FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 2 OF 4



BROWN COUNTY, WISCONSIN

AND INCORPORATED AREAS

COMMUNITY NAME	NUMBER
ALLOUEZ, VILLAGE OF	550612
ASHWAUBENON, VILLAGE OF	550600
BELLEVUE, VILLAGE OF	550627
BROWN COUNTY, UNINCORPORATED AREAS	550020
DE PERE, CITY OF	550021
DENMARK, VILLAGE OF*	550616
GREEN BAY, CITY OF	550022
HOBART, VILLAGE OF	550626
HOWARD, VILLAGE OF	550023
PULASKI, VILLAGE OF	550024
SUAMICO, VILLAGE OF	550660
WRIGHTSTOWN, VILLAGE OF	550025

^{*}No Special Flood Hazard Areas Identified

TRIBAL NATION	NUMBER
THE ONEIDA NATION OF WISCONSIN	550379



REVISED: May 9, 2023

FLOOD INSURANCE STUDY NUMBER 55009CV002C

Version Number 2.4.3.5

TABLE OF CONTENTS

Volume 1

		<u>Page</u>
SEC 1.1 1.2 1.3 1.4	TION 1.0 – INTRODUCTION The National Flood Insurance Program Purpose of this Flood Insurance Study Report Jurisdictions Included in the Flood Insurance Study Project Considerations for using this Flood Insurance Study Report	1 1 2 2 6
SEC 2.1 2.2 2.3 2.4 2.5	Floodplain Boundaries Floodways Base Flood Elevations Non-Encroachment Zones Coastal Flood Hazard Areas 2.5.1 Water Elevations and the Effects of Waves 2.5.2 Floodplain Boundaries and BFEs for Coastal Areas 2.5.3 Coastal High Hazard Areas 2.5.4 Limit of Moderate Wave Action	16 16 31 32 32 32 33 35 36 37
SEC 3.1	TION 3.0 – INSURANCE APPLICATIONS National Flood Insurance Program Insurance Zones	38 38
SEC 4.1 4.2 4.3 4.4	TION 4.0 – AREA STUDIED Basin Description Principal Flood Problems Non-Levee Flood Protection Measures Levees	39 39 40 41 42
SEC 5.1 5.2 5.3	Hydrologic Analyses Hydraulic Analyses Coastal Analyses 5.3.1 Total Stillwater Elevations 5.3.2 Waves 5.3.3 Coastal Erosion 5.3.4 Wave Hazard Analyses Alluvial Fan Analyses	42 42 52 72 73 74 75 75
SEC 6.1 6.2 6.3	TION 6.0 – MAPPING METHODS Vertical and Horizontal Control Base Map Floodplain and Floodway Delineation	80 80 81 82

TABLE OF CONTENTS

Volume 1 (continued)

<u>Figures</u>

	<u>Page</u>
Figure 1: FIRM Index Figure 2: FIRM Notes to Users Figure 3: Map Legend for FIRM Figure 4: Floodway Schematic Figure 5a: Wave Runup Transect Schematic Figure 5b: Wave Overtopping Schematic Figure 6a: Coastal Transect Schematic (Wave Runup and Overtopping) Figure 6b: Coastal Transect Schematic (Overland Wave Propagation) Figure 7: Frequency Discharge-Drainage Area Curves Figure 8: 1-Percent-Annual-Chance Stillwater Elevations for Coastal Areas Figure 9: Transect Location Map	8 9 12 31 34 36 37 51 73 79
<u>Tables</u>	<u>Page</u>
Table 1: Listing of NFIP Jurisdictions Table 2: Flooding Sources Included in this FIS Report Table 3: Flood Zone Designations by Community Table 4: Basin Characteristics Table 5: Principal Flood Problems Table 6: Historic Flooding Elevations Table 7: Non-Levee Flood Protection Measures Table 8: Levees Table 9: Summary of Discharges Table 10: Summary of Non-Coastal Stillwater Elevations Table 11: Stream Gage Information used to Determine Discharges Table 12: Summary of Hydrologic and Hydraulic Analyses Table 13: Roughness Coefficients Table 14: Summary of Coastal Analyses Table 15: Water Level Station Analysis Specifics Table 16: Coastal Transect Parameters Table 17: Summary of Alluvial Fan Analyses Table 18: Results of Alluvial Fan Analyses Table 19: Countywide Vertical Datum Conversion Table 20: Stream-Based Vertical Datum Conversion Table 21: Base Map Sources Table 22: Summary of Topographic Elevation Data used in Mapping Table 23: Floodway Data	3 17 39 40 41 41 41 42 43 51 52 53 72 74 77 80 80 81 81 82 83 84
Volume 2	<u>Page</u>
SECTION 6.0 – MAPPING METHODS (continued) 6.4 Coastal Flood Hazard Mapping 6.5 FIRM Revisions 6.5.1 Letters of Map Amendment 6.5.2 Letters of Map Revision Based on Fill 6.5.3 Letters of Map Revision 6.5.4 Physical Map Revisions 6.5.5 Contracted Restudies 6.5.6 Community Map History	159 159 161 161 161 162 162 163 163

TABLE OF CONTENTS Volume 2 (continued)

	<u>Page</u>
SECTION 7.0 – CONTRACTED STUDIES AND COMMUNITY COORDINATION 7.1 Contracted Studies 7.2 Community Meetings	164 164 173
SECTION 8.0 – ADDITIONAL INFORMATION	176
SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES	178
<u>Tables (continued)</u>	<u>Page</u>
Table 23: Floodway Data (continued)	92
Table 24: Flood Hazard and Non-Encroachment Data for Selected Streams	159
Table 25: Summary of Coastal Transect Mapping Considerations	160
Table 26: Incorporated Letters of Map Change	162
Table 27: Community Map History	164
Table 28: Summary of Contracted Studies Included in this FIS Report	165
Table 29: Community Meetings	174
Table 30: Map Repositories	176
Table 31: Additional Information	177
Table 32: Bibliography and References	179

Volume 3 Exhibits

Flood Profiles	<u>Panel</u>
Ash Street Tributary to Lancaster Creek	01 P
Ashwaubenon Creek	02-05 P
Ashwaubenon Creek (Middle)	06-07 P
Ashwaubenon Creek (Upper)	08 P
Baird Creek	09-15 P
Baird Creek Tributary	16-17 P
Baird Creek Tributary 6	18 P
Bakers Creek	19 P
Bakers Creek Tributary	20 P
Barina Creek	21 P
Beaver Dam Creek	22-27 P
Bower Creek	28-32 P
Bower Creek Tributary	33 P
Bower Creek Tributary A	34 P
Bower Creek Tributary B	35 P
Bower Creek Tributary 1	36-37 P
Bower Creek Tributary 2	38-40 P
Branch of Plum Creek	41 P
Branch of Plum Creek – Lower Tributary	42-43 P
Branch of Plum Creek – Upper Tributary	44 P
Branch River	45-46 P
Duck Creek	47-52 P
Duck Creek Tributary – Stream 11	53 P
Duck Creek Tributary 12	54 P
Dutchman Creek	55-57 P

TABLE OF CONTENTS Volume 3 (continued)

Exhibits (continued)

Flood Profiles (continued)	<u>Panel</u>
Dutchman Creek North Tributary	58-59 P
Dutchman Creek South Tributary	60 P
Dutchman Creek Southeast Tributary	61 P
Dutchman Creek Southwest Tributary	62-63 P
East River	64-68 P
East River Tributary	69 P
East River Tributary A	70-71 P
East River Tributary B	72 P

Volume 4 Exhibits (continued)

	<u>Panel</u>
East Verlin North Tributary	
to Willow Creek	73 P
East Verlin Tributary to Willow Creek	74-75 P
Ellis Creek	76 P
Fox River	77-80 P
Lancaster Creek	81-82 P
Lancaster Creek Tributary	83 P
Mahon Creek	84-86 P
Middle Branch Little Suamico River	87 P
Neshota River	88-89 P
North Branch Ashwaubenon Creek	90-91 P
North Branch Bakers Creek	92 P
North Branch Willow Creek	93-94 P
North Tributary South Branch	
Ashwaubenon Creek	95 P
Oneida Creek	96 P
Pioneer Tributary to Duck Creek	97 P
Plum Creek	98-100 P
Sorensons Creek	101-102 P
Sorensons Creek Tributary	103-105 P
South Branch Ashwaubenon Creek	106-107 P
South Branch Little Suamico River	108-109 P
South Tributary to Willow Creek	110 P
Spring Creek	111-114 P
Spring Creek Tributary A	115-116 P
Spring Creek Tributary A Ditch	117 P
Spring Creek Tributary B	118 P
Suamico River	119-122 P
Tributary 1 to Dutchman Creek	
Southwest Tributary	123 P

TABLE OF CONTENTS

Volume 4 (continued)

Exhibits (continued)

Flood Profiles (continued)	<u>Panel</u>
Tributary 2 to Dutchman Creek Southwest Tributary Tributary 3 to Dutchman Creek	124 P
Southwest Tributary	125 P
Trout Creek	126-129 P
Unnamed Tributary to Green Bay	130 P
Vanguard Way Tributary to	
Lancaster Creek	131 P
West Verlin Tributary to Willow Creek	132 P
Willow Creek	133-138 P

Published Separately

Flood Insurance Rate Map Index Flood Insurance Rate Map (FIRM)

Table 23: Floodway Data (continued)

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
akers Creek A B C	176 1,282 2,275	67 165 29	120 184 42	3.2 2.1 6.4	649.6 653.9 656.6	649.6 653.9 656.6	649.6 653.9 656.6	0.0 0.0 0.0

¹ Feet above Limit of Detailed Study

^{*} Limit of Detailed Study is located approximately 250 feet downstream of Belmont Road

-
\triangleright
W
Ш
Ŋ
\boldsymbol{c}

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

BAKERS CREEK

Table 23: Floodway Data (continued)

FLOODING SOUR	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
Bakers Creek Tributary A B C D E	76 698 1,396 1,939 2,399	27 147 131 158 128	64 176 147 163 117	4.5 1.5 1.7 1.6 2.1	602.8 604.9 607.8 610.9 616.7	602.8 604.9 607.8 610.9 616.7	602.8 604.9 607.8 610.9 616.7	0.0 0.0 0.0 0.0 0.0

¹ Feet above Velp Avenue

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

BAKERS CREEK TRIBUTARY

Table 23: Floodway Data (continued)

FLOODING SOL	JRCE	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
Barina Creek A B C D E F G H	0 175 276 381 681 1,431 1,991 2,311	41 28 74 223 169 162 159 38	74 37 72 325 1,165 710 572 73	4.0 8.1 4.1 0.9 0.5 0.4 3.2	612.6 613.6 615.5 617.7 621.2 621.2 621.2	612.6 613.6 615.5 617.7 621.2 621.2 621.3 621.2	612.6 613.6 615.5 617.7 621.2 621.2 621.3 621.2	0.0 0.0 0.0 0.0 0.0 0.0 0.0

¹ Feet above limit of detailed study

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

BARINA CREEK

^{*}Limit of detailed study is approximately 375 feet downstream of Church Road.

Table 23: Floodway Data (continued)

		1				T			
							BASE FL		
FLOODING	SOURCE		FL	OODWAY		Į W	ATER-SURFAC		
							(FEET N	AVD)	
			SECTION	MEAN	WIDTH				
CROSS	DISTANCE ¹	WIDTH	AREA	VELOCITY	REDUCED	REGULATORY	WITHOUT	WITH	INCREASE
SECTION	DIGITATOL	(FEET)	(SQUARE	(FEET PER	FROM PRIOR	I KEGOL/ (TOIKT	FLOODWAY	FLOODWAY	IIIONE/IOE
			FEET)	SECOND)	STUDY				
Beaver Dam									
Creek									
Α	1.089	120	889	1.1	-80	588.1	588.1	588.1	0.0
В	1.717	75	671	1.4	-1	588.3	588.3	588.3	0.0
С	2.567	82	541	1.7	12	588.4	588.4	588.4	0.0
D	4.515	495	1.381	0.7	175	588.8	588.8	588.8	0.0
E	5.265	281	827	1.0	-33	588.9	588.9	588.9	0.0
F	7.518	443	720	1.2	64	592.1	592.1	592.1	0.0
G	10.109	121	382	2.2	-30	597.8	597.8	597.8	0.0
Н	11.199	39	112	7.5	-5	599.8	599.8	599.8	0.0
l l	15.177	253	872	1.0	178	616.1	616.1	616.1	0.0
J	15.830	200	778	1.1	50	616.5	616.5	616.5	0.0
K	16.961	243	671	1.3	79	617.9	617.9	617.9	0.0
L	17.958	248	688	1.2	63	620.8	620.8	620.8	0.0
M	19.058	174	526	1.6	2	622.8	622.8	622.8	0.0
N	20.158	410	1.106	8.0	93	624.8	624.8	624.8	0.0
0	21.653	260	825	1.0	122	626.7	626.7	626.7	0.0
P	22.487	316	705	1.2	144	628.5	628.5	628.5	0.0
Q R	23.762	318	801	1.1	16	631.8	631.8	631.8	0.0
S S	24.823	79	222	3.8	-12	633.9	633.9	633.9	0.0
S T	26.247	195	735	1.1	9	638.9	638.9	638.9	0.0
	26.989	175	681	1.2	-5	641.3	641.3	641.3	0.0
U	28.314	252	685	1.2	134	646.2	646.2	646.2	0.0
V W	29.304	170	580	1.5	11	650.3	650.3	650.3	0.0
X X	30.164	211	495	1.7	33	652.6	652.6	652.6	0.0
	31.205	110	747	1.1	-23	660.5	660.5	660.5	0.0
Y Z	32.493	165	479	1.8	3	661.7	661.7	661.7	0.0
AA	33.396	198 247	404 926	2.1 0.9	82	666.1 676.7	666.1 676.7	666.1 676.7	0.0 0.0
AA	35,039	241	920	0.9	35	0/0./	010.1	0/0./	0.0

¹Feet above confluence with Duck Creek

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

BEAVER DAM CREEK

Table 23: Floodway Data (continued)

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	INCREAS
Bower Creek								
Α	1.834	1.340	6.845	1.3	590.9	588.3 ²	588.3	0.0
В	3.092	1.055	5.143	1.9	590.9	588.5 ²	588.5	0.0
С	4.526	1.570	7.882	1.4	590.9	588.9 ²	588.9	0.0
D	6.040	1.430	4.912	1.3	590.9	589.1 ²	589.1	0.0
E	7.244	1.545	4.177	1.3	590.9	589.3 ²	589.3	0.0
F	8.038	1.306	3.774	1.5	590.9	589.5 ²	589.5	0.0
G	9.406	270	1.410	5.7	590.9	589.5 ²	589.5	0.0
Н	10.790	665	4.765	1.8	592.4	592.4	592.4	0.0
I	12.083	650	3.822	1.9	592.9	592.9	592.9	0.0
J	13.615	520	3.514	2.5	593.7	593.7	593.7	0.0
K	15.451	640	2.722	2.4	595.0	595.0	595.0	0.0
L	17.386	1.385	6.285	1.3	597.5	597.5	597.5	0.0
M	18.468	771	2.440	2.2	597.7	597.7	597.7	0.0
N	19.299	630	1.359	3.5	598.0	598.0	598.0	0.0
Ο	20.297	129	1.259	8.9	600.8	600.8	600.8	0.0
Р	21.297	345	1.150	3.4	606.2	606.2	606.2	0.0
Q	22.235	184	2.247	3.2	606.9	606.9	606.9	0.0
R	23.246	143	8.28	5.3	609.6	609.6	609.6	0.0
S	24.106	326	1.564	2.5	612.0	612.0	612.0	0.0
Т	24.955	257	693	5.6	612.9	612.9	612.9	0.0
U	26.048	92	525	7.4	617.4	617.4	617.4	0.0
V	27.000	339	2.057	1.9	620.8	620.8	620.8	0.0
W	27.799	265	1.175	3.3	621.1	621.1	621.1	0.0
X	28.787	316	1.279	3.7	622.7	622.7	622.7	0.0
Υ	29.695	316	1.283	3.8	626.2	626.2	626.2	0.0
Z	30.669	775	1.576	2.7	632.2	632.2	632.2	0.0

¹ Feet Above Mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

BOWER CREEK

²Elevations computed without consideration of backwater effects from East River

Table 23: Floodway Data (continued)

FLOODING SOU	RCE	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
Bower Creek Tributary A B	267 815	153 59	750 780	2.3 3.3	827.4 831.3	827.4 831.3	827.4 831.3	0.0

¹Feet above Limit of Detailed Study

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

BOWER CREEK TRIBUTARY

Table 23: Floodway Data (continued)

FLOODING SOUP	RCE	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
Bower Creek Tributary 1 A B C D E F G H	1,953 3,067 4,654 5,934 6,630 7,888 9,109 10,802	684 1,359 1,198 461 115 285 268 327	3,000 2,684 1,706 5,953 1,575 379 338 526	1.7 1.4 1.6 2.4 3.7 2.7 3.0 2.0	590.9 590.9 591.1 593.9 597.0 600.0 604.4 618.3	589.4 ² 590.0 ² 591.1 593.9 597.0 600.0 604.4 618.3	589.4 590.0 591.1 593.9 597.0 600.0 604.4 618.3	0.0 0.0 0.0 0.0 0.0 0.0 0.0

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

BOWER CREEK TRIBUTARY 1

¹Feet above mouth ²Elevation computed without consideration of backwater effects from the East River

Table 23: Floodway Data (continued)

FLOODING SOL	JRCE		FLOODWA	Y	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	
Bower Creek Tributary 2			,	,					
Α	296	228	2,238	0.6	594.7	594.7	594.7	0.0	
В	885	140	633	1.8	594.8	594.8	594.8	0.0	
С	1,599	35	253	5.6	600.1	600.1	600.1	0.0	
D	1,910	124	412	1.8	604.8	604.8	604.8	0.0	
E	3,136	71	200	4.1	612.3	612.3	612.3	0.0	
F	4,298	204	651	0.3	624.0	624.0	624.0	0.0	
G	5,169	41	131	5.3	632.3	632.3	632.3	0.0	
Н	6,040	17	14	16.4	674.5	674.5	674.5	0.0	
I	6,295	117	183	1.6	698.6	698.6	698.6	0.0	
J	7,193	20	97	4.7	701.7	701.7	701.7	0.0	
K	8,122	14	20	3.0	707.1	707.1	707.1	0.0	
L	8,816	32	22	2.8	716.8	716.8	716.8	0.0	
M	9,583	42	28	2.7	729.7	729.7	729.7	0.0	

¹ Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

BOWER CREEK TRIBUTARY 2

Table 23: Floodway Data (continued)

					Γ			
FLOODING SOUP	RCE	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
Bower Creek Tributary A A B C D	256 1,183 3,005 5,328	222 47 51 131	2015 111 74 131	0.8 3.6 4.7 2.6	606.3 607.6 622.3 639.3	606.3 607.6 622.3 639.3	606.3 607.6 622.3 639.3	0.0 0.0 0.0 0.0

¹ Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

BOWER CREEK TRIBUTARY A

Table 23: Floodway Data (continued)

FLOODING SOL	JRCE		FLOODWA	Y	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
Bower Creek Tributary B A B C D	289 844 1,594 2,266	148 135 117 143	380 190 175 202	1.8 3.6 4.8 3.4	606.7 611.7 619.6 628.5	606.7 611.7 619.6 628.5	606.7 611.7 619.6 628.5	0.0 0.0 0.0 0.0

¹Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

BOWER CREEK TRIBUTARY B

Table 23: Floodway Data (continued)

FLOODIN	G SOURCE		FL	OODWAY		w	BASE FL ATER-SURFAC (FEET N	E ELEVATION	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Branch of Plum Creek A B C D	612 823 1,034 1,245	186 184 262 281	352 323 394 387	4.2 2.9 2.8 2.9	-4 0 -8 16	765.3 765.7 766.1 766.4	765.3 765.7 766.1 766.4	765.3 765.7 766.1 766.4	0.0 0.0 0.0 0.0

¹Feet above Holland Court

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

BRANCH OF PLUM CREEK

Table 23: Floodway Data (continued)

FLOODING	SOURCE		FL	OODWAY		W	BASE FL ATER-SURFAC (FEET N	E ELEVATION	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Branch Plum Creek Lower Tributary A B C D E F G	270 540 730 910 1,180 1,391 1,591	119 64 82 70 78 84 22	116 44 66 56 61 59 33	1.2 3.1 2.1 2.5 3.4 3.4 4.2	-105 -7 -32 -24 -8 4 -2	766.1 766.7 768.1 768.9 770.4 771.4 772.6	766.1 766.7 768.1 768.9 770.4 771.4 772.6	766.1 766.7 768.1 768.9 770.4 771.4 772.6	0.0 0.0 0.0 0.0 0.0 0.0

²Feet above confluence with Branch of Plum Creek

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

BRANCH OF PLUM CREEK LOWER TRIBUTARY

Table 23: Floodway Data (continued)

FLOODING SOURCE			BASE FLOOD FLOODWAY WATER-SURFACE ELEVATION (FEET NAVD)							
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE	
Branch Plum Creek Upper Tributary A B C D E F	300 458 648 848 978 1,189	112 98 63 102 94 20	161 125 90 110 90 48	2.5 2.8 4.1 3.8 4.1 5.9	-13 -24 -11 -6 -13 3	765.7 765.9 766.3 767.0 767.5 768.7	765.7 765.9 766.3 767.0 767.5 768.7	765.7 765.9 766.3 767.0 767.5 768.7	0.0 0.0 0.0 0.0 0.0 0.0	

²Feet above confluence with Branch of Plum Creek

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

BRANCH OF PLUM CREEK UPPER TRIBUTARY

Table 23: Floodway Data (continued)

FLOODING SOU	RCE	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
Branch River A B C D E F G	1,216 6,876 8,559 10,775 12,445 14,066 16,069	920 720 440 510 50 280 720	4,910 3,040 2,140 1,845 460 565 1,685	0.7 1.2 1.3 1.5 6.2 5.1 1.7	839.4 839.6 840.0 843.6 845.5 847.6 851.1	839.4 839.6 840.0 843.6 845.5 847.6 851.1	839.4 839.6 840.0 843.6 845.5 847.6 851.1	0.0 0.0 0.0 0.0 0.0 0.0

¹ Feet above limit of detailed study

TABLI	BROWN COUNTY, WI	FLOODWAY DATA
E 23	AND INCORPORATED AREAS	BRANCH RIVER

Table 23: Floodway Data (continued)

FLOODING	SOURCE		FL	OODWAY		W	BASE FL ATER-SURFAC FEET N	E ELEVATION	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY (FEET)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREAS
Duck Creek									
Α	510	323	1.556	4.2	1	*	584.0 ²	584.0	0.0
В	1.182	305	1.758	3.7	-1	584.7	584.7	584.7	0.0
С	2.352	560	3.834	1.7	-5	585.3	585.3	585.3	0.0
D	3.252	173	1.459	4.5	-12	585.5	585.5	585.5	0.0
E	4.748	625	3.943	1.7	-7	587.2	587.2	587.2	0.0
F	5.938	594	2.196	3.0	469	587.4	587.4	587.4	0.0
G	6.830	225	2.244	2.9	-12	588.0	588.0	588.0	0.0
Н	7.750	717	4.288	1.5	596	588.4	588.4	588.4	0.0
I	8.940	634	4.906	1.3	141	588.6	588.6	588.6	0.0
J	10.290	230	2.284	2.7	-3	588.9	588.9	588.9	0.0
K	10.731	1.438	7.174	0.9	1,299	590.5	590.5	590.5	0.0
L	12.466	576	4.716	1.3	-3	590.7	590.7	590.7	0.0
M	13.774	350	2.913	2.0	6	590.8	590.8	590.8	0.0
N	14.789	637	4.361	1.4	-1	591.0	591.0	591.0	0.0
0	15.553	346	3.070	1.9	4	591.1	591.1	591.1	0.0
Р	16.167	375	4.215	1.4	2	591.3	591.3	591.3	0.0
Q	16.907	279	2.962	2.0	0	591.3	591.3	591.3	0.0
R	18.145	244	2.624	2.1	0	591.9	591.9	591.9	0.0
S	18.890	419	6.716	1.3	-1	592.2	592.2	592.2	0.0
T	20.168	780	5.241	1.1	2	592.3	592.3	592.3	0.0
U	20.921	681	3.230	1.7	0	592.4	592.4	592.4	0.0
V	21.978	217	1.315	4.2	-3	593.4	593.4	593.4	0.0
W	23.324	617	2.410	2.3	180	595.6	595.6	595.6	0.0
X	26 444	552	1 536	3.6	372	596 6	596 6	596 6	n n
Y	27 994	317	1 260	44	-5	598.3	598.3	598.3	n n
Z	29.544	345	1.226	4.5	-90	599.8	599.8	599.8	0.0

¹Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

DUCK CREEK

²Elevation computed without considering backwater from Green Bay

^{*} Controlled by coastal flooding. See Flood Insurance Rate Map for regulatory base flood elevations

Table 23: Floodway Data (continued)

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)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Duck Creek (continued) AA AB AC AD AE AF AG AH AI AJ AK AL AM AN AO AP AQ AR AS	30.824 31.974 32.604 33.984 35.464 37.624 38.504 39.334 41.094 46.244 49.394 51.944 54.269 56.594 61.094 62.674 65.964 68.704 74.014	625 399 123 990 835 1.063 956 412 560 629 729 758 643 562 619 174 279 1.027 400	2.005 1.690 877 4.097 2.975 4.731 3.732 1.663 1.824 2.500 2.894 3.489 1.484 1.779 1.461 1.090 1.557 4.167 3.093	2.8 3.3 6.3 1.4 1.9 1.2 1.5 3.3 3.0 2.2 1.9 1.6 3.7 3.1 3.8 5.1 3.6 1.3 1.8	151 4 -230 -53 96 706 460	601.8 602.7 603.4 605.4 605.9 608.2 613.6 614.2 618.5 626.4 629.4 632.1 639.6 648.6 662.7 668.4 672.3 673.8 675.3	601.8 602.7 603.4 605.4 605.9 608.2 613.6 614.2 618.5 626.4 629.4 632.1 639.6 648.6 662.7 668.4 672.3 673.8 675.3	601.8 602.7 603.4 605.4 605.9 608.2 613.6 614.2 618.5 626.4 629.4 632.1 639.6 648.6 662.7 668.4 672.3 673.8 675.3	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

¹ Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

DUCK CREEK

FLOODING SOU	RCE	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
Duck Creek Tributary - Stream 11 A B C D E F G	283 983 1,707 2,406 3,092 3,917 4,501	434 27 73 65 26 89 53	1,477 62 129 103 80 458 140	0.4 5.5 2.6 3.3 4.2 0.7 2.4	605.7 611.4 624.2 637.0 647.1 665.8 668.4	604.2 ² 611.4 624.2 637.0 647.1 665.8 668.4	604.2 611.4 624.2 637.0 647.1 665.8 668.4	0.0 0.0 0.0 0.0 0.0 0.0

¹Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

DUCK CREEK TRIBUTARY – STREAM 11

²Elevation computed without consideration of backwater effects from Duck Creek

Table 23: Floodway Data (continued)

					1	BASE F	I 00D	
FLOODING SOUR	RCE		FLOODWA	Υ	V	BASE F VATER-SURFA(FEET N	CE ELEVATION	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Duck Creek Tributary 12 A B C D	745 1,489 2,149 2,724	105 52 28 26	132 99 15 15	1.9 1.6 3.9 4.1	644.4 656.9 665.4 674.0	644.4 656.9 665.4 674.0	644.4 656.9 665.4 674.0	0.0 0.0 0.0 0.0

¹Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

DUCK CREEK TRIBUTARY – STREAM 12

Table 23: Floodway Data (continued)

FLOODING	SOURCE		FL	OODWAY		W	BASE FL ATER-SURFAC FEET N	E ELEVATION	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREAS
Dutchman Creek									
Α	483	256	1,816	1.9	1	585.9	585.9	585.9	0.0
В	1,622	142	1,571	2.2	-4	592.9	592.9	592.9	0.0
С	2,633	44	591	5.8	-6	593.2	593.2	593.2	0.0
D	3,124	372	3,956	0.9	0	595.8	595.8	595.8	0.0
E	4,470	709	4,702	0.7	149	595.9	595.9	595.9	0.0
F	5,226	301	1,593	2.2	162	596.1	596.1	596.1	0.0
G	6,158	165	2,229	1.5	-1	596.6	596.6	596.6	0.0
Н	7,421	168	1,005	3.3	0	596.8	596.8	596.8	0.0
I	8,534	169	1,136	2.9	0	598.6	598.6	598.6	0.0
J	9,414	165	914	3.6	-1	598.9	598.9	598.9	0.0
K	10,622	95	678	4.9	-1	602.1	602.1	602.1	0.0
L	11,653	447	4,179	0.8	2	605.4	605.4	605.4	0.0
M	12,805	244	1,767	1.8	2	605.5	605.5	605.5	0.0
N	13,612	228	1,947	1.6	-7	607.5	607.5	607.5	0.0
0	17,460	118	676	3.6	1	608.4	608.4	608.4	0.0
Р	17,829	107	679	3.6	3	610.2	610.2	610.2	0.0
Q	19,673	291	1,224	1.6	-140	610.8	610.8	610.8	0.0
R	21,711	300	799	2.5	-7	615.3	615.3	615.3	0.0
S	22,214	171	460	4.4	0	619.4	619.4	619.4	0.0
Т	24,277	182	504	4.0	0	633.5	633.5	633.5	0.0
U	25,185	83	471	4.2	1	639.5	639.5	639.5	0.0
V	25,770	162	649	3.1	0	646.1	646.1	646.1	0.0
W	26,833	440	1,180	1.7	-5	650.7	650.7	650.7	0.0

Feet above confluence with Fox River

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

DUTCHMAN CREEK

Table 23: Floodway Data (continued)

FLOODING	SOURCE		FL	OODWAY		W	BASE FL ATER-SURFAC (FEET N	E ELEVATION	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Dutchman Creek North Tributary A B C D E F G H I J K L	12,148 12,666 13,325 14,418 16,337 17,325 18,791 19,089 20,544 21,225 21,953 23,429 23,830	94 332 315 283 92 68 36 132 88 274 201 105 107	1.088 2.984 1.638 3.633 352 278 64 322 133 943 465 348 382	1.1 0.4 0.7 0.2 2.2 2.5 5.6 1.1 2.7 0.4 0.5 0.5 0.4	1 8 5 1 11 2 0 1 0 0 1 0 0	609.1 611.1 611.1 623.1 623.3 624.0 632.0 637.5 646.8 657.0 657.0 671.8 677.3	609.1 611.1 611.1 623.1 623.3 624.0 632.0 637.5 646.8 657.0 657.0 671.8 677.3	609.1 611.1 611.1 623.1 623.3 624.0 632.0 637.5 646.8 657.0 657.0 671.8 677.3	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

¹Above confluence of Dutchman Creek with Fox River

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

DUTCHMAN CREEK NORTH TRIBUTARY

Table 23: Floodway Data (continued)

FLOODING	SOURCE		FL	OODWAY		BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Dutchman Creek South Tributary A B C D E H H	20,085 20,550 20,955 21,764 22,306 23,207 24,164 24,713	110 40 115 39 96 109 115 369	661 331 584 280 474 455 388 940	2.0 3.9 2.2 4.6 2.7 2.8 3.3 1.4	0 1 -3 0 -5 -3 -20 -92	613.5 613.6 615.5 616.2 618.3 620.6 623.2 623.9	613.5 613.6 615.5 616.2 618.3 620.6 623.2 623.9	613.5 613.6 615.5 616.2 618.3 620.6 623.2 623.9	0.0 0.0 0.0 0.0 0.0 0.0 0.0

¹Above confluence of Dutchman Creek with Fox River

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

DUTCHMAN CREEK SOUTH TRIBUTARY

Table 23: Floodway Data (continued)

FLOODING	SOURCE		FL	OODWAY		BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Dutchman Creek Southeast Tributary A B C D E F G	25.072 25.977 26.604 28.024 28.844 29.519 31.864	146 110 247 378 656 646 1.013	286 133 982 438 269 1.071 1.109	1.7 3.6 0.5 1.1 1.8 0.5 0.4	24 -13 23 93 -2 -17 8	625.7 629.5 634.1 634.5 635.9 636.9 637.1	625.7 629.5 634.1 634.5 635.9 636.9 637.1	625.7 629.5 634.1 634.5 635.9 636.9 637.1	0.0 0.0 0.0 0.0 0.0 0.0

¹Feet above mouth of Dutchman Creek at the Fox River

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

DUTCHMAN CREEK SOUTHEAST TRIBUTARY

Table 23: Floodway Data (continued)

							DACE EL	000	
FLOODING	SOURCE		FL	OODWAY		W	BASE FL ATER-SURFAC		
1200510	0001102			00211711		(FEET NAVD)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY (FEET)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Dutchman Creek Southwest Tributary A B C D E F G H I	25.137 26.287 26.649 27.759 28.149 28.559 31.724 32.959 33.649	302 47 240 160 120 297 190 245 176	617 171 1,114 340 199 2,445 240 141 107	1.3 4.7 0.7 2.4 4.0 0.4 1.6 2.5 3.3	-42 -9 -3 -61 3 5 2 5 8	624.0 628.1 633.0 633.3 635.2 642.1 643.0 644.5 646.2	624.0 628.1 633.0 633.3 635.2 642.1 643.0 644.5 646.2	624.0 628.2 633.0 633.3 635.2 642.1 643.0 644.5 646.2	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

¹Feet above mouth of Dutchman Creek at Fox River

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

DUTCHMAN CREEK SOUTHWEST TRIBUTARY

Table 23: Floodway Data (continued)

CROSS SECTION East River A B C D E F G H	1,492 2,680 3,410 5,962 7,533 9,343 10,512	WIDTH (FEET) 182 140 146 122 163 500	SECTION AREA (SQUARE FEET) 2,183 1,766 1,856 1,245 1,982 3,716	MEAN VELOCITY (FEET PER SECOND) 3.6 4.4 4.2 6.3 4.0	585.7 585.7 585.7 585.7 586.6	WITHOUT FLOODWAY 584.4 ² 585.1 ² 585.4 ² 586.6	WITH FLOODWAY 584.4 585.1 585.4	0.0 0.0 0.0 0.0
A B C D E F G	2,680 3,410 5,962 7,533 9,343 10,512	140 146 122 163 500	1,766 1,856 1,245 1,982	4.4 4.2 6.3	585.7 585.7	585.1 ² 585.4 ²	585.1	0.0
B C D E F G	2,680 3,410 5,962 7,533 9,343 10,512	140 146 122 163 500	1,766 1,856 1,245 1,982	4.4 4.2 6.3	585.7 585.7	585.1 ² 585.4 ²	585.1	0.0
C D E F G	3,410 5,962 7,533 9,343 10,512	146 122 163 500	1,856 1,245 1,982	4.2 6.3	585.7	585.4 ²		
D E F G	5,962 7,533 9,343 10,512	122 163 500	1,245 1,982	6.3			585.4	0.0
E F G	7,533 9,343 10,512	163 500	1,982		586.6	586.6	l	
F G	9,343 10,512	500		4.0			586.9	0.3
G	10,512		2716		588.1	588.1	588.3	0.2
				2.1	588.5	588.5	588.7	0.2
H		488	3,601	1.6	588.6	588.6	588.8	0.2
	11,880	229	2,902	2.0	588.7	588.7	588.9	0.2
I	12,637	948	6,781	0.9	589.0	589.0	589.2	0.2
J	14,620	777	4,808	1.2	589.1	589.1	589.3	0.2
K	16,562	747	3,534	1.6	589.2	589.2	589.4	0.2
L	18,156	175	2,546	2.2	589.3	589.3	589.5	0.2 0.2
M	20,186	1,020	8,408	0.7	589.5	589.5	589.8	0.2
N	22,340	600	5,329	1.1	589.6	589.6	589.8	0.2
0	24,473	380	3,963	1.4	589.7	589.7	589.9	0.2 0.3
Р	26,702	913	5,809	1.0	589.9	589.9	590.1	
Q	30,063	900	6,728	0.8	589.9	589.9	590.3	0.4
R	31,495	420	3,472	1.6	590.0	590.0	590.4	0.4
S	32,883	1,450	11,614	0.5	590.1	590.1	590.5	0.4
Т	35,504	265	2,471	2.3	590.2	590.2	590.5	0.4
U	38,584	695	5,117	1.1	590.4	590.4	590.9	0.4
V	41,963	505	3,477	0.8	590.6	590.6	591.1	0.5
W	45,845	1,481	7,165	0.4	590.6	590.6	591.2	0.6
X	49,260	1,086	4,483	0.6	590.7	590.7	591.3	0.6
Υ	52,498	173	1,225	2.2	591.2	591.2	591.7	0.5
Z	52,930	202	922	2.9	591.4	591.4	591.7	0.4

¹ Feet above confluence with Fox River

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

EAST RIVER

² Elevations computed without consideration of backwater effects from Green Bay

Table 23: Floodway Data (continued)

FLOODING SOL	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	INCREAS		
ast River (continued)										
` AA ´	57,320	732	6,589	0.9	592.5	592.5	593.1	0.6		
AB	59,341	553	2,091	1.3	594.0	594.0	594.3	0.3		
AC	64,067	554	1,727	1.6	595.2	595.2	595.3	0.1		
AD	65,297	151	934	2.9	595.7	595.7	595.8	0.1		
AE	68,888	457	1,087	2.5	597.6	597.6	597.8	0.2		
AF	75,750	967	2,481	1.1	601.3	601.3	601.6	0.3		
AG	78,212	1,301	3,328	0.8	602.1	602.1	602.3	0.2		
AH	80,193	96	506	5.3	603.2	603.2	603.2	0.0		
Al	81,661	401	1,473	1.8	605.2	605.2	605.3	0.2		
AJ	84,845	510	1,292	2.1	607.6	607.6	607.6	0.0		
AK	85,841	85	720	4.1	608.6	608.6	608.6	0.0		
AL	87,628	148	747	3.6	610.0	610.0	610.0	0.0		
AM	89,571	381	1,695	1.6	611.2	611.2	611.6	0.4		
AN	91,836	457	1,221	2.2	612.3	612.3	612.6	0.3		
AO	92,681	120	653	4.1	613.8	613.8	613.8	0.0		
AP	94,148	489	1,379	2.0	615.0	615.0	615.1	0.1		
AQ	95,961	80	540	5.0	616.9	616.9	616.9	0.0		
AR	97,556	592	2,346	1.2	618.4	618.4	618.5	0.0		
AS	100,914	1,150	3,992	0.7	619.0	619.0	619.0	0.0		
AT	104,174	160	908	2.5	620.2	620.2	620.2	0.0		
AU	106,455	380	1,263	1.8	621.3	621.3	621.3	0.0		
AV	110,602	405	1,555	1.5	623.7	623.7	623.8	0.0		
AW	112,276	78	733	3.1	624.9	624.9	625.0	0.1		
AX	112,732	344	1,992	1.2	625.6	625.6	625.7	0.1		
AY	114,534	405	1,851	1.2	625.9	625.9	626.0	0.1		
AZ	115,339	64	393	5.9	626.4	626.4	626.5	0.1		

¹Feet above confluence with Fox River

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

EAST RIVER

Table 23: Floodway Data (continued)

						BASE F	LOOD		
FLOODING SOUI	RCE	FLOODWAY			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	
East River (continued) BA BB BC BD BE BF	116,436 117,533 121,353 121,800 122,688 124,118	763 765 557 616 585 818	1,906 1,995 1,300 764 1,660 1,514	1.3 1.2 1.6 2.8 1.3 1.4	627.8 628.0 629.2 629.9 630.9 631.4	627.8 628.0 629.2 629.9 630.9 631.4	627.9 628.1 629.2 629.9 630.9 631.4	0.1 0.1 0.0 0.0 0.0 0.0	

¹Feet above confluence with Fox River

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

EAST RIVER

Table 23: Floodway Data (continued)

FLOODIN	G SOURCE		FL	OODWAY		BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
East River Tributary			,	,					
A B C D E	4,514 4,904 5,519 6,309 6.559	630 150 150 150 100	1,422 315 260 345 250	0.5 2.0 2.7 1.9 2.6	249 -104 -25 -32	591.5 591.6 592.0 592.5 594.7	591.5 591.6 592.0 592.5 594.7	591.5 591.6 592.0 592.5 594.7	0.0 0.0 0.0 0.0 0.0

¹ Feet above confluence with Bower Creek

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

EAST RIVER TRIBUTARY

Table 23: Floodway Data (continued)

FLOODING	SOURCE		FL	OODWAY		w	BASE FL ATER-SURFAC (FEET N	E ELEVATION		
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREAS	
East River Tributary A							2			
Α	401	208	891	0.9	0	591.5	588.9 ²	588.9	0.00	
В	840	25	141	5.9	-12	591.5	588.9 ²	588.9	0.00	
С	1,243	344	1,444	0.6	28	592.4	592.4	592.4	0.00	
D	1,914	454	1,766	0.3	5	592.4	592.4	592.4	0.00	
Е	2,441	446	1,701	0.3	0	592.4	592.4	592.4	0.00	
F	2,881	310	827	0.6	0	592.5	592.5	592.5	0.00	
G	3,562	186	342	1.4	-36	592.6	592.6	592.6	0.00	
Н	3,973	116	117	4.0	-8	593.4	593.4	593.4	0.00	
I	4,423	164	289	1.8	-5	595.8	595.8	595.8	0.00	
J	4,948	26	472	5.5	-14	600.0	600.0	600.0	0.00	
K	5,280	189	350	1.2	-22	600.8	600.8	600.8	0.00	
L	5,599	80	204	1.3	0	601.0	601.0	601.0	0.00	
M	5,902	60	152	1.7	7	602.2	602.2	602.2	0.00	
N	6,209	62	73	3.6	-17	602.7	602.7	602.7	0.00	
Ο	6,512	120	788	0.3	-8	605.3	605.3	605.3	0.00	
Р	7,169	130	586	0.4	-1	605.3	605.3	605.3	0.00	
Q	7,572	227	435	0.6	0	611.2	611.2	611.2	0.00	
R	8,471	330	454	0.6	-1	612.5	612.5	612.5	0.00	
S	8,863	70	127	2.9	-4	612.7	612.7	612.7	0.00	

¹Feet above confluence with the East River

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

EAST RIVER TRIBUTARY A

²Elevation computed without consideration of backwater effects from the East River

Table 23: Floodway Data (continued)

	T				D. 4.05. 51	000		
FLOODING SOURCE FLOODWAY				BASE FLOOD WATER-SURFACE ELEVATION				
T EGGE ING GGGNGE	12	OODWA		**/	(FEET NA			
CROSS SECTION DISTANCE ¹	WIDTH AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY (FEET)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE	
East River Tributary B A 362 B 547 C 839 D 1,152 E 1,357 F 1,566 G 1,793	142 283 203 410 102 67 142 128 136 80 32 21 33 33	0.5 0.4 2.3 0.5 0.8 3.0 1.9	7 5 -14 -7 6 3 6	592.4 592.4 592.4 592.4 593.4 595.2	589.1 ² 589.1 ² 589.9 ² 590.5 ² 590.6 ² 593.4 595.2	589.1 589.9 590.5 590.6 593.4 595.2	0.0 0.0 0.0 0.0 0.0 0.0	

¹Feet above confluence with East River Tributary A

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

EAST RIVER TRIBUTARY B

²Elevations computed without consideration of backwater effects from East River Tributary A

Table 23: Floodway Data (continued)

							BASE FL	OOD			
FLOODING	FLOODING SOURCE		FLOODWAY				WATER-SURFACE ELEVATION				
					,		(FEET N	AVD)	.		
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE		
East Verlin North Tributary to Willow Creek A B	425 588	53 13	130 32	0.2 0.6	3 -13	606.2	606.2 606.2	606.2 606.2	0.0		

¹Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

EAST VERLIN NORTH TRIBUTARY TO WILLOW CREEK

Table 23: Floodway Data (continued)

FLOODING	SOURCE		FL	OODWAY		BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
East Verlin Tributary to Willow Creek			,	,					
Α	735	39	73	4.3	18	591.0	591.0	591.0	0.0
В	1,760	25	60	4.0	-6	596.5	596.5	596.5	0.0
С	2,348	170	343	1.6	-2	598.1	598.1	598.1	0.0
D	3,182	39	80	6.7	-10	598.8	598.8	598.8	0.0
E	3,432	170	277	2.0	8	600.4	600.4	600.4	0.0
F	3,816	42	92	5.9	-3	601.8	601.8	601.8	0.0
G	5,013	69	175	3.0	-1	606.2	606.2	606.2	0.0
Н	5,630	126	104	5.0	0	608.4	608.4	608.4	0.0
l	6,568	90	218	2.4	4	620.6	620.6	620.6	0.0
J	6,682	20	55	9.4	0	621.5	621.5	621.5	0.0

¹ Feet above confluence with Willow Creek

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

EAST VERLIN TRIBUTARY TO WILLOW CREEK

Table 23: Floodway Data (continued)

FLOODING SOU	IRCE		FLOODWA	Y	V	BASE F VATER-SURFAC (FEET N	CE ELEVATION	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Ellis Creek A B C D E F G H I	144 742 1,210 1,533 1,711 1,996 2,439 2,921 3,731	212 172 78 62 69 59 71 137 80	1,454 806 145 80 107 86 118 845 110	0.4 0.6 3.2 5.4 4.1 4.8 3.5 0.3 2.3	650.9 650.9 651.1 652.8 654.4 656.2 660.0 669.9 670.1	650.9 650.9 651.1 652.8 654.4 656.2 660.0 669.9 670.1	650.9 650.9 651.1 652.8 654.4 656.2 660.0 669.9 670.1	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

¹Feet above upstream end of culvert at Auto Plaza Drive

\dashv	
\triangleright	
W	
Ш	
N	
W	

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

ELLIS CREEK

Table 23: Floodway Data (continued)

FLOODING SOU	JRCE		FLOODWA	Y	V	BASE F ATER-SURFAC FEET N	E ELEVATION	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Fox River A B C D E F G H I J K L M N O P Q R S	3,076 6,119 9,196 10,658 13,207 14,982 18,584 22,084 26,962 40,215 40,497 53,939 66,171 71,996 72,693 78,931 86,403 94,903 103,310	604 515 699 614 540 615 1,067 1,413 2,483 1,042 983 1,032 1,820 537 565 530 478 454 535	15,597 14,870 17,355 16,216 15,369 17,770 29,370 22,815 30,720 9,264 21,852 11,248 14,712 6,388 8,266 7,363 6,833 5,682 7,444	2.2 2.3 1.8 1.9 2.0 1.7 1.1 1.5 1.0 3.2 1.4 2.7 2.0 4.7 3.6 4.0 4.1 5.0 3.8	* 584.7 584.8 584.9 585.0 585.0 585.1 585.3 589.3 589.9 590.7 591.5 598.5 599.2 600.4 601.4 602.7	584.1 ² 584.2 ² 584.7 584.7 584.8 584.9 585.0 585.0 585.1 585.3 589.3 589.9 590.6 591.5 598.5 599.2 600.4 601.4 602.5	584.1 584.2 584.7 584.7 584.8 584.9 585.0 585.0 585.1 585.3 589.3 589.9 590.7 591.5 598.5 599.2 600.4 601.5 602.7	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

¹Feet above mouth

* Controlled by coastal flooding. See Flood Insurance Rate Map for regulatory base flood elevations

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

FOX RIVER

² Elevations computed without consideration of backwater effects from Green Bay

Table 23: Floodway Data (continued)

FLOODING	SOURCE		FL	OODWAY		BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Lancaster Creek									
A B C D E F G H I J K L M N O P Q R S T U V W X X	122 1.032 1.342 2.294 3.074 3.884 4.424 4.759 5.359 5.619 5.709 5.859 6.549 7.629 7.929 8.291 8.726 9.161 10.331 11.501 12.671 13.811 15.281 15.981	125 215 70 1.098 343 368 140 220 64 30 45 77 390 408 65 651 435 415 327 219 110 270 192 28	634 489 374 652 1.178 1.057 412 734 164 239 251 286 1.594 961 214 2.014 1.063 395 596 400 486 548 237 186	2.4 3.1 4.0 1.8 1.0 1.1 2.9 1.6 6.5 4.5 4.3 3.7 0.7 1.1 5.0 0.5 0.9 2.4 1.6 2.4 1.9 1.7 4.0 4.4	10 114 -41 -827 -19 5 0 23 -31 -2 -19 -50 -4 -87 -60 62 110 19 -77 -154 -80 81 46 -12	586.1 586.4 587.1 588.9 590.3 590.8 591.3 592.6 592.3 594.6 594.7 595.0 596.0 596.2 596.3 597.1 597.2 597.3 599.8 601.6 603.7 605.3 608.6 611.0	586.1 ² 586.4 587.1 588.9 590.3 590.8 591.3 592.6 592.3 594.6 594.7 595.0 596.0 596.2 596.3 597.1 597.2 597.3 599.8 601.6 603.7 605.3 608.6 611.0	586.1 586.4 587.1 588.9 590.3 590.8 591.3 592.6 592.3 594.6 594.7 595.0 596.0 596.2 596.3 597.1 597.2 597.3 599.8 601.6 603.7 605.3 608.6 611.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
Y Z	16.242 16.732	175 40	550 192	1.5 4.3	-2 -35	611.9 612.4	611.9 612.4	611.9 612.4	0.0 0.0

¹Feet above confluence with Duck Creek

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

LANCASTER CREEK

²Elevations without considering Backwater from Duck Creek

Table 23: Floodway Data (continued)

FLOODING	G SOURCE		FL	OODWAY		BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Lancaster Creek (continued) AA AB AC AD	17.224 18.184 19.564 20.734	135 170 88 370	239 415 172 642	3.4 2.0 4.8 1.3	-6 -7 -80 -44	613.3 615.6 618.5 622.8	613.3 615.6 618.5 622.8	613.3 615.6 618.5 622.8	0.0 0.0 0.0 0.0

¹Feet above confluence with Duck Creek

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

LANCASTER CREEK

Table 23: Floodway Data (continued)

FLOODING SOUP	RCE		FLOODWA	Υ	V	BASE F VATER-SURFAC FEET N	E ELEVATION	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A B C D E F	371 733 938 1,178 1,383 1,786	60 60 105 76 90 41	74 63 94 136 72 38	2.8 3.3 2.1 2.3 2.8 5.1	618.3 620.7 622.2 623.7 625.7 630.2	618.3 620.7 622.2 623.7 625.7 630.2	618.3 620.7 622.2 623.7 625.7 630.2	0.0 0.0 0.0 0.0 0.0

¹Feet above Rockwell Road

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

LANCASTER CREEK TRIBUTARY

Table 23: Floodway Data (continued)

FLOODING SOL	JRCE		FLOODWA	Υ	v	BASE F VATER-SURFAC FEET N	E ELEVATION	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
lahon Creek			,	,				
Α	1,199	89	361	3.3	591.6	591.6	591.6	0.0
В	1,391	170	628	1.8	592.5	592.5	592.5	0.0
С	1,763	180	495	2.2	593.2	593.2	593.2	0.0
D	2,097	135	272	4.1	593.5	593.5	593.5	0.0
E	2,419	123	188	5.9	595.0	595.0	595.0	0.0
F	2,627	252	364	3.4	597.5	597.5	597.5	0.0
G	2,974	197	351	3.6	599.7	599.7	599.7	0.0
Н	3,469	291	695	1.6	602.6	602.6	602.6	0.0
I	3,680	197	365	3.7	604.4	604.4	604.4	0.0
J	4,117	237	518	2.2	605.8	605.8	605.8	0.0
K	4,320	195	450	2.4	606.4	606.4	606.4	0.0
L	4,610	140	326	3.5	608.2	608.2	608.2	0.0
M	5,291	225	344	3.2	614.7	614.7	614.7	0.0
N	5,645	182	420	2.6	620.7	620.7	620.7	0.0
0	6,098	148	237	4.1	625.5	625.5	625.5	0.0
Р	6,301	40	196	6.0	627.3	627.3	627.3	0.0
Q	6,459	167	909	1.1	632.8	632.8	632.8	0.0
R	6,711	77	581	2.7	632.9	632.9	632.9	0.0
S	6,868	34	1,020	3.7	636.5	636.5	636.5	0.0
Т	6,907	125	1,702	1.0	636.8	636.8	636.8	0.0
U	7,954	147	279	3.3	641.2	641.2	641.2	0.0
V	8,499	152	366	2.5	647.3	647.3	647.3	0.0
W	9,310	139	259	3.6	654.5	654.5	654.5	0.0
X	9,564	171	440	2.2	657.5	657.5	657.5	0.0
Υ	10,031	138	357	2.7	661.2	661.2	661.2	0.0
Z	10,210	46	159	8.2	661.9	661.9	661.9	0.0

¹Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

MAHON CREEK

Table 23: Floodway Data (continued)

FLOODING SOU	RCE		FLOODWA	Y	V	BASE F VATER-SURFAC (FEET N	CE ELEVATION	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Mahon Creek (continued) AA AB AC AD AE AF AG AH AI AJ AK AL AM AN	10,410 10,703 11,430 12,488 13,027 13,531 13,792 14,068 14,799 15,530 15,694 15,945 16,771 17,148	139 177 109 138 176 94 107 74 55 41 57 92 48 60	652 327 310 358 384 212 191 172 125 80 129 847 82 136	1.5 3.0 3.0 2.3 2.1 3.9 4.3 4.8 5.8 6.6 4.1 0.5 4.9 3.0	666.1 666.8 677.1 687.0 694.6 702.2 704.9 711.5 736.9 749.9 752.4 764.5 766.6 773.0	666.1 666.8 677.1 687.0 694.6 702.2 704.9 711.5 736.9 749.9 752.4 764.5 766.6 773.0	666.1 666.8 677.1 687.0 694.6 702.2 704.9 711.5 736.9 749.9 752.4 764.5 766.6 773.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

¹Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

MAHON CREEK

FLOODING	SOURCE		FL	OODWAY		BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Middle Branch Little Suamico River A B C D	138 655 1,423 5.115	8 60 34 82	29 120 55 106	8.4 4.1 7.4 2.1	-6 28 14 -12	795.6 799.0 800.3 809.8	795.6 799.0 800.3 809.8	795.6 799.0 800.3 809.8	0.0 0.0 0.0 0.0

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

MIDDLE BRANCH LITTLE SUAMICO RIVER

¹ Feet above Limit of Detailed Study*

* Limit of Detailed Study is approximately 40 feet downstream of Summit Street

Table 23: Floodway Data (continued)

FLOODING SOUI	RCE		FLOODWA	Y	V	BASE F VATER-SURFAC (FEET N	E ELEVATION	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Neshota River A B C D E F G H I J K L M N O P Q	6,019 6,072 8,765 8,818 10,085 12,038 14,520 14,573 16,738 18,322 18,374 18,638 18,691 20,328 22,915 24,869 24,922	115 190 715 760 940 385 245 335 530 90 70 240 310 730 780 80 60	1,036 1,687 4,025 3,110 4,180 1,545 604 1,087 3,000 870 1,150 3,820 4,860 4,260 4,600 370 390	4.0 2.8 0.0 1.3 1.2 2.9 7.3 4.1 1.5 4.6 3.5 1.1 0.8 0.9 0.9 10.8 10.2	687.7 687.9 689.7 689.7 690.1 690.6 696.5 698.2 700.7 701.4 701.4 702.1 702.2 702.5 702.9 702.9 703.7	687.7 687.9 689.7 689.7 690.1 690.6 696.5 698.2 700.7 701.4 702.1 702.2 702.5 702.9 702.9 703.7	687.7 687.9 689.7 689.7 690.1 690.6 696.5 698.2 700.7 701.4 702.1 702.2 702.5 702.9 702.9 703.7	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

¹ Feet above mouth

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

NESHOTA RIVER

Table 23: Floodway Data (continued)

					T			
FLOODING SOUR	RCE		FLOODWA	Υ	V	BASE F VATER-SURFA(FEET N	CE ELEVATION	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
North Branch Ashwaubenon Creek A B C D E F G H I	83,025 86,422 88,371 89,207 90,139 91,304 92,927 93,470 95,592	264 226 202 223 198 234 278 265 190	2,129 747 413 290 280 508 628 371 418	0.4 1.2 2.1 3.3 3.1 1.7 1.4 2.3 2.4	661.0 661.2 664.2 665.8 668.3 670.5 674.5 674.9 681.0	661.0 661.2 664.2 665.8 668.3 670.5 674.5 674.9 681.0	661.0 661.2 664.2 665.8 668.3 670.5 674.5 674.9 681.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

¹ Feet above mouth of Ashwaubenon Creek at Fox River

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

NORTH BRANCH ASHWAUBENON CREEK

Table 23: Floodway Data (continued)

FLOODING SOUF	RCE	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
North Branch Bakers Creek A B C D	264 917 1,507 2,014	114 110 155 138	127 55 174 77	1.5 3.4 1.9 2.5	657.8 659.9 662.8 664.6	657.8 659.9 662.8 664.6	657.8 659.9 662.8 664.6	0.0 0.0 0.0 0.0

¹Feet above confluence with Bakers Creek

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

NORTH BRANCH BAKERS CREEK

Table 23: Floodway Data (continued)

FLOODING SOU	RCE	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	
North Branch Willow Creek A B C D E F G H I J K	77 487 760 2,393 2,903 3,393 3,891 5,996 6,283 9,254 12,472	42 47 153 192 256 159 193 135 180 135 110	490 1,385 2,879 811 805 645 289 197 185 154 180	4.3 1.5 0.4 1.2 0.9 1.3 2.5 3.6 3.9 3.8 2.8	629.4 645.1 645.9 646.0 652.1 654.5 654.8 672.6 678.4 711.6 735.8	629.4 645.1 645.9 646.0 652.1 654.5 654.8 672.6 678.4 711.6 735.8	629.4 645.1 645.9 646.0 652.1 654.5 654.8 672.6 678.4 711.6 735.8	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	

¹Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

NORTH BRANCH WILLOW CREEK

Table 23: Floodway Data (continued)

FLOODING SOU	RCE	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
North Tributary South Branch Ashwaubenon Creek A B C D E	90,820 91,222 91,677 92,092 92,798	119 86 88 109 33	304 127 110 114 134	1.2 2.8 3.2 3.1 5.1	663.7 664.3 667.9 670.5 674.7	663.7 664.3 667.9 670.5 674.7	663.7 664.3 667.9 670.5 674.7	0.0 0.0 0.0 0.0 0.0

¹ Feet above confluence of Ashwaubenon Creek at Fox River

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

NORTH TRIBUTARY SOUTH BRANCH ASHWAUBENON CREEK

Table 23: Floodway Data (continued)

FLOODING SOU	RCE	FLOODWAY			V	BASE F /ATER-SURFAC (FEET N	E ELEVATION	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Oneida Creek A B C D E F G H I J K L M N O	3 677 1,199 1,432 1,668 2,120 2,358 2,825 3,278 3,737 4,106 4,527 5,314 5,614 5,951	206 283 145 112 116 160 115 117 140 128 111 52 78 92 59	597 247 874 233 220 307 241 199 179 178 131 47 79 81 61	0.8 2.0 2.5 2.3 2.3 1.6 2.1 2.5 2.8 2.8 1.6 3.9 2.3 2.2 3.2	596.0 596.6 600.3 603.0 604.6 606.2 607.9 611.0 614.0 619.9 621.3 625.6 633.8 636.2 639.3	592.9 ² 596.6 600.3 603.0 604.6 606.2 607.9 611.0 614.0 619.9 621.3 625.6 633.8 636.2 639.3	592.9 596.6 600.3 603.0 604.6 606.2 607.9 611.0 614.0 619.9 621.3 625.6 633.8 636.2 639.3	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

¹Feet above confluence with Duck Creek

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

ONEIDA CREEK

²Elevations computed without consideration of backwater effects from Duck Creek

FLOODING SOUF	RCE	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
Pioneer Tributary to Duck Creek A B C	192 732 1,046	223 22 38	643 150 1,482	0.2 1.5 0.4	590.7 590.7 595.7	588.0 ² 588.3 ² 595.7	588.0 588.3 595.7	0.0 0.0 0.0

¹Feet above confluence with Duck Creek

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

PIONEER TRIBUTARY TO DUCK CREEK

²Elevations computed without consideration of backwater effects from Duck Creek

Table 23: Floodway Data (continued)

FLOODING	G SOURCE		FL	OODWAY		BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Plum Creek A B C D E F G H	645 700 813 4,422 10,082 12,459 14,381 15,504 15,703	120 117 309 218 358 370 239 90 69	971 943 1,316 913 1,305 1,885 1,025 555 510	5.5 5.0 7.8 3.9 2.7 3.5 6.5 7.0	26 21 -10 0 22 -36 2 -66 10	601.8 601.8 601.8 608.1 615.9 619.3 621.7 624.7 625.3	600.5 ² 600.5 ² 600.8 ² 608.1 615.9 619.3 621.7 624.7 625.3	600.5 600.8 600.8 608.1 615.9 619.3 621.7 624.7 625.3	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

¹Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

PLUM CREEK

²Elevations computed without consideration of backwater effects from Fox River

Table 23: Floodway Data (continued)

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	
Sorensons Creek A B C D E F G H I J K L M N O P Q R S	623 1,421 2,661 3,170 4,188 5,002 5,592 6,383 7,158 9,950 11,147 11,851 12,608 13,077 14,500 15,857 16,400 17,410 19,368	146 78 88 321 284 159 60 298 240 258 99 227 75 142 61 93 128 208 204	1,696 334 312 730 449 697 263 818 574 340 244 352 163 515 727 271 303 525 343	2.8 5.3 5.7 2.4 4.0 3.9 6.9 2.2 2.1 3.5 4.9 3.3 7.2 3.0 7.3 4.5 3.9 2.2 3.4	601.9 602.5 606.2 609.9 612.3 615.3 617.6 621.4 622.6 629.3 634.6 637.8 644.6 648.5 654.1 666.4 668.7 674.4 680.4	601.9 602.5 606.2 609.9 612.3 615.3 617.6 621.4 622.6 629.3 634.6 637.8 644.6 648.5 654.1 666.4 668.7 674.4 680.4	601.9 602.5 606.2 609.9 612.3 615.3 617.6 621.4 622.6 629.3 634.6 637.8 644.6 648.5 654.1 666.4 668.7 674.4 680.4	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	

¹ Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

SORENSONS CREEK

Table 23: Floodway Data (continued)

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	
orensons Creek Tributary									
Α	293	64	192	7.5	651.2	651.2	651.2	0.00	
В	688	95	242	6.0	659.6	659.6	659.6	0.00	
Č	1.126	98	234	6.2	671.2	671.2	671.2	0.00	
D	1.716	77	197	7.3	689.0	689.0	689.0	0.00	
E	2.057	173	301	4.8	693.3	693.3	693.3	0.00	
F	2.851	176	481	3.0	698.0	698.0	698.0	0.00	
G	3.425	180	330	4.4	699.8	699.8	699.8	0.00	
Н	3.812	185	461	3.1	701.4	701.4	701.4	0.00	
I	4.786	22	171	8.4	708.0	708.0	708.0	0.00	
J	5.531	155	607	2.4	709.5	709.5	709.5	0.00	
K	6.361	161	505	2.9	711.0	711.0	711.0	0.00	
L	6.924	180	581	2.5	712.4	712.4	712.4	0.00	
M	7.201	164	579	2.5	712.9	712.9	712.9	0.00	
N	7.406	147	454	3.2	713.9	713.9	713.9	0.00	
Ο	7.975	191	517	2.8	715.9	715.9	715.9	0.00	
Р	8.757	130	340	4.2	719.3	719.3	719.3	0.00	
Q	9.978	150	334	4.3	726.3	726.3	726.3	0.00	
R	10.243	148	1129	1.3	735.4	735.4	735.4	0.00	
S	10.561	179	1983	0.7	739.0	739.0	739.0	0.00	
Т	10.920	276	1951	0.7	739.4	739.4	739.4	0.00	
U	11.281	119	711	2.0	739.4	739.4	739.4	0.00	
V	11.538	194	1115	1.3	741.7	741.7	741.7	0.00	
W	12.669	192	752	1.9	741.9	741.9	741.9	0.00	
X	13.340	144	407	3.5	742.3	742.3	742.3	0.00	
Υ	13.811	161	378	3.8	743.4	743.4	743.4	0.00	
Z	14.809	241	460	3.1	747.3	747.3	747.3	0.00	

¹Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

SORENSONS CREEK TRIBUTARY

Table 23: Floodway Data (continued)

FLOODING SOL	JRCE	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
South Branch Ashwaubenon Creek A B C D E F G H I J K L M N O P	82,530 83,171 83,993 84,674 85,395 86,226 87,035 88,088 88,901 89,593 90,516 91,384 92,345 93,221 93,980 94,526	493 310 256 352 243 266 447 337 246 242 193 268 230 147 128 190	4,741 3.148 2.362 2.688 1.897 2.549 3.649 2.431 1.410 1.345 572 834 649 558 498 669	0.3 0.4 0.6 0.5 0.7 0.5 0.9 1.0 2.3 1.6 2.0 2.3 2.6 2.0	661.0 661.0 661.0 661.0 663.2 663.2 663.3 663.3 663.4 663.7 665.0 666.0 668.3 670.1	661.0 661.0 661.0 661.0 663.2 663.2 663.3 663.4 663.7 665.0 666.0 668.3 670.1 670.8	661.0 661.0 661.0 661.0 663.2 663.2 663.3 663.3 663.4 663.7 665.0 666.0 668.3 670.1 670.8	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

¹ Feet above mouth of Ashwaubenon Creek at Fox River

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

SOUTH BRANCH ASHWAUBENON CREEK

Table 23: Floodway Data (continued)

FLOODING	SOURCE		FL	OODWAY		BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)				
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE	
South Branch Little Suamico River			,	,						
A B C D E F G H I J K L M N	384 926 1,393 2,784 3,815 5,498 5,934 6,776 7,160 7,790 8,289 8,644 9,374 10,444	345 84 870 186 275 156 291 199 18 174 301 32 595 1,329	1,330 312 1,633 223 388 228 565 326 86 252 301 148 622 2,600	1.4 2.2 1.3 9.5 5.1 8.7 3.1 5.8 7.3 7.3 6.0 7.8 4.1 1.0	16 41 192 -23 100 128 139 87 5 86 250 -16 109 112	784.9 785.4 785.7 791.7 795.8 800.3 801.4 802.6 804.6 807.8 809.0 809.8 810.8 811.1	784.9 785.4 785.7 791.7 795.8 800.3 801.4 802.6 804.6 807.8 809.0 809.8 810.8 811.1	784.9 785.4 785.7 791.7 795.8 800.3 801.4 802.6 804.6 807.8 809.0 809.8 810.8 811.1	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

SOUTH BRANCH LITTLE SUAMICO RIVER

¹Feet above Limit of Detailed Study*

* Limit of Detailed Study is approximately 85 feet downstream of Corporate Way

Table 23: Floodway Data (continued)

FLOODING SOUR	RCE	FLOODWAY			V	BASE F VATER-SURFAC	CE ELEVATION	
	T				(FEET NAVD)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
South Tributary to Willow								
Creek A B C D E F G H I J	882 1,582 2,152 2,642 3,302 3,892 4,732 5,412 5,922 6,237	754 858 225 238 354 76 78 30 32 40	1,790 1,085 369 99 202 95 210 69 72 130	0.2 0.4 0.8 3.0 1.4 3.1 1.0 2.8 2.7 1.5	590.2 590.2 590.2 590.2 590.5 591.1 591.3 592.3 598.7	587.4 ² 587.5 ² 587.8 ² 589.6 ² 590.5 591.1 591.3 592.3 598.7	587.4 587.5 587.8 589.6 590.5 591.1 591.3 592.3 598.7	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

¹Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

SOUTH TRIBUTARY TO WILLOW CREEK

²Elevation computed without consideration of backwater effects from Willow Creek

FLOODING SOL	JRCE		FLOODWA	Y	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	
Spring Creek			,	,					
Α	538	563	2,699	2.0	595.4	595.4	595.4	0.0	
В	1,246	214	680	8.3	595.9	595.9	595.9	0.0	
С	1,465	236	2,183	3.0	600.3	600.3	600.3	0.0	
D	1,972	375	8,960	1.5	601.7	601.7	601.7	0.0	
E	2,543	431	3,140	0.9	602.0	602.0	602.0	0.0	
F	3,788	232	737	2.8	602.4	602.4	602.4	0.0	
G	4,062	146	557	3.7	603.2	603.2	603.2	0.0	
Н	4,332	544	2,963	0.7	605.0	605.0	605.0	0.0	
I	4,761	284	1,308	2.0	605.0	605.0	605.0	0.0	
J	5,880	331	873	2.4	608.3	608.3	608.3	0.0	
K	7,717	352	780	2.6	614.7	614.7	614.7	0.0	
L	8,506	197	1,250	2.2	619.4	619.4	619.4	0.0	
M	9,085	420	2,673	0.8	624.2	624.2	624.2	0.0	
N	9,797	253	951	2.2	624.2	624.2	624.2	0.0	
0	10,861	305	622	3.4	626.1	626.1	626.1	0.0	
Р	11,697	65	630	7.6	629.4	629.4	629.4	0.0	
Q	12,406	223	1,585	1.3	637.5	637.5	637.5	0.0	
R	13,503	267	929	2.2	637.7	637.7	637.7	0.0	
S	14,584	66	436	7.4	644.9	644.9	644.9	0.0	
T	15,300	399	2,282	1.0	652.9	652.9	652.9	0.0	
U	15,779	232	675	4.4	654.9	654.9	654.9	0.0	
V	16,392	209	434	4.7	670.0	670.0	670.0	0.0	
W	17,560	84	832	7.6	693.0	693.0	693.0	0.0	
Χ	17,908	162	2,383	1.4	703.0	703.0	703.0	0.0	
Υ	19,048	105	529	3.1	703.0	703.0	703.0	0.0	
Z	20,440	121	282	5.5	705.6	705.6	705.6	0.0	

¹ Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

SPRING CREEK

Table 23: Floodway Data (continued)

FLOODING SOU	RCE		FLOODWA	Y	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	
Spring Creek (continued)									
AA	20,877	122	397	3.9	708.9	708.9	708.9	0.0	
AB	21,170	146	533	2.9	711.2	711.2	711.2	0.0	
AC	22,622	134	438	3.5	714.0	714.0	714.0	0.0	
AD	23,090	119	399	3.9	717.0	717.0	717.0	0.0	
AE	24,825	136	561	3.1	720.5	720.5	720.5	0.0	
AF	25,202	163	1,653	1.2	727.8	727.8	727.8	0.0	
AG	26,647	177	551	2.9	728.4	728.4	728.4	0.0	
AH	26,959	175	314	4.9	730.3	730.3	730.3	0.0	
Al	28,153	141	527	2.7	736.6	736.6	736.6	0.0	
AJ	28,910	116	264	5.3	739.0	739.0	739.0	0.0	
AK	29,248	165	638	2.2	740.9	740.9	740.9	0.0	
AL	30,617	127	256	5.5	745.0	745.0	745.0	0.0	
AM	31,131	184	1,163	1.2	750.7	750.7	750.7	0.0	
AN	33,115	131	368	3.8	751.2	751.2	751.2	0.0	
AO	34,332	155	224	6.2	755.2	755.2	755.2	0.0	
AP	34,757	195	440	3.2	757.5	757.5	757.5	0.0	
AQ	36,769	291	503	3.7	763.9	763.9	763.9	0.0	
AR	37,486	218	641	1.1	770.0	770.0	770.0	0.0	
AS	38,236	223	228	1.2	770.9	770.9	770.9	0.0	
AT	38,823	97	153	1.9	775.4	775.4	775.4	0.0	
AU	39,200	177	566	0.6	779.4	779.4	779.4	-0.1	
AV	40,051	145	516	0.6	783.5	783.5	783.5	0.0	

¹ Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

SPRING CREEK

Table 23: Floodway Data (continued)

FLOODING SOUI	RCE		FLOODWA	Y	V	BASE F VATER-SURFAC (FEET N	E ELEVATION	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Spring Creek Tributary A A B C D E F G H I J K L M N O P Q	356 1,384 2,344 2,698 3,051 3,552 4,188 4,581 5,146 5,694 6,046 6,649 6,935 7,309 7,693 8,031 8,283	162 221 130 113 143 100 71 93 89 169 95 108 37 144 120 57 100	1,213 1,385 181 341 436 189 153 218 144 382 287 453 337 179 104 293	0.5 0.4 3.1 1.8 1.3 3.0 3.7 2.8 3.8 1.4 1.9 1.3 1.8 0.9 1.7 5.2 1.8	703.0 705.7 706.1 707.7 708.4 711.1 714.0 717.3 721.0 726.2 727.0 734.5 736.1 737.0 737.3 739.3 743.4	703.0 705.7 706.1 707.7 708.4 711.1 714.0 717.3 721.0 726.2 727.0 734.5 736.1 737.0 737.3 739.3 743.4	703.0 705.7 706.1 707.7 708.4 711.1 714.0 717.3 721.0 726.2 727.0 734.5 736.1 737.0 737.3 739.3 743.4	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

¹Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

SPRING CREEK TRIBUTARY A

Table 23: Floodway Data (continued)

FLOODING SOUR	RCE	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
Spring Creek Tributary A Ditch A B C	42 285 551	59 19 34	171 33 111	1.4 6.9 2.1	735.9 738.1 739.5	735.9 738.1 739.5	735.9 738.1 739.5	0.0 0.0 0.0

¹Feet above confluence with Spring Creek Tributary A

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

SPRING CREEK TRIBUTARY A DITCH

Table 23: Floodway Data (continued)

FLOODING SOU	RCE	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
Spring Creek Tributary B A B C D E F G H	329 546 969 1,345 1,694 2,160 2,539 2,801 3,362	51 54 37 45 42 39 60 240 260	79 91 47 66 63 49 110 1,417 241	3.8 3.2 6.3 4.5 3.2 4.1 2.5 0.3 0.8	734.3 736.6 742.5 747.6 750.7 753.5 756.1 758.9 759.6	734.3 736.6 742.5 747.6 750.7 753.5 756.1 758.9 759.6	734.3 736.6 742.5 747.6 705.7 753.5 756.1 758.9 759.7	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1

¹Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

SPRING CREEK TRIBUTARY B

Table 23: Floodway Data (continued)

FLOODING	SOURCE		FL	OODWAY		W	BASE FLOOD WATER-SURFACE ELEVATION (FEET NAVD)		
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREAS
Suamico River			,	,					
Α	1,054	149	1,877	2.2	310	*	584.1 ²	584.1	0.0
В	3,611	474	1,102	3.7	-142	584.5	584.5	584.5	0.0
С	6,126	366	1,783	2.3	146	585.3	585.3	585.3	0.0
D	7,792	721	1,541	2.6	583	585.7	585.7	585.7	0.0
E	8,015	307	2,247	1.8	-127	586.6	586.6	586.6	0.0
F	13,473	162	936	4.3	18	587.3	587.3	587.3	0.0
G	13,866	228	1,044	3.9	38	587.8	587.8	587.8	0.0
Н	14,533	126	993	4.1	-32	588.5	588.5	588.5	0.0
I	14,717	100	909	4.5	5	589.3	589.3	589.3	0.0
J	15,529	210	1,688	2.4	-40	591.2	591.2	591.2	0.0
K	17,153	433	1,664	2.2	-58	591.6	591.6	591.6	0.0
L	18,759	884	2,979	1.2	370	592.4	592.4	592.4	0.0
M	19,595	651	2,666	1.4	130	596.1	596.1	596.1	0.0
N	20,778	539	1,625	2.3	-2	596.3	596.3	596.3	0.0
Ο	22,814	96	943	3.9	-80	597.4	597.4	597.4	0.0
Р	23,005	140	1,087	3.4	-151	597.9	597.9	597.9	0.0
Q	25,075	398	2,140	1.7	51	599.1	599.1	599.1	0.0
R	27,732	844	1,308	2.8	713	601.8	601.8	601.8	0.0
S	29,034	630	1,977	1.9	152	605.6	605.6	605.6	0.0
T	33,697	72	498	7.7	-196	609.5	609.5	609.5	0.0
U	34,083	250	868	4.2	-3	611.1	611.1	611.1	0.0
V	38,838	754	1,314	2.5	666	617.3	617.3	617.3	0.0
W	40,990	161	640	5.2	-24	623.7	623.7	623.7	0.0
X	42,265	122	528	6.3	-80	626.4	626.4	626.4	0.0
Y	44,189	75	294	11.2	-37	635.5	635.5	635.5	0.0
Z	45,614	83	499	6.6	-13	642.2	642.2	642.2	0.0

¹Feet above mouth

23

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

SUAMICO RIVER

²Elevations computed without consideration of backwater effects from Green Bay

^{*} Controlled by coastal flooding. See Flood Insurance Rate Map for regulatory base flood elevations

Table 23: Floodway Data (continued)

FLOODING	S SOURCE		FL	OODWAY		W	BASE FL ATER-SURFAC FEET N	E ELEVATION	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Tributary 1 to Dutchman Creek Southwest Tributary A B C D E	630 1,405 1,945 2,265 2,815	88 42 36 47 35	56 39 45 57 26	2.5 3.6 3.1 2.5 4.9	-13 -12 -31 -4 -5	642.1 649.1 656.6 660.3 664.5	642.1 649.1 656.6 660.3 664.5	642.1 649.1 656.6 660.3 664.5	0.0 0.0 0.0 0.0 0.0

¹Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

TRIBUTARY 1 TO DUTCHMAN CREEK SOUTHWEST TRIBUTARY

Table 23: Floodway Data (continued)

FLOODING	SOURCE		FL	BASE FLOOD FLOODWAY WATER-SURFACE ELEVA (FEET NAVD)				E ELEVATION	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Tributary 2 to Dutchman Creek Southwest Tributary A B C	0 770 2,550	310 57 52	565 37 53	0.3 4.1 2.6	101 -15 -5	642.1 646.7 665.6	642.1 646.7 665.6	642.1 646.7 665.6	0.0 0.0 0.0

¹ Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

TRIBUTARY 2 TO DUTCHMAN CREEK SOUTHWEST TRIBUTARY

Table 23: Floodway Data (continued)

G SOURCE		FLOODWAY				WATER-SURFACE ELEVATION (FEET NAVD)		
DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
		,						
400 1,950	210 81	159 84	1.5 2.4	23 5	649.0 663.7	649.0 663.7	649.0 663.7	0.0 0.0
	DISTANCE ¹	DISTANCE ¹ WIDTH (FEET)	DISTANCE ¹ WIDTH (FEET) SECTION AREA (SQUARE FEET) 400 210 159	DISTANCE ¹ WIDTH (FEET) SECTION AREA (SQUARE FEET) (FEET PER SECOND) 400 210 159 1.5	DISTANCE ¹ WIDTH (FEET) SECTION AREA (SQUARE FEET) SECOND) WIDTH REDUCED FROM PRIOR STUDY	DISTANCE ¹ WIDTH (FEET) SECTION AREA (SQUARE FEET) WELOCITY (FEET PER SECOND) REGULATORY 400 210 159 1.5 23 649.0	SOURCE FLOODWAY WATER-SURFAC (FEET N SECTION AREA (SQUARE FEET) SECOND) MEAN VELOCITY (FEET PER SECOND) FROM PRIOR STUDY REGULATORY FLOODWAY WITHOUT FLOODWAY WITHOUT FLOODWAY	DISTANCE ¹ WIDTH (SQUARE FEET) SECOND) MEAN VELOCITY (FEET PER SECOND) FROM PRIOR STUDY REGULATORY FLOODWAY FLOODWAY 400 210 159 1.5 23 649.0 649.0 649.0

¹Feet above mouth

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

TRIBUTARY 3 TO DUTCHMAN CREEK SOUTHWEST TRIBUTARY

Table 23: Floodway Data (continued)

FLOODING SC	DURCE		FLOODWAY		WATE		E FLOOD LEVATION (FE	ET NAVD)
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
TROUT CREEK								
A-D	*	*	*	*	*	*	*	*
E	6,389	205	390	4.1	628.8	628.8	628.8	0.0
F	12,672	370	1,090	1.5	640.1	640.1	640.1	0.0
G	15,893	60	180	9.0	649.7	649.7	649.7	0.0
Н	15,998	10	130	12.3	657.7	657.7	657.7	0.0
1	16,051	50	685	2.3	660.7	660.7	660.7	0.0
J	16,157	230	2,465	0.6	663.2	663.2	663.2	0.0
K	16,262	370	4,530	0.3	663.2	663.2	663.2	0.0
L	17,160	365	3,870	0.4	663.2	663.2	663.2	0.0
M	23,179	700	520	2.9	663.4	663.4	663.4	0.0
N	24,394	70	330	4.5	667.9	667.9	667.9	0.0
0	24,605	215	1,345	1.1	672.4	672.4	672.4	0.0
Р	29,779	400	445	3.4	676.0	676.0	676.0	0.0
Q	29,885	480	1,155	1.3	679.1	679.1	679.1	0.0
R	36,115	280	655	2.3	687.6	687.6	687.6	0.0
S	39,917	200	860	1.3	693.3	693.3	693.3	0.0
T	44,510	90	275	4.0	702.2	702.2	702.2	0.0
U	44,669	25	165	6.7	702.9	702.9	702.9	0.0
V	46,517	70	150	4.7	706.8	706.8	706.8	0.0
W	49,474	45	100	7.0	716.4	716.4	716.4	0.0
X	49,579	120	105	6.7	719.4	719.4	719.4	0.0

¹Feet above confluence with Duck Creek

BROWN COUNTY, WI
AND INCORPORATED AREAS

FLOODWAY DATA

TROUT CREEK

^{*}Data not shown because flooding is influenced by confluence with Duck Creek

Table 23: Floodway Data (continued)

FLOODING SOUR	RCE	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
Unnamed Tributary to Green Bay A B C D E F G	283 429 665 901 1,154 1,428 2,135	61 37 47 41 62 68 81	112 90 43 55 47 76 78	2.5 4.0 4.1 3.2 3.7 2.3 2.3	591.0 594.4 601.3 604.9 610.9 613.8 624.1	591.0 594.4 601.3 604.9 610.9 613.8 624.1	591.0 594.4 601.3 604.9 610.9 613.8 624.1	0.0 0.0 0.0 0.0 0.0 0.0

¹Feet above confluence with Green Bay

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

UNNAMED TRIBUTARY TO GREEN BAY

Table 23: Floodway Data (continued)

FLOODING SOUR	RCE	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
Vanguard Way Tributary to Lancaster Creek A B C D	184 398 602 755	22 16 21 16	20 19 43 25	9.2 9.7 4.3 7.3	613.5 618.5 623.2 628.8	613.5 618.5 623.2 628.8	613.5 618.5 623.2 628.8	0.0 0.0 0.0 0.0

¹Feet above confluence with Lancaster Creek

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

VANGUARD WAY TRIBUTARY TO LANCASTER CREEK

FLOODING	SOURCE		FL	FLOODWAY			BASE FL ATER-SURFAC (FEET N	E ELEVATION	
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
West Verlin Tributary to Willow Creek A B C D E F G H	85 1,038 1,516 1,722 2,395 2,635 3,595 4,592 5,500	271 102 185 40 39 60 26 52 98	1,638 286 1,133 345 287 195 651 337 778	0.2 1.2 0.6 2.4 2.0 1.5 2.9 2.5 1.6	-17 -6 -1 3 3 -26 -4 9 -1	589.9 589.9 589.9 590.5 591.0 592.5 594.5 596.6	587.3 ² 587.3 ² 589.0 ² 589.1 ² 590.5 591.0 592.5 594.5 596.6	587.3 587.3 589.0 589.1 590.5 591.0 592.5 594.5 596.6	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

¹ Feet above mouth at Willow Creek

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

WEST VERLIN TRIBUTARY TO WILLOW CREEK

² Elevations computed without consideration of backwater effects

Table 23: Floodway Data (continued)

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
Willow Creek			,	,		_		
Α	1,558	287	1,304	1.5	589.9	587.3 ²	587.3	0.0
В	2,571	1,207	4,275	0.5	589.9	588.7 ²	588.7	0.0
С	3,584	1,092	1,522	1.3	589.9	588.8 ²	588.8	0.0
D	4,413	860	4,138	0.5	590.2	590.2	590.2	0.0
Е	5,019	694	883	2.2	590.2	590.2	590.2	0.0
F	5,364	878	2,458	0.8	590.5	590.5	590.5	0.0
G	6,515	641	993	1.9	590.8	590.8	590.8	0.0
Н	6,876	219	333	5.1	592.6	592.6	592.6	0.0
I	8,645	54	189	8.9	596.4	596.4	596.4	0.0
J	9,345	64	229	7.4	600.1	600.1	600.1	0.0
K	9,706	131	319	5.3	603.9	603.9	603.9	0.0
L	10,175	252	691	2.4	606.5	606.5	606.5	0.0
M	11,247	222	533	3.2	608.3	608.3	608.3	0.0
N	12,204	315	711	2.3	610.8	610.8	610.8	0.0
0	13,099	171	463	3.5	612.2	612.2	612.2	0.0
Р	14,727	265	747	2.2	616.3	616.3	616.3	0.0
Q	16,400	350	493	3.3	619.6	619.6	619.6	0.0
R	16,575	316	650	2.5	620.5	620.5	620.5	0.0
S	17,239	330	664	2.4	622.2	622.2	622.2	0.0
Т	17,648	199	851	1.9	624.2	624.2	624.2	0.0
U	17,909	198	676	2.3	625.1	625.1	625.1	0.0
V	18,542	185	758	2.1	627.1	627.1	627.1	0.0
W	18,849	140	490	3.1	628.6	628.6	628.6	0.0
X	19,580	226	789	1.1	629.4	629.4	629.4	0.0
Υ	20,562	69	586	1.5	643.4	643.4	643.4	0.0
Z	21,669	272	1,222	0.7	643.5	643.5	643.5	0.0
15 of the over month								

¹Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS

FLOODWAY DATA

WILLOW CREEK

²Elevations computed without consideration of backwater effects from East River.

Table 23: Floodway Data (continued)

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 ²	WITH FLOODWAY	INCREASE
Willow Creek (continued) AA AB AC AD AE AF AG AH AI AJ AK AL AM AN AO AP AQ AR AS	22,424 23,242 23,600 24,549 24,904 25,870 26,530 26,868 27,254 27,711 28,469 30,570 31,228 32,402 34,038 34,559 35,420 36,682 39,191	201 95 275 116 165 247 206 8 69 249 243 178 208 236 276 173 214 123 113	367 171 3,135 177 255 382 328 53 1,084 2,219 937 348 2,080 1,876 762 242 325 236 114	2.3 4.9 0.3 4.6 3.2 2.1 2.5 15.2 0.8 0.4 0.9 2.3 0.3 0.3 0.8 2.5 1.8 2.5 3.2	643.8 650.0 665.3 667.5 673.6 680.3 683.1 691.4 701.2 701.2 701.3 709.8 726.5 726.5 731.6 734.1 738.8 746.2 760.3	643.8 650.0 665.3 667.5 673.6 680.3 683.1 691.4 701.2 701.2 701.3 709.8 726.5 726.5 731.6 734.1 738.8 746.2 760.3	643.8 650.0 665.3 667.5 673.6 680.3 683.1 691.4 701.2 701.2 701.3 709.8 726.5 731.6 734.1 738.8 746.2 760.3	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

TABLE 23

FEDERAL EMERGENCY MANAGEMENT AGENCY

BROWN COUNTY, WI AND INCORPORATED AREAS **FLOODWAY DATA**

WILLOW CREEK

¹Feet above mouth ²Elevation reflects East River backwater elevation

Table 24: Flood Hazard and Non-Encroachment Data for Selected Streams [Not applicable for this Flood Risk Project]

6.4 Coastal Flood Hazard Mapping

Flood insurance zones and BFEs including the wave effects were identified on each transect based on the results from the onshore wave hazard analyses. Between transects, elevations were interpolated using topographic maps, land-use and land-cover data, and knowledge of coastal flood processes to determine the aerial extent of flooding. Sources for topographic data are shown in Table 22.

Zone VE is subdivided into elevation zones and BFEs are provided on the FIRM.

The limit of Zone VE shown on the FIRM is defined as the farthest inland extent of any of these criteria (determined for the 1-percent-annual-chance flood condition):

- The primary frontal dune zone is defined in 44 CFR Section 59.1 of the NFIP regulations. "The primary frontal dune represents a continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes that occur immediately landward and adjacent to the beach. The primary frontal dune zone is subject to erosion and overtopping from high tides and waves during major coastal storms. The inland limit of the primary frontal dune zone occurs at the point where there is a distinct change from a relatively steep slope to a relatively mild slope."
- The wave runup Zone VE occurs where the (eroded) ground profile is 3.0 feet or more below the 2-percent wave runup elevation.
- The wave overtopping splash Zone VE is the area landward of the crest of an overtopped barrier, in cases where the potential 2-percent wave runup exceeds the barrier crest elevation.
- The breaking wave height Zone VE occurs where 3-foot or greater wave heights could occur.
- The high-velocity flow Zone VE is landward of the overtopping splash zone (or area on a sloping beach or other shore type), where the product of depth of flow times the flow velocity squared (hv2) is greater than or equal to 200 ft3/sec2.

The SFHA boundary indicates the landward extent of the coastal SFHAs shown on the FIRM as Zones VE, AE, AO, AH, or A.

Table 25 indicates the coastal analyses used for floodplain mapping and the criteria used to determine the inland limit of the open-coast Zone VE and the SFHA boundary at each transect.

Table 25: Summary of Coastal Transect Mapping Considerations

Coastal Transect	Primary Frontal Dune (PFD) Identified	Wave Runup Analysis Zone Designation and BFE	Wave Height Analysis Zone Designation and BFE	Zone VE Limit	SFHA Boundary
		(ft NAVD88)	(ft NAVD88)		
BR-01^	N/A	N/A	VE 587, AE 586 - 585	Breaking Wave Height	SWEL + Wave Setup
BR-02	N/A	N/A	VE 587, AE 585	Breaking Wave Height	SWEL + Wave Setup
BR-03	N/A	VE 586, AE 586	AE 585	Runup	SWEL + Wave Setup
BR-04^	N/A	N/A	VE 587, AE 586 - 585	Breaking Wave Height	SWEL + Wave Setup
BR-05^	N/A	N/A	VE 587, AE 586 - 585	Breaking Wave Height	SWEL + Wave Setup
BR-06	N/A	VE 587	AE 586 - 585	Runup	SWEL + Wave Setup
BR-07^	N/A	VE 587	AE 586	Runup	Runup
BR-08	N/A	VE 588, AO3	AE 585	Runup	SWEL
BR-09 [^]	N/A	VE 588, AO1, AE 585	N/A	Runup	Runup
BR-10	N/A	N/A	VE 588	Runup	Runup
BR-11	N/A	N/A	VE 588	Runup	Runup
BR-12	N/A	N/A	VE 587, AE 586	Breaking Wave Height	SWEL + Wave Setup
BR-13	N/A	AE 586	VE 587	Breaking Wave Height	Runup
BR-14	N/A	N/A	VE 587, AE 585	Breaking Wave Height	SWEL + Wave Setup
BR-15	N/A	N/A	VE 587, AE 586 - 585	Breaking Wave Height	SWEL + Wave Setup
BR-16	N/A	AE 586	VE 587	Breaking Wave Height	Runup
BR-17	N/A	VE 586, AE 586	VE 588	Runup	Runup
BR-18	N/A	VE 588	N/A	Runup	Runup
BR-19	N/A	N/A	VE 587, AE 586	Breaking Wave Height	Runup
BR-20 (Failed)	N/A	VE 587	VE 587	Runup	Runup
BR-21 (Failed)	N/A	VE 587	VE 587	Runup	Runup
BR-22	N/A	AE 586	VE 587	Runup	Runup

[^]Data provided for offshore shoreline only, where transect crosses multiple shorelines

A LiMWA boundary has also been added in coastal areas subject to overland wave propagation for use by local communities in safe rebuilding practices. The LiMWA represents the approximate landward limit of the 1.5-foot breaking wave.

6.5 FIRM Revisions

This FIS Report and the FIRM are based on the most up-to-date information available to FEMA at the time of its publication; however, flood hazard conditions change over time. Communities or private parties may request flood map revisions at any time. Certain types of requests require submission of supporting data. FEMA may also initiate a revision. Revisions may take several forms, including Letters of Map Amendment (LOMAs), Letters of Map Revision Based on Fill (LOMR-Fs), Letters of Map Revision (LOMRs) (referred to collectively as Letters of Map Change (LOMCs)), Physical Map Revisions (PMRs), and FEMA-contracted restudies. These types of revisions are further described below. Some of these types of revisions do not result in the republishing of the FIS Report. To assure that any user is aware of all revisions, it is advisable to contact the community repository of flood-hazard data (shown in Table 30, "Map Repositories").

6.5.1 Letters of Map Amendment

A LOMA is an official revision by letter to an effective NFIP map. A LOMA results from an administrative process that involves the review of scientific or technical data submitted by the owner or lessee of property who believes the property has incorrectly been included in a designated SFHA. A LOMA amends the currently effective FEMA map and establishes that a specific property is not located in a SFHA. A LOMA cannot be issued for properties located on the PFD (primary frontal dune).

To obtain an application for a LOMA, visit www.fema.gov/flood-maps/change-your-flood-zone and download the form "MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill". Visit the "Flood Map-Related Fees" section to determine the cost, if any, of applying for a LOMA.

FEMA offers a tutorial on how to apply for a LOMA. The LOMA Tutorial Series can be accessed at https://www.fema,gov/online-tutorials.

For more information about how to apply for a LOMA, call the FEMA Mapping and Insurance eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627).

6.5.2 Letters of Map Revision Based on Fill

A LOMR-F is an official revision by letter to an effective NFIP map. A LOMR-F states FEMA's determination concerning whether a structure or parcel has been elevated on fill above the base flood elevation and is, therefore, excluded from the SFHA.

Information about obtaining an application for a LOMR-F can be obtained in the same manner as that for a LOMA, by visiting www.fema.gov/flood-maps/change-your-flood-zone for the "MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill" or by calling the FEMA Mapping and Insurance eXchange, toll free, at 1-877-FEMA MAP (1-877-336-2627). Fees for applying for a LOMR-F, if any, are listed in the "Flood Map-Related Fees" section.

A tutorial for LOMR-F is available at https://www.fema.gov/online-tutorials.

6.5.3 Letters of Map Revision

A LOMR is an official revision to the currently effective FEMA map. It is used to change flood zones, floodplain and floodway delineations, flood elevations and planimetric features. All requests for LOMRs should be made to FEMA through the chief executive officer of the community, since it is the community that must adopt any changes and revisions to the map. If the request for a LOMR is not submitted through the chief executive officer of the community, evidence must be submitted that the community has been notified of the request.

To obtain an application for a LOMR, visit<u>www.fema.gov/flood-maps/change-your-flood-zone</u> and download the form "MT-2 Application Forms and Instructions for Conditional Letters of MapRevision and Letters of Map Revision". Visit the "Flood Map-Related Fees" section to determine the cost of applying for a LOMR. For more information about how to apply for a LOMR, call the FEMA Mapping and Insurance eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627) to speak to a Map Specialist.

Previously issued mappable LOMCs (including LOMRs) that have been incorporated into the Brown County FIRM are listed in Table 26.

Case Effective Number Date Flooding Source FIRM Panel(s) 55009C0257G. 17-05-2419P 10-20-2017 Willow Creek 55009C0276G 55009C0183G. 19-05-1294P 02-15-2019 Lake Michigan 55009C0184G 55009C0256G. 20-05-2968P 10-16-2020 Ashwaubenon Creek 55009C0258G

Table 26: Incorporated Letters of Map Change

6.5.4 Physical Map Revisions

A Physical Map Revisions (PMR) is an official republication of a community's NFIP map to effect changes to base flood elevations, floodplain boundary delineations, regulatory floodways and planimetric features. These changes typically occur as a result of structural works or improvements, annexations resulting in additional flood hazard areas or correction to base flood elevations or SFHAs.

The community's chief executive officer must submit scientific and technical data to FEMA to support the request for a PMR. The data will be analyzed and the map will be revised if warranted. The community is provided with copies of the revised information and is afforded a review period. When the base flood elevations are changed, a 90-day appeal period is provided. A 6-month adoption period for formal approval of the revised map(s) is also provided.

For more information about the PMR process, please visit www.fema.gov and visit the "Flood Map Revision Processes" section.

6.5.5 Contracted Restudies

The NFIP provides for a periodic review and restudy of flood hazards within a given community. FEMA accomplishes this through a national watershed-based mapping needs assessment strategy, known as the Coordinated Needs Management Strategy (CNMS). The CNMS is used by FEMA to assign priorities and allocate funding for new flood hazard analyses used to update the FIS Report and FIRM. The goal of CNMS is to define the validity of the engineering study data within a mapped inventory. The CNMS is used to track the assessment process, document engineering gaps and their resolution, and aid in prioritization for using flood risk as a key factor for areas identified for flood map updates. Visit www.fema.gov to learn more about the CNMS or contact the FEMA Regional Office listed in Section 8 of this FIS Report.

6.5.6 Community Map History

The current FIRM presents flooding information for the entire geographic area of Brown County. Previously, separate FIRMs, Flood Hazard Boundary Maps (FHBMs) and/or Flood Boundary and Floodway Maps (FBFMs) may have been prepared for the incorporated communities and the unincorporated areas in the county that had identified SFHAs. Current and historical data relating to the maps prepared for the project area are presented in Table 27, "Community Map History." A description of each of the column headings and the source of the date is also listed below.

- Community Name includes communities falling within the geographic area shown on the FIRM, including those that fall on the boundary line, nonparticipating communities, and communities with maps that have been rescinded. Communities with No Special Flood Hazards are indicated by a footnote. If all maps (FHBM, FBFM, and FIRM) were rescinded for a community, it is not listed in this table unless SFHAs have been identified in this community.
- Initial Identification Date (First NFIP Map Published) is the date of the first NFIP
 map that identified flood hazards in the community. If the FHBM has been
 converted to a FIRM, the initial FHBM date is shown. If the community has never
 been mapped, the upcoming effective date or "pending" (for Preliminary FIS
 Reports) is shown. If the community is listed in Table 27 but not identified on the
 map, the community is treated as if it were unmapped.
- Initial FHBM Effective Date is the effective date of the first FHBM. This date may be the same date as the Initial NFIP Map Date.
- FHBM Revision Date(s) is the date(s) that the FHBM was revised, if applicable.
- Initial FIRM Effective Date is the date of the first effective FIRM for the community.
- FIRM Revision Date(s) is the date(s) the FIRM was revised, if applicable. This is the revised date that is shown on the FIRM panel, if applicable. As countywide studies are completed or revised, each community listed should have its FIRM dates updated accordingly to reflect the date of the countywide study. Once the FIRMs exist in countywide format, as PMRs of FIRM panels within the county are completed, the FIRM Revision Dates in the table for each community affected by the PMR are updated with the date of the PMR, even if the PMR did not revise all the panels within that community.

The initial effective date for the Brown County FIRMs in countywide format was 08/18/2009.

Table 27: Community Map History

Community Name/ Tribal Nation	Initial Identification Date	Initial FHBM Effective Date	FHBM Revision Date(s)	Initial FIRM Effective Date	FIRM Revision Date(s)
Allouez, Village of ²	08/18/2009	N/A	N/A	08/18/2009	05/09/2023
Ashwaubenon, Village of	10/27/1978	10/27/1978	N/A	09/28/1979	05/09/2023 03/17/2014 08/18/2009
Bellevue, Village of ²	08/18/2009	N/A	N/A	08/18/2009	05/09/2023
Brown County, Unincorporated Areas	04/17/1978	N/A	N/A	04/17/1978	05/09/2023 03/17/2014 08/18/2009 11/04/1992 2/19/1982
De Pere, City of	12/28/1973	12/28/1973	06/04/1976 02/23/1979	07/02/1981	05/09/2023 08/18/2009
Denmark, Village of ^{1,2}	08/18/2009	N/A	N/A	08/18/2009	N/A
Green Bay, City of	08/30/1974	08/30/1974	11/07/1975	09/30/1977	05/09/2023 03/17/2014 08/18/2009 06/01/1984 08/14/1981 01/11/1980
Hobart, Village of	04/17/1978	N/A	N/A	04/17/1978	03/17/2014 08/18/2009 11/04/1992 02/19/1982
Howard, Village of	12/28/1973	12/28/1973	05/14/1976	02/17/1982	05/09/2023 03/17/2014 08/18/2009
The Oneida Nation of Wisconsin ²	08/18/2009	N/A	N/A	08/18/2009	03/17/2014
Pulaski, Village of	05/24/1974	05/24/1974	05/28/1976	08/03/1981	03/17/2014 08/18/2009
Suamico, Village of ²	08/18/2009	N/A	N/A	08/18/2009	05/09/2023 03/17/2014
Wrightstown, Village of	08/22/1975	08/22/1975	N/A	05/19/1981	08/18/2009

¹ No Special Flood Hazard Areas identified

SECTION 7.0 – CONTRACTED STUDIES AND COMMUNITY COORDINATION

7.1 Contracted Studies

Table 28 provides a summary of the contracted studies, by flooding source, that are included in this FIS Report.

² This community did not have a FIRM prior to the first countywide FIRM for Brown County

Table 28: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities/ Tribal Nations
Apple Creek	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
Ash Street Tributary to Lancaster Creek	08/18/2009	Wisconsin Department of Natural Resources (WDNR)	*	August 2006	Howard, Village of
Ashwaubenon Creek	08/18/2009	WIDNR	HSFE05-12- J-0014	August 2006	Ashwaubenon, Village of; Brown County, Unincorporated Areas; De Pere, City of
Ashwaubenon Creek (Middle)	08/18/2009	WIDNR	*	August 2006	Brown County, Unincorporated Areas; De Pere, City of
Ashwaubenon Creek (Upper)	08/18/2009	WIDNR	*	August 2006	Brown County, Unincorporated Areas
Baird Creek	08/18/2009	WIDNR	*	August 2006	Green Bay, City of
Baird Creek Tributary	08/18/2009	WIDNR	*	August 2006	Green Bay, City of
Baird Creek Tributary 6	08/18/2009	WIDNR	*	August 2006	Green Bay, City of
Bakers Creek	08/18/2009	WIDNR	*	August 2006	Howard, Village of
Bakers Creek Tributary	08/18/2009	WIDNR	*	August 2006	Howard, Village of
Barina Creek	08/18/2009	WIDNR	*	August 2006	Green Bay, City of
Beaver Dam Creek	08/18/2009	WIDNR	*	August 2006	Green Bay, City of; Howard, Village of
Bower Creek	08/18/2009	WIDNR	*	August 2006	Bellevue, Village of; Brown County, Unincorporated Areas

^{*} Data unavailable

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities/ Tribal Nations
Bower Creek Tributary	08/18/2009	WIDNR	*	August 2006	Brown County, Unincorporated Areas
Bower Creek Tributary 1	08/18/2009	WIDNR	*	August 2006	Bellevue, Village of; Brown County, Unincorporated Areas
Bower Creek Tributary 2	08/18/2009	WIDNR	*	August 2006	Bellevue, Village of; Brown County, Unincorporated Areas
Bower Creek Tributary A	08/18/2009	WIDNR	*	August 2006	Bellevue, Village of; Brown County, Unincorporated Areas
Bower Creek Tributary B	08/18/2009	WIDNR	*	August 2006	Bellevue, Village of; Brown County, Unincorporated Areas
Branch of Plum Creek	08/18/2009	WIDNR	*	August 2006	Brown County, Unincorporated Areas
Branch of Plum Creek Lower Tributary	08/18/2009	WIDNR	*	August 2006	Brown County, Unincorporated Areas
Branch of Plum Creek Upper Tributary	08/18/2009	WIDNR	*	August 2006	Brown County, Unincorporated Areas
Branch River	08/18/2009	WIDNR	*	August 2006	Brown County, Unincorporated Areas
Branch River Downstream	08/18/2009	WIDNR	*	August 2006	Brown County, Unincorporated Areas
Branch River Upstream	08/18/2009	WIDNR	*	August 2006	Brown County, Unincorporated Areas
Duck Creek	08/18/2009	WIDNR	*	August 2006	Green Bay, City of; Hobart and Howard, Villages of; The Oneida Nation of Wisconsin
Duck Creek Tributary Stream 11	08/18/2009	WIDNR	*	August 2006	Green Bay, City of; The Oneida Nation of Wisconsin

^{*} Data unavailable

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities/ Tribal Nations
Duck Creek Tributary Stream 12	08/18/2009	WIDNR	*	August 2006	Green Bay, City of; Hobart, Village of; The Oneida Nation of Wisconnsin
Dutchman Creek	08/18/2009	USACE	EMW-88-E- 2768	September 1989	Allouez, Ashwaubenon, and Hobart, Villages of
Dutchman Creek North Tributary	08/18/2009	WIDNR	*	August 2006	Ashwaubenon, Village of
Dutchman Creek South Tributary	08/18/2009	WIDNR	*	August 2006	Ashwaubenon, Village of
Dutchman Creek Southeast Tributary	08/18/2009	WIDNR	*	August 2006	Ashwaubenon, Village of
Dutchman Creek Southwest Tributary	08/18/2009	WIDNR	*	August 2006	Ashwaubenon, Village of
East River	08/18/2009	USACE	EMW-89-E- 3218	September 1990	Allouez and Bellevue, Villages of; Brown County, Unincorporated Areas; De Pere and Green Bay, Cities of
East River Tributary	08/18/2009	WIDNR	*	August 2006	Brown County, Unincorporated Areas
East River Tributary A	08/18/2009	Mead & Hunt, Inc.	*	June 1994	Brown County, Unincorporated Areas; De Pere, City of
East River Tributary B	08/18/2009	Mead & Hunt, Inc.	*	June 1994	Brown County, Unincorporated Areas
East River Tributary C	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
East River Tributary D	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas

^{*} Data unavailable

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities/ Tribal Nations
East River Tributary D2	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
East River Tributary E	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
East River Tributary E2	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
East River Tributary F	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
East River Tributary F2	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
East River Tributary G	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
East River Tributary G2	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
East River Tributary H	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
East River Tributary I	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
East River Tributary J	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
East River Tributary J2	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
East River Tributary J3	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
East Verlin North Tributary to Willow Creek	08/18/2009	WIDNR	*	August 2006	Bellevue, Village of;

^{*} Data unavailable

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities/ Tribal Nations
East Verlin Tributary to Willow Creek	08/18/2009	WIDNR	*	August 2006	Bellevue, Village of; Green Bay, City of
Ellis Creek	08/18/2009	WIDNR	*	August 2006	Green Bay, City of
ERT Overflow	08/18/2009	WIDNR	*	August 2006	Brown County, Unincorporated Areas
ERT Overflow 2	08/18/2009	WIDNR	*	August 2006	Brown County, Unincorporated Areas
Fox River	08/18/2009	WIDNR	*	August 2016	Allouez, Ashwaubenon, and Wrightstown, Villages of; Brown County, Unincorporated Areas; De Pere and Green Bay, Cities of
Green Bay/Lake Michigan	05/09/2023	STARR	HSFE05-12- J-0014	September 2017	Brown County, Unincorporated Areas; Green Bay, City of; Howard and Suamico, Villages of
Haller Creek	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Suamico, Village of
Hemlock Creek	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas; De Pere, City of
Lancaster Creek	08/18/2009	Owen Ayers & Associates	*	August 1991	Howard, Village of
Lancaster Creek Tributary	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Howard, Village of
Mahon Creek	08/18/2009	WIDNR	*	August 2006	Green Bay, City of
Middle Branch Little Suamico River	08/18/2009	WIDNR	*	August 2006	Pulaski, Village of
Moose Creek	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Suamico, Village of

^{*} Data unavailable

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities/ Tribal Nations
Neshota River	08/18/2009	WIDNR	*	August 2006	Brown County, Unincorporated Areas
North Branch Ashwaubenon Creek	08/18/2009	WIDNR	*	August 2006	Brown County, Unincorporated Areas; Hobart, Village of
North Branch Bakers Creek	08/18/2009	WIDNR	*	August 2006	Howard, Village of
North Branch Suamico River	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
North Branch Wequiock Creek	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
North Branch Willow Creek	08/18/2009	WIDNR	*	August 2006	Bellevue, Village of; Green Bay, City of
North Pulaski Tributary	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Pulaski, Village of
North Tributary South Branch Ashwaubenon Creek	08/18/2009	WIDNR	*	August 2006	Brown County, Unincorporated Areas
Oneida Creek	08/18/2009	WIDNR	*	August 2006	Green Bay, City of; The Oneida Nation of Wisconsin
Pioneer Tributary to Duck Creek	08/18/2009	WIDNR	*	August 2006	Howard, Village of
Plum Creek	08/18/2009	WIDNR	*	August 2006	Brown County, Unincorporated Areas; Wrightstown, Village of
Plum Creek Tributary 1	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
Plum Creek Tributary 2	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas

^{*} Data unavailable

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities/ Tribal Nations
Plum Creek Tributary 3	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
Plum Creek Tributary 4	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
Potter Creek	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
Sorensons Creek	08/18/2009	WIDNR	*	August 2006	Bellevue, Village of; Brown County, Unincorporated Areas
Sorensons Creek Tributary	08/18/2009	WIDNR	*	August 2006	Bellevue, Village of
South Branch Ashwaubenon Creek	08/18/2009	WIDNR	*	August 2006	Brown County, Unincorporated Areas
South Branch Little Suamico Creek	08/18/2009	WIDNR	*	August 2006	Brown County, Unincorporated Areas; Pulaski, Village of
South Tributary to Willow Creek	08/18/2009	WIDNR	*	August 2006	Bellevue, Village of
Spring Creek	08/18/2009	WIDNR	*	August 2006	Bellevue, Village of
Spring Creek Tributary A	08/18/2009	WIDNR	*	August 2006	Bellevue, Village of; Green Bay, City of
Spring Creek Tributary A Ditch	08/18/2009	WIDNR	*	August 2006	Bellevue, Village of
Spring Creek Tributary B	08/18/2009	WIDNR	*	August 2006	Bellevue, Village of
Suamico River	08/18/2009	WIDNR	*	August 2006	Brown County, Unincorporated Areas; Suamico, Village of

^{*} Data unavailable

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities/ Tribal Nations
Tributary 1 to Dutchman Creek Southwest Tributary	08/18/2009	WIDNR	*	August 2006	Ashwaubenon and Hobart, Villages of
Tributary 2 to Dutchman Creek Southwest Tributary	08/18/2009	WIDNR	*	August 2006	Ashwaubenon, Village of
Tributary 3 to Dutchman Creek Southwest Tributary	08/18/2009	WIDNR	*	August 2006	Ashwaubenon, Village of
Trout Creek	08/18/2009	STARR	10-05-4875P	October 2012	Green Bay, City of; Hobart, Village of; The Oneida Nation of Wisconsin
Unnamed Tributary 1 to Duck Creek	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Hobart, Village of; The Oneida Nation of Wisconsin
Unnamed Tributary 1.1 to Duck Creek	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Hobart, Village of; The Oneida Nation of Wisconsin
Unnamed Tributary 1.2 to Duck Creek	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Hobart, Village of
Unnamed Tributary 1.2.1 to Duck Creek	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Hobart, Village of; The Oneida Nation of Wisconsin
Unnamed Tributary 1 to Ashwaubenon Creek	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
Unnamed Tributary 2 to Ashwaubenon Creek	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
Unnamed Tributary to Bower Creek	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas

^{*} Data unavailable

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities/ Tribal Nations
Unnamed Tributary to Bower Creek Tributary B	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
Unnamed Tributary to Green Bay	08/18/2009	WIDNR	*	August 2006	Green Bay, City of
Unnamed Tributary to Haller Creek	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Suamico, Village of
Unnamed Tributary to Plum Creek	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
Unnamed Tributary to the West Branch Suamico River	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
Vanguard Way Tributary to Lancaster Creek	08/18/2009	WIDNR	*	August 2006	Howard, Village of
Wequiock Creek	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
West Branch Suamico River	08/18/2009	CDM	HSFE05-05- D-0027/TO09	August 2006	Brown County, Unincorporated Areas
West Verlin Tributary to Willow Creek	08/18/2009	WIDNR	*	August 2006	Allouez and Bellevue, Villages of; Green Bay, City of
Willow Creek	08/18/2009	WIDNR	*	August 2006	Bellevue, Village of; Green Bay, City of
vviiiow Creek	05/09/2023	Cedar Corporation	*	October 2017	Bellevue, Village of

^{*} Data unavailable

7.2 Community Meetings

The dates of the community meetings held for this Flood Risk Project and previous Flood Risk Projects are shown in Table 29. These meetings may have previously been referred to by a variety of names (Community Coordination Officer (CCO), Scoping, Discovery, etc.,), but all meetings represent opportunities for FEMA, community officials, study contractors, and other invited guests to discuss the planning for and results of the project.

Table 29: Community Meetings

Community/Tribal Nation	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
		January 14, 2021	Final CCO	FEMA, WIDNR, STARR II, and the community
Allouez, Village of	May 9, 2023	July 28, 2017	Flood Risk Review	FEMA, WIDNR, STARR, and the Village of Allouez
Ashwaubenon, Village of	May 9, 2023	January 14, 2021	Final CCO	FEMA, WIDNR, STARR II, and the community
		January 14, 2021	Final CCO	FEMA, WIDNR, STARR II, and the community
Bellevue, Village of	May 9, 2023	July 28, 2017	Flood Risk Review	FEMA, WIDNR, STARR, and the Village of Bellevue
Brown County,	May 9, 2023	January 14, 2021	Final CCO	FEMA, WIDNR, STARR II, and the community
Unincorporated Areas		July 28, 2017	Flood Risk Review	FEMA, WIDNR, STARR, and Brown County, Unincorporated Areas
De Pere, City of	May 9, 2023	January 14, 2021	Final CCO	FEMA, WIDNR, STARR II, and the community
Denmark, Village of	August 18, 2009	August 15, 2007	Final CCO	FEMA, WIDNR, CDM, and the Village of Denmark
Consum Davi City of	M 0, 0000	January 14, 2021	Final CCO	FEMA, WIDNR, STARR II, and the community
Green Bay, City of	May 9, 2023	July 28, 2017	Flood Risk Review	FEMA, WIDNR, STARR, and the City of Green Bay
Hobart, Village of	March 17, 2014	April 15, 2013	Final CCO	FEMA, WIDNR, STARR, and the Village of Hobart
I I A A A A A A A A A A A A A A A A A A		January 14, 2021	Final CCO	FEMA, WIDNR, STARR II, and the community
Howard, Village of	May 9, 2023	July 28, 2017	Flood Risk Review	FEMA, WIDNR, STARR, and the Village of Howard
Pulaski, Village of	August 18, 2009	August 15, 2007	Final CCO	FEMA, WIDNR, CDM, and the Village of Pulaski

Table 29: Community Meetings (continued)

Community/Tribal Nation	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
Suamico, Village of	May 9, 2023	January 14, 2021	Final CCO	FEMA, WIDNR, STARR II, and the community
The Oneida Nation of Wisconsin	March 17, 2014	April 15, 2013	Final CCO	FEMA, WIDNR, STARR, and The Oneida Nation of Wisconsin
Wrightstown, Village of	August 18, 2009	August 15, 2007	Final CCO	FEMA, WIDNR, CDM, and the Village of Wrightstown

SECTION 8.0 – ADDITIONAL INFORMATION

Information concerning the pertinent data used in the preparation of this FIS Report can be obtained by submitting an order with any required payment to the FEMA Engineering Library. For more information on this process, see https://www.fema.gov.

Table 30 is a list of the locations where FIRMs for Brown County can be viewed. Please note that the maps at these locations are for reference only and are not for distribution. Also, please note that only the maps for the community listed in the table are available at that particular repository. A user may need to visit another repository to view maps from an adjacent community.

Table 30: Map Repositories

Community/Tribal Nation	Address	City	State	Zip Code
Allouez, Village of	Brown County Office Northern Building 305 East Walnut Street Room 320	Green Bay	WI	54301
Ashwaubenon, Village of	Village Hall 2155 Holmgren Way	Ashwaubenon	WI	54304
Bellevue, Village of	Village Offices 2828 Allouez Avenue	Bellevue	WI	54311
Brown County, Unincorporated Areas	Brown County Office Northern Building 305 East Walnut Street Room 320	Green Bay	WI	54301
De Pere, City of City Hall 335 South Broadway		De Pere	WI	54115
Denmark, Village of ¹	Village Hall 118 East Main Street	Denmark	WI	54208
Green Bay, City of	City Hall 100 North Jefferson Street	Green Bay	WI	54301
Hobart, Village of	Village Hall 2990 South Pine Tree Road	Hobart	WI	54155
Howard, Village of	Village Hall 2456 Glendale Avenue	Howard	WI	54313
The Oneida Nation of Wisconsin	Norbert Hill Center North 7210 Seminary Road	Oneida	WI	54155
Pulaski, Village of	Village Hall		WI	54162
Suamico, Village of	Municipal Services Center 12781 Velp Avenue	Suamico	WI	54313
Wrightstown, Village of	Village Hall 529 Main Street	Wrightstown	WI	54180

¹ No Special Flood Hazard Areas identified

The National Flood Hazard Layer (NFHL) dataset is a compilation of effective FIRM Databases and LOMCs. Together they create a GIS data layer for a State or Territory.

The NFHL is updated as studies become effective and extracts are made available to the public monthly. NFHL data can be viewed or ordered from the website shown in Table 31.

Table 31 contains useful contact information regarding the FIS Report, the FIRM, and other relevant flood hazard and GIS data. In addition, information about the State NFIP Coordinator and GIS Coordinator is shown in this table. At the request of FEMA, each Governor has designated an agency of State or territorial government to coordinate that State's or territory's NFIP activities. These agencies often assist communities in developing and adopting necessary floodplain management measures. State GIS Coordinators are knowledgeable about the availability and location of State and local GIS data in their state.

Table 31: Additional Information

FEMA and the NFIP					
FEMA and FEMA Engineering Library website	https://www.fema.gov/national-flood-insurance-program-flood-hazard-mapping/engineering-library				
NFIP website	https://www.fema.gov/national-flood-insurance-program				
NFHL Dataset	https://msc.fema.gov				
FEMA Region V	536 South Clark Street Chicago, Illinois 60605 (312) 408-5500				
	Other Federal Agencies				
USGS website	www.usgs.gov				
Hydraulic Engineering Center website	www.hec.usace.army.mil				
	State Agencies and Organizations				
State NFIP Coordinator	Michelle Staff, CFM Wisconsin Department of Natural Resources Post Office Box 7921 Madison, Wisconsin 53707 (608) 266-3093 michelle.staff@wisconsin.gov				
State GIS Coordinator	Curtis Pulford Geographic Information Officer State of Wisconsin DOA Division of Enterprise Technology 101 East Wilson Street Post Office Box 7844 Madison, Wisconsin 53707-7844 (608) 261-5042 curtis.pulford@wisconsin.gov				

SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES

Table 32 includes sources used in the preparation of and cited in this FIS Report as well as additional studies that have been conducted in the study area.

Table 32: Bibliography and References

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
ADCIRC	U.S. Army Corps of Engineers, Engineer and Research Development Center (ERDC)	ADvanced CIRCulation Model	US Army Cops of Engineers	Vicksburg, MS		
BCLIO (2008)	Brown County Land Information Office	PLSS and Municipal Boundary	PLSS and Municipal Boundary features	Green Bay, WI	January 2008	
BROWN (2010)	Brown County, WI	Brown County, WI LiDAR 2010	Ayres Associates Inc	Madison, WI	April 2010	
CDM (1998)	CDM	WSEL and stream centerlines for approximate study	CDM	Washington, D.C.	January 1998	
Census (2018)	U.S. Census Bureau	Tiger Roads Data	U.S. Census Bureau	Washington, D.C.	September 2018	ftp://ftp2.census.gov/geo/tig er/TIGER2018/ROADS/
CSHORE	U.S. Army Corps of Engineers, Engineer and Research Development Center (ERDC)	Cross-Shore Numerical Model	N. Kobayashi et. al	Vicksburg, MS	April 2014	
DIM	FEMA	Coastal Flood Hazard Analysis and Mapping for the Pacific Coast of the United States, Section D.4.2 – Study Methodology	FEMA	Washington, D.C.	January 2005	
FEMA	FEMA	FIS Effective dates	FEMA	Washington, D.C.	September 1979	

Table 32: Bibliography and References (continued)

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
FEMA (2004)	FEMA	Stream Layer Effective Date	FEMA	Washington, D.C.	January 2004	
FEMA (2004)	FEMA	Location of roads, railroads, bridges, streams and other physical features	FEMA	Washington, D.C.	April 2004	
FEMA (2008)	FEMA	Grid of DFIRM Panels	FEMA	Washington, D.C.	January 2008	
FEMA (2010)	FEMA	Effective LOMR 10-05- 2748P	FEMA	Washington, D.C.	December 2010	
FEMA (2011)	FEMA	Effective LOMR 10-05- 6098P	FEMA	Washington, D.C.	July 2011	
FEMA (2011)	FEMA	Effective LOMR 11-05- 4502P	FEMA	Washington, D.C.	November 2011	
FEMA (2012)	FEMA	Effective LOMR 11-05- 2704P	FEMA	Washington, D.C.	January 2012	
FEMA (2012)	FEMA	Effective LOMR 12-05- 1916P	FEMA	Washington, D.C.	July 2012	
FEMA (2012)	FEMA	Trout Creek LOMR 10- 05-4857P	FEMA	Washington, D.C.	January 2012	
FEMA (2013)	FEMA	Effective LOMR 12-05- 4503P	FEMA	Washington, D.C.	March 2013	
FEMA (2014)	FEMA	Effective LOMR 14-05- 3376P	FEMA	Washington, D.C.	December 2014	
FEMA (2014)	FEMA	Brown County Effective DFIRM Database	FEMA	Washington, D.C.	March 2014	https://msc.fema.gov/portal/ advanceSearch#searchresu ltsanchor

Table 32: Bibliography and References (continued)

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
FEMA (2014)	FEMA	Effective LOMR 13-05- 5752P	FEMA	Washington, D.C.	March 2014	
FEMA (2014)	FEMA	Effective LOMR 13-05- 5753P	FEMA	Washington, D.C.	February 2014	
FEMA (2014)	FEMA	Effective LOMR 14-05- 2566P	FEMA	Washington, D.C.	December 2014	
FEMA (2014)	FEMA	FEMA Great Lakes Coastal Guidelines, Appendix D.3 Update	FEMA	Washington, D.C.	January 2014	
FEMA (2014)	FEMA	Effective LOMR 14-05- 3375P	FEMA	Washington, D.C.	December 2014	
FEMA (2017)	FEMA	Effective LOMR 16-05- 4339P	FEMA	Washington, D.C.	September 2017	
FEMA (2017)	FEMA	LOMR 17-05-2419P	FEMA	Washington, D.C.	October 2017	https://msc.fema.gov/portal/ advanceSearch#searchresu ltsanchor
FEMA (2018)	FEMA	Effective LOMR 17-05- 5248P	FEMA	Washington, D.C.	April 2018	
FEMA (2018)	FEMA	Guidance for Flood Risk Analysis and Mapping: Coastal Wave Runup and Overtopping	FEMA	Washington, D.C.	February 2018	
HEC-1	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-1 Flood Hydrograph Package, Computer Program 723-X6- L2010	US Army Corps of Engineers	Davis, CA	January 1985	

Table 32: Bibliography and References (continued)

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
HEC-2	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-2 Water Surface Profiles, Computer Program 723-X6- L202A	US Army Corps of Engineers	Davis, CA	April 1984	
HEC-RAS	U.S. Army Corps of Engineers, Hydrologic Engineering Center	HEC-RAS River Analysis System, Version 3.1.3	US Army Corps of Engineers	Davis, CA	May 2005	
JALBTCX (2013)	US Amy Corps of Engineers, JALBTCX	LiDAR	US Army Corps of Engineers, JALBTCX	Kiln, MI	January 2013	
NEH (1972)	U.S. Department of Agriculture, Soil Conservation Service	National Engineering Handbook, Section 4, Hydrology, Part I, Watershed Planning	U.S. Department of Agriculture, Soil Conservation Service	Washington, D.C.	January 1972	
STARR (2017)	STARR	Brown County Lake Michigan Coastal Update	FEMA	Calverton, MD		https://www.fema.gov
Stock, et al. (2006)	Coastal Engineering, Volume 53	Empiracal Parameterization of Setup, Swash, and Runup	H.F. Stockdon, et al.	Washington, D.C.	January 2006	
SWAN	Delft University of Technology	Simulating WAves Nearshore Model	Booij, et. al.	The Netherlands		

Table 32: Bibliography and References (continued)

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
TR-20	U.S. Department of Agriculture, Soil Conservation Service, Engineering Division	Technical Release No, 20, Computer Program for Project Formulation, Hydrology	U.S. Department of Agriculture, Soil Conservation Service, Engineering Division	Washington, D.C.	May 1965	
TR-55	U.S. Department of Agriculture, Soil Conservation Service (SCS)	Technical Release No. 55: Urban Hydrology for Small Watersheds	U.S. Department of Agriculture, Soil Conservation Service (SCS)	Washington, D.C.	January 1975	
USACE (1984)	U.S. Army Corps of Engineers, ERDC	Shore Protection Manual	U.S. Army Corps of Engineers, ERDC	Vicksburg, MS	January 1984	https://usace.contentdm.p16 021coll11/id/1932
USACE (2012)	US Amy Corps of Engineers	USACE Structures	US Army Corps of Engineers	Reston, VA	September 2012	http://www.lrc.usace.army.m
USDA/FS A (2017)	USDA FSA Aerial Photography Field Office	2017 NAIP DOP Imagery	USDA FSA Aerial Photography Field Office	Salt Lake City, UT	November 2017	https://gdg.sc.egov.usda.go <u>v/</u>
USGS/US DA (2017)	USGS and USDA - NRCS	Watershed Boundary Dataset (WBD), HUC8 Boundaries	USGS	Sioux Falls, SD	September 2017	https://datagateway.nrcs.us da.gov/
Van Gent (2001)	Journal of Waterway, Port, Coastal, Engineering, Volume 127 (5)	Wave Runup on Dikes with Shallow Foreshores	M.R.A van Gent	Washington, D.C.	January 2001	

Table 32: Bibliography and References (continued)

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/Editor	Place of Publication	Publication Date/ Date of Issuance	Link
WHAFIS	FEMA	Wave Height Analysis for Flood Insurance Studies – WHAFIS Version 4.0	D. Divoky	Washington, D.C.	August 2007	
WIDNR	Wisconsin Department of Natural Resources	Fox River Redelineation	FEMA	Washington, D.C.	August 2016	
WIDNR (2018)	Wisconsin DNR	WIDNR	Wisconsin DNR	Madison, WI	January 2018	https://data-wi- dnr.opendata.arcgis.com/da tasets/24k-hydro-shorelines- banks