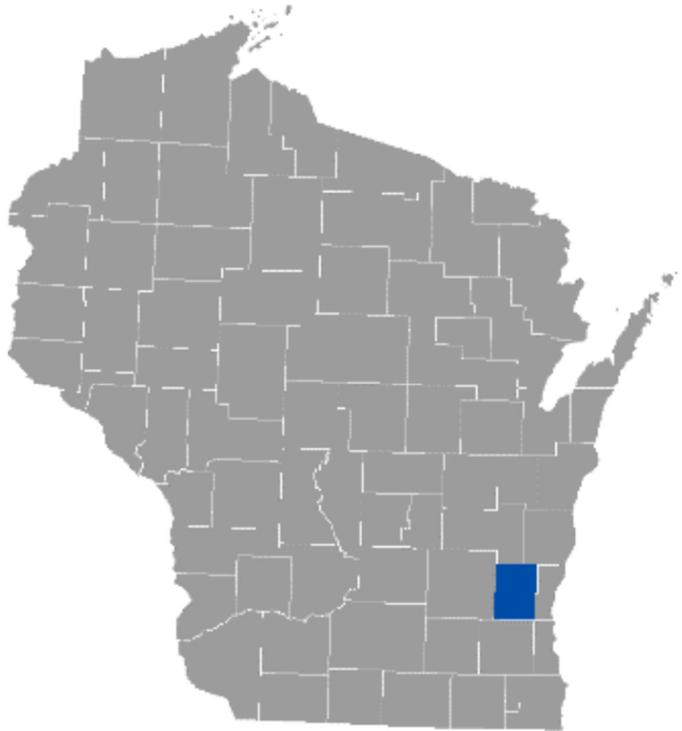


FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 2 OF 9



WASHINGTON COUNTY, WISCONSIN AND INCORPORATED AREAS

COMMUNITY NAME	NUMBER	COMMUNITY NAME	NUMBER
GERMANTOWN, VILLAGE OF	550472	NEWBURG, VILLAGE OF	550056
HARTFORD, CITY OF	550473	RICHFIELD, VILLAGE OF	550518
JACKSON, VILLAGE OF	550530	SLINGER, VILLAGE OF	550587
KEWASKUM, VILLAGE OF	550474	WASHINGTON COUNTY, UNINCORPORATED AREAS	550471
MILWAUKEE, CITY OF*	550278	WEST BEND, CITY OF	550475

*No Special Flood Hazard Areas Identified within Washington County

REVISED:

February 20, 2026

FLOOD INSURANCE STUDY NUMBER
55131CV002D
Version Number 2.8.4.3



FEMA

TABLE OF CONTENTS

Volume 1

	<u>Page</u>
SECTION 1.0 – INTRODUCTION	1
1.1 The National Flood Insurance Program	1
1.2 Purpose of this Flood Insurance Study Report	2
1.3 Jurisdictions Included in the Flood Insurance Study Project	2
1.4 Considerations for using this Flood Insurance Study Report	5
SECTION 2.0 – FLOODPLAIN MANAGEMENT APPLICATIONS	14
2.1 Floodplain Boundaries	14
2.2 Floodways	39
2.3 Base Flood Elevations	40
2.4 Non-Encroachment Zones	41
2.5 Coastal Flood Hazard Areas	41
2.5.1 Water Elevations and the Effects of Waves	41
2.5.2 Floodplain Boundaries and BFEs for Coastal Areas	41
2.5.3 Coastal High Hazard Areas	41
2.5.4 Limit of Moderate Wave Action	41
SECTION 3.0 – INSURANCE APPLICATIONS	41
3.1 National Flood Insurance Program Insurance Zones	41
SECTION 4.0 – AREA STUDIED	42
4.1 Basin Description	42
4.2 Principal Flood Problems	43
4.3 Dams and Other Flood Hazard Reduction Measures	43
4.4 Levee Systems	44
SECTION 5.0 – ENGINEERING METHODS	44
5.1 Hydrologic Analyses	44
5.2 Hydraulic Analyses	82

Volume 2

5.3 Coastal Analyses	112
5.3.1 Total Stillwater Elevations	112
5.3.2 Waves	113
5.3.3 Coastal Erosion	113
5.3.4 Wave Hazard Analyses	113
5.4 Alluvial Fan Analyses	114
SECTION 6.0 – MAPPING METHODS	115
6.1 Vertical and Horizontal Control	115
6.2 Base Map	116
6.3 Floodplain and Floodway Delineation	117

TABLE OF CONTENTS *(continued)*

Volume 4

	<u>Page</u>
6.4 Coastal Flood Hazard Mapping	259
6.5 FIRM Revisions	259
6.5.1 Letters of Map Amendment	259
6.5.2 Letters of Map Revision Based on Fill	259
6.5.3 Letters of Map Revision	260
6.5.4 Physical Map Revisions	260
6.5.5 Contracted Restudies	261
6.5.6 Community Map History	261
SECTION 7.0 – CONTRACTED STUDIES AND COMMUNITY COORDINATION	264
7.1 Contracted Studies	264
7.2 Community Meetings	283
SECTION 8.0 – ADDITIONAL INFORMATION	286
SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES	287

Figures – Volume 1

	<u>Page</u>
Figure 1: FIRM Index	6
Figure 2: FIRM Notes to Users	7
Figure 3: Map Legend for FIRM	10
Figure 4: Floodway Schematic	40
Figure 5: Wave Runup Transect Schematic	41
Figure 6: Coastal Transect Schematic	41
Figure 7: Frequency Discharge-Drainage Area Curves	80

Figures – Volume 2

Figure 8: 1% Annual Chance Total Stillwater Elevations for Coastal Areas	112
Figure 9: Transect Location Map	113

Tables – Volume 1

	<u>Page</u>
Table 1: Listing of NFIP Jurisdictions	3
Table 2: Flooding Sources Included in this FIS Report	15
Table 3: Flood Zone Designations by Community	42
Table 4: Basin Characteristics	42
Table 5: Principal Flood Problems	43
Table 6: Historic Flooding Elevations	43
Table 7: Dams and Other Flood Hazard Reduction Measures	43

TABLE OF CONTENTS *(continued)*

Tables – Volume 1 *(continued)*

	<u>Page</u>
Table 8: Levee Systems	44
Table 9: Summary of Discharges	46
Table 10: Summary of Non-Coastal Stillwater Elevations	81
Table 11: Stream Gage Information used to Determine Discharges	82

Tables – Volume 2

Table 12: Summary of Hydrologic and Hydraulic Analyses	83
Table 13: Roughness Coefficients	107
Table 14: Summary of Coastal Analyses	112
Table 15: Tide Gage Analysis Specifics	112
Table 16: Coastal Transect Parameters	113
Table 17: Summary of Alluvial Fan Analyses	114
Table 18: Results of Alluvial Fan Analyses	114
Table 19: Countywide Vertical Datum Conversion	115
Table 20: Stream-Based Vertical Datum Conversion	116
Table 21: Base Map Sources	116
Table 22: Summary of Topographic Elevation Data used in Mapping	118

Tables – Volumes 2 and 3

Table 23: Floodway Data	120
-------------------------	-----

Tables – Volume 4

Table 24: Flood Hazard and Non-Encroachment Data for Selected Streams	259
Table 25: Summary of Coastal Transect Mapping Considerations	259
Table 26: Incorporated Letters of Map Change	260
Table 27: Community Map History	262
Table 28: Summary of Contracted Studies Included in this FIS Report	264
Table 29: Community Meetings	284
Table 30: Map Repositories	286
Table 31: Additional Information	287
Table 32: Bibliography and References	288

Exhibits – Volume 4

<u>Flood Profiles</u>	<u>Panel</u>	
Allenton Creek	001-003	P
Allenton Creek Bypass	004	P
Allenton Creek Unnamed Tributary 1	005	P
Allenton Creek Unnamed Tributary 1.1	006	P
Amy Bell Creek	007	P
Ashippun River	008-015	P
Ashippun River – Overland Flowpath	016	P

TABLE OF CONTENTS *(continued)*

Exhibits – Volume 4 *(continued)*

<u>Flood Profiles</u>	<u>Panel</u>	
Ashippun River Tributary 2	017-019	P
Ashippun River Tributary 2.1	020	P
Ashippun River Tributary 2.2	021	P
Ashippun River Tributary 3	022	P
Ashippun River Tributary 4	023	P
Ashippun River Tributary 5	024	P
Bark River	025-029	P
Bark River Tributary 1	030	P
Bark River Tributary 1.1	031	P
Bolton Brook	032-034	P
Bonniwell Creek	035-036	P
Brooklane Overflow	037	P
Butler Creek Tributary 1	038	P
Butler Creek Tributary 2	039	P

Exhibits – Volume 5

<u>Flood Profiles</u>	<u>Panel</u>	
Cedar Creek	040-056	P
Cedarburg Creek	057-059	P
Coney River	060-066	P
Coney River – Overland Flowpath	067	P
Deer Creek	068-070	P
East Branch Milwaukee River	071-075	P
East Branch Rock River	076-090	P
East Branch Rock River Unnamed Tributary 1	091-092	P
East Branch Rock River Unnamed Tributary 1.1	093	P
East Branch Rock River Unnamed Tributary 1.2	094	P
East Branch Rock River Unnamed Tributary 1.3	095	P
East Branch Rock River Unnamed Tributary 1.3.1	096	P
East Branch Rock River Unnamed Tributary 1.4	097	P
East Branch Rock River Unnamed Tributary 2	098-099	P
East Branch Rock River Unnamed Tributary 2 Bypass	100	P
East Branch Rock River Unnamed Tributary 2.1	101	P
East Branch Rock River Unnamed Tributary 2.1 Bypass	102	P
East Branch Rock River Unnamed Tributary 2.2	103	P
East Branch Rock River Unnamed Tributary 2.3	104	P
Edgewood Creek	105	P
Edgewood Creek Overflow Channel	106	P

TABLE OF CONTENTS *(continued)*

Exhibits – Volume 5 *(continued)*

<u>Flood Profiles</u>	<u>Panel</u>	
Evergreen Bypass	107	P
Evergreen Creek	108-112	P
Flynn Creek	113-115	P
Frieden's Creek	116-119	P
Hasmer Creek	120-121	P
Hubertus Ditch No. 1	122	P
HWY 41 Overflow	123	P

Exhibits – Volume 6

<u>Flood Profiles</u>	<u>Panel</u>	
Jackson Creek	124-126	P
Kettleview Creek	127-128	P
Kewaskum Creek	129-136	P
Kewaskum Creek Overflow Channel	137	P
Knights Creek	138-139	P
Knights Creek Overflow	140	P
Kohlsville River	141-148	P
Kohlsville River – Park Route	149	P
Kohlsville River Unnamed Tributary 1	150	P
Kohlsville River Unnamed Tributary 2	151-153	P
Kohlsville River Unnamed Tributary 2.1	154	P
Kressen Branch	155-157	P
Lehner Outlet	158-160	P
Limestone Creek	161-166	P
Limestone Creek Unnamed Tributary 1	167	P
Limestone Creek Unnamed Tributary 2	168	P
Limestone Creek Unnamed Tributary 3	169	P
Limestone Creek Unnamed Tributary 3.1	170-171	P
Limestone Creek Unnamed Tributary 3.2	172	P
Limestone Creek Unnamed Tributary 4	173	P
Limestone Creek Unnamed Tributary 5	174	P
Limestone Creek Unnamed Tributary 6	175	P
Little Cedar Creek	176-182	P
Little Cedar Creek Bypass	183	P
Little Oconomowoc River	184-187	P
Marsh Creek	188	P
Mason Creek	189-190	P
Mason Creek Tributary 1	191	P
Menomonee River	192-194	P
Menomonee River Unnamed Tributary 1	195-196	P

TABLE OF CONTENTS *(continued)*

Exhibits – Volume 6 *(continued)*

<u>Flood Profiles</u>	<u>Panel</u>	
Milwaukee River	197-208	P

Exhibits – Volume 7

<u>Flood Profiles</u>	<u>Panel</u>	
Myra Creek	209-211	P
Nature's Friends Tributary	212	P
No Name Creek Unnamed Tributary 1	213	P
Nolan Creek	214-215	P
North Branch Cedar Creek	216-219	P
North Branch Menomonee River	220-223	P
North Branch Milwaukee River	224-227	P
North Branch Milwaukee River Unnamed Tributary 1	228	P
North Branch Milwaukee River Unnamed Tributary 2	229	P
North Creek	230-231	P
North Crossway Channel	232-234	P
North Crossway Channel Unnamed Tributary 1	235	P
North Crossway Channel Unnamed Tributary 2	236	P
Oconomowoc Bypass	237-238	P
Oconomowoc River	239-243	P
Polk Springs Creek	244-245	P
Putter Creek	246	P
Quaas Creek	247-251	P
Rubicon River	252-256	P
Rubicon River – Overland Flowpath	257	P
Rubicon River Tributary 1	258	P
Rubicon River Tributary 2	259	P
Scenic Brook	260	P
Silver Creek	261-266	P
Silverbrook Creek	267	P
Smith Lake Channel	268-269	P
Springside Creek	270-271	P
Stony Creek	272-276	P
Stony Creek Unnamed Tributary 1	277	P
Stream 1	278	P
Tributary 1 to Milwaukee River	279	P
Tributary 2 to Milwaukee River	280	P
Tributary 2 to Milwaukee River Split	281-282	P
Tributary No. 1	283-285	P

TABLE OF CONTENTS *(continued)*

Exhibits – Volume 7 *(continued)*

<u>Flood Profiles</u>	<u>Panel</u>	
Tributary No. 1A	286	P
Tributary No. 1B	287	P
Tributary No. 2	288	P
Tributary No. 2 Unnamed Tributary 1	289	P
Tributary No. 3	290	P
Tributary No. 4	291-292	P

Exhibits – Volume 8

<u>Flood Profiles</u>	<u>Panel</u>	
Tributary No. 5	293-294	P
Tributary No. 5 Overflow	295	P
Unnamed Tributary to Ashippun River	296	P
Unnamed Tributary to Frieden's Creek	297	P
UT to West Branch Menomonee River	298-300	P
UT to West Branch Menomonee River Overflow	301	P
UT-1 Kewaskum Creek	302-303	P
UT-1 Milwaukee River	304-305	P
UT-1 Mink Creek	306	P
UT-1 Quaas Creek	307-309	P
UT-1 to Big Cedar Lake	310-312	P
UT-1 to Cedar Creek	313	P
UT-1 to Coney River	314	P
UT-1 to Coney River Overflow	315	P
UT-1 to Coney River Overflow West	316	P
UT-1 to Evergreen Creek	317	P
UT-1 to Hasmer Creek	318	P
UT-1 to Kressen Branch	319-320	P
UT-1 to Little Cedar Creek	321	P
UT-1 to Little Cedar Lake	322	P
UT-1 to Oconomowoc River	323-324	P
UT-1 to Polk Springs Creek	325	P
UT-1 to Rubicon River	326-328	P
UT-1.1 Quaas Creek	329	P
UT-1.1 to Rubicon River	330	P
UT-1.1.1 to Rubicon River	331	P
UT-1.2 Quaas Creek	332-333	P
UT-1.2 to Rubicon River	334	P
UT-1.2.1 to Rubicon River	335	P
UT-2 Kewaskum Creek	336	P

TABLE OF CONTENTS *(continued)*

Exhibits – Volume 8 *(continued)*

<u>Flood Profiles</u>	<u>Panel</u>	
UT-2 Milwaukee River	337-338	P
UT-2 to Cedar Creek	339-340	P
UT-2 to Coney River	341	P
UT-2 to Little Cedar Creek	342	P
UT-2 to Oconomowoc River	343-344	P
UT-2 to Rubicon River	345-348	P
UT-2.1 Milwaukee River	349	P
UT-2.1 to Rubicon River	350	P
UT-3 Milwaukee River	351-354	P
UT-3 to Rubicon River	355-357	P
UT-3.1 to Rubicon River	358	P
UT-4 Milwaukee River	359-360	P
UT-4 to Rubicon River	361	P
UT-5 to Rubicon River	362	P
Wallace Creek	363-367	P
Wallace Creek Unnamed Tributary 2	368	P
Wallace Creek Unnamed Tributary 3	369	P
Washington Creek	370	P
Wayne Creek	371-376	P
Wayne Creek Unnamed Tributary 1	377	P

Exhibits – Volume 9

<u>Flood Profiles</u>	<u>Panel</u>	
Wayne Creek Unnamed Tributary 2	378-381	P
Wayne Creek Unnamed Tributary 2.1	382	P
Wayne Creek Unnamed Tributary 3	383	P
Wayne Creek Unnamed Tributary 4	384-385	P
Wayne Creek Unnamed Tributary 4.1	386	P
Wayne Creek Unnamed Tributary 4.2	387	P
Wayne Creek Unnamed Tributary 5	388	P
Wayne Creek Unnamed Tributary 6	389	P
West Branch Menomonee River	390-393	P
West Branch Menomonee River Overflow	394	P
West Branch Milwaukee River	395-396	P
West Branch Milwaukee River Unnamed Tributary 1	397-402	P
West Branch Milwaukee River Unnamed Tributary 1.1	403	P
West Branch Milwaukee River Unnamed Tributary 1.2	404	P

TABLE OF CONTENTS *(continued)*

Exhibits – Volume 9 *(continued)*

<u>Flood Profiles</u>	<u>Panel</u>	
Wetland Extension 2	405-406	P
Wetland Extension 2.1	407-409	P
Willow Creek	410-412	P
Willow Creek Unnamed Tributary 1	413	P
Willow Creek Unnamed Tributary 1.1	414	P
Wingate Creek	415-416	P

Published Separately

Flood Insurance Rate Map (FIRM)

Table 12: Summary of Hydrologic and Hydraulic Analyses

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Allenton Creek	Confluence with East Branch Rock River	Approximately 5,200 feet upstream of Aurora Road	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	For the East Branch Rock River PMR studies (LOMR 17-05-2540P), flood storage was taken into account through permanent water bodies and areas covered by the regulated Wisconsin Wetland Inventory where significant flood attenuation may occur. Study performed in NAVD88(2012).
Allenton Creek Bypass	Convergence with Allenton Creek	Divergence from Allenton Creek	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Study performed in NAVD88(2012).
Allenton Creek Unnamed Tributary 1	Confluence with Allenton Creek	Approximately 2,300 feet upstream of Addison Road	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Study performed in NAVD88(2012).
Allenton Creek Unnamed Tributary 1.1	Confluence with Allenton Creek Unnamed Tributary 1	Approximately 650 feet upstream of Railroad	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Study performed in NAVD88(2012).
Amy Bell Creek	Mouth at Bark Lake	Amy Bell Lake	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Amy Bell Lake	Entire Shoreline	Entire Shoreline	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE	Study performed in NAVD88(2007).
Ashippun River	Washington / Dodge County Boundary	Approximately 750 feet downstream of Druid Lake	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	For the Ashippun River watershed, flood storage was taken into account through permanent water bodies and areas covered by the regulated Wisconsin Wetland Inventory where significant flood attenuation may occur. WDNR revised the 2013 study on the Ashippun River to account for breakout flow on the northwest side of Druid Lake, which reduced discharges and flood elevations from Druid Lake to the Washington / Dodge County Boundary. Study performed in NAVD88(2007).
Ashippun River	Approximately 750 feet downstream of Druid Lake	Approximately 2,100 feet upstream of Druid Lake	HEC-HMS 3.5	HEC-RAS 4.1.0	2016	AE w/ Floodway	LOMR 16-05-1498P

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Ashippun River	Approximately 2,100 feet upstream of Druid Lake	Approximately 1.9 miles upstream of County Highway E	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	For the Ashippun River watershed, flood storage was taken into account through permanent water bodies and areas covered by the regulated Wisconsin Wetland Inventory where significant flood attenuation may occur. WDNR revised the 2013 study on the Ashippun River to account for breakout flow on the northwest side of Druid Lake, which reduced discharges and flood elevations from Druid Lake to the Washington / Dodge County Boundary. Study performed in NAVD88(2007).
Ashippun River Overland Flowpath	Convergence with Unnamed Tributary to Ashippun River	Divergence from Ashippun River	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Ashippun River Tributary 2	Confluence with Ashippun River	Approximately 1,500 feet upstream of Riley Road	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Ashippun River Tributary 2.1	Confluence with Ashippun River Tributary 2	Approximately 1,500 feet upstream of Cart Path	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Ashippun River Tributary 2.2	Confluence with Ashippun River Tributary 2	Approximately 0.8 miles upstream	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Ashippun River Tributary 3	Confluence with Ashippun River	Approximately 1,100 feet upstream	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Ashippun River Tributary 4	Confluence with Ashippun River	Approximately 500 feet upstream of County Highway E	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Ashippun River Tributary 5	Confluence with Ashippun River	Approximately 1,250 feet upstream	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Bark River	Washington / Waukesha County Boundary	Approximately 620 feet upstream of Bark River Drive	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	For the Bark River watershed, flood storage was taken into account through permanent water bodies and areas covered by the regulated Wisconsin Wetland Inventory where significant flood attenuation may occur. The hydrologic model was calibrated using the lake stages of the dams in Waukesha County for the flood of June, 2008. Study performed in NAVD88(2007).
Bark River	Approximately 620 feet upstream of Bark River Drive	Approximately 1,010 feet upstream of Bark River Drive	HEC-HMS 3.5	HEC-RAS 4.1.0	2022	AE w/ Floodway	LOMR 21-05-1969P
Bark River	Approximately 1,010 feet upstream of Bark River Drive	Approximately 1,400 feet upstream of Scenic Road	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	For the Bark River watershed, flood storage was taken into account through permanent water bodies and areas covered by the regulated Wisconsin Wetland Inventory where significant flood attenuation may occur. The hydrologic model was calibrated using the lake stages of the dams in Waukesha County for the flood of June, 2008. Study performed in NAVD88(2007).
Bark River Tributary 1	Washington / Waukesha County Boundary	Approximately 1,140 feet upstream	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Bark River Tributary 1.1	Confluence with Bark River Tributary 1	Approximately 1,040 feet upstream	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Bolton Brook	Confluence with Stony Creek	Approximately 4,100 feet upstream of Boltonville Road	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Bonniwell Creek	Confluence with Little Cedar Creek	Approximately 500 feet upstream of Holy Hill Road	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).
Brooklane Overflow	Confluence with Edgewood Creek Overflow Channel	Divergence from Edgewood Creek	HEC-HMS 3.5	HEC-RAS 4.1.0	2019	AE w/ Floodway	Study performed in NAVD88(2012).

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Butler Creek Tributary 1	Washington / Dodge County Boundary	Approximately 1,060 feet upstream	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Butler Creek Tributary 2	Washington / Dodge County Boundary	Approximately 780 feet upstream	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Cedar Creek	Ozaukee / Washington County Boundary	Approximately 40 feet upstream of Ozaukee / Washington County Boundary	HEC-HMS 3.5	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2018 Cedar Creek record.
Cedar Creek	Approximately 40 feet upstream of Washington / Ozaukee County Boundary	Cedar Lake	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	For the Cedar Creek watershed, flood storage was taken into account through permanent water bodies and areas covered by the regulated Wisconsin Wetland Inventory where significant flood attenuation may occur. The May 24, 2004 flood event at USGS streamgage 04086500 was modeled in HEC-HMS. Without any calibration, the resulting modeled peak discharge matched the observed discharge within 4%. Study performed in NAVD88(2012).
Cedar Lake	Entire Shoreline	Entire Shoreline	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE	Study performed in NAVD88(2012).
Cedarburg Creek	Confluence with Cedar Creek	Approximately 250 feet downstream of Washington / Ozaukee County Boundary	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).
Cedarburg Creek	Approximately 250 feet downstream of Washington / Ozaukee County Boundary	Washington / Ozaukee County Boundary	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Coney River	Confluence with Oconomowoc River	County Highway E	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Coney River	County Highway E	County Highway CC	HEC-HMS 2.2.2	HEC-RAS 3.1.3	2013	AE w/ Floodway	Planned land use information was taken from SEWRPC 2020 planning report. The impacts of floodwater storage were accounted for by routing flood hydrographs computed for individual subbasins where there is considerable floodwater storage which would significantly affect flood flows and stages. Study performed in NGVD29.
Coney River Overland Flowpath	Convergence with Coney River	Divergence from Coney River	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Deer Creek	Confluence with North Branch Cedar Creek	Approximately 2,500 feet upstream of Church Road	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).
East Branch Milwaukee River	Confluence with Milwaukee River	Approximately 20 feet downstream of Washington / Fond du Lac County Boundary	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
East Branch Milwaukee River	Approximately 20 feet downstream of Washington / Fond du Lac County Boundary	Washington / Fond du Lac County Boundary	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	A	Reference Special Considerations from 2019 Milwaukee River Study.
East Branch Rock River	Approximately 250 feet upstream of Dodge / Washington County Boundary	Hillcrest Drive	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
East Branch Rock River	Approximately 4,500 feet downstream of State Highway 33	Hillcrest Drive	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	For the East Branch Rock River watershed, flood storage was taken into account through permanent water bodies and areas covered by the regulated Wisconsin Wetland Inventory where significant flood attenuation may occur. Study performed in NAVD88(2007).

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
East Branch Rock River	Hillcrest Drive	Approximately 4,000 feet upstream of Deer Road	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
East Branch Rock River Unnamed Tributary 1	Dodge / Washington County Boundary	Approximately 1,100 feet upstream of the confluence with East Branch Rock River Unnamed Tributary 1.4	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
East Branch Rock River Unnamed Tributary 1.1	Confluence with East Branch Rock River Unnamed Tributary 1	Approximately 1,300 feet upstream of the confluence with East Branch Rock River Unnamed Tributary 1	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
East Branch Rock River Unnamed Tributary 1.2	Confluence with East Branch Rock River Unnamed Tributary 1	Washington / Dodge County Boundary	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
East Branch Rock River Unnamed Tributary 1.3	Confluence with East Branch Rock River Unnamed Tributary 1	Approximately 3,300 feet upstream of State Highway 28	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
East Branch Rock River Unnamed Tributary 1.3.1	Confluence with East Branch Rock River Unnamed Tributary 1.3	Approximately 950 feet upstream of the confluence with East Branch Rock River Unnamed Tributary 1.3	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
East Branch Rock River Unnamed Tributary 1.4	Confluence with East Branch Rock River Unnamed Tributary 1	Just downstream of Interstate 41	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
East Branch Rock River Unnamed Tributary 2	Confluence with East Branch Rock River	Approximately 2,700 feet Upstream of Wildlife Road	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
East Branch Rock River Unnamed Tributary 2 Bypass	Convergence with East Branch Rock River	Divergence from East Branch Rock River Unnamed Tributary 2	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Study performed in NAVD88(2012).
East Branch Rock River Unnamed Tributary 2.1	Confluence with East Branch Rock River Unnamed Tributary 2	Approximately 450 feet upstream of Wildlife Road	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
East Branch Rock River Unnamed Tributary 2.1 Bypass	Confluence with East Branch Rock River Unnamed Tributary 2.2	Approximately 600 feet upstream of confluence with East Branch Rock River Unnamed Tributary 2.2	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Study performed in NAVD88(2012).
East Branch Rock River Unnamed Tributary 2.2	Confluence with East Branch Rock River Unnamed Tributary 2	Approximately 1,200 feet upstream of Wildlife Road	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
East Branch Rock River Unnamed Tributary 2.3	Confluence with East Branch Rock River Unnamed Tributary 2	Approximately 100 Feet Upstream of Highway 33	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Study performed in NAVD88(2012).
Edgewood Creek	Confluence with North Creek	Approximately 0.5 mile upstream of Brooklane Overflow	HEC-HMS 3.5	HEC-RAS 4.1.0	2019	AE w/ Floodway	Study performed in NAVD88(2012).
Edgewood Creek Overflow Channel	Confluence with Kewaskum Creek	Divergence from Edgewood Creek	HEC-HMS 3.5	HEC-RAS 4.1.0	2019	AE w/ Floodway	Study performed in NAVD88(2012).
Evergreen Bypass	Confluence with Evergreen Creek	Divergence from Evergreen Creek	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Evergreen Creek	County Highway G	Approximately 2,400 feet upstream of Hron Road	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).
Flynn Creek	Confluence with Oconomowoc River	Approximately 700 feet upstream of Shannon Road	HEC-HMS 2.2.2	HEC-RAS 3.1.3	2013	AE w/ Floodway	Planned land use information was taken from SEWRPC 2020 planning report. The impacts of floodwater storage were accounted for by routing flood hydrographs computed for individual subbasins where there is considerable floodwater storage which would significantly affect flood flows and stages. Study performed in NGVD29.
Frieden's Creek	Confluence with Cedar Creek	State Highway 45	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).
Green Lake	Entire Shoreline	Entire Shoreline	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE	Reference Special Considerations from 2019 Milwaukee River Study.
Hasmer Creek	Confluence with Cedar Creek	Approximately 2,000 feet upstream of Hasmer Lake	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).
Hubertus Ditch No. 1	Confluence with Bark River	Approximately 800 feet upstream of Hubertus Road	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
HWY 41 Overflow	Confluence with West Branch Menomonee River	Divergence from UT to West Branch Menomonee River	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Flood storage taken into account during hydrology. Study performed in NAVD88(2012).
Jackson Creek	Confluence with Cedar Creek	Approximately 600 feet upstream of Jackson Drive	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).
Kettleview Creek	Confluence with Kewaskum Creek	County Highway B	HEC-HMS 3.5	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Kewaskum Creek	Confluence with Milwaukee River	Ridge Road	HEC-HMS 3.5	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Kewaskum Creek	Ridge Road	Approximately 1/3 mile upstream of Schuster Drive	HEC-HMS 3.5	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Kewaskum Creek Overflow Channel	Confluence with Kettleview Creek	Divergence from Kewaskum Creek	HEC-HMS 3.5	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Knights Creek	Confluence with North Creek	Approximately 500 feet downstream of Highland Drive	HEC-HMS 3.5	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Knights Creek Overflow	Confluence with Edgewood Creek	Divergence from Knights Creek	HEC-HMS 3.5	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Kohlsville River	Confluence with East Branch Rock River	Beechnut Drive	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
Kohlsville River	Beechnut Drive	Approximately 300 feet downstream of County Highway D	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Kohlsville River	Approximately 300 feet downstream of County Highway D	Approximately 5,800 feet upstream of Townline Road	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
Kohlsville River – Park Route	Convergence with Kohlsville River	Divergence from Kohlsville River	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Kohlsville River Unnamed Tributary 1	Confluence with Kohlsville River	Approximately 3,200 feet upstream of the confluence with Kohlsville River	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
Kohlsville River Unnamed Tributary 2	Confluence with Kohlsville River	Approximately 8,300 feet upstream of Aurora Road	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
Kohlsville River Unnamed Tributary 2.1	Confluence with Kohlsville River Unnamed Tributary 2	Approximately 1,100 feet upstream of the confluence with Kohlsville River Unnamed Tributary 2	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Kressen Branch	Confluence with Little Cedar Creek	Approximately 1,800 feet upstream of Pioneer Road	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2007).
Lake Five	Entire shoreline within Washington County	Entire shoreline within Washington County	HEC-HMS 3.5	N/A	2013	AE	Lake Five is an internally drained lake. Spillways representing low-lying areas surrounding the lake were simulated for the studied durations and frequencies; however, water never rose to the level to show spillover from the lake. The initial lake elevation was determined by examining local stage gage data from 1974 to 2012, and utilizing the maximum measured elevation. Study performed in NAVD88(2007).
Lehner Outlet	Confluence with Cedar Creek	Approximately 4,800 feet upstream of Scenic Road	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).
Limestone Creek	Confluence with East Branch Rock River	Just downstream of County Road U	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
Limestone Creek Unnamed Tributary 1	Confluence with Limestone Creek	Approximately 2,800 feet upstream of the confluence with Limestone Creek	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
Limestone Creek Unnamed Tributary 2	Confluence with Limestone Creek	Approximately 2,100 feet upstream of the confluence with Limestone Creek	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
Limestone Creek Unnamed Tributary 3	Confluence with Limestone Creek	Approximately 4,300 feet upstream of Crooked Road	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
Limestone Creek Unnamed Tributary 3.1	Confluence with Limestone Creek Unnamed Tributary 3	Approximately 3,400 Feet Upstream of County Highway S	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Limestone Creek Unnamed Tributary 3.2	Confluence with Limestone Creek Unnamed Tributary 3	Approximately 3,200 feet upstream of the confluence with Limestone Creek Unnamed Tributary 3	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
Limestone Creek Unnamed Tributary 4	Confluence with Limestone Creek	Approximately 600 feet upstream of Hillcrest Drive	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
Limestone Creek Unnamed Tributary 5	Confluence with Limestone Creek	Approximately 2,450 feet upstream of County Road U	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
Limestone Creek Unnamed Tributary 6	Confluence with Limestone Creek	Just downstream of County Road U	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
Little Cedar Creek	Confluence with Cedar Creek	Approximately 2,900 feet upstream of Scenic Road	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Upon development of the Little Cedar Creek hydraulic model, it was determined that some discharge would leave the watershed and flow into the headwaters of the main stem of the Oconomowoc River. This occurs where water backs up behind the Railroad culvert (near Pioneer / Scenic Roads), and eventually spills over the divide on the southern end into Oconomowoc Bypass. Study performed in NAVD88(2012).
Little Cedar Creek Bypass	Confluence with Little Cedar Creek	Divergence from Little Cedar Creek	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).
Little Oconomowoc River	Confluence with Oconomowoc River	Approximately 1.1 miles upstream of Donegal Road	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Lower Rock River Watershed Zone A studies	Various	Various	Information Unavailable	Information Unavailable	2013	A	
Marsh Creek	Confluence with Bark River	0.5 miles upstream of confluence with Bark River	TR-20	Information Unavailable	1980	AE	Study performed in NGVD29.

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Mason Creek	Washington / Waukesha County Boundary	Washington / Dodge County Boundary	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Mason Creek Tributary 1	Washington / Waukesha County Boundary	Approximately 1.3 miles upstream	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Menomonee River	Washington / Waukesha County Boundary	2,800 feet upstream of Lovers Lane	HSP	Information Unavailable	1980	AE	Study performed in NGVD29.
Menomonee River Unnamed Tributary 1	Confluence with Menomonee River	Approximately 460 feet upstream of De La Court	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Milwaukee River	Ozaukee / Washington County Boundary	Washington / Fond du Lac County Boundary	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Flood storage was taken into account through permanent water bodies and areas covered by the regulated Wisconsin Wetland Inventory where significant flood attenuation may occur. Study performed in NAVD88(2012).
Milwaukee River Watershed Zone A studies	Various	Various	Information Unavailable	Information Unavailable	2013	A	
Mueller Lake	Entire Shoreline	Entire Shoreline	HEC-HMS 3.5	N/A	2018	AE w/ Floodway	Elevations determined by the hydrologic analysis. Study performed in NAVD88(2012).
Myra Creek	Confluence with Milwaukee River	Approximately 0.85 miles upstream of Tillman and Stern Dam	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Nature's Friends Tributary	Confluence with Cedar Creek	Approximately 2,400 feet upstream of confluence with Cedar Creek	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).
No Name Creek Unnamed Tributary 1	Dodge / Washington County Boundary	Approximately 1,700 feet upstream of Dodge / Washington County Boundary	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Nolan Creek	Confluence with East Branch Rock River	Just downstream of West Bend Road	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
North Branch Cedar Creek	Confluence with Cedar Creek	Approximately 2,000 feet upstream of County Highway Y	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).
North Branch Menomonee River	Confluence with Menomonee River	Approximately 0.5 mile upstream of Goldendale Road	HSPF	HEC-RAS 4.1.0	2019	AE w/ Floodway	Flood storage taken into account during hydrology. Study performed in NAVD88(2012).
North Branch Milwaukee River	Ozaukee / Washington County Boundary	Washington / Sheboygan County Boundary	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
North Branch Milwaukee River Unnamed Tributary 1	Confluence with North Branch Milwaukee River	Approximately 2,150 feet upstream of County Road M	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
North Branch Milwaukee River Unnamed Tributary 2	Confluence with North Branch Milwaukee River	Washington / Ozaukee County Boundary	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
North Creek	Confluence with Milwaukee River	Highland Drive	HEC-HMS 3.5	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
North Crossway Channel	Waukesha / Washington County Boundary	Approximately 1,960 feet upstream of Strawgrass Lane	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study. The portion upstream of the confluence with North Crossway Unnamed Tributary 2 was previously referred to as Unnamed Tributary to North Crossway Channel in the 2022 FIS.
North Crossway Channel Unnamed Tributary 1	Confluence with North Crossway Channel	Approximately 2,360 feet upstream of Washington Drive	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
North Crossway Channel Unnamed Tributary 2	Confluence with North Crossway Channel	Approximately 135 feet upstream of Wasaukee Road	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Oconomowoc Bypass	Pleasant Hill Road	Divergence from Little Cedar Creek	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Upon development of the Little Cedar Creek hydraulic model, it was determined that some discharge would leave the watershed and flow into the headwaters of the main stem of the Oconomowoc River. This occurs where water backs up behind the Railroad culvert (near Pioneer / Scenic Roads), and eventually spills over the divide on the southern end into Oconomowoc Bypass. Study performed in NAVD88(2012).
Oconomowoc River	Washington / Waukesha County Boundary	Approximately 2,600 feet upstream of Hillside Road	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	For the Oconomowoc River watershed, flood storage was taken into account through permanent water bodies and areas covered by the regulated Wisconsin Wetland Inventory where significant flood attenuation may occur. A breakout flow occurs from the Oconomowoc River at the west side of Little Friess Lake near Lake Drive. This flow heads west (over Friess Lake Road) until it enters UT-1 to Oconomowoc River. For this revision, WDNR combined the Oconomowoc River and UT-1 to Oconomowoc River models into a single split flow HEC-RAS v4.1.0 model. This accounts for the amount of flow leaving the Oconomowoc River, which reduces discharges below Lower Friess Lake and increases discharges on UT-1 to Oconomowoc River by 49 cfs for the 1% annual chance event. Study performed in NAVD88(2007).
Polk Springs Creek	Confluence with Cedar Creek	Approximately 300 feet upstream of Mayfield Road	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).
Putter Creek	Confluence with Coney River	Approximately 4,300 feet upstream	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Quaas Creek	Confluence with Milwaukee River	Parkway Drive	HEC-HMS 3.5	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Rubicon River	Washington / Dodge County Boundary	Just downstream of State Highway 60	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	For the Rubicon River watershed, flood storage was taken into account through permanent water bodies and areas covered by the regulated Wisconsin Wetland Inventory where significant flood attenuation may occur. Study performed in NAVD88(1991).
Rubicon River	Just downstream of State Highway 60	Just upstream of Franklin Drive	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	LOMR 17-05-4823P
Rubicon River	Just upstream of Franklin Drive	Approximately 2,600 feet upstream of State Highway 175	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	For the Rubicon River watershed, flood storage was taken into account through permanent water bodies and areas covered by the regulated Wisconsin Wetland Inventory where significant flood attenuation may occur. Study performed in NAVD88(1991).
Rubicon River Overland Flowpath	Convergence with Rubicon River	Divergence from Rubicon River	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(1991).
Rubicon River Tributary 1	Washington / Dodge County Boundary	Approximately 1,600 feet upstream	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Rubicon River Tributary 2	Washington / Dodge County Boundary	Approximately 960 feet upstream	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Scenic Brook	Confluence with Bark River	Approximately 4,700 feet upstream	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Silver Creek	Confluence with Milwaukee River	Silver Lake	TR-20	HEC-2	1995	AE w/ Floodway	Study performed in NGVD29.
Silverbrook Creek	Confluence with Silver Creek	0.5 miles upstream of U.S. Highway 45	HEC-1	Information Unavailable	1995	AE w/ Floodway	The hydrology represented 2010 projected land use data. Study performed in NGVD29.
Smith Lake Channel	Confluence with Milwaukee River	Pond just north of Smith Lake	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Springside Creek	Confluence with Little Cedar Creek	Pioneer Road	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Stony Creek	Confluence with North Branch Milwaukee River	Washington / Fond du Lac County Boundary	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Stony Creek Unnamed Tributary 1	Confluence with Stony Creek	Approximately 2,550 feet upstream of Westcott Road	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Stream 1	Dodge / Washington County Boundary	Divergence from East Branch Rock River Unnamed Tributary 1	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Study performed in NAVD88(2012).
Tributary 1 to Milwaukee River	Confluence with Milwaukee River	Approximately 2/3 miles upstream of State Highway 33	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Study performed in NAVD88(2012).
Tributary 2 to Milwaukee River	Confluence with Milwaukee River	Approximately 0.2 mile upstream of North Oak Road	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Study performed in NAVD88(2012).
Tributary 2 to Milwaukee River Split	Confluence with Tributary 2 to Milwaukee River	Divergence from UT-3 Milwaukee River	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Tributary No. 1	Confluence with Menomonee River	Butternut Road	HEC-HMS 4.0 and HSPF	HEC-RAS 4.1.0	2019	AE w/ Floodway	Flood storage taken into account during hydrology. Study performed in NAVD88(2012).
Tributary No. 1A	Confluence with Tributary No. 1	Division Road	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Study performed in NAVD88(2012).
Tributary No. 1B	Confluence with Tributary No. 1	Donges Bay Road	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Study performed in NAVD88(2012).
Tributary No. 2	Confluence with Menomonee River	Mequon Road	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Study performed in NAVD88(2012).
Tributary No. 2 Unnamed Tributary 1	250 feet upstream of State Highway 167	Approximately 70 feet downstream of Legend Avenue	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Study performed in NAVD88(2012).
Tributary No. 3	Confluence with Menomonee River	300 feet west of Park Avenue	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Tributary No. 4	Confluence with North Branch Menomonee River	Divergence from North Branch Menomonee River	HSPF	HEC-RAS 4.1.0	2019	AE w/ Floodway	Flood storage taken into account during hydrology. Study performed in NAVD88(2012).

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Tributary No. 5	Confluence with Menomonee River	Approximately 3/4 miles upstream of Tributary No. 5 Overflow	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Tributary No. 5 Overflow	Confluence with Tributary No. 5	Divergence from Tributary No. 5 to Menomonee River	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Unnamed Tributary to Ashippun River	Confluence with Ashippun River	Approximately 1.0 miles upstream	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(2007).
Unnamed Tributary to Frieden's Creek	Confluence with Frieden's Creek	Approximately 500 feet upstream of confluence with Frieden's Creek	Information Unavailable	Information Unavailable	2005	AE	Previously referred to as Frieden's Creek in the 2015 FIS, when it was incorporated as LOMR 05-05-1018P.
UT to West Branch Menomonee River	Confluence with West Branch Menomonee River	Approximately 0.25 miles upstream of Freistadt Road	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Flood storage taken into account during hydrology. Study performed in NAVD88(2012).
UT to West Branch Menomonee River Overflow	Confluence with West Branch Menomonee River	Divergence from UT to West Branch Menomonee River	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Flood storage taken into account during hydrology. Study performed in NAVD88(2012).
UT Washington Creek	Confluence with Washington Creek	Approximately 0.2 miles upstream of West Washington Street	HEC-HMS 4.2.1	HEC-RAS 4.1.0	2019	A	Study performed in NAVD88(2012).
UT Wingate Creek	Confluence with Wingate Creek	Approximately 0.4 miles upstream of confluence with Wingate Creek	HEC-HMS 4.2.1	HEC-RAS 4.1.0	2019	A	Study performed in NAVD88(2012).
UT-1 Kewaskum Creek	Confluence with Kewaskum Creek	Approximately 0.4 mile upstream of Townline Road	HEC-HMS 3.5	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
UT-1 Milwaukee River	Confluence with Milwaukee River	Approximately 1.3 miles upstream of US Highway 45	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
UT-1 Mink Creek	Sheboygan / Washington County Boundary	Approximately 100 feet downstream of Cranberry Road	HEC-HMS 4.2.1	HEC-RAS 4.1.0	2019	A	Reference Special Considerations from 2019 Milwaukee River Study.

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
UT-1 Mink Creek	Approximately 100 feet downstream of Cranberry Road	Approximately 1,130 feet upstream of Boltonville Road	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
UT-1 Quaas Creek	Confluence with Quaas Creek	Just south of George Court	HEC-HMS 3.5	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Upper Rock River Watershed Zone A studies	Various	Various	Information Unavailable	Information Unavailable	2013	A	
UT-1 to Big Cedar Lake	Confluence with Cedar Lake	Arthur Road	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).
UT-1 to Cedar Creek	County Highway Y	Washington Drive	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).
UT-1 to Coney River	Confluence with Coney River	Approximately 1,100 feet upstream of Slinger Road	HEC-HMS 2.2.2	HEC-RAS 3.1.3	2013	AE w/ Floodway	Study performed in NGVD29.
UT-1 to Coney River Overflow	Confluence with Coney River	Divergence from UT-1 to Coney River	HEC-HMS 2.2.2	HEC-RAS 3.1.3	2013	AE w/ Floodway	Study performed in NGVD29.
UT-1 to Coney River Overflow West	Confluence with Coney River	Approximately 1,000 feet upstream	HEC-HMS 2.2.2	HEC-RAS 3.1.3	2013	AE w/ Floodway	Study performed in NGVD29.
UT-1 to Evergreen Creek	Confluence with Evergreen Creek	Approximately 1,600 feet upstream of County Highway G	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).
UT-1 to Hasmer Creek	Confluence with Hasmer Creek	Approximately 4,000 feet upstream of confluence with Hasmer Creek	Information Unavailable	Information Unavailable	2011	AE	Previously referred to as Hasmer Creek in the 2015 FIS, when it was incorporated as LOMR 10-05-2489P. The portion of that study from Hasmer Lake down to the mouth has been superseded by the 2018 study.
UT-1 to Kressen Branch	Confluence with Kressen Branch	Approximately 600 feet upstream of Church Road	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
UT-1 to Little Cedar Creek	Confluence with Little Cedar Creek	Approximately 2,500 feet upstream of Jackson Drive	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).
UT-1 to Little Cedar Lake	Confluence with Little Cedar Lake	Approximately 300 feet upstream of Wayne Drive	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).
UT-1 to Oconomowoc River	Confluence with Oconomowoc River	Divergence from Oconomowoc River	HEC-HMS 2.2.2	HEC-RAS 4.1.0	2013	AE w/ Floodway	Planned land use information was taken from SEWRPC 2020 planning report. A breakout flow occurs from the Oconomowoc River at the west side of Little Friess Lake near Lake Drive. This flow heads west (over Friess Lake Road) until it enters UT-1 to Oconomowoc River. For the 2015 FIS, WDNR combined the Oconomowoc River and UT-1 to Oconomowoc River models into a single split flow HEC-RAS v4.1.0 model. This accounts for the amount of flow leaving the Oconomowoc River, which reduces discharges below Lower Friess Lake and increases discharges on UT-1 to Oconomowoc River by 49 cfs for the 1% annual chance event. Study performed in NAVD88(2007).
UT-1 to Polk Springs Creek	Confluence with Polk Springs Creek	State Highway 45	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).
UT-1 to Rubicon River	Confluence with Rubicon River	Approximately 1,900 feet upstream of County Highway U	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(1991).
UT-1.1 Quaas Creek	Confluence with UT-1 Quaas Creek	Approximately 0.5 mile upstream of UT-1 Quaas Creek	HEC-HMS 3.5	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
UT-1.1 to Rubicon River	Confluence with UT-1 to Rubicon River	Washington / Dodge County Boundary	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(1991).
UT-1.1.1 to Rubicon River	Confluence with UT-1.1 to Rubicon River	Approximately 3,200 feet upstream	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(1991).

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
UT-1.2 Quaas Creek	Confluence with UT-1 Quaas Creek	Approximately 0.1 miles upstream of US Highway 45	HEC-HMS 3.5	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
UT-1.2 to Rubicon River	Confluence with UT-1 to Rubicon River	Approximately 2,800 feet upstream of County Highway K	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(1991).
UT-1.2.1 to Rubicon River	Confluence with UT-1.2 to Rubicon River	Approximately 2,800 feet upstream of Saint Lawrence Lane	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(1991).
UT-2 Kewaskum Creek	Confluence with Kewaskum Creek	Kettle View Drive	HEC-HMS 3.5	HEC-RAS 4.1.0	2019	AE w/ Floodway	Study performed in NAVD88(2012).
UT-2 Milwaukee River	Confluence with Milwaukee River	Approximately 1.1 miles upstream of UT-2.1 Milwaukee River	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
UT-2 to Cedar Creek	Confluence with Cedar Creek	Center Road	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).
UT-2 to Coney River	Confluence with Coney River	Approximately 1.4 miles upstream	HEC-HMS 2.2.2	HEC-RAS 3.1.3	2013	AE w/ Floodway	Study performed in NGVD29.
UT-2 to Little Cedar Creek	Confluence with Little Cedar Creek	Approximately 1,500 feet upstream of confluence with Little Cedar Creek	HEC-HMS 3.5	HEC-RAS 4.1.0	2018	AE w/ Floodway	Study performed in NAVD88(2012).
UT-2 to Oconomowoc River	Confluence with Oconomowoc River	State Highway 164	HEC-HMS 2.2.2	HEC-RAS 3.1.3	2013	AE w/ Floodway	Planned land use information was taken from SEWRPC 2020 planning report. The impacts of floodwater storage were accounted for by routing flood hydrographs computed for individual subbasins where there is considerable floodwater storage which would significantly affect flood flows and stages. Study performed in NGVD29.
UT-2 to Rubicon River	Confluence with Rubicon River	Approximately 1,900 feet upstream of County Highway U	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(1991).

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
UT-2.1 Milwaukee River	Confluence with UT-2 Milwaukee River	Approximately 0.7 miles upstream of UT-2 Milwaukee River	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
UT-2.1 to Rubicon River	Confluence with Rubicon River	Approximately 1.0 miles upstream of State Highway 83	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(1991).
UT-3 Milwaukee River	Confluence with Milwaukee River	Green Lake	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
UT-3 to Rubicon River	Confluence with Rubicon River	Approximately 3,000 feet upstream of confluence with UT-3.1 to Rubicon River	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(1991).
UT-3.1 to Rubicon River	Confluence with UT-3 to Rubicon River	Arthur Road	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(1991).
UT-4 Milwaukee River	Confluence with Milwaukee River	Approximately 0.5 miles upstream of East Newark Drive	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Study performed in NAVD88(2012).
UT-4 to Rubicon River	Confluence with Rubicon River	Approximately 4,200 feet upstream	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(1991).
UT-5 to Rubicon River	Confluence with Rubicon River	Approximately 2,200 feet upstream of Wisconsin Central Railroad	HEC-HMS 3.5	HEC-RAS 4.1.0	2013	AE w/ Floodway	Study performed in NAVD88(1991).
Wallace Creek	Confluence with North Branch Milwaukee River	Approximately 200 feet downstream of Wallace Lake Road	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Wallace Creek Unnamed Tributary 2	Confluence with Wallace Creek	Approximately 1,900 feet upstream of the confluence	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Wallace Creek Unnamed Tributary 3	Confluence with Wallace Creek	Approximately 780 feet upstream of South Indian Lore Road	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Washington Creek	Confluence with Silver Creek	500 feet upstream of Sheppard's Drive	HEC-1	Information Unavailable	1995	AE w/ Floodway	Study performed in NGVD29.
Wayne Creek	Confluence with Kohlsville River	Just downstream of Saint Killian Drive	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
Wayne Creek Unnamed Tributary 1	Confluence with Wayne Creek	Approximately 2,500 feet upstream of the confluence with Wayne Creek	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
Wayne Creek Unnamed Tributary 2	Confluence with Wayne Creek	Approximately 8,900 feet upstream of County Highway W	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
Wayne Creek Unnamed Tributary 2.1	Confluence with Wayne Creek Unnamed Tributary 2	Approximately 600 feet upstream of the confluence with Wayne Creek Unnamed Tributary 2	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Study performed in NAVD88(2012).
Wayne Creek Unnamed Tributary 3	Confluence with Wayne Creek	Approximately 1,900 feet upstream of Fairview Drive	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
Wayne Creek Unnamed Tributary 4	Confluence with Wayne Creek	Just downstream of Woodlawn Drive	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
Wayne Creek Unnamed Tributary 4.1	Confluence with Wayne Creek Unnamed Tributary 4	Approximately 1,600 feet upstream of the confluence with Wayne Creek Unnamed Tributary 4	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Wayne Creek Unnamed Tributary 4.2	Confluence with Wayne Creek Unnamed Tributary 4	Approximately 550 feet upstream of the confluence with Wayne Creek Unnamed Tributary 4	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Study performed in NAVD88(2012).
Wayne Creek Unnamed Tributary 5	Confluence with Wayne Creek	Approximately 1,700 feet upstream of the confluence with Wayne Creek	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Study performed in NAVD88(2012).
Wayne Creek Unnamed Tributary 6	Confluence with Wayne Creek	Approximately 4,100 feet upstream of the confluence with Wayne Creek	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2022 Allenton Creek Study.
West Branch Menomonee River	Confluence with Menomonee River	Approximately 600 feet upstream of Brookside Drive	HEC-HMS 4.0 and HSPF	HEC-RAS 4.1.0	2019	AE w/ Floodway	Flood storage taken into account during hydrology. Study performed in NAVD88(2012).
West Branch Menomonee River Overflow	Confluence with West Branch Menomonee River	Divergence from West Branch Menomonee River	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Flood storage taken into account during hydrology. Study performed in NAVD88(2012).
West Branch Milwaukee River	Confluence with Milwaukee River	Approximately 300 feet upstream of US Highway 45	HEC-HMS 4.0	HEC-RAS 4.1.0	2019	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
West Branch Milwaukee River	Approximately 300 feet upstream of US Highway 45	At confluence of West Branch Milwaukee River Unnamed Tributary 1	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
West Branch Milwaukee River Unnamed Tributary 1	Fond du Lac / Washington County Boundary	Just downstream of Lake Bernice Road	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
West Branch Milwaukee River Unnamed Tributary 1.1	Confluence with West Branch Milwaukee River Unnamed Tributary 1	Just downstream of Townline Road	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.

Table 12: Summary of Hydrologic and Hydraulic Analyses (continued)

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
West Branch Milwaukee River Unnamed Tributary 1.2	Confluence with West Branch Milwaukee River Unnamed Tributary 1	Approximately 1,120 feet upstream of the confluence with West Branch Milwaukee River Unnamed Tributary 1	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Wetland Extension 2	Confluence with West Branch Milwaukee River Unnamed Tributary 1	Approximately 2,100 feet upstream of Sunset Drive	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Wetland Extension 2.1	Confluence with Wetland Extension 2	Approximately 5,950 feet upstream of Townline Road	HEC-HMS 4.2	HEC-RAS 4.1.0	2022	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Willow Creek	Confluence with Menomonee River	Just upstream of Amy Belle Road extended	HSPF	HEC-RAS 4.1.0	2019	AE w/ Floodway	Flood storage taken into account during hydrology. Study performed in NAVD88(2012).
Willow Creek Unnamed Tributary 1	Confluence with Willow Creek	Just downstream of County Line Road	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Willow Creek Unnamed Tributary 1.1	Confluence with Willow Creek Unnamed Tributary 1	Approximately 1,950 feet upstream of the confluence with Willow Creek	HEC-HMS 4.2	HEC-RAS 5.0.3	2020	AE w/ Floodway	Reference Special Considerations from 2019 Milwaukee River Study.
Wingate Creek	Confluence with Milwaukee River	420 feet downstream of Wallace Lake Road	HEC-1	HEC-2	1989	AE w/ Floodway	The hydrology represented 2010 projected land use data. Study performed in NGVD29.

Table 13: Roughness Coefficients

Flooding Source	Channel “n”	Overbank “n”
Allenton Creek	0.035 – 0.060	0.030 – 0.120
Allenton Creek Bypass	0.030 – 0.080	0.080 – 0.120
Allenton Creek Unnamed Tributary 1	0.040 – 0.060	0.040 – 0.120
Allenton Creek Unnamed Tributary 1.1	0.040 – 0.050	0.040 – 0.120
Amy Bell Creek	0.045 – 0.055	0.045 – 0.100
Ashippun River	0.030 – 0.055	0.040 – 0.120
Ashippun River – Overland Flowpath	0.040 – 0.045	0.040 – 0.080
Ashippun River Tributary 2	0.040 – 0.050	0.040 – 0.100
Ashippun River Tributary 2.1	0.040 – 0.055	0.040 – 0.120
Ashippun River Tributary 2.2	0.040 – 0.050	0.045 – 0.100
Ashippun River Tributary 3	0.045 – 0.050	0.050 – 0.120
Ashippun River Tributary 4	0.040 – 0.055	0.040 – 0.120
Ashippun River Tributary 5	0.040 – 0.045	0.045 – 0.080
Bark River	0.030 – 0.060	0.045 – 0.120
Bark River Tributary 1	0.040 – 0.045	0.045 – 0.100
Bark River Tributary 1.1	0.040	0.045 – 0.100
Bolton Brook	0.030 – 0.060	0.020 – 0.140
Bonniwell Creek	0.035	0.060 – 0.100
Brooklane Overflow	0.016 – 0.035	0.045 – 0.060
Butler Creek Tributary 1	0.040 – 0.050	0.045 – 0.120
Butler Creek Tributary 2	0.040	0.050 – 0.100
Cedar Creek	0.035 – 0.040	0.060 – 0.110
Cedarburg Creek	0.035	0.060 – 0.100
Coney River	0.020 – 0.050	0.020 – 0.120
Coney River – Overland Flowpath	0.045 – 0.055	0.045 – 0.100
Deer Creek	0.035	0.060 – 0.100
East Branch Milwaukee River	0.035	0.050 – 0.100
East Branch Rock River	0.030 – 0.060	0.020 – 0.150
East Branch Rock River Unnamed Tributary 1	0.040 – 0.060	0.040 – 0.140
East Branch Rock River Unnamed Tributary 1.1	0.040 – 0.060	0.040 – 0.100
East Branch Rock River Unnamed Tributary 1.2	0.040 – 0.060	0.040 – 0.150
East Branch Rock River Unnamed Tributary 1.3	0.030 – 0.060	0.040 – 0.150
East Branch Rock River Unnamed Tributary 1.3.1	0.060	0.040 – 0.135
East Branch Rock River Unnamed Tributary 1.4	0.040 – 0.060	0.040 – 0.135

Table 13: Roughness Coefficients (continued)

Flooding Source	Channel “n”	Overbank “n”
East Branch Rock River Unnamed Tributary 2	0.040 – 0.060	0.040 – 0.150
East Branch Rock River Unnamed Tributary 2 Bypass	0.050 – 0.060	0.050 – 0.120
East Branch Rock River Unnamed Tributary 2.1	0.050 – 0.060	0.040 – 0.140
East Branch Rock River Unnamed Tributary 2.1 Bypass	0.050 – 0.060	0.080
East Branch Rock River Unnamed Tributary 2.2	0.040 – 0.060	0.040 – 0.140
East Branch Rock River Unnamed Tributary 2.3	0.040 – 0.060	0.040 – 0.045
Edgewood Creek	0.025 – 0.035	0.045 – 0.120
Edgewood Creek Overflow Channel	0.016 – 0.035	0.060 – 0.120
Evergreen Bypass	0.060	0.060 – 0.100
Evergreen Creek	0.035 – 0.060	0.060 – 0.100
Flynn Creek	0.020 – 0.070	0.020 – 0.100
Frieden’s Creek	0.035	0.060 – 0.100
Hasmer Creek	0.035	0.060 – 0.100
Hubertus Ditch No. 1	0.040 – 0.045	0.040 – 0.100
Hwy 41 Overflow	0.030	0.030 – 0.040
Jackson Creek	0.035	0.060 – 0.100
Kettleview Creek	0.040	0.060 – 0.120
Kewaskum Creek	0.025 – 0.045	0.050 – 0.120
Kewaskum Creek Overflow Channel	0.045	0.070 – 0.100
Knights Creek	0.035 – 0.040	0.050 – 0.120
Knights Creek Overflow	0.025	0.060
Kohlsville River	0.035 – 0.060	0.030 – 0.150
Kohlsville River – Park Route	0.035 – 0.055	0.045 – 0.120
Kohlsville River Unnamed Tributary 1	0.040 – 0.045	0.040 – 0.135
Kohlsville River Unnamed Tributary 2	0.040 – 0.055	0.030 – 0.150
Kohlsville River Unnamed Tributary 2.1	0.040 – 0.050	0.040 – 0.100
Kressen Branch	0.035	0.060 – 0.100
Lehner Outlet	0.035	0.080 – 0.100
Limestone Creek	0.035 – 0.060	0.030 – 0.135
Limestone Creek Unnamed Tributary 1	0.045 – 0.060	0.045 – 0.150
Limestone Creek Unnamed Tributary 2	0.050 – 0.060	0.045 – 0.135
Limestone Creek Unnamed Tributary 3	0.040 – 0.060	0.045 – 0.135

Table 13: Roughness Coefficients (continued)

Flooding Source	Channel "n"	Overbank "n"
Limestone Creek Unnamed Tributary 3.1	0.045 – 0.060	0.030 – 0.120
Limestone Creek Unnamed Tributary 3.2	0.040 – 0.050	0.040 – 0.100
Limestone Creek Unnamed Tributary 4	0.040 – 0.050	0.040 – 0.080
Limestone Creek Unnamed Tributary 5	0.040 – 0.060	0.040 – 0.150
Limestone Creek Unnamed Tributary 6	0.040 – 0.045	0.040 – 0.090
Little Cedar Creek	0.035	0.060 – 0.100
Little Cedar Creek Bypass	0.035	0.060
Little Oconomowoc River	0.035 – 0.050	0.030 – 0.120
Marsh Creek	0.020 – 0.100	0.025 – 0.120
Mason Creek	0.040	0.040 – 0.100
Mason Creek Tributary 1	0.040 – 0.050	0.045 – 0.120
Menomonee River	0.017 – 0.068	0.035 – 0.160
Menomonee River Unnamed Tributary 1	0.040 – 0.060	0.020 – 0.140
Milwaukee River	0.025 – 0.048	0.040 – 0.155
Myra Creek	0.025 – 0.060	0.050 – 0.120
Nature's Friends Tributary	0.035	0.100
No Name Creek Unnamed Tributary 1	0.040 – 0.050	0.040 – 0.150
Nolan Creek	0.040 – 0.060	0.040 – 0.120
North Branch Cedar Creek	0.035	0.060 – 0.100
North Branch Menomonee River	0.035 – 0.040	0.050 – 0.120
North Branch Milwaukee River	0.040 – 0.060	0.020 – 0.140
North Branch Milwaukee River Unnamed Tributary 1	0.045 – 0.060	0.030 – 0.140
North Branch Milwaukee River Unnamed Tributary 2	0.030 – 0.060	0.020 – 0.140
North Creek	0.035 – 0.040	0.040 – 0.120
North Crossway Channel	0.030 – 0.060	0.020 – 0.120
North Crossway Channel Unnamed Tributary 1	0.040 – 0.060	0.020 – 0.120
North Crossway Channel Unnamed Tributary 2	0.045 – 0.050	0.020 – 0.120
Oconomowoc Bypass	0.035	0.060 – 0.100
Oconomowoc River	0.030 – 0.060	0.030 – 0.150
Polk Springs Creek	0.035	0.060 – 0.100
Putter Creek	0.040 – 0.045	0.050 – 0.120
Quaas Creek	0.035 – 0.045	0.050 – 0.120
Rubicon River	0.035 – 0.045	0.040 – 0.100
Rubicon River Overland Flowpath	0.050	0.055 – 0.100
Rubicon River Tributary 1	0.040 – 0.045	0.045 – 0.120

Table 13: Roughness Coefficients (continued)

Flooding Source	Channel "n"	Overbank "n"
Rubicon River Tributary 2	0.040 – 0.045	0.040 – 0.080
Scenic Brook	0.050	0.080 – 0.120
Silver Creek	0.015 – 0.090	0.040 – 0.095
Silverbrook Creek	0.015 – 0.070	0.030 – 0.120
Smith Lake Channel	0.025 – 0.050	0.050 – 0.120
Springside Creek	0.035	0.060 – 0.100
Stony Creek	0.030 – 0.060	0.020 – 0.140
Stony Creek Unnamed Tributary 1	0.045 – 0.060	0.030 – 0.140
Stream 1	0.040 – 0.050	0.040 – 0.060
Tributary 1 to Milwaukee River	0.030 – 0.040	0.050 – 0.100
Tributary 2 to Milwaukee River	0.045-0.050	0.050 – 0.100
Tributary 2 to Milwaukee River Split	0.050	0.060 – 0.100
Tributary No. 1	0.016 – 0.080	0.050 – 0.120
Tributary No. 1A	0.016 – 0.050	0.040 – 0.120
Tributary No. 1B	0.035 – 0.050	0.050 – 0.120
Tributary No. 2	0.025 – 0.035	0.050 – 0.120
Tributary No. 2 Unnamed Tributary 1	0.045-0.050	0.030 – 0.120
Tributary No. 3	0.040	0.100 – 0.120
Tributary No. 4	0.040 – 0.050	0.050 – 0.120
Tributary No. 5	0.040	0.050 – 0.120
Tributary No. 5 Overflow	0.040 – 0.050	0.060 – 0.100
Unnamed Tributary to Ashippun River	0.040 – 0.050	0.035 – 0.120
Unnamed Tributary to Frieden's Creek	0.040	0.050
UT to West Branch Menomonee River	0.025 – 0.045	0.050 – 0.120
UT to West Branch Menomonee River Overflow	0.050 – 0.120	0.050 – 0.120
UT Washington Creek	0.040	0.060 – 0.100
UT Wingate Creek	0.050 – 0.070	0.050 – 0.100
UT-1 Kewaskum Creek	0.035 – 0.040	0.050 – 0.120
UT-1 Milwaukee River	0.035 – 0.040	0.050 – 0.120
UT-1 Mink Creek	0.045 – 0.060	0.030 – 0.140
UT-1 Quaas Creek	0.025 – 0.050	0.050 – 0.120
UT-1 to Big Cedar Lake	0.035	0.060 – 0.100
UT-1 to Cedar Creek	0.035	0.100
UT-1 to Coney River	0.020 – 0.060	0.020 – 0.100
UT-1 to Coney River Overflow	0.020 – 0.070	0.020 – 0.070
UT-1 to Coney River Overflow West	0.035 – 0.070	0.035 – 0.070
UT-1 to Evergreen Creek	0.035	0.060
UT-1 to Hasmer Creek	0.024 – 0.050	0.030 – 0.110

Table 13: Roughness Coefficients (continued)

Flooding Source	Channel "n"	Overbank "n"
UT-1 to Kressen Branch	0.035	0.060-0.100
UT-1 to Little Cedar Creek	0.035	0.100
UT-1 to Little Cedar Lake	0.035	0.080
UT-1 to Oconomowoc River	0.040 – 0.070	0.020 – 0.100
UT-1 to Polk Springs Creek	0.035	0.060
UT-1 to Rubicon River	0.030 – 0.045	0.040 – 0.100
UT-1.1 Quaas Creek	0.045 – 0.050	0.120
UT-1.1 to Rubicon River	0.030 – 0.040	0.040 – 0.090
UT-1.1.1 to Rubicon River	0.035	0.060 – 0.080
UT-1.2 Quaas Creek	0.045	0.050 – 0.120
UT-1.2 to Rubicon River	0.035 – 0.040	0.045 – 0.080
UT-1.2.1 to Rubicon River	0.035 – 0.040	0.040 – 0.080
UT-2 Kewaskum Creek	0.040	0.070 – 0.120
UT-2 Milwaukee River	0.045	0.060 – 0.120
UT-2 to Cedar Creek	0.035	0.080-0.100
UT-2 to Coney River	0.035 – 0.070	0.020 – 0.070
UT-2 to Little Cedar Creek	0.035	0.060
UT-2 to Oconomowoc River	0.035 – 0.070	0.020 – 0.070
UT-2 to Rubicon River	0.030 – 0.045	0.040 – 0.100
UT-2.1 Milwaukee River	0.040	0.050 – 0.120
UT-2.1 to Rubicon River	0.035 – 0.040	0.045 – 0.080
UT-3 Milwaukee River	0.025 – 0.060	0.050 – 0.120
UT-3 to Rubicon River	0.030 – 0.045	0.040 – 0.100
UT-3.1 to Rubicon River	0.030	0.040
UT-4 Milwaukee River	0.040 – 0.050	0.050 – 0.100
UT-4 to Rubicon River	0.035	0.050 – 0.100
UT-5 to Rubicon River	0.030 – 0.040	0.045 – 0.100
Wallace Creek	0.030 – 0.060	0.030 – 0.120
Wallace Creek Unnamed Tributary 2	0.045 – 0.060	0.030 – 0.120
Wallace Creek Unnamed Tributary 3	0.050 – 0.060	0.030 – 0.120
Washington Creek	0.013 – 0.150	0.013 – 0.150
Wayne Creek	0.035 – 0.060	0.030 – 0.135
Wayne Creek Unnamed Tributary 1	0.050 – 0.060	0.030 – 0.150
Wayne Creek Unnamed Tributary 2	0.040 – 0.065	0.040 – 0.150
Wayne Creek Unnamed Tributary 2.1	0.045 – 0.060	0.050 – 0.120
Wayne Creek Unnamed Tributary 3	0.030 – 0.060	0.040 – 0.120
Wayne Creek Unnamed Tributary 4	0.040 – 0.060	0.030 – 0.120
Wayne Creek Unnamed Tributary 4.1	0.060	0.040 – 0.120

Table 13: Roughness Coefficients (continued)

Flooding Source	Channel "n"	Overbank "n"
Wayne Creek Unnamed Tributary 4.2	0.040 – 0.045	0.030 – 0.100
Wayne Creek Unnamed Tributary 5	0.045 – 0.050	0.040 – 0.050
Wayne Creek Unnamed Tributary 6	0.045 – 0.060	0.030 – 0.120
West Branch Menomonee River	0.035 – 0.050	0.050 – 0.120
West Branch Menomonee River Overflow	0.040 – 0.080	0.045 – 0.100
West Branch Milwaukee River	0.035 – 0.050	0.030 – 0.120
West Branch Milwaukee River Unnamed Tributary 1	0.030 – 0.060	0.020 – 0.150
West Branch Milwaukee River Unnamed Tributary 1.1	0.060	0.040 – 0.120
West Branch Milwaukee River Unnamed Tributary 1.2	0.050 – 0.060	0.040 – 0.120
Wetland Extension 2	0.060 – 0.065	0.040 – 0.150
Wetland Extension 2.1	0.055 – 0.060	0.050 – 0.150
Willow Creek	0.025 – 0.040	0.045 – 0.120
Willow Creek Unnamed Tributary 1	0.040 – 0.060	0.020 – 0.120
Willow Creek Unnamed Tributary 1.1	0.040 – 0.060	0.040 – 0.120
Wingate Creek	0.024 – 0.090	0.035 – 0.120

5.3 Coastal Analyses

This section is not applicable to this Flood Risk Project.

**Table 14: Summary of Coastal Analyses
[Not Applicable to this Flood Risk Project]**

5.3.1 Total Stillwater Elevations

This section is not applicable to this Flood Risk Project.

**Figure 8: 1% Annual Chance Total Stillwater Elevations for Coastal Areas
[Not Applicable to this Flood Risk Project]**

**Table 15: Tide Gage Analysis Specifics
[Not Applicable to this Flood Risk Project]**

5.3.2 Waves

This section is not applicable to this Flood Risk Project.

5.3.3 Coastal Erosion

This section is not applicable to this Flood Risk Project.

5.3.4 Wave Hazard Analyses

This section is not applicable to this Flood Risk Project.

Table 16: Coastal Transect Parameters
[Not Applicable to this Flood Risk Project]

Figure 9: Transect Location Map
[Not Applicable to this Flood Risk Project]

5.4 Alluvial Fan Analyses

This section is not applicable to this Flood Risk Project.

**Table 17: Summary of Alluvial Fan Analyses
[Not Applicable to this Flood Risk Project]**

**Table 18: Results of Alluvial Fan Analyses
[Not Applicable to this Flood Risk Project]**

SECTION 6.0 – MAPPING METHODS

6.1 Vertical and Horizontal Control

All FIS Reports and FIRMs are referenced to a specific vertical datum. The vertical datum provides a starting point against which flood, ground, and structure elevations can be referenced and compared. Until recently, the standard vertical datum used for newly created or revised FIS Reports and FIRMs was the National Geodetic Vertical Datum of 1929 (NGVD29). With the completion of the North American Vertical Datum of 1988 (NAVD88), many FIS Reports and FIRMs are now prepared using NAVD88 as the referenced vertical datum.

Flood elevations shown in this FIS Report and on the FIRMs are referenced to NAVD88 (2012). These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For this update, new studies used the version of NAVD88 (2012). Streams on FIRMs with an effective date of 02/25/2022 already had elevations published in NAVD88 (2012). As part of this RiskMAP update, streams on FIRMs with an effective date after 02/25/2022 had elevation data adjusted, as necessary, to NAVD88 (2012). Please refer to the special considerations in Table 12 to determine the vertical datum used in the original hydraulic analyses.

The datum conversion factor from NGVD29 to NAVD88 (2012) is 0.0'. The datum conversion from NAVD88 (1991) to NAVD88 (2012) is + 0.2' [NAVD88 (1991) + 0.2' = NAVD88 (2012)]. The datum conversion from NAVD88 (2007) to NAVD88 (2012) is + 0.1' [NAVD88 (2007) + 0.1' = NAVD88 (2012)]. Conversions within the NAVD88 transformations were done by evaluating NGS benchmarks in the county and averaging the differences countywide.

For information regarding conversion between NGVD29 and NAVD88 or other datum conversion, visit the National Geodetic Survey website at www.ngs.noaa.gov.

Temporary vertical monuments are often established during the preparation of a flood hazard analysis for the purpose of establishing local vertical control. Although these monuments are not shown on the FIRM, they may be found in the archived project documentation associated with the FIS Report and the FIRMs for this community. Interested individuals may contact FEMA to access these data.

To obtain current elevation, description, and/or location information for benchmarks in the area, please visit the NGS website at www.ngs.noaa.gov.

Table 19: Countywide Vertical Datum Conversion

[Not Applicable to this Flood Risk Project]

Table 20: Stream-Based Vertical Datum Conversion

[Not Applicable to this Flood Risk Project]

6.2 Base Map

The FIRMs and FIS Report for this project have been produced in a digital format. The flood hazard information was converted to a Geographic Information System (GIS) format that meets FEMA’s FIRM Database specifications and geographic information standards. This information is provided in a digital format so that it can be incorporated into a local GIS and be accessed more easily by the community. The FIRM Database includes most of the tabular information contained in the FIS Report in such a way that the data can be associated with pertinent spatial features. For example, the information contained in the Floodway Data table and Flood Profiles can be linked to the cross sections that are shown on the FIRMs. Additional information about the FIRM Database and its contents can be found in FEMA’s *Guidelines and Standards for Flood Risk Analysis and Mapping*, www.fema.gov/flood-maps/guidance-partners/guidelines-standards.

Base map information shown on the FIRM was derived from the sources described in Table 21.

Table 21: Base Map Sources

Data Type	Data Provider	Data Date	Data Scale	Data Description
2015 High-resolution Digital Orthoimagery of Washington County, Wisconsin	Wisconsin Regional Orthoimagery Consortium (WROC)	2018	1:24,000	Washington County Orthoimage re-sampled to 18 inch resolution and reprojected to UTM (NAD83) Zone 16N (WDNR, 2018)
Political Boundaries for Washington County, Wisconsin	Wisconsin Department of Natural Resources	2023	1:100,000	Spatial and attribute information for political boundaries in Washington County, Wisconsin (WDNR, 2023b)
Transportation data for Washington County and Incorporated Areas, Wisconsin	Wisconsin Department of Natural Resources	2016	1:100,000	Spatial and attribute information for transportation areas in Washington County, downloaded from OpenStreetMap (OSM) Roads. (WDNR, 2016)
USGS National Map: Orthoimagery for Washington County	US Geological Survey	2020*		Orthorectified digital aerial photographs and satellite images of 1-meter (m) pixel resolution or finer for FIRMs dated 02/20/2026. (USGS, 2020)
Wisconsin 2000 Roads	Wisconsin Office of Land Information Services, DOA	2000	1:100,000	Spatial and attribute information for transportation network in Washington County. (US CENSUS, 2000)

* Most recently refreshed data

Table 21: Base Map Sources (continued)

Data Type	Data Provider	Data Date	Data Scale	Data Description
Wisconsin Hydrological Features	Wisconsin Department of Natural Resources	2004	1:24,000	Spatial and attribute information for hydrologic network in Washington County, WI. (WDNR, 2004)
Wisconsin PLSS sections from 1:24K landnet	Wisconsin Department of Natural Resources	1996	1:24,000	Spatial and attribute information for PLSS areas and boundaries (WDNR, 1996)

* Most recently refreshed data

6.3 Floodplain and Floodway Delineation

The FIRM shows tints, screens, and symbols to indicate floodplains and floodways as well as the locations of selected cross sections used in the hydraulic analyses and floodway computations.

For riverine flooding sources, the mapped floodplain boundaries shown on the FIRM have been delineated using the flood elevations determined at each cross section; between cross sections, the boundaries were interpolated using the topographic elevation data described in Table 22.

In cases where the 1-percent and 0.2-percent-annual-chance floodplain boundaries are close together, only the 1-percent-annual-chance floodplain boundary has been shown. Small areas within the floodplain boundaries may lie above the flood elevations but cannot be shown due to limitations of the map scale and/or lack of detailed topographic data.

The floodway widths presented in this FIS Report and on the FIRM were computed for certain stream segments on the basis of equal conveyance reduction from each side of the floodplain. Floodway widths were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. Table 2 indicates the flooding sources for which floodways have been determined. The results of the floodway computations for those flooding sources have been tabulated for selected cross sections and are shown in Table 23, "Floodway Data

Table 22: Summary of Topographic Elevation Data used in Mapping

Community	Flooding Source	Source for Topographic Elevation Data			
		Description	Vertical Accuracy	Horizontal Accuracy	Citation
Germantown, Village of; Jackson, Village of; Kewaskum Village of; Newburg, Village of; Richfield, Village of; Washington County, Unincorporated Areas; West Bend, City of	Allenton Creek and Unnamed Tributaries 1, and 1.1, Allenton Creek Bypass, Bolton Brook, Brooklane Overflow, Bonniwell Creek, Cedar Creek, Cedar Lake, Cedarburg Creek, Deer Creek, East Branch Milwaukee River, East Branch Rock River (downstream of approximately 4,500 feet downstream of State Highway 33 and upstream of Hillcrest Drive), East Branch Rock River Unnamed Tributaries 1, 1.1, 1.2, 1.3, 1.3.1, 1.4, 2, 2 Bypass, 2.1, 2.1 Bypass, 2.2, and 2.3, Edgewood Creek and Overflow Channel, Evergreen Bypass, Evergreen Creek, Frieden's Creek, Green Lake, Hasmer Creek, HWY 41 Overflow, Jackson Creek, Kettleview Creek, Kewaskum Creek and Overflow Channel, Knights Creek and Overflow, Kohlsville River (downstream of Beechnut Drive and upstream of approximately 300 feet downstream of County Highway D), Kohlsville River Unnamed Tributaries 1, 2, and 2.1, Kressen Branch, Lehner Outlet, Limestone Creek and Unnamed Tributaries 1, 2, 3, 3.1, 3.2, 4, 5, and 6, Little Cedar Creek, Little Cedar Creek Bypass, Menomonee River Unnamed Tributary 1, Milwaukee River, Mueller Lake, Myra Creek, Nature's Friends Tributary, No Name Creek Unnamed Tributary 1, Nolan Creek, North Branch Cedar Creek, North Branch Menomonee River, North Branch Milwaukee River and Unnamed Tributaries 1 and 2, North Creek, North Crossway Channel and Unnamed Tributaries 1 and 2, Oconomowoc Bypass, Polk Springs Creek, Quaas Creek, Smith Lake Channel, Springside Creek, Stony Creek and Unnamed Tributary 1, Stream 1, Tributary 1 and 2 to Milwaukee River, Tributary 2 to Milwaukee River Split, Tributary No.1, 1A, and 1B, Tributary No. 2 and Unnamed Tributary 1, Tributary No. 3, Tributary No. 4, Tributary No. 5 and Overflow, UT to West Branch Menomonee River and Overflow, UT Washington Creek, UT Wingate Creek, UT-1 and UT-2 Kewaskum Creek, UT-1, UT-2, UT-2.1, UT-3, and UT-4 Milwaukee River, UT-1 Mink Creek, UT-1, UT-1.1, UT-1.2 Quaas Creek, UT-1 to Big Cedar Lake, UT-1 and UT-2 to Cedar Creek, UT-1 to Evergreen Creek, UT-1 to Kressen Branch, UT-1 and UT-2 to Little Cedar Creek, UT-1 to Little Cedar Lake, UT-1 to Polk Springs Creek, UT Wallace Creek and Unnamed Tributaries 2 and 3, Wayne Creek and Unnamed Tributaries 1, 2, 2.1, 3, 4, 4.1, 4.2, 5, and 6, West Branch Menomonee River and Overflow, West Branch Milwaukee River and Unnamed Tributaries 1, 1.1, and 1.2, Wetland Extension 2 and 2.1, Willow Creek and Unnamed Tributaries 1 and 1.1	2015 LiDAR Derived Digital Elevation Model for Washington County, Wisconsin.	4.1 cm RMSEz	Not provided	WDNR, 2017

Table 22: Summary of Topographic Elevation Data used in Mapping (continued)

Community	Flooding Source	Source for Topographic Elevation Data			
		Description	Vertical Accuracy	Horizontal Accuracy	Citation
Hartford, City of; Richfield, Village of; Slinger, Village of; Washington County, Unincorporated Areas	Amy Bell Creek, Amy Bell Lake, Ashippun River, Ashippun River – Overland Flowpath, Ashippun River Tributaries 2, 2.1, 2.2, 3, 4, and 5, Bark River and Tributaries 1 and 1.1, Butler Creek Tributaries 1 and 2, Coney River (downstream of CTH E), Coney River – Overland Flowpath, East Branch Rock River (from approximately 4,500 feet downstream of State Highway 33 to Hillcrest Drive), Hubertus Ditch No. 1, Kohlsville River (from Beechnut Drive to approximately 300 feet downstream of County Highway D), Kohlsville River – Park Route, Lake Five, Little Oconomowoc River, Lower Rock River Watershed Zone A Studies, Mason Creek and Tributary 1, Menomonee River, Milwaukee Watershed Zone A Studies, Oconomowoc River, Putter Creek, Rubicon River and Tributary 1 and 2, Rubicon River Overland Flowpath, Scenic Brook, Unnamed Tributary to Ashippun River, Unnamed Tributary to Frieden’s Creek, Upper Rock River Watershed Zone A Studies, UT-1 to Oconomowoc River, UT-1, UT-1.1, UT-1.1.1, UT-1.2, UT-1.2.1, UT-2, UT-2.1, UT-3, UT-3.1, UT-4, and UT-5 to Rubicon River	DEM based on three terrain sources provided by Washington County: 1) 2007 LiDAR data where available, 2) 2005 digital terrain model, and 3) 2003 digital terrain model in some areas	Not provided	Not provided	WDNR, 2007a
Jackson, Village of; Richfield, Village of; Washington County, Unincorporated Areas; West Bend, City of	Marsh Creek, Silver Creek, Silverbrook Creek, UT-1 to Hasmer Creek, and Washington Creek	2005 Digital Topographic Data	Not provided	Not provided	CDM, 2005
Richfield, Village of; Washington County, Unincorporated Areas	Coney River (upstream of County Highway E), Flynn Creek, UT-1 and UT-2 to Coney River, UT-1 to Coney River Overflow, UT-1 to Coney River Overflow West, and UT-2 to Oconomowoc River, UT1	2003 Digital Terrain Model	Not provided	Not provided	SEWRPC, 2003
Washington County, Unincorporated Areas; West Bend, City of	Wingate Creek	2000 Digital Base Map Information	Not provided	Not provided	SEWRPC, 2000

BFEs shown at cross sections on the FIRM represent the 1-percent-annual-chance water surface elevations shown on the Flood Profiles and in the Floodway Data tables in the FIS Report.

Table 23: Floodway Data

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
ALLENTON CREEK								
A	891	1,474	1,735	0.5	955.8	955.8	955.8	0.0
B	2,991	16	27	1.0	957.3	957.3	957.3	0.0
C	3,152	35	37	0.7	959.0	959.0	959.0	0.0
D	5,103	23	20	1.3	962.5	962.5	962.5	0.0
E	6,952	40	26	1.0	969.7	969.7	969.7	0.0
F	7,140	787	1,227	0.7	974.3	974.3	974.3	0.0
G	8,370	521	485	1.7	979.0	979.0	979.0	0.0
H	9,608	201	216	3.9	982.2	982.2	982.2	0.0
I	10,028	301	448	1.9	987.3	987.3	987.3	0.0
J	10,226	259	860	0.6	987.4	987.4	987.4	0.0
K	10,628	770	3,503	0.2	998.5	998.5	998.5	0.0
L	11,683	146	133	4.0	1,011.7	1,011.7	1,011.7	0.0
M	13,388	167	203	2.6	1,038.9	1,038.9	1,038.9	0.0
N	14,952	140	143	3.7	1,065.3	1,065.3	1,065.3	0.0

¹FEET ABOVE CONFLUENCE WITH EAST BRANCH ROCK RIVER

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: ALLENTON CREEK

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
ALLENTON CREEK BYPASS								
A	760 ¹	95	142	5.7	962.6	962.6	962.6	0.0
B	1,157 ¹	497	2,886	0.3	967.0	967.0	967.0	0.0
C	3,346 ¹	612	1,029	0.8	967.1	967.1	967.1	0.0
ALLENTON CREEK UNNAMED TRIBUTARY 1								
A	343 ¹	116	91	2.3	987.5	987.5	987.5	0.0
B	1,093 ¹	366	286	0.7	988.0	988.0	988.0	0.0
C	1,669 ¹	46	90	2.3	991.0	991.0	991.0	0.0
D	2,557 ¹	106	111	1.8	996.0	996.0	996.0	0.0
E	3,070 ¹	95	59	3.4	998.8	998.8	998.8	0.0
F	3,680 ¹	29	48	4.1	1,001.8	1,001.8	1,001.8	0.0
ALLENTON CREEK UNNAMED TRIBUTARY 1.1								
A	75 ²	82	62	0.4	994.8	994.8	994.8	0.0
B	509 ²	13	19	1.2	994.8	994.8	994.8	0.0
C	729 ²	33	14	1.6	996.6	996.6	996.6	0.0
D	1,084 ²	15	11	2.1	999.8	999.8	999.8	0.0

¹FEET ABOVE CONFLUENCE WITH ALLENTON CREEK

²FEET ABOVE CONFLUENCE WITH ALLENTON CREEK UNNAMED TRIBUTARY 1

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: ALLENTON CREEK BYPASS – ALLENTON CREEK UNNAMED TRIBUTARY 1 - ALLENTON CREEK UNNAMED TRIBUTARY 1.1

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
AMY BELL CREEK								
A	114 ¹	307	353	0.5	976.1	974.2 ³	974.2	0.0
B	606 ¹	416	276	0.6	976.1	974.3 ³	974.3	0.0
C	1,489 ¹	279	285	0.6	976.1	975.3 ³	975.3	0.0
D	2,082 ¹	566	1,009	0.2	976.1	975.4 ³	975.4	0.0
E	3,096 ¹	567	1,541	0.1	976.1	975.4 ³	975.4	0.0
ASHIPPUN RIVER								
A	694 ²	1,118	1,574	0.2	953.7	953.7	953.7	0.0
B	1,744 ²	172	178	1.8	954.4	954.4	954.4	0.0
C	2,725 ²	103	119	2.7	956.2	956.2	956.2	0.0
D	3,798 ²	162	156	2.1	958.9	958.9	958.9	0.0
E	4,941 ²	180	207	1.6	960.9	960.9	960.9	0.0
F	6,229 ²	123	174	1.8	962.5	962.5	962.5	0.0
G	8,028 ²	79	105	3.1	966.3	966.3	966.3	0.0
H	8,367 ²	161	248	1.3	967.2	967.2	967.2	0.0
I	10,553 ²	251	342	0.9	968.5	968.5	968.5	0.0
J	12,638 ²	223	314	0.9	969.4	969.4	969.4	0.0
K	14,266 ²	207	247	1.2	970.7	970.7	970.7	0.0
L	15,888 ²	630	880	0.3	971.4	971.4	971.4	0.0
M	17,749 ²	201	196	1.5	971.6	971.6	971.6	0.0
N	17,929 ²	95	225	1.3	972.0	972.0	972.0	0.0
O	18,083 ²	270	613	0.5	972.5	972.5	972.5	0.0
P	20,233 ²	391	764	0.4	972.6	972.6	972.6	0.0
Q	20,571 ²	328	878	0.3	974.1	974.1	974.1	0.0
R	21,357 ²	1,451	17,029	0.0	974.1	974.1	974.1	0.0
S	21,590 ²	1,555	32,967	0.0	974.1	974.1	974.1	0.0

¹FEET ABOVE MOUTH AT BARK LAKE, ²FEET ABOVE COUNTY BOUNDARY,

³ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM BARK RIVER

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY	FLOODWAY DATA
	WASHINGTON COUNTY, WI	FLOODING SOURCE: AMY BELL CREEK - ASHIPPUN RIVER
	AND INCORPORATED AREAS	

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
ASHIPPUN RIVER (CONTINUED)								
T	26,025	339	557	1.1	974.4	974.4	974.4	0.0
U	28,990	871	851	0.7	975.0	975.0	975.0	0.0
V	29,818	443	347	1.7	975.5	975.5	975.5	0.0
W	31,628	362	518	1.2	977.7	977.7	977.7	0.0
X	33,913	544	598	0.9	979.3	979.3	979.3	0.0
Y	34,830	273	388	1.4	981.0	981.0	981.0	0.0
Z	35,359	331	470	1.2	981.7	981.7	981.7	0.0
AA	36,639	267	428	1.3	982.4	982.4	982.4	0.0
AB	39,346	235	359	1.6	985.4	985.4	985.4	0.0
AC	39,749	215	826	0.7	987.5	987.5	987.5	0.0
AD	41,014	324	676	0.8	987.6	987.6	987.6	0.0
AE	42,172	521	851	0.6	988.3	988.3	988.3	0.0
AF	42,634	390	1,256	0.4	990.8	990.8	990.8	0.0
AG	44,857	410	852	0.6	990.9	990.9	990.9	0.0
AH	46,801	1,395	2,130	0.2	991.2	991.2	991.2	0.0
AI	47,450	865	1,604	0.2	991.2	991.2	991.2	0.0
AJ	48,215	402	455	0.8	991.9	991.9	991.9	0.0
AK	49,453	161	241	1.5	993.8	993.8	993.8	0.0
AL	49,727	400	1,028	0.4	995.7	995.7	995.7	0.0
AM	53,687	1,340	3,439	0.1	995.8	995.8	995.8	0.0
AN	54,675	119	148	2.0	995.8	995.8	995.8	0.0
AO	55,838	74	149	1.9	999.4	999.4	999.4	0.0
AP	56,478	289	229	1.3	1,000.0	1,000.0	1,000.0	0.0
AQ	56,751	1,059	3,256	0.1	1,003.4	1,003.4	1,003.4	0.0
AR	59,421	559	400	0.4	1,003.4	1,003.4	1,003.4	0.0

¹FEET ABOVE COUNTY BOUNDARY

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: ASHIPPUN RIVER

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
ASHIPPUN RIVER (CONTINUED)								
AS	60,122 ¹	25	54	3.2	1,005.8	1,005.8	1,005.8	0.0
AT	60,917 ¹	179	146	1.2	1,007.1	1,007.1	1,007.1	0.0
AU	62,303 ¹	560	276	0.6	1,008.0	1,008.0	1,008.0	0.0
AV	62,925 ¹	74	66	2.6	1,010.8	1,010.8	1,010.8	0.0
AW	64,132 ¹	292	135	1.1	1,012.2	1,012.2	1,012.2	0.0
AX	64,827 ¹	212	82	1.8	1,017.8	1,017.8	1,017.8	0.0
AY	65,266 ¹	250	189	0.8	1,020.4	1,020.4	1,020.4	0.0
AZ	65,923 ¹	145	77	1.9	1,023.8	1,023.8	1,023.8	0.0
BA	66,083 ¹	100	68	2.2	1,025.6	1,025.6	1,025.6	0.0
BB	66,437 ¹	272	288	0.5	1,026.2	1,026.2	1,026.2	0.0
ASHIPPUN RIVER - OVERLAND FLOWPATH								
A	468 ²	366 ³	78	0.4	991.7	991.7	991.7	0.0
B	653 ²	454	49	0.6	992.3	992.3	992.3	0.0
C	1,427 ²	422 ³	170	0.2	992.5	992.5	992.5	0.0
D	2,361 ²	95	26	1.0	995.6	995.6	995.6	0.0
E	2,650 ²	335	463	0.1	995.7	995.7	995.7	0.0

¹FEET ABOVE COUNTY BOUNDARY, ²FEET ABOVE CONVERGENCE WITH UNNAMED TRIBUTARY TO ASHIPPUN RIVER

³TOP WIDTH REFLECTS NUMEROUS SMALL ISLANDS THAT COULD NOT BE SHOWN AT MAP SCALE

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: ASHIPPUN RIVER - ASHIPPUN RIVER - OVERLAND FLOWPATH

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
ASHIPPUN RIVER TRIBUTARY 2								
A	540 ¹	1,080	1,256	0.3	953.7	952.9 ³	952.9	0.0
B	2,211 ¹	44	117	3.3	953.7	953.0 ³	953.0	0.0
C	3,075 ¹	590	520	0.7	954.0	954.0	954.0	0.0
D	5,508 ¹	1,480	1,378	0.3	955.0	955.0	955.0	0.0
E	7,196 ¹	154	102	1.5	955.7	955.7	955.7	0.0
F	8,015 ¹	99	126	1.2	957.6	957.6	957.6	0.0
G	9,552 ¹	100	102	0.9	960.1	960.1	960.1	0.0
H	10,671 ¹	432	377	0.3	960.4	960.4	960.4	0.0
I	11,239 ¹	77	36	2.6	963.1	963.1	963.1	0.0
J	11,509 ¹	24	28	3.4	965.7	965.7	965.7	0.0
K	11,746 ¹	88	136	0.7	968.1	968.1	968.1	0.0
L	13,246 ¹	24	25	4.4	968.3	968.3	968.3	0.0
ASHIPPUN RIVER TRIBUTARY 2.1								
A	174 ²	923	823	0.3	955.1	955.1	955.1	0.0
B	1,386 ²	208	235	1.2	957.2	957.2	957.2	0.0
C	2,562 ²	112	139	1.9	961.6	961.6	961.6	0.0
D	3,455 ²	89	71	3.7	965.6	965.6	965.6	0.0
E	3,909 ²	119	81	3.2	966.5	966.5	966.5	0.0
F	4,490 ²	130	143	0.2	967.9	967.9	967.9	0.0
G	5,147 ²	160	630	0.1	967.9	967.9	967.9	0.0

¹FEET ABOVE CONFLUENCE WITH ASHIPPUN RIVER, ²FEET ABOVE CONFLUENCE WITH ASHIPPUN RIVER TRIBUTARY 2

³ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM ASHIPPUN RIVER

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: ASHIPPUN RIVER TRIBUTARY 2 - ASHIPPUN RIVER TRIBUTARY 2.1

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
ASHIPPUN RIVER TRIBUTARY 2.2								
A	68 ¹	44	42	1.0	960.0	960.0	960.0	0.0
B	862 ¹	16	21	1.9	961.2	961.2	961.2	0.0
C	1,383 ¹	10	18	2.2	962.4	962.4	962.4	0.0
D	2,459 ¹	14	16	1.2	963.7	963.7	963.7	0.0
E	3,866 ¹	16	17	1.2	964.3	964.3	964.3	0.0
F	4,346 ¹	10	9	2.3	965.3	965.3	965.3	0.0
ASHIPPUN RIVER TRIBUTARY 3								
A	539 ²	168	191	1.8	981.1	981.1	981.1	0.0
B	1,025 ²	176	151	2.3	983.1	983.1	983.1	0.0
ASHIPPUN RIVER TRIBUTARY 4								
A	150 ²	763	1,387	0.0	995.8	995.3 ³	995.3	0.0
B	1,389 ²	308	432	0.1	995.8	995.3 ³	995.3	0.0
C	1,713 ²	30	24	2.5	995.8	995.8	995.8	0.0
D	2,148 ²	12	22	2.7	998.8	998.8	998.8	0.0
E	3,021 ²	187	51	1.2	1,001.2	1,001.2	1,001.2	0.0
F	3,408 ²	145	47	1.3	1,004.3	1,004.3	1,004.3	0.0
G	3,760 ²	55	45	1.4	1,008.8	1,008.8	1,008.8	0.0
H	3,968 ²	90	119	1.6	1,009.2	1,009.2	1,009.2	0.0
I	4,143 ²	71	58	3.3	1,012.7	1,012.7	1,012.7	0.0

¹FEET ABOVE CONFLUENCE WITH ASHIPUN RIVER TRIBUTARY 2, ²FEET ABOVE CONFLUENCE WITH ASHIPUN RIVER

³ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM ASHIPUN RIVER

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: ASHIPUN RIVER TRIBUTARY 2.2 - ASHIPPUN RIVER TRIBUTARY 3 - ASHIPUN RIVER TRIBUTARY 4

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
ASHIPPUN RIVER TRIBUTARY 5								
A	39 ¹	445	1,102	0.1	1,003.4	1,003.2 ³	1,003.2	0.0
B	581 ¹	13	16	3.4	1,003.6	1,003.6	1,003.6	0.0
C	874 ¹	89	58	1.0	1,004.7	1,004.7	1,004.7	0.0
D	1,257 ¹	31	22	2.5	1,007.6	1,007.6	1,007.6	0.0
BARK RIVER								
A	354,857 ²	93	131	1.1	968.9	968.9	968.9	0.0
B	355,954 ²	621	880	0.1	969.2	969.2	969.2	0.0
C	356,976 ²	621	615	0.2	969.3	969.3	969.3	0.0
D	357,853 ²	260	315	0.6	969.5	969.5	969.5	0.0
E	358,675 ²	768	456	0.4	970.1	970.1	970.1	0.0
F	360,034 ²	1,325	720	0.1	970.5	970.5	970.5	0.0
G	360,929 ²	214	129	0.8	970.7	970.7	970.7	0.0
H	361,859 ²	423	676	0.3	971.1	971.1	971.1	0.0
I	362,568 ²	212	132	1.0	971.3	971.3	971.3	0.0
J	363,149 ²	18	309	1.6	973.8	973.8	973.8	0.0
K	363,686 ²	470	1,157	0.1	975.2	975.2	975.2	0.0
L	364,632 ²	187	467	0.2	975.2	975.2	975.2	0.0
M	365,290 ²	165	261	0.4	975.7	975.7	975.7	0.0
N	366,028 ²	240	372	0.3	976.0	976.0	976.0	0.0
O	366,979 ²	314	638	0.2	976.0	976.0	976.0	0.0
P	367,359 ²	437	1,083	0.1	976.0	976.0	976.0	0.0
Q	367,828 ²	203	1,601	0.1	976.0	976.0	976.0	0.0
R	368,338 ²	278	1,321	0.1	976.1	976.1	976.1	0.0
S	368,878 ²	788	10,565	0.0	976.1	976.1	976.1	0.0

¹FEET ABOVE CONFLUENCE WITH ASHIPUN RIVER, ²FEET ABOVE CONFLUENCE WITH ROCK RIVER

³ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM ASHIPUN RIVER

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: ASHIPUN RIVER TRIBUTARY 5 - BARK RIVER

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BARK RIVER (CONTINUED)								
T	370,666	688	14,916	0.0	976.1	976.1	976.1	0.0
U	372,977	1,192	3,114	0.1	976.1	976.1	976.1	0.0
V	373,554	1,760	5,580	0.0	976.1	976.1	976.1	0.0
W	374,437	2,027	3,219	0.0	976.1	976.1	976.1	0.0
X	376,830	526	292	0.6	977.4	977.4	977.4	0.0
Y	378,186	154	367	1.8	982.8	982.8	982.8	0.0
Z	378,740	169	106	1.1	986.4	986.4	986.4	0.0
AA	379,092	51	39	3.0	992.1	992.1	992.1	0.0
AB	379,216	31	30	3.9	994.9	994.9	994.9	0.0
AC	379,298	59	56	2.1	997.0	997.0	997.0	0.0
AD	379,365	35	26	4.5	997.0	997.0	997.0	0.0
AE	379,541	129	190	0.6	999.8	999.8	999.8	0.0
AF	379,665	22	31	3.8	1,001.3	1,001.3	1,001.3	0.0
AG	379,931	39	47	2.5	1,005.1	1,005.1	1,005.1	0.0
AH	380,422	60	205	0.9	1,010.5	1,010.5	1,010.5	0.0
AI	380,955	530	1,787	0.1	1,012.3	1,012.3	1,012.3	0.0
AJ	381,360	371	884	0.2	1,012.3	1,012.3	1,012.3	0.0
AK	382,266	240	414	0.3	1,014.1	1,014.1	1,014.1	0.0
AL	382,778	196	113	1.0	1,015.4	1,015.4	1,015.4	0.0
AM	383,199	173	112	1.1	1,016.4	1,016.4	1,016.4	0.0

¹FEET ABOVE CONFLUENCE WITH ROCK RIVER

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: BARK RIVER

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BARK RIVER TRIBUTARY 1								
A	88 ¹	45	122	0.9	973.6	973.6	973.6	0.0
B	710 ¹	113	166	0.6	973.7	973.7	973.7	0.0
C	930 ¹	184	839	0.1	974.6	974.6	974.6	0.0
D	1,138 ¹	183	378	0.3	974.6	974.6	974.6	0.0
BARK RIVER TRIBUTARY 1.1								
A	48 ²	142	160	0.1	973.7	973.7	973.7	0.0
B	330 ²	122	385	0.0	974.7	974.7	974.7	0.0
C	1,036 ²	241	766	0.0	974.7	974.7	974.7	0.0
BOLTON BROOK								
A	36 ³	142	138	3.8	840.1	840.1	840.1	0.0
B	184 ³	130	158	3.3	843.0	843.0	843.0	0.0
C	419 ³	200	598	0.9	850.0	850.0	850.0	0.0
D	644 ³	225	371	1.4	852.5	852.5	852.5	0.0
E	921 ³	86	101	5.1	855.0	855.0	855.0	0.0
F	1,119 ³	62	126	4.1	859.1	859.1	859.1	0.0
G	1,486 ³	31	90	5.8	865.9	865.9	865.9	0.0
H	1,748 ³	229	370	1.4	866.9	866.9	866.9	0.0
I	1,885 ³	222	157	3.3	867.5	867.5	867.5	0.0
J	2,139 ³	258	415	1.2	869.6	869.6	869.6	0.0
K	2,414 ³	143	175	3.0	870.8	870.8	870.8	0.0
L	2,821 ³	135	214	2.4	873.4	873.4	873.4	0.0
M	3,114 ³	125	136	3.8	876.4	876.4	876.4	0.0

¹FEET ABOVE WASHINGTON / WAUKESHA COUNTY BOUNDARY, ²FEET ABOVE CONFLUENCE WITH BARK RIVER TRIBUTARY 1

³FEET ABOVE CONFLUENCE WITH STONY CREEK

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY	FLOODWAY DATA
	WASHINGTON COUNTY, WI	FLOODING SOURCE: BARK RIVER TRIBUTARY 1 -
	AND INCORPORATED AREAS	BARK RIVER TRIBUTARY 1.1 - BOLTON BROOK

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BOLTON BROOK (CONTINUED)								
N	3,387 ¹	235	259	2.0	879.5	879.5	879.5	0.0
O	3,566 ¹	355	759	0.7	882.2	882.2	882.2	0.0
P	4,178 ¹	168	179	2.2	884.4	884.4	884.4	0.0
Q	4,383 ¹	175	191	2.1	885.7	885.7	885.7	0.0
R	4,534 ¹	277	351	1.1	887.8	887.8	887.8	0.0
S	4,894 ¹	38	81	4.8	891.2	891.2	891.2	0.0
T	5,486 ¹	183	194	2.0	897.2	897.2	897.2	0.0
U	5,706 ¹	144	154	2.6	900.7	900.7	900.7	0.0
V	5,943 ¹	182	182	2.2	903.5	903.5	903.5	0.0
W	6,199 ¹	101	149	2.6	904.8	904.8	904.8	0.0
X	6,640 ¹	96	103	3.8	908.3	908.3	908.3	0.0
Y	6,960 ¹	75	117	3.3	912.1	912.1	912.1	0.0
Z	7,568 ¹	428	2,068	0.2	916.2	916.2	916.2	0.0
BONNIWELL CREEK								
A	1,240 ²	45	257	2.5	866.6	866.6	866.6	0.0
B	1,494 ²	103	370	1.8	867.7	867.7	867.7	0.0
C	2,777 ²	137	274	2.1	875.1	875.1	875.1	0.0
D	3,022 ²	75	211	2.7	879.8	879.8	879.8	0.0
E	3,539 ²	337	402	1.4	881.2	881.2	881.2	0.0
F	4,413 ²	186	183	3.1	888.8	888.8	888.8	0.0
G	4,583 ²	316	1,301	0.4	894.5	894.5	894.5	0.0
H	5,464 ²	102	124	2.7	894.9	894.9	894.9	0.0
I	6,622 ²	175	161	2.0	901.8	901.8	901.8	0.0
J	7,635 ²	51	118	2.8	904.8	904.8	904.8	0.0

¹FEET ABOVE CONFLUENCE WITH STONY CREEK

²FEET ABOVE CONFLUENCE WITH LITTLE CEDAR CREEK

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY	FLOODWAY DATA
	WASHINGTON COUNTY, WI	FLOODING SOURCE: BOLTON BROOK - BONNIWELL CREEK
	AND INCORPORATED AREAS	

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BONNIWELL CREEK (CONTINUED)								
K	7,806 ¹	51	284	1.2	908.3	908.3	908.3	0.0
L	8,276 ¹	482	1,542	0.2	908.4	908.4	908.4	0.0
BUTLER CREEK TRIBUTARY 1								
A	476 ²	14	28	6.7	1,014.2	1,014.2	1,014.2	0.0
B	1,059 ²	87	56	3.3	1,022.1	1,022.1	1,022.1	0.0
BUTLER CREEK TRIBUTARY 2								
A	0 ²	40	87	2.1	997.0	997.0	997.0	0.0
B	306 ²	30	31	5.9	997.7	997.7	997.7	0.0
C	766 ²	76	64	2.9	1,001.9	1,001.9	1,001.9	0.0
CEDAR CREEK								
A	703 ³	785	4,319	1.2	836.8	836.8	836.8	0.0
B	2,430 ³	708	3,457	1.5	837.2	837.2	837.2	0.0
C	4,615 ³	944	5,773	0.9	838.8	838.8	838.8	0.0
D	5,629 ³	383	2,477	2.0	839.1	839.1	839.1	0.0
E	5,755 ³	556	3,274	1.5	840.2	840.2	840.2	0.0
F	8,002 ³	2,884	17,324	0.3	840.4	840.4	840.4	0.0
G	10,172 ³	3,817	22,393	0.2	840.5	840.5	840.5	0.0
H	12,478 ³	5,397	26,484	0.2	840.5	840.5	840.5	0.0
I	17,233 ³	5,000	28,436	0.2	840.5	840.5	840.5	0.0
J	19,614 ³	5,778	33,917	0.2	840.5	840.5	840.5	0.0

¹FEET ABOVE CONFLUENCE WITH LITTLE CEDAR CREEK, ²FEET ABOVE WASHINGTON / DODGE COUNTY BOUNDARY

³FEET ABOVE OZAUKEE / WASHINGTON COUNTY BOUNDARY

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: BONNIWELL CREEK - BUTLER CREEK TRIBUTARY 1 - BUTLER CREEK TRIBUTARY 2 - CEDAR CREEK

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
CEDAR CREEK (CONTINUED)								
K	22,305	3,368	16,008	0.4	840.6	840.6	840.6	0.0
L	22,408	3,498	15,972	0.4	841.6	841.6	841.6	0.0
M	23,356	6,260	23,140	0.3	841.7	841.7	841.7	0.0
N	27,855	2,268	7,048	0.7	842.0	842.0	842.0	0.0
O	29,740	2,105	7,336	0.6	842.5	842.5	842.5	0.0
P	29,849	2,458	11,103	0.4	843.6	843.6	843.6	0.0
Q	30,693	1,675	6,501	0.7	843.6	843.6	843.6	0.0
R	32,169	418	2,153	2.2	844.0	844.0	844.0	0.0
S	33,275	736	2,794	1.7	844.9	844.9	844.9	0.0
T	33,779	712	3,056	1.5	845.8	845.8	845.8	0.0
U	34,501	609	3,313	1.4	846.2	846.2	846.2	0.0
V	34,826	669	3,547	1.3	846.5	846.5	846.5	0.0
W	35,495	658	3,566	1.3	846.8	846.8	846.8	0.0
X	36,157	618	3,634	1.3	847.1	847.1	847.1	0.0
Y	37,110	775	2,844	1.6	847.4	847.4	847.4	0.0
Z	37,245	784	5,072	0.9	848.4	848.4	848.4	0.0
AA	38,168	336	2,305	2.0	848.6	848.6	848.6	0.0
AB	38,469	186	1,537	3.0	849.3	849.3	849.3	0.0
AC	40,188	921	5,655	0.3	849.9	849.9	849.9	0.0
AD	41,350	612	2,567	0.7	850.0	850.0	850.0	0.0
AE	42,812	290	1,476	0.8	850.1	850.1	850.1	0.0
AF	42,874	334	1,191	0.9	850.5	850.5	850.5	0.0
AG	43,440	589	1,293	0.9	850.7	850.7	850.7	0.0
AH	43,491	525	1,304	0.9	850.9	850.9	850.9	0.0
AI	44,722	254	170	3.2	853.4	853.4	853.4	0.0

¹FEET ABOVE OZAUKEE / WASHINGTON COUNTY BOUNDARY

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: CEDAR CREEK

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
CEDAR CREEK (CONTINUED)								
AJ	45,571	209	244	2.2	856.8	856.8	856.8	0.0
AK	46,729	196	280	1.9	859.6	859.6	859.6	0.0
AL	47,676	259	216	2.5	867.7	867.7	867.7	0.0
AM	48,427	71	101	5.3	874.1	874.1	874.1	0.0
AN	48,557	77	238	2.3	876.2	876.2	876.2	0.0
AO	48,854	379	272	2.0	876.7	876.7	876.7	0.0
AP	49,675	25	68	7.9	883.4	883.4	883.4	0.0
AQ	50,187	134	419	1.3	888.0	888.0	888.0	0.0
AR	51,032	70	89	6.0	888.3	888.3	888.3	0.0
AS	51,275	56	164	3.3	890.3	890.3	890.3	0.0
AT	51,498	46	132	4.1	892.3	892.3	892.3	0.0
AU	52,122	55	80	6.7	896.0	896.0	896.0	0.0
AV	52,450	102	105	5.1	899.5	899.5	899.5	0.0
AW	52,776	56	152	3.5	913.5	913.5	913.5	0.0
AX	53,409	42	136	3.9	914.6	914.6	914.6	0.0
AY	54,310	122	182	3.0	916.0	916.0	916.0	0.0
AZ	54,365	255	831	0.7	918.9	918.9	918.9	0.0
BA	55,741	250	520	1.0	919.0	919.0	919.0	0.0
BB	55,784	198	532	1.0	919.8	919.8	919.8	0.0
BC	56,713	120	93	3.1	924.0	924.0	924.0	0.0
BD	56,750	142	182	1.6	925.2	925.2	925.2	0.0
BE	57,089	28	45	6.4	927.8	927.8	927.8	0.0
BF	57,642	73	53	5.3	934.5	934.5	934.5	0.0
BG	58,598	52	61	4.7	941.5	941.5	941.5	0.0
BH	59,113	59	70	4.1	946.1	946.1	946.1	0.0

¹FEET ABOVE OZAUKEE / WASHINGTON COUNTY BOUNDARY

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: CEDAR CREEK

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
CEDAR CREEK (CONTINUED)								
BI	59,927	24	41	6.9	955.0	955.0	955.0	0.0
BJ	60,015	80	196	1.5	957.5	957.5	957.5	0.0
BK	60,543	32	43	6.7	965.3	965.3	965.3	0.0
BL	61,101	39	67	4.3	968.0	968.0	968.0	0.0
BM	61,570	173	100	2.8	970.4	970.4	970.4	0.0
BN	61,978	123	130	2.2	972.5	972.5	972.5	0.0
BO	62,382	173	86	3.3	976.5	976.5	976.5	0.0
BP	62,675	28	92	3.1	980.1	980.1	980.1	0.0
BQ	63,430	112	153	1.9	981.6	981.6	981.6	0.0
BR	63,984	54	61	4.7	984.5	984.5	984.5	0.0
BS	64,375	132	123	2.3	987.2	987.2	987.2	0.0
BT	64,834	35	52	5.5	992.2	992.2	992.2	0.0
BU	64,944	48	158	1.8	995.0	995.0	995.0	0.0
BV	65,278	19	44	6.5	1,004.6	1,004.6	1,004.6	0.0
BW	65,527	327	1,311	0.2	1,005.6	1,005.6	1,005.6	0.0
BX	66,343	336	461	0.6	1,005.6	1,005.6	1,005.6	0.0
BY	66,973	116	124	2.2	1,005.8	1,005.8	1,005.8	0.0
BZ	67,639	115	89	3.0	1,008.7	1,008.7	1,008.7	0.0
CA	68,079	102	113	2.4	1,010.3	1,010.3	1,010.3	0.0
CB	68,435	31	82	3.3	1,011.6	1,011.6	1,011.6	0.0
CC	69,477	90	150	1.7	1,012.9	1,012.9	1,012.9	0.0
CD	69,960	73	114	2.2	1,013.3	1,013.3	1,013.3	0.0
CE	71,072	393	698	0.4	1,013.7	1,013.7	1,013.7	0.0
CF	72,528	537	780	0.3	1,013.8	1,013.8	1,013.8	0.0
CG	73,625	189	295	0.9	1,013.9	1,013.9	1,013.9	0.0

¹FEET ABOVE OZAUKEE / WASHINGTON COUNTY BOUNDARY

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: CEDAR CREEK

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
CEDAR CREEK (CONTINUED)								
CH	74,835	37	101	2.5	1,014.4	1,014.4	1,014.4	0.0
CI	74,897	51	153	1.6	1,014.8	1,014.8	1,014.8	0.0
CJ	75,615	151	309	0.8	1,015.0	1,015.0	1,015.0	0.0
CK	76,739	305	545	0.5	1,015.1	1,015.1	1,015.1	0.0
CL	77,798	217	375	0.7	1,015.2	1,015.2	1,015.2	0.0
CM	78,568	167	225	1.1	1,016.1	1,016.1	1,016.1	0.0
CN	79,360	596	1,975	0.1	1,016.2	1,016.2	1,016.2	0.0
CO	82,780	1,516	50,284	0.0	1,016.2	1,016.2	1,016.2	0.0
CP	85,261	753	2,412	0.1	1,016.2	1,016.2	1,016.2	0.0
CQ	87,064	1,452	819	0.3	1,016.2	1,016.2	1,016.2	0.0
CR	88,295	1,340	482	0.4	1,016.3	1,016.3	1,016.3	0.0
CS	89,663	1,342	1,230	0.2	1,016.4	1,016.4	1,016.4	0.0
CT	90,957	191	230	0.9	1,016.6	1,016.6	1,016.6	0.0
CU	91,398	169	118	1.6	1,016.9	1,016.9	1,016.9	0.0
CV	91,869	69	127	1.5	1,019.7	1,019.7	1,019.7	0.0
CW	92,182	154	530	0.4	1,021.5	1,021.5	1,021.5	0.0
CX	92,545	73	93	2.1	1,021.5	1,021.5	1,021.5	0.0
CY	92,991	15	31	6.2	1,026.0	1,026.0	1,026.0	0.0
CZ	93,351	49	65	3.0	1,028.4	1,028.4	1,028.4	0.0
DA	94,295	139	128	1.5	1,030.2	1,030.2	1,030.2	0.0
DB	94,828	74	59	3.3	1,030.8	1,030.8	1,030.8	0.0
DC	94,988	336	1,185	0.2	1,032.7	1,032.7	1,032.7	0.0

¹FEET ABOVE OZAUKEE / WASHINGTON COUNTY BOUNDARY

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: CEDAR CREEK

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
CEDARBURG CREEK								
A	5,783	571	505	1.2	841.2	841.2	841.2	0.0
B	6,649	70	147	4.2	843.0	843.0	843.0	0.0
C	7,752	332	487	1.3	847.4	847.4	847.4	0.0
D	8,771	283	365	1.7	849.1	849.1	849.1	0.0
E	8,912	300	1,052	0.6	851.6	851.6	851.6	0.0
F	9,635	402	1,046	0.5	851.7	851.7	851.7	0.0
G	10,427	424	941	0.6	851.9	851.9	851.9	0.0
H	10,932	323	556	1.0	852.0	852.0	852.0	0.0
I	11,726	342	408	1.3	852.8	852.8	852.8	0.0
J	13,052	437	558	1.0	854.2	854.2	854.2	0.0
K	13,627	164	349	1.5	855.0	855.0	855.0	0.0
L	13,780	160	373	1.4	855.8	855.8	855.8	0.0
M	14,211	372	642	0.8	856.1	856.1	856.1	0.0
N	14,586	298	483	1.1	856.6	856.6	856.6	0.0
O	14,969	260	436	1.2	857.0	857.0	857.0	0.0
P	15,765	567	865	0.6	857.6	857.6	857.6	0.0
Q	16,917	302	370	1.4	858.8	858.8	858.8	0.0
R	17,601	717	695	0.8	860.5	860.5	860.5	0.0

¹FEET ABOVE CONFLUENCE WITH CEDAR CREEK

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: CEDARBURG CREEK

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
CONEY RIVER								
A	451	2,065	7,968	0.1	966.7	966.7	966.7	0.0
B	1,343	481	482	1.7	966.9	966.9	966.9	0.0
C	2,268	49	111	7.5	972.9	972.9	972.9	0.0
D	2,362	138	353	2.4	974.3	974.3	974.3	0.0
E	2,922	106	149	5.6	975.9	975.9	975.9	0.0
F	2,961	152	621	1.3	979.2	979.2	979.2	0.0
G	3,524	160	223	3.7	979.9	979.9	979.9	0.0
H	4,150	128	165	5.0	987.6	987.6	987.6	0.0
I	4,813	234	360	2.3	991.1	991.1	991.1	0.0
J	5,076	355	1,658	0.5	997.4	997.4	997.4	0.0
K	6,349	177	324	2.6	997.5	997.5	997.5	0.0
L	7,389	147	239	2.9	999.5	999.5	999.5	0.0
M	8,355	634	1,147	0.6	1,000.6	1,000.6	1,000.6	0.0
N	9,788	162	201	3.5	1,001.2	1,001.2	1,001.2	0.0
O	10,680	190	325	2.2	1,003.4	1,003.4	1,003.4	0.0
P	11,609	427	703	1.0	1,004.0	1,004.0	1,004.0	0.0
Q	11,906	565	2,865	0.2	1,005.8	1,005.8	1,005.8	0.0
R	14,839	1,333	3,795	0.2	1,005.9	1,005.9	1,005.9	0.0
S	17,648	405	192	1.5	1,006.0	1,006.0	1,006.0	0.0
T	18,328	251	170	1.6	1,008.7	1,008.7	1,008.7	0.0
U	18,965	158	198	1.4	1,010.2	1,010.2	1,010.2	0.0
V	19,219	18	148	1.9	1,016.6	1,016.6	1,016.6	0.0
W	20,737	154	168	1.8	1,016.8	1,016.8	1,016.8	0.0
X	21,433	26	65	4.6	1,020.7	1,020.7	1,020.7	0.0
Y	22,348	26	83	3.6	1,030.2	1,030.2	1,030.2	0.0
Z	22,916	33	44	6.8	1,033.8	1,033.8	1,033.8	0.0

¹FEET ABOVE CONFLUENCE WITH OCOMONOWOC RIVER

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: CONEY RIVER

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
CONEY RIVER (CONTINUED)								
AA	23,393	44	112	2.7	1,035.8	1,035.8	1,035.8	0.0
AB	23,880	30	57	5.3	1,036.8	1,036.8	1,036.8	0.0
AC	24,101	140	292	0.9	1,040.1	1,040.1	1,040.1	0.0
AD	24,999	27	79	3.4	1,040.1	1,040.1	1,040.1	0.0
AE	25,935	505	1,759	0.2	1,040.6	1,040.6	1,040.6	0.0
AF	26,661	234	577	0.5	1,040.6	1,040.6	1,040.6	0.0
AG	26,794	195	505	0.5	1,042.4	1,042.4	1,042.4	0.0
AH	27,671	96	154	1.8	1,042.4	1,042.4	1,042.4	0.0
AI	28,204	392	897	1.1	1,043.3	1,043.3	1,043.3	0.0
AJ	28,865	560	610	0.6	1,043.5	1,043.5	1,043.5	0.0
AK	29,257	591	1,767	0.2	1,046.6	1,046.6	1,046.6	0.0
AL	31,009	37	87	1.3	1,047.2	1,047.2	1,047.2	0.0
AM	31,522	23	47	1.7	1,049.6	1,049.6	1,049.6	0.0
AN	31,879	20	44	1.8	1,050.1	1,050.1	1,050.1	0.0
AO	32,597	26	55	1.5	1,050.5	1,050.5	1,050.5	0.0
AP	32,902	27	41	2.0	1,050.8	1,050.8	1,050.8	0.0
AQ	33,637	34	68	1.2	1,051.5	1,051.5	1,051.5	0.0
AR	34,814	31	71	1.1	1,051.9	1,051.9	1,051.9	0.0
AS	36,121	34	74	1.1	1,052.3	1,052.3	1,052.3	0.0
AT	37,038	1,107	2,716	0.0	1,052.3	1,052.3	1,052.3	0.0
AU	38,334	634	1,096	0.1	1,052.3	1,052.3	1,052.3	0.0
AV	39,359	671	1,806	0.0	1,052.3	1,052.3	1,052.3	0.0
AW	39,609	354	2,023	0.0	1,053.5	1,053.5	1,053.5	0.0

¹FEET ABOVE CONFLUENCE WITH OCOMONOWOC RIVER

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: CONEY RIVER

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
CONEY RIVER - OVERLAND FLOWPATH								
A	642	1,048	1,439	0.0	1,005.9	1,005.9	1,005.9	0.0
B	2,142	65	22	1.0	1,006.9	1,006.9	1,006.9	0.0
C	3,608	325	186	0.1	1,007.5	1,007.5	1,007.5	0.0
D	3,782	146	13	1.6	1,011.5	1,011.5	1,011.5	0.0
E	3,949	220	857	0.0	1,011.6	1,011.6	1,011.6	0.0
F	4,215	120	12	1.8	1,014.6	1,014.6	1,014.6	0.0
G	4,373	112	30	0.7	1,016.0	1,016.0	1,016.0	0.0
H	5,083	105	27	0.8	1,016.6	1,016.6	1,016.6	0.0
I	5,671	295	323	0.1	1,016.6	1,016.6	1,016.6	0.0

¹FEET ABOVE CONVERGENCE WITH CONEY RIVER

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: CONEY RIVER - OVERLAND FLOWPATH

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
DEER CREEK								
A	1,431	252	276	1.8	842.2	842.2	842.2	0.0
B	2,446	349	423	1.2	845.0	845.0	845.0	0.0
C	3,520	247	337	1.5	847.4	847.4	847.4	0.0
D	4,748	227	324	1.5	851.5	851.5	851.5	0.0
E	6,006	292	481	1.0	852.9	852.9	852.9	0.0
F	6,667	44	95	5.2	854.0	854.0	854.0	0.0
G	6,733	35	127	3.9	855.4	855.4	855.4	0.0
H	7,936	532	1,081	0.6	856.5	856.5	856.5	0.0
I	9,213	362	478	1.4	857.6	857.6	857.6	0.0
J	9,741	302	281	2.3	863.1	863.1	863.1	0.0
K	9,825	265	847	0.8	865.5	865.5	865.5	0.0
L	10,494	347	994	0.7	865.6	865.6	865.6	0.0
M	12,515	426	595	0.4	866.0	866.0	866.0	0.0
N	13,264	399	154	1.5	868.0	868.0	868.0	0.0
O	13,375	107	209	0.7	869.3	869.3	869.3	0.0
P	13,470	145	460	0.3	870.7	870.7	870.7	0.0
Q	13,941	168	228	0.6	870.7	870.7	870.7	0.0
R	14,039	164	447	0.3	872.1	872.1	872.1	0.0
S	14,693	292	315	0.2	872.1	872.1	872.1	0.0
T	15,317	72	37	1.8	872.8	872.8	872.8	0.0
U	15,790	31	21	3.2	874.9	874.9	874.9	0.0
V	16,538	240	107	0.6	876.8	876.8	876.8	0.0

¹FEET ABOVE CONFLUENCE WITH NORTH BRANCH CEDAR CREEK

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: DEER CREEK

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
EAST BRANCH MILWAUKEE RIVER								
A	4,693 ¹	729	2,123	0.6	932.9	927.2 ³	927.2	0.0
B	12,319 ¹	1,262	3,256	0.4	932.9	927.6 ³	927.6	0.0
C	15,845 ¹	872	2,950	0.4	932.9	928.7 ³	928.7	0.0
D	19,940 ¹	886	2,088	0.6	932.9	929.2 ³	929.2	0.0
E	23,124 ¹	880	2,198	0.6	932.9	930.0 ³	930.0	0.0
F	25,284 ¹	480	1,339	1.0	932.9	931.0 ³	931.0	0.0
G	28,429 ¹	625	1,952	0.7	932.9	932.7 ³	932.7	0.0
H	29,329 ¹	382	1,206	1.1	932.9	932.9 ³	932.9	0.0
I	30,412 ¹	523	1,563	0.8	933.2	933.2	933.2	0.0
EAST BRANCH ROCK RIVER								
A	2,994 ²	4,209	9,462	0.2	937.4	937.4	937.4	0.0
B	13,672 ²	4,651	9,227	0.5	937.6	937.6	937.6	0.0
C	19,650 ²	2,888	7,799	0.6	938.5	938.5	938.5	0.0
D	24,082 ²	122	642	6.9	942.2	942.2	942.2	0.0
E	24,221 ²	84	766	5.8	944.1	944.1	944.1	0.0
F	24,269 ²	111	1,063	4.2	944.4	944.4	944.4	0.0
G	24,400 ²	114	1,217	3.7	945.1	945.1	945.1	0.0
H	28,606 ²	2,520	19,555	0.2	945.7	945.7	945.7	0.0
I	34,623 ²	882	5,517	0.3	945.8	945.8	945.8	0.0
J	38,731 ²	138	1,039	1.4	945.8	945.8	945.8	0.0
K	38,831 ²	129	940	1.6	945.9	945.9	945.9	0.0
L	42,887 ²	1,025	4,847	0.3	946.0	946.0	946.0	0.0
M	47,103 ²	904	3,558	0.5	946.2	946.2	946.2	0.0
N	51,995 ²	1,416	5,318	0.4	946.2	946.2	946.2	0.0

¹FEET ABOVE CONFLUENCE WITH MILWAUKEE RIVER, ²FEET ABOVE COUNTY BOUNDARY

³ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM MILWAUKEE RIVER

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY	FLOODWAY DATA
	WASHINGTON COUNTY, WI	FLOODING SOURCE: EAST BRANCH MILWAUKEE RIVER - EAST BRANCH ROCK RIVER
	AND INCORPORATED AREAS	

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
EAST BRANCH ROCK RIVER (CONTINUED)								
O	52,217	1,474	6,847	0.3	947.7	947.7	947.7	0.0
P	59,693	773	3,023	0.7	947.8	947.8	947.8	0.0
Q	61,364	1,027	2,946	0.7	948.0	948.0	948.0	0.0
R	62,449	1,872	6,969	0.4	948.7	948.7	948.7	0.0
S	65,739	238	815	3.0	948.8	948.8	948.8	0.0
T	65,975	130	649	3.7	949.6	949.6	949.6	0.0
U	66,107	375	1,446	1.7	950.8	950.8	950.8	0.0
V	67,424	783	2,088	1.2	951.1	951.1	951.1	0.0
W	68,498	666	1,931	1.3	951.4	951.4	951.4	0.0
X	68,793	332	1,606	1.5	952.6	952.6	952.6	0.0
Y	69,957	938	4,355	0.6	952.7	952.7	952.7	0.0
Z	70,748	845	3,772	0.6	952.7	952.7	952.7	0.0
AA	71,017	930	4,404	0.3	954.6	954.6	954.6	0.0
AB	73,103	675	3,043	0.5	954.8	954.8	954.8	0.0
AC	75,160	1,262	5,010	0.8	955.1	955.1	955.1	0.0
AD	78,465	1,562	7,197	0.5	955.4	955.4	955.4	0.0
AE	84,171	1,264	3,204	0.3	955.6	955.6	955.6	0.0
AF	86,834	446	899	0.9	958.7	958.7	958.7	0.0
AG	88,140	145	205	3.9	971.1	971.1	971.1	0.0
AH	89,393	143	182	4.4	985.3	985.3	985.3	0.0
AI	89,530	316	2,045	0.4	991.8	991.8	991.8	0.0
AJ	90,973	553	1,235	0.1	991.9	991.9	991.9	0.0
AK	91,252	612	2,055	0.1	992.4	992.4	992.4	0.0
AL	92,355	30	24	5.1	1,003.8	1,003.8	1,003.8	0.0

¹FEET ABOVE COUNTY BOUNDARY

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: EAST BRANCH ROCK RIVER

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 1								
A	49	263	1,057	0.8	956.3	956.3	956.3	0.0
B	524	296	486	1.8	956.6	956.6	956.6	0.0
C	1,211	84	180	3.5	958.4	958.4	958.4	0.0
D	1,390	244	1,031	0.6	961.8	961.8	961.8	0.0
E	2,433	124	1,109	0.6	966.5	966.5	966.5	0.0
F	5,123	139	231	2.8	967.3	967.3	967.3	0.0
G	5,802	133	252	2.6	969.1	969.1	969.1	0.0
H	5,913	158	425	1.5	970.4	970.4	970.4	0.0
I	7,001	225	406	1.6	971.7	971.7	971.7	0.0
J	7,547	152	272	1.1	972.0	972.0	972.0	0.0
K	7,712	220	833	0.4	977.2	977.2	977.2	0.0
L	9,398	268	509	0.5	977.3	977.3	977.3	0.0

¹FEET ABOVE CONFLUENCE WITH EAST BRANCH ROCK RIVER

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 1

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 1.1								
A	464	90	116	2.3	957.2	957.2	957.2	0.0
B	705	146	94	2.9	960.2	960.2	960.2	0.0
C	1,057	159	96	2.8	964.0	964.0	964.0	0.0
EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 1.2								
A	310	91	162	0.7	966.5	959.6 ²	959.6	0.0
B	712	120	153	0.7	966.5	960.2 ²	960.2	0.0
EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 1.3								
A	245	321	536	0.7	973.8	973.8	973.8	0.0
B	1,016	209	129	3.0	974.9	974.9	974.9	0.0
C	1,920	69	71	5.5	981.9	981.9	981.9	0.0
D	2,559	32	120	3.3	987.0	987.0	987.0	0.0
E	3,134	79	69	2.6	992.7	992.7	992.7	0.0

¹FEET ABOVE CONFLUENCE WITH EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 1

²ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 1

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
	FLOODING SOURCE: EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 1.1 – EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 1.2 – EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 1.3	

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 1.3.1								
A	43 ¹	100	97	3.9	990.9	990.9	990.9	0.0
B	435 ¹	245	226	1.7	994.7	994.7	994.7	0.0
C	841 ¹	195	190	2.0	998.3	998.3	998.3	0.0
EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 1.4								
A	438 ²	601	2,375	0.1	977.2	977.2	977.2	0.0
B	2,258 ²	930	2,509	0.1	977.2	977.2	977.2	0.0

¹FEET ABOVE CONFLUENCE WITH EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 1.3

²FEET ABOVE CONFLUENCE WITH EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 1

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 1.3.1 – EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 1.4

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 2								
A	448 ¹	680	5,727	0.1	960.1	960.1	960.1	0.0
B	1,669 ¹	1,093	4,461	0.1	960.1	960.1	960.1	0.0
C	3,066 ¹	415	335	3.9	961.4	961.4	961.4	0.0
D	3,339 ¹	988	4,587	0.3	967.7	967.7	967.7	0.0
E	4,628 ¹	758	840	1.6	971.0	971.0	971.0	0.0
F	5,334 ¹	339	483	2.9	976.4	976.4	976.4	0.0
G	6,438 ¹	195	258	3.5	988.4	988.4	988.4	0.0
H	7,324 ¹	197	326	2.8	997.7	997.7	997.7	0.0
I	8,238 ¹	224	324	2.8	1,006.5	1,006.5	1,006.5	0.0
J	9,153 ¹	85	195	4.6	1,016.9	1,016.9	1,016.9	0.0
K	9,280 ¹	294	1,283	0.7	1,024.8	1,024.8	1,024.8	0.0
L	9,890 ¹	161	254	3.0	1,029.5	1,029.5	1,029.5	0.0
M	10,770 ¹	166	361	2.1	1,040.2	1,040.2	1,040.2	0.0
N	11,587 ¹	54	96	8.0	1,055.8	1,055.8	1,055.8	0.0
EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 2 BYPASS								
A	337 ²	73	151	1.2	955.4	955.4	955.4	0.0
B	774 ²	173	92	2.0	959.5	959.5	959.5	0.0
C	1,495 ²	263	519	0.4	959.8	959.8	959.8	0.0

¹FEET ABOVE CONFLUENCE WITH EAST BRANCH ROCK RIVER

²FEET ABOVE CONVERGENCE WITH EAST BRANCH ROCK RIVER

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 2 - EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 2 BYPASS

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 2.1								
A	74 ¹	99	52	2.6	976.0	976.0	976.0	0.0
B	454 ¹	19	29	4.8	986.0	986.0	986.0	0.0
C	1,593 ¹	42	43	3.2	1,014.5	1,014.5	1,014.5	0.0
D	1,733 ¹	94	149	1.6	1,021.5	1,021.5	1,021.5	0.0
E	2,113 ¹	65	60	4.0	1,035.1	1,035.1	1,035.1	0.0
EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 2.1 BYPASS								
A	177 ²	77	41	2.4	1,015.9	1,015.9	1,015.9	0.0
B	541 ²	71	52	1.9	1,019.8	1,019.8	1,019.8	0.0
EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 2.2								
A	136 ¹	135	199	1.0	984.3	984.3	984.3	0.0
B	609 ¹	143	93	2.1	989.5	989.5	989.5	0.0
C	1,366 ¹	38	40	4.9	1,004.3	1,004.3	1,004.3	0.0
D	1,475 ¹	139	436	0.2	1,012.1	1,012.1	1,012.1	0.0
E	1,864 ¹	29	20	4.6	1,014.6	1,014.6	1,014.6	0.0
F	2,192 ¹	115	40	2.4	1,029.5	1,029.5	1,029.5	0.0
G	2,514 ¹	76	31	3.1	1,046.7	1,046.7	1,046.7	0.0

¹FEET ABOVE CONFLUENCE WITH EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 2

²FEET ABOVE CONFLUENCE WITH EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 2.2

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
	FLOODING SOURCE: EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 2.1 – EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 2.1 BYPASS – EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 2.2	

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 2.3								
A	221 ¹	120	122	3.4	1,029.3	1,029.3	1,029.3	0.0
B	639 ¹	124	134	3.1	1,037.2	1,037.2	1,037.2	0.0
C	1,131 ¹	98	94	4.4	1,046.1	1,046.1	1,046.1	0.0
D	1,438 ¹	271	3,302	0.1	1,067.7	1,067.7	1,067.7	0.0
EDGEWOOD CREEK								
A	170 ²	95	50	2.8	949.7	949.7	949.7	0.0
B	490 ²	99	107	0.5	950.0	950.0	950.0	0.0
C	871 ²	121	159	0.3	950.0	950.0	950.0	0.0
D	1,325 ²	98	88	0.6	950.0	950.0	950.0	0.0
E	1,901 ²	72	119	1.8	950.8	950.8	950.8	0.0
F	2,143 ²	70	119	1.7	951.0	951.0	951.0	0.0
G	2,292 ²	51	74	3.2	951.1	951.1	951.1	0.0
H	2,611 ²	31	29	4.9	954.9	954.9	954.9	0.0
I	2,822 ²	70	92	1.5	961.6	961.6	961.6	0.0
J	2,967 ²	45	42	3.3	962.3	962.3	962.3	0.0
K	3,202 ²	30	31	4.6	966.7	966.7	966.7	0.0
L	3,377 ²	21	23	6.2	969.8	969.8	969.8	0.0
M	3,492 ²	19	22	6.3	972.0	972.0	972.0	0.0
N	3,633 ²	20	22	6.4	974.6	974.6	974.6	0.0
O	3,795 ²	31	34	4.1	977.1	977.1	977.1	0.0
P	3,985 ²	46	48	2.9	978.8	978.8	978.8	0.0
Q	4,287 ²	28	33	4.2	980.3	980.3	980.3	0.0
R	4,541 ²	56	96	1.5	981.0	981.0	981.0	0.0
S	4,864 ²	29	37	3.8	983.8	983.8	983.8	0.0

¹FEET ABOVE CONFLUENCE WITH EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 2

²FEET ABOVE CONFLUENCE WITH NORTH CREEK

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: EAST BRANCH ROCK RIVER UNNAMED TRIBUTARY 2.3 – EDGEWOOD CREEK

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
EDGEWOOD CREEK OVERFLOW CHANNEL								
A	438 ¹	32	32	5.3	937.5	936.1 ³	936.1	0.0
B	696 ¹	62	38	4.4	939.8	939.8	939.8	0.0
C	859 ¹	72	40	4.3	940.7	940.7	940.7	0.0
D	1,045 ¹	77	45	3.8	941.9	941.9	941.9	0.0
E	1,230 ¹	71	45	3.8	943.0	943.0	943.0	0.0
F	1,479 ¹	73	43	4.0	945.0	945.0	945.0	0.0
G	1,761 ¹	71	43	4.0	946.7	946.7	946.7	0.0
H	1,945 ¹	59	38	4.5	948.1	948.1	948.1	0.0
I	2,105 ¹	69	43	4.0	949.3	949.3	949.3	0.0
J	2,430 ¹	115	162	0.9	950.0	950.0	950.0	0.0
EVERGREEN BYPASS								
A	58 ²	145	64	0.4	946.3	946.3	946.3	0.0
B	456 ²	226	817	0.0	949.6	949.6	949.6	0.0
C	622 ²	330	601	0.0	949.8	949.8	949.8	0.0

¹FEET ABOVE CONFLUENCE WITH KEWASKUM CREEK, ²FEET ABOVE CONFLUENCE WITH EVERGREEN CREEK

³ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM KEWASKUM CREEK

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: EDGEWOOD CREEK OVERFLOW CHANNEL - EVERGREEN BYPASS

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
EVERGREEN CREEK								
A	4,048	423	568	1.9	844.9	844.9	844.9	0.0
B	4,511	187	225	4.6	849.0	849.0	849.0	0.0
C	4,559	205	719	1.4	851.6	851.6	851.6	0.0
D	4,954	128	223	4.6	854.9	854.9	854.9	0.0
E	5,340	119	240	4.3	858.8	858.8	858.8	0.0
F	5,678	50	173	6.0	860.6	860.6	860.6	0.0
G	5,989	405	1,541	0.7	863.8	863.8	863.8	0.0
H	7,168	300	521	1.8	868.0	868.0	868.0	0.0
I	7,589	307	506	1.9	869.5	869.5	869.5	0.0
J	7,933	268	428	2.2	871.1	871.1	871.1	0.0
K	9,092	364	653	1.4	874.9	874.9	874.9	0.0
L	9,758	374	468	2.0	877.2	877.2	877.2	0.0
M	10,997	300	478	2.0	883.7	883.7	883.7	0.0
N	12,311	180	294	3.2	890.5	890.5	890.5	0.0
O	13,353	249	489	1.9	896.2	896.2	896.2	0.0
P	14,282	228	428	2.2	900.7	900.7	900.7	0.0
Q	14,833	31	107	8.7	902.9	902.9	902.9	0.0
R	14,930	59	296	3.1	907.8	907.8	907.8	0.0
S	15,708	188	502	0.9	910.5	910.5	910.5	0.0
T	16,290	134	309	1.4	910.7	910.7	910.7	0.0
U	16,350	115	382	1.2	911.5	911.5	911.5	0.0
V	17,088	250	529	0.4	911.6	911.6	911.6	0.0
W	18,055	134	250	0.9	911.9	911.9	911.9	0.0
X	19,122	370	264	0.9	912.7	912.7	912.7	0.0
Y	19,456	227	398	0.6	914.2	914.2	914.2	0.0
Z	20,130	244	213	1.1	915.0	915.0	915.0	0.0

¹FEET ABOVE COUNTY HIGHWAY G

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: EVERGREEN CREEK

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
EVERGREEN CREEK (CONTINUED)								
AA	20,348	119	110	2.1	916.5	916.5	916.5	0.0
AB	20,672	69	119	2.0	918.5	918.5	918.5	0.0
AC	21,872	91	86	2.7	924.2	924.2	924.2	0.0
AD	22,503	41	44	2.5	930.7	930.7	930.7	0.0
AE	22,610	144	571	0.2	937.1	937.1	937.1	0.0
AF	23,115	41	46	2.4	937.1	937.1	937.1	0.0
AG	23,607	28	33	3.3	941.5	941.5	941.5	0.0
AH	23,677	44	95	1.2	943.4	943.4	943.4	0.0
AI	24,003	69	43	2.5	944.9	944.9	944.9	0.0
AJ	24,437	14	16	0.8	948.2	948.2	948.2	0.0
AK	24,678	12	34	0.4	949.8	949.8	949.8	0.0
AL	25,628	36	13	2.9	953.8	953.8	953.8	0.0
AM	25,904	20	13	2.9	961.0	961.0	961.0	0.0
AN	26,270	224	264	0.2	961.2	961.2	961.2	0.0
AO	26,625	35	28	1.4	962.6	962.6	962.6	0.0
AP	27,035	211	211	0.2	962.8	962.8	962.8	0.0

¹FEET ABOVE COUNTY HIGHWAY G

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: EVERGREEN CREEK

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
FLYNN CREEK								
A	0.563	174	201	7.5	938.2	938.2	938.2	0.0
B	0.577	150	243	6.2	940.5	940.5	940.5	0.0
C	0.665	112	324	4.7	948.0	948.0	948.0	0.0
D	0.796	219	487	3.1	952.9	952.9	952.9	0.0
E	0.832	567	2,814	0.5	958.0	958.0	958.0	0.0
F	1.038	407	2,115	0.7	958.1	958.1	958.1	0.0
G	1.281	383	1,043	1.3	958.3	958.3	958.3	0.0
H	1.434	260	648	2.1	959.2	959.2	959.2	0.0
I	1.474	440	1,748	0.8	960.2	960.2	960.2	0.0
J	1.662	630	2,046	0.7	960.2	960.2	960.2	0.0
K	1.714	363	752	1.8	962.2	962.2	962.2	0.0
L	1.750	323	1,116	1.2	962.6	962.6	962.6	0.0
M	1.862	356	658	2.1	963.1	963.1	963.1	0.0
N	1.960	343	852	1.6	964.1	964.1	964.1	0.0
O	2.009	310	703	2.0	964.5	964.5	964.5	0.0
P	2.145	111	292	4.7	968.8	968.8	968.8	0.0
Q	2.274	129	342	4.0	974.9	974.9	974.9	0.0
R	2.457	206	363	3.3	983.0	983.0	983.0	0.0
S	2.564	188	342	3.5	987.0	987.0	987.0	0.0
T	2.742	132	336	3.5	994.0	994.0	994.0	0.0
U	2.888	123	287	4.1	999.6	999.6	999.6	0.0
V	2.995	134	308	3.9	1,001.2	1,001.2	1,001.2	0.0
W	3.098	360	1,394	0.9	1,001.9	1,001.9	1,001.9	0.0
X	3.258	803	2,995	0.4	1,002.0	1,002.0	1,002.0	0.0
Y	3.548	1,060	3,961	0.3	1,002.0	1,002.0	1,002.0	0.0
Z	3.738	329	360	3.1	1,003.7	1,003.7	1,003.7	0.0

¹MILES ABOVE CONFLUENCE WITH OCONOMOWOC RIVER

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: FLYNN CREEK

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
FLYNN CREEK (CONTINUED)								
AA	3.827 ¹	593	715	1.5	1,004.5	1,004.5	1,004.5	0.0
AB	3.975 ¹	1,120	2,204	0.3	1,007.0	1,007.0	1,007.0	0.0
AC	4.119 ¹	771	1,352	0.5	1,007.0	1,007.0	1,007.0	0.0
AD	4.257 ¹	440	320	2.1	1,007.8	1,007.8	1,007.8	0.0
AE	4.462 ¹	378	597	1.1	1,010.4	1,010.4	1,010.4	0.0
AF	4.639 ¹	147	166	3.9	1,012.1	1,012.1	1,012.1	0.0
AG	4.814 ¹	316	394	1.7	1,013.6	1,013.6	1,013.6	0.0
AH	4.896 ¹	311	497	1.3	1,014.2	1,014.2	1,014.2	0.0
AI	5.011 ¹	261	333	2.0	1,014.6	1,014.6	1,014.6	0.0
AJ	5.162 ¹	239	436	1.5	1,015.4	1,015.4	1,015.4	0.0
AK	5.231 ¹	585	2,357	0.2	1,018.9	1,018.9	1,018.9	0.0
AL	5.407 ¹	883	2,787	0.1	1,018.9	1,018.9	1,018.9	0.0
AM	5.612 ¹	149	199	1.8	1,018.9	1,018.9	1,018.9	0.0
AN	5.660 ¹	133	175	2.0	1,020.0	1,020.0	1,020.0	0.0
AO	5.792 ¹	310	208	1.7	1,023.0	1,023.0	1,023.0	0.0
AP	5.817 ¹	300	760	0.5	1,025.5	1,025.5	1,025.5	0.0
AQ	5.947 ¹	395	406	0.9	1,025.7	1,025.7	1,025.7	0.0
FRIEDEN'S CREEK								
A	5,604 ²	1,653	2,649	0.5	841.9	841.9	841.9	0.0
B	6,800 ²	784	895	1.1	843.7	843.7	843.7	0.0
C	7,450 ²	146	202	4.9	845.1	845.1	845.1	0.0
D	7,910 ²	389	533	1.8	846.9	846.9	846.9	0.0
E	8,404 ²	394	762	1.3	848.0	848.0	848.0	0.0
F	9,344 ²	554	947	1.0	850.7	850.7	850.7	0.0

¹MILES ABOVE CONFLUENCE WITH OCONOMOWOC RIVER

²FEET ABOVE CONFLUENCE WITH CEDAR CREEK

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY	FLOODWAY DATA
	WASHINGTON COUNTY, WI	FLOODING SOURCE: FLYNN CREEK - FRIEDEN'S CREEK
	AND INCORPORATED AREAS	

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
FRIEDEN'S CREEK (CONTINUED)								
G	10,039	372	480	2.0	854.5	854.5	854.5	0.0
H	10,393	192	559	1.8	860.7	860.7	860.7	0.0
I	10,757	296	339	2.9	862.5	862.5	862.5	0.0
J	11,362	44	167	5.8	870.2	870.2	870.2	0.0
K	11,783	156	235	4.0	877.8	877.8	877.8	0.0
L	12,554	101	151	6.2	889.5	889.5	889.5	0.0
M	13,126	98	181	5.2	897.6	897.6	897.6	0.0
N	13,541	26	89	10.5	902.7	902.7	902.7	0.0
O	13,650	25	247	3.8	910.3	910.3	910.3	0.0
P	13,899	40	314	3.0	910.4	910.4	910.4	0.0
Q	14,247	317	2,021	0.4	910.8	910.8	910.8	0.0
R	15,347	977	4,734	0.2	910.8	910.8	910.8	0.0
S	16,609	217	337	2.1	911.0	911.0	911.0	0.0
T	16,945	184	356	2.0	912.3	912.3	912.3	0.0
U	18,115	588	816	0.9	914.9	914.9	914.9	0.0
V	18,820	370	420	1.7	916.7	916.7	916.7	0.0
W	19,516	196	330	1.5	920.6	920.6	920.6	0.0
X	20,336	31	86	5.8	924.0	924.0	924.0	0.0
Y	20,401	58	129	3.9	924.7	924.7	924.7	0.0
Z	21,149	342	350	1.4	928.9	928.9	928.9	0.0
AA	21,629	72	101	5.0	931.2	931.2	931.2	0.0
AB	22,513	31	74	6.7	939.1	939.1	939.1	0.0
AC	22,552	69	181	2.7	941.6	941.6	941.6	0.0
AD	23,520	37	124	4.0	945.0	945.0	945.0	0.0
AE	23,745	36	188	2.7	946.7	946.7	946.7	0.0

¹FEET ABOVE CONFLUENCE WITH CEDAR CREEK

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: FRIEDEN'S CREEK

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
HASMER CREEK								
A	964	461	329	1.5	852.4	852.4	852.4	0.0
B	2,456	87	108	4.6	863.1	863.1	863.1	0.0
C	3,026	149	239	2.1	865.8	865.8	865.8	0.0
D	3,598	159	196	2.6	866.8	866.8	866.8	0.0
E	4,043	113	199	2.5	867.6	867.6	867.6	0.0
F	4,551	163	198	2.5	868.5	868.5	868.5	0.0
G	5,032	107	180	2.8	869.4	869.4	869.4	0.0
H	5,154	215	1,007	0.5	872.5	872.5	872.5	0.0
I	5,912	60	291	1.7	872.6	872.6	872.6	0.0
J	7,099	559	9,711	0.1	872.7	872.7	872.7	0.0
K	7,621	65	186	1.8	873.5	873.5	873.5	0.0
L	8,187	298	991	0.3	873.8	873.8	873.8	0.0
M	8,468	31	47	7.3	876.0	876.0	876.0	0.0
N	8,804	30	47	7.3	879.5	879.5	879.5	0.0
O	9,083	24	45	7.6	882.8	882.8	882.8	0.0
P	9,349	28	51	6.6	885.5	885.5	885.5	0.0
Q	9,386	80	235	1.5	888.6	888.6	888.6	0.0

¹FEET ABOVE CONFLUENCE WITH CEDAR CREEK

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: HASMER CREEK

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
HUBERTUS DITCH NO. 1								
A	1,705 ¹	59	74	3.8	979.4	979.4	979.4	0.0
B	2,471 ¹	523	400	0.7	980.9	980.9	980.9	0.0
C	3,677 ¹	147	77	2.8	981.6	981.6	981.6	0.0
D	3,898 ¹	50	189	1.1	984.2	984.2	984.2	0.0
E	4,651 ¹	853	1,895	0.0	984.2	984.2	984.2	0.0
HWY 41 OVERFLOW								
A	459 ²	29	23	4.7	922.3	922.3	922.3	0.0
B	629 ²	29	23	4.6	926.0	926.0	926.0	0.0
C	845 ²	26	22	4.8	929.9	929.9	929.9	0.0
D	1,129 ²	20	20	5.3	935.4	935.4	935.4	0.0
E	1,487 ²	23	21	5.1	941.3	941.3	941.3	0.0
F	1,939 ²	26	27	3.9	945.5	945.5	945.5	0.0
G	2,404 ²	31	28	3.7	948.9	948.9	948.9	0.0
H	2,731 ²	27	22	4.8	953.1	953.1	953.1	0.0
I	2,980 ²	22	20	5.3	957.6	957.6	957.6	0.0
J	3,206 ²	22	20	5.2	961.6	961.6	961.6	0.0
K	3,433 ²	19	19	5.5	965.7	965.7	965.7	0.0
L	3,697 ²	61	30	3.5	973.0	973.0	973.0	0.0
M	3,878 ²	36	28	3.8	975.5	975.5	975.5	0.0
N	4,172 ²	24	21	5.0	979.3	979.3	979.3	0.0
O	4,406 ²	31	24	4.4	982.8	982.8	982.8	0.0

¹FEET ABOVE CONFLUENCE WITH BARK RIVER

²FEET ABOVE CONFLUENCE WITH WEST BRANCH MILWAUKEE RIVER

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY	FLOODWAY DATA
	WASHINGTON COUNTY, WI	FLOODING SOURCE: HUBERTUS DITCH NO. 1 - HWY 41 OVERFLOW
	AND INCORPORATED AREAS	

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
JACKSON CREEK								
A	928	113	116	1.7	843.8	843.3 ²	843.3	0.0
B	1,236	109	76	2.6	844.1	844.1	844.1	0.0
C	1,364	211	326	0.6	845.8	845.8	845.8	0.0
D	1,639	137	65	2.1	846.5	846.5	846.5	0.0
E	1,918	132	80	1.7	849.5	849.5	849.5	0.0
F	2,497	123	82	1.7	854.3	854.3	854.3	0.0
G	3,256	16	26	5.3	860.6	860.6	860.6	0.0
H	3,305	77	121	1.1	863.5	863.5	863.5	0.0
I	4,008	13	17	5.2	868.8	868.8	868.8	0.0
J	4,557	25	19	4.6	875.3	875.3	875.3	0.0
K	4,687	24	67	1.3	879.0	879.0	879.0	0.0
L	5,270	34	22	4.0	882.6	882.6	882.6	0.0

¹FEET ABOVE CONFLUENCE WITH CEDAR CREEK

²ELEVATIONS COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM CEDAR CREEK

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: JACKSON CREEK

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
KETTLEVIEW CREEK								
A	901	341	711	1.0	940.2	940.2	940.2	0.0
B	1,765	525	805	0.9	941.1	941.1	941.1	0.0
C	2,170	421	704	1.0	941.7	941.7	941.7	0.0
D	2,707	385	602	1.2	942.5	942.5	942.5	0.0
E	3,352	307	764	0.9	944.3	944.3	944.3	0.0
F	3,799	409	974	0.7	944.6	944.6	944.6	0.0
G	4,856	467	1,232	0.5	947.1	947.1	947.1	0.0
H	5,111	283	387	1.5	947.2	947.2	947.2	0.0
I	5,472	318	480	1.2	948.4	948.4	948.4	0.0
J	5,723	155	214	2.8	951.0	951.0	951.0	0.0
K	5,996	345	695	0.9	952.4	952.4	952.4	0.0
L	6,262	345	408	0.6	952.6	952.6	952.6	0.0
M	6,705	122	145	1.7	954.9	954.9	954.9	0.0
N	6,962	179	191	1.3	956.3	956.3	956.3	0.0
O	7,699	173	137	1.7	961.2	961.2	961.2	0.0
P	8,125	123	107	2.2	965.3	965.3	965.3	0.0
Q	8,564	150	120	2.0	970.0	970.0	970.0	0.0
R	8,788	161	96	2.5	974.3	974.3	974.3	0.0
S	9,188	27	39	6.1	983.4	983.4	983.4	0.0
T	9,446	100	79	3.0	989.8	989.8	989.8	0.0
U	9,700	65	63	3.8	996.7	996.7	996.7	0.0
V	9,924	86	74	3.2	1,001.6	1,001.6	1,001.6	0.0
W	10,299	73	74	3.2	1,007.9	1,007.9	1,007.9	0.0
X	10,794	76	68	3.5	1,018.0	1,018.0	1,018.0	0.0
Y	11,083	84	78	3.1	1,023.1	1,023.1	1,023.1	0.0
Z	11,458	72	70	3.4	1,028.3	1,028.3	1,028.3	0.0

¹FEET ABOVE CONFLUENCE WITH KEWASKUM CREEK

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: KETTLEVIEW CREEK

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
KEWASKUM CREEK								
A	363	207	1,086	1.8	936.2	935.4 ³	935.4	0.0
B	1,088	202	749	2.6	936.7	936.7	936.7	0.0
C	1,736	374	2,263	0.9	937.3	937.3	937.3	0.0
D	3,162	410	1,661	1.2	937.6	937.6	937.6	0.0
E	4,069	237	647	3.1	939.2	939.2	939.2	0.0
F	4,438	446	2,318	0.9	939.8	939.8	939.8	0.0
G	5,273	740	2,181	0.9	940.0	940.0	940.0	0.0
H	6,149	417	1,179	1.7	940.4	940.4	940.4	0.0
I	7,036	285	768	2.7	941.6	941.6	941.6	0.0
J	7,278	234	513	4.0	942.1	942.1	942.1	0.0
K	7,497	166	527	3.9	943.4	943.4	943.4	0.0
L	7,676	75	404	5.1	945.7	945.7	945.7	0.0
M	7,911	321	1,537	1.3	946.6	946.6	946.6	0.0
N	8,648	353	1,435	1.4	947.0	947.0	947.0	0.0
O	9,323	460	1,551	1.3	947.4	947.4	947.4	0.0
P	9,751	431	1,299	1.6	947.7	947.7	947.7	0.0
Q	10,218	480	1,400	1.5	948.4	948.4	948.4	0.0
R	10,755	589	1,689	1.2	949.3	949.3	949.3	0.0
S	11,444	544	1,599	1.3	949.8	949.8	949.8	0.0
T	11,902	591	1,448	1.4	950.4	950.4	950.4	0.0
U	12,289	672	1,619	1.3	951.1	951.1	951.1	0.0
V	12,617	727	1,608	1.3	951.7	951.7	951.7	0.0
W	12,957	678	1,599	1.3	952.4	952.4	952.4	0.0
X	13,444	609	2,026	1.0	955.1	955.1	955.1	0.0
Y	14,091	480 ²	911	2.3	955.9	955.9	955.9	0.0
Z	14,413	326	540	3.8	957.6	957.6	957.6	0.0

¹FEET ABOVE CONFLUENCE WITH MILWAUKEE RIVER, ²MAPPED FLOODWAY WIDTH INCLUDES UT-2 KEWASKUM CREEK FLOODWAY

³ELEVATIONS COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM THE MILWAUKEE RIVER

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY	FLOODWAY DATA
	WASHINGTON COUNTY, WI	FLOODING SOURCE: KEWASKUM CREEK
	AND INCORPORATED AREAS	

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
KEWASKUM CREEK (CONTINUED)								
AA	14,820	354	1,053	1.9	959.9	959.9	959.9	0.0
AB	15,260	303	830	2.5	960.8	960.8	960.8	0.0
AC	15,635	215	484	4.2	962.5	962.5	962.5	0.0
AD	15,881	213	551	3.7	964.2	964.2	964.2	0.0
AE	16,161	245	483	4.2	965.3	965.3	965.3	0.0
AF	16,625	421	1,456	1.4	969.9	969.9	969.9	0.0
AG	17,067	404	983	2.1	970.3	970.3	970.3	0.0
AH	17,511	348	799	2.6	971.4	971.4	971.4	0.0
AI	18,071	240	710	2.9	973.8	973.8	973.8	0.0
AJ	18,438	387	996	2.1	975.4	975.4	975.4	0.0
AK	18,937	377	1,177	1.7	976.6	976.6	976.6	0.0
AL	19,346	530	1,661	1.3	977.3	977.3	977.3	0.0
AM	20,574	412	813	2.6	977.9	977.9	977.9	0.0
AN	21,065	399	1,061	2.0	978.8	978.8	978.8	0.0
AO	21,913	464	955	2.2	981.0	981.0	981.0	0.0
AP	22,249	277	565	3.8	981.8	981.8	981.8	0.0
AQ	22,562	204	404	5.2	984.3	984.3	984.3	0.0
AR	23,004	357	1,211	1.8	988.6	988.6	988.6	0.0
AS	23,550	404	1,154	1.8	989.4	989.4	989.4	0.0
AT	23,874	524	1,188	1.8	990.0	990.0	990.0	0.0
AU	24,236	328	965	2.2	991.1	991.1	991.1	0.0
AV	24,820	388	941	2.3	992.8	992.8	992.8	0.0
AW	25,408	509	1,124	1.9	994.7	994.7	994.7	0.0
AX	25,753	462	884	2.4	996.2	996.2	996.2	0.0
AY	26,992	302	453	4.7	1,000.8	1,000.8	1,000.8	0.0
AZ	27,324	384	783	3.3	1,003.8	1,003.8	1,003.8	0.0

¹FEET ABOVE CONFLUENCE WITH MILWAUKEE RIVER

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: KEWASKUM CREEK

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
KEWASKUM CREEK (CONTINUED)								
BA	27,639	254	658	3.9	1,005.4	1,005.4	1,005.4	0.0
BB	27,865	193	555	4.7	1,006.5	1,006.5	1,006.5	0.0
BC	28,346	338	1,801	1.4	1,009.2	1,009.2	1,009.2	0.0
BD	28,812	317	854	3.0	1,009.7	1,009.7	1,009.7	0.0
BE	29,197	306	1,181	2.2	1,011.3	1,011.3	1,011.3	0.0
BF	29,555	317	1,175	2.2	1,011.7	1,011.7	1,011.7	0.0
BG	29,984	632	3,589	0.7	1,012.3	1,012.3	1,012.3	0.0
BH	30,670	826	2,950	0.8	1,012.5	1,012.5	1,012.5	0.0
BI	31,621	1,259	3,567	0.7	1,012.8	1,012.8	1,012.8	0.0
BJ	32,416	1,244	5,454	0.4	1,013.0	1,013.0	1,013.0	0.0
BK	33,314	678	4,404	0.4	1,014.7	1,014.7	1,014.7	0.0
BL	33,622	998	5,576	0.3	1,014.7	1,014.7	1,014.7	0.0
BM	35,308	1,588	8,765	0.1	1,014.7	1,014.7	1,014.7	0.0
BN	36,973	942	2,751	0.5	1,014.7	1,014.7	1,014.7	0.0
BO	37,589	523	758	1.6	1,014.8	1,014.8	1,014.8	0.0
BP	37,893	292	453	2.7	1,015.9	1,015.9	1,015.9	0.0
BQ	38,216	238	480	2.6	1,017.4	1,017.4	1,017.4	0.0
BR	38,898	374	579	1.8	1,019.1	1,019.1	1,019.1	0.0
BS	39,750	195	177	2.9	1,021.0	1,021.0	1,021.0	0.0
BT	40,637	30	65	8.0	1,025.1	1,025.1	1,025.1	0.0
BU	41,147	132	285	1.8	1,033.8	1,033.8	1,033.8	0.0
BV	41,473	104	245	1.1	1,034.5	1,034.5	1,034.5	0.0
BW	41,875	28	53	5.1	1,034.5	1,034.5	1,034.5	0.0
BX	42,479	23	68	4.0	1,036.7	1,036.7	1,036.7	0.0
BY	42,991	19	41	6.7	1,038.3	1,038.3	1,038.3	0.0
BZ	43,741	29	91	3.0	1,040.7	1,040.7	1,040.7	0.0

¹FEET ABOVE CONFLUENCE WITH MILWAUKEE RIVER

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: KEWASKUM CREEK

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
KEWASKUM CREEK (CONTINUED)								
CA	44,477 ¹	96	103	2.6	1,041.6	1,041.6	1,041.6	0.0
CB	44,668 ¹	135	174	1.6	1,042.2	1,042.2	1,042.2	0.0
CC	44,938 ¹	129	440	0.6	1,046.3	1,046.3	1,046.3	0.0
CD	45,214 ¹	527	2,464	0.0	1,046.4	1,046.4	1,046.4	0.0
CE	45,560 ¹	635	2,913	0.0	1,046.4	1,046.4	1,046.4	0.0
CF	45,974 ¹	635	3,027	0.0	1,046.4	1,046.4	1,046.4	0.0
CG	46,854 ¹	662	2,841	0.1	1,046.4	1,046.4	1,046.4	0.0
CH	47,629 ¹	683	2,247	0.1	1,046.4	1,046.4	1,046.4	0.0
KEWASKUM CREEK OVERFLOW CHANNEL								
A	378 ²	175	67	0.8	946.2	946.2	946.2	0.0
B	802 ²	101	42	1.3	948.4	948.4	948.4	0.0
C	1,332 ²	313	187	0.3	949.0	949.0	949.0	0.0
D	1,792 ²	191	86	0.6	950.0	950.0	950.0	0.0
E	2,035 ²	150	80	0.7	950.5	950.5	950.5	0.0
F	2,269 ²	83	38	1.4	951.8	951.8	951.8	0.0

¹FEET ABOVE CONFLUENCE WITH MILWAUKEE RIVER

²FEET ABOVE CONFLUENCE WITH KETTLEVIEW CREEK

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: KEWASKUM CREEK - KEWASKUM CREEK OVERFLOW CHANNEL

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
KNIGHTS CREEK								
A	310 ¹	61	209	1.4	956.2	956.2	956.2	0.0
B	968 ¹	76	86	4.5	957.4	957.4	957.4	0.0
C	1,177 ¹	248	405	0.9	958.7	958.7	958.7	0.0
D	1,663 ¹	419	528	0.6	959.1	959.1	959.1	0.0
E	2,093 ¹	252	175	1.9	961.2	961.2	961.2	0.0
F	2,483 ¹	177	189	1.7	963.8	963.8	963.8	0.0
G	2,839 ¹	244	197	1.6	967.2	967.2	967.2	0.0
H	3,235 ¹	233	203	1.6	971.3	971.3	971.3	0.0
I	3,545 ¹	116	131	2.4	975.6	975.6	975.6	0.0
J	3,859 ¹	103	98	3.2	981.9	981.9	981.9	0.0
K	4,368 ¹	27	51	6.2	993.0	993.0	993.0	0.0
L	4,605 ¹	38	51	4.8	999.1	999.1	999.1	0.0
M	4,848 ¹	35	48	5.1	1,004.0	1,004.0	1,004.0	0.0
N	5,009 ¹	35	43	5.7	1,008.1	1,008.1	1,008.1	0.0
O	5,189 ¹	29	45	5.4	1,012.1	1,012.1	1,012.1	0.0
P	5,423 ¹	64	67	3.6	1,017.3	1,017.3	1,017.3	0.0
Q	5,770 ¹	156	141	1.7	1,021.2	1,021.2	1,021.2	0.0
R	6,124 ¹	156	156	1.6	1,022.4	1,022.4	1,022.4	0.0
S	6,362 ¹	142	115	2.1	1,023.7	1,023.7	1,023.7	0.0
T	6,709 ¹	81	66	3.7	1,026.9	1,026.9	1,026.9	0.0
U	7,058 ¹	63	70	3.5	1,032.7	1,032.7	1,032.7	0.0
KNIGHTS CREEK OVERFLOW								
A	120 ²	69	25	3.5	951.9	951.9	951.9	0.0
B	332 ²	53	23	3.7	954.5	954.5	954.5	0.0
C	565 ²	63	26	3.3	956.9	956.9	956.9	0.0

¹FEET ABOVE CONFLUENCE WITH NORTH CREEK

²FEET ABOVE CONFLUENCE WITH EDGEWOOD CREEK

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: KNIGHTS CREEK - KNIGHTS CREEK OVERFLOW

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
KOHLSVILLE RIVER								
A	2,062	2,100	5,110	0.4	938.5	938.5	938.5	0.0
B	3,567	865	3,195	0.7	943.1	943.1	943.1	0.0
C	4,729	564	1,913	1.2	943.3	943.3	943.3	0.0
D	4,847	581	2,680	0.8	944.2	944.2	944.2	0.0
E	7,245	1,010	4,499	0.5	944.4	944.4	944.4	0.0
F	10,645	711	2,037	1.1	944.8	944.8	944.8	0.0
G	14,240	255	395	2.6	947.4	947.4	947.4	0.0
H	15,255	175	350	2.9	949.6	949.6	949.6	0.0
I	15,652	191	383	2.1	950.8	950.8	950.8	0.0
J	15,827	170	549	1.5	952.5	952.5	952.5	0.0
K	17,222	331	771	1.1	955.0	955.0	955.0	0.0
L	19,452	477	708	1.1	956.3	956.3	956.3	0.0
M	20,723	34	65	5.1	958.0	958.0	958.0	0.0
N	21,021	191	166	2.0	959.8	959.8	959.8	0.0
O	21,484	135	114	2.9	961.4	961.4	961.4	0.0
P	22,128	28	59	5.7	965.3	965.3	965.3	0.0
Q	22,662	119	108	3.1	968.8	968.8	968.8	0.0
R	23,302	124	106	3.1	970.7	970.7	970.7	0.0
S	23,555	36	79	4.2	972.1	972.1	972.1	0.0
T	23,728	287	3,092	0.3	981.9	981.9	981.9	0.0
U	24,065	162	1,192	0.7	981.9	981.9	981.9	0.0
V	24,242	103	448	1.7	982.2	982.2	982.2	0.0
W	24,435	104	289	2.7	982.2	982.2	982.2	0.0
X	24,703	102	166	4.6	983.2	983.2	983.2	0.0
Y	25,625	161	211	3.6	988.8	988.8	988.8	0.0
Z	25,871	139	233	4.1	990.4	990.4	990.4	0.0

¹FEET ABOVE CONFLUENCE WITH EAST BRANCH ROCK RIVER

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: KOHLSVILLE RIVER

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
KOHLSVILLE RIVER (CONTINUED)								
AA	26,004	121	539	1.8	993.8	993.8	993.8	0.0
AB	27,453	214	584	1.6	998.5	998.5	998.5	0.0
AC	28,495	198	450	2.1	999.4	999.4	999.4	0.0
AD	28,571	180	538	1.8	1,000.6	1,000.6	1,000.6	0.0
AE	29,950	359	1,307	0.7	1,002.5	1,002.5	1,002.5	0.0
AF	31,706	435	1,618	0.3	1,004.7	1,004.7	1,004.7	0.0
AG	32,860	123	153	3.4	1,006.0	1,006.0	1,006.0	0.0
AH	34,097	116	203	2.5	1,009.1	1,009.1	1,009.1	0.0
AI	34,217	272	1,105	0.5	1,013.2	1,013.2	1,013.2	0.0
AJ	36,580	246	658	0.8	1,013.6	1,013.6	1,013.6	0.0
AK	37,483	283	384	1.3	1,014.0	1,014.0	1,014.0	0.0
AL	37,627	364	1,722	0.1	1,018.7	1,018.7	1,018.7	0.0
AM	38,528	567	1,763	0.1	1,018.7	1,018.7	1,018.7	0.0
AN	39,899	48	69	1.7	1,020.2	1,020.2	1,020.2	0.0
AO	41,118	32	47	2.6	1,024.5	1,024.5	1,024.5	0.0
AP	41,990	97	102	1.2	1,027.5	1,027.5	1,027.5	0.0
AQ	42,079	174	231	0.5	1,029.2	1,029.2	1,029.2	0.0
AR	43,302	52	59	2.0	1,031.2	1,031.2	1,031.2	0.0
AS	43,393	65	135	0.9	1,033.8	1,033.8	1,033.8	0.0
AT	44,271	92	64	1.9	1,035.6	1,035.6	1,035.6	0.0
AU	44,389	192	629	0.2	1,039.9	1,039.9	1,039.9	0.0
AV	46,263	124	89	1.4	1,041.6	1,041.6	1,041.6	0.0
AW	47,827	176	125	1.0	1,045.3	1,045.3	1,045.3	0.0
AX	49,876	75	28	4.3	1060.5	1060.5	1060.5	0.0

¹FEET ABOVE CONFLUENCE WITH EAST BRANCH ROCK RIVER

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: KOHLSVILLE RIVER

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
KOHLSVILLE RIVER - PARK ROUTE								
A	83 ¹	481	804	0.6	957.7	957.7	957.7	0.0
B	629 ¹	206	374	1.3	958.5	958.5	958.5	0.0
C	1,009 ¹	73	113	4.2	961.6	961.6	961.6	0.0
D	1,264 ¹	19	55	8.6	964.8	964.8	964.8	0.0
E	1,302 ¹	204	440	1.1	980.5	980.5	980.5	0.0
F	1,762 ¹	39	134	3.6	980.6	980.6	980.6	0.0
G	2,049 ¹	70	289	1.7	981.7	981.7	981.7	0.0
H	2,318 ¹	187	1,748	0.3	981.9	981.9	981.9	0.0
KOHLSVILLE RIVER UNNAMED TRIBUTARY 1								
A	557 ²	516	464	1.3	944.3	941.6 ³	941.6	0.0
B	1,421 ²	342	303	2.0	944.9	944.9	944.9	0.0
C	2,228 ²	140	130	4.7	956.4	956.4	956.4	0.0
D	3,204 ²	154	147	4.1	977.7	977.7	977.7	0.0

¹FEET ABOVE CONVERGENCE WITH KOHLSVILLE RIVER, ²FEET ABOVE CONFLUENCE WITH KOHLSVILLE RIVER

³ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM KOHLSVILLE RIVER

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: KOHLSVILLE RIVER - PARK ROUTE - KOHLSVILLE RIVER UNNAMED TRIBUTARY 1

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
KOHLSVILLE RIVER UNNAMED TRIBUTARY 2								
A	1,842 ¹	616	1,181	0.5	1,002.6	1,002.6	1002.6	0.0
B	3,720 ¹	523	677	0.9	1,005.0	1,005.0	1,005.0	0.0
C	5,693 ¹	373	497	1.2	1,009.9	1,009.9	1,009.9	0.0
D	5,810 ¹	405	787	0.8	1,012.7	1,012.7	1,012.7	0.0
E	6,428 ¹	186	287	2.1	1,021.7	1,021.7	1,021.7	0.0
F	6,551 ¹	271	1,401	0.4	1,030.0	1,030.0	1,030.0	0.0
G	7,317 ¹	104	147	4.2	1,031.1	1,031.1	1,031.1	0.0
H	7,422 ¹	302	647	0.9	1,033.8	1,033.8	1,033.8	0.0
I	8,325 ¹	371	1,046	0.6	1,034.3	1,034.3	1,034.3	0.0
J	9,735 ¹	683	1,728	0.2	1,034.9	1,034.9	1,034.9	0.0
K	12,565 ¹	296	239	1.3	1,037.7	1,037.7	1,037.7	0.0
L	15,349 ¹	468	400	0.8	1,040.4	1,040.4	1,040.4	0.0
M	16,900 ¹	91	88	3.5	1,049.2	1,049.2	1,049.2	0.0
N	16,989 ¹	119	308	1.0	1,052.5	1,052.5	1,052.5	0.0
O	17,833 ¹	26	51	6.1	1,059.6	1,059.6	1,059.6	0.0
KOHLSVILLE RIVER UNNAMED TRIBUTARY 2.1								
A	458 ²	174	108	3.5	1,034.9	1033.9 ³	1,033.9	0.0
B	1,107 ²	135	109	3.4	1,039.2	1,039.2	1,039.2	0.0

¹FEET ABOVE CONFLUENCE WITH KOHLSVILLE RIVER, ²FEET ABOVE CONFLUENCE WITH KOHLSVILLE RIVER UNNAMED TRIBUTARY 2

³ELEVATION COMPUTED WITHOUT CONSIDERATION OF BACKWATER EFFECTS FROM KOHLSVILLE RIVER UNNAMED TRIBUTARY 2

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: KOHLSVILLE RIVER UNNAMED TRIBUTARY 2 - KOHLSVILLE RIVER UNNAMED TRIBUTARY 2.1

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
KRESSEN BRANCH								
A	3,443	3,425	21,358	0.1	851.1	851.1	851.1	0.0
B	7,092	2,230	11,053	0.1	851.1	851.1	851.1	0.0
C	11,636	922	3,014	0.4	851.1	851.1	851.1	0.0
D	13,673	1,946	8,210	0.1	851.2	851.2	851.2	0.0
E	14,839	1,676	2,912	0.4	851.3	851.3	851.3	0.0
F	15,923	766	1,186	0.4	851.5	851.5	851.5	0.0
G	16,786	70	127	3.8	851.7	851.7	851.7	0.0
H	16,841	49	192	2.5	852.5	852.5	852.5	0.0
I	17,330	427	387	1.3	852.9	852.9	852.9	0.0
J	18,604	64	143	3.4	855.4	855.4	855.4	0.0

¹FEET ABOVE CONFLUENCE WITH LITTLE CEDAR CREEK

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: KRESSEN BRANCH

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1 % ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
LEHNER OUTLET								
A	255	85	49	3.4	924.9	924.9	924.9	0.0
B	581	91	51	3.3	930.9	930.9	930.9	0.0
C	867	122	126	1.3	932.1	932.1	932.1	0.0
D	1,161	41	34	4.9	934.2	934.2	934.2	0.0
E	1,560	51	41	4.0	939.9	939.9	939.9	0.0
F	1,692	131	323	0.5	943.9	943.9	943.9	0.0
G	2,108	90	126	1.3	943.9	943.9	943.9	0.0
H	2,706	21	37	4.4	946.1	946.1	946.1	0.0
I	2,898	57	76	2.2	948.1	948.1	948.1	0.0
J	4,081	104	61	2.1	958.1	958.1	958.1	0.0
K	4,632	56	39	3.4	962.8	962.8	962.8	0.0
L	5,474	83	66	2.0	966.8	966.8	966.8	0.0
M	6,021	146	141	0.9	967.5	967.5	967.5	0.0
N	6,859	154	183	0.7	969.2	969.2	969.2	0.0
O	7,629	350	353	0.4	969.4	969.4	969.4	0.0
P	8,457	111	109	1.2	969.5	969.5	969.5	0.0
Q	8,586	454	1,123	0.1	972.2	972.2	972.2	0.0
R	10,083	320	447	0.2	972.2	972.2	972.2	0.0
S	10,662	97	79	1.1	973.1	973.1	973.1	0.0
T	10,714	153	259	0.3	977.3	977.3	977.3	0.0
U	11,103	54	30	2.9	978.9	978.9	978.9	0.0
V	11,559	40	82	1.1	979.6	979.6	979.6	0.0
W	12,517	114	107	0.5	979.7	979.7	979.7	0.0
X	13,124	21	20	2.7	980.4	980.4	980.4	0.0
Y	13,374	29	18	2.9	982.9	982.9	982.9	0.0

¹FEET ABOVE CONFLUENCE WITH CEDAR CREEK

TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY WASHINGTON COUNTY, WI AND INCORPORATED AREAS	FLOODWAY DATA
		FLOODING SOURCE: LEHNER OUTLET