	667.9	667.9	668.5	0.6
L	23050	45	187	7.8	678.2	678.2	678.5	0.3
M	24312	48	237	6.1	683.8	683.8	684.5	0.7
N	24740	37	284	5.1	687.6	687.6	688.1	0.5
O	26570	50	174	8.4	691.4	691.4	691.7	0.3
P	30980	78	356	2.5	704.3	704.3	705.3	1.0
Q	33640	43	104	8.5	715.9	715.9	715.9	0.0
R	34186	100	637	1.4	725.0	725.0	725.0	0.0
S	34796	25	148	6.0	725.2	725.2	725.3	0.1
T	35610	49	125	7.1	727.9	727.9	728.4	0.5
U	38260	40	110	8.0	750.5	750.5	751.0	0.5
V	39090	63	180	4.9	755.8	755.8	756.6	0.8
W	39255	77	335	2.6	759.5	759.5	759.6	0.1
X	41375	27	86	10.2	776.4	776.4	776.4	0.0
Y	41570	52	582	1.5	788.3	788.3	789.3	1.0
Z	41990	120	1738	0.5	795.7	795.7	796.7	1.0
AA	42580	98	623	1.4	795.7	795.7	796.7	1.0
AB	42802	88	923	1.0	803.7	803.7	804.7	1.0
AC	43570	46	145	6.1	809.4	809.4	809.6	0.2
AD	44460	53	249	3.5	824.2	824.2	824.7	0.5
AE	45215	76	457	1.9	838.8	838.8	839.8	1.0
AF	46180	80	164	5.4	840.5	840.5	841.5	1.0

[1] Feet above confluence with Lake Erie

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK
(ALL JURISDICTIONS)

FLOODWAY DATA

RUSH CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Scajaquada Creek								
A	36	104	1026	5.9	578.4	578.4	578.6	0.2
B	160	90	982	6.2	578.5	578.5	578.8	0.3
C	232	144	1380	4.4	578.8	578.8	579.1	0.3
D	305	116	1343	4.5	579.2	579.2	579.3	0.1
E	541	84	772	7.9	579.2	579.2	579.2	0.0
F	590	80	781	7.8	579.2	579.2	579.2	0.0
G	654	71	771	7.9	579.9	579.9	580.6	0.7
H	733	68	844	7.2	580.9	580.9	581.4	0.5
I	840	67	1235	4.9	584.2	584.2	584.6	0.4
J	1002	83	1284	4.8	584.3	584.3	584.9	0.6
K	1165	166	1444	4.2	584.4	584.4	585.0	0.6
L	1287	217	2354	2.6	586.4	586.4	587.3	0.9
M	1456	158	2064	3.0	586.6	586.6	587.5	0.9
N	1639	139	1907	3.2	586.7	586.7	587.6	0.9
O	1769	180	2559	2.4	586.8	586.8	587.7	0.9
P	1969	153	2148	2.8	586.8	586.8	587.8	1.0
Q	2159	93	1276	4.8	586.8	586.8	587.7	0.9
R	2335	71	1031	6.7	587.5	587.5	588.3	0.8
S	2499	147	2467	2.5	590.4	590.4	591.3	0.9
T	2763	86	1722	3.5	590.4	590.4	591.3	0.9
U	3225	102	1815	3.4	590.5	590.5	591.4	0.9
V	4152	126	2100	2.9	590.7	590.7	591.6	0.9
W	4546	168	2379	2.6	590.8	590.8	591.8	1.0
X	4780	186	2609	2.3	591.0	591.0	591.9	0.9
Y	5054	226	3470	1.8	591.2	591.2	592.2	1.0
Z	5422	290	4380	1.4	591.3	591.3	592.3	1.0

[1] Feet above confluence with Black Rock Canal

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

SCAJAQUADA CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Scajaquada Creek (Continued)								
AA	5543	310	4642	1.3	591.3	591.3	592.3	1.0
AB	6265	241	2694	2.3	591.3	591.3	592.3	1.0
AC	6666	307	3644	1.7	591.4	591.4	592.4	1.0
AD	7054	319	3203	1.9	591.4	591.4	592.4	1.0
AE	7503	392	4756	1.3	591.5	591.5	592.5	1.0
AF	7854	269	3269	1.9	591.5	591.5	592.5	1.0
AG	8167	203	3039	2.0	591.6	591.6	592.6	1.0
AH	8429	222	2903	2.1	591.8	591.8	592.7	0.9
AI	8967	295	3578	2.0	591.8	591.8	592.8	1.0
AJ	9121	265	3877	1.6	592.0	592.0	593.0	1.0
AK	9332	299	5754	1.1	592.1	592.1	593.1	1.0
AL	10066	608	14928	0.4	592.1	592.1	593.1	1.0
AM	10921	455	10330	0.6	592.1	592.1	593.1	1.0
AN	11835	487	5888	1.0	592.1	592.1	593.1	1.0
AO	12017	553	6112	1.0	592.1	592.1	593.1	1.0
AP	12272	595	7177	0.9	592.1	592.1	593.1	1.0
AQ	12734	379	4260	1.4	592.1	592.1	593.1	1.0
AR	12989	333	3886	1.6	592.2	592.2	593.2	1.0
AS	13237	296	4493	1.4	592.3	592.2	593.2	1.0
AT	13600	347	3558	1.7	592.3	592.2	593.2	1.0
AU	13867	319	3669	1.7	592.3	592.3	593.3	1.0
AV	14174	249	2586	2.4	592.4	592.4	593.4	1.0
AW	14760	219	1186	5.1	592.5	592.5	593.5	1.0
AX	15255	72	531	11.5	592.5	592.5	593.2	0.7
AY	15449	69	693	8.8	596.3	596.3	597.3	1.0

[1] Feet above confluence with Black Rock Canal

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

SCAJAQUADA CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Scajaquada Creek (Continued)								
AZ	15666[1]	82	499	12.2	596.8	596.8	597.4	0.6
BA	16170[1]	54	408	15.0	611.3	611.3	611.4	0.1
BB	47890[1]	77	603	3.6	650.2	650.2	650.2	0.0
BC	49843[1]	92	653	3.4	651.9	651.9	652.0	0.1
BD	53064[1]	67	479	4.6	654.9	654.9	655.3	0.4
BE	57702[1]	71	383	3.4	660.4	660.4	660.5	0.1
BF	60964[1]	57	377	3.1	662.6	662.6	663.1	0.5
BG	62836[1]	30	170	6.1	666.5	666.5	666.7	0.2
BH	69493[1]	41	172	3.7	679.3	679.3	679.4	0.1
BI	73420[1]	31	156	3.0	693.6	693.6	693.6	0.0
BJ	74860[1]	91	383	1.2	696.6	696.6	697.5	0.9
BK	76360[1]	70	254	1.8	700.1	700.1	701.1	1.0
BL	77950[1]	20	78	3.7	704.2	704.2	704.9	0.7
BM	79620[1]	25	68	4.2	708.6	708.6	709.4	0.8
Scajaquada Creek North Branch								
A	1015[2]	29	99	4.1	668.1	668.1	668.2	0.1
B	2087[2]	12	42	9.8	670.9	670.9	670.9	0.0
Scajaquada Creek Tributary T-1								
A	3928[2]	*	*	*	646.7	*	*	*

[1] Feet above confluence with Black Rock Canal

[2] Feet above confluence with Scajaquada Creek

* Floodway not computed

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

SCAJAQUADA CREEK - SCAJAQUADA CREEK NORTH BRANCH - SCAJAQUADA CREEK TRIBUTARY T-1

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Slate Bottom Creek								
A	154	75	780	3.5	599.5	598.6[2]	599.3[2]	0.7
B	521	40	419	6.5	599.6	599.6	600.2	0.6
C	821	58	678	4.0	600.3	600.3	600.9	0.6
D	1086	71	749	3.6	600.5	600.5	601.1	0.6
E	1578	59	647	4.2	600.7	600.7	601.4	0.7
F	1995	28	343	7.9	601.0	601.0	601.2	0.2
G	3314	24	299	9.1	605.9	605.9	605.9	0.0
H	3508	55	580	4.7	607.3	607.3	607.3	0.0
I	3939	48	491	5.5	607.5	607.5	607.7	0.2
J	4853	43	469	5.8	608.5	608.5	609.1	0.6
K	5297	55	611	3.4	609.3	609.3	609.9	0.6
L	6135	64	470	4.4	609.5	609.5	610.3	0.8
M	6750	53	336	6.2	610.8	610.8	611.7	0.9
N	7090	51	303	6.9	611.7	611.7	612.7	1.0
O	7342	33	214	9.8	612.5	612.5	613.5	1.0
P	7920	42	271	7.7	618.3	618.3	619.2	0.9
Q	8652	48	287	7.3	623.1	623.1	623.2	0.1
R	9242	46	303	6.9	626.1	626.1	626.2	0.1
S	9955	36	188	11.1	630.4	630.4	630.7	0.3
T	10567	36	228	9.2	636.5	636.5	636.9	0.4
U	11022	74	463	4.5	638.7	638.7	639.2	0.5
V	11608	61	209	10.0	641.0	641.0	641.0	0.0
W	11992	39	199	10.5	645.7	645.7	646.0	0.3
X	12250	37	181	8.0	648.4	648.4	648.5	0.1
Y	13794	46	254	5.7	655.3	655.3	655.5	0.2
Z	15157	44	268	5.4	658.9	658.9	659.1	0.2

[1] Feet above confluence with Cayuga Creek
[2] Elevation computed without consideration of backwater effects from Cayuga Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

SLATE BOTTOM CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Slate Bottom Creek (Continued)								
AA	15485	55	365	4.0	660.2	660.2	660.4	0.2
AB	16446	40	269	5.4	661.4	661.4	661.7	0.3
AC	17498	47	332	4.4	663.2	663.2	663.5	0.3
AD	17785	55	354	4.1	663.8	663.8	664.1	0.3
AE	18430	58	282	5.1	664.9	664.9	665.1	0.2
AF	18856	62	305	4.8	666.1	666.1	666.2	0.1
AG	19087	67	334	4.3	666.8	666.8	666.8	0.0
AH	19204	71	345	3.0	667.0	667.0	667.2	0.2
AI	19419	107	487	2.2	668.1	668.1	668.2	0.1
AJ	20115	39	171	6.2	668.6	668.6	668.6	0.0
AK	20333	92	398	2.6	669.3	669.3	669.5	0.2
AL	20539	64	293	3.6	670.7	670.7	670.9	0.2
AM	21483	84	518	2.0	671.4	671.4	671.6	0.2
AN	22295	35	190	5.5	671.7	671.7	671.9	0.2
AO	22382	31	135	7.8	672.5	672.5	672.5	0.0
AP	22671	40	190	5.5	674.2	674.2	674.4	0.2
AQ	23223	34	187	5.6	675.4	675.4	676.1	0.7
AR	24217	87	336	3.1	678.3	678.3	678.6	0.3
AS	25582	74	352	3.0	679.8	679.8	680.6	0.8
AT	25809	102	606	1.7	680.0	680.0	681.0	1.0
AU	26097	49	261	3.9	680.0	680.0	681.0	1.0
AV	26334	78	397	2.6	681.9	681.9	682.7	0.8
AW	26890	242	1141	0.9	682.1	682.1	682.9	0.8
AX	28047	90	314	2.7	682.3	682.3	683.0	0.7
AY	29413	73	273	3.2	684.8	684.8	685.5	0.7

[1] Feet above confluence with Cayuga Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

SLATE BOTTOM CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Slate Bottom Creek (Continued)								
AZ	29977[1]	78	323	2.7	685.4	685.4	686.2	0.8
BA	30826[1]	54	227	2.9	686.3	686.3	687.2	0.9
BB	32137[1]	88	298	2.2	688.1	688.1	688.7	0.6
BC	32367[1]	41	161	4.0	688.3	688.3	688.9	0.6
BD	33391[1]	167	371	1.8	690.5	690.5	690.7	0.2
BE	34756[1]	164	311	2.1	692.5	692.5	692.5	0.0
BF	36132[1]	133	263	2.5	695.1	695.1	695.2	0.1
BG	37292[1]	51	150	4.3	698.1	698.1	698.3	0.2
BH	37666[1]	23	81	8.0	699.2	699.2	699.6	0.4
BI	38078[1]	45	154	4.2	702.1	702.1	702.3	0.2
BJ	38405[1]	134	577	1.1	703.1	703.1	703.9	0.8
BK	38644[1]	135	403	1.6	703.2	703.2	704.0	0.8
BL	38906[1]	105	277	2.3	703.8	703.8	704.4	0.6
BM	39312[1]	97	181	3.6	705.1	705.1	705.4	0.3
BN	39568[1]	114	693	0.9	708.5	708.5	709.5	1.0
BO	39969[1]	83	316	2.1	708.6	708.6	709.6	1.0
BP	40499[1]	25	94	6.9	709.3	709.3	709.9	0.6
BQ	40993[1]	32	137	4.7	711.7	711.7	712.6	0.9
BR	41208[1]	42	149	4.4	713.0	713.0	713.1	0.1
BS	41686[1]	46	142	4.6	714.7	714.7	715.7	1.0
Slate Bottom Creek North Branch								
A	2000[2]	52	152	3.9	669.8	669.8	670.2	0.4

[1] Feet above confluence with Cayuga Creek
[2] Feet above confluence with Slate Bottom Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

SLATE BOTTOM CREEEK - SLATE BOTTOM CREEK NORTH BRANCH

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Smokes Creek								
A	0	60	487	10.9	581.1	574.3[2]	574.3[2]	0.0
B	180	73	588	9.0	581.1	575.4[2]	575.4[2]	0.0
C	325	136	1131	4.7	581.1	576.7[2]	576.7[2]	0.0
D	1415	112	915	5.8	581.1	577.3[2]	577.3[2]	0.0
E	2110	111	841	6.3	581.1	577.9[2]	577.9[2]	0.0
F	2630	105	861	6.2	581.1	578.5[2]	578.5[2]	0.0
G	2795	78	456	11.6	581.1	578.5[2]	578.6[2]	0.1
H	3660	127	1156	4.6	581.1	580.5[2]	580.5[2]	0.0
I	4450	112	1216	4.4	581.1	580.9[2]	580.9[2]	0.0
J	4570	75	727	7.3	581.3	581.3	581.3	0.0
K	4705	138	1534	3.5	582.6	582.6	582.6	0.0
L	5065	134	1418	3.7	582.7	582.7	582.7	0.0
M	5245	65	1014	5.2	582.7	582.7	582.7	0.0
N	5445	120	1997	2.7	584.2	584.2	584.2	0.0
O	5585	80	1256	4.2	584.2	584.2	584.2	0.0
P	6020	122	1406	3.8	584.3	584.3	584.3	0.0
Q	6165	125	1470	3.6	584.6	584.6	584.6	0.0
R	6285	129	1565	3.4	584.6	584.6	584.6	0.0
S	6455	95	1050	5.0	584.7	584.7	584.7	0.0
T	6590	120	1362	3.9	585.1	585.1	585.1	0.0
U	7025	110	1221	4.3	585.2	585.2	585.2	0.0
V	7345	141	1499	3.5	585.4	585.4	585.4	0.0
W	7490	116	1176	4.5	585.5	585.5	585.5	0.0
X	7980	131	1417	3.7	585.7	585.7	585.7	0.0
Y	8450	120	1179	4.5	585.8	585.8	585.8	0.0
Z	8580	58	1157	4.6	587.1	587.1	587.1	0.0

[1] Feet above confluence with Lake Erie
[2] Elevation computed without consideration of backwater effects from Lake Erie

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

SMOKES CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Smokes Creek (Continued)								
AA	8670	77	1131	4.7	587.5	587.5	587.5	0.0
AB	8740	53	580	9.1	587.5	587.5	587.5	0.0
AC	8910	106	1551	3.4	588.3	588.3	588.3	0.0
AD	9000	113	1610	3.3	588.3	588.3	588.3	0.0
AE	9080	108	1424	3.7	588.3	588.3	588.3	0.0
AF	9230	123	1612	3.3	588.9	588.9	588.9	0.0
AG	9370	114	1454	3.6	588.9	588.9	588.9	0.0
AH	9485	56	1041	5.1	589.1	589.1	589.1	0.0
AI	9695	132	2510	2.1	589.7	589.7	589.7	0.0
AJ	9805	92	1351	2.1	589.7	589.7	589.7	0.0
AK	10115	54	943	3.0	589.8	589.8	589.8	0.0
AL	10225	54	908	3.1	590.1	590.1	590.1	0.0
AM	10340	75	1172	2.4	590.9	590.9	590.9	0.0
AN	10510	112	921	3.1	590.9	590.9	590.9	0.0
AO	10650	108	1457	1.9	591.0	591.0	591.0	0.0
AP	11350	94	1115	2.5	591.0	591.0	591.0	0.0
AQ	11560	119	1448	2.0	591.2	591.2	591.2	0.0
AR	11850	98	1140	2.5	591.2	591.2	591.2	0.0
AS	12580	40	622	4.6	591.2	591.2	591.2	0.0
AT	12770	80	973	2.9	591.5	591.5	591.5	0.0
AU	13030	110	1196	2.4	591.7	591.7	591.7	0.0
AV	13380	104	1005	2.8	591.7	591.7	591.7	0.0
AW	13680	86	840	3.4	591.7	591.7	591.7	0.0
AX	13870	92	820	3.5	592.2	592.2	592.2	0.0
AY	14500	118	1021	2.8	592.4	592.4	592.4	0.0

[1] Feet above confluence with Lake Erie

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

SMOKES CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Smokes Creek (Continued)								
AZ	15845[1]	91	640	4.4	592.7	592.7	592.7	0.0
BA	16850[1]	62	307	9.2	593.3	593.3	593.3	0.0
BB	16965[1]	63	324	8.7	593.8	593.8	593.8	0.0
BC	17425[1]	90	507	5.6	595.6	595.6	595.6	0.0
BD	17620[1]	71	413	6.8	596.3	596.3	596.3	0.0
BE	19085[1]	70	422	6.7	599.0	599.0	599.0	0.0
BF	20540[1]	78	329	8.6	604.3	604.3	604.3	0.0
BG	20730[1]	80	461	6.0	606.7	606.7	606.7	0.0
BH	21750[1]	105	814	3.4	607.5	607.5	607.8	0.3
BI	22440[1]	250	1459	4.3	610.9	610.9	611.3	0.4
BJ	24235[1]	250	1760	3.4	613.6	613.6	614.2	0.6
BK	26242[1]	350	1968	3.3	616.8	616.8	617.4	0.6
BL	30202[1]	150	378	9.6	624.8	624.8	624.8	0.0
BM	33264[1]	150	677	6.6	635.4	635.4	636.3	0.9
Smokes Creek Northeast Branch								
A	1381[2]	47	175	10.5	754.4	754.4	754.4	0.0
B	2566[2]	41	203	9.1	764.1	764.1	764.7	0.6
C	3595[2]	120	313	5.9	772.4	772.4	772.7	0.3
D	5026[2]	96	785	2.3	780.9	780.9	781.9	1.0
E	5665[2]	112	677	2.7	781.3	781.3	782.3	1.0
F	6705[2]	35	176	10.4	782.6	782.6	783.2	0.6
G	7466[2]	67	308	6.0	787.7	787.7	788.2	0.5
H	7747[2]	120	994	1.9	791.7	791.7	791.8	0.1

[1] Feet above confluence with Lake Erie
[2] Feet above confluence with Smokes Creek Northwest Branch

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

SMOKES CREEK - SMOKES CREEK NORTHEAST BRANCH

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Smokes Creek Northeast Branch (Continued)								
I	8496[1]	80	407	4.5	791.7	791.7	792.2	0.5
J	8820[1]	167	1217	1.5	795.4	795.4	795.7	0.3
K	10648[1]	101	293	6.3	809.2	809.2	809.8	0.6
L	12015[1]	75	342	5.4	820.4	820.4	821.2	0.8
M	13429[1]	224	841	2.2	826.0	826.0	827.0	1.0
N	14533[1]	65	197	9.4	832.8	832.8	832.8	0.0
O	15925[1]	76	479	3.8	839.4	839.4	840.3	0.9
P	17431[1]	80	228	5.2	855.3	855.3	855.6	0.3
Q	17718[1]	100	722	1.6	858.9	858.9	859.7	0.8
R	18196[1]	22	129	9.2	858.9	858.9	859.7	0.8
S	18266[1]	77	432	2.7	871.7	871.7	872.2	0.5
T	18625[1]	415	4432	0.3	871.8	871.8	872.3	0.5
U	20182[1]	64	383	3.1	871.8	871.8	872.3	0.5
V	20611[1]	100	492	2.4	872.1	872.1	872.8	0.7
W	21600[1]	100	227	5.2	875.0	875.0	875.8	0.8
X	23600[1]	132	511	1.4	884.3	884.3	885.3	1.0
Y	25600[1]	90	154	4.8	890.2	890.2	891.1	0.9
Smokes Creek Northwest Branch								
A	38860[2]	150	404	8.4	689.1	689.1	689.6	0.5
B	42370[2]	159	817	3.7	706.7	706.7	707.7	1.0
C	43065[2]	125	515	5.8	708.3	708.3	709.0	0.7
D	44768[2]	170	696	4.3	715.3	715.3	716.2	0.9

[1] Feet above confluence with Smokes Creek Northwest Branch
[2] Feet above confluence with Lake Erie

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

SMOKES CREEK NORTHEAST BRANCH - SMOKES CREEK NORTHWEST BRANCH

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Smokes Creek Northwest Branch (Continued)								
E	45580	90	469	6.4	718.4	718.4	719.4	1.0
F	46340	68	399	7.5	725.7	725.7	726.1	0.4
G	46542	65	330	9.1	726.2	726.2	726.9	0.7
H	47171	120	918	3.3	734.0	734.0	734.3	0.3
I	47660	139	632	4.7	734.0	734.0	734.3	0.3
J	48100	120	464	6.5	734.9	734.9	735.7	0.8
K	48275	150	1074	2.8	739.8	739.8	739.9	0.1
L	48885	140	639	4.7	739.8	739.8	740.1	0.3
M	49700	80	293	6.2	747.5	747.5	747.5	0.0
N	50650	51	262	7.0	754.6	754.6	755.6	1.0
O	51555	55	206	8.9	762.4	762.4	763.1	0.7
P	51932	40	185	9.9	768.0	768.0	768.3	0.3
Q	52026	72	484	3.8	771.8	771.8	772.7	0.9
R	52116	65	408	4.5	772.1	772.1	773.1	1.0
S	52341	74	437	4.2	774.3	774.3	775.3	1.0
T	52526	68	414	4.4	774.6	774.6	775.4	0.8
U	52650	120	752	2.4	775.2	775.2	776.2	1.0
V	54400	110	257	7.1	778.9	778.9	778.9	0.0
W	55300	121	492	3.7	783.4	783.4	784.0	0.6
X	55520	194	1324	1.4	788.3	788.3	789.3	1.0
Y	58755	70	268	6.8	808.6	808.6	809.2	0.6
Z	59470	190	1079	1.7	813.4	813.4	814.4	1.0
AA	61070	52	174	10.5	823.3	823.3	823.3	0.0
AB	62160	35	213	8.6	830.5	830.5	831.4	0.9

[1] Feet above confluence with Lake Erie

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

SMOKES CREEK NORTHWEST BRANCH

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Smokes Creek Northwest Branch (Continued)								
AC	63058	60	521	3.5	844.8	844.8	844.8	0.0
AD	63900	60	232	7.9	845.3	845.3	845.3	0.0
AE	64828	23	167	10.9	851.8	851.8	852.8	1.0
AF	64983	93	867	2.1	855.9	855.9	856.8	0.9
AG	65731	200	1448	1.3	856.1	856.1	857.1	1.0
AH	66208	110	806	1.9	856.2	856.7	857.7	1.0
AI	66770	282	2330	0.6	862.3	862.3	863.3	1.0
AJ	67345	214	975	1.5	862.3	862.3	863.3	1.0
AK	68230	142	587	2.6	862.7	862.7	863.7	1.0
AL	69070	42	314	4.8	866.4	866.4	866.8	0.4
AM	69710	150	822	1.8	866.9	866.9	867.5	0.6
AN	70232	180	566	2.6	867.1	867.1	867.9	0.8
AO	71210	187	527	2.8	868.1	868.1	869.0	0.9
AP	71320	155	448	3.3	869.6	869.6	869.8	0.2
AQ	73789	105	506	3.0	875.0	875.0	875.2	0.2
AR	75090	106	198	7.6	876.6	876.6	877.8	1.2
AS	76889	291	831	1.8	883.4	883.4	884.3	0.9
AT	77708	118	289	5.2	888.9	888.9	889.2	0.3
AU	78859	150	449	3.3	893.8	893.8	894.3	0.5
AV	80840	110	205	7.3	903.6	903.6	903.6	0.0
AW	82170	46	226	6.6	913.7	913.7	914.7	1.0
AX	83960	50	158	9.5	931.0	931.0	931.7	0.7
AY	85080	38	164	5.2	940.1	940.1	941.1	1.0
AZ	87120	50	111	7.8	960.8	960.8	961.0	0.2

[1] Feet above confluence with Lake Erie

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

SMOKES CREEK NORTHWEST BRANCH

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Smokes Creek Northwest Branch (Continued)								
BA	89550[1]	50	109	7.9	1003.2	1003.2	1003.2	0.0
BB	90150[1]	40	111	7.8	1009.8	1009.8	1010.4	0.6
BC	90285[1]	86	443	1.9	1013.5	1013.5	1014.5	1.0
BD	90920[1]	50	120	7.2	1022.1	1022.1	1022.1	0.0
Smokes Creek South Branch								
A	80[2]	62	1148	2.4	589.8	589.8	589.8	0.0
B	280[2]	115	1576	1.7	590.1	589.9[3]	589.9	0.0
C	390[2]	50	946	2.9	590.9	590.4[3]	590.4[3]	0.0
D	520[2]	101	1532	1.8	590.9	590.4[3]	590.4[3]	0.0
E	670[2]	108	1713	1.6	591.0	590.4[3]	590.4[3]	0.0
F	830[2]	95	1446	1.9	591.0	590.5[3]	590.5[3]	0.0
G	1250[2]	110	1395	2.0	591.0	590.5[3]	590.5[3]	0.0
H	1650[2]	98	1107	2.5	591.0	590.5[3]	590.5[3]	0.0
I	1830[2]	135	1614	1.7	591.0	590.6[3]	590.6[3]	0.0
J	2120[2]	95	1221	2.3	591.0	590.6[3]	590.6[3]	0.0
K	2230[2]	104	1182	2.3	591.0	590.6[3]	590.6[3]	0.0
L	2405[2]	109	1193	2.3	591.0	591.0	591.0	0.0
M	2640[2]	99	948	2.9	591.0	591.0	591.0	0.0
N	2830[2]	107	991	2.8	591.0	591.0	591.0	0.0
O	3040[2]	107	1065	2.6	591.5	591.5	591.5	0.0
P	4160[2]	120	979	2.8	591.7	591.7	591.7	0.0
Q	6135[2]	85	516	5.3	593.4	593.4	593.6	0.2
R	9455[2]	79	448	6.1	596.4	596.4	596.9	0.5
S	9645[2]	75	458	6.0	598.9	598.9	598.9	0.0

[1] Feet above confluence with Lake Erie
[2] Feet above confluence with Smokes Creek
[3] Elevation computed without consideration of lateral flow effects from Smokes Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

SMOKES CREEK NORTHWEST BRANCH - SMOKES CREEK SOUTH BRANCH

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Smokes Creek South Branch (Continued)								
T	9745	68	517	5.3	599.2	599.2	599.2	0.0
U	9825	45	402	6.8	599.2	599.2	599.2	0.0
V	9975	38	456	6.0	599.6	599.6	599.6	0.0
W	10385	86	464	5.9	599.6	599.6	600.0	0.4
X	10785	60	529	5.2	600.3	600.3	600.5	0.2
Y	11175	75	736	3.7	600.9	600.9	601.2	0.3
Z	11365	60	281	9.8	600.9	600.9	601.0	0.1
AA	11700	55	367	7.1	602.3	602.3	602.9	0.6
AB	12530	120	450	5.8	605.9	605.9	606.1	0.2
AC	13420	71	435	6.0	609.0	609.0	609.9	0.9
AD	13936	68	414	6.3	610.2	610.2	611.2	1.0
AE	14070	80	419	6.2	610.8	610.8	611.6	0.8
AF	14480	90	439	5.9	613.0	613.0	613.5	0.5
AG	15766	109	623	4.2	620.0	620.0	620.4	0.4
AH	16240	110	346	7.5	620.4	620.4	620.8	0.4
AI	16990	100	373	6.2	625.4	625.4	625.6	0.2
AJ	18220	91	385	6.0	629.7	629.7	630.3	0.6
AK	19150	116	295	7.8	634.3	634.3	634.3	0.0
AL	19975	46	245	9.4	641.0	641.0	641.0	0.0
AM	20670	66	590	3.6	649.2	649.2	649.2	0.0
AN	21220	49	315	6.8	649.2	649.2	649.4	0.2
AO	21800	54	273	7.9	650.4	650.4	651.2	0.8
AP	22050	46	401	5.4	657.2	657.2	657.6	0.4
AQ	22250	39	250	8.6	657.2	657.2	657.6	0.4
AR	22290	49	191	11.2	661.0	661.0	661.0	0.0

[1] Feet above confluence with Smokes Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

SMOKES CREEK SOUTH BRANCH

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Smokes Creek South Branch (Continued)								
AS	23090	55	290	7.4	665.8	665.8	666.0	0.2
AT	23930	40	202	10.6	668.2	668.2	669.1	0.9
AU	25680	36	210	10.3	681.0	681.0	681.8	0.8
AV	25980	90	826	2.6	690.1	690.1	690.1	0.0
AW	26220	48	367	5.9	690.1	690.1	690.1	0.0
AX	26660	63	314	6.9	690.9	690.9	691.0	0.1
AY	26930	78	251	8.6	692.2	692.2	692.2	0.0
AZ	27620	60	272	7.9	696.9	696.9	697.4	0.5
BA	28780	83	358	6.0	703.1	703.1	704.1	1.0
BB	29630	44	181	8.3	709.3	709.3	710.0	0.7
BC	30490	40	160	9.3	718.3	718.3	718.3	0.0
BD	32080	37	101	9.1	738.7	738.7	738.7	0.0
BE	32660	25	107	8.6	743.9	743.9	744.8	0.9
BF	32960	60	270	3.4	748.1	748.1	748.1	0.0
BG	33660	60	141	6.5	754.3	754.3	754.3	0.0
BH	34640	34	133	6.9	762.2	762.2	763.1	0.9
BI	35550	42	166	5.5	766.9	766.9	767.9	1.0
BJ	36950	48	208	4.4	773.9	773.9	774.9	1.0
BK	37440	39	259	3.6	779.2	779.2	779.9	0.7
BL	37660	36	227	4.0	780.5	780.5	781.0	0.5
BM	38260	28	82	9.8	782.4	782.4	782.4	0.0
BN	38410	21	81	9.9	785.3	785.3	785.3	0.0
BO	39350	27	98	8.2	795.4	795.4	795.9	0.5
BP	39725	29	92	8.7	801.0	801.0	801.0	0.0
BQ	40375	17	79	10.2	807.5	807.5	807.9	0.4

[1] Feet above confluence with Smokes Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

SMOKES CREEK SOUTH BRANCH

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Smokes Creek South Branch (Continued)								
BR	40520	40	185	4.3	813.1	813.1	813.6	0.5
BS	40960	22	49	8.6	815.8	815.8	815.8	0.0
BT	41260	50	202	3.5	835.4	835.4	836.0	0.6
BU	43140	67	473	1.5	845.3	845.3	845.4	0.1
BV	43290	69	526	1.3	846.2	846.2	846.2	0.0
BW	43941	45	149	4.7	848.4	848.4	848.7	0.3
BX	44850	30	77	9.1	853.1	853.1	853.1	0.0
BY	45740	58	218	3.2	858.8	858.8	859.8	1.0
BZ	46280	107	141	5.0	860.4	860.4	861.2	0.8
CA	46580	55	229	3.1	864.0	864.0	864.5	0.5
CB	47630	26	93	7.5	868.7	868.7	869.7	1.0
CC	47740	50	202	3.5	871.7	871.7	872.3	0.6
CD	48660	28	112	6.3	875.1	875.1	875.1	0.0
CE	49400	29	102	6.8	878.3	878.3	878.6	0.3
CF	50820	22	100	7.0	885.1	885.1	886.1	1.0
CG	51520	54	181	5.9	893.1	893.1	893.4	0.3
CH	52040	43	118	5.9	896.5	896.5	896.5	0.0
CI	52400	30	126	5.6	898.6	898.6	898.6	0.0
CJ	54140	23	70	10.0	913.1	913.1	913.2	0.1
CK	54400	22	79	4.6	915.7	915.7	916.4	0.7
CL	54750	38	172	2.1	918.4	918.4	918.8	0.4
CM	57360	21	49	7.4	949.5	949.5	949.8	0.3
CN	58270	26	48	7.4	962.3	962.3	962.4	0.1
CO	58730	24	64	5.6	969.6	969.6	969.9	0.3
CP	59450	32	50	7.2	981.7	981.7	981.7	0.0
CQ	60790	40	137	2.6	1008.5	1008.5	1008.5	0.0

[1] Feet above confluence with Smokes Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

SMOKES CREEK SOUTH BRANCH

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Smokes Creek South Branch South Tributary								
A	100	55	107	7.0	720.0	720.0	720.0	0.0
B	1250	34	93	8.1	729.9	729.9	729.9	0.0
C	2120	142	417	1.8	748.6	748.6	748.6	0.0
D	2750	41	172	4.4	754.6	754.6	754.6	0.0
E	3191	25	106	7.1	758.6	758.6	758.6	0.0
F	3237	36	181	4.1	759.8	759.8	759.8	0.0
G	4380	35	88	8.6	767.9	767.9	767.9	0.0
H	5910	58	221	3.4	775.6	775.6	776.6	1.0
I	7140	69	245	3.1	780.5	780.5	781.5	1.0
J	8570	48	60	6.5	790.0	790.0	790.0	0.0
K	9590	10	46	8.5	799.2	799.2	800.1	0.9
L	11560	40	79	4.9	816.9	816.9	817.5	0.6
M	12550	22	61	6.4	824.9	824.9	825.7	0.8
N	13065	34	134	2.9	831.7	831.7	831.7	0.0
O	13730	29	51	7.6	834.8	834.8	834.9	0.1
P	14430	28	82	4.7	838.9	838.9	839.4	0.5
Q	14550	59	283	1.4	842.4	842.4	843.3	0.9
R	15270	54	207	1.9	842.6	842.6	843.5	0.9
S	16320	40	60	6.5	845.1	845.1	845.3	0.2
T	17200	54	173	1.7	846.9	846.9	847.4	0.5
U	17728	50	169	1.8	850.2	850.2	850.2	0.0
V	18240	34	81	3.7	850.3	850.3	850.5	0.2

[1] Feet above confluence with Smokes Creek South Branch

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK
(ALL JURISDICTIONS)

FLOODWAY DATA

SMOKES CREEK SOUTH BRANCH SOUTH TRIBUTARY

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Smokes Creek South Branch Tributary 1								
A	50[1]	47	110	4.4	625.9	625.9	625.9	0.0
B	2171[1]	30	110	4.4	657.0	657.0	657.2	0.2
C	2672[1]	70	381	1.3	665.7	665.7	666.6	0.9
D	2736[1]	40	259	1.9	665.7	665.7	666.6	0.9
E	2882[1]	49	316	1.5	666.1	666.1	667.0	0.9
F	3200[1]	17	83	5.8	668.3	668.3	668.9	0.6
G	4201[1]	83	438	1.1	679.3	679.3	680.3	1.0
Smokes Creek South Branch Tributary 2								
A	70[1]	21	73	8.7	703.1	702.5[3]	703.5[3]	1.0
B	1620[1]	21	64	9.9	728.6	728.6	728.6	0.0
C	2970[1]	22	69	9.1	749.1	749.1	749.5	0.4
D	3095[1]	86	491	1.3	753.0	753.0	754.0	1.0
E	3880[1]	26	68	9.3	754.7	754.7	754.7	0.0
F	4400[1]	27	82	7.7	761.9	761.9	761.9	0.0
G	5550[1]	24	89	7.1	769.0	769.0	769.2	0.2
H	6100[1]	25	64	6.6	772.4	772.4	772.6	0.2
I	6550[1]	12	60	3.5	775.8	775.8	776.1	0.3
J	7250[1]	18	61	3.4	776.2	776.2	777.1	0.9
K	7850[1]	18	42	5.0	778.4	778.4	778.4	0.0
Spicer Creek								
A	152[2]	56	108	3.4	564.3	564.3	564.4	0.1
B	672[2]	42	103	3.6	566.0	566.0	566.0	0.0

[1] Feet above confluence with Smokes Creek South Branch
[2] Feet above confluence with Niagara River - Tonawanda Channel
[3] Elevation computed without consideration of backwater effects from Smokes Creek South Branch

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

SMOKES CREEK SOUTH BRANCH TRIBUTARY 1 - SMOKES CREEK SOUTH BRANCH TRIBUTARY 2 - SPICER CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Spicer Creek (Continued)								
C	912	22	101	3.6	566.6	566.6	566.6	0.0
D	1050	38	227	1.6	571.1	571.1	571.1	0.0
E	1502	49	438	0.8	571.1	571.1	571.1	0.0
F	1657	63	508	0.7	571.1	571.1	571.1	0.0
G	1831	26	174	2.1	571.1	571.1	571.2	0.1
H	2574	23	88	4.2	571.5	571.5	571.7	0.2
I	2929	32	118	3.1	572.1	572.1	572.5	0.4
J	3201	15	74	5.0	572.4	572.4	573.2	0.8
K	3751	31	117	3.1	574.0	574.0	574.6	0.6
L	4299	20	84	4.4	575.1	575.1	575.5	0.4
M	4452	19	106	3.4	575.8	575.8	576.3	0.5
N	4854	24	104	3.5	576.3	576.3	576.9	0.6
O	5135	26	128	2.6	576.7	576.7	577.3	0.6
P	5392	20	93	3.6	576.9	576.9	577.5	0.6
Q	6008	27	122	2.7	577.6	577.6	578.4	0.8
R	6812	44	182	1.8	578.6	578.6	579.5	0.9
S	7680	35	150	2.2	579.4	579.4	580.4	1.0
T	8571	23	105	3.2	580.3	580.3	581.1	0.8
U	8891	31	152	2.2	580.8	580.8	581.6	0.8
V	9670	42	153	2.2	581.3	581.3	582.1	0.8
W	10204	22	97	3.5	581.8	581.8	582.6	0.8
X	10308	33	178	1.7	581.9	581.9	582.9	1.0
Y	10660	60	317	1.0	584.3	584.3	585.0	0.7
Z	10972	56	317	1.0	584.3	584.3	585.1	0.8
AA	12102	39	215	1.4	584.5	584.5	585.2	0.7
AB	13694	30	145	2.1	585.0	585.0	585.9	0.9

[1] Feet above confluence with Niagara River - Tonawanda Channel

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

SPICER CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Spring Brook								
A	3250[1]	35	192	3.4	1337.6	1337.6	1337.7	0.1
B	5820[1]	20	75	8.7	1342.2	1342.2	1343.2	1.0
C	6370[1]	100	304	2.1	1346.0	1346.0	1346.4	0.4
D	8270[1]	130	621	1.0	1346.3	1346.3	1347.2	0.9
E	9923[1]	100	119	4.4	1353.9	1353.9	1353.9	0.0
F	11550[1]	100	141	3.8	1359.1	1359.1	1359.1	0.0
Spring Creek								
A	1100[2]	52	287	1.1	673.9	673.9	673.9	0.0
B	1505[2]	120	771	0.4	675.7	675.7	675.7	0.0
C	2495[2]	13	34	9.4	675.9	675.9	675.9	0.0
D	2873[2]	80	412	0.8	682.7	682.7	682.9	0.2
E	3049[2]	24	105	3.0	683.6	683.6	683.6	0.0
Tannery Brook								
A	470[3]	38	145	11.2	863.0	863.0	863.0	0.0
B	818[3]	36	410	3.9	890.1	890.1	890.3	0.2
C	1792[3]	56	467	3.5	898.1	898.1	899.1	1.0
D	2986[3]	155	456	3.5	902.7	902.7	903.4	0.7
E	3410[3]	95	566	2.9	905.5	905.5	906.1	0.6
F	4230[3]	100	314	5.2	905.9	905.9	906.6	0.7
G	4380[3]	109	696	2.3	909.7	909.7	910.5	0.8
H	5288[3]	75	409	4.0	911.0	911.0	911.6	0.6
I	5431[3]	90	489	3.3	913.1	913.1	913.8	0.7
J	5915[3]	45	377	3.3	916.1	916.1	916.8	0.7
K	6200[3]	180	815	1.5	916.6	916.6	917.4	0.8

[1] Feet above South Buffalo Street
[2] Feet above mouth
[3] Feet above confluence with Cazenovia Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

SPRING BROOK - SPRING CREEK - TANNERY BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Tannery Brook (Continued)								
L	6586[1]	38	232	5.4	916.6	916.6	917.1	0.5
M	7061[1]	33	206	6.1	918.5	918.5	918.9	0.4
N	7220[1]	28	187	6.7	919.7	919.7	920.7	1.0
O	8762[1]	40	147	8.6	928.3	928.3	928.3	0.0
P	8877[1]	155	816	1.5	934.7	934.7	934.8	0.1
Q	9810[1]	38	123	10.3	936.6	936.6	936.6	0.0
R	10040[1]	59	288	4.4	942.6	942.6	942.6	0.0
S	10660[1]	34	113	11.1	943.7	943.7	943.7	0.0
Thatcher Brook								
A	100[2]	*	*	*	749.0[3]	*	*	*
B	470[2]	*	*	*	749.0[3]	*	*	*
C	2756[2]	*	*	*	753.3	*	*	*
D	3095[2]	*	*	*	756.3	*	*	*
E	3390[2]	*	*	*	759.8	*	*	*
F	3765[2]	*	*	*	760.3	*	*	*
G	4186[2]	*	*	*	764.6	*	*	*
H	4400[2]	*	*	*	767.0	*	*	*
I	4930[2]	*	*	*	772.4	*	*	*
J	4960[2]	*	*	*	773.2	*	*	*
K	5210[2]	*	*	*	773.5	*	*	*
L	5530[2]	*	*	*	774.7	*	*	*
M	5580[2]	*	*	*	781.5	*	*	*
N	5870[2]	*	*	*	784.0	*	*	*
O	6550[2]	*	*	*	789.4	*	*	*

[1] Feet above confluence with Cazenovia Creek [2] Feet above mouth

[3] Elevation computed with backwater effects from Cattaraugus Creek

* Floodway not computed

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

TANNERY BROOK - THATCHER BROOK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Thatcher Brook (Continued)								
P	7360[1]	*	*	*	799.0	799.0	*	*
Q	7500[1]	*	*	*	799.0	799.0	*	*
Tonawanda Creek								
A	2290[2]	196[3]	3852	4.5	570.3	569.7[4]	570.7[4]	1.0
B	8140[2]	290[3]	3738	4.6	571.5	571.5	572.3	0.8
C	9145[2]	242[3]	4189	4.1	571.8	571.8	572.5	0.7
D	12036[2]	220[3]	3903	4.4	572.3	572.3	573.0	0.7
E	14486[2]	266[3]	4329	4.0	572.8	572.8	573.4	0.6
F	16909[2]	284[3]	4441	3.9	573.3	573.3	573.9	0.6
G	18209[2]	464[3]	5927	2.9	573.6	573.6	574.2	0.6
H	18928[2]	450[3]	6090	2.8	573.7	573.7	574.3	0.6
I	19659[2]	322[3]	4096	4.2	573.7	573.7	574.3	0.6
J	20166[2]	257[3]	4374	3.9	573.9	573.9	574.5	0.6
K	24500[2]	218[3]	4351	4.3	574.8	574.8	574.9	0.1
L	29500[2]	230[3]	3947	4.5	575.7	575.7	575.8	0.1
M	34540[2]	293[3]	4886	3.6	576.8	576.8	577.3	0.5
N	35870[2]	212[3]	4087	4.4	576.9	576.9	577.4	0.5
O	41360[2]	275[3]	4984	3.6	577.4	577.4	578.0	0.6
P	47220[1]	225[3]	4502	4.0	577.8	577.8	578.4	0.6
Q	51520[1]	309[3]	5892	3.0	578.2	578.2	578.9	0.7
R	57000[1]	220[3]	4212	2.7	578.8	578.8	579.4	0.6
S	59850[1]	193[3]	3151	3.6	579.2	579.2	579.8	0.6
T	63900[1]	200[3]	3083	3.7	581.0	581.0	581.6	0.6
U	69880[1]	211[3]	3155	2.1	583.1	583.1	584.1	1.0

[1] Feet above mouth
[2] Feet above confluence with Niagara River - Tonawanda Channel
[3] Width extends beyond Erie County corporate limits
[4] Elevation computed without consideration of backwater effects from Niagara River - Tonawanda Channel
* Floodway not computed

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

THATCHER BROOK - TONAWANDA CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Tonawanda Creek (Continued)								
V	73025[1]	153[3]	2610	2.5	583.5	583.5	584.5	1.0
W	76425[1]	120[3]	2081	3.2	584.5	584.5	585.4	0.9
X	80975[1]	197[3]	3174	2.1	585.2	585.2	586.2	1.0
Y	83625[1]	120[3]	2213	3.0	585.8	585.8	586.8	1.0
Z	89725[1]	213[3]	3443	1.9	587.0	587.0	588.0	1.0
AA	93475[1]	213[3]	3467	1.9	587.5	587.5	588.5	1.0
AB	98725[1]	182[3]	2557	2.6	588.4	588.4	589.4	1.0
AC	101825[1]	210[3]	2933	2.3	589.2	589.2	590.1	0.9
AD	105875[1]	230[3]	3384	2.0	589.9	589.9	590.8	0.9
AE	109275[1]	220[3]	3515	2.3	590.5	590.5	591.4	0.9
AF	115475[1]	573[3]	5957	1.4	591.2	591.2	592.1	0.9
AG	122625[1]	384[3]	3512	2.5	591.5	591.5	592.4	0.9
AH	128775[1]	153[3]	2241	4.0	592.0	592.0	592.9	0.9
AI	133800[1]	2916[3]	15823	0.6	592.7	592.7	593.7	1.0
AJ	144000[1]	2072[3]	32572	0.7	593.1	593.1	594.1	1.0
Tributary 1 to Niagara River Tonawanda Channel								
A	1560[2]	93	429	0.8	573.7	573.7	573.7	0.0
B	2210[2]	36	63	3.9	573.8	573.8	573.9	0.1
C	3510[2]	18	46	5.4	577.8	577.8	578.8	1.0
Waterfalls Village Creek								
A	256[2]	40	116	4.0	586.1	586.1	587.1	1.0
B	486[2]	67	205	2.2	586.9	586.9	587.9	1.0

[1] Feet above confluence with Niagara River - Tonawanda Channel
[2] Feet above confluence with Lake Erie
[3] Width extends beyond Erie County corporate limits

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

TONAWANDA CREEK - TRIBUTARY 1 TO NIAGARA RIVER TONAWANDA CHANNEL - WATERFALLS VILLAGE CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Waterfalls Village Creek (Continued)								
C	620[1]	37	205	2.2	586.9	586.9	587.9	1.0
D	800[1]	40	268	1.7	587.2	587.0	588.0	1.0
E	1402[1]	14	61	7.6	590.2	590.2	590.2	0.0
F	1460[1]	109	213	2.2	591.3	591.3	591.3	0.0
G	2077[1]	100	427	1.1	599.5	599.5	599.9	0.4
H	3130[1]	29	57	8.1	602.8	602.8	602.8	0.0
I	4030[1]	32	92	5.0	607.9	607.9	607.9	0.0
J	4478[1]	70	1129	0.4	626.6	626.6	627.6	1.0
K	5490[1]	68	408	1.1	626.6	626.6	627.6	1.0
L	6172[1]	50	304	1.5	634.8	634.8	634.9	0.1
M	6750[1]	68	716	0.6	649.9	649.9	650.9	1.0
N	7010[1]	58	458	1.0	649.9	649.9	650.9	1.0
O	7040[1]	65	122	3.8	649.9	649.9	650.9	1.0
P	7430[1]	93	120	3.8	655.6	655.6	655.6	0.0
Q	8020[1]	43	178	2.6	665.4	665.4	665.4	0.0
R	8357[1]	49	211	2.2	669.2	669.2	669.5	0.3
Woods Creek								
A	4749[2]	59	310	2.6	567.7	566.5[3]	567.4[3]	0.9
B	6627[2]	79	373	2.8	567.7	567.6[3]	568.5[3]	0.9
C	9177[2]	57	255	1.9	569.8	569.8	570.8	1.0
D	11227[2]	40	147	1.2	570.4	570.4	571.3	0.9
E	12452[2]	54	116	2.4	571.0	571.0	571.6	0.6
F	15262[2]	11	25	5.1	575.4	575.4	575.4	0.0
G	15522[2]	13	18	7.0	576.7	576.7	577.2	0.5
H	16372[2]	27	56	2.3	577.7	577.7	578.6	0.9

[1] Feet above confluence with Lake Erie
[2] Feet above confluence with Niagara River - Tonawanda Channel
[3] Elevation computed without consideration of backwater effects from Niagara River - Tonawanda Channel

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

WATERFALLS VILLAGE CREEK - WOODS CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Woods Creek Tributary 1								
A	328	54	244	1.1	567.9	567.9	568.9	1.0
B	1228	49	109	2.4	568.2	568.2	569.1	0.9
C	2378	61	111	2.3	570.7	570.7	570.7	0.0
D	3628	61	144	1.8	571.7	571.7	571.8	0.1
E	6478	32	101	2.6	573.5	573.5	573.9	0.4
Woods Creek Tributary 3								
A	700	112	179	0.3	571.1	571.1	572.0	0.9
B	893	125	244	0.2	571.4	571.4	573.9	0.9

[1] Feet above confluence with Woods Creek

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

FLOODWAY DATA

WOODS CREEK TRIBUTARY 1 - WOODS CREEK TRIBUTARY 3

5.0 INSURANCE APPLICATIONS

For flood insurance rating purposes, flood insurance zone designations are assigned to a community based on the results of the engineering analyses. The zones are as follows:

Zone A

Zone A is the flood insurance rate zone that corresponds to the 1-percent-annual-chance floodplains that are determined in the FIS by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no base flood elevations or depths are shown within this zone.

Zone AE

Zone AE is the flood insurance rate zone that corresponds to the 1-percent-annual-chance floodplains that are determined in the FIS by detailed methods. In most instances, whole-foot base flood elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone AH

Zone AH is the flood insurance rate zone that corresponds to the areas of 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are between 1 and 3 feet. Whole-foot base flood elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone AO

Zone AO is the flood insurance rate zone that corresponds to the areas of 1-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 feet. Average whole-foot base flood depths derived from the detailed hydraulic analyses are shown within this zone.

Zone X

Zone X is the flood insurance rate zone that corresponds to areas outside the 0.2-percent-annual-chance floodplain, areas within the 0.2-percent-annual-chance floodplain, and to areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent-annual-chance flood by levees. No base flood elevations or depths are shown within this zone.

6.0 FLOOD INSURANCE RATE MAP

The FIRM is designed for flood insurance and floodplain management applications.

For flood insurance applications, the map designates flood insurance rate zones as described in Section 5.0 and, in the 1-percent-annual-chance floodplains that were studied by detailed methods, shows selected whole-foot base flood elevations or average depths. Insurance agents use the zones and base flood elevations in conjunction with information on structures and their contents to assign premium rates for flood insurance policies.

For floodplain management applications, the map shows by tints, screens, and symbols, the 1- and 0.2-percent-annual-chance floodplains. Floodways and the locations of selected cross sections used in the hydraulic analyses and floodway computations are shown where applicable.

The current FIRM presents flooding information for the entire geographic area of Erie County. Previously, separate Flood Hazard Boundary Maps and/or FIRMs were prepared for each identified flood-prone jurisdiction in Niagara County. This countywide FIRM also includes flood hazard information that was presented separately on Flood Boundary and Floodway Maps (FBFMs), where applicable. Historical data relating to the maps prepared for each community, prior to the countywide FIS, are presented in Table 11, "Community Map History."

Within the Villages of Depew and Lancaster, and the Towns of Amherst and Cheektowaga, there are one or more levees that have not been demonstrated by the community or levee owner(s) to meet the requirements of 44 CFR Part 65.10 of the NFIP regulations as it relates to the levees' capacity to provide 1-percent-annual-chance flood protection. Please refer to the Notice to Flood Insurance Study Users page at the front of this FIS report for more information on how this may affect the FIRM.

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISION DATE(S)	FIRM EFFECTIVE DATE	FIRM REVISION DATE(S)
Akron, Village of	May 31, 1974	September 19, 1975	November 19, 1980	
Alden, Town of	May 31, 1974	August 20, 1976	June 1, 1981	February 6, 1991
Alden, Village of	May 17, 1974	June 16, 1976 November 30, 1979	January 6, 1984	
Amherst, Town of	March 8, 1974	August 6, 1976 July 7, 1978	December 18, 1984	September 28, 1990
Angola, Village of	December 6, 1974	None	May 18, 1979	December 3, 1982 August 6, 2002
Aurora, Town of	April 12, 1974	March 26, 1976	April 16, 1979	
Blasdell, Village of	November 22, 1974	None	June 25, 1976	
Boston, Town of	April 12, 1974	September 12, 1975	September 30, 1981	
Brant, Town of	June 14, 1974	July 30, 1976	January 6, 1984	
Buffalo, City of	June 28, 1974	November 28, 1975	November 18, 1981	August 23, 1999
Cheektowaga, Town of	September 7, 1973	May 28, 1976	July 5, 1977	June 16, 1978 July 2, 1981 April 8, 1983 March 15, 1984
Clarence, Town of	May 17, 1974	July 16, 1976	April 1, 1982	
Colden, Town of	May 31, 1974	July 2, 1976	July 2, 1979	September 4, 1986
Collins, Town of	August 2, 1974	None	May 16, 1977	
Concord, Town of	August 2, 1974	August 27, 1976	February 27, 1984	
Depew, Village of	February 22, 1974	July 30, 1976	August 3, 1981	

TABLE 11

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

COMMUNITY MAP HISTORY

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISION DATE(S)	FIRM EFFECTIVE DATE	FIRM REVISION DATE(S)
East Aurora, Village of	July 20, 1973	None	July 20, 1973	July 1, 1974 December 5, 1975 June 29, 1979 August 6, 2002
Eden, Town of	September 20, 1974	May 28, 1976	August 24, 1979	
Elma, Town of	September 21, 1973	None	June 1, 1977	June 22, 1998
Evans, Town of	May 31, 1974	August 20, 1976	September 30, 1977	September 16, 1982 February 2, 2002
[1,2] Farnham, Village of	N/A	N/A	N/A	
Gowanda, Village of	February 8, 1973	N/A	June 1, 1977	
Grand Island, Town of	August 2, 1974	October 3, 1975	January 16, 1980	
Hamburg, Town of	August 30, 1974	December 26, 1975	November 19, 1980	October 4, 1994 December 20, 2001
Hamburg, Village of	October 29, 1976	March 25, 1977	January 20, 1982	
Holland, Town of	June 14, 1974	July 2, 1976	May 1, 1979	
[1,2] Kenmore, Village of	N/A	N/A	N/A	
Lackawanna, City of	June 28, 1974	August 13, 1976	July 2, 1980	
Lancaster, Town of	May 24, 1974	May 21, 1976	December 1, 1981	February 23, 2001
Lancaster, Village of	April 12, 1974	May 14, 1976 March 4, 1977	July 2, 1979	
Marilla, Town of	May 17, 1974	None	September 20, 1978	
Newstead, Town of	April 12, 1974	August 20, 1976 April 22, 1977	November 19, 1980	May 4, 1992

[1] No Special Flood Hazard Areas identified [2] This community does not have map history prior to the first countywide mapping

TABLE 11

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

COMMUNITY MAP HISTORY

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISION DATE(S)	FIRM EFFECTIVE DATE	FIRM REVISION DATE(S)
[1,2] North Collins, Town of	N/A	N/A	N/A	
[1,2] North Collins, Village of	N/A	N/A	N/A	
Orchard Park, Town of	August 9, 1974	August 20, 1976	March 16, 1983	
Orchard Park, Village of	June 7, 1974	October 17, 1975	September 2, 1981	
Sardinia, Town of	June 28, 1974	June 25, 1976	October 21, 1983	January 16, 2003
[1,2] Sloan, Village of	N/A	N/A	N/A	
Springville, Village of	May 17, 1974	June 4, 1976	February 27, 1984	July 17, 1986
Tonawanda, City of	August 1, 1979	N/A	August 1, 1979	
Tonawanda, Town of	June 7, 1974	October 24, 1975	August 17, 1981	
Wales, Town of	May 10, 1974	July 23, 1976	August 15, 1979	
West Seneca, Town of	October 12, 1973	N/A	February 2, 1977	
Williamsville, Village of	May 31, 1974	August 6, 1976	March 1, 1982	

[1] No Special Flood Hazard Areas identified [2] This community does not have map history prior to the first countywide mapping

TABLE 11

FEDERAL EMERGENCY MANAGEMENT AGENCY

ERIE COUNTY, NEW YORK (ALL JURISDICTIONS)

COMMUNITY MAP HISTORY

7.0 OTHER STUDIES

A FIS is has been prepared for Niagara County, New York, All Jurisdictions, (FEMA, 2010). A FIS has been published for the Town of Arcade, Wyoming County (FEMA, March 1992). A FIS has been published for the Seneca Nation of Indians (FEMA, September 1988), which includes the Cattaraugus Reservation.

Information pertaining to each jurisdiction within Erie County has been compiled into this FIS. Therefore, this FIS supersedes all previously printed FIS report, FHBMs, FBFMs and FIRMs for all jurisdictions within Erie County.

This is a multi-volume FIS. Each volume may be revised separately, in which case it supersedes the previously printed volume. Users should refer to the Table of Contents in Volume 1 for the current effective date of each volume: volumes bearing these dates contain the most up-to-date hazard data.

8.0 LOCATION OF DATA

Information concerning the pertinent data used in the preparation of this FIS can be obtained by contacting FEMA, Federal Insurance and Mitigation Division, 26 Federal Plaza, Room 1351, New York, New York 10278.

9.0 BIBLIOGRAPHY AND REFERENCES

1) American Society of Civil Engineers. (1889). Transcripts of the American Society of Civil Engineers; Volume 20: Pages 1 – 56. New York, New York.

2) Bissell, Merrill & Associates, Engineering Consultants, of Williamsville, New York. (June 14, 1977). Map Showing As-Built Key Elevation Points on Road Net and Building Sites, Audubon 2A New Community, Town of Amherst, New York, Drawings 1 & 2, Scale 1:1,200.

3) Boss International, Inc. (April 12, 2007). RiverCAD XP for AutoCAD, Release 2007.3 for Windows. Madison, Wisconsin.

4) Chow, V.T. (1959). Open-Channel Hydraulics. McGraw-Hill: New York, New York.

5) City of Tonawanda, New York. (February 26, 1975). Photographs of flooding in the City and Town of Tonawanda, New York.

6) Dethier, Bernard E. (July 1966). Cornell University Agricultural Experiment Station, Bulletin 1009, New York State College of Agriculture: Precipitation in New York State. Ithaca, New York.

7) Economic Consultants Organization, Inc. (1975). Economic Development in the Erie-Niagara Region.

8) Erie and Niagara Counties Regional Planning Board. (June 1976). North Branch Smokes Creek Strom Drainage Management Program. Amherst, New York.

9) Erie and Niagara Counties Regional Planning Board. (May 1973). Regional Storm Drainage Management Plan. Buffalo, New York.

10) Erie and Niagara Counties Regional Water Resources Planning Board. (July 1972). Storm Drainage Design Manual. Buffalo, New York.

11) Erie and Niagara Counties Regional Water Resources Planning Board. (December 1969). Ere-Niagara Basin, Comprehensive Water Resources Plan, Main Report. Buffalo, New York.

12) Erie and Niagara Counties Regional Planning Board. (1968). Basic Planning Report ENB-2, Surface Water in the Erie-Niagara Basin, New York. Buffalo, New York.

13) Federal Emergency Management Agency. (September 28, 2008). Flood Insurance Rate Map, Erie County, New York (All Jurisdictions). Washington, D.C.

14) Federal Emergency Management Agency. (September 28, 2008). Flood Insurance Study, Erie County, New York (All Jurisdictions). Washington, D.C.

15) Federal Emergency Management Agency. (March 11, 2008). Final Report - Lake Erie Storm Surge High Water Mark Collection. Washington, D.C.

16) Federal Emergency Management Agency. (January 16, 2003). Flood Insurance Rate Map, Town of Sardinia, Erie County, New York. Washington, D.C.

17) Federal Emergency Management Agency. (January 16, 2003). Flood Insurance Study, Town of Sardinia, Erie County, New York. Washington, D.C.

18) Federal Emergency Management Agency. (August 6, 2002). Flood Insurance Rate Map, Village of Angola, Erie County, New York. Washington, D.C.

19) Federal Emergency Management Agency. (August 6, 2002). Flood Insurance Study, Village of Angola, Erie County, New York. Washington, D.C.

20) Federal Emergency Management Agency. (August 6, 2002). Flood Insurance Rate Map, Village of East Aurora, Erie County, New York. Washington, D.C.

21) Federal Emergency Management Agency. (August 6, 2002). Flood Insurance Study, Village of East Aurora, Erie County, New York. Washington, D.C.

22) Federal Emergency Management Agency. (February 2, 2002). Flood Insurance Study, Town of Evans, Erie County, New York. Washington, D.C.

23) Federal Emergency Management Agency. (February 2, 2002). Flood Insurance Study, Village of East Aurora, Erie County, New York. Washington, D.C.

24) Federal Emergency Management Agency. (December 20, 2001). Flood Insurance Rate Map, Town of Hamburg, Erie County, New York. Washington, D.C

25) Federal Emergency Management Agency. (December 20, 2001). Flood Insurance Study, Town of Hamburg, Erie County, New York. Washington, D.C.

26) Federal Emergency Management Agency. (February 23, 2001). Flood Insurance Rate Map, Town of Lancaster, Erie County, New York. Washington, D.C.

27) Federal Emergency Management Agency. (August 23, 1999). Flood Insurance Rate Map, City of Buffalo, Erie County, New York. Washington, D.C.

28) Federal Emergency Management Agency. (August 23, 1999). Flood Insurance Study, City of Buffalo, Erie County, New York. Washington, D.C.

29) Federal Emergency Management Agency. (June 22, 1998). Flood Insurance Rate Map, Town of Elma, Erie County, New York. Washington, D.C.

30) Federal Emergency Management Agency. (June 22, 1998). Flood Insurance Study, Town of Elma, Erie County, New York. Washington, D.C.

31) Federal Emergency Management Agency. (March 5, 1996). Flood Insurance Rate Map, Town of Clarence, Erie County, New York. Washington, D.C.

32) Federal Emergency Management Agency. (March 5, 1996). Flood Insurance Study, Town of Clarence, Erie County, New York. Washington, D.C.

33) Federal Emergency Management Agency. (October 4, 1994). Flood Insurance Study, Town of Hamburg, Erie County, New York. Washington, D.C.

34) Federal Emergency Management Agency. (October 16, 1992). Flood Insurance Rate Map, Town of Amherst, Erie County, New York. Washington, D.C.

35) Federal Emergency Management Agency. (October 16, 1992). Flood Insurance Study, Town of Amherst, Erie County, New York. Washington, D.C.

36) Federal Emergency Management Agency. (September 30, 1992). Flood Insurance Rate Map, Town of West Seneca, Erie County, New York. Washington, D.C.

37) Federal Emergency Management Agency. (September 30, 1992). Flood Insurance Study, Town of West Seneca, Erie County, New York. Washington, D.C.

38) Federal Emergency Management Agency. (May 4, 1992). Flood Insurance Rate Map, Town of Newstead, Erie County, New York. Washington, D.C.

39) Federal Emergency Management Agency. (March 3, 1992). Flood Insurance Rate Map, Town of Arcade, Wyoming County, New York. Washington, D.C.

40) Federal Emergency Management Agency. (March 3, 1992). Flood Insurance Study, Town of Arcade, Wyoming County, New York. Washington, D.C.

41) Federal Emergency Management Agency. (February 6, 1991). Flood Insurance Rate Map, Town of Alden Erie County, New York. Washington, D.C.

42) Federal Emergency Management Agency. (February 6, 1991). Flood Insurance Study, Town of Alden, Erie County, New York. Washington, D.C.

43) Federal Emergency Management Agency. (February 6, 1991). Flood Insurance Study, Town of Newstead, Erie County, New York. Washington, D.C.

44) Federal Emergency Management Agency. (September 28, 1990). Flood Insurance Study, Town of Amherst, Erie County, New York. Washington, D.C.

45) Federal Emergency Management Agency. (September 30, 1988). Flood Insurance Rate Map, Seneca Nation of Indians, Allegany, Cattaraugus, Chautauqua and Erie Counties, New York. Washington, D.C.

46) Federal Emergency Management Agency. (September 30, 1988). Flood Insurance Study, Seneca Nation of Indians, Allegany, Cattaraugus, Chautauqua and Erie Counties, New York. Washington, D.C.

47) Federal Emergency Management Agency. (September 4, 1986). Flood Boundary and Floodway Map, Town of Concord, Erie County, New York. Washington, D.C.

48) Federal Emergency Management Agency. (September 4, 1986). Flood Insurance Rate Map, Town of Concord, Erie County, New York. Washington, D.C.

49) Federal Emergency Management Agency. (September 4, 1986). Flood Insurance Study, Town of Concord, Erie County, New York. Washington, D.C.

50) Federal Emergency Management Agency. (July 17, 1986). Flood Boundary and Floodway Map, Village of Springville, Erie County, New York. Washington, D.C.

51) Federal Emergency Management Agency. (July 17, 1986). Flood Insurance Rate Map, Village of Springville, Erie County, New York. Washington, D.C.

52) Federal Emergency Management Agency. (July 17, 1986). Flood Insurance Study, Village of Springville, Erie County, New York. Washington, D.C.

53) Federal Emergency Management Agency. (June 18, 1984). Flood Insurance Study, Town of Amherst, Erie County, New York. Washington, D.C.

54) Federal Emergency Management Agency (July 6, 1984). Flood Insurance Rate Map, Town of Darien, Genesee County, New York. Washington, D.

55) Federal Emergency Management Agency (April 20, 1984). Flood Insurance Rate Map, Town of East Otto, Cattaraugus County, New York. Washington, D.C

56) Federal Emergency Management Agency (April 20, 1984). Flood Insurance Rate Map, Town of Otto, Cattaraugus County, New York. Washington, D.C

57) Federal Emergency Management Agency (April 20, 1984). Flood Insurance Rate Map, Town of Persia, Cattaraugus County, New York. Washington, D.C.

58) Federal Emergency Management Agency (April 20, 1984). Flood Insurance Rate Map, Town of Yorkshire, Cattaraugus County, New York. Washington, D.C

59) Federal Emergency Management Agency. (March 15, 1984). Flood Boundary and Floodway Map, Town of Cheektowaga, Erie County, New York. Washington, D.C.

60) Federal Emergency Management Agency. (March 15, 1984). Flood Insurance Rate Map, Town of Cheektowaga, Erie County, New York. Washington, D.C.

61) Federal Emergency Management Agency. (March 15, 1984). Flood Insurance Study, Town of Cheektowaga, Erie County, New York. Washington, D.C.

62) Federal Emergency Management Agency. (January 20, 1984). Flood Insurance Rate Map, Town of Pembroke, Genesee County, New York. Washington, D.C.

63) Federal Emergency Management Agency. (January 6, 1984). Flood Insurance Rate Map, Town of Brant, Erie County, New York. Washington, D.C.

64) Federal Emergency Management Agency. (January 6, 1984). Flood Insurance Rate Map, Village of Alden, Erie County, New York. Washington, D.C.

65) Federal Emergency Management Agency. (December 23, 1983). Flood Insurance Rate Map, Town of Bennington, Wyoming County, New York. Washington, D.C.

66) Federal Emergency Management Agency. (December 23, 1983). Flood Insurance Rate Map, Town of Java, Wyoming County, New York. Washington, D.C.

67) Federal Emergency Management Agency. (December 23, 1983). Flood Insurance Rate Map, Town of Sheldon, Wyoming County, New York. Washington, D.C.

68) Federal Emergency Management Agency. (November 18, 1983). Flood Insurance Rate Map, Town of Alabama, Genesee County, New York. Washington, D.C.

69) Federal Emergency Management Agency. (March 16, 1983). Flood Boundary and Floodway Map, Town of Orchard Park, Erie County, New York. Washington, D.C.

70) Federal Emergency Management Agency. (March 16, 1983). Flood Insurance Rate Map, Town of Orchard Park, Erie County, New York. Washington, D.C.

71) Federal Emergency Management Agency. (February 11, 1983). Flood Boundary and Floodway Map, City of Tonawanda, Erie County, New York. Washington, D.C.

72) Federal Emergency Management Agency. (February 11, 1983). Flood Insurance Rate Map, City of Tonawanda, Erie County, New York. Washington, D.C.

73) Federal Emergency Management Agency. (November 12, 1982). Flood Insurance Rate Map, Town of Tonawanda, Erie County, New York. Washington, D.C.

74) Federal Emergency Management Agency. (September 16, 1982). Flood Insurance Study, Town of Orchard Park, Erie County, New York. Washington, D.C.

75) Federal Emergency Management Agency. (March 1, 1982). Flood Boundary and Floodway Map, Village of Williamsville, Erie County, New York. Washington, D.C.

76) Federal Emergency Management Agency. (March 1, 1982). Flood Insurance Rate Map, Village of Williamsville, Erie County, New York. Washington, D.C.

77) Federal Emergency Management Agency. (January 20, 1982). Flood Boundary and Floodway Map, Village of Hamburg, Erie County, New York. Washington, D.C.

78) Federal Emergency Management Agency. (January 20, 1982). Flood Insurance Rate Map, Village of Hamburg, Erie County, New York. Washington, D.C.

79) Federal Emergency Management Agency. (September 1, 1981). Flood Insurance Study, Village of Williamsville, Erie County, New York. Washington, D.C.

80) Federal Emergency Management Agency. (July 20, 1981). Flood Insurance Study, Village of Hamburg, Erie County, New York. Washington, D.C.

81) Federal Emergency Management Agency. (Unpublished). Flood Insurance Rate Map, Niagara County, New York (All Jurisdictions). Washington, D.C.

82) Federal Emergency Management Agency. (Unpublished). Flood Insurance Study, Niagara County, New York (All Jurisdictions). Washington, D.C.

83) Federal Emergency Management Agency, Federal Insurance Administration. (March 16, 1982). Flood Insurance Study, Town of Evans, Erie County, New York. Washington, D.C.

84) Federal Emergency Management Agency, Federal Insurance Administration. (October 1, 1981). Flood Insurance Study, Town of Clarence, Erie County, New York. Washington, D.C.

85) Federal Emergency Management Agency, Federal Insurance Administration. (September 30, 1981). Flood Boundary and Floodway Map, Town of Boston, Erie County, New York. Washington, D.C.

86) Federal Emergency Management Agency, Federal Insurance Administration. (September 30, 1981). Flood Insurance Rate Map, Town of Boston, Erie County, New York. Washington, D.C.

87) Federal Emergency Management Agency, Federal Insurance Administration. (September 2, 1981). Flood Boundary and Floodway Map, Village of Orchard Park, Erie County, New York. Washington, D.C.

88) Federal Emergency Management Agency, Federal Insurance Administration. (September 2, 1981). Flood Insurance Rate Map, Village of Orchard Park, Erie County, New York. Washington, D.C.

89) Federal Emergency Management Agency, Federal Insurance Administration. (August 17, 1981). Flood Boundary and Floodway Map, Town of Tonawanda, Erie County, New York. Washington, D.C.

90) Federal Emergency Management Agency, Federal Insurance Administration. (August 17, 1981). Flood Insurance Rate Map, Town of Tonawanda, Erie County, New York. Washington, D.C.

91) Federal Emergency Management Agency, Federal Insurance Administration. (August 3, 1981). Flood Boundary and Floodway Map, Village of Depew, Erie County, New York. Washington, D.C.

92) Federal Emergency Management Agency, Federal Insurance Administration. (August 3, 1981). Flood Insurance Rate Map, Village of Depew, Erie County, New York. Washington, D.C.

93) Federal Emergency Management Agency, Federal Insurance Administration. (July 1, 1981). Flood Insurance Study, Village of Orchard Park, Erie County, New York. Washington, D.C.

94) Federal Emergency Management Agency, Federal Insurance Administration. (June 1, 1981). Flood Insurance Study, Town of Lancaster, Erie County, New York. Washington, D.C.

95) Federal Emergency Management Agency, Federal Insurance Administration. (May 18, 1981). Flood Insurance Study, City of Buffalo, Erie County, New York. Washington, D.C.

96) Federal Emergency Management Agency, Federal Insurance Administration. (March 30, 1981). Flood Insurance Study, Town of Boston, Erie County, New York. Washington, D.C.

97) Federal Emergency Management Agency, Federal Insurance Administration. (February 17, 1981). Flood Insurance Study, Town of Tonawanda, Erie County, New York. Washington, D.C.

98) Federal Emergency Management Agency, Federal Insurance Administration. (February 3, 1981). Flood Insurance Study, Village of Depew, Erie County, New York. Washington, D.C.

99) Federal Emergency Management Agency, Federal Insurance Administration. (December 1, 1980). Flood Insurance Study, Town of Alden, Erie County, New York. Washington, D.C.

100) Federal Emergency Management Agency, Federal Insurance Administration. (November 19, 1980). Flood Boundary and Floodway Map, Village of Akron, Erie County, New York. Washington, D.C.

101) Federal Emergency Management Agency, Federal Insurance Administration. (November 19, 1980). Flood Insurance Rate Map, Village of Akron, Erie County, New York. Washington, D.C.

102) Federal Emergency Management Agency, Federal Insurance Administration. (August 14, 1980). Flood Insurance Study, Town of Hamburg, Erie County, New York. Washington, D.C.

103) Federal Emergency Management Agency, Federal Insurance Administration. (May 1980). Flood Insurance Study, Town of Newstead, Erie County, New York. Washington, D.C.

104) Federal Emergency Management Agency, Federal Insurance Administration. (May 1980). Flood Insurance Study, Village of Akron, Erie County, New York. Washington, D.C.

105) Federal Emergency Management Agency, Federal Insurance Administration. (January 1980). Flood Insurance Study, City of Lackawanna, Erie County, New York. Washington, D.C.

106) Harter, H.L. (1968). Soil Conservation Service Technical Release No. 38, New Tables of Percentage Points of the Pearson Type III Distribution.

107) Herbert H. Smith Associates. (June 1972). Town of Holland, Erie County, New York – Volume 1: Planning Studies.

108) Herbert H. Smith Associates. (March 1970). A Comprehensive Master Plan, Town of Colden, Erie County, New York, Volume 1: Basic Studies.

109) Herbert H. Smith Associates. (March 1970). A Comprehensive Master Plan, Town of Wales, Erie County, New York, Volume 1: Basic Studies.

110) Hulsing, Harry. (1967). Measurement of Peak Discharge at Dams by Indirect Methods: Techniques of Water Resources Investigations of the U.S. Geological Survey, Book 3, Chapter A5, 29 pages.

111) Johnstone and Cross. (1949). Elements of Applied Hydrology. New York, New York.

112) Krehbil and Associates. (August 1966). Drainage Study, Town of Alden, New York. Tonawanda, New York.

113) Leonard S. Wegman Company, Inc. (December 1973). Comprehensive Sewerage Study, Buffalo, New York.

114) Matthai, Howard; Stull, Harold E.; Davidian, J. (1970). Techniques of Water Resource Investigations, Book 7, Chapter C-3: Preparation of Input Data for Automatic Computation of Stage-Discharge Relations at Culverts.

115) McCrosky – Reuter. (1971). Master Plan Report, 1971, Collins Community, Cattaraugus Valley Area, New York.

116) National Oceanic & Atmospheric Administration, National Weather Service. (Retrieved January 2007). Buffalo, NY Forecast Office, Average Annual Precipitation Map. http://www.erh.noaa.gov/buf/hydrology.htm.

117) Olean Times Herald. (August 13, 2009; Retrieved September 2009). "Village of Gowanda decimated by storm, flooding". Retrieved online: www.oleantimesherald.com.

118) Ontario-Hydro Corporation, Civil Works Department (Unpublished). “Gage Data on Niagara River”. Tonawanda, New York.

119) Pack, A.B. (1972). Climate of New York, Climates of the States: National Oceanic and Atmospheric Administration, Climatography of the U.S. Washington, D.C.

120) Powell, Roy F.; James, L; Douglas, Jones, Jr.; Earl, D. (authors). (November 4, 1975). "An Approximate Method for Quick Flood Plain Mapping", Presented at ASCE National Convention, Denver, Colorado.

121) Sergel, R.C. (1973). Emergency Treatment Assistance, Thatcher Brook and Grannis Creek

122) Snyder, F.F. (October 1958). Synthetic Flood Frequency – Journal of the Hydraulics Division, Procedures of the American Society of Civil Engineers, Paper 1808. New York.

123) Somers, W.C. and Selner, G.I. (1965). Surface Water Techniques of the U.S. Geological Survey, Book 1: Computation of stage-discharge relationships at culverts. Washington, D.C.

124) State of New York, Department of Commerce. (1974). Profiles of People, Jobs and Housing Buffalo Area: Albany, New York, Business Fact Book, Part 2, Pages 6 and 7.

125) State of New York, Department of Environmental Conservation, Water Resources Commission. (1970). Bulletin No. 67, Maximum Known Discharges of New York Streams. Albany, New York.

126) State of New York, Department of Transportation. (1975). Barge Canal System and Connecting Waterways. Albany, New York.

127) State of New York, Department of Transportation. (Undated). Planimetric Maps, Scale 1:24,000.

128) The Buffalo Evening News. (January 22, 1959). Buffalo, New York. (City of Tonawanda)

129) The Buffalo Evening News. (March 23, 1955). Buffalo, New York. (Town of Grand Island)

130) The Courier Express. (January 23 and 24, 1957). Buffalo, New York. (City of Tonawanda)

131) Thornbury, William D. of John Wiley & Sons, Inc. (1965). Regional Geomorphology of the United States. New York.

132) Town of Orchard Park Planning Board. (January 1973). Soil Inventory and Interpretive Study. Orchard Park, New York.

133) Town and Village of Alden. (1972). Basic Studies. Alden, New York.

134) Tryton and Schwartz & Associates, Inc. (July 1969). Comprehensive Plan for the Village of East Aurora and Town of Aurora.

135) Tryton and Schwartz & Associates, Inc. (1964). Comprehensive Plan for the Village of Lancaster.

136) U.S. Army Corps of Engineers. (1973). Shore Protection Manual, Volumes 1, 2, and 3. Fort Belvoir, Virginia.

137) U.S. Army Corps of Engineers. (1968). Flood Plain Information Report, Cattaraugus Creek and Thatcher Brook, Irving, Sunset Bay and Gowanda, New York.

138) U.S. Army Corps of Engineers. (April 1966). Floodplain Information, Buffalo Creek, New York, in the Towns of Elma and West Seneca. Buffalo, New York.

139) U.S. Army Corps of Engineers, Buffalo District. (November 1997). Special Flood Hazard Evaluation Report – Big Sister Creek, Village of Angola, Erie County, New York. Buffalo, New York.

140) U.S. Army Corps of Engineers, Buffalo District. (November 1997). Special Flood Hazard Evaluation Report – Tannery Brook, Village of East Aurora, Erie County, New York. Buffalo, New York.

141) U.S. Army Corps of Engineers, Buffalo District. (October 1990). Buffalo Metropolitan Area, New York, Water Resources Management, Final Report on Water Resources and Related Land Management – Supporting Documentation. Buffalo, New York.

142) U.S. Army Corps of Engineers, Buffalo District. (January 1990). Buffalo River / Lower Tonawanda Creek Draft Feasibility and Environmental Impact Statement. Buffalo, New York.

143) U.S. Army Corps of Engineers, Buffalo District. (August 1986). Flood Damage Study, Tonawanda Channel, Upper Niagara River, New York. Buffalo, New York.

144) U.S. Army Corps of Engineers, Buffalo District. (November 1984). Special Flood Hazard Evaluation Report, Spring Brook, Town of Concord and Village of Springville, Erie County, New York. Buffalo, New York.

145) U.S. Army Corps of Engineers, Buffalo District. (November 1976, revised April 1978). Ellicott Creek, New York, Design Memorandum No. 1, General – Phase I Plan Formulation Final. Buffalo, New York.

146) U.S. Army Corps of Engineers, Buffalo District. (November 1976, revised April 1978). Ellicott Creek, New York, Hydrology and Hydraulic Design – Phase II, Appendix A. Buffalo, New York.

147) U.S. Army Corps of Engineers, Buffalo District. (March 1978). Buffalo Metropolitan Area, New York, Water Resources Management Study: Detailed Project Report for Flood Management in Cayuga Creek Watershed, Draft Report. Buffalo, New York.

148) U.S. Army Corps of Engineers, Buffalo District. (March 1976). Scajaquada Creek, New York, General Design Memorandum, Phase II, Detailed Design. Buffalo, New York.

149) U.S. Army Corps of Engineers, Buffalo District. (1976; updated 1978). Buffalo Metropolitan Area, New York, Water Resources Management Study, Interim Report on Feasibility of Flood Management in Tonawanda Creek Watershed. Buffalo, New York.

150) U.S. Army Corps of Engineers, Buffalo District. (1976; updated 1978). Buffalo Metropolitan Area, New York, Water Resources Management in Tonawanda Creek Watershed, Final Feasibility Report. Buffalo, New York.

151) U.S. Army Corps of Engineers, Buffalo District. (March 1975). Feasibility of Flood Management in Cazenovia Creek Watershed. Buffalo, New York.

152) U.S. Army Corps of Engineers, Buffalo District. (August 1973). Ellicott Creek Basin Restudy Report of Alternative Plans for Ellicott Creek Watershed Main Report, Environmental Impact Statement and Summary Report, Appendices A-G. Buffalo, New York.

153) U.S. Army Corps of Engineers, Buffalo District. (October 1972). Floodplain Information, Ellicott Creek in the Area of Lancaster and Alden. Buffalo, New York.

154) U.S. Army Corps of Engineers, Buffalo District. (1972). Review of Reports on Buffalo River Basin, New York for Flood Control, Allied Purposes, Restoration and Wastewater Management, Phase 1 Report on Cazenovia Creek. Buffalo, New York.

155) U.S. Army Corps of Engineers, Buffalo District. (1972). Floodplain Information, Ellicott Creek, Erie County, New York. Buffalo, New York.

156) U.S. Army Corps of Engineers, Buffalo District. (January 1968, Reprinted June 1971). Floodplain Information, Ellicott Creek in the City of Tonawanda, and in the Towns of Tonawanda, Amherst, Cheektowaga and Lancaster, Erie county, New York. Buffalo, New York.

157) U.S. Army Corps of Engineers, Buffalo District. (1970). Survey Report for Flood Control and Allied Purposes, Ellicott Creek, New York. Buffalo, New York.

158) U.S. Army Corps of Engineers, Buffalo District. (May 1969). Flood Plain Information, Scajaquada Creek, Buffalo, New York. Buffalo, New York.

159) U.S. Army Corps of Engineers, Buffalo District. (May 1969). Flood Plain Information, Scajaquada Creek in the Towns of Cheektowaga and Lancaster. Buffalo, New York.

160) U.S. Army Corps of Engineers, Buffalo District. (1968). Flood Plain Information Report, Cattaraugus Creek and Thatcher Brook, Irving, Sunset Bay and Gowanda, New York. Buffalo, New York.

161) U.S. Army Corps of Engineers, Buffalo District. (August 1967). Flood Plain Information Report, Tonawanda Creek and Its Affected Tributaries, Erie and Niagara Counties, New York. Buffalo, New York.

162) U.S. Army Corps of Engineers, Buffalo District. (May 1967). Floodplain Information Report, Cayuga Creek, West Seneca, Cheektowaga and Lancaster, New York. Buffalo, New York.

163) U.S. Army Corps of Engineers, Buffalo District. (April 1966). Floodplain Information, Cazenovia Creek N.Y. in the City of Buffalo and Town of West Seneca. Buffalo, New York.

164) U.S. Army Corps of Engineers, Buffalo District. (February 1965). Flood Plain Information Report, Smokes Creek, City of Lackawanna, New York. Buffalo, New York.

165) U.S. Army Corps of Engineers, Buffalo District. (Unpublished). Annual Maximum Stages at Niagara River Gaging Stations. Buffalo, New York.

166) U.S. Army Corps of Engineers, Buffalo District, and the State of New York. (May 1970). Joint Study Report – Flood Control and Allied Purposes on Ellicott Creek. Buffalo, New York.

167) U.S. Army Corps of Engineers, Detroit District. (April 1988). Revised Report on Great Lakes Open-Coast Flood Levels – Phase I. Detroit, Michigan.

168) U.S. Army Corps of Engineers, Detroit District. (February 1977). Great Lakes Open Coast Flood Levels. Detroit, Michigan.

169) U.S. Army Corps of Engineers, Detroit District. (October 1975). Great Lakes 100-Year Open Coast Flood Levels, Volume 2. Detroit, Michigan.

170) U.S. Army Corps of Engineers, Detroit District. (December 1974). Great Lakes 100-Year Open Coast Flood Levels, Volume 1. Detroit, Michigan.

171) U.S. Army Corps of Engineers, Great Lakes Basin Commission. (1975). Great Lakes Basin Framework Study, Appendix 14 – Flood Plains.

172) U.S. Army Corps of Engineers, Hydrologic Engineering Center. (May 2005). HEC-RAS River Analysis System, Version 3.1.3. Davis, California.

173) U.S. Army Corps of Engineers, Hydrologic Engineering Center. (November 2002). HEC-RAS River Analysis System Users Manual. Davis, California.

174) U.S. Army Corps of Engineers, Hydrologic Engineering Center. (May 1991). HEC-2 Water-surface Profiles, Version 4.62. Davis, California.

175) U.S. Army Corps of Engineers, Hydrologic Engineering Center. (October 1970; revised December 5, 1988). HEC-1 Flood Hydrograph Package. Davis, California

176) U.S. Army Corps of Engineers, Hydrologic Engineering Center. (October 1973; revised April 1984). HEC-2 Water-surface Profiles, Generalized Computer Program. Davis, California.

177) U.S. Army Corps of Engineers, Hydrologic Engineering Center. (October 1973; updated November 1977 and January 1981). HEC-2 Water-surface Profiles, Users Manual. Davis, California.

178) U.S. Army Corps of Engineers, Hydrologic Engineering Center. (June 1974). Application of the HEC-2 Bridge Routines, Training Document No. 6. Davis, California.

179) U.S. Army Corps of Engineers, Hydrologic Engineering Center. (May 1974). Floodway Determination Using Computer Program HEC-2, Training Document No. 5. Davis, California.

180) U.S. Army Corps of Engineers, Hydrologic Engineering Center. (1972). HEC-723-x6-L2350, Regional Frequency Computation. Davis, California

181) U.S. Army Corps of Engineers, Hydrologic Engineering Center. (Undated). Hydraulic Engineering Circular No. 46, Regional Frequency Analysis. Davis, California.

182) U.S. Department of Agriculture. (Undated). Soil Survey of Erie County, New York, Number 14, Series 1929.

183) U.S. Department of Agriculture, Soil Conservation Service. (May 1982). TR-20 Project Formulation - Hydrology. Washington, D.C.

184) U.S. Department of Agriculture, Soil Conservation Service. (January 1975). Technical Release No. 55, Urban Hydrology for Small Watersheds. Washington, D.C.

185) U.S. Department of Commerce. (1975). Local Climatological Data, Annual Summary with Comparative Data for Buffalo. Washington, D.C.

186) U.S. Department of Commerce, Bureau of the Census. (2001). 2000 Census of Population, Number of Inhabitants, New York. Washington, D.C.

187) U.S. Department of Commerce, Bureau of the Census. (1991). 1990 Census of Population, Number of Inhabitants, New York. Washington, D.C.

188) U.S. Department of Commerce, Bureau of the Census. (1981). 1980 Census of Population, Number of Inhabitants, New York. Washington, D.C.

189) U.S. Department of Commerce, Bureau of the Census. (1971). 1970 Census of Population, Number of Inhabitants, New York. Washington, D.C.

190) U.S. Department of Commerce, Bureau of Public Roads. (November 1963). Hydraulic Circular No. 4, Estimating Peak Rates of Runoff from Small Watersheds in Portions of New York. Washington, D.C.

191) U.S. Department of Commerce, Bureau of Public Roads. (1961). Hydraulic Design Series No. 2, Peak Rates of Runoff from Small Watersheds. Washington, D.C.

192) U.S. Department of Commerce, National Oceanic and Atmospheric Administration. (1979). Local Climatological Data. Buffalo, New York.

193) U.S. Department of Commerce, National Oceanic and Atmospheric Administration. (1975). Local Climatological Data, Annual Summary with Comparative Data for Buffalo, New York. Buffalo, New York.

194) U.S. Department of Commerce, Weather Bureau. (January 1963) Technical Paper No. 40, Rainfall Frequency Atlas of the United States. Washington, D.C.

195) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (July 2, 1980). Flood Boundary and Floodway Map, City of Lackawanna, Erie County, New York. Washington, D.C.

196) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (July 2, 1980). Flood Insurance Rate Map, City of Lackawanna, Erie County, New York. Washington, D.C.

197) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (January 16, 1980). Flood Boundary and Floodway Map, Town of Grand Island, Erie County, New York. Washington, D.C.

198) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (January 16, 1980). Flood Insurance Rate Map, Town of Grand Island, Erie County, New York. Washington, D.C.

199) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (August 24, 1979). Flood Insurance Rate Map, Town of Eden, Erie County, New York. Washington, D.C.

200) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (August 15, 1979). Flood Insurance Rate Map, Town of Wales, Erie County, New York. Washington, D.C.

201) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (July 2, 1979). Flood Boundary and Floodway Map, Town of Colden, Erie County, New York. Washington, D.C.

202) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (July 2, 1979). Flood Boundary and Floodway Map, Village of Lancaster, Erie County, New York. Washington, D.C.

203) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (July 2, 1979). Flood Insurance Rate Map, Town of Colden, Erie County, New York. Washington, D.C.

204) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (July 2, 1979). Flood Insurance Rate Map, Village of Lancaster, Erie County, New York. Washington, D.C.

205) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (July 1979). Flood Insurance Study, Town of Grand Island, Erie County, New York. Washington, D.C.

206) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (May 1, 1979). Flood Boundary and Floodway Map, Town of Holland, Erie County, New York. Washington, D.C.

207) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (May 1, 1979). Flood Insurance Rate Map, Town of Holland, Erie County, New York. Washington, D.C.

208) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (April 16, 1979). Flood Boundary and Floodway Map, Town of Aurora, Erie County, New York. Washington, D.C.

209) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (April 16, 1979). Flood Insurance Rate Map, Town of Aurora, Erie County, New York. Washington, D.C.

210) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (February 1979). Flood Insurance Study, City of Tonawanda, Erie County, New York. Washington, D.C.

211) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (February 1979). Flood Insurance Study, Town of Wales

212) , Erie County, New York. Washington, D.C.

213) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (January 1979). Flood Insurance Study, Town of Colden, Erie County, New York. Washington, D.C.

214) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (January 1979). Flood Insurance Study, Village of Lancaster, Erie County, New York. Washington, D.C.

215) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (November 1978). Flood Insurance Study, Town of Holland, Erie County, New York. Washington, D.C.

216) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (October 1978). Flood Insurance Study, Town of Aurora, Erie County, New York. Washington, D.C.

217) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (September 29, 1978). Flood Boundary and Floodway Map, Town of Marilla, Erie County, New York. Washington, D.C.

218) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (September 29, 1978). Flood Insurance Rate Map, Town of Marilla, Erie County, New York. Washington, D.C.

219) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (March 1978). Flood Insurance Study, Town of Marilla, Erie County, New York. Washington, D.C.

220) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (November 1977). Flood Insurance Study, Town of Evans, Erie County, New York. Washington, D.C.

221) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (June 1, 1977). Flood Hazard Boundary Map & Flood Insurance Rate Map, Village of Gowanda, Cattaraugus and Erie County, New York. Washington, D.C.

222) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (May 16, 1977). Flood Boundary and Floodway Map, Town of Collins, Erie County, New York. Washington, D.C.

223) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (May 16, 1977). Flood Hazard Boundary Map & Flood Insurance Rate Map, Town of Collins, Erie County, New York. Washington, D.C.

224) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (December 1976). Flood Insurance Study, Town of Elma, Erie County, New York. Washington, D.C.

225) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (December 1976). Flood Insurance Study, Village of Gowanda, Cattaraugus and Erie County, New York. Washington, D.C.

226) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (November 1976). Flood Insurance Study, Town of Collins, Erie County, New York. Washington, D.C.

227) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (August 1976). Flood Insurance Study, Town of West Seneca, Erie County, New York. Washington, D.C.

228) U.S. Department of Housing and Urban Development, Federal Insurance Administration. (June 25, 1976). Flood Hazard Boundary Map and Flood Insurance Rate Map, Village of Blasdell, Erie County, New York. Washington, D.C.

229) U.S. Department of the Interior, Geological Survey. (2006). Prepared in cooperation with the New York Department of Transportation, Scientific Investigation Report 2006-5112, Magnitude and Frequency of Floods in New York, Richard Lumia, Douglas A. Freehafer and Martyn J. Smith. Reston, Virginia.

230) U.S. Department of the Interior, Geological Survey. (2006). User's Manual for Program PeakFQ, Annual Flood-Frequency Analysis Using Bulletin 17B Guidelines, Kathleen M. Flynn, William H. Kirby, and Paul R. Hummel. Reston, Virginia.

231) U.S. Department of the Interior, Geological Survey. (2002). Water-Resources Investigation Report 02-4168, The National Flood Frequency Program, Version 3, A Computer Program for Estimating Magnitude and Frequency of Floods for Ungaged Sites. Reston, Virginia.

232) U.S. Department of the Interior, Geological Survey. (2000). Water Resources Investigation Report 00-4022, Development of a Contour Map Showing Generalized Skew Coefficients of Annual Peak Discharges of Rural, Unregulated Streams in New York, Excluding Long Island, Richard Lumia and Yvonne H. Baevsky. Troy, New York.

233) U.S. Department of the Interior, Geological Survey. (1994). Water-Resources Investigation Report 94-4002, Nationwide Summary of U.S. Geological Survey Regional Regression Equations for Estimation of Magnitude and Frequency of Floods for Ungaged Sites, 1993. Reston, Virginia.

234) U.S. Department of the Interior, Geological Survey. (1991). Prepared in cooperation with the New York Department of Transportation, Water-Resources Investigation Report 90-4197, Regionalization of Flood Discharges for Rural, Unregulated Streams in New York, excluding Long Island, Richard Lumia. Albany, New York

235) U.S. Department of the Interior, Geological Survey. (1983). Water Supply Paper 2207, Flood characteristics of urban watersheds in the United States, V.B. Sauer, W.O. Thomas, Jr., V.A. Stricker and K.V. Wilson. Washington, D.C.

236) U.S. Department of the Interior, Geological Survey. (Revised March 1982, September 1981). Guidelines for Determining Flood Flow Frequency, Bulletin 17B. Reston, Virginia.

237) U.S. Department of the Interior, Geological Survey. (1980). 7.5-Minute Series Topographic Maps, Scale 1:24,000; Contour Interval 5 Feet: Clarence Center, New York.

238) U.S. Department of the Interior, Geological Survey. (1980). 7.5-Minute Series Topographic Maps, Scale 1:24,000; Contour Interval 5 Feet: Wolcottsville, New York.

239) U.S. Department of the Interior, Geological Survey. (1979). 7.5-Minute Series Topographic Maps, Scale 1:24,000; Contour Interval 10 Feet: Holland, New York.

240) U.S. Department of the Interior, Geological Survey. (1979). Water Resources Investigations 79-83. Techniques for Estimating Magnitude and Frequency of Floods on Rural Unregulated Streams in New York State Excluding Long Island. Albany, New York.

241) U.S. Department of the Interior, Geological Survey. (1978). Log-Pearson Type III Frequency Analysis Following Water Resources Council Guidelines, Systematic Records; Alabama Gage No. 04217500 on Tonawanda Creek. Washington, D.C.

242) U.S. Department of the Interior, Geological Survey. (1978). Log-Pearson Type III Frequency Analysis Following Water Resources Council Guidelines, Systematic Records; Lancaster Gage No. 04215000 on Cayuga Creek. Washington, D.C.

243) U.S. Department of the Interior, Geological Survey. (1978). Log-Pearson Type III Frequency Analysis Following Water Resources Council Guidelines, Systematic Records with Historic Adjustment; Lancaster Gage No. 04215000 on Cayuga Creek. Washington, D.C.

244) U.S. Department of the Interior, Geological Survey. (1978). Log-Pearson Type III Frequency Analysis Following Water Resources Council Guidelines, Systematic Records; Williamsville Gage No. 04218500 and 04218518 on Ellicott Creek. Washington, D.C.

245) U.S. Department of the Interior, Geological Survey. (1978). Log-Pearson Type III Frequency Analysis Following Water Resources Council Guidelines, Systematic Records with Historic Adjustment; Williamsville Gage No. 04218500 and 04218518 on Ellicott Creek. Washington, D.C.

246) U.S. Department of the Interior, Geological Survey. (1977). National Handbook of Recommended Methods for Water Data Acquisition. Washington, D.C.

247) U.S. Department of the Interior, Geological Survey. (1976). Open File Report 76-499: Computer Applications for Step-Backwater and Floodway Analysis. Washington, D.C.

248) U.S. Department of the Interior, Geological Survey. (Published Annually 1963-1973). Water Resources Data for New York, Part 1, Surface Water Records. Washington, D.C.

249) U.S. Department of the Interior, Geological Survey. (1967). Water-Supply Paper 1849, Roughness Characteristics of Natural Channels. Washington, D.C.

250) U.S. Department of the Interior, Geological Survey. (1965). Water-Supply Paper 1677, Magnitude and Frequency of Floods in the United States, Part 4. St Lawrence River Basin. Washington, D.C.

251) U.S. Department of the Interior, Geological Survey. (1965). 7.5-Minute Series Topographic Maps, Scale 1:24,000; Contour Interval 10 Feet: Buffalo Northeast, New York.

252) U.S. Department of the Interior, Geological Survey. (1965). 7.5-Minute Series Topographic Maps, Scale 1:24,000; Contour Interval 10 Feet: Clarence Center, New York.

253) U.S. Department of the Interior, Geological Survey. (1965). 7.5-Minute Series Topographic Maps, Scale 1:24,000; Contour Interval 10 Feet: East Aurora, New York.

254) U.S. Department of the Interior, Geological Survey. (1965). 7.5-Minute Series Topographic Maps, Scale 1:24,000; Contour Interval 10 Feet: Eden, New York.

255) U.S. Department of the Interior, Geological Survey. (1965). 7.5-Minute Series Topographic Maps, Scale 1:24,000; Contour Interval 10 Feet: Lancaster, New York.

256) U.S. Department of the Interior, Geological Survey. (1965). 7.5-Minute Series Topographic Maps, Scale 1:24,000; Contour Interval 20 Feet: Langford, New York.

257) U.S. Department of the Interior, Geological Survey. (1965). 7.5-Minute Series Topographic Maps, Scale 1:24,000; Contour Interval 10 Feet: Orchard Park, New York.

258) U.S. Department of the Interior, Geological Survey. (1965). 7.5-Minute Series Topographic Maps, Scale 1:24,000; Contour Interval 10 Feet: Tonawanda East, New York.

259) U.S. Department of the Interior, Geological Survey. (1965). 7.5-Minute Series Topographic Maps, Scale 1:24,000; Contour Interval 10 Feet: Wolcottsville, New York.

260) U.S. Department of the Interior, Geological Survey. (1960). 7.5-Minute Series Topographic Maps, Scale 1:24,000; Contour Interval 10 Feet: Angola, New York.

261) U.S. Department of the Interior, Geological Survey. (1960). 7.5-Minute Series Topographic Maps, Scale 1:24,000; Contour Interval 20 Feet: North Collins, New York.

262) U.S. Department of the Interior, Geological Survey. (1957). 7.5-Minute Series Topographic Maps, Scale 1:24,000; Contour Interval 10 Feet: Sardinia, New York.

263) U.S. Department of the Interior, Geological Survey. (1955). 7.5-Minute Series Topographic Maps, Scale 1:24,000; Contour Interval 10 Feet: Colden, New York.

264) U.S. Department of the Interior, Geological Survey. (1955). 7.5-Minute Series Topographic Maps, Scale 1:24,000; Contour Interval 10 Feet: Holland, New York.

265) U.S. Department of the Interior, Geological Survey. (1954). 7.5-Minute Series Topographic Maps, Scale 1:24,000; Contour Interval 10 Feet: Springville, New York.

266) U.S. Department of the Interior, Geological Survey. (1949). 7.5-Minute Series Topographic Maps, Scale 1:24,000; Contour Interval 10 Feet: Akron, New York

267) U.S. Department of the Interior, Geological Survey. (Undated). Determination of Approximate 100-Year Flood Boundaries for Streams in New York State. Washington, D.C.

268) U.S. Department of the Interior, Geological Survey. (Undated). Techniques for Water Resources Investigations, Preparation on Input Data for Automatic Computations of Stage-Discharge Relations at Culverts. Washington, D.C.

269) U.S. Department of the Interior, Geological Survey. (Unpublished). Flow Analysis, Eighteen Mile Creek at North Boston, New York.

270) U.S. Department of the Interior, Geological Survey. (Unpublished). Normal Depth Curve for Upper New York State.

271) U.S. Department of the Interior, Geological Survey, Water Resources. (Ret. September 2009) USGS 04213500 Cattaraugus Creek at Gowanda New York. Web Interface: http://waterdata.usgs.gov/nwis/inventory.

272) U.S. Department of the Interior, Geological Survey, Water Resources. (Ret. January 2007). USGS 04215000 Cayuga Creek near Lancaster New York. Web Interface: http://waterdata.usgs.gov/nwis/inventory.

273) U.S. Department of the Interior, Geological Survey, Water Resources. (Ret. January 2007). USGS 04215500 Cazenovia Creek at Ebenezer New York. Web Interface: http://waterdata.usgs.gov/nwis/inventory.

274) U.S. Department of the Interior, Geological Survey, Water Resources. (Ret. January 2007). USGS 04218518 Ellicott Creek Below Williamsville New York. Web Interface: http://waterdata.usgs.gov/nwis/inventory.

275) U.S. Department of the Interior, Geological Survey, Water Resources. (Ret. January 2007). USGS 04218500 Ellicott Creek at Williamsville New York. Web Interface: http://waterdata.usgs.gov/nwis/inventory.

276) U.S. Department of the Interior, Geological Survey, Water Resources. (Ret. January 2007). USGS 04218000 Tonawanda Creek at Rapids New York. Web Interface: http://waterdata.usgs.gov/nwis/inventory.

277) Water Resources Council. (June 1977). Guidelines for Determining Flood Flow Frequency, Bulletin 17A. Washington, D.C.

278) Water Resources Council. (March 1976). Guidelines for Determining Flood Flow Frequency, Bulletin 17. Washington, D.C.

279) Water Resources Council. (December 1967). A Uniform Technique for Determining Flood Flow Frequency, Bulletin 15. Washington, D.C.

280) U.S. Department of Commerce, Bureau of the Census. 2010 Census of Population and 2017 Population Estimate of Erie County, New York. Washington, D.C. https://factfinder.census.gov/