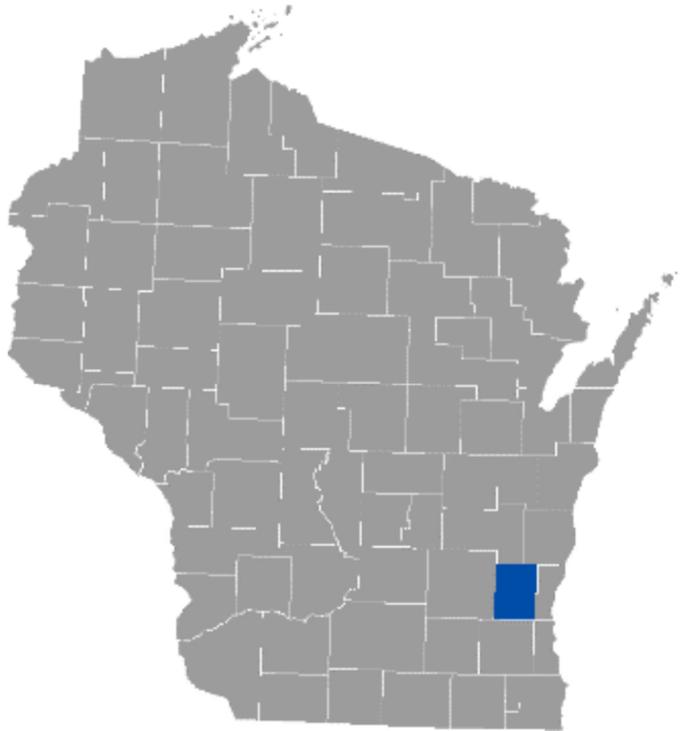


FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 1 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
55131CV001D
Version Number 2.8.4.3



FEMA

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Published Separately

Flood Insurance Rate Map (FIRM)

FLOOD INSURANCE STUDY REPORT WASHINGTON COUNTY, WISCONSIN

SECTION 1.0 – INTRODUCTION

1.1 The National Flood Insurance Program

The National Flood Insurance Program (NFIP) is a voluntary Federal program that enables property owners in participating communities to purchase insurance protection against losses from flooding. This insurance is designed to provide an alternative to disaster assistance to meet the escalating costs of repairing damage to buildings and their contents caused by floods.

For decades, the national response to flood disasters was generally limited to constructing flood-control works such as dams, levees, sea-walls, and the like, and providing disaster relief to flood victims. This approach did not reduce losses nor did it discourage unwise development. In some instances, it may have actually encouraged additional development. To compound the problem, the public generally could not buy flood coverage from insurance companies, and building techniques to reduce flood damage were often overlooked.

In the face of mounting flood losses and escalating costs of disaster relief to the general taxpayers, the U.S. Congress created the NFIP. The intent was to reduce future flood damage through community floodplain management ordinances, and provide protection for property owners against potential losses through an insurance mechanism that requires a premium to be paid for the protection.

The U.S. Congress established the NFIP on August 1, 1968, with the passage of the National Flood Insurance Act of 1968. The NFIP was broadened and modified with the passage of the Flood Disaster Protection Act of 1973 and other legislative measures. It was further modified by the National Flood Insurance Reform Act of 1994 and the Flood Insurance Reform Act of 2004. The NFIP is administered by the Federal Emergency Management Agency (FEMA), which is a component of the Department of Homeland Security (DHS).

Participation in the NFIP is based on an agreement between local communities and the Federal Government. If a community adopts and enforces floodplain management regulations to reduce future flood risks to new construction and substantially improved structures in Special Flood Hazard Areas (SFHAs), the Federal Government will make flood insurance available within the community as a financial protection against flood losses. The community's floodplain management regulations must meet or exceed criteria established in accordance with Title 44 Code of Federal Regulations (CFR) Part 60, *Criteria for Land Management and Use*.

SFHAs are delineated on the community's Flood Insurance Rate Maps (FIRMs). Under the NFIP, buildings that were built before the flood hazard was identified on the community's FIRMs are generally referred to as "Pre-FIRM" buildings. When the NFIP was created, the U.S. Congress recognized that insurance for Pre-FIRM buildings would be prohibitively expensive if the premiums were not subsidized by the Federal Government. Congress also recognized that most of these floodprone buildings were built by individuals who did not have sufficient knowledge of the flood hazard to make informed

decisions. The NFIP requires that full actuarial rates reflecting the complete flood risk be charged on all buildings constructed or substantially improved on or after the effective date of the initial FIRM for the community or after December 31, 1974, whichever is later. These buildings are generally referred to as “Post-FIRM” buildings.

1.2 Purpose of this Flood Insurance Study Report

This Flood Insurance Study (FIS) Report revises and updates information on the existence and severity of flood hazards for the study area. The studies described in this report developed flood hazard data to assist communities in efforts to implement sound floodplain management.

In some states or communities, floodplain management criteria or regulations may exist that are more restrictive than the minimum Federal requirements. Contact your State NFIP Coordinator to ensure that any higher State standards are included in the community’s regulations.

1.3 Jurisdictions Included in the Flood Insurance Study Project

This FIS Report covers the entire geographic area of Washington County, Wisconsin.

The jurisdictions that are included in this project area, along with the Community Identification Number (CID) for each community and the United States Geological Survey (USGS) 8-digit Hydrologic Unit Code (HUC-8) sub-basins affecting each, are shown in Table 1. The FIRM panel numbers that affect each community are listed. If the flood hazard data for the community is not included in this FIS Report, the location of that data is identified.

The location of flood hazard data for participating communities in multiple jurisdictions is also indicated in the table.

Jurisdictions that have no identified SFHAs as of the effective date of this study are indicated in the table. Changed conditions in these communities (such as urbanization or annexation) or the availability of new scientific or technical data about flood hazards could make it necessary to determine SFHAs in these jurisdictions in the future.

Table 1: Listing of NFIP Jurisdictions

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Germantown, Village of	550472	04040003	55131C0268F, 55131C0269F, 55131C0288F, 55131C0289E, 55131C0356G, 55131C0357E, 55131C0358F, 55131C0359E, 55131C0376E, 55131C0377E, 55131C0378E, 55131C0379E	
Hartford, City of ¹	550473	07090001	55131C0206F, 55131C0207F, 55131C0208F, 55131C0209F, 55131C0217F, 55131C0226F, 55131C0228F, 55131C0229F, 55131C0233F, 55131C0236F, 55131C0241F	
Jackson, Village of	550530	04040003	55131C0254E, 55131C0258E, 55131C0259E, 55131C0266E, 55131C0267E	
Kewaskum, Village of ²	550474	04040003	55131C0044E, 55131C0061E, 55131C0063E, 55131C0064E, 55131C0151E, 55131C0152E	
Milwaukee, City of ^{3,4}	550278	04040003	55131C0379E	
Newburg, Village of ⁵	550056	04040003	55131C0183E, 55131C0191F	
Richfield, Village of	550518	04040003, 07090001, 07090002, 07120006	55131C0241F, 55131C0242F, 55131C0243F, 55131C0244F, 55131C0262E, 55131C0263F, 55131C0264E, 55131C0266E, 55131C0268F, 55131C0331F, 55131C0332F, 55131C0333F, 55131C0334F, 55131C0351F, 55131C0352F, 55131C0353F, 55131C0354F, 55131C0356G, 55131C0358F	
Slinger, Village of	550587	04040003, 07090001	55131C0227F, 55131C0229F, 55131C0231F, 55131C0232E, 55131C0233F, 55131C0234F, 55131C0253E, 55131C0261F	

¹ This community is also located in Dodge County

² This community is also located in Fond du Lac County

³ This community is also located in Milwaukee and Waukesha Counties

⁴ Special flood areas have been identified in this community; however, none exist within the portion of the community located in Washington County

⁵ This community is also located in Ozaukee County

Table 1: Listing of NFIP Jurisdictions (continued)

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Washington County, Unincorporated Areas	550471	04040003, 07090001	55131C0017F, 55131C0019F, 55131C0036F, 55131C0037F ⁶ , 55131C0038F, 55131C0039F, 55131C0041E ⁶ , 55131C0042E, 55131C0043E, 55131C0044E, 55131C0061E, 55131C0062E, 55131C0063E, 55131C0064E, 55131C0066E, 55131C0067E, 55131C0068E, 55131C0069E, 55131C0086E, 55131C0087E, 55131C0088E, 55131C0089E, 55131C0091E, 55131C0093E, 55131C0107F, 55131C0109F, 55131C0117F, 55131C0119F, 55131C0126F, 55131C0127F, 55131C0128F, 55131C0129F, 55131C0131E, 55131C0132E, 55131C0133E, 55131C0134E, 55131C0136F, 55131C0137F, 55131C0138F, 55131C0139F, 55131C0141E, 55131C0142F, 55131C0143E, 55131C0144E, 55131C0151E, 55131C0152E, 55131C0153E, 55131C0154E, 55131C0156E, 55131C0157E, 55131C0158E, 55131C0159E, 55131C0161F, 55131C0162E, 55131C0163E, 55131C0164E, 55131C0166E, 55131C0167E, 55131C0168E, 55131C0169E, 55131C0176E, 55131C0177E, 55131C0178F, 55131C0179F, 55131C0181E, 55131C0183E, 55131C0186F, 55131C0187F, 55131C0188E, 55131C0189F, 55131C0191F, 55131C0193E, 55131C0206F, 55131C0207F, 55131C0208F, 55131C0209F, 55131C0216F, 55131C0217F, 55131C0218F, 55131C0219F, 55131C0226F, 55131C0227F, 55131C0228F, 55131C0229F, 55131C0231F, 55131C0232E, 55131C0233F, 55131C0234F, 55131C0236F, 55131C0237F, 55131C0238F, 55131C0239F, 55131C0241F, 55131C0242F, 55131C0243F, 55131C0244F, 55131C0251E, 55131C0252E, 55131C0253E, 55131C0254E, 55131C0256F, 55131C0257E, 55131C0258E, 55131C0259E, 55131C0261F, 55131C0262E, 55131C0263F, 55131C0264E, 55131C0266E, 55131C0267E, 55131C0268F, 55131C0269F, 55131C0276E, 55131C0277E, 55131C0278E, 55131C0279F, 55131C0281F, 55131C0286E, 55131C0287E, 55131C0288F, 55131C0289E, 55131C0306F, 55131C0307F, 55131C0308F, 55131C0309F, 55131C0326F, 55131C0327F, 55131C0328F, 55131C0329F, 55131C0331F, 55131C0333F	
West Bend, City of	550475	04040003	55131C0153E, 55131C0154E, 55131C0158E, 55131C0159E, 55131C0161F, 55131C0162E, 55131C0164E, 55131C0166E, 55131C0167E, 55131C0168E, 55131C0169E, 55131C0186F, 55131C0256F, 55131C0257E	

¹ This community is also located in Dodge County

² This community is also located in Fond du Lac County

³ This community is also located in Milwaukee and Waukesha Counties

⁴ Special flood areas have been identified in this community; however, none exist within the portion of the community located in Washington County

⁵ This community is also located in Ozaukee County

⁶ Panel not printed

1.4 Considerations for using this Flood Insurance Study Report

The NFIP encourages State and local governments to implement sound floodplain management programs. To assist in this endeavor, each FIS Report provides floodplain data, which may include a combination of the following: 10-, 4-, 2-, 1-, and 0.2-percent annual chance flood elevations (the 1-percent-annual-chance flood elevation is also referred to as the Base Flood Elevation (BFE)); delineations of the 1-percent-annual-chance and 0.2-percent-annual-chance floodplains; and 1-percent-annual-chance floodway. This information is presented on the FIRM and/or in many components of the FIS Report, including Flood Profiles, Floodway Data tables, Summary of Non-Coastal Stillwater Elevations tables, and Coastal Transect Parameters tables (not all components may be provided for a specific FIS).

This section presents important considerations for using the information contained in this FIS Report and the FIRM, including changes in format and content. Figures 1, 2, and 3 present information that applies to using the FIRM with the FIS Report.

- Part or all of this FIS Report may be revised and republished at any time. In addition, part of this FIS Report may be revised by a Letter of Map Revision (LOMR), which does not involve republication or redistribution of the FIS Report. Refer to Section 6.5 of this FIS Report for information about the process to revise the FIS Report and/or FIRM.

It is, therefore, the responsibility of the user to consult with community officials by contacting the community repository to obtain the most current FIS Report components. Communities participating in the NFIP have established repositories of flood hazard data for floodplain management and flood insurance purposes. Community map repository addresses are provided in Table 30, "Map Repositories," within this FIS Report.

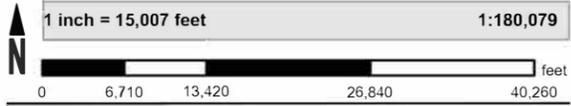
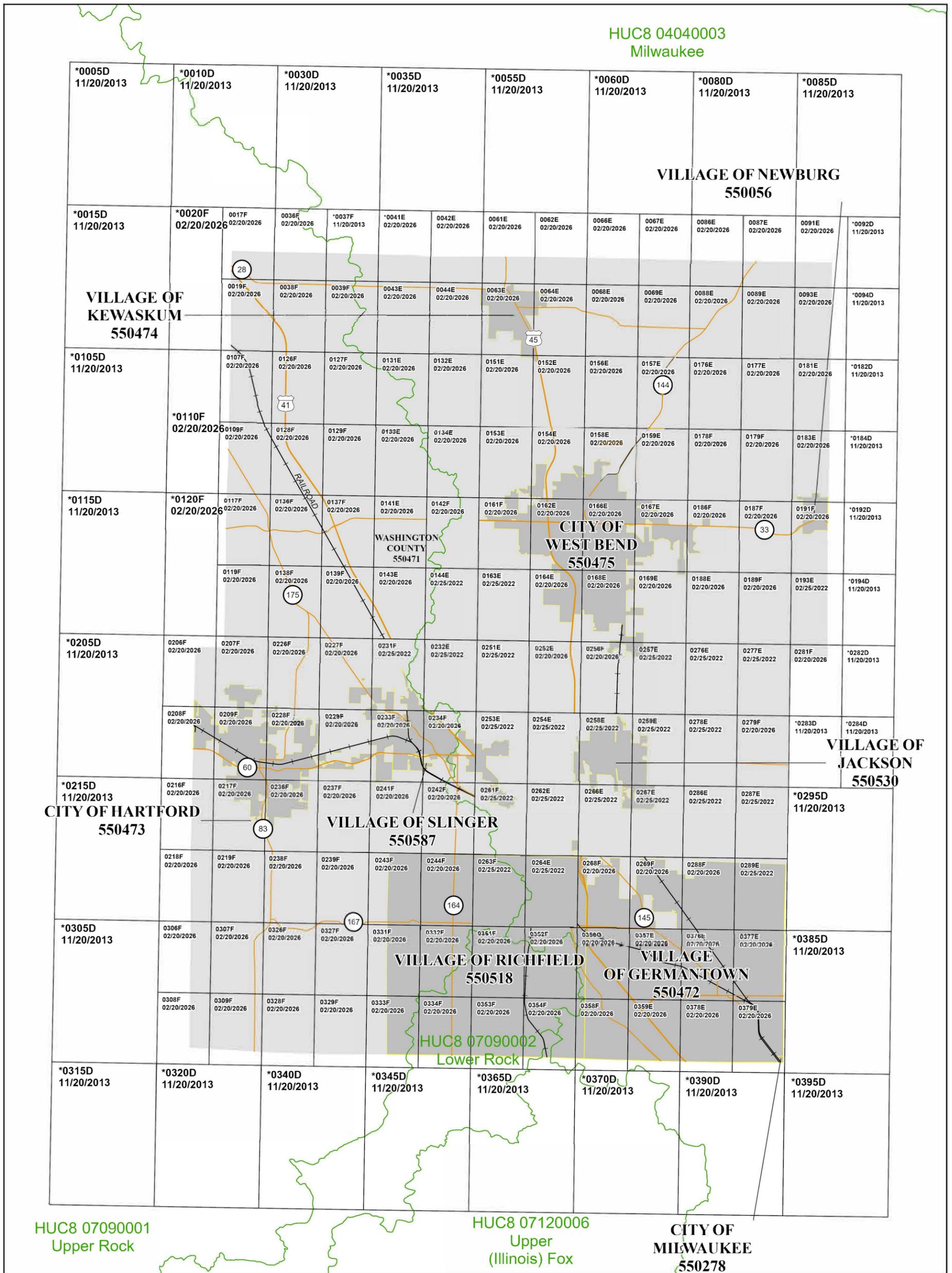
- New FIS Reports are frequently developed for multiple communities, such as entire counties. A countywide FIS Report incorporates previous FIS Reports for individual communities and the unincorporated area of the county (if not jurisdictional) into a single document and supersedes those documents for the purposes of the NFIP.

The initial Countywide FIS Report for Washington County became effective on November 20, 2013. Refer to Table 27 for information about subsequent revisions to the FIRMs.

- FEMA has developed a *Guide to Flood Maps* (FEMA 258) and online tutorials to assist users in accessing the information contained on the FIRM. These include how to read panels and step-by-step instructions to obtain specific information. To obtain this guide and other assistance in using the FIRM, visit the FEMA Web site at www.fema.gov/flood-maps/tutorials.

The FIRM Index in Figure 1 shows the overall FIRM panel layout within Washington County, and also displays the panel number and effective date for each FIRM panel in the county. Other information shown on the FIRM Index includes community boundaries, flooding sources, watershed boundaries, and USGS HUC-8 codes.

Figure 1: FIRM Index



Map Projection:
NAD 1983 HARN UTM Zone 16N
Vertical Datum: NAVD88

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://MSC.FEMA.GOV)

SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP INDEX

WASHINGTON COUNTY, WISCONSIN, AND INCORPORATED AREAS

PANELS PRINTED:

0017, 0019, 0036, 0038, 0039, 0042, 0043, 0044, 0061, 0062, 0063, 0064, 0066, 0067, 0068, 0069, 0086, 0087, 0088, 0089, 0091, 0093, 0107, 0109, 0117, 0119, 0126, 0127, 0128, 0129, 0131, 0132, 0133, 0134, 0136, 0137, 0138, 0139, 0141, 0142, 0143, 0144, 0151, 0152, 0153, 0154, 0156, 0157, 0158, 0159, 0161, 0162, 0163, 0164, 0166, 0167, 0168, 0169, 0176, 0177, 0178, 0179, 0181, 0183, 0186, 0187, 0188, 0189, 0191, 0193, 0206, 0207, 0208, 0209, 0216, 0217, 0218, 0219, 0226, 0227, 0228, 0229, 0231, 0232, 0233, 0234, 0236, 0237, 0238, 0239, 0241, 0242, 0243, 0244, 0251, 0252, 0253, 0254, 0256, 0257, 0258, 0259, 0261, 0262, 0263, 0264, 0266, 0267, 0268, 0269, 0276, 0277, 0278, 0279, 0281, 0286, 0287, 0288, 0289, 0306, 0307, 0308, 0309, 0326, 0327, 0328, 0329, 0331, 0332, 0333, 0334, 0351, 0352, 0353, 0354, 0356, 0357, 0358, 0359, 0376, 0377, 0378, 0379



FEMA

MAP NUMBER
55131CIND0D

EFFECTIVE DATE
February 20, 2026

* PANEL NOT PRINTED - NO SPECIAL FLOOD HAZARD AREAS

Each FIRM panel may contain specific notes to the user that provide additional information regarding the flood hazard data shown on that map. However, the FIRM panel does not contain enough space to show all the notes that may be relevant in helping to better understand the information on the panel. Figure 2 contains the full list of these notes.

Figure 2: FIRM Notes to Users

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM including historic versions of this FIRM, how to order products, or the National Flood Insurance Program in general, please call the FEMA Mapping and Insurance eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Flood Map Service Center website or by calling the FEMA Mapping and Insurance eXchange.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates, refer to Table 27 in this FIS Report.

To determine if flood insurance is available in the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

The map is for use in administering the NFIP. It may not identify all areas subject to flooding, particularly from local drainage sources of small size. Consult the community map repository to find updated or additional flood hazard information.

BASE FLOOD ELEVATIONS: For more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, consult the Flood Profiles and Floodway Data and/or Summary of Non-Coastal Stillwater Elevations tables within this FIS Report. Use the flood elevation data within the FIS Report in conjunction with the FIRM for construction and/or floodplain management.

Figure 2. FIRM Notes to Users (*continued*)

FLOODWAY INFORMATION: Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the FIS Report for this jurisdiction.

FLOOD CONTROL STRUCTURE INFORMATION: Certain areas not in Special Flood Hazard Areas may have reduced flood hazards due to flood control structures. Refer to Section 4.3 "Dams and Other Flood Hazard Reduction Measures" of this FIS Report for information on flood control structures for this jurisdiction.

PROJECTION INFORMATION: The projection used in the preparation of the map was Universal Transverse Mercator (UTM) Zone 16N. The horizontal datum was the World Geodetic System (WGS) of 1984. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

ELEVATION DATUM: Flood elevations on the FIRM are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at www.ngs.noaa.gov.

Local vertical monuments may have been used to create the map. To obtain current monument information, please contact the appropriate local community listed in Table 30 of this FIS Report.

BASE MAP INFORMATION: For panels dated February 20, 2026, base map information shown on the FIRM was provided in digital format by the United States Geological Survey (USGS). The basemap shown is the USGS National Map: Orthoimagery, last refreshed October 2020. For panels dated February 25, 2022, base map information shown on the FIRM was provided in digital format by the Wisconsin Regional Orthoimagery Consortium (WROC). The aerial photography was acquired in the Spring of 2015 to create 1":1000' scale digital orthophotos with 18-in resolution. For information about base maps, refer to Section 6.2 "Base Map" in this FIS Report.

The map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables may reflect stream channel distances that differ from what is shown on the map.

Corporate limits shown on the map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after the map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Figure 2. FIRM Notes to Users (continued)

NOTES FOR FIRM INDEX

REVISIONS TO INDEX: As new studies are performed and FIRM panels are updated within Washington County, Wisconsin, corresponding revisions to the FIRM Index will be incorporated within the FIS Report to reflect the effective dates of those panels. Please refer to Table 27 of this FIS Report to determine the most recent FIRM revision date for each community. The most recent FIRM panel effective date will correspond to the most recent index date.

ATTENTION: The corporate limits shown are based on the best information available at the time of publication of this FIRM Index. As such, they may be more current than those shown on FIRM panels issued before February 20, 2026.

SPECIAL NOTES FOR SPECIFIC FIRM PANELS

This Notes to Users section was created specifically for Washington County, Wisconsin, effective February 20, 2026.

FLOOD RISK REPORT: A Flood Risk Report (FRR) may be available for many of the flooding sources and communities referenced in this FIS Report. The FRR is provided to increase public awareness of flood risk by helping communities identify the areas within their jurisdictions that have the greatest risks. Although non-regulatory, the information provided within the FRR can assist communities in assessing and evaluating mitigation opportunities to reduce these risks. It can also be used by communities developing or updating flood risk mitigation plans. These plans allow communities to identify and evaluate opportunities to reduce potential loss of life and property. However, the FRR is not intended to be the final authoritative source of all flood risk data for a project area; rather, it should be used with other data sources to paint a comprehensive picture of flood risk.

Each FIRM panel contains an abbreviated legend for the features shown on the maps. However, the FIRM panel does not contain enough space to show the legend for all map features. Figure 3 shows the full legend of all map features. Note that not all of these features may appear on the FIRM panels in Washington County.

Figure 3: Map Legend for FIRM

<p>SPECIAL FLOOD HAZARD AREAS: The 1% annual chance flood, also known as the base flood or 100-year flood, has a 1% chance of happening or being exceeded each year. Special Flood Hazard Areas are subject to flooding by the 1% annual chance flood. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood. The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights. See note for specific types. If the floodway is too narrow to be shown, a note is shown.</p>	
	Special Flood Hazard Areas subject to inundation by the 1% annual chance flood (Zones A, AE, AH, AO, AR, A99, V and VE)
Zone A	The flood insurance rate zone that corresponds to the 1% annual chance floodplains. No base (1% annual chance) flood elevations (BFEs) or depths are shown within this zone.
Zone AE	The flood insurance rate zone that corresponds to the 1% annual chance floodplains. Base flood elevations derived from the hydraulic analyses are shown within this zone.
Zone AH	The flood insurance rate zone that corresponds to the areas of 1% annual chance shallow flooding (usually areas of ponding) where average depths are between 1 and 3 feet. Whole-foot BFEs derived from the hydraulic analyses are shown at selected intervals within this zone.
Zone AO	The flood insurance rate zone that corresponds to the areas of 1% annual chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 feet. Average whole-foot depths derived from the hydraulic analyses are shown within this zone.
Zone AR	The flood insurance rate zone that corresponds to areas that were formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
Zone A99	The flood insurance rate zone that corresponds to areas of the 1% annual chance floodplain that will be protected by a Federal flood protection system where construction has reached specified statutory milestones. No base flood elevations or flood depths are shown within this zone.
Zone V	The flood insurance rate zone that corresponds to the 1% annual chance coastal floodplains that have additional hazards associated with storm waves. Base flood elevations are not shown within this zone.
Zone VE	Zone VE is the flood insurance rate zone that corresponds to the 1% annual chance coastal floodplains that have additional hazards associated with storm waves. Base flood elevations derived from the coastal analyses are shown within this zone as static whole-foot elevations that apply throughout the zone.
	Regulatory Floodway determined in Zone AE.

Figure 3: Map Legend for FIRM (continued)

OTHER AREAS OF FLOOD HAZARD	
	Shaded Zone X: Areas of 0.2% annual chance flood hazards and areas of 1% annual chance flood hazards with average depths of less than 1 foot or with drainage areas less than 1 square mile.
	Future Conditions 1% Annual Chance Flood Hazard – Zone X: The flood insurance rate zone that corresponds to the 1% annual chance floodplains that are determined based on future-conditions hydrology. No base flood elevations or flood depths are shown within this zone.
	Area with Reduced Flood Hazard due to Accredited or Provisionally Accredited Levee System: Area is shown as reduced flood hazard from the 1-percent-annual-chance or greater flood by a levee system. Overtopping or failure of any levee system is possible. See Notes to Users for important information.
	Area with Undetermined Flood Hazard due to Non-Accredited Levee System: Analysis and mapping procedures for non-accredited levee systems were applied resulting in a flood insurance rate zone where flood hazards are undetermined, but possible.
OTHER AREAS	
	Zone D (Areas of Undetermined Flood Hazard): The flood insurance rate zone that corresponds to unstudied areas where flood hazards are undetermined, but possible.
	Unshaded Zone X: Areas of minimal flood hazard.
FLOOD HAZARD AND OTHER BOUNDARY LINES	
 (ortho) (vector)	Flood Zone Boundary (white line on ortho-photography-based mapping; gray line on vector-based mapping)
	Limit of Study
	Jurisdiction Boundary
	Limit of Moderate Wave Action (LiMWA): Indicates the inland limit of the area affected by waves greater than 1.5 feet

Figure 3: Map Legend for FIRM (continued)

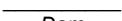
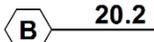
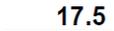
GENERAL STRUCTURES	
 <i>Aqueduct</i> <i>Channel</i> <i>Culvert</i> <i>Storm Sewer</i>	Channel, Culvert, Aqueduct, or Storm Sewer
 <i>Dam</i> <i>Jetty</i> <i>Weir</i>	Dam, Jetty, Weir
	Levee, Dike, or Floodwall
 <i>Bridge</i>	Bridge
REFERENCE MARKERS	
 22.0	River mile Markers
CROSS SECTION & TRANSECT INFORMATION	
	Lettered Cross Section with Regulatory Water Surface Elevation (BFE)
	Numbered Cross Section with Regulatory Water Surface Elevation (BFE)
	Unlettered Cross Section with Regulatory Water Surface Elevation (BFE)
	Coastal Transect
 	<p>Profile Baseline: Indicates the modeled flow path of a stream and is shown on FIRM panels for all valid studies with profiles or otherwise established base flood elevation.</p> <p>Coastal Transect Baseline: Used in the coastal flood hazard model to represent the 0.0-foot elevation contour and the starting point for the transect and the measuring point for the coastal mapping.</p>
	Base Flood Elevation Line
ZONE AE (EL 16)	Static Base Flood Elevation value (shown under zone label)
ZONE AO (DEPTH 2)	Zone designation with Depth
ZONE AO (DEPTH 2) (VEL 15 FPS)	Zone designation with Depth and Velocity

Figure 3: Map Legend for FIRM (continued)

BASE MAP FEATURES	
	River, Stream or Other Hydrographic Feature
	Interstate Highway
	U.S. Highway
	State Highway
	County Highway
	Street, Road, Avenue Name, or Private Drive if shown on Flood Profile
	Railroad
	Horizontal Reference Grid Line
	Horizontal Reference Grid Ticks
	Secondary Grid Crosshairs
Land Grant	Name of Land Grant
7	Section Number
R. 43 W. T. 22 N.	Range, Township Number
4276⁰⁰⁰mE	Horizontal Reference Grid Coordinates (UTM)
365000 FT	Horizontal Reference Grid Coordinates (State Plane)
80° 16' 52.5"	Corner Coordinates (Latitude, Longitude)

SECTION 2.0 – FLOODPLAIN MANAGEMENT APPLICATIONS

2.1 Floodplain Boundaries

To provide a national standard without regional discrimination, the 1-percent-annual-chance (100-year) flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2-percent-annual-chance (500-year) flood is employed to indicate additional areas of flood hazard in the community.

Each flooding source included in the project scope has been studied and mapped using professional engineering and mapping methodologies that were agreed upon by FEMA and Washington County as appropriate to the risk level. Flood risk is evaluated based on factors such as known flood hazards and projected impact on the built environment. Engineering analyses were performed for each studied flooding source to calculate its 1-percent-annual-chance flood elevations; elevations corresponding to other floods (e.g. 10-, 4-, 2-, 0.2-percent annual chance, etc.) may have also been computed for certain flooding sources. Engineering models and methods are described in detail in Section 5.0 of this FIS Report. The modeled elevations at cross sections were used to delineate the floodplain boundaries on the FIRM; between cross sections, the boundaries were interpolated using elevation data from various sources. More information on specific mapping methods is provided in Section 6.0 of this FIS Report.

Depending on the accuracy of available topographic data (Table 22), study methodologies employed (Section 5.0), and flood risk, certain flooding sources may be mapped to show both the 1-percent and 0.2-percent-annual-chance floodplain boundaries, regulatory water surface elevations (BFEs), and/or a regulatory floodway. Similarly, other flooding sources may be mapped to show only the 1-percent-annual-chance floodplain boundary on the FIRM, without published water surface elevations. 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 is shown on the FIRM. Figure 3, “Map Legend for FIRM”, describes the flood zones that are used on the FIRMs to account for the varying levels of flood risk that exist along flooding sources within the project area. Table 2 and Table 3 indicate the flood zone designations for each flooding source and each community within Washington County, respectively.

Table 2, “Flooding Sources Included in this FIS Report,” lists each flooding source, including its study limits, affected communities, mapped zone on the FIRM, and the completion date of its engineering analysis from which the flood elevations on the FIRM and in the FIS Report were derived. Descriptions and dates for the latest hydrologic and hydraulic analyses of the flooding sources are shown in Table 12. Floodplain boundaries for these flooding sources are shown on the FIRM (published separately) using the symbology described in Figure 3. On the map, the 1-percent-annual-chance floodplain corresponds to the SFHAs. The 0.2-percent-annual-chance floodplain shows areas that, although out of the regulatory floodplain, are still subject to flood hazards.

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 procedures to remove these areas from the SFHA are described in Section 6.5 of this FIS Report.

Table 2: Flooding Sources Included in this FIS Report

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Allenton Creek	Washington County, Unincorporated Areas	Confluence with East Branch Rock River	Approximately 5,200 feet upstream of Aurora Road	0790001	3.0	*	Y	AE	2022
Allenton Creek Bypass	Washington County, Unincorporated Areas	Convergence with Allenton Creek	Divergence from Allenton Creek	0790001	0.9	*	Y	AE	2022
Allenton Creek Unnamed Tributary 1	Washington County, Unincorporated Areas	Confluence with Allenton Creek	Approximately 2,300 feet upstream of Addison Road	0790001	0.7	*	Y	AE	2022
Allenton Creek Unnamed Tributary 1.1	Washington County, Unincorporated Areas	Confluence with Allenton Creek Unnamed Tributary 1	Approximately 650 feet upstream of Railroad	0790001	0.2	*	Y	AE	2022
Amy Bell Creek	Richfield, Village of	Mouth at Bark Lake	Amy Bell Lake	07090002	0.6	*	Y	AE	2013
Amy Bell Lake	Richfield, Village of	Entire Shoreline	Entire Shoreline	07090002	*	0.1	N	AE	2013
Ashippun River	Washington County, Unincorporated Areas	Washington / Dodge County Boundary	Approximately 750 feet downstream of Druid Lake	07090001	3.9	*	Y	AE	2013
Ashippun River	Washington County, Unincorporated Areas	Approximately 750 feet downstream of Druid Lake	Approximately 2,100 feet upstream of Druid Lake	07090001	0.8	*	Y	AE	2016
Ashippun River	Washington County, Unincorporated Areas	Approximately 2,100 feet upstream of Druid Lake	Approximately 1.9 miles upstream of County Highway E	07090001	8.0	*	Y	AE	2013
Ashippun River Overland Flowpath	Washington County, Unincorporated Areas	Convergence with Unnamed Tributary to Ashippun River	Divergence from Ashippun River	07090001	0.6	*	Y	AE	2013

* Not calculated for this Flood Risk Project

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Ashippun River Tributary 2	Washington County, Unincorporated Areas	Confluence with Ashippun River	Approximately 1,500 feet upstream of Riley Road	07090001	2.5	*	Y	AE	2013
Ashippun River Tributary 2.1	Washington County, Unincorporated Areas	Confluence with Ashippun River Tributary 2	Approximately 1,500 feet upstream of Cart Path	07090001	1.0	*	Y	AE	2013
Ashippun River Tributary 2.2	Washington County, Unincorporated Areas	Confluence with Ashippun River Tributary 2	Approximately 0.8 miles upstream	07090001	0.8	*	Y	AE	2013
Ashippun River Tributary 3	Washington County, Unincorporated Areas	Confluence with Ashippun River	Approximately 1,100 feet upstream	07090001	0.2	*	Y	AE	2013
Ashippun River Tributary 4	Washington County, Unincorporated Areas	Confluence with Ashippun River	Approximately 500 feet upstream of County Highway E	07090001	0.2	*	Y	AE	2013
Ashippun River Tributary 5	Washington County, Unincorporated Areas	Confluence with Ashippun River	Approximately 1,250 feet upstream	07090001	2.5	*	Y	AE	2013
Bark River	Richfield, Village of	Washington / Waukesha County Boundary	Approximately 620 feet upstream of Bark River Drive	07090002	5.4	*	Y	AE	2013
Bark River	Richfield, Village of	Approximately 620 feet upstream of Bark River Drive	Approximately 1,010 feet upstream of Bark River Drive	07090002	5.4	*	Y	AE	2022
Bark River	Richfield, Village of	Approximately 1,010 feet upstream of Bark River Drive	Approximately 1,400 feet upstream of Scenic Road	07090002	5.4	*	Y	AE	2013
Bark River Tributary 1	Richfield, Village of	Washington / Waukesha County Boundary	Approximately 1,140 feet upstream	07090002	0.2	*	Y	AE	2013

* Not calculated for this Flood Risk Project

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Bark River Tributary 1.1	Richfield, Village of	Confluence with Bark River Tributary 1	Approximately 1,040 feet upstream	07090002	0.2	*	Y	AE	2013
Bolton Brook	Washington County, Unincorporated Areas	Confluence with Stony Creek	Approximately 4,100 feet upstream of Boltonville Road	04040003	1.4	*	Y	AE	2020
Bonniwell Creek	Richfield, Village of; Germantown, Village of	Confluence with Little Cedar Creek	Approximately 500 feet upstream of Holy Hill Road	04040003	1.6	*	Y	AE	2018
Brooklane Overflow	Kewaskum, Village of	Confluence with Edgewood Creek Overflow Channel	Divergence from Edgewood Creek	04040003	0.1	*	Y	AE	2019
Butler Creek Tributary 1	Washington County, Unincorporated Areas	Washington / Dodge County Boundary	Approximately 1,060 feet upstream	07090001	0.2	*	Y	AE	2013
Butler Creek Tributary 2	Washington County, Unincorporated Areas	Washington / Dodge County Boundary	Approximately 780 feet upstream	07090001	0.1	*	Y	AE	2013
Cedar Creek	Washington County, Unincorporated Areas	Ozaukee / Washington County Boundary	Approximately 40 feet upstream of Ozaukee / Washington County Boundary	04040003	<0.1	*	Y	AE	2019
Cedar Creek	Jackson, Village of; Washington County, Unincorporated Areas	Approximately 40 feet upstream of Washington / Ozaukee County Boundary	Cedar Lake	04040003	18.3	*	Y	AE	2018
Cedar Lake	Washington County, Unincorporated Areas	Entire Shoreline	Entire Shoreline	04040003	*	1.8	Y	AE	2018

* Not calculated for this Flood Risk Project

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Cedarburg Creek	Washington County, Unincorporated Areas	Confluence with Cedar Creek	Approximately 250 feet downstream of Washington / Ozaukee County Boundary	04040003	3.4	*	Y	AE	2018
Cedarburg Creek	Washington County, Unincorporated Areas	Approximately 250 feet downstream of Washington / Ozaukee County Boundary	Washington / Ozaukee County Boundary	04040003	<0.1	*	Y	AE	2019
Coney River	Richfield, Village of; Washington County, Unincorporated Areas	Confluence with Oconomowoc River	County Highway E	07090001	4.5	*	Y	AE	2013
Coney River	Washington County, Unincorporated Areas	County Highway E	County Highway CC	07090001	3.0	*	Y	AE	2013
Coney River Overland Flowpath	Washington County, Unincorporated Areas	Convergence with Coney River	Divergence from Coney River	07090001	1.2	*	Y	AE	2013
Deer Creek	Washington County, Unincorporated Areas	Confluence with North Branch Cedar Creek	Approximately 2,500 feet upstream of Church Road	04040003	3.1	*	Y	AE	2018
East Branch Milwaukee River	Washington County, Unincorporated Areas	Confluence with Milwaukee River	Approximately 20 feet downstream of Washington / Fond du Lac County Boundary	04040003	5.8	*	Y	AE	2019
East Branch Milwaukee River	Washington County, Unincorporated Areas	Approximately 20 feet downstream of Washington / Fond du Lac County Boundary	Washington / Fond du Lac County Boundary	04040003	<0.1	*	N	A	2019

* Not calculated for this Flood Risk Project

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
East Branch Rock River	Washington County, Unincorporated Areas	Approximately 250 feet upstream of Dodge / Washington County Boundary	Approximately 4,500 feet downstream of State Highway 33	07090001	11.6	*	Y	AE	2022
East Branch Rock River	Washington County, Unincorporated Areas	Approximately 4,500 feet downstream of State Highway 33	Hillcrest Drive	07090001	1.8	*	Y	AE	2013
East Branch Rock River	Washington County, Unincorporated Areas	Hillcrest Drive	Approximately 4,000 feet upstream of Deer Road	07090001	4.3	*	Y	AE	2022
East Branch Rock River Unnamed Tributary 1	Washington County, Unincorporated Areas	Dodge / Washington County Boundary	Approximately 1,100 feet upstream of the confluence with East Branch Rock River Unnamed Tributary 1.4	07090001	1.8	*	Y	AE	2022
East Branch Rock River Unnamed Tributary 1.1	Washington County, Unincorporated Areas	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	07090001	0.2	*	Y	AE	2022
East Branch Rock River Unnamed Tributary 1.2	Washington County, Unincorporated Areas	Confluence with East Branch Rock River Unnamed Tributary 1	Washington / Dodge County Boundary	07090001	0.2	*	Y	AE	2022
East Branch Rock River Unnamed Tributary 1.3	Washington County, Unincorporated Areas	Confluence with East Branch Rock River Unnamed Tributary 1	Approximately 3,300 feet upstream of State Highway 28	07090001	0.7	*	Y	AE	2022

* Not calculated for this Flood Risk Project

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
East Branch Rock River Unnamed Tributary 1.3.1	Washington County, Unincorporated Areas	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	07090001	0.2	*	Y	AE	2022
East Branch Rock River Unnamed Tributary 1.4	Washington County, Unincorporated Areas	Confluence with East Branch Rock River Unnamed Tributary 1	Just downstream of Interstate 41	07090001	0.5	*	Y	AE	2022
East Branch Rock River Unnamed Tributary 2	Washington County, Unincorporated Areas	Confluence with East Branch Rock River	Approximately 2,700 feet Upstream of Wildlife Road	07090001	2.3	*	Y	AE	2022
East Branch Rock River Unnamed Tributary 2 Bypass	Washington County, Unincorporated Areas	Convergence with East Branch Rock River	Divergence from East Branch Rock River Unnamed Tributary 2	07090001	0.4	*	Y	AE	2022
East Branch Rock River Unnamed Tributary 2.1	Washington County, Unincorporated Areas	Confluence with East Branch Rock River Unnamed Tributary 2	Approximately 450 feet upstream of Wildlife Road	07090001	0.4	*	Y	AE	2022
East Branch Rock River Unnamed Tributary 2.1 Bypass	Washington County, Unincorporated Areas	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	07090001	0.1	*	Y	AE	2022
East Branch Rock River Unnamed Tributary 2.2	Washington County, Unincorporated Areas	Confluence with East Branch Rock River Unnamed Tributary 2	Approximately 1,200 feet upstream of Wildlife Road	07090001	0.5	*	Y	AE	2022

* Not calculated for this Flood Risk Project

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
East Branch Rock River Unnamed Tributary 2.3	Washington County, Unincorporated Areas	Confluence with East Branch Rock River Unnamed Tributary 2	Approximately 100 Feet Upstream of Highway 33	07090001	0.3	*	Y	AE	2022
Edgewood Creek	Kewaskum, Village of	Confluence with North Creek	Approximately 0.5 mile upstream of Brooklane Overflow	04040003	0.9	*	Y	AE	2019
Edgewood Creek Overflow Channel	Kewaskum, Village of	Confluence with Kewaskum Creek	Divergence from Edgewood Creek	04040003	0.6	*	Y	AE	2019
Evergreen Bypass	Washington County, Unincorporated Areas	Confluence with Evergreen Creek	Divergence from Evergreen Creek	04040003	0.1	*	Y	AE	2018
Evergreen Creek	Washington County, Unincorporated Areas; West Bend, City of	County Highway G	Approximately 2,400 feet upstream of Hron Road	04040003	5.1	*	Y	AE	2018
Flynn Creek	Washington County, Unincorporated Areas	Confluence with Oconomowoc River	Approximately 700 feet upstream of Shannon Road	07090001	5.9	*	Y	AE	2013
Frieden's Creek	Jackson, Village of; Washington County, Unincorporated Areas	Confluence with Cedar Creek	State Highway 45	04040003	4.5	*	Y	AE	2018
Green Lake	Washington County, Unincorporated Areas	Entire Shoreline	Entire Shoreline	04040003	*	0.1	N	AE	2019
Hasmer Creek	Jackson, Village of; Washington County, Unincorporated Areas	Confluence with Cedar Creek	Approximately 2,000 feet upstream of Hasmer Lake	04040003	1.8	*	Y	AE	2018
Hubertus Ditch No. 1	Richfield, Village of	Confluence with Bark River	Approximately 800 feet upstream of Hubertus Road	07090002	0.9	*	Y	AE	2013

* Not calculated for this Flood Risk Project

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
HWY 41 Overflow	Germantown, Village of	Confluence with West Branch Menomonee River	Divergence from UT to West Branch Menomonee River	04040003	0.9	*	Y	AE	2019
Jackson Creek	Jackson, Village of; Washington County, Unincorporated Areas	Confluence with Cedar Creek	Approximately 600 feet upstream of Jackson Drive	04040003	1.0	*	Y	AE	2018
Kettleview Creek	Kewaskum, Village of; Washington County, Unincorporated Areas	Confluence with Kewaskum Creek	County Highway B	04040003	2.2	*	Y	AE	2019
Kewaskum Creek	Kewaskum, Village of; Washington County, Unincorporated Areas	Confluence with Milwaukee River	Ridge Road	04040003	5.1	*	Y	AE	2019
Kewaskum Creek	Washington County, Unincorporated Areas	Ridge Road	Approximately 1/3 mile upstream of Schuster Drive	04040003	4.0	*	Y	AE	2019
Kewaskum Creek Overflow Channel	Washington County, Unincorporated Areas	Confluence with Kettleview Creek	Divergence from Kewaskum Creek	04040003	0.6	*	Y	AE	2019
Knights Creek	Kewaskum, Village of; Washington County, Unincorporated Areas	Confluence with North Creek	Approximately 500 feet downstream of Highland Drive	04040003	1.3	*	Y	AE	2019
Knights Creek Overflow	Kewaskum, Village of	Confluence with Edgewood Creek	Divergence from Knights Creek	04040003	0.2	*	Y	AE	2019
Kohlsville River	Washington County, Unincorporated Areas	Confluence with East Branch Rock River	Beechnut Drive	07090001	3.0	*	Y	AE	2022
Kohlsville River	Washington County, Unincorporated Areas	Beechnut Drive	Approximately 300 feet downstream of County Highway D	07090001	1.9	*	Y	AE	2013

* Not calculated for this Flood Risk Project

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Kohlsville River	Washington County, Unincorporated Areas	Approximately 300 feet downstream of County Highway D	Approximately 5,800 feet upstream of Townline Road	07090001	4.6	*	Y	AE	2022
Kohlsville River – Park Route	Washington County, Unincorporated Areas	Convergence with Kohlsville River	Divergence from Kohlsville River	07090001	0.5	*	Y	AE	2013
Kohlsville River Unnamed Tributary 1	Washington County, Unincorporated Areas	Confluence with Kohlsville River	Approximately 3,200 feet upstream of the confluence with Kohlsville River	07090001	0.6	*	Y	AE	2022
Kohlsville River Unnamed Tributary 2	Washington County, Unincorporated Areas	Confluence with Kohlsville River	Approximately 8,300 feet upstream of Aurora Road	07090001	3.4	*	Y	AE	2022
Kohlsville River Unnamed Tributary 2.1	Washington County, Unincorporated Areas	Confluence with Kohlsville River Unnamed Tributary 2	Approximately 1,100 feet upstream of the confluence with Kohlsville River Unnamed Tributary 2	07090001	0.2	*	Y	AE	2022
Kressen Branch	Germantown, Village of; Washington County, Unincorporated Areas	Confluence with Little Cedar Creek	Approximately 1,800 feet upstream of Pioneer Road	04040003	3.5	*	Y	AE	2018
Lake Five	Richfield, Village of	Entire shoreline within Washington County	Entire shoreline within Washington County	07090002	*	0.2	N	AE	2013
Lehner Outlet	Washington County, Unincorporated Areas	Confluence with Cedar Creek	Approximately 4,800 feet upstream of Scenic Road	04040003	2.5	*	Y	AE	2018
Limestone Creek	Washington County, Unincorporated Areas	Confluence with East Branch Rock River	Just downstream of County Road U	07090001	6.3	*	Y	AE	2022

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Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Limestone Creek Unnamed Tributary 1	Washington County, Unincorporated Areas	Confluence with Limestone Creek	Approximately 2,800 feet upstream of the confluence with Limestone Creek	07090001	0.5	*	Y	AE	2022
Limestone Creek Unnamed Tributary 2	Washington County, Unincorporated Areas	Confluence with Limestone Creek	Approximately 2,100 feet upstream of the confluence with Limestone Creek	07090001	0.4	*	Y	AE	2022
Limestone Creek Unnamed Tributary 3	Washington County, Unincorporated Areas	Confluence with Limestone Creek	Approximately 4,300 feet upstream of Crooked Road	07090001	1.0	*	Y	AE	2022
Limestone Creek Unnamed Tributary 3.1	Washington County, Unincorporated Areas	Confluence with Limestone Creek Unnamed Tributary 3	Approximately 3,400 Feet Upstream of County Highway S	07090001	1.4	*	Y	AE	2022
Limestone Creek Unnamed Tributary 3.2	Washington County, Unincorporated Areas	Confluence with Limestone Creek Unnamed Tributary 3	Approximately 3,200 feet upstream of the confluence with Limestone Creek Unnamed Tributary 3	07090001	0.6	*	Y	AE	2022
Limestone Creek Unnamed Tributary 4	Washington County, Unincorporated Areas	Confluence with Limestone Creek	Approximately 600 feet upstream of Hillcrest Drive	07090001	0.3	*	Y	AE	2022
Limestone Creek Unnamed Tributary 5	Washington County, Unincorporated Areas	Confluence with Limestone Creek	Approximately 2,450 feet upstream of County Road U	07090001	0.9	*	Y	AE	2022
Limestone Creek Unnamed Tributary 6	Washington County, Unincorporated Areas	Confluence with Limestone Creek	Just downstream of County Road U	07090001	0.6	*	Y	AE	2022

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Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Little Cedar Creek	Germantown, Village of; Richfield, Village of; Washington County, Unincorporated Areas	Confluence with Cedar Creek	Approximately 2,900 feet upstream of Scenic Road	04040003	8.2	*	Y	AE	2018
Little Cedar Creek Bypass	Germantown, Village of; Richfield, Village of; Washington County, Unincorporated Areas	Confluence with Little Cedar Creek	Divergence from Little Cedar Creek	04040003	0.9	*	Y	AE	2018
Little Oconomowoc River	Washington County, Unincorporated Areas	Confluence with Oconomowoc River	Approximately 1.1 miles upstream of Donegal Road	07090001	4.7	*	Y	AE	2013
Lower Rock River Watershed Zone A studies	Richfield, Village of	Various	Various	07090002	1.0	*	N	A	2013
Marsh Creek	Richfield, Village of	Confluence with Bark River	0.5 miles upstream of confluence with Bark River	07090002	0.4	*	N	AE	1980
Mason Creek	Washington County, Unincorporated Areas	Washington / Waukesha County Boundary	Washington / Dodge County Boundary	07090001	2.2	*	Y	AE	2013
Mason Creek Tributary 1	Washington County, Unincorporated Areas	Washington / Waukesha County Boundary	Approximately 1.3 miles upstream	07090001	1.1	*	Y	AE	2013
Menomonee River	Germantown, Village of	Washington / Waukesha County Boundary	2,800 feet upstream of Lovers Lane	04040003	6.3	*	N	AE	1980
Menomonee River Unnamed Tributary 1	Germantown, Village of	Confluence with Menomonee River	Approximately 460 feet upstream of De La Court	04040003	1.5	*	Y	AE	2020

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Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Milwaukee River	Kewaskum, Village of; Newburg, Village of; Washington County, Unincorporated Areas; West Bend, City of	Ozaukee / Washington County Boundary	Washington / Fond du Lac County Boundary	04040003	28.3	*	Y	AE	2019
Milwaukee River Watershed Zone A studies	Germantown, Village of; Washington County, Unincorporated Areas; West Bend, City of	Various	Various	04040003	1.0	*	N	A	2013
Mueller Lake	Washington County, Unincorporated Areas	Entire Shoreline	Entire Shoreline	04040003	*	0.2	N	AE	2018
Myra Creek	Washington County, Unincorporated Areas	Confluence with Milwaukee River	Approximately 0.85 miles upstream of Tillman and Stern Dam	04040003	3.2	*	Y	AE	2019
Nature's Friends Tributary	Washington County, Unincorporated Areas	Confluence with Cedar Creek	Approximately 2,400 feet upstream of confluence with Cedar Creek	04040003	0.5	*	Y	AE	2018
No Name Creek Unnamed Tributary 1	Washington County, Unincorporated Areas	Dodge / Washington County Boundary	Approximately 1,700 feet upstream of Dodge / Washington County Boundary	07090001	0.3	*	Y	AE	2022
Nolan Creek	Washington County, Unincorporated Areas	Confluence with East Branch Rock River	Just downstream of West Bend Road	07090001	1.4	*	Y	AE	2022
North Branch Cedar Creek	Washington County, Unincorporated Areas	Confluence with Cedar Creek	Approximately 2,000 feet upstream of County Highway Y	04040003	9.0	*	Y	AE	2018

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Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
North Branch Menomonee River	Germantown, Village of; Washington County, Unincorporated Areas	Confluence with Menomonee River	Approximately 0.5 mile upstream of Goldendale Road	04040003	4.3	*	Y	AE	2019
North Branch Milwaukee River	Washington County, Unincorporated Areas	Ozaukee / Washington County Boundary	Washington / Sheboygan County Boundary	04040003	8.5	*	Y	AE	2020
North Branch Milwaukee River Unnamed Tributary 1	Washington County, Unincorporated Areas	Confluence with North Branch Milwaukee River	Approximately 2,150 feet upstream of County Road M	04040003	1.5	*	Y	AE	2020
North Branch Milwaukee River Unnamed Tributary 2	Washington County, Unincorporated Areas	Confluence with North Branch Milwaukee River	Washington / Ozaukee County Boundary	04040003	1.8	*	Y	AE	2020
North Creek	Kewaskum, Village of; Washington County, Unincorporated Areas	Confluence with Milwaukee River	Highland Drive	04040003	2.4	*	Y	AE	2019
North Crossway Channel	Washington County, Unincorporated Areas	Waukesha / Washington County Boundary	Approximately 1,960 feet upstream of Strawgrass Lane	04040003	2.4	*	Y	AE	2020
North Crossway Channel Unnamed Tributary 1	Washington County, Unincorporated Areas	Confluence with North Crossway Channel	Approximately 2,360 feet upstream of Washington Drive	04040003	0.7	*	Y	AE	2020
North Crossway Channel Unnamed Tributary 2	Washington County, Unincorporated Areas	Confluence with North Crossway Channel	Approximately 135 feet upstream of Wasaukee Road	04040003	0.2	*	Y	AE	2020
Oconomowoc Bypass	Richfield, Village of; Washington County, Unincorporated Areas	Pleasant Hill Road	Divergence from Little Cedar Creek	04040003	1.3	*	Y	AE	2018

* Not calculated for this Flood Risk Project

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Oconomowoc River	Richfield, Village of; Washington County, Unincorporated Areas	Washington / Waukesha County Boundary	Approximately 2,600 feet upstream of Hillside Road	07090001	10.5	*	Y	AE	2013
Polk Springs Creek	Washington County, Unincorporated Areas	Confluence with Cedar Creek	Approximately 300 feet upstream of Mayfield Road	04040003	1.8	*	Y	AE	2018
Putter Creek	Washington County, Unincorporated Areas	Confluence with Coney River	Approximately 4,300 feet upstream	07090001	0.8	*	Y	AE	2013
Quaas Creek	Washington County, Unincorporated Areas; West Bend, City of	Confluence with Milwaukee River	Parkway Drive	04040003	6.1	*	Y	AE	2019
Rubicon River	Hartford, City of; Washington County, Unincorporated Areas	Washington / Dodge County Boundary	Just downstream of State Highway 60	07090001	6.3	*	Y	AE	2013
Rubicon River	Hartford, City of; Washington County, Unincorporated Areas	Just downstream of State Highway 60	Just upstream of Franklin Drive	07090001	1.2	*	Y	AE	2018
Rubicon River	Hartford, City of; Slinger, Village of; Washington County, Unincorporated Areas	Just upstream of Franklin Drive	Approximately 2,600 feet upstream of State Highway 175	07090001	2.9	*	Y	AE	2013
Rubicon River Overland Flowpath	Hartford, City of; Washington County, Unincorporated Areas	Convergence with Rubicon River	Divergence from Rubicon River	07090001	0.5	*	Y	AE	2013
Rubicon River Tributary 1	Washington County, Unincorporated Areas	Washington / Dodge County Boundary	Approximately 1,600 feet upstream	07090001	0.3	*	Y	AE	2013
Rubicon River Tributary 2	Washington County, Unincorporated Areas	Washington / Dodge County Boundary	Approximately 960 feet upstream	07090001	0.2	*	Y	AE	2013
Scenic Brook	Richfield, Village of	Confluence with Bark River	Approximately 4,700 feet upstream	07090002	0.9	*	Y	AE	2013

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Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Silver Creek	Washington County, Unincorporated Areas; West Bend, City of	Confluence with Milwaukee River	Silver Lake	04040003	5.7	*	Y	AE	1995
Silverbrook Creek	Washington County, Unincorporated Areas; West Bend, City of	Confluence with Silver Creek	0.5 miles upstream of U.S. Highway 45	04040003	1.4	*	Y	AE	1995
Smith Lake Channel	Washington County, Unincorporated Areas	Confluence with Milwaukee River	Pond just north of Smith Lake	04040003	1.5	*	Y	AE	2019
Springside Creek	Germantown, Village of; Richfield, Village of; Washington County, Unincorporated Areas	Confluence with Little Cedar Creek	Pioneer Road	04040003	1.2	*	Y	AE	2018
Stony Creek	Washington County, Unincorporated Areas	Confluence with North Branch Milwaukee River	Washington / Fond du Lac County Boundary	04040003	11.2	*	Y	AE	2020
Stony Creek Unnamed Tributary 1	Washington County, Unincorporated Areas	Confluence with Stony Creek	Approximately 2,550 feet upstream of Westcott Road	04040003	0.8	*	Y	AE	2020
Stream 1	Washington County, Unincorporated Areas	Dodge / Washington County Boundary	Divergence from East Branch Rock River Unnamed Tributary 1	07090001	0.1	*	Y	AE	2022
Tributary 1 to Milwaukee River	Washington County, Unincorporated Areas; West Bend, City of	Confluence with Milwaukee River	Approximately 2/3 miles upstream of State Highway 33	04040003	1.0	*	Y	AE	2019
Tributary 2 to Milwaukee River	Washington County, Unincorporated Areas; West Bend, City of	Confluence with Milwaukee River	Approximately 0.2 mile upstream of North Oak Road	04040003	1.2	*	Y	AE	2019
Tributary 2 to Milwaukee River Split	Washington County, Unincorporated Areas	Confluence with Tributary 2 to Milwaukee River	Divergence from UT-3 Milwaukee River	04040003	1.3	*	Y	AE	2019

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Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Tributary No. 1	Germantown, Village of	Confluence with Menomonee River	Butternut Road	04040003	3.3	*	Y	AE	2019
Tributary No. 1A	Germantown, Village of	Confluence with Tributary No. 1	Division Road	04040003	1.0	*	Y	AE	2019
Tributary No. 1B	Germantown, Village of	Confluence with Tributary No. 1	Donges Bay Road	04040003	0.6	*	Y	AE	2019
Tributary No. 2	Germantown, Village of	Confluence with Menomonee River	Mequon Road	04040003	1.2	*	Y	AE	2019
Tributary No. 2 Unnamed Tributary 1	Germantown, Village of	250 feet upstream of State Highway 167	Approximately 70 feet downstream of Legend Avenue	04040003	0.1	*	Y	AE	2020
Tributary No. 3	Germantown, Village of	Confluence with Menomonee River	300 feet west of Park Avenue	04040003	0.6	*	Y	AE	2019
Tributary No. 4	Germantown, Village of	Confluence with North Branch Menomonee River	Divergence from North Branch Menomonee River	04040003	2.4	*	Y	AE	2019
Tributary No. 5	Germantown, Village of	Confluence with Menomonee River	Approximately 3/4 miles upstream of Tributary No. 5 Overflow	04040003	2.1	*	Y	AE	2019
Tributary No. 5 Overflow	Germantown, Village of	Confluence with Tributary No. 5	Divergence from Tributary No. 5 to Menomonee River	04040003	0.7	*	Y	AE	2019
Unnamed Tributary to Ashippun River	Hartford, City of; Washington County, Unincorporated Areas	Confluence with Ashippun River	Approximately 1.0 miles upstream	07090001	0.4	*	Y	AE	2013
Unnamed Tributary to Frieden's Creek	Washington County, Unincorporated Areas	Confluence with Frieden's Creek	Approximately 500 feet upstream of confluence with Frieden's Creek	04040003	0.1	*	N	AE	2005

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Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
UT to West Branch Menomonee River	Germantown, Village of	Confluence with West Branch Menomonee River	Approximately 0.25 miles upstream of Freistadt Road	04040003	2.8	*	Y	AE	2019
UT to West Branch Menomonee River Overflow	Germantown, Village of	Confluence with West Branch Menomonee River	Divergence from UT to West Branch Menomonee River	04040003	0.4	*	Y	AE	2019
UT Washington Creek	Washington County, Unincorporated Areas; West Bend, City of	Confluence with Washington Creek	Approximately 0.2 miles upstream of West Washington Street	04040003	0.4	*	N	A	2019
UT Wingate Creek	Washington County, Unincorporated Areas; West Bend, City of	Confluence with Wingate Creek	Approximately 0.4 miles upstream of confluence with Wingate Creek	04040003	0.4	*	N	A	2019
UT-1 Kewaskum Creek	Washington County, Unincorporated Areas	Confluence with Kewaskum Creek	Approximately 0.4 mile upstream of Townline Road	04040003	2.0	*	Y	AE	2019
UT-1 Milwaukee River	Washington County, Unincorporated Areas	Confluence with Milwaukee River	Approximately 1.3 miles upstream of US Highway 45	04040003	2.1	*	Y	AE	2019
UT-1 Mink Creek	Washington County, Unincorporated Areas	Sheboygan / Washington County Boundary	Approximately 100 feet downstream of Cranberry Road	04040003	<0.1	*	N	A	2019
UT-1 Mink Creek	Washington County, Unincorporated Areas	Approximately 100 feet downstream of Cranberry Road	Approximately 1,130 feet upstream of Boltonville Road	04040003	1.0	*	Y	AE	2020
UT-1 Quaas Creek	Washington County, Unincorporated Areas	Confluence with Quaas Creek	Just south of George Court	04040003	2.5	*	Y	AE	2019

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Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Upper Rock River Watershed Zone A studies	Hartford, City of; Richfield, Village of; Washington County, Unincorporated Areas	Various	Various	07090001	1.0	*	N	A	2013
UT-1 to Big Cedar Lake	Washington County, Unincorporated Areas	Confluence with Cedar Lake	Arthur Road	04040003	3.2	*	Y	AE	2018
UT-1 to Cedar Creek	Washington County, Unincorporated Areas	County Highway Y	Washington Drive	04040003	0.5	*	Y	AE	2018
UT-1 to Coney River	Washington County, Unincorporated Areas	Confluence with Coney River	Approximately 1,100 feet upstream of Slinger Road	07090001	1.4	*	Y	AE	2013
UT-1 to Coney River Overflow	Washington County, Unincorporated Areas	Confluence with Coney River	Divergence from UT-1 to Coney River	07090001	0.3	*	Y	AE	2013
UT-1 to Coney River Overflow West	Washington County, Unincorporated Areas	Confluence with Coney River	Approximately 1,000 feet upstream	07090001	0.2	*	Y	AE	2013
UT-1 to Evergreen Creek	Washington County, Unincorporated Areas	Confluence with Evergreen Creek	Approximately 1,600 feet upstream of County Highway G	04040003	0.5	*	Y	AE	2018
UT-1 to Hasmer Creek	Jackson, Village of; Washington County, Unincorporated Areas	Confluence with Hasmer Creek	Approximately 4,000 feet upstream of confluence with Hasmer Creek	04040003	0.6	*	N	AE	2011
UT-1 to Kressen Branch	Washington County, Unincorporated Areas	Confluence with Kressen Branch	Approximately 600 feet upstream of Church Road	04040003	1.5	*	Y	AE	2018
UT-1 to Little Cedar Creek	Washington County, Unincorporated Areas	Confluence with Little Cedar Creek	Approximately 2,500 feet upstream of Jackson Drive	04040003	0.6	*	Y	AE	2018

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Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
UT-1 to Little Cedar Lake	Washington County, Unincorporated Areas	Confluence with Little Cedar Lake	Approximately 300 feet upstream of Wayne Drive	04040003	0.4	*	Y	AE	2018
UT-1 to Oconomowoc River	Richfield, Village of; Washington County, Unincorporated Areas	Confluence with Oconomowoc River	Divergence from Oconomowoc River	07090001	2.6	*	Y	AE	2013
UT-1 to Polk Springs Creek	Washington County, Unincorporated Areas	Confluence with Polk Springs Creek	State Highway 45	04040003	0.2	*	Y	AE	2018
UT-1 to Rubicon River	Washington County, Unincorporated Areas	Confluence with Rubicon River	Approximately 1,900 feet upstream of County Highway U	07090001	6.1	*	Y	AE	2013
UT-1.1 Quaas Creek	Washington County, Unincorporated Areas	Confluence with UT-1 Quaas Creek	Approximately 0.5 mile upstream of UT-1 Quaas Creek	04040003	0.5	*	Y	AE	2019
UT-1.1 to Rubicon River	Washington County, Unincorporated Areas	Confluence with UT-1 to Rubicon River	Washington / Dodge County Boundary	07090001	1.6	*	Y	AE	2013
UT-1.1.1 to Rubicon River	Washington County, Unincorporated Areas	Confluence with UT-1.1 to Rubicon River	Approximately 3,200 feet upstream	07090001	0.6	*	Y	AE	2013
UT-1.2 Quaas Creek	Washington County, Unincorporated Areas	Confluence with UT-1 Quaas Creek	Approximately 0.1 miles upstream of US Highway 45	04040003	1.3	*	Y	AE	2019
UT-1.2 to Rubicon River	Washington County, Unincorporated Areas	Confluence with UT-1 to Rubicon River	Approximately 2,800 feet upstream of County Highway K	07090001	1.7	*	Y	AE	2013
UT-1.2.1 to Rubicon River	Washington County, Unincorporated Areas	Confluence with UT-1.2 to Rubicon River	Approximately 2,800 feet upstream of Saint Lawrence Lane	07090001	1.6	*	Y	AE	2013
UT-2 Kewaskum Creek	Washington County, Unincorporated Areas	Confluence with Kewaskum Creek	Kettle View Drive	04040003	0.8	*	Y	AE	2019

* Not calculated for this Flood Risk Project

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
UT-2 Milwaukee River	Washington County, Unincorporated Areas; West Bend, City of	Confluence with Milwaukee River	Approximately 1.1 miles upstream of UT-2.1 Milwaukee River	04040003	1.8	*	Y	AE	2019
UT-2 to Cedar Creek	Washington County, Unincorporated Areas	Confluence with Cedar Creek	Center Road	04040003	1.6	*	Y	AE	2018
UT-2 to Coney River	Richfield, Village of; Washington County, Unincorporated Areas	Confluence with Coney River	Approximately 1.4 miles upstream	07090001	1.4	*	Y	AE	2013
UT-2 to Little Cedar Creek	Washington County, Unincorporated Areas	Confluence with Little Cedar Creek	Approximately 1,500 feet upstream of confluence with Little Cedar Creek	04040003	0.3	*	Y	AE	2018
UT-2 to Oconomowoc River	Richfield, Village of	Confluence with Oconomowoc River	State Highway 164	07090001	2.3	*	Y	AE	2013
UT-2 to Rubicon River	Washington County, Unincorporated Areas	Confluence with Rubicon River	Approximately 1,900 feet upstream of County Highway U	07090001	6.1	*	Y	AE	2013
UT-2.1 Milwaukee River	Washington County, Unincorporated Areas	Confluence with UT-2 Milwaukee River	Approximately 0.7 miles upstream of UT-2 Milwaukee River	04040003	0.7	*	Y	AE	2019
UT-2.1 to Rubicon River	Hartford, City of; Washington County, Unincorporated Areas	Confluence with Rubicon River	Approximately 1.0 miles upstream of State Highway 83	07090001	1.7	*	Y	AE	2013
UT-3 Milwaukee River	Washington County, Unincorporated Areas	Confluence with Milwaukee River	Green Lake	04040003	3.7	*	Y	AE	2019
UT-3 to Rubicon River	Hartford, City of; Washington County, Unincorporated Areas	Confluence with Rubicon River	Approximately 3,000 feet upstream of confluence with UT-3.1 to Rubicon River	07090001	2.2	*	Y	AE	2013

* Not calculated for this Flood Risk Project

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
UT-3.1 to Rubicon River	Hartford, City of; Washington County, Unincorporated Areas	Confluence with UT-3 to Rubicon River	Arthur Road	07090001	0.7	*	Y	AE	2013
UT-4 Milwaukee River	Washington County, Unincorporated Areas	Confluence with Milwaukee River	Approximately 0.5 miles upstream of East Newark Drive	04040003	1.5	*	Y	AE	2019
UT-4 to Rubicon River	Slinger, Village of; Washington County, Unincorporated Areas	Confluence with Rubicon River	Approximately 4,200 feet upstream	07090001	0.8	*	Y	AE	2013
UT-5 to Rubicon River	Slinger, Village of; Washington County, Unincorporated Areas	Confluence with Rubicon River	Approximately 2,200 feet upstream of Wisconsin Central Railroad	07090001	1.6	*	Y	AE	2013
Wallace Creek	Washington County, Unincorporated Areas	Confluence with North Branch Milwaukee River	Approximately 200 feet downstream of Wallace Lake Road	04040003	10.3	*	Y	AE	2020
Wallace Creek Unnamed Tributary 2	Washington County, Unincorporated Areas	Confluence with Wallace Creek	Approximately 1,900 feet upstream of the confluence	04040003	0.4	*	Y	AE	2020
Wallace Creek Unnamed Tributary 3	Washington County, Unincorporated Areas	Confluence with Wallace Creek	Approximately 780 feet upstream of South Indian Lore Road	04040003	0.6	*	Y	AE	2020
Washington Creek	Washington County, Unincorporated Areas, West Bend, City of	Confluence with Silver Creek	500 feet upstream of Sheppard's Drive	04040003	1.5	*	Y	AE	1995
Wayne Creek	Washington County, Unincorporated Areas	Confluence with Kohlsville River	Just downstream of Saint Killian Drive	07090001	6.3	*	Y	AE	2022

* Not calculated for this Flood Risk Project

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Wayne Creek Unnamed Tributary 1	Washington County, Unincorporated Areas	Confluence with Wayne Creek	Approximately 2,500 feet upstream of the confluence with Wayne Creek	07090001	0.5	*	Y	AE	2022
Wayne Creek Unnamed Tributary 2	Washington County, Unincorporated Areas	Confluence with Wayne Creek	Approximately 8,900 feet upstream of County Highway W	07090001	3.2	*	Y	AE	2022
Wayne Creek Unnamed Tributary 2.1	Washington County, Unincorporated Areas	Confluence with Wayne Creek Unnamed Tributary 2	Approximately 600 feet upstream of the confluence with Wayne Creek Unnamed Tributary 2	07090001	0.1	*	Y	AE	2022
Wayne Creek Unnamed Tributary 3	Washington County, Unincorporated Areas	Confluence with Wayne Creek	Approximately 1,900 feet upstream of Fairview Drive	07090001	0.4	*	Y	AE	2022
Wayne Creek Unnamed Tributary 4	Washington County, Unincorporated Areas	Confluence with Wayne Creek	Just downstream of Woodlawn Drive	07090001	1.3	*	Y	AE	2022
Wayne Creek Unnamed Tributary 4.1	Washington County, Unincorporated Areas	Confluence with Wayne Creek Unnamed Tributary 4	Approximately 1,600 feet upstream of the confluence with Wayne Creek Unnamed Tributary 4	07090001	0.3	*	Y	AE	2022
Wayne Creek Unnamed Tributary 4.2	Washington County, Unincorporated Areas	Confluence with Wayne Creek Unnamed Tributary 4	Approximately 550 feet upstream of the confluence with Wayne Creek Unnamed Tributary 4	07090001	0.1	*	Y	AE	2022
Wayne Creek Unnamed Tributary 5	Washington County, Unincorporated Areas	Confluence with Wayne Creek	Approximately 1,700 feet upstream of the confluence with Wayne Creek	07090001	0.3	*	Y	AE	2022

* Not calculated for this Flood Risk Project

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Wayne Creek Unnamed Tributary 6	Washington County, Unincorporated Areas	Confluence with Wayne Creek	Approximately 4,100 feet upstream of the confluence with Wayne Creek	07090001	0.8	*	Y	AE	2022
West Branch Menomonee River	Germantown, Village of	Confluence with Menomonee River	Approximately 600 feet upstream of Brookside Drive	04040003	3.6	*	Y	AE	2019
West Branch Menomonee River Overflow	Germantown, Village of	Confluence with West Branch Menomonee River	Divergence from West Branch Menomonee River	04040003	0.2	*	Y	AE	2019
West Branch Milwaukee River	Washington County, Unincorporated Areas	Confluence with Milwaukee River	Approximately 300 feet upstream of US Highway 45	04040003	0.8	*	Y	AE	2019
West Branch Milwaukee River	Washington County, Unincorporated Areas	Approximately 300 feet upstream of US Highway 45	At confluence of West Branch Milwaukee River Unnamed Tributary 1	04040003	1.7	*	Y	AE	2020
West Branch Milwaukee River Unnamed Tributary 1	Washington County, Unincorporated Areas	Fond du Lac / Washington County Boundary	Just downstream of Lake Bernice Road	04040003	6.3	*	Y	AE	2020
West Branch Milwaukee River Unnamed Tributary 1.1	Washington County, Unincorporated Areas	Confluence with West Branch Milwaukee River Unnamed Tributary 1	Just downstream of Townline Road	04040003	0.2	*	Y	AE	2020

* Not calculated for this Flood Risk Project

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub-Basin(s)	Length (mi) (streams or coastlines)	Area (mi ²) (estuaries or ponding)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
West Branch Milwaukee River Unnamed Tributary 1.2	Washington County, Unincorporated Areas	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	04040003	0.2	*	Y	AE	2020
Wetland Extension 2	Washington County, Unincorporated Areas	Confluence with West Branch Milwaukee River Unnamed Tributary 1	Approximately 2,100 feet upstream of Sunset Drive	07090001	1.7	*	Y	AE	2022
Wetland Extension 2.1	Washington County, Unincorporated Areas	Confluence with Wetland Extension 2	Approximately 5,950 feet upstream of Townline Road	07090001	2.5	*	Y	AE	2022
Willow Creek	Germantown, Village of; Richfield, Village of	Confluence with Menomonee River	Just upstream of Amy Belle Road extended	04040003	2.9	*	Y	AE	2019
Willow Creek Unnamed Tributary 1	Germantown, Village of	Confluence with Willow Creek	Just downstream of County Line Road	04040003	0.6	*	Y	AE	2020
Willow Creek Unnamed Tributary 1.1	Germantown, Village of	Confluence with Willow Creek Unnamed Tributary 1	Approximately 1,950 feet upstream of the confluence with Willow Creek	04040003	0.4	*	Y	AE	2020
Wingate Creek	Washington County, Unincorporated Areas; West Bend, City of	Confluence with Milwaukee River	420 feet downstream of Wallace Lake Road	04040003	2.5	*	Y	AE	1989

* Not calculated for this Flood Risk Project

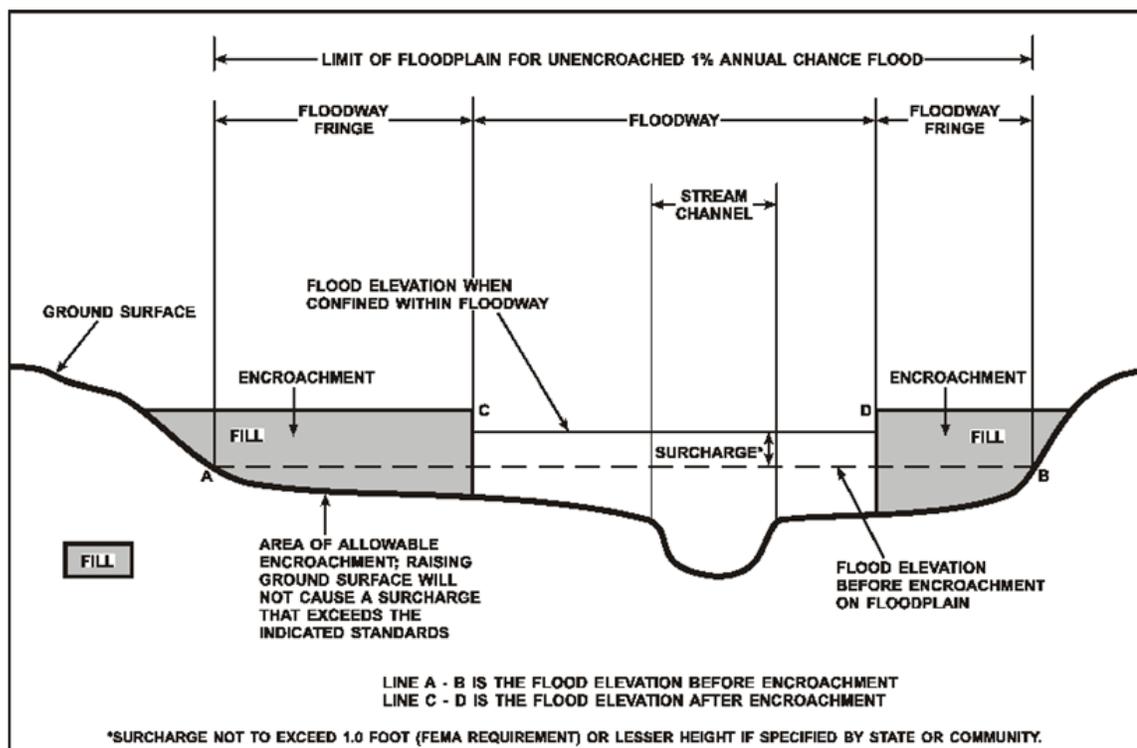
2.2 Floodways

Encroachment on floodplains, such as structures and fill, reduces flood-carrying capacity, increases flood heights and velocities, and increases flood hazards in areas beyond the encroachment itself. One aspect of floodplain management involves balancing the economic gain from floodplain development against the resulting increase in flood hazard.

For purposes of the NFIP, a floodway is used as a tool to assist local communities in balancing floodplain development against increasing flood hazard. With this approach, the area of the 1-percent-annual-chance floodplain on a river is divided into a floodway and a floodway fringe based on hydraulic modeling. The floodway is the channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment in order to carry the 1-percent-annual-chance flood. The floodway fringe is the area between the floodway and the 1-percent-annual-chance floodplain boundaries where encroachment is permitted. The floodway must be wide enough so that the floodway fringe could be completely obstructed without increasing the water surface elevation of the 1-percent-annual-chance flood more than 1 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to floodplain development are shown in Figure .

To participate in the NFIP, Federal regulations require communities to limit increases caused by encroachment to 1.0 foot, provided that hazardous velocities are not produced. Regulations for Wisconsin require communities in Washington County to limit increases caused by encroachment to 0.00 feet and several communities have adopted additional restrictions. The floodways in this project are presented to local agencies as minimum standards that can be adopted directly or that can be used as a basis for additional floodway projects.

Figure 4: Floodway Schematic



Floodway widths presented in this FIS Report and on the FIRM were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. For certain stream segments, floodways were adjusted so that the amount of floodwaters conveyed on each side of the floodplain would be reduced equally. The results of the floodway computations have been tabulated for selected cross sections and are shown in Table 23, "Floodway Data."

All floodways that were developed for this Flood Risk Project are shown on the FIRM using the symbology described in Figure 3. In cases where the floodway and 1-percent-annual-chance floodplain boundaries are either close together or collinear, only the floodway boundary has been shown on the FIRM. For information about the delineation of floodways on the FIRM, refer to Section 6.3.

2.3 Base Flood Elevations

The hydraulic characteristics of flooding sources were analyzed to provide estimates of the elevations of floods of the selected recurrence intervals. The BFE is the elevation of the 1-percent-annual-chance flood. These BFEs are most commonly rounded to the whole foot, as shown on the FIRM, but in certain circumstances or locations they may be rounded to 0.1 foot. Cross section lines shown on the FIRM may also be labeled with the BFE rounded to 0.1 foot. Whole-foot BFEs derived from engineering analyses that apply to coastal areas, areas of ponding, or other static areas with little elevation change may also be shown at selected intervals on the FIRM.

Cross sections with BFEs shown on the FIRM correspond to the cross sections shown in

the Floodway Data table and Flood Profiles in this FIS Report. For construction and/or floodplain management purposes, users are cautioned to use the flood elevation data presented in this FIS Report in conjunction with the data shown on the FIRM. For example, the user may use the FIRM to determine the stream station of a location of interest and then use the profile to determine the 1-percent annual chance elevation at that location. Because only selected cross sections may be shown on the FIRM for riverine areas, the profile should be used to obtain the flood elevation between mapped cross sections. Additionally, for riverine areas, whole-foot elevations shown on the FIRM may not exactly reflect the elevations derived from the hydraulic analyses; therefore, elevations obtained from the profile may more accurately reflect the results of the hydraulic analysis.

2.4 Non-Encroachment Zones

This section is not applicable to this Flood Risk Project.

2.5 Coastal Flood Hazard Areas

2.5.1 Water Elevations and the Effects of Waves

This section is not applicable to this Flood Risk Project.

Figure 5: Wave Runup Transect Schematic

[Not Applicable to this Flood Risk Project]

2.5.2 Floodplain Boundaries and BFEs for Coastal Areas

This section is not applicable to this Flood Risk Project.

2.5.3 Coastal High Hazard Areas

This section is not applicable to this Flood Risk Project.

Figure 6: Coastal Transect Schematic

[Not Applicable to this Flood Risk Project]

2.5.4 Limit of Moderate Wave Action

This section is not applicable to this Flood Risk Project.

SECTION 3.0 – INSURANCE APPLICATIONS

3.1 National Flood Insurance Program Insurance Zones

For flood insurance applications, the FIRM designates flood insurance rate zones as described in Figure 3, “Map Legend for FIRM.” Flood insurance zone designations are assigned to flooding sources based on the results of the hydraulic or coastal analyses. Insurance agents use the zones shown on the FIRM and depths and base flood elevations in this FIS Report in conjunction with information on structures and their contents to assign

premium rates for flood insurance policies.

The 1-percent-annual-chance floodplain boundary corresponds to the boundary of the areas of special flood hazards (e.g. Zones A, AE, V, VE, etc.), and the 0.2-percent-annual-chance floodplain boundary corresponds to the boundary of areas of additional flood hazards.

Table 3 lists the flood zones in Washington County.

Table 3: Flood Zone Designations by Community

Community	Flood Zone(s)
Germantown, Village of	A, AE, X
Hartford, City of	A, AE, X
Jackson, Village of	AE, X
Kewaskum, Village of	AE, X
Milwaukee, City of	X
Newburg, Village of	AE, X
Richfield, Village of	A, AE, X
Slinger, Village of	A, AE, X
Washington County, Unincorporated Areas	A, AE, X
West Bend, City of	A, AE, X

SECTION 4.0 – AREA STUDIED

4.1 Basin Description

Table 4 contains a description of the characteristics of the HUC-8 sub-basins within which each community falls. The table includes the main flooding sources within each basin, a brief description of the basin, and its drainage area.

Table 4: Basin Characteristics

HUC-8 Sub-Basin Name	HUC-8 Sub-Basin Number	Primary Flooding Source	Description of Affected Area	Drainage Area (square miles)
Lower Rock	07090002	Rock River	Drains a small portion of Southern Washington County that includes the headwaters of the Bark River	1,830
Milwaukee	04040003	Milwaukee River	Encompasses the Eastern half of Washington County	879
Upper (Illinois) Fox	07120006	Fox River	Upper portion of the (Illinois) Fox River basin in Wisconsin (no SFHA's in Washington County)	1,544
Upper Rock	07010001	Rock River	Encompasses the Western half of Washington County	1,892

4.2 Principal Flood Problems

Table 5 contains a description of the principal flood problems that have been noted for Washington County by flooding source.

Table 5: Principal Flood Problems

Flooding Source	Description of Flood Problems
Multiple	Washington County is most susceptible to flooding in spring due to a combination of rapid snowmelt, spring rains, and frozen ground. Ice and debris may jam at bridge construction and cause much higher river stages than would normally be expected. The largest and most disastrous flood occurred in August 1924. Almost eight inches of rain fell causing severe flooding of the county's waterways. Most bridges of the county were washed out, dams were destroyed, and a train wreck occurred near the Village of Kewaskum. Other large floods occurred in 1952, 1965, and 1978 (WCHS 1979).
Multiple	On June 8, 2008, heavy rains resulted in flash flooding over much of Washington County. Water depths on road surfaces reached 3 feet or more and there were gravel washouts. Some farm fields would remain flooded into early July.
Rubicon River	Major flooding of the Rubicon River near the City of Hartford occurred in March 1929 and April 1959. These flooding events are estimated to be less than 10-year recurrence interval floods based on comparison of the historic information with the flood profiles. The late winter flood was attributed to the simultaneous occurrence of snowmelt and a light rainfall. The river rose very rapidly, and just east of the Hartford, washed out much of the area that is now Wilson Avenue. Floodwaters overtopped the Rural Street Bridge which is located 1,000 feet downstream of the dam. Flood stages dropped rapidly and the river returned to its banks on the following day. A rainfall-snowmelt combination caused flooding the night of April 2, 1959. This flood was not as severe as the 1929 event because the floodwaters were generally contained by the river banks, although some industries and city parkland did experience flooding (SEWRPC 1974).

Table 6 contains information about historic flood elevations in the communities within Washington County.

Table 6: Historic Flooding Elevations
[Not Applicable to this Flood Risk Project]

4.3 Dams and Other Flood Hazard Reduction Measures

Table 7 contains information about non-levee flood hazard reduction measures within Washington County such as dams or jetties. Levee systems are addressed in Section 4.4 of this FIS Report.

Table 7: Dams and Other Flood Hazard Reduction Measures
[Not Applicable to this Flood Risk Project]

4.4 Levee Systems

This section is not applicable to this Flood Risk Project.

Table 8: Levee Systems
[Not Applicable to this Flood Risk Project]

SECTION 5.0 – ENGINEERING METHODS

For the flooding sources in the community, standard hydrologic and hydraulic study methods were used to determine the flood hazard data required for this study. Flood events of a magnitude that are expected to be equaled or exceeded at least once on the average during any 10-, 25-, 50-, 100-, or 500-year period (recurrence interval) have been selected as having special significance for floodplain management. These events, commonly termed the 10-, 25-, 50-, 100-, and 500-year floods, have a 10-, 4-, 2-, 1-, and 0.2-percent-annual-chance, respectively, of being equaled or exceeded during any year.

Although the recurrence interval represents the long-term, average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when periods greater than 1 year are considered. For example, the risk of having a flood that equals or exceeds the 100-year flood (1-percent chance of annual exceedance) during the term of a 30-year mortgage is approximately 26 percent (about 3 in 10); for any 90-year period, the risk increases to approximately 60 percent (6 in 10). The analyses reported herein reflect flooding potentials based on conditions existing in the community at the time of completion of this study. Maps and flood elevations will be amended periodically to reflect future changes.

In addition to these flood events, the “1-percent-plus”, or “1%+”, annual chance flood elevation has been modeled and included on the flood profile for certain flooding sources in this FIS Report. While not used for regulatory or insurance purposes, this flood event has been calculated to help illustrate the variability range that exists between the regulatory 1-percent-annual-chance flood elevation and a 1-percent-annual-chance elevation that has taken into account an additional amount of uncertainty in the flood discharges (thus, the 1% “plus”). For flooding sources whose discharges were estimated using regression equations, the 1%+ flood elevations are derived by taking the 1-percent-annual-chance flood discharges and increasing the modeled discharges by a percentage equal to the average predictive error for the regression equation. For flooding sources with gage- or rainfall-runoff-based discharge estimates, the upper 84-percent confidence limit of the discharges is used to compute the 1%+ flood elevations.

The engineering analyses described here incorporate the results of previously issued Letters of Map Change (LOMCs) listed in Table 26, “Incorporated Letters of Map Change”, which include Letters of Map Revision (LOMRs). For more information about LOMRs, refer to Section 6.5, “FIRM Revisions.”

5.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish the peak elevation-frequency relationships for floods of the selected recurrence intervals for each flooding source

studied. Hydrologic analyses are typically performed at the watershed level. Depending on factors such as watershed size and shape, land use and urbanization, and natural or man-made storage, various models or methodologies may be applied. A summary of the hydrologic methods applied to develop the discharges used in the hydraulic analyses for each stream is provided in Table 12. Greater detail (including assumptions, analysis, and results) is available in the archived project documentation.

A summary of the discharges is provided in Table 9. A summary of stillwater elevations developed for non-coastal flooding sources is provided in Table 10.

Table 9: Summary of Discharges

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Allenton Creek	At confluence of Allenton Creek Unnamed Tributary 1	3.5	353	514	665	841	1,146	1,342
Allenton Creek	Convergence of Allenton Creek Bypass	3.5	353	514	665	841	1,146	1,342
Allenton Creek	Divergence of Allenton Creek Bypass	3.5	347	500	644	814	1,106	1,294
Allenton Creek	Approximately 3,000 feet downstream of Cedar View Road	1.7	234	334	425	529	708	822
Allenton Creek Bypass	Divergence from Allenton Creek	3.5	6	15	21	27	40	48
Allenton Creek Unnamed Tributary 1	At I-41	1.0	81	123	162	208	295	342
Allenton Creek Unnamed Tributary 1	At confluence of Allenton Creek Unnamed Tributary 1.1	1.0	80	121	161	206	291	339
Allenton Creek Unnamed Tributary 1	Approximately 2,250 feet upstream of Addison Road	0.9	77	117	155	199	281	327
Allenton Creek Unnamed Tributary 1.1	Approximately 1,800 feet upstream of Addison Road	<0.1	8	13	17	22	31	36
Amy Bell Creek	At mouth of Amy Bell Lake	0.4	75	100	125	160	*	215
Ashippun River	At confluence with Ashippun River Tributary 2	15.4	250	340	420	500	*	740
Ashippun River	Approximately 4,100 feet upstream of County Highway O	11.8	210	260	280	320	*	470
Ashippun River	At Druid Lake outlet	10.2	200	240	260	290	*	440
Ashippun River	At confluence with Ashippun River Tributary 3	8.8	310	430	520	600	*	860
Ashippun River	At State Highway 83	7.0	280	400	480	560	*	770
Ashippun River	At confluence with Unnamed Tributary to Ashippun River	5.9	270	380	450	520	*	720
Ashippun River	Downstream of divergence with Ashippun River - Overland Flowpath	3.7	183	266	310	368	*	490

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Ashippun River	At confluence with Ashippun River Tributary 4	3.0	185	275	325	395	*	550
Ashippun River	At confluence with Ashippun River Tributary 5	1.7	110	190	230	290	*	415
Ashippun River	Approximately 1.2 miles upstream of County Highway E	0.9	80	110	135	175	*	240
Ashippun River	Approximately 1.9 miles upstream of County Highway E	0.6	65	90	115	150	*	210
Ashippun River - Overland Flowpath	At divergence from Ashippun River	*	2	9	15	27	*	60
Ashippun River Tributary 2	At confluence with Ashippun River Tributary 2.1	2.1	165	235	290	385	*	530
Ashippun River Tributary 2	At confluence with Ashippun River Tributary 2.2	0.8	70	95	120	155	*	215
Ashippun River Tributary 2	At Riley Road	0.4	40	55	70	95	*	135
Ashippun River Tributary 2	Approximately 1,600 feet upstream of Riley Road	0.4	45	65	85	110	*	155
Ashippun River Tributary 2.1	Approximately 1,100 feet downstream of cart path	1.3	125	170	205	270	*	365
Ashippun River Tributary 2.1	At Cart Path	1.2	120	165	200	260	*	355
Ashippun River Tributary 2.1	Approximately 1,500 feet upstream of cart path	0.1	15	20	25	30	*	45
Ashippun River Tributary 2.2	Approximately 2,200 feet upstream of mouth	0.2	20	25	30	40	*	60
Ashippun River Tributary 2.2	Approximately 4,300 feet upstream of mouth	0.1	10	13	16	20	*	30
Ashippun River Tributary 3	At mouth	0.9	175	230	275	350	*	465
Ashippun River Tributary 4	Approximately 500 feet upstream of County Highway E	0.7	90	120	150	190	*	255

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Ashippun River Tributary 4	At County Highway E	0.6	50	50	50	60	*	80
Ashippun River Tributary 5	At mouth	0.1	25	35	40	55	*	75
Bark River	At confluence with Scenic Brook	6.4	53	70	85	98	*	148
Bark River	At Bark Lake Drive	5.3	22	32	41	50	*	84
Bark River	At Bark Lake Road	3.8	103	138	163	185	*	258
Bark River	At confluence with Hubertus Ditch No. 1	3.0	73	97	115	131	*	183
Bark River	Upstream of Hubertus Ditch No. 1	2.1	65	87	103	117	*	164
Bark River Tributary 1	Approximately 950 feet upstream of County Highway Q	0.7	25	45	75	105	*	155
Bark River Tributary 1	At County Highway Q	0.6	20	35	65	95	*	135
Bark River Tributary 1.1	At mouth	0.1	6	9	11	13	*	19
Bolton Brook	At Boltonville Road	1.6	107	241	368	518	861	1,007
Bolton Brook	Approximately 2,000 feet upstream of Boltonville Road	1.2	81	184	280	394	742	755
Bolton Brook	Approximately 1,600 feet downstream of Washington County Boundary	1.1	79	180	275	388	794	744
Bonniwell Creek	At U.S. Highway 41	2.5	651	851	1,011	1,251	*	1,665
Bonniwell Creek	At U.S. Highway 41	1.3	338	442	526	652	*	873
Bonniwell Creek	At Rockfield Road	1.0	295	384	455	563	*	747
Bonniwell Creek	At Holy Hill Road	0.6	171	223	264	327	*	434
Brooklane Overflow	Divergence from Edgewood Creek	0.4	0	2	12	31	72	116
Butler Creek Tributary 1	At Washington / Dodge County Boundary	0.7	95	125	145	185	*	245
Butler Creek Tributary 2	At Washington / Dodge County Boundary	0.3	95	125	150	185	*	245

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Cedar Creek	At confluence with North Branch Cedar Creek	92.6	3,023	3,951	4,643	5,227	*	6,964
Cedar Creek	At confluence approximately 1.2 miles upstream of CTH M	79.2	2,846	3,693	4,327	4,866	*	6,441
Cedar Creek	At confluence with Cedarburg Creek	77.4	3,008	4,054	4,632	5,415	*	7,228
Cedar Creek	At confluence with Evergreen Creek	68.0	3,127	4,221	4,808	5,606	*	7,442
Cedar Creek	At confluence with Frieden's Creek	62.4	3,254	4,459	5,096	5,957	*	7,907
Cedar Creek	At confluence with UT-2 to Cedar Creek	54.2	2,751	3810	4,401	5,191	*	7,020
Cedar Creek	At confluence with Jackson Creek	49.5	2,509	3440	3,953	4,639	*	6,240
Cedar Creek	At Hickory Lane	48.7	2,512	3437	3,951	4,638	*	6,239
Cedar Creek	At confluence with Little Cedar Creek	47.0	2,472	3421	3,934	4,631	*	6,245
Cedar Creek	At confluence with Polk Springs Creek	24.1	1,023	1,409	1,621	1,870	*	2,435
Cedar Creek	At confluence with Hasmer Creek	20.4	619	842	957	1,108	*	1,482
Cedar Creek	At confluence with Nature's Friends Tributary	17.1	266	380	445	537	*	768
Cedar Creek	At confluence with Lehner Outlet	17.0	255	365	431	521	*	742
Cedar Creek	At Lent Dam	14.8	116	175	228	285	*	488
Cedar Creek	At Cedar Creek Road	13.9	109	165	216	271	*	468
Cedar Creek	At Little Cedar Lake Dam	12.6	100	151	199	249	*	438
Cedar Creek	At Little Cedar Lake Inlet	10.8	90	131	176	221	*	415
Cedar Creek	At Big Cedar Lake Dam	9.7	76	117	157	194	*	379
Cedarburg Creek	At County Highway M	6.1	278	381	472	610	*	867
Cedarburg Creek	At Washington / Ozaukee County Boundary	4.9	249	343	418	534	*	754

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Coney River	Approximately 2,100 feet upstream of Pleasant Hill Road	8.3	400	540	650	830	*	1,150
Coney River	At confluence with Putter Creek	7.2	350	460	550	700	*	950
Coney River	Downstream of divergence with Coney River - Overland Flowpath	5.3	170	220	250	278	*	283
Coney River	At County Highway E	5.3	170	220	250	300	*	350
Coney River	At confluence with UT-1 to Coney River	5.3	175	*	245	270	*	332
Coney River	At confluence with UT-1 to Coney River Overflow	2.5	138	*	290	386	*	608
Coney River	At confluence with UT-1 to Coney River Overflow West	2.5	96	*	220	300	*	464
Coney River	Approximately 1,500 feet downstream of County Highway E	2.5	54	*	91	113	*	151
Coney River	At County Highway CC	1.8	38	*	64	80	*	106
Coney River - Overland Flowpath	At divergence from Coney River	*	0	0	0	22	*	67
Deer Creek	At County Highway M	3.4	236	316	381	490	*	695
Deer Creek	At confluence approximately 1,600 feet upstream of Birchwood Trail	3.0	327	432	517	649	*	891
Deer Creek	At Church Road	0.8	116	152	181	226	*	307
Deer Creek	At Church Road	0.5	70	93	112	142	*	195
Deer Creek	Approximately 3,000 feet upstream of Church Road	0.3	31	41	49	66	*	94
East Branch Milwaukee River	Approximately 3,300 feet upstream of confluence with Milwaukee River	44.2	592	854	1,093	1,370	1,784	2,194
East Branch Milwaukee River	Approximately 3,700 feet downstream of State Highway 28	43.6	589	849	1,087	1,363	1,775	2,184
East Branch Milwaukee River	Approximately 1,700 feet downstream of State Highway 28	42.0	580	835	1,069	1,342	1,748	2,149

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
East Branch Milwaukee River	Approximately 5,200 feet downstream of Moraine Drive	40.9	571	823	1,054	1,324	1,724	2,118
East Branch Milwaukee River	Approximately 500 feet downstream of Moraine Drive	40.0	566	814	1,044	1,311	1,708	2,100
East Branch Milwaukee River	At Washington County Boundary	39.1	561	806	1,035	1,300	1,694	2,083
East Branch Rock River	At Washington County Boundary	80.8	717	1,124	1,523	1,988	2,862	3,517
East Branch Rock River	Approximately 8,300 feet downstream of confluence of Kohlsville River	78.9	798	1,252	1,687	2,204	3,201	3,973
East Branch Rock River	At confluence of Kohlsville River	74.6	1,545	2,438	3,357	4,513	6,608	8,301
East Branch Rock River	At confluence of Nolan Creek	52.7	1,542	2,472	3,363	4,449	6,280	7,691
East Branch Rock River	Approximately 1 mile upstream of WCL Railroad crossing	34.3	508	810	1,125	1,498	2,158	2,760
East Branch Rock River	Approximately 4,500 feet upstream of County Road DW	31.4	648	1,025	1,427	1,911	2,808	3,500
East Branch Rock River	At Railroad Crossing	27.7	674	1,072	1,481	1,990	2,910	3,697
East Branch Rock River	At Hillcrest Drive	26.5	1,290	1,770	2,110	2,420	*	3,340
East Branch Rock River	At confluence of East Branch Rock River Unnamed Tributary 2	26.5	519	805	1,125	1,519	2,223	2,998
East Branch Rock River	At confluence of Limestone Creek	22.4	1,438	2,143	2,825	3,645	5,043	6,353
East Branch Rock River	Convergence of East Branch Rock River Unnamed Tributary 2 Bypass	22.4	1,462	2,222	2,963	3,831	5,310	6,675
East Branch Rock River	At confluence of Allenton Creek	6.0	418	619	808	1,025	1,411	1,745
East Branch Rock River	Approximately 70 feet upstream of Deer Road	1.0	326	482	628	792	1,097	1,260
East Branch Rock River	Approximately 0.75 miles upstream of Deer Road	0.2	51	75	98	124	172	199
East Branch Rock River Unnamed Tributary 1	At confluence of East Branch Rock River Unnamed Tributary 1.1	4.7	386	575	751	851	968	992

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
East Branch Rock River Unnamed Tributary 1	At confluence of East Branch Rock River Unnamed Tributary 1.2	3.4	290	434	570	732	1,022	1,207
East Branch Rock River Unnamed Tributary 1	Divergence of Stream 1	3.4	290	434	570	632	662	672
East Branch Rock River Unnamed Tributary 1	At confluence of East Branch Rock River Unnamed Tributary 1.3	3.1	262	387	506	645	892	1,049
East Branch Rock River Unnamed Tributary 1	At confluence of East Branch Rock River Unnamed Tributary 1.4	1.0	116	175	232	297	420	485
East Branch Rock River Unnamed Tributary 1	Approximately 0.2 miles upstream of confluence of East Branch Rock River Unnamed Tributary 1.4	0.6	110	166	218	279	394	454
East Branch Rock River Unnamed Tributary 1.1	Approximately 0.2 miles upstream of confluence with East Branch Rock River Unnamed Tributary 1	1.1	113	165	214	269	367	428
East Branch Rock River Unnamed Tributary 1.2	At Washington County Boundary	0.2	47	67	85	106	141	163
East Branch Rock River Unnamed Tributary 1.3	At confluence of East Branch Rock River Unnamed Tributary 1.3.1	1.7	160	236	308	390	538	626
East Branch Rock River Unnamed Tributary 1.3	Approximately 0.1 miles upstream of confluence of East Branch Rock River Unnamed Tributary 1.3.1	0.2	77	110	141	175	236	271
East Branch Rock River Unnamed Tributary 1.3.1	Approximately 125 feet downstream of Mullen Lane	1.6	154	228	298	378	523	608
East Branch Rock River Unnamed Tributary 1.4	Downstream of I-41	0.5	57	83	107	135	183	213
East Branch Rock River Unnamed Tributary 2	Divergence of East Branch Rock River Unnamed Tributary 2 Bypass	3.6	273	271	279	283	281	274
East Branch Rock River Unnamed Tributary 2	At Hillcrest Drive	3.1	297	350	418	469	548	596
East Branch Rock River Unnamed Tributary 2	At confluence of East Branch Rock River Unnamed Tributary 2.1	2.5	544	797	1,033	1,303	1,796	2,110
East Branch Rock River Unnamed Tributary 2	At confluence of East Branch Rock River Unnamed Tributary 2.2	2.3	544	823	1,092	1,404	1,970	2,329
East Branch Rock River Unnamed Tributary 2	At confluence of East Branch Rock River Unnamed Tributary 2.3	1.9	381	554	715	898	1,220	1,419

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
East Branch Rock River Unnamed Tributary 2	Approximately 4,080 feet downstream of Aurora Road	1.4	326	474	611	766	1,043	1,204
East Branch Rock River Unnamed Tributary 2 Bypass	Divergence from East Branch Rock River Unnamed Tributary 2	3.6	24	79	138	186	267	322
East Branch Rock River Unnamed Tributary 2.1	Approximately 400 feet upstream of Wildlife Road	0.2	104	149	192	239	324	372
East Branch Rock River Unnamed Tributary 2.1	Divergence of East Branch Rock River Unnamed Tributary 2.1 Bypass	0.2	104	123	133	138	150	153
East Branch Rock River Unnamed Tributary 2.1 Bypass	Divergence from East Branch Rock River Unnamed Tributary 2.1	0.2	1	26	59	101	174	219
East Branch Rock River Unnamed Tributary 2.2	Convergence of East Branch Rock River Unnamed Tributary 2.1 Bypass	0.3	41	85	135	195	300	364
East Branch Rock River Unnamed Tributary 2.2	Approximately 1,200 feet upstream of Wildlife Road	0.1	41	59	76	94	126	145
East Branch Rock River Unnamed Tributary 2.3	Approximately 150 feet upstream of State Highway 33	0.3	196	271	339	415	544	627
Edgewood Creek	At confluence of Edgewood Culvert	0.5	41	65	106	155	232	284
Edgewood Creek	At confluence of Knights Creek Overflow	0.5	22	47	88	139	216	273
Edgewood Creek	Divergence of Edgewood Creek Overflow Channel	0.4	22	36	45	53	71	80
Edgewood Creek	At Edgewood Road	0.4	69	117	155	191	246	266
Edgewood Creek	Downstream of Brooklane Overflow	0.4	88	135	172	208	262	280
Edgewood Creek	Upstream of Brooklane Overflow	0.4	88	137	184	239	334	396
Edgewood Creek	Approximately 3,500 feet upstream of Edgewood Road	0.2	53	82	109	141	194	232
Edgewood Creek Overflow Channel	At confluence of Brooklane Overflow	0.4	47	83	122	171	247	304
Edgewood Creek Overflow Channel	Divergence from Edgewood Creek	0.4	47	81	111	140	175	188

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Evergreen Bypass	At divergence from Evergreen Creek	*	5	11	16	26	*	44
Evergreen Creek	At confluence approximately 1,600 feet upstream of County Highway G	4.7	523	704	846	1,060	*	1,442
Evergreen Creek	At confluence with UT-1 to Evergreen Creek	4.3	506	683	821	1,030	*	1,401
Evergreen Creek	At confluence approximately 1,800 feet upstream of Stoney Creek Road	3.6	458	618	748	946	*	1,286
Evergreen Creek	At County Highway NN	3.5	450	607	736	932	*	1,268
Evergreen Creek	At Maple Road	1.4	204	279	343	443	*	591
Evergreen Creek	At confluence approximately 600 feet downstream of Jackson Drive	0.5	118	156	187	235	*	322
Evergreen Creek	At West Bend Sub Railroad	0.2	55	72	86	109	*	150
Evergreen Creek	At divergence of Evergreen Bypass	*	12	13	13	13	*	13
Evergreen Creek	At Hron Road	0.1	17	23	29	39	*	57
Flynn Creek	At confluence with Oconomowoc River	4.7	487	*	1,126	1,548	*	2,450
Flynn Creek	At Emerald Drive	4.4	472	*	1,091	1,503	*	2,381
Flynn Creek	Approximately 4,100 feet downstream of Shamrock Lane	3.8	431	*	1,006	1,378	*	2,179
Flynn Creek	Approximately 2,100 feet upstream of Shamrock Lane	3.0	374	*	870	1,188	*	1,865
Flynn Creek	At Donegal Road	2.6	345	*	802	1,095	*	1,716
Flynn Creek	At State Highway 167	1.3	221	*	497	656	*	1,018
Flynn Creek	Approximately 700 feet upstream of Shannon Road	0.7	117	*	264	356	*	593
Frieden's Creek	Approximately 3,500 feet downstream of Cedar Creek Road	4.8	654	841	992	1,230	*	1,667
Frieden's Creek	At Jackson Drive	4.0	513	656	771	978	*	1,344

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Frieden's Creek	At Cameros Way	3.7	477	613	737	934	*	1,280
Frieden's Creek	At confluence approximately 700 feet downstream of County Highway P	2.6	402	506	589	721	*	961
Frieden's Creek	At U.S. Highway 45	1.5	231	318	387	498	*	696
Hasmer Creek	At Hasmer Lake Outlet	1.4	174	279	366	500	*	716
Hasmer Creek	At Hasmer Lake Inlet	1.0	265	342	403	498	*	663
Hasmer Creek	Approximately 2,000 feet upstream of Hasmer Lake	0.7	176	231	274	341	*	456
Hubertus Ditch No. 1	Approximately 1,400 feet downstream of Hubertus Road	0.8	130	175	215	280	*	380
Hubertus Ditch No. 1	At Hubertus Road	0.4	105	140	170	215	*	285
Hubertus Ditch No. 1	Approximately 800 feet upstream of Hubertus Road	0.1	20	25	30	35	*	50
Hwy 41 Overflow	Divergence from UT to West Branch Menomonee River	0.4	0	6	50	105	213	273
Jackson Creek	At Eagle Drive	0.2	98	130	160	195	*	277
Jackson Creek	Approximately 1,400 feet downstream of Jackson Drive	0.1	70	92	112	137	*	187
Jackson Creek	At Jackson Drive	0.1	46	59	71	87	*	120
Kettleview Creek	At confluence of Kewaskum Creek Overflow Channel	1.2	215	356	503	695	1,087	1,037
Kettleview Creek	Approximately 1,100 feet upstream of Kettleview Drive	1.1	198	327	452	592	848	734
Kettleview Creek	At Highland Drive	0.4	80	132	183	239	345	416
Kewaskum Creek	At Railroad	11.5	609	1,011	1,429	1,962	2,768	3,046
Kewaskum Creek	At confluence of Edgewood Creek Overflow Channel	11.2	614	1,020	1,442	1,976	2,791	3,048
Kewaskum Creek	At confluence of Kettleview Creek	11.0	635	1,064	1,508	2,034	2,881	3,086

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Kewaskum Creek	Divergence of Kewaskum Creek Overflow Channel	8.9	691	1,155	1,595	2,050	2,793	2,858
Kewaskum Creek	Approximately 850 feet upstream of Badger Road	8.9	691	1,156	1,609	2,103	2,962	3,036
Kewaskum Creek	Approximately 2,600 feet upstream of Kettleview Drive	8.1	675	1,124	1,564	2,044	2,863	3,009
Kewaskum Creek	At Ridge Road	7.2	729	1,224	1,650	2,120	2,995	2,945
Kewaskum Creek	Approximately 3,300 feet downstream of County Highway D	6.3	864	1,419	1,954	2,589	3,686	4,478
Kewaskum Creek	At confluence of UT-1 Kewaskum Creek	5.7	791	1,296	1,777	2,353	3,351	4,072
Kewaskum Creek	At County Highway D	4.0	589	1,016	1,426	1,915	2,844	3,339
Kewaskum Creek	Approximately 4,900 feet upstream of County Highway D	2.9	382	654	921	1,242	1,842	2,189
Kewaskum Creek	Approximately 2,200 feet downstream of Beaver Dam Road	2.1	324	554	776	1,045	1,550	1,842
Kewaskum Creek	At Beaver Dam Road	1.2	166	278	387	518	755	896
Kewaskum Creek	Approximately 800 feet downstream of Schusters Drive	0.7	96	153	208	273	386	459
Kewaskum Creek	At Schusters Drive	0.4	9	20	32	49	77	99
Kewaskum Creek	Approximately 2,000 feet upstream of Schusters Drive	0.4	47	87	129	180	292	332
Kewaskum Creek Overflow Channel	Divergence from Kewaskum Creek	8.9	0	1	14	53	169	178
Knights Creek	Divergence of Knights Creek Overflow	0.9	129	193	241	298	392	495
Knights Creek	Upstream of Knights Avenue	0.9	129	204	284	384	537	687
Knights Creek	Approximately 1,400 feet upstream of Knights Avenue	0.6	98	168	239	326	474	585
Knights Creek	Approximately 3,800 feet upstream of Knights Avenue	0.5	102	170	237	316	458	550
Knights Creek	At Highland Drive	0.3	89	139	188	243	341	407

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Knights Creek Overflow	Divergence from Knights Creek	0.9	0	11	43	86	145	192
Kohlsville River	At confluence of Kohlsville River Unnamed Tributary 1	19.7	799	1,228	1,678	2,260	3,214	4,088
Kohlsville River	At confluence of Wayne Creek	18.5	814	1,249	1,704	2,246	3,188	4,020
Kohlsville River	Approximately 100 feet downstream of Beechnut Drive	9.3	348	548	768	1,026	1,451	1,931
Kohlsville River	At confluence with Kohlsville River - Park Route	8.0	400	570	680	810	*	1,130
Kohlsville River	At Kohlsville Dam (primary spillway)	8.0	185	276	308	332	*	483
Kohlsville River	At County Highway D	7.1	380	540	640	770	*	1,060
Kohlsville River	At confluence of Kohlsville River Unnamed Tributary 2	7.1	325	517	722	962	1,353	1,810
Kohlsville River	At Beaver Dam Road	1.8	170	280	386	515	784	940
Kohlsville River	Approximately 1.1 miles upstream of Townline Road	0.2	41	66	91	120	181	206
Kohlsville River - Park Route	At Kohlsville Dam (Park Route outlet)	*	215	294	372	478	*	647
Kohlsville River Unnamed Tributary 1	Approximately 2,000 feet downstream of County Road D	0.8	266	382	488	606	816	940
Kohlsville River Unnamed Tributary 2	At confluence of Kohlsville River Unnamed Tributary 2.1	3.2	215	343	462	611	890	1,063
Kohlsville River Unnamed Tributary 2	Approximately 0.5 miles downstream of Alpine Road	1.2	127	189	244	310	431	504
Kohlsville River Unnamed Tributary 2.1	Approximately 1,100 feet upstream of confluence with Kohlsville River Unnamed Tributary 2	0.2	154	228	297	375	526	597
Kressen Branch	At County Highway G	7.0	642	849	1,020	1,278	*	1,734
Kressen Branch	At confluence approximately 3,300 feet upstream of County Highway G	5.2	571	738	876	1,079	*	1,432
Kressen Branch	At County Highway M	2.7	256	332	396	486	*	679

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Lehner Outlet	At State Highway 60	1.1	76	101	141	166	*	269
Lehner Outlet	At Scenic Road	0.7	48	70	110	130	*	208
Lehner Outlet	At Lehner Lake Outlet	0.5	22	38	70	87	*	142
Lehner Outlet	At Lehner Lake Inlet	0.2	28	38	48	53	*	74
Limestone Creek	At confluence of Limestone Creek Unnamed Tributary 1	15.4	1,033	1,527	2,014	2,607	3,579	4,610
Limestone Creek	At confluence of Limestone Creek Unnamed Tributary 2	13.5	996	1,484	1,950	2,515	3,465	4,195
Limestone Creek	At confluence of Limestone Creek Unnamed Tributary 3	11.7	1,075	1,560	2,013	2,537	3,420	4,037
Limestone Creek	At confluence of Limestone Creek Unnamed Tributary 4	9.4	963	1,381	1,778	2,228	2,989	3,552
Limestone Creek	At confluence of Limestone Creek Unnamed Tributary 5	6.0	667	979	1,315	1,715	2,371	2,896
Limestone Creek	Downstream of County Road U	4.4	653	978	1,295	1,668	2,338	2,770
Limestone Creek Unnamed Tributary 1	Approximately 800 feet downstream of Deer Road	0.2	159	227	291	363	491	564
Limestone Creek Unnamed Tributary 2	Approximately 2,100 feet upstream of confluence with Limestone Creek	0.5	185	273	354	446	616	707
Limestone Creek Unnamed Tributary 3	At confluence of Limestone Creek Unnamed Tributary 3.1	1.9	107	168	228	303	426	527
Limestone Creek Unnamed Tributary 3.1	Approximately 3,400 feet upstream of County Highway S	0.1	66	99	131	168	239	272
Limestone Creek Unnamed Tributary 3.2	Approximately 3,200 feet upstream of confluence with Limestone Creek Unnamed Tributary 3	0.2	61	91	119	151	211	242
Limestone Creek Unnamed Tributary 4	Approximately 600 feet upstream of Hillcrest Drive	2.7	612	880	1,126	1,403	1,891	2,187
Limestone Creek Unnamed Tributary 5	Approximately 100 feet downstream of County Road U	0.6	415	596	764	950	1,288	1,474

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Limestone Creek Unnamed Tributary 5	Approximately 2,400 feet upstream of County Road U	0.1	89	126	159	196	261	298
Limestone Creek Unnamed Tributary 5	Approximately 700 feet upstream of County Road U	0.1	87	123	156	192	255	293
Little Cedar Creek	At confluence approximately 850 feet upstream of Cedar Creek	22.7	1,836	2,402	2,872	3,603	*	4,922
Little Cedar Creek	At confluence with Kressen Branch Cedar Creek	19.5	1,791	2,322	2,756	3,430	*	4,655
Little Cedar Creek	At West Bend Sub Railroad	10.7	1,391	1,814	2,160	2,697	*	3,653
Little Cedar Creek	At confluence with UT-1 to Little Cedar Creek	10	1,387	1,809	2,154	2,688	*	3,635
Little Cedar Creek	At confluence with Springside and Bonniwell Creeks	9.0	1,535	2,030	2,423	3,020	*	4,085
Little Cedar Creek	At U.S. Highway 45 (includes Bonniwell Creek inflow)	7.6	1,297	1,711	2,031	2,522	*	3,422
Little Cedar Creek	At divergence of Little Cedar Creek Bypass	*	647	786	961	1,022	*	1,048
Little Cedar Creek	At confluence approximately 600 feet upstream of Mayfield Road	4.0	463	599	706	871	*	1,156
Little Cedar Creek	At Town Line Road	2.1	166	211	248	306	*	404
Little Cedar Creek	At Scenic Road	1.6	57	59	59	63	*	66
Little Cedar Creek	Approximately 3,500 feet upstream of Scenic Road	0.4	45	63	78	101	*	144
Little Cedar Creek Bypass	At divergence from Little Cedar Creek	*	650	925	1,070	1,500	*	2,374
Little Oconomowoc River	At County Line Road	8.6	250	360	440	520	*	780
Little Oconomowoc River	At confluence near Roosevelt Road	5.9	250	350	430	500	*	730
Little Oconomowoc River	At Donegal Road	3.3	250	340	440	480	*	650

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Little Oconomowoc River	At Dublin Drive	1.9	130	180	250	280	*	420
Mason Creek	Approximately 2,200 feet downstream of Erin Road	1.1	170	230	280	350	*	470
Mason Creek	At Erin Road	0.5	130	180	210	270	*	350
Mason Creek Tributary 1	Approximately 1.2 miles upstream of confluence	0.8	80	110	165	210	*	300
Mason Creek Tributary 1	Approximately 3,200 feet upstream of confluence	0.2	35	45	55	70	*	95
Menomonee River Unnamed Tributary 1	At Division Road	1.0	288	436	606	811	1,219	1,461
Menomonee River Unnamed Tributary 1	Approximately 1,900 feet upstream of Division Road	0.6	326	486	635	804	1,133	1,282
Menomonee River Unnamed Tributary 1	Approximately 260 feet downstream of Holy Hill Road	0.5	294	438	570	721	1,014	1,150
Milwaukee River	At County Highway A	261.4	4,152	6,332	8,368	10,764	14,694	17,979
Milwaukee River	Approximately 3,000 feet upstream of County Highway A	259.6	4,141	6,308	8,344	10,741	14,651	17,955
Milwaukee River	Approximately 11,000 feet upstream of County Highway A	256.3	4,124	6,252	8,277	10,660	14,507	17,838
Milwaukee River	At confluence of Riveredge Creek	254.1	4,091	6,207	8,221	10,593	14,395	17,724
Milwaukee River	At Main Street	249.0	4,006	6,088	8,082	10,407	14,125	17,377
Milwaukee River	At confluence of UT-3 Milwaukee River	246.6	4,008	6,080	8,076	10,401	14,098	17,362
Milwaukee River	At confluence of Myra Creek	241.2	3,879	5,895	7,828	10,077	13,651	16,780
Milwaukee River	At confluence of Tributary 2 to Milwaukee River	236.8	3,840	5,842	7,763	9,992	13,529	16,610
Milwaukee River	At confluence of Tributary 1 to Milwaukee River	235.8	3,849	5,849	7,772	9,998	13,545	16,602
Milwaukee River	At confluence of UT-2 Milwaukee River	234.8	3,880	5,913	7,876	10,141	13,774	16,832

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Milwaukee River	At confluence of Wingate Creek	232.2	3,859	5,917	7,912	10,199	13,879	16,823
Milwaukee River	At confluence of Quaas Creek	230.2	3,848	5,906	7,906	10,185	13,872	16,806
Milwaukee River	At South Indiana Avenue	219.1	3,582	5,515	7,379	9,496	12,967	15,625
Milwaukee River	At West Bend Dam	217.7	3,557	5,481	7,324	9,430	12,890	15,529
Milwaukee River	At confluence of Silver Creek	217.6	3,559	5,487	7,332	9,442	12,909	15,552
Milwaukee River	At Barton Dam	207.3	3,191	4,931	6,599	8,500	11,649	13,981
Milwaukee River	Approximately 1,600 feet upstream of Woodford Road	206.5	3,181	4,916	6,578	8,476	11,621	13,951
Milwaukee River	At confluence of Smith Lake Channel	203.4	3,090	4,778	6,389	8,223	11,275	13,491
Milwaukee River	At confluence of East Branch Milwaukee River	199.6	3,053	4,752	6,375	8,207	11,274	13,427
Milwaukee River	At confluence of UT-1 Milwaukee River	152.2	2,880	4,420	5,890	7,538	10,336	12,204
Milwaukee River	At confluence of Kewaskum Creek	146.4	2,798	4,327	5,821	7,460	10,336	12,130
Milwaukee River	At confluence of North Creek	134.2	1,907	2,973	3,997	5,126	7,132	8,406
Milwaukee River	At confluence of West Branch Milwaukee River	128.8	1,619	2,492	3,326	4,262	5,907	7,177
Milwaukee River	At Washington County Boundary	71.0	741	1,221	1,680	2,296	3,177	4,361
Myra Creek	At confluence with Milwaukee River	2.7	111	186	266	365	561	666
Myra Creek	At Tuscola Lane	2.4	105	178	252	347	535	637
Myra Creek	Approximately 5,000 feet upstream of Tuscola Lane	1.6	85	145	204	274	409	480
Myra Creek	Approximately 8,500 feet upstream of Tuscola Lane	0.8	60	99	134	172	261	280
Nature's Friends Tributary	At Nature's Friends Dam	0.1	10	13	16	20	*	35
Nature's Friends Tributary	Approximately 900 feet upstream of Nature's Friends Lake	0.1	26	33	40	50	*	68

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
No Name Creek Unnamed Tributary 1	At Washington County Boundary	0.5	186	289	388	498	705	837
No Name Creek Unnamed Tributary 1	Approximately 400 feet downstream of Ohio Road	0.1	91	131	169	210	285	327
Nolan Creek	Approximately 900 feet upstream of Nenno Road	17.0	1,458	2,313	3,167	4,198	6,036	7,336
Nolan Creek	At West Bend Road	14.5	1,382	2,175	2,970	3,925	5,623	6,832
North Branch Cedar Creek	At confluence with Deer Creek	11.2	399	596	702	851	*	1,216
North Branch Cedar Creek	At St. Augustine Road	6.0	204	294	347	420	*	605
North Branch Cedar Creek	At Knoll Wood Drive	3.7	120	178	210	254	*	373
North Branch Cedar Creek	At Washington / Ozaukee County Boundary	1.9	97	143	168	200	*	289
North Branch Cedar Creek	Upstream of Washington / Ozaukee County Boundary	0.2	16	22	29	33	*	50
North Branch Menomonee River	Divergence of Tributary No. 4	3.3	250	371	480	588	741	803
North Branch Menomonee River	Downstream of Railroad	2.7	256	401	540	707	1,063	1,230
North Branch Menomonee River	Approximately 2,300 feet upstream of County Highway Y	0.8	275	445	613	821	1,267	1,510
North Branch Milwaukee River	At confluence of North Branch Milwaukee River Unnamed Tributary 1	144.2	2,336	4,059	5,799	7,988	12,728	15,048
North Branch Milwaukee River	Approximately 1,250 feet upstream of County Road M	142.7	2,359	4,101	5,865	8,076	12,867	15,237
North Branch Milwaukee River	Approximately 250 feet upstream of Trading Post Trail	139.7	2,436	4,266	6,122	8,470	13,579	16,181
North Branch Milwaukee River	At confluence of Wallace Creek	137.2	2,450	4,286	6,148	8,496	13,632	16,225
North Branch Milwaukee River	At confluence of Stony Creek	123.1	2,200	3,841	5,529	7,651	12,258	14,469

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
North Branch Milwaukee River	At confluence of North Branch Milwaukee River Unnamed Tributary 2	101.3	2,063	3,566	5,073	6,965	11,122	13,053
North Branch Milwaukee River	Approximately 600 feet upstream of Jay Road	91.7	1,781	3,101	4,437	6,117	9,816	11,568
North Branch Milwaukee River	At confluence of North Branch Milwaukee River Unnamed Tributary 3	89.2	2,007	3,446	4,893	6,775	10,829	12,719
North Branch Milwaukee River	At Washington County Boundary	88.8	1,991	3,422	4,860	6,733	10,753	12,657
North Branch Milwaukee River Unnamed Tributary 1	Upstream of County Road M	0.5	169	250	323	406	564	641
North Branch Milwaukee River Unnamed Tributary 1	Approximately 1,000 feet downstream of Meadow Road	0.3	100	146	187	234	321	367
North Branch Milwaukee River Unnamed Tributary 2	Downstream of Camp Awana Road	8.6	532	852	1,150	1,535	2,195	2,776
North Creek	Downstream of Wildlife Drive	2.4	326	488	625	888	1,234	1,782
North Creek	At confluence of Edgewood Creek	2.2	371	586	791	1,026	1,445	1,761
North Creek	Approximately 1,100 feet upstream of Edgewood Road	1.7	317	494	651	831	1,149	1,392
North Creek	At confluence of Knights Creek	1.5	279	431	563	713	974	1,187
North Creek	Approximately 700 feet downstream of State Highway 28	0.6	132	211	287	374	526	628
North Creek	At State Highway 28	0.5	98	160	219	287	409	485
North Creek	Approximately 1,500 feet upstream of State Highway 28	0.3	57	95	132	174	254	301
North Creek	At Highland Drive	0.2	40	64	87	113	161	191
North Crossway Channel	At County Line Road	3.4	305	400	488	602	796	1,000
North Crossway Channel	Approximately 1,000 feet downstream of Union Pacific Railroad crossing	3.2	265	335	405	485	630	827

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
North Crossway Channel	At the Union Pacific Railroad crossing	2.6	131	156	177	200	232	251
North Crossway Channel	At Donges Bay Road	2.4	206	236	255	269	295	320
North Crossway Channel	At confluence of North Crossway Channel Unnamed Tributary 1	2.1	193	216	236	258	286	315
North Crossway Channel	At confluence of North Crossway Channel Unnamed Tributary 2	1.5	161	183	203	226	273	286
North Crossway Channel	Approximately 600 feet downstream of Strawgrass Lane	0.2	100	114	130	149	195	206
North Crossway Channel	At Strawgrass Lane	0.1	78	116	149	188	262	301
North Crossway Channel	Approximately 650 feet downstream of Mequon Road	0.1	65	95	123	155	213	244
North Crossway Channel Unnamed Tributary 1	At Washington Drive	0.6	156	206	256	336	445	712
North Crossway Channel Unnamed Tributary 1	Approximately 2,000 feet downstream of Union Pacific Railroad crossing	0.5	260	383	496	625	865	989
North Crossway Channel Unnamed Tributary 2	Downstream of Wasaukee Road	1.0	78	82	86	90	99	102
North Crossway Channel Unnamed Tributary 2	Approximately 150 feet upstream of Wasaukee Road	1.0	78	81	85	89	97	100
Oconomowoc Bypass	At divergence from Little Cedar Creek	*	20	62	70	80	*	170
Oconomowoc Bypass	Approximately 2,100 feet downstream of Pioneer Road	*	20	62	106	180	*	314
Oconomowoc River	At confluence with Flynn Creek	27.5	480	690	820	920	*	1,290
Oconomowoc River	At confluence with UT-1 to Oconomowoc River	20.3	440	640	730	820	*	1,130

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Oconomowoc River	At Elmwood Road	18.0	420	620	698	731	*	934
Oconomowoc River	At Hubertus Road	17.2	410	610	688	721	*	904
Oconomowoc River	Downstream of divergence of UT-1 to Oconomowoc River	17.2	470	640	718	761	*	964
Oconomowoc River	At Friess Lake Outlet	16.7	470	640	730	810	*	1,110
Oconomowoc River	At Friess Lake Inlet	15.3	520	660	760	840	*	1,120
Oconomowoc River	At confluence with UT-2 to Oconomowoc River	14.9	530	670	780	870	*	1,130
Oconomowoc River	At State Highway 164	11.9	440	560	640	700	*	930
Oconomowoc River	At confluence with Coney River	11.1	610	780	920	1,140	*	1,520
Oconomowoc River	At Hillside Road	2.2	310	400	470	580	*	770
Oconomowoc River	Approximately 2,700 feet upstream of Hillside Road	1.2	56	64	70	85	*	139
Polk Springs Creek	At County Highway P	3.5	671	861	1,015	1,253	*	1,658
Polk Springs Creek	At U.S. Highway 45	2.7	498	645	761	940	*	1,247
Putter Creek	Approximately 3,000 feet upstream of the mouth	0.5	140	180	210	260	*	340
Quaas Creek	At County Highway I	8.5	475	739	1,005	1,342	1,838	2,390
Quaas Creek	Approximately 1,300 feet upstream of Sand Drive	7.7	505	782	1,050	1,393	1,903	2,410
Quaas Creek	Approximately 2,400 feet downstream of Paradise Drive	6.9	468	701	937	1,235	1,655	2,173
Quaas Creek	At County Highway G	6.0	420	641	864	1,144	1,563	2,031
Quaas Creek	Approximately 1,300 feet upstream of Progress Drive	5.1	380	585	793	1,058	1,452	1,894
Quaas Creek	At confluence of UT-1 Quaas Creek	4.4	337	520	704	939	1,293	1,674

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Quaas Creek	Approximately 4,700 feet above confluence of UT-1 Quaas Creek	0.9	128	186	240	302	396	478
Rubicon River	At confluence with UT-3 to Rubicon River	30.8	780	1,050	1,290	1,540	*	2,350
Rubicon River	At Wacker Drive	26.8	640	930	1,170	1,400	*	2,150
Rubicon River	At Steel Craft Drive	25.5	620	900	1,140	1,370	*	2,070
Rubicon River	At confluence with UT-2 to Rubicon River	24.7	610	890	1,120	1,350	*	2,030
Rubicon River	At confluence with UT-1 to Rubicon River	20.7	560	830	1,030	1,230	*	1,820
Rubicon River	At confluence with Rubicon River Overland Flowpath	11.5	150	230	400	500	*	1,010
Rubicon River	At Pike Lake Outlet	11.0	150	180	210	220	*	260
Rubicon River	Downstream of divergence from Rubicon River Overland Flowpath	7.4	350	510	636	655	*	600
Rubicon River	At Kettle Moraine Road	6.8	460	630	820	930	*	1,380
Rubicon River	At confluence approximately 1,600 feet downstream of Milwaukee Sub Railroad	6.2	460	630	820	920	*	1,340
Rubicon River	At confluence with UT-5 to Rubicon River	5.1	410	550	710	800	*	1,140
Rubicon River	At confluence with UT-4 to Rubicon River	2.1	190	250	320	360	*	510
Rubicon River	At State Highway 75	1.0	80	101	132	154	*	250
Rubicon River	Approximately 2,600 feet upstream of State Highway 75	1.0	73	98	127	142	*	203
Rubicon River Overland Flowpath	At divergence from Rubicon River	*	0	0	53	135	*	790
Rubicon River Tributary 1	At Washington / Dodge County Boundary	1.3	170	225	275	355	*	485
Rubicon River Tributary 2	At Washington / Dodge County Boundary	0.4	145	185	220	275	*	355
Scenic Brook	At mouth	1.1	37	48	55	62	*	83

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Silver Creek	At confluence with the Milwaukee River	6.3	253	*	379	447	*	628
Silver Creek	At City Park Drive in Regner Park	6.0	184	*	323	399	*	600
Silver Creek	At West Washington Street, downstream of the confluence of Silverbrook Creek	5.7	184	*	302	366	*	532
Silver Creek	At University Drive	5.6	365	*	520	590	*	740
Silver Creek	At Silverbrook Drive, upstream of the confluence of Silverbrook Creek	4.0	184	*	320	394	*	590
Silver Creek	At West Washington Street	3.9	141	*	250	305	*	460
Silver Creek	Above confluence of Washington Creek	2.1	20	*	30	30	*	40
Silver Creek	Above Lucas Lake	1.5	55	*	85	95	*	125
Silver Creek	Below Paradise Valley Lake	1.4	30	*	40	45	*	55
Silver Creek	Above Paradise Valley Lake	1.3	10	*	15	15	*	20
Silverbrook Creek	At confluence with Silver Creek	1.6	46	*	117	150	*	276
Silverbrook Creek	At Silverbrook Drive	1.5	196	*	330	398	*	580
Silverbrook Creek	Just upstream of 15th Avenue	1.4	178	*	310	371	*	550
Silverbrook Creek	Just upstream of the intersection of 18th Avenue and Chestnut Street	1.1	89	*	200	268	*	470
Silverbrook Creek	Just downstream of U.S. Highway 45	0.2	40	*	54	62	*	87
Smith Lake Channel	At Smith Lake Outlet	1.7	70	129	193	275	402	526
Smith Lake Channel	At Smith Lake Inlet	0.9	110	161	210	265	359	421
Smith Lake Channel	At Little Drickens Lake Inlet	0.7	98	145	188	237	312	372
Springside Creek	At Springside Lane	0.7	143	188	224	279	*	375
Springside Creek	At Shadow Lane	0.3	70	92	109	135	*	180
Stony Creek	At confluence of Bolton Brook	18.6	485	785	1,129	1,557	2,357	2,967

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Stony Creek	At Bolton Drive	16.4	415	675	936	1,275	1,905	2,382
Stony Creek	At North Paradise Road	15.2	388	635	880	1,199	1,804	2,241
Stony Creek	At confluence of Stony Creek Unnamed Tributary 1	12.9	412	673	924	1,219	1,863	2,164
Stony Creek	At Forest View Road	10.0	119	220	326	456	792	923
Stony Creek	Approximately 0.5 miles upstream of Forest View Road	9.8	131	243	368	519	933	982
Stony Creek	At County Line Drive	8.0	55	98	175	278	498	695
Stony Creek Unnamed Tributary 1	At Westcott Road	1.4	253	406	553	727	1,075	1,261
Stony Creek Unnamed Tributary 1	Approximately 2,450 feet upstream of Wescott Road	1.2	260	403	538	701	1,015	1,170
Stony Creek Unnamed Tributary 1	Approximately 2,550 feet upstream of Wescott Road	1.0	223	345	460	600	867	1,002
Stream 1	Divergence from East Branch Rock River Unnamed Tributary 1	3.4	0	0	0	100	360	535
Tributary 1 to Milwaukee River	At confluence with Milwaukee River	0.6	127	182	228	284	373	423
Tributary 1 to Milwaukee River	At State Highway 33	0.2	55	77	99	118	154	187
Tributary 1 to Milwaukee River	2,400 feet upstream of State Highway 33	0.1	17	27	37	48	73	79
Tributary 2 to Milwaukee River	At State Highway 33	0.9	47	78	110	160	228	309
Tributary 2 to Milwaukee River	Approximately 1,000 feet upstream of State Highway 33	0.7	40	59	77	98	131	158
Tributary 2 to Milwaukee River	At Oak Road	0.1	6	13	20	29	54	60
Tributary 2 to Milwaukee River Split	Divergence from UT-3 Milwaukee River	3.3	9	21	37	62	109	140
Tributary No. 1	At confluence of Tributary No. 1A	2.3	37	53	68	85	114	138
Tributary No. 1	At confluence of Tributary No. 1B	1.4	1,050	1,490	1,880	2,320	3,220	3,550

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Tributary No. 1	Upstream of Donges Bay Road	0.5	237	330	409	497	674	740
Tributary No. 1	At Pilgrim Road	0.4	181	284	375	477	690	756
Tributary No. 1	Divergence of Pilgrim Road Storm Sewer	0.1	1	18	34	51	87	97
Tributary No. 1	At Butternut Road	0.1	31	48	64	81	117	127
Tributary No. 1A	At Division Road	0.2	85	124	158	196	260	306
Tributary No. 1A	At convergence of Hawthorn Drive/Western Avenue Storm Sewer	0.2	46	65	83	102	133	155
Tributary No. 1A	Divergence of Hawthorn Drive/Western Avenue Storm Sewer	0.1	41	60	78	97	128	150
Tributary No. 1A	At Western Avenue	0.1	46	65	83	102	133	155
Tributary No. 1B	At Pilgrim Road	0.8	166	254	338	432	588	696
Tributary No. 1B	Approximately 600 feet downstream of Donges Bay Road	0.3	131	200	265	337	455	537
Tributary No. 1B	At Donges Bay Road	0.1	67	98	127	158	211	246
Tributary No. 2	Approximately 300 feet upstream of the confluence with Menomonee River	0.7	265	383	486	600	787	913
Tributary No. 2	Approximately 600 feet upstream of Western Avenue	0.5	260	370	466	571	748	856
Tributary No. 2	At Mequon Road	0.2	130	182	229	279	359	417
Tributary No. 2 Unnamed Tributary 1	Downstream of Legend Avenue	0.1	102	142	178	218	285	326
Tributary No. 3	Approximately 2,900 feet upstream of confluence with Menomonee River	0.1	98	139	175	213	281	313
Tributary No. 4	Approximately 1,700 feet upstream of Rockfield Road	3.3	86	165	252	383	749	937
Tributary No. 4	Divergence from North Branch Menomonee River	2.7	6	30	60	119	322	427
Tributary No. 5	At Lovers Lane	1.8	119	196	274	367	526	650
Tributary No. 5	At confluence of Tributary No. 5 Overflow	1.6	130	212	302	407	584	751

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Tributary No. 5	At County Highway F	1.3	116	170	209	285	407	481
Tributary No. 5	Divergence of Tributary No. 5 Overflow	0.8	26	59	35	20	27	39
Tributary No. 5	Upstream of divergence of Tributary No. 5 Overflow	0.8	26	63	105	150	217	284
Tributary No. 5	Approximately 1,200 feet upstream of Railroad	0.3	8	10	11	12	16	14
Tributary No. 5 Overflow	At County Highway F	0.8	0	24	64	80	120	145
Tributary No. 5 Overflow	Divergence from Tributary No. 5	0.8	0	4	70	130	190	247
Unnamed Tributary to Ashippun River	Approximately 2,100 feet upstream of confluence with Ashippun River	2.0	102	149	185	227	*	350
Unnamed Tributary to Ashippun River	At convergence with Ashippun River - Overland Flowpath	0.7	62	89	105	137	*	210
Unnamed Tributary to Ashippun River	Approximately 1.0 miles upstream of confluence with Ashippun River	0.7	60	80	90	110	*	150
Unnamed Tributary to Frieden's Creek	Just downstream of County Highway P	0.9	8	*	*	581	*	*
UT-1 Kewaskum Creek	Approximately 3,800 feet upstream of Highland Drive	1.1	211	342	466	610	860	1,030
UT-1 Kewaskum Creek	Approximately 2,200 feet upstream of Townline Road	0.6	144	229	311	404	567	678
UT-1 Milwaukee River	At State Highway 45	4.8	179	279	375	472	622	736
UT-1 Milwaukee River	Approximately 4,200 feet upstream of State Highway 45	3.7	170	272	355	443	587	687
UT-1 Milwaukee River	Approximately 7,000 feet upstream of State Highway 45	2.5	252	371	488	613	834	965
UT-1 Mink Creek	At Washington County Boundary	1.4	255	432	605	810	1,282	1,423
UT-1 Mink Creek	At the confluence of UT-1.1 Mink Creek	1.2	256	429	597	800	1,271	1,401
UT-1 Mink Creek	Approximately 250 feet upstream of Boltonville Road	0.1	42	64	85	109	157	177

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
UT-1 Quaas Creek	Upstream of confluence with Quaas Creek	3.1	214	336	459	626	878	1,153
UT-1 Quaas Creek	At confluence of UT-1.2 Quaas Creek	2.7	217	340	458	611	853	1,100
UT-1 Quaas Creek	At State Highway 45	1.4	167	269	367	489	697	875
UT-1 Quaas Creek	At confluence of UT-1.1 Quaas Creek	1.1	122	190	256	341	477	603
UT-1 Quaas Creek	At Quaas Lake Outlet	0.6	89	141	190	249	351	412
UT-1 Quaas Creek	At Quaas Lake Inlet	0.5	87	137	184	239	333	396
UT-1 to Big Cedar Lake	At County Highway NN	1.4	172	234	285	371	*	519
UT-1 to Big Cedar Lake	At detention pond downstream of Arthur Road	0.6	91	122	146	185	*	253
UT-1 to Cedar Creek	At County Highway Y	0.7	92	124	150	190	*	266
UT-1 to Cedar Creek	At Cedar Sauk Road	0.4	48	63	75	94	*	129
UT-1 to Cedar Creek	At Washington Drive	0.2	17	23	29	41	*	65
UT-1 to Coney River	At mouth	0.9	86	*	125	142	*	143
UT-1 to Coney River	Downstream of divergence with UT-1 to Coney River Overflow	0.6	52	*	56	58	*	60
UT-1 to Coney River	At Sherman Road	0.6	137	*	256	332	*	518
UT-1 to Coney River	Approximately 1,100 feet upstream of Slinger Road	0.4	110	*	223	289	*	453
UT-1 to Coney River Overflow	At divergence from UT-1 to Coney River	*	85	*	200	274	*	458
UT-1 to Coney River Overflow	At divergence with UT-1 to Coney River Overflow West	*	42	*	71	88	*	145
UT-1 to Coney River Overflow West	At divergence from UT-1 to Coney River Overflow	*	43	*	130	188	*	314
UT-1 to Evergreen Creek	Approximately 900 feet upstream of County Highway G	0.4	125	160	187	227	*	302

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
UT-1 to Evergreen Creek	Approximately 1,700 feet upstream of County Highway G	0.1	44	56	66	81	*	108
UT-1 to Hasmer Creek	Hasmer Lake inlet upstream of U.S. Highway 45	0.4	50	*	80	100	*	130
UT-1 to Kressen Branch	At Church Road	0.7	47	70	89	119	*	176
UT-1 to Little Cedar Creek	At Jackson Drive	0.3	84	110	130	162	*	216
UT-1 to Little Cedar Creek	Approximately 2,200 feet upstream of Jackson Drive	0.1	37	48	56	70	*	93
UT-1 to Little Cedar Lake	At Lake Drive	0.2	30	43	53	70	*	99
UT-1 to Oconomowoc River	At divergence from Oconomowoc River	*	0	0	12	49	*	146
UT-1 to Oconomowoc River	Approximately 3,100 feet upstream of Hogsback Road	1.0	44	66	92	150	*	276
UT-1 to Polk Springs Creek	At U.S. Highway 45	0.7	178	225	261	316	*	410
UT-1 to Rubicon River	At Clover Road	8.6	260	350	420	540	*	740
UT-1 to Rubicon River	At confluence with UT-1.2 to Rubicon River	6.8	470	600	700	870	*	1,130
UT-1 to Rubicon River	At confluence with UT-1.1 to Rubicon River	2.1	140	190	200	220	*	260
UT-1 to Rubicon River	Approximately 2,400 feet upstream of County Highway U	0.3	80	110	130	160	*	210
UT-1.1 Quaas Creek	Approximately 1,300 feet upstream of Mile View Road	0.5	42	70	98	135	194	241
UT-1.1 to Rubicon River	At confluence with UT-1.1.1 to Rubicon River	0.8	100	130	160	210	*	280
UT-1.1 to Rubicon River	At County Highway U	0.3	80	100	120	140	*	190
UT-1.1.1 to Rubicon River	Approximately 3,100 feet upstream of the mouth	0.2	33	41	47	57	*	74

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
UT-1.2 Quaas Creek	At State Highway 45	0.3	73	111	147	188	260	302
UT-1.2 to Rubicon River	At confluence with UT-1.2.1 to Rubicon River	2.6	400	510	600	730	*	950
UT-1.2 to Rubicon River	Approximately 2,800 feet upstream of County Highway K	0.3	130	160	190	240	*	310
UT-1.2.1 to Rubicon River	At confluence approximately 1,300 feet downstream of Saint Lawrence Lane	1.6	200	260	310	390	*	520
UT-1.2.1 to Rubicon River	Approximately 2,900 feet upstream of Saint Lawrence Lane	0.5	60	80	100	130	*	170
UT-2 Kewaskum Creek	At confluence with Kewaskum Creek	0.6	119	192	261	340	481	575
UT-2 Milwaukee River	Below confluence of UT-2.1 Milwaukee River	0.8	48	87	129	185	280	363
UT-2 Milwaukee River	Approximately 2,900 feet upstream of confluence of UT-2.1 Milwaukee River	0.4	78	127	175	235	337	404
UT-2 Milwaukee River	Approximately 5,800 feet upstream of confluence of UT-2.1 Milwaukee River	0.2	28	48	70	95	144	171
UT-2 to Cedar Creek	At County Highway G	3.2	459	597	707	874	*	1,182
UT-2 to Cedar Creek	At Center Road	2.2	318	414	490	608	*	822
UT-2 to Coney River	Approximately 1.4 miles upstream of mouth	0.8	16	*	27	33	*	45
UT-2 to Little Cedar Creek	At Scenic Road	0.7	83	108	127	166	*	232
UT-2 to Oconomowoc River	Approximately 1,300 feet downstream of Pleasant Hill Road	1.6	284	*	599	790	*	1,233
UT-2 to Oconomowoc River	Approximately 1,700 feet downstream of State Highway 164	0.5	106	*	212	274	*	427
UT-2 to Oconomowoc River	Downstream of State Highway 164	0.3	79	*	159	205	*	320
UT-2 to Oconomowoc River	Upstream of State Highway 164	0.1	13	*	26	34	*	53

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
UT-2 to Rubicon River	Approximately 1,400 feet upstream of Main Street	0.9	90	120	150	190	*	260
UT-2 to Rubicon River	Approximately 2,900 feet downstream of Arthur Road	0.3	110	140	160	200	*	260
UT-2 to Rubicon River	At Arthur Road	0.1	28	36	42	52	*	67
UT-2.1 Milwaukee River	Above confluence with UT-2 Milwaukee River	0.3	3	8	14	23	41	57
UT-2.1 to Rubicon River	Approximately 5,000 feet upstream of State Highway 83	0.9	60	90	110	140	*	190
UT-3 Milwaukee River	At confluence with Milwaukee River	4.8	151	227	282	358	459	608
UT-3 Milwaukee River	Approximately 1,500 feet downstream of Poplar Road	4.4	141	214	266	338	439	570
UT-3 Milwaukee River	Divergence of Tributary 2 to Milwaukee River Split	3.3	104	163	215	270	367	429
UT-3 Milwaukee River	Approximately 1,800 feet upstream of Poplar Road	3.3	113	184	252	332	476	569
UT-3 Milwaukee River	At Wallace Lake Road	2.1	43	68	91	116	160	199
UT-3 Milwaukee River	At Church Road	1.7	25	42	61	83	118	170
UT-3 Milwaukee River	Green Lake Outlet	0.7	16	29	46	70	104	153
UT-3 to Rubicon River	At County Highway N	2.0	500	650	770	950	*	1,250
UT-3 to Rubicon River	At confluence with UT-3.1 to Rubicon River	1.1	230	300	360	440	*	580
UT-3 to Rubicon River	Approximately 3,000 feet upstream of confluence with UT-3.1 to Rubicon River	0.3	110	140	170	200	*	260
UT-3.1 to Rubicon River	At Arthur Road	0.8	180	230	270	340	*	450
UT-4 Milwaukee River	At County Highway M	1.2	190	314	429	567	818	962
UT-4 Milwaukee River	At Newark Drive	0.6	83	137	189	251	370	431
UT-4 Milwaukee River	Approximately 2,500 feet upstream of Newark Drive	0.1	21	36	51	69	107	120

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
UT-4 to Rubicon River	Approximately 4,000 feet upstream of the mouth	1.0	120	160	200	260	*	370
UT-5 to Rubicon River	At confluence approximately 2,200 feet upstream of the mouth	2.6	400	530	640	820	*	1,110
UT-5 to Rubicon River	At State Highway 175	0.5	14	28	40	41	*	42
UT-5 to Rubicon River	Approximately 2,200 feet upstream of Chicago Sub Railroad	0.5	21	31	45	52	*	88
UT to West Branch Menomonee River	Approximately 500 feet upstream of Maple Road	1.8	183	276	360	456	630	736
UT to West Branch Menomonee River	Approximately 1,100 feet downstream of County Highway Y	1.6	163	245	317	398	554	636
UT to West Branch Menomonee River	At County Highway Y	1.0	64	83	99	117	156	179
UT to West Branch Menomonee River	Divergence of UT to West Branch Menomonee River Overflow	0.6	28	31	31	32	33	49
UT to West Branch Menomonee River	At U.S. Highway 41	0.4	102	154	165	173	183	187
UT to West Branch Menomonee River	Approximately 1,500 feet upstream of Hubertus Road	0.2	58	94	128	167	244	280
UT to West Branch Menomonee River Overflow	Divergence from UT to West Branch Menomonee River	0.6	131	215	258	305	371	424
Wallace Creek	At Orchard Valley Road	13.6	624	1,060	1,541	2,115	3,242	4,047
Wallace Creek	Approximately 0.5 miles upstream of Boltonville Road	12.2	614	1,040	1,513	2,075	3,166	3,957
Wallace Creek	At Shalom Drive	9.5	783	1,301	1,820	2,442	3,658	4,363
Wallace Creek	Approximately 450 feet upstream of Indian Lore Road	9.4	783	1,300	1,819	2,441	3,655	4,361
Wallace Creek	At confluence of Wallace Creek Unnamed Tributary 2	8.8	777	1,287	1,800	2,396	3,577	4,251
Wallace Creek	At County Road A	3.3	193	314	437	590	889	1,098

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Wallace Creek	At confluence of Wallace Creek Unnamed Tributary 3	2.5	169	272	367	477	712	854
Wallace Creek	Approximately 250 feet upstream of Newark Drive	1.7	82	149	219	307	522	593
Wallace Creek	Approximately 200 feet downstream of North River Road	0.6	5	9	18	44	82	166
Wallace Creek	At inlet to Wallace Lake	0.2	7	13	20	28	46	53
Wallace Creek Unnamed Tributary 2	Approximately 1,900 feet upstream of mouth	5.0	588	957	1,321	1,744	2,588	3,057
Wallace Creek Unnamed Tributary 3	Upstream of South Indian Lore Road	0.1	7	14	22	31	51	62
Washington Creek	Above confluence with Silver Creek	3.5	260	*	540	600	*	900
Washington Creek	At confluence with Silver Creek	2.5	166	*	260	296	*	400
Washington Creek	Just upstream of confluence of an unnamed tributary	1.6	82	*	120	136	*	180
Washington Creek	Just downstream of West Washington Street	1.6	56	*	80	91	*	120
Washington Creek	At West Washington Street	1.5	30	*	38	42	*	50
Washington Creek	Just upstream of West Washington Street	0.9	53	*	98	120	*	170
Washington Creek	Upstream of Villa Park Drive	0.6	112	*	208	242	*	360
Washington Creek	Downstream of City of West Bend corporate limits	0.6	112	*	208	239	*	360
Washington Creek	Just downstream of City of West Bend corporate limits	0.6	79	*	147	170	*	255
Wayne Creek	At confluence of Wayne Creek Unnamed Tributary 1	8.3	541	874	1,199	1,609	2,332	2,855
Wayne Creek	At confluence of Wayne Creek Unnamed Tributary 2	7.3	512	831	1,141	1,530	2,212	2,709
Wayne Creek	At confluence of Wayne Creek Unnamed Tributary 3	5.1	499	826	1,137	1,525	2,223	2,676

*Not calculated for this Flood Risk Project

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Wayne Creek	At confluence of Wayne Creek Unnamed Tributary 4	4.1	429	707	970	1,306	1,943	2,285
Wayne Creek	At confluence of Wayne Creek Unnamed Tributary 5	2.2	233	350	465	622	881	1,101
Wayne Creek	At confluence of Wayne Creek Unnamed Tributary 6	2.0	250	375	496	668	949	1,184
Wayne Creek	At State Road 28	1.4	298	447	591	758	1,063	1,257
Wayne Creek	At Saint Kilian Drive	0.6	216	319	414	521	721	826
Wayne Creek Unnamed Tributary 1	Approximately 2,500 feet upstream of confluence with Wayne Creek	0.4	122	178	230	288	395	454
Wayne Creek Unnamed Tributary 2	At confluence of Wayne Creek Unnamed Tributary 2.1	1.9	181	273	364	467	651	768
Wayne Creek Unnamed Tributary 2	At County Highway W	1.3	44	63	92	126	177	239
Wayne Creek Unnamed Tributary 2	Approximately 1.5 miles upstream of County Highway W	0.1	20	28	42	58	81	111
Wayne Creek Unnamed Tributary 2	Approximately 1.7 miles upstream of County Highway W	0.1	24	34	50	70	101	136
Wayne Creek Unnamed Tributary 2.1	Approximately 600 feet upstream of confluence with Wayne Creek Unnamed Tributary 2	0.3	122	182	237	299	416	476
Wayne Creek Unnamed Tributary 3	Approximately 1,900 feet upstream of Fairview Drive	0.6	113	164	211	264	359	416
Wayne Creek Unnamed Tributary 4	At confluence of Wayne Creek Unnamed Tributary 4.1	1.8	236	404	556	743	1,089	1,284
Wayne Creek Unnamed Tributary 4	At confluence of Wayne Creek Unnamed Tributary 4.2	1.1	435	650	852	1,081	1,518	1,735
Wayne Creek Unnamed Tributary 4	Approximately 100 feet downstream of Woodlawn Drive	0.1	76	105	133	163	217	247
Wayne Creek Unnamed Tributary 4.1	Approximately 1,600 feet upstream of confluence with Wayne Creek Unnamed Tributary 4	0.2	71	105	137	173	239	274

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Wayne Creek Unnamed Tributary 4.2	Approximately 600 feet upstream of confluence with Wayne Creek Unnamed Tributary 4	1.0	414	622	815	1,034	1,457	1,663
Wayne Creek Unnamed Tributary 5	Approximately 1,700 feet upstream of confluence with Wayne Creek	0.1	52	80	106	135	193	219
Wayne Creek Unnamed Tributary 6	Approximately 500 feet downstream of State Highway 28	0.2	182	258	328	407	545	627
West Branch Menomonee River	At Private Driveway	4.1	726	1,060	1,370	1,740	2,424	2,870
West Branch Menomonee River	At Maple Road	3.8	786	1,150	1,480	1,870	2,604	3,070
West Branch Menomonee River	Approximately 1,900 feet upstream of Railroad	1.3	648	942	1,207	1,510	2,061	2,377
West Branch Menomonee River	Approximately 250 feet upstream of Private Drive	1.1	499	727	934	1,170	1,595	1,837
West Branch Menomonee River	Approximately 1,100 feet downstream of Dalebrook Drive	0.9	447	681	904	1,158	1,561	1,879
West Branch Menomonee River	At confluence of UT to West Branch Menomonee River Overflow	0.7	399	607	804	1,027	1,384	1,652
West Branch Menomonee River	At confluence of West Branch Menomonee River Overflow	0.5	249	361	496	652	924	1,087
West Branch Menomonee River	At County Highway Y	0.5	146	181	237	295	416	497
West Branch Menomonee River	Divergence of West Branch Menomonee River Overflow	0.3	100	114	141	191	276	337
West Branch Menomonee River	At confluence of HWY 41 Overflow	0.3	204	294	412	548	785	938
West Branch Menomonee River	At Hilltop Drive	0.3	204	288	362	443	572	665
West Branch Menomonee River	Approximately 600 feet upstream of Brookside Drive	0.1	34	45	55	66	82	94
West Branch Menomonee River Overflow	Divergence from West Branch Menomonee River	0.3	103	180	259	357	508	590

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
West Branch Milwaukee River	At State Highway 45	57.7	1,154	1,769	2,361	3,019	4,183	4,856
West Branch Milwaukee River	Approximately 3,500 feet upstream of Eisenbahn State Trail	56.2	1,330	2,077	2,786	3,592	5,278	5,983
West Branch Milwaukee River Unnamed Tributary 1	At confluence of West Branch Milwaukee River Unnamed Tributary 1.2	10.9	446	692	943	1,244	1,796	2,152
West Branch Milwaukee River Unnamed Tributary 1	At County Road H	7.7	283	431	584	770	1,087	1,335
West Branch Milwaukee River Unnamed Tributary 1	Approximately 3,600 feet downstream of County Road H	6.0	289	425	547	692	938	1,094
West Branch Milwaukee River Unnamed Tributary 1	At confluence of West Branch Milwaukee River Unnamed Tributary 1.2	1.4	282	421	539	691	950	1,095
West Branch Milwaukee River Unnamed Tributary 1	Approximately 1,100 feet downstream of Lake Bernice Road	0.4	130	180	227	280	366	434
West Branch Milwaukee River Unnamed Tributary 1	Downstream of Lake Bernice Road	<0.1	8	12	16	21	30	35
West Branch Milwaukee River Unnamed Tributary 1.1	At Townline Road	1.9	178	263	343	434	596	699
West Branch Milwaukee River Unnamed Tributary 1.2	Approximately 1,100 feet upstream of confluence with West Branch Milwaukee River Unnamed Tributary 1	0.9	223	319	408	518	698	812
Wetland Extension 2	At confluence of Wetland Extension 2.1	2.5	187	280	365	464	484	748
Wetland Extension 2	Approximately 1,900 feet downstream of Sunset Drive	0.4	61	90	118	152	166	250
Wetland Extension 2	Divergence from Wayne Creek Unnamed Tributary 2	0.1	4	6	8	12	20	25
Wetland Extension 2.1	At Townline Road	1.1	95	144	187	238	250	390

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance Future	0.2% Annual Chance
Wetland Extension 2.1	Approximately 1.1 miles upstream of Townline Road	0.1	12	20	25	33	45	57
Willow Creek	At County Highway Y	5.1	757	1,100	1,410	1,770	2,435	2,900
Willow Creek	Approximately 2,400 feet upstream of State Highway 175	3.0	411	614	802	1,020	1,462	1,700
Willow Creek	At confluence of Willow Creek Tributary 1	2.9	394	594	782	1,010	1,453	1,710
Willow Creek	Divergence of Willow Creek Tributary 1	1.5	265	291	305	305	305	305
Willow Creek	Approximately 6,400 feet upstream of confluence of Willow Creek Tributary 1	1.1	394	594	782	1,010	1,453	1,710
Willow Creek Unnamed Tributary 1	At confluence of Willow Creek Unnamed Tributary 1.1	1.4	436	786	1,107	1,497	2,510	2,663
Willow Creek Unnamed Tributary 1	At County Line Road	1.0	328	472	606	757	1,029	1,181
Willow Creek Unnamed Tributary 1.1	Approximately 2,000 feet upstream of confluence with Willow Creek	0.2	241	469	694	979	1,831	1,842
Wingate Creek	Above confluence with Milwaukee River	1.5	412	*	604	697	*	*

*Not calculated for this Flood Risk Project

**Figure 7: Frequency Discharge-Drainage Area Curves
[Not Applicable to this Flood Risk Project]**

Table 10: Summary of Non-Coastal Stillwater Elevations

Flooding Source	Location	Elevations (feet NAVD88)					
		10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	1%+ Annual Chance	0.2% Annual Chance
Amy Bell Lake	Richfield, Village of	975.0	975.1	975.4 ¹	976.1 ¹	*	979.1 ¹
Cedar Lake	Entire shoreline	1032.0	1032.3	1032.5	1032.7	*	1033.2
Green Lake	Washington County, Unincorporated Areas	869.1	869.2	869.4	869.6	870.0	870.1
Lake Five	Richfield, Village of	975.5	975.8	976.1	976.3	*	976.9
Mueller Lake	Entire shoreline	1035.4	1035.8	1036.1	1036.3	*	1036.9

¹Elevations reflect backwater effects from Bark River

*Not calculated for this Flood Risk Project

**Table 11: Stream Gage Information used to Determine Discharges
[Not Applicable to this Flood Risk Project]**

5.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of flooding from the sources studied were carried out to provide estimates of the elevations of floods of the selected recurrence intervals. Base flood elevations on the FIRM represent the elevations shown on the Flood Profiles and in the Floodway Data tables in the FIS Report. Rounded whole-foot elevations may be shown on the FIRM in coastal areas, areas of ponding, and other areas with static base flood elevations. These whole-foot elevations may not exactly reflect the elevations derived from the hydraulic analyses. For construction and/or floodplain management purposes, users are cautioned to use the flood elevation data presented in this FIS Report in conjunction with the data shown on the FIRM. The hydraulic analyses for this FIS were based on unobstructed flow. The flood elevations shown on the profiles are thus considered valid only if hydraulic structures remain unobstructed, operate properly, and do not fail.

For streams for which hydraulic analyses were based on cross sections, locations of selected cross sections are shown on the Flood Profiles (Exhibit 1). For stream segments for which a floodway was computed (Section 6.3), selected cross sections are also listed in Table 23, "Floodway Data."

A summary of the methods used in hydraulic analyses performed for this project is provided in Table 12. Roughness coefficients are provided in Table 13. Roughness coefficients are values representing the frictional resistance water experiences when passing overland or through a channel. They are used in the calculations to determine water surface elevations. Greater detail (including assumptions, analysis, and results) is available in the archived project documentation.