

# FLOOD INSURANCE STUDY



## ROCK COUNTY, WISCONSIN AND INCORPORATED AREAS VOLUME 1 OF 2

Community Name	Community Number
BELOIT, CITY OF	555544
BRODHEAD, CITY OF	550160
CLINTON, VILLAGE OF	550067
EDGERTON, CITY OF	550365
EVANSVILLE, CITY OF	550366
FOOTVILLE, VILLAGE OF	550575
JANESVILLE, CITY OF	555560
MILTON, CITY OF	550026
*ORFORDVILLE, VILLAGE OF	550369
ROCK COUNTY (UNINCORPORATED AREAS)	550363

\*No Special Flood Hazard Areas Identified



Rock County

REVISED:  
SEPTEMBER 16, 2015



Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER

55105CV001B

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FLOOD INSURANCE STUDY USERS**

Communities participating in the National Flood Insurance Program have established repositories of flood hazard data for floodplain management and flood insurance purposes. This Flood Insurance Study (FIS) report may not contain all data available within the Community Map Repository. Please contact the Community Map Repository for any additional data.

The Federal Emergency Management Agency (FEMA) may revise and republish part or all of this FIS report at any time. In addition, FEMA may revise part of this FIS report by the Letter of Map Revision process, which does not involve republication or redistribution of the FIS report. Therefore, users should consult with community officials and check the Community Map Repository to obtain the most current FIS report components.

Initial Countywide FIS Effective Date: August 19, 2008

Revised Countywide FIS Date: September 16, 2015

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**FLOOD INSURANCE STUDY  
ROCK COUNTY, WISCONSIN AND INCORPORATED AREAS**

**1.0 INTRODUCTION**

1.1 Purpose of Study

This Flood Insurance Study (FIS) revises and updates information on the existence and severity of flood hazards in the geographic area of Rock County, including the Cities of Beloit, Brodhead, Edgerton, Evansville, Janesville and Milton; the Villages of Clinton, Footville and Orfordville; and the unincorporated areas of Rock County (referred to collectively herein as Rock County).

Please note that the City of Edgerton is geographically located in Rock and Dane Counties. Also, the City of Brodhead is geographically located in Rock and Green Counties. The land area and flood-hazard information, if any, for the portions of the Villages of Edgerton and Brodhead that lie in Rock County are included in this FIS report. For flood-hazard information in Dane or Green Counties, see separately published FIS report and Flood Insurance Rate Map (FIRM).

Please note that here are no special flood hazard areas identified in the Village of Orfordville.

This FIS aids in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. This FIS has developed flood risk data for various areas of the county that will be used to establish actuarial flood insurance rates. This information will also be used by the communities of Rock County to update existing floodplain regulations as part of the Regular Phase of the National Flood Insurance Program (NFIP), and will also be used by local and regional planners to further promote sound land use and floodplain development. Minimum floodplain management requirements for participation in the NFIP are set forth in the Code of Federal Regulations at 44 CFR, 60.3.

In some states or communities, floodplain management criteria or regulations may exist that are more restrictive or comprehensive than the minimum Federal requirements. In such cases, the more restrictive criteria take precedence and the State (or other jurisdictional agency) will be able to explain them.

1.2 Authority and Acknowledgments

The sources of authority for this FIS are the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973.

### **Pre-Countywide Analyses**

The hydrologic and hydraulic analyses for the following streams were done by Owen Ayres and Associates, Inc., for FEMA under Contract H-3805 completed in May 1979: Yahara River, Otter Creek, Marsh Creek, Sugar River, Turtle Creek, Unnamed Tributary 1 and 2 to Turtle Creek, Spring Brook (Janesville) and Bass Creek from Footville Road to its mouth. The hydrologic analyses for the Rock River, Raccoon Creek, Unnamed Tributary 1 & 2 to Raccoon Creek, East Fork Raccoon Creek, Unnamed Tributary to East Fork Raccoon Creek done under this same contract was incorporated into the new 2006 hydraulic study.

The hydrologic and hydraulic analyses for Allen Creek above the Lake Leota Dam were performed by the U.S. Department of Agriculture, Soil Conservation Service (SCS), as reported in a “Flood Hazard Study, City of Evansville, Rock County, Wisconsin” in January 1984. The hydrologic analysis done in that study was used in the 2006 hydraulic study.

### **Initial Countywide Analyses**

For the original countywide FIS in 2008, the hydrologic analyses for Saunders Creek, Fisher Creek, Markham Creek, Greenbelt Tributaries 1-5, Morningside Tributary, Blackhawk Creek, Unnamed Tributary to Blackhawk Creek, Unnamed Tributary 1 to Rock River, Spring Brook (Beloit), Unnamed Tributary in Turtle Township, Bass Creek above Footville Road, Lenigan Creek, Lenigan Creek Tributaries 1 & 2, Unnamed Clinton Tributary, Unnamed Tributary in Union Township, Philhower Road Tributary, Unnamed Tributary 2 to Rock River, and Milton Ditch was performed by Wisconsin DNR. The hydraulic analyses for these same streams in addition to Rock River, Raccoon Creek, Unnamed Tributaries 1 & 2 to Raccoon Creek, East Fork Raccoon Creek, Unnamed Tributary to East Fork Raccoon Creek was performed by Gannett Fleming, for the Federal Emergency Management Agency (FEMA), under Contract No. NMF00000316. Mapping done countywide was performed by Gannett Fleming. This work was completed in May 2006.

### **Revised Countywide Analyses**

This countywide FIS includes new hydraulic analyses for Bass Creek below County Highway D and new hydraulic and hydrologic analyses for Blackhawk Creek, Greenbelt Tributaries 1-5, Morningside Tributary, Rock River, Saunders Creek, Spring Brook (Beloit), Spring Brook (Janesville), Tributary to Fisher Creek, Turtle Creek, Unnamed Tributary 1 to Turtle Creek, Unnamed Tributary 2 to Turtle Creek, Unnamed Tributary to Blackhawk Creek and Yahara River. The analyses for this study were performed by Wisconsin DNR for FEMA under Mapping Activity Statement Contract No. WI-10-01. This study was completed in November 2012.

The coordinate system used for the production of the FIRM is Universal Transverse Mercator (UTM), North American Datum of 1983 (NAD 83), GRS 80 spheroid. Differences in the datum and spheroid used in the production of FIRMs for adjacent counties may result in slight positional differences in map features at the county boundaries. These differences do not affect the accuracy of information shown on the FIRM.

### 1.3 Coordination

The initial Consultation Coordination Officer (CCO) meetings for this countywide FIS were held on February 1, 2011 and two on February 7, 2011, and attended by representatives of FEMA, WDNR and community officials. These meetings are held to explain the nature and purpose of a FIS and to identify the streams to be studied by detailed methods. A final CCO meeting was held on October 29, 2013 with representatives from FEMA, the communities and WDNR to review the results of the study. All problems raised at that meeting have been addressed in this study.

For the 2008 countywide FIS, an initial meeting was held on April 8, 2004 and attended by representatives of FEMA, WDNR and community officials. A final CCO meeting was held on December 6, 2006 with representatives from the communities and WDNR to review the results of the study.

The dates of the initial and final CCO meetings held for previous FIS's for the incorporated communities within Rock County, are shown below.

Beloit, City of:

Streams requiring detailed and approximate study were identified at an initial coordination and time and cost meeting attended by representatives of FEMA, the Study Contractor, and the City of Beloit on February 2, 1977. Base maps were obtained from the U.S. Army Corps of Engineers (COE), Rock Island District; and the City of Beloit. Flood elevations, flood boundaries, and floodway delineations were determined by the Wisconsin Department of Natural Resources, the Rock Island District COE, and the U.S. Geological Survey (USGS).

On October 16, 1980, the results of the work by the Study Contractor were reviewed and accepted at a final coordination meeting attended by representatives of FEMA, the Study Contractor, and the City of Beloit.

Edgerton, City of: Streams requiring detailed study were identified at a meeting attended by representatives of the Study Contractor, FEMA, the Wisconsin Department of Natural Resources and representatives of the City of Edgerton on June 6, 1979. Results of the hydrologic analyses were coordinated with the Wisconsin Department of Natural Resources, Flood Plain Management Section, and the Engineering Department of the City of Edgerton.

On March 31, 1981, the results of the study were reviewed and accepted at a final meeting attended by representatives of the Study Contractor, FEMA and community officials.

Evansville, City of: On February 21, 1983, the results of this study were reviewed and accepted at a final coordination meeting attended by representatives of the community and FEMA.

Janesville, City of: At a time and cost meeting on August 6, 1980 with representatives of the Wisconsin Department of Natural Resources (WDNR), FEMA, the Study Contractor, and the City Engineer, the limits of detailed and approximate study were determined. The hydrology and hydraulics for the Rock River and Spring Brook and the floodway were coordinated with the WDNR.

On January 18, 1984, the results of the work by the Study Contractor were reviewed and accepted at a final coordination meeting attended by representatives of the Study Contractor, FEMA, and the community.

Rock County  
(Unincorporated Areas): A search for basic data was made at all levels of government. County officials, local residents, the U.S. Army Corps of Engineers (COE), the U.S. Geological Survey (USGS) and the State of Wisconsin were contacted to obtain data on land use and other available data within the county.

Discharges were coordinated with the COE, the USGS, and the States of Illinois and Wisconsin.

An initial coordination meeting was held on February 21, 1975, to define study procedures and establish detailed study areas. This meeting was attended by representatives of FEMA, the State of Wisconsin, Rock County, and the Study Contractor.

During the course of the work by the Study Contractor, flood elevations, flood boundaries, and floodway delineations were reviewed with community officials and with officials from the Wisconsin Department of Natural Resources.

On October 14, 1980, the results of the work by the Study Contractor were reviewed and accepted at a final coordination meeting attended by personnel of FEMA, the State of Wisconsin, the county, and the Study Contractor.

## 2.0 AREA STUDIED

### 2.1 Scope of Study

This FIS covers the geographic area of Rock County, Wisconsin, including the incorporated communities listed in Section 1.1. The areas studied by detailed methods were selected with priority given to all known flood hazard areas and areas of projected development and proposed construction.

The following flooding sources listed in Table 1 were newly studied or revised by detailed methods:

Table 1 – Flooding Sources Studied by Detailed Methods for this FIS

<u>Stream</u>	<u>Limits of Detailed Study</u>
Bass Creek	From its mouth to County Highway D
Blackhawk Creek	From its confluence with Spring Brook (Janesville) to approximately 500 feet upstream of S. Milton Shopiere Road
Greenbelt Tributary 1	From its mouth at Blackhawk Creek to Sandhill Drive
Greenbelt Tributary 2	From its mouth at Greenbelt Tributary 4 to approximately 950 feet upstream of E. Milwaukee Street

Table 1 – Flooding Sources Studied by Detailed Methods for this FIS - continued

<u>Stream</u>	<u>Limits of Detailed Study</u>
Greenbelt Tributary 3	From its mouth at Greenbelt Tributary 1 to approximately 2400 feet upstream of Saratoga Drive
Greenbelt Tributary 4	From its mouth at Greenbelt Tributary 1 to approximately 1300 feet upstream of County Highway A
Greenbelt Tributary 5	From its mouth at Greenbelt Tributary 4 to approximately 1200 feet upstream of Highway 14
Morningside Tributary	From its mouth at Spring Brook (Janesville) to approximately 200 feet north of Blue Wing Court at N. Wright Road
Rock River	Its entire length within Rock County
Saunders Creek	Its entire length within Rock County
Spring Brook (Beloit)	From its mouth at Turtle Creek to approximately 50 feet upstream of State Highway 140
Spring Brook (Janesville)	From its mouth at the Rock River to the confluence with Blackhawk Creek
Tributary to Fisher Creek	From its mouth at Fisher Creek to County Highway A
Turtle Creek	Its entire length within Rock County
Unnamed Tributary 1 to Turtle Creek	From its mouth at Turtle Creek to approximately 275 feet upstream of E. Elm Drive
Unnamed Tributary 2 to Turtle Creek	From its mouth at Turtle Creek to County Highway J
Unnamed Tributary to Blackhawk Creek	From its mouth at Blackhawk Creek to N. Tarrant Road

Table 1 – Flooding Sources Studied by Detailed Methods for this FIS - continued

<u>Stream</u>	<u>Limits of Detailed Study</u>
Yahara River	Its entire length within Rock County

The following flooding sources in Table 2 were previously studied by detailed methods and not revised for this countywide FIS:

Table 2 – Flooding Sources Previously Studied by Detailed Methods

<u>Stream</u>	<u>Limits of Detailed Study</u>
Allen Creek	From 450 feet below State Highway 213 to approximately 6500 feet above City of Evansville corporate limits
Bass Creek	From County Highway D to W. Dorner Road
East Fork Raccoon Creek	From the state boundary to Spring Creek Road
Fisher Creek	From its mouth at the Rock River to approximately 2100 feet above N. Little Road
Markham Creek	From its mouth at the Rock River to approximately 2200 feet upstream of W. Hanover Road
Marsh Creek	From its mouth at the Rock River to County Highway H
Otter Creek	From the county boundary to Bowers Road
Raccoon Creek	From the downstream county boundary to State Highway 81
Sugar River	Its entire length in Rock County
Unnamed Tributary 1 to Raccoon Creek	From its mouth at Raccoon Creek to Beloit-Newark Road

Table 2 – Flooding Sources Previously Studied by Detailed Methods - continued

<u>Stream</u>	<u>Limits of Detailed Study</u>
Unnamed Tributary 1 to Rock River	From its mouth at the Rock River to County Highway G
Unnamed Tributary 2 to Raccoon Creek	From its mouth at Unnamed Tributary 1 to Raccoon Creek to Beloit-Newark Road
Unnamed Tributary East Fork Raccoon Creek	From its mouth at East Fork Raccoon Creek to Beloit-Newark Road
Unnamed Tributary in Turtle Township	From the state boundary to approximately 400 feet below S. Clinton Corners Road

Approximate analyses were used to study those areas having a low development potential or minimal flood hazards. The scope and methods of study were proposed to, and agreed upon, by FEMA and WDNR.

Streams studied by approximate methods are: Allen Creek and tributaries, Badfish Creek and tributaries, Bass Creek and tributaries, Dry Creek and tributary, East Fork Raccoon Creek and tributary, Frog Pond Creek, Galloway Creek and tributary, Gibbs Creek and tributary, Lenigan Creek and tributaries, Little Turtle Creek and tributaries, Markham Creek, Marsh Creek, Milton Ditch, Norwegian Creek, Otter Creek and tributaries, Philhower Road Tributary, Raccoon Creek and tributaries, Spring Brook, Spring Creek, Stevens Creek and tributary, Swan Creek, Taylor Creek and tributaries, Unnamed Tributary 1 to Turtle Creek, Unnamed Clinton Tributary, Unnamed Clinton Tributary Southern Branch, Unnamed Tributary 2 to Rock River, Unnamed Tributary in Union Township, Willow Creek and tributary.

Approximate analyses were used to study those areas having low development potential or minimal flood hazards. This was done by approximate engineering analysis using Rock County’s 2010 and 2011 terrain data. These approximated elevations were then laid over that terrain data for a revised flood boundary.

This countywide FIS also incorporates the determination of letters issued by FEMA resulting in map changes (Letters of Map Change, or LOMCs) as shown in Table 3. All Letters of Map Revision (LOMRs) and Letters of Map Amendment (LOMAs) incorporated in this study are summarized in the Summary of Map Actions (SOMA) associated with this FIS update. Copies of the SOMA may be obtained from the Community Map Repository.

Table 3 – Letters of Map Change

<u>Community Identifier</u>	<u>Flooding Source</u>	<u>Case Number</u>	<u>Date Issued</u>	<u>Type</u>
Rock County	Unnamed Tributary To Allen Creek	12-05-1647P	7/11/2012	LOMR
Rock County	Little Turtle Creek	08-05-4045P	9/11/2009	LOMR

## 2.2 Community Description

Rock County, located in south-central Wisconsin, is bordered on the west by Green County, on the north by Dane and Jefferson Counties, on the east by Walworth County, and on the south by Winnebago and Boone Counties in Illinois. Rock County includes the incorporated areas of Brodhead, Orfordville, Footville, Evansville, Beloit, Janesville, Edgerton, Clinton, and Milton. Rock County's present boundaries were established in 1838. Prior to 1836 the county was a portion of Milwaukee County. Rock County derived its name from the Rock River which the French named “Riviere de la Roche”.

Rock County has experienced a general increase in population since 1850 when there were 20,750 residents. By 1880 there were 43,220 residents, 113,913 by 1960, 131,970 by 1970, 140,103 in 1990, 152,307 in 2000 and 160,331 residents in 2010. Interstate Highway 90 is the major north-south highway.

Joseph Thiebeau, a French-Canadian fur trader, was the first white man to come to the county in 1824. The Rock River valley was under control of a number of Indian tribes until the end of the Black Hawk War in 1832. Following the end of Indian control, permanent settlement began to appear with all the present towns being organized by 1849. Wheat was the first stable crop to be grown in the county; however, due to disease and soil depletion the wheat production decreased, with increased acreage being devoted to oats, hay, and corn. The main farm enterprise in Rock County is dairying with the raising of beef cattle becoming increasingly important. Important crops in the county are field and sweet corn, hay, oats, soybeans, and peas. In addition to farming, Janesville and Beloit have become manufacturing centers for machinery and automobiles.

The climate of Rock County is classified as continental, with long cold winters and warm humid summers. The county has recorded an average annual precipitation of 33 inches, which includes a moderate winter snowfall. Approximately 60 percent of this precipitation occurs within the five month period from May to September. Thunderstorms occur on the average of 40 times a year. The total annual snowfall has ranged from less than 10 inches to more than 65 inches. Prevailing winds are from the south in the summer and from the west during the winter months. The average wind speed during the windiest months

(March, April, and November) is 12 miles per hour. The extreme temperatures recorded are -27 degrees Fahrenheit (F.) and 100 degrees F., exhibiting extreme seasonal variations.

Rock County is underlain entirely by sedimentary sandstones and limestone. The county is divided into three physiographic regions. The northern region is composed of hills and kettles, the result of glacial deposition. The central and southeastern portions of the county are typified by a flat glacial outwash plain. The southwestern corner of the county experienced less glacial activity, which is evidenced by deep valleys cut in sandstone ridges. A majority of the county's river and stream valleys are filled with thick deposits of alluvial sand and gravel. A majority of the soils in Rock County are a result of glacial activity. The county is generally typified by a surface layer of silt loam or loam underlain by glacial till or stratified sand and gravel outwash materials. The exception is the southwest region where shallow surface layers of loam or sandy loam overlay the bedrock

Rock County is drained entirely by the Rock River and its tributaries. The Rock River's major tributaries are the Yahara River, the Sugar River, Raccoon Creek and Turtle Creek. The Yahara River and its major tributary, Badfish Creek, drain the northwestern corner of the county along Allen and Marsh Creeks. The Sugar River, Raccoon Creek, and their tributaries drain the southwestern region of the county. Raccoon Creek confluences with the Sugar River in Illinois which in turn empties into the Rock River. The southeastern portion of the county is drained by Turtle Creek, which confluences with the Rock River in South Beloit.

The floodplains include residential, commercial, industrial, recreational, and agricultural developments. The river floodplains, in general, follow the natural valley limits.

### 2.3 Principal Flood Problems

The streams and rivers in Rock County are subject to flooding throughout the year; however, most flooding has occurred in the spring. These spring floods, the result of a combined snowmelt with moderate amounts of precipitation, can cause flooding which is aggravated due to ice jams throughout the stream reaches. March is the most common month for peak annual discharges based on USGS stream flow records. Even though early spring is the most common time for flooding, the most severe floods on record occurred on Turtle Creek in late April 1973 and countywide in August 2007. Another significant flooding event, particularly on the Rock River, occurred in June 2008.



Figure 1. Flood Scenes on Rock River from June 2008 in Janesville



Figure 2. Flood Scenes on Rock River from June 2008 in Janesville



Figure 3. Flood Scenes on Rock River from June 2008 in Janesville



Figure 4. Flood Scenes on Rock River from June 2008 in Beloit

## 2.4 Flood Protection Measures

There are a number of dams on the rivers and creeks in Rock County; however, none of these dams were designed as flood control structures. The Rock Island COE has published a Phase I General Design Memorandum for a flood damage reduction project on Turtle Creek. That project was terminated due to a lack of economic justification. Rock County originally adopted a state approved floodplain zoning ordinance in November 1974. This Flood Insurance Study is expected to provide data that will be used to update the existing zoning ordinance. A levee system is located on the southwest flood plain of the Sugar River from the State Boundary to about one mile upstream of Nelson Road and on the northeast side from about two miles downstream of Nelson Road to about one mile upstream of Nelson Road. These levees will not provide any protection from the 100-year flood.

## 3.0 **ENGINEERING METHODS**

For the flooding sources studied in detail 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 once on the average during any 10-, 25-, 50-, 100-, or 500-year period (recurrence interval) have been selected as having special significance for flood plain management and for flood insurance rates. These events, commonly termed the 10-, 25-, 50-, 100-, and 500-year floods, have a 10-, 4-, 2-, 1-, and 0.2-percent 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 1-percent-annual-chance in any 50-year period is approximately 40 percent (4 in 10), and, 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.

### 3.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish peak discharge-frequency relationships for each flooding source studied by detailed methods affecting the community.

#### **Pre-Countywide Analyses**

Discharge values for Otter, Marsh, and Bass Creek downstream of S. Footville Road were determined by procedures set forth in Project Formulation Hydrology,

Technical Release No. 20 (TR-20). Supporting computations were made using Conger's method and a peak discharge-drainage area comparison to Turtle Creek.

Discharges for Allen Creek were computed using the TR-20 method as reported in a Flood Hazard Study for the City of Evansville, Wisconsin.

Discharges for the Sugar River are based on a statistical analysis of the USGS recording station (No. 5-4365) with a period of record from 1914 to the present, located on the left bank of the Sugar River, 1.2 miles southwest of Brodhead. The adopted discharge-frequency relationship was the result of coordination between Wisconsin and Illinois and was accepted by FEMA. Discharges for the study were based on a drainage area-discharge comparison to the Brodhead gage.

Discharges for Raccoon Creek and its two unnamed tributaries were determined by a TR-20 model. Supporting calculations were made by Conger's method and a discharge-drainage area comparison.

Discharges for the East Fork Raccoon Creek and its unnamed tributary were based on a TR-20 model. Supporting computations included a drainage area comparison to a USGS gage (No. 5-4372) with a period of record from 1958 to the present located on the unnamed tributary and Conger's method.

The hydrologic analyses for Allen Creek to establish the peak discharge relationships for floods of the 10-, 50-, 100-, and 500-year recurrence intervals were made utilizing the SCS hydrology computer program TR-20. The principal factors considered in this method are soil types, land use, slope of terrain, channel length and rainfall distribution. Four rainfalls were used in the model. Rainfall data for the 10-, 500, 100-, and 500-year return frequency storms were obtained from the U.S. Weather Bureau Technical Paper No. 40. The resulting flows computed in the TR-20 model were compared to U.S. Geological Survey (USGS) gauged watersheds of similar characteristics and were determined to match reasonably well.

### **Initial Countywide Analyses**

The hydrologic analyses for Bass Creek upstream of S. Footville Road, Fisher Creek, Markham Creek, Unnamed Tributary 1 to Rock River and Unnamed Tributary in Turtle Township were done using the Wisconsin DNR Hydrology Tool extension in ArcView 3.2 and HEC-HMS 2.2.2.

For these streams, the loss rate method/abstraction used was SCS CN. CN data was based on WiscLand grid. The SCS Unit hydrograph/TR-55 flow path segment method was used. Channel properties were estimated from the 2000 digital terrain model (DTM). Manning's N values were derived from the 2000 orthophoto. Muskingum Cunge was used for routing and channels were based off of the 2000 DTM.

Rainfall distribution curve was developed by SEWRPC for all southeast Wisconsin Counties. Rock County was on the fringe of this region, but it was determined that the curve still applied as the curve included gauge data from Rock County.

24-, 12-, 6- and 3-hour storm durations were run in HEC-HMS to determine the storm with the highest peak flow. The 24-, 12-, 6- and 3-hour rainfall for 10-, 50- and 100-year storms were obtained from the U.S. Weather Bureau Technical Paper No. 40. The 500-year rainfall total was extrapolated based on the previous totals.

There was a storm on August 5, 1998 that approximately measured as a 1 percent annual chance rainfall event. This event was entered into the HEC-HMS models to compare the flow to the 1 percent annual chance peak flow. The values compared favorably.

The stream gauge on a tributary to Fisher Creek (#5430403) was used to verify Fisher Creek's peak value.

### **Revised Countywide Analyses**

The methods used to determine peak discharge-frequency relationships for the flooding sources newly studied in detail or restudied as part of this countywide FIS are described below.

A new hydrologic analysis was performed by the Wisconsin Department of Natural Resources (WDNR) in 2012 for the Spring Brook (Janesville) watershed (Spring Brook (Janesville), Blackhawk Creek, Morningside Tributary, Greenbelt Tributaries 1-5, Unnamed Tributary to Blackhawk Creek), Tributary to Fisher Creek, Rock River, Saunders Creek, Spring Brook (Beloit), Yahara River and the Turtle Creek watershed (Turtle Creek, Unnamed Tributaries 1 and 2 to Turtle Creek.) Discharges were computed using the Hydrologic Engineering Center's *Hydrologic Modeling System (HEC-HMS)* computer software, version 3.5.0 (Reference 62). For each subbasin, runoff Curve Numbers (CNs) were estimated using SSURGO soils data and the WISCLAND landuse data (1992). Times of concentration were estimated using the TR-55 flowpath segment method. The rainfall distribution used was developed by the WDNR and is based on large storms in the State of Wisconsin from 1975 to 2003. Flood storage was taken into account in numerous locations along these streams. The reaches modeled as storage reservoirs are regulated wetlands. It is assumed that no major construction or filling will occur in these areas that would reduce the amount of available storage volume.

Some reaches in these studies were considered non-contributing due to the volume of depressions being able to contain a 0.2 percent rainfall event without contributing any runoff.

Where available, surveyed high water marks (HWMs) from the June 2008 event were used to calibrate the HEC-HMS models. Precipitation data was recorded and entered into the models for the events of June, 2008 at National Climatic Data Center (NCDC) precipitation gages. An Inverse Distance weighting method was chosen for the precipitation method (Met Model “June 2008”). This method computes the precipitation hyetograph for each subbasin using nearby gages and weights them according to the distance to each gage. CNs were adjusted for the 2008 run until the appropriate discharges were found to match the surveyed HWMs coded into the hydraulic models. The design discharges were then determined by running the design WI distribution storms over the basin model with adjusted CNs.

There are multiple USGS stream gages in the Turtle Creek watershed that recorded the August 2007 flood event. There are multiple rainfall gages surrounding the watershed that recorded this same event. Observed rainfall and streamflow data were entered into the model for the month of August. The basin model was then calibrated to match the observed hydrographs and/or the lake stages of the lakes in the watershed by adjusting the CNs. Using the calibrated basin model, theoretical design storms were ran at various durations.

A new hydrologic analysis was performed by the WDNR in 2010 for the main stem of the Rock River within Wisconsin. Discharges were computed using the Hydrologic Engineering Center’s *Hydrologic Modeling System (HEC-HMS)* computer software, version 3.1.0 (Reference 63). For each subbasin, runoff CNs were estimated using SSURGO soils data and the WISCLAND landuse data (1992). Times of concentration were estimated using the TR-55 flowpath segment method. The rainfall distribution used was developed by the WDNR and is based on large storms in the State of Wisconsin. Flood storage was taken into account at Lake Koshkonong, Sinissippi Lake, and the Horicon Marsh. It is assumed that no major construction or filling will occur in these areas that would reduce the amount of available storage volume. There are five USGS stream gages along the Rock River within the project area that recorded the record-breaking flood of June, 2008. Observed rainfall and streamflow data were entered into the model for the month of June. The basin model was then calibrated to match the observed hydrographs by adjusting CNs and SCS lag times. The USGS had updated the Log Pearson Type III (LPIII) statistical analyses at the gages to reflect the 2008 event. Using the calibrated basin model, theoretical design storms were ran at various durations. The duration storm that most closely matches the revised LPIII values at the gages was chosen to represent the 10-, 2-, 1-, and 0.2-percent annual chance peak discharges.

A hydrologic evaluation of the Unnamed Tributary to Allen Creek was completed using the synthetic hydrograph method from HEC-HMS. Results were checked against published flow rates on similar streams in the County.

Peak discharge-drainage area relationships for Rock County are shown in Table 4.

Table 4 - Summary of Discharges

<u>Flooding Source and Location</u>	<u>Drainage Area (square miles)</u>	<u>Peak Discharges (cubic feet per second)</u>				
		<u>10-Percent Annual Chance</u>	<u>4-Percent Annual Chance</u>	<u>2-Percent Annual Chance</u>	<u>1-Percent Annual Chance</u>	<u>0.2-Percent Annual Chance</u>
<b>ALLEN CREEK</b>						
Downstream of North State Highway 213	*	795	*	1,340	1,600	2,300
Approximately 1 mile above North State Highway 213	*	765	*	1,290	1,545	2,230
Approximately 2.3 miles above North State Highway 213	*	730	*	1,230	1,475	2,150
Halfway between East Church Street and Water Street	*	675	*	1,145	1,375	2,050
At Lake Leota Dam	*	590	*	1,010	1,215	1,770
<b>BASS CREEK</b>						
At mouth	65.9	4,350	6,000	7,400	9,000	13,000
At State Highway 11	14.0	2,225	*	3,537	4,362	6,283
At Old State Highway 11	13.3	2,169	*	3,439	4,240	6,097
At Dorner Road	9.3	1,705	*	2,649	3,234	4,553
<b>BLACKHAWK CREEK</b>						
At Highway 14	36.7	2,263	3,230	3,728	4,402	5,918
At confluence with Unnamed Tributary to Blackhawk Creek	33.2	2,050	2,923	3,372	3,978	5,340
1/2 mile upstream of S. Milton-Shopiere Road	12.3	732	1,029	1,183	1,393	1,862
<b>EAST FORK RACCOON CREEK</b>						
At WI-IL state line	17.0	2,150	*	3,450	4,100	5,700
Upstream of Unnamed Tributary to East Fork Raccoon Creek	10.8	1,450	*	2,300	2,750	3,900
At Spring Creek Road	6.6	1,050	*	1,650	1,920	2,700

\*Data not available

Table 4 - Summary of Discharges - continued

<u>Flooding Source and Location</u>	<u>Drainage Area (square miles)</u>	<u>Peak Discharges (cubic feet per second)</u>				
		<u>10-Percent Annual Chance</u>	<u>4-Percent Annual Chance</u>	<u>2-Percent Annual Chance</u>	<u>1-Percent Annual Chance</u>	<u>0.2-Percent Annual Chance</u>
<b>FISHER CREEK</b>						
At mouth	5.9	861	*	1,491	1,817	2,831
Upstream of Unnamed Trib	4.0	621	*	1,047	1,270	1,935
At Rockport Road	3.5	540	*	914	1,099	1,646
At State Highway 11	2.6	535	*	890	1,074	1,577
Downstream of Mineral Point Road	1.7	408	*	656	774	1,112
Upstream of Mineral Point Road	0.8	206	*	331	390	560
<b>GREENBELT TRIBUTARY 1</b>						
At confluence with Greenbelt Tributary 4	4.7	651	870	1,065	1,340	1,836
At confluence with Greenbelt Tributary 3	1.4	343	450	544	675	905
At Highway 14	0.6	131	176	215	270	369
At Sandhill Drive	0.3	51	69	85	107	147
<b>GREENBELT TRIBUTARY 2</b>						
At E. Milwaukee Street	0.9	130	198	259	346	502
Approximately 900' upstream of E. Milwaukee Street	0.9	107	142	174	218	298
<b>GREENBELT TRIBUTARY 3</b>						
At mouth	0.3	102	134	161	199	266
<b>GREENBELT TRIBUTARY 4</b>						
At confluence with Greenbelt Tributary 5	3.2	385	509	617	771	1,045
At confluence with Greenbelt Tributary 2	1.9	282	398	501	647	907
At E. Case Drive	0.9	158	208	251	313	421
1/3 mile upstream of CTH A	0.4	92	122	148	186	252
<b>GREENBELT TRIBUTARY 5</b>						
At Highway 14	1.0	91	95	98	101	106
Approximately 1200 feet upstream of Highway 14	1.0	114	151	183	229	310
<b>LITTLE TURTLE CREEK</b>						
6500 feet upstream of State Highway 67	3.8	*	*	*	582	*

\*Data not available

Table 4 - Summary of Discharges - continued

<u>Flooding Source and Location</u>	<u>Drainage Area (square miles)</u>	<u>Peak Discharges (cubic feet per second)</u>				
		<u>10- Percent Annual Chance</u>	<u>4- Percent Annual Chance</u>	<u>2- Percent Annual Chance</u>	<u>1- Percent Annual Chance</u>	<u>0.2- Percent Annual Chance</u>
<b>MARKHAM CREEK</b>						
At mouth	10.2	1,210	*	1,922	2,374	3,409
At confluence with Unnamed Tributary	8.8	1,158	*	1,811	2,230	3,187
At railroad bridge	5.8	846	*	1,315	1,620	2,288
At State Highway 11	3.8	583	*	898	1,087	1,496
At N. Willowdale Road	2.7	387	*	604	734	1,015
At Mineral Point Road	1.1	201	*	304	366	501
<b>MARSH CREEK</b>						
At mouth	30.8	1,800	*	2,900	3,470	4,900
At State Highway 187	22.0	1,550	*	2,500	2,950	4,150
<b>MORNINGSIDE TRIBUTARY</b>						
950 feet downstream of E. Milwaukee Street	5.6	422	678	815	970	1,281
950 feet upstream of Randolph Road	3.9	265	445	533	640	855
At large storm sewer outlet at Highway 14	2.4	173	278	324	384	515
At small storm sewer outlet On Wright Road at Blue Wing Pond	2.4	0	40	93	159	306
<b>OTTER CREEK</b>						
At Rock County limits	50.3	2,150	*	3,550	4,250	6,000
<b>RACCOON CREEK</b>						
At WI-IL state line	27.8	2,750	*	4,500	5,350	7,700
Approximately 1.3 miles above CTH H	16.4	1,600	*	2,600	3,150	4,400
At State Highway 81	12.1	1,400	*	2,300	2,700	3,900
<b>ROCK RIVER</b>						
At confluence with Bark R.	2,258.3	9,020	*	13,890	15,830	21,500
At State Highway 59	2,578.5	8,500	*	13,030	14,830	20,160
At Indianford Dam	2,651.0	8,570	*	13,100	14,900	20,230
At confluence with Yahara River	3,187.9	9,320	*	14,480	16,600	22,920
At Afton gage 5430500	3,353.7	9,340	*	14,580	16,760	23,610
At WI-IL state line	3,474.3	9,360	*	15,040	17,600	25,420

\*Data not available

Table 4 - Summary of Discharges - continued

<u>Flooding Source and Location</u>	<u>Drainage Area (square miles)</u>	<u>Peak Discharges (cubic feet per second)</u>				
		<u>10- Percent Annual Chance</u>	<u>4- Percent Annual Chance</u>	<u>2- Percent Annual Chance</u>	<u>1- Percent Annual Chance</u>	<u>0.2- Percent Annual Chance</u>
<b>SAUNDERS CREEK</b>						
At southern Edgerton corporate limits	41.1	968	1,294	1,605	1,953	2,947
At confluence near Stoughton Road	37.6	858	1,170	1,525	1,864	2,840
At Dane-Rock County line	26.1	578	914	1,184	1,443	2,144
<b>SPRING BROOK (BELOIT)</b>						
1/4 mile downstream of Willowbrook Road	14.6	1,380	1,676	2,143	2,622	3,751
Just downstream of S. Walker Road	6.8	911	1,227	1,532	1,913	2,663
0.6 mile upstream of S. Gustafson Road	4.6	730	958	1,168	1,416	1,926
1/4 mile upstream of S. Clinton Corners Road	3.3	604	784	943	1,138	1,541
1/6 mile downstream of State Highway 140	1.3	218	281	341	417	562
At State Highway 140	0.8	140	178	214	259	345
<b>SPRING BROOK (JANESVILLE)</b>						
900 feet downstream of Sharon Road	59.1	3,474	5,087	5,922	7,052	9,594
At E. Racine Street	50.7	2,899	4,179	4,848	5,773	7,854
At confluence with Morningside Tributary	48.1	2,772	3,989	4,627	5,481	7,391
At confluence with Greenbelt Tributary 1	42.1	2,439	3,487	4,033	4,776	6,442
<b>SUGAR RIVER</b>						
At WI-IL state line	696.0	11,400	*	20,600	2,550	3,900
Below confluence with Taylor Creek	658.0	10,800	*	19,500	24,100	36,900
Above confluence with Taylor Creek	605.0	10,500	*	18,900	23,400	35,800
<b>TRIBUTARY TO FISHER CREEK</b>						
1100 feet upstream of mouth	0.8	299	415	519	633	915
At County Highway A	0.2	78	108	136	166	237

\*Data not available

Table 4 - Summary of Discharges - continued

<u>Flooding Source and Location</u>	<u>Drainage Area (square miles)</u>	<u>Peak Discharges (cubic feet per second)</u>				
		<u>10- Percent Annual Chance</u>	<u>4- Percent Annual Chance</u>	<u>2- Percent Annual Chance</u>	<u>1- Percent Annual Chance</u>	<u>0.2- Percent Annual Chance</u>
<b>TURTLE CREEK</b>						
At confluence with Spring Brook (Beloit)	234.8	8,070	10,736	12,532	14,806	20,056
At Shopiere Road	216.1	7,724	10,308	12,017	14,174	18,971
At confluence with Unnamed Trib 1 to Turtle Creek	204.8	7,504	10,052	11,695	13,769	18,312
At tributary just downstream of S. Carvers Rock Road	187.8	7,147	9,648	11,188	13,117	17,284
At confluence with Little Turtle Creek	172.4	6,593	8,982	10,363	12,036	15,717
At confluence with Trout Lake tributary	106.4	2,762	3,589	4,081	4,681	6,010
<b>UNNAMED TRIBUTARY 1 TO RACCOON CREEK</b>						
At mouth	6.1	1,300	*	2,160	2,580	3,700
At State Highway 81	3.3	730	*	1,200	1,450	2,050
At Beloit-Newark Road	1.0	330	*	560	670	980
<b>UNNAMED TRIBUTARY 1 TO ROCK RIVER</b>						
At mouth	18.4	2,255	*	3,473	4,205	5,813
Above State Highway 51	17.9	2,232	*	3,415	4,129	5,692
At field crossing 1/4 mile above State Highway 51	17.2	2,170	*	3,308	3,992	5,492
450 feet below CTH G	16.7	2,113	*	3,214	3,876	5,331
At CTH G	15.8	2,000	*	3,038	3,662	5,036
<b>UNNAMED TRIBUTARY 1 TO TURTLE CREEK</b>						
900 feet upstream of S. Milton-Shopiere Road	6.6	708	917	1,119	1,296	1,748
200 feet upstream of E. Elm Drive	4.4	470	607	740	856	1,153
<b>UNNAMED TRIBUTARY 2 TO RACCOON CREEK</b>						
At mouth	2.4	580	*	960	1,150	1,650

\*Data not available

Table 4 - Summary of Discharges - continued

<u>Flooding Source and Location</u>	<u>Drainage Area (square miles)</u>	<u>Peak Discharges (cubic feet per second)</u>				
		<u>10- Percent Annual Chance</u>	<u>4- Percent Annual Chance</u>	<u>2- Percent Annual Chance</u>	<u>1- Percent Annual Chance</u>	<u>0.2- Percent Annual Chance</u>
<b>UNNAMED TRIBUTARY 2 TO TURTLE CREEK</b>						
1500 feet downstream of railroad crossing	3.3	551	738	920	1,153	1,606
Just upstream of I-43	1.4	314	419	519	647	894
Just upstream of CTH J	0.9	240	314	384	474	642
<b>UNNAMED TRIBUTARY IN TURTLE TOWNSHIP</b>						
At WI-IL state line	6.5	643	*	1,051	1,307	1,908
At East CTH P	5.8	604	*	990	1,230	1,781
At confluence with tributary	4.8	537	*	859	1,057	1,518
At confluence with tributary	4.0	490	*	762	925	1,313
At East CTH P	3.3	424	*	643	795	1,126
At East CTH P	1.4	239	*	376	455	630
At S. Clinton Corners Road	0.6	117	*	178	214	293
<b>UNNAMED TRIBUTARY TO ALLEN CREEK</b>						
At Croft Road	3.0	544	*	976	1,248	2,345
At Confluence with East Unnamed Tributary	2.8	524	*	944	1,205	2,325
At Confluence with West Unnamed Tributary	2.4	503	*	907	1,166	2,391
At Porter Road	0.8	108	*	218	304	1,038
<b>UNNAMED TRIBUTARY TO BLACKHAWK CREEK</b>						
1200 feet upstream of N. Milton-Shopiere Road	17.6	1,135	1,630	1,883	2,227	2,999
1/2 mile downstream of N. Tarrant Road	16.1	1,056	1,516	1,753	2,075	2,800
At N. Tarrant Road	13.6	922	1,317	1,520	1,795	2,411
<b>UNNAMED TRIBUTARY TO EAST FORK RACCOON CREEK</b>						
At mouth	4.8	820	*	1,310	1,550	2,200
At Beloit-Newark Road	1.6	400	*	640	760	1,060

\*Data not available

Table 4 - Summary of Discharges - continued

<u>Flooding Source and Location</u>	Drainage Area (square miles)	Peak Discharges (cubic feet per second)				
		<u>10- Percent Annual Chance</u>	<u>4- Percent Annual Chance</u>	<u>2- Percent Annual Chance</u>	<u>1- Percent Annual Chance</u>	<u>0.2- Percent Annual Chance</u>
<b>YAHARA RIVER</b>						
At confluence with Badfish Creek	470.0	2,009	3,314	1,119	1,304	1,754
At Stebbinsville Dam	389.0	927	1,455	1,416	1,737	2,502
At confluence with tributary near CTH N	385.5	914	1,383	1,713	2,115	3,086
At Dunkirk Dam	372.3	786	1,165	1,833	2,300	3,429
At Fourth Street Bridge in City of Stoughton	366.9	720	969	4,280	5,360	8,099

The City of Janesville Flood Insurance Study Hydrologic Summary produced by Owen Ayers & Associates in 1981 has flow values for portions of Fisher Creek, Markham Creek, Morningside Tributary and Greenbelt Tributaries 1-5 because they were previously approximate zones. These values compared favorably to the HEC-HMS peak flow values attained in 2005.

### 3.2 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. Users should be aware that flood elevations shown on the Flood Insurance Rate Map (FIRM) represent rounded whole-foot elevations and may not exactly reflect the elevations shown on the Flood Profiles or in the Floodway Data Table in the FIS report. Flood elevations shown on the FIRM are primarily intended for flood insurance rating purposes. 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.

#### **Pre-Countywide Analyses**

The starting water-surface elevations for Sugar River match the elevations at the upstream limit of the Winnebago County, Illinois, Flood Insurance Study.

The hydraulic analyses for Allen Creek were taken from the Flood Hazard Study for the City of Evansville. The flood profiles taken from the report were computed using the SCS WSP-2 computer program.

Cross section data for Allen Creek were obtained from field survey measurements. All bridges and culverts were field surveyed to obtain elevation data and structural geometry.

Comparing the 100-year flood elevation with the contour maps, it was discovered that flow would occur over the Chicago and North Western railroad tracks toward the east in an area downstream of Main Street. The water that flows over the tracks does not re-enter Allen Creek until it joins the flow from a drainage basin from the east and enters Allen Creek south of the city. The divided flow was subtracted from the main flow in the channel.

### **Initial Countywide Analyses**

Detailed studies for Fisher Creek, Markham Creek, Unnamed Trib 1 to Rock River, Unnamed Trib in Turtle Township, and Bass Creek above S. Footville Road were done by Gannett Fleming using HEC-RAS 3.1.3. Distances between all cross sections were obtained by calculating the distance along the stream centerline digitized from the 2000 Rock County orthophoto. The channel and overbank roughness factors (Manning's "n") for these studies were assigned on the basis of inspection of the 2000 Rock County orthophoto. Floodplain delineations were created by Gannett Fleming using year 2000 Rock County digital terrain data and ArcGIS 9.1.

Redelineated studies for Raccoon Creek, East Fork Raccoon Creek, Unnamed Tribs 1 & 2 to Raccoon Creek, Unnamed Trib to East Fork Raccoon Creek and Allen Creek below Lake Leota Dam were done by Gannett Fleming using HEC-RAS 3.1.3. All studies that were redelineated used the previous model's "n" values. All bridges in the existing model were verified as the current existing bridges and the 2000 orthophoto was inspected to search for new bridges since the model was created. If the DOT had plans for a new bridge, it was entered into the HEC-RAS 3.1.3 model and re-run to get new water surface elevations. Floodplain delineations were created by Gannett Fleming using year 2000 Rock County digital terrain data and ArcGIS 9.1.

There were no new hydraulic models created for; Otter Creek, Marsh Creek, Turtle Creek, Sugar River and upstream of the Lake Leota Dam on Allen Creek. The old FIS profile was taken as is and those elevations were mapped on new terrain data. This was done largely for the fact that the original model could not be located on most of these. On the few that an original model could be found, complications including matching the cross sections to new terrain and time constraints were used as the reason why the model was not updated.

The 10-year frequency water surface of the Rock River was used as the starting water surface for the following studies: Unnamed Trib. 1 to Rock River, Markham Creek and Fisher Creek.

Starting water surface elevation for Unnamed Trib. in Turtle Township was done by normal depth calculation.

## Revised Countywide Analyses

For this revision, new hydraulic models for Turtle Creek, Unnamed Tribs 1 & 2 to Turtle Creek, Spring Brook (Beloit) from Clinton Corners Road to STH 140, Spring Brook (Janesville), Blackhawk Creek, Greenbelt Tribs 1-5 in the City of Janesville, Morningside Tributary, a tributary to Fisher Creek above Mineral Point Avenue, Bass Creek below CTH D, and the Yahara River were developed by MSA Professional Services using HEC-RAS v4.1.0 (Reference 64). Cross sections were extracted from 5-foot DEM data produced by the Wisconsin DNR and supplemented with field surveyed channel data. All bridges and culverts were field surveyed to obtain elevation data and structural geometry. Channel surveys account for the removal of the Fulton Dam and Stebbinsville Dam on the Yahara River. Cross sectional data extraction was performed with ArcGIS 10.0 and the ACOE GeoRAS 10 extension. All bridges and culverts were field surveyed to obtain elevation data and structural geometry. Manning's "n" values were determined by field observation and interpretation of land cover from year 2010 statewide NAIP orthophotos.

Due to the level of detail and lack of data on Turtle Creek, a possible overflow bypass across Creek Road to the Rock River was not studied by detailed methods. All flow was assumed to continue downstream on Turtle Creek.

The main stem of the Rock River was restudied in its entirety within Rock County. Cross sections were developed using the county's 2-foot contour accuracy terrain data from 2000. Field surveys were performed in the fall of 2009 through spring of 2010, and were incorporated into the model to represent all significant bridge and dam structures, and to get enough intermediate channel surveys to represent the river bottom. Water-surface elevations were computed using the USACE HEC-RAS v4.0 computer program (Reference 65). For the downstream boundary condition at the Wisconsin / Illinois State boundary, starting water surface elevations were taken from the Winnebago County, IL FIS dated September 6, 2006. The first modeled cross section is located approximately 120 feet downstream of Shirland Avenue and corresponds with the location of cross section BS of the Winnebago County DFIRM (panel 17201C0131D). Manning's "n" values in the overbanks were assigned based on the 2005 through 2008 NAIP orthophotos. Existing models and FIS reports were used where available to assign the N values in the channel.

Numerous high water marks were collected for the June, 2008 flood event. A June, 2008 run was performed in HEC-RAS in order to calibrate the model. In this run, discharges were taken from the June, 2008 HEC-HMS results, and high water marks were entered into the model. The channel Manning's "n" values were adjusted until the simulated water surface elevations matched the observed high water marks. The design simulation was then run based on the calibrated Manning's "n" values.

Saunders Creek, Spring Brook (Beloit) below Clinton Corners Road and Unnamed Tributary to Blackhawk Creek used previous HEC-RAS geometry but revised flows, starting water surface elevations and floodway limits. These were then re-run in HEC-RAS v4.1.0 (Reference 64).

The 10% annual chance flood elevation of the Rock River was used as the starting water surface for all profiles on the following studies: Bass Creek, Saunders Creek, Spring Brook (Janesville), Spring Brook (Beloit) and the Yahara River.

The matching frequency water surface elevation of the Rock River was used as the starting water surface for Turtle Creek.

Blackhawk Creek is an extension of Spring Brook (Janesville) in the same HEC-RAS model, so its starting water surface elevation is equal to the matching frequency water surface of Spring Brook (Janesville) at the confluence.

The 10-year frequency water surface of Spring Brook (Janesville) was used as the starting water surface for Morningside Tributary. A portion of Morningside Tributary is partially enclosed in a storm sewer system in Wright Road between USH 14 and a pond north of Blue Wing Court. The hydraulic model uses a split flow routine to distribute discharge from the pond into the storm sewer system, and excess flows are directed into Wright Road.

The matching frequency water surface elevation on Blackhawk Creek was used as the starting water surface elevation for Unnamed Trib to Blackhawk Creek.

The 10-year frequency water surface of Blackhawk Creek was used as the starting water surface for Greenbelt Trib 1. Greenbelt Tribs 1-5 were all entered in the same HEC-RAS model and Tribs 2-5 starting water surface elevations were computed by HEC-RAS at junction nodes of the receiving stream.

The 10-year frequency water surface of Turtle Creek was used as the starting water surface for Spring Brook (Beloit), Unnamed Trib 1 to Turtle Creek, and Unnamed Trib 2 to Turtle Creek.

For Unnamed Tributary to Allen Creek, all but two of the cross-sections developed for use in this study were field measured using survey equipment. Two of the cross sections were developed from County 2' contour data. The data was placed into CADD and a TIN was generated. Spatial information was then extracted in HEC-RAS format using Eagle Point software. The dimensions of all hydraulic structures encountered in the field (all of which were included in the model) were measured using a tape measure. The study included 2 culvert structures, and a weir/orifice structure at the outlet of the Porter Road pond. The starting down-stream water surface elevation was determined using the HEC-RAS slope-area method. The starting energy slope was set to 0.003 ft/ft.

Roughness factors (Manning's "n") used in the hydraulic computations were chosen by engineering judgment and were based on field observations of the streams and floodplain areas. Roughness factors for all streams studied by detailed methods are shown in Table 5, "Summary of Roughness Coefficients."

Table 5 – Summary of Roughness Coefficients

<u>Stream</u>	<u>Channel “n”</u>	<u>Overbank “n”</u>
Allen Creek	0.012 – 0.035	0.030 – 0.120
Bass Creek	0.035 – 0.050	0.050 – 0.100
Blackhawk Creek	0.035 – 0.040	0.050 – 0.100
East Fork Raccoon Creek	*	*
Fisher Creek	0.032 – 0.037	0.050 – 0.100
Greenbelt Tributary 1	0.035 – 0.045	0.050 – 0.080
Greenbelt Tributary 2	0.035 – 0.045	0.045 – 0.080
Greenbelt Tributary 3	0.030 – 0.035	0.045 – 0.050
Greenbelt Tributary 4	0.035	0.045 – 0.050
Greenbelt Tributary 5	0.035	0.045 – 0.050
Little Turtle Creek	0.040	0.055 – 0.070
Markham Creek	0.032 – 0.035	0.050 – 0.065
Marsh Creek	*	*
Morningside Tributary	0.020 – 0.035	0.035 – 0.080
Otter Creek	*	*
Raccoon Creek	*	*
Rock River	0.025 – 0.044	0.040 – 0.100
Saunders Creek	0.035 – 0.040	0.060 – 0.110
Spring Brook (Beloit)	0.035 – 0.040	0.040 – 0.140
Spring Brook (Janesville)	0.040	0.050 – 0.100
Sugar River	*	*
Tributary to Fisher Creek	0.035 – 0.045	0.050 – 0.080
Turtle Creek	0.028 – 0.035	0.050 – 0.100
Unnamed Tributary 1 to Raccoon Creek	*	*
Unnamed Tributary 1 to Rock River	0.037 – 0.040	0.055 – 0.075
Unnamed Tributary 1 to Turtle Creek	0.035	0.050
Unnamed Tributary 2 to Raccoon Creek	*	*
Unnamed Tributary 2 to Turtle Creek	0.040	0.050 – 0.080
Unnamed Tributary in Turtle Township	0.032 – 0.042	0.035 – 0.070
Unnamed Tributary to Allen Creek	0.012 – 0.04	0.055
Unnamed Tributary to Blackhawk Creek	0.040	0.055 - 0.065

\*Data not available

Table 5 – Summary of Roughness Coefficients - continued

<u>Stream</u>	<u>Channel “n”</u>	<u>Overbank “n”</u>
Unnamed Tributary to East Fork Raccoon Creek	*	*
Yahara River	0.035 – 0.045	0.050 – 0.100
*Data not available		

Locations of selected cross sections used in the hydraulic analyses are shown on the Flood Profiles (Exhibit 1). For stream segments for which a floodway was computed (Section 4.2), selected cross section locations are also shown on the FIRM (Exhibit 2).

The hydraulic analyses for this study were based on unobstructed flow. The flood elevations shown on the Flood Profiles (Exhibit 1) are thus considered valid only if hydraulic structures remain unobstructed, operate properly, and do not fail.

### 3.3 Vertical Datum

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

Flood elevations shown in this FIS report and on the FIRM are referenced to NAVD. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. Some of the data used in this revision were taken from the prior effective FIS reports and FIRMs and adjusted to NAVD88. The datum conversion factor from NGVD29 to NAVD88 in Rock County is -0.2 feet (0.0 feet NGVD29 = -0.2 feet NAVD88).

For information regarding conversion between the NGVD29 and NAVD88, visit the National Geodetic Survey website at [www.ngs.noaa.gov](http://www.ngs.noaa.gov), or contact the National Geodetic Survey at the following address:

NGS Information Services  
 NOAA, N/NGS12  
 National Geodetic Survey  
 SSMC-3, #9202  
 1315 East-West Highway  
 Silver Spring, Maryland 20910-3282  
 (301) 713-3242  
 (301) 713-4172 (fax)

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

To obtain current elevation, description, and/or location information for benchmarks shown on this map, please contact the Information Services Branch of the NGS at (301) 713-3242, or visit their website at [www.ngs.noaa.gov](http://www.ngs.noaa.gov).

## **4.0 FLOODPLAIN MANAGEMENT APPLICATIONS**

The NFIP encourages State and local governments to adopt sound floodplain management programs. Therefore, each FIS provides 1-percent-annual-chance (100-year) flood elevations and delineations of the 1- and 0.2-percent-annual-chance (500-year) floodplain boundaries and 1-percent-annual-chance floodway to assist communities in developing floodplain management measures. This information is presented on the FIRM and in many components of the FIS report, including Flood Profiles and Floodway Data Table. Users should reference the data presented in the FIS report as well as additional information that may be available at the local map repository before making flood elevation and/or floodplain boundary determinations.

### **4.1 Floodplain Boundaries**

To provide a national standard without regional discrimination, the 1-percent-annual-chance flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2-percent-annual-chance flood is employed to indicate additional areas of flood risk in the community. For each stream studied by detailed methods, the 1- and 0.2-percent-annual-chance floodplain boundaries have been delineated using the flood elevations determined at each cross section.

Between cross sections, the boundaries were delineated based on the 2011 and 2010 Rock County LiDAR as well as the 2000 Rock County digital terrain model.

The 1- and 0.2-percent-annual-chance floodplain boundaries are shown on the FIRM (Exhibit 2). On this map, the 1-percent-annual-chance floodplain boundary corresponds to the boundary of the areas of special flood hazards (Zones A and AE), and the 0.2-percent-annual-chance floodplain boundary corresponds to the boundary of areas of moderate 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.

For the streams studied by approximate methods, only the 1-percent-annual-chance floodplain boundary is shown on the FIRM (Exhibit 2).

## 4.2 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 this aspect of floodplain management. Under this concept, the area of the 1-percent-annual-chance floodplain is divided into a floodway and a floodway fringe. The floodway is the channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment so that the 1-percent-annual-chance flood can be carried without substantial increases in flood heights. Minimum Federal standards limit such increases to 1 foot, provided that hazardous velocities are not produced. The floodways in this study are presented to local agencies as minimum standards that can be adopted directly or that can be used as a basis for additional floodway studies.

The floodways presented in this FIS report and on the FIRM were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. The results of the floodway computations are tabulated for selected cross sections (See Table 6, "Floodway Data"). In cases where the floodway and 1-percent-annual-chance floodplain boundaries are either close together or collinear, only the floodway boundary is shown.

In the redelineation efforts, the floodway was not recalculated. As a result, there were areas where the previous floodway did not fit within the boundaries of the 1-percent-annual-chance floodplain. Therefore, in these areas, the floodway was reduced. Table 6, Floodway Data Table lists the water surface elevations, with and without a floodway, the mean velocity in the floodway, and the location and area at each surveyed cross section as determined by hydraulic methods. The width of the floodway depicted by the FIRM panels and the amount of reduction to fit the floodway inside the 1-percent-annual-chance floodplain, if necessary, is also listed.

The area between the floodway and 1-percent-annual-chance floodplain boundaries is termed the floodway fringe. The floodway fringe encompasses the portion of the floodplain that could be completely obstructed without increasing the water-surface elevation (WSEL) of the 1-percent-annual-chance flood more than 0.00 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to floodplain development are shown in Figure 5.

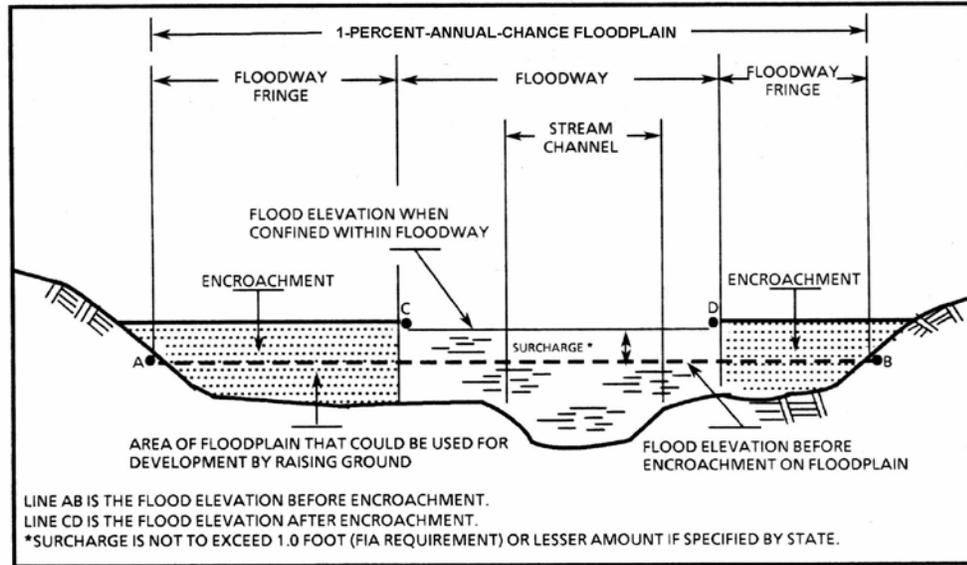


Figure 5 - Floodway Schematic

Near the mouths of streams studied in detail, floodway computations are made without regard to flood elevations on the receiving water body. Therefore, “Without Floodway” elevations presented in Table 6 for some downstream cross sections are lower than the regulatory flood elevations in that area, which must take into account the 1-percent-annual-chance flooding due to backwater.

Portions of the Turtle Creek floodway extend beyond the Rock County boundary.

Note that there is no floodway computed for Little Turtle Creek. This study is an incorporated LOMR (08-05-4045P) as shown in Table 3.

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
ALLEN CREEK								
A	279	219	1,062	3.3	870.6	870.6	870.6	0.0
B	383	129	794	4.2	870.7	870.7	870.7	0.0
C	503	165	1,365	3.7	871.3	871.3	871.3	0.0
D	551	247	845	5.9	871.3	871.3	871.3	0.0
E	5,539	713	2,037	1.0	876.2	876.2	876.2	0.0
F	9,609	679	636	2.5	878.6	878.6	878.6	0.0
G	10,307	181	441	3.3	880.2	880.2	880.2	0.0
H	12,489	571	1,213	1.3	882.1	882.1	882.1	0.0
I	13,331	904	841	1.7	882.8	882.8	882.8	0.0
J	15,404	53	4,541	6.5	888.3	888.3	888.3	0.0
K	15,788	37	6,258	5.9	889.9	889.9	889.9	0.0
L	15,818	76	5,799	4.0	891.4	891.4	891.4	0.0
M	15,941	97	4,813	3.7	891.6	891.6	891.6	0.0
N	16,602	114	593	3.6	892.2	892.2	892.2	0.0
O	16,807	213	593	2.4	892.5	892.5	892.5	0.0
P	16,868	219	584	2.4	892.5	892.5	892.5	0.0
Q	16,896	200	590	2.6	892.5	892.5	892.5	0.0
R	16,944	198	578	2.8	892.6	892.6	892.6	0.0
S	17,490	94	426	4.4	893.0	893.0	893.0	0.0
T	17,560	51	203	6.8	893.0	893.0	893.0	0.0
U	17,633	57	215	6.4	894.0	894.0	894.0	0.0
V	17,730	117	494	2.8	894.7	894.7	894.7	0.0
W	18,278	57	516	5.4	895.0	895.0	895.0	0.0
X	18,402	58	707	4.7	895.3	895.3	895.3	0.0
Y	18,423	58	3,133	3.3	897.3	897.3	897.3	0.0
Z	18,439	55	2,543	3.9	897.3	897.3	897.3	0.0

<sup>1</sup> Feet above 450 feet below STH 213/59

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b>	<b>FLOODWAY DATA</b>
	<b>AND INCORPORATED AREAS</b>	<b>ALLEN CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
ALLEN CREEK (continued)								
AA	18,612	46	1,165	1.0	897.6	897.6	897.6	0.0
AB	18,665	50	710	1.7	897.6	897.6	897.6	0.0
AC	18,698	55	746	2.9	897.6	897.6	897.6	0.0
AD	19,021	87	501	3.5	897.7	897.7	897.7	0.0
AE	19,095	36	203	6.0	897.7	897.7	897.7	0.0
AF	19,184	37	207	5.9	898.3	898.3	898.3	0.0
AG	19,192	38	327	4.4	898.6	898.6	898.6	0.0
AH	20,033	219	779	2.1	899.4	899.4	899.4	0.0
AI	20,694	67	454	3.4	899.7	899.7	899.7	0.0
AJ	20,857	50	377	3.2	899.8	899.8	899.8	0.0
AK	20,940	35	297	4.1	900.5	900.5	900.5	0.0
AL	20,960	36	185	6.9	900.5	900.5	900.5	0.0
AM	20,995	57	425	4.6	900.9	900.9	900.9	0.0
AN	21,598	262	506	2.4	901.7	901.7	901.7	0.0
AO	21,815	153	351	3.8	901.9	901.9	901.9	0.0
AP	21,829	146	346	3.8	901.9	901.9	901.9	0.0
AQ	21,867	115	263	5.5	901.9	901.9	901.9	0.0
AR	21,915	87	340	4.3	902.4	902.4	902.4	0.0
AS	23,661	245	*	*	910.8	910.8	910.8	0.0
AT	24,337	167	*	*	911.9	911.9	911.9	0.0
AU	26,420	726	*	*	913.7	913.7	913.7	0.0
AV	27,579	354	*	*	914.7	914.7	914.7	0.0
AW	30,130	770	*	*	921.3	921.3	921.3	0.0

<sup>1</sup> Feet above 450 feet below STH 213/59

\* Data not available

<b>TABLE 6</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>ROCK COUNTY, WI</b> <b>AND INCORPORATED AREAS</b>	<b>ALLEN CREEK</b>

FLOODING SOURCE		FLOODWAY				1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY (FEET)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BASS CREEK									
A	1,720	436	7,631	3.1	0	755.4	755.4	755.4	0.0
B	2,340	272	7,611	3.6	0	757.3	757.3	757.3	0.0
C	2,709	830	4,402	2.7	0	757.6	757.6	757.6	0.0
D	3,487	836	4,292	2.1	0	758.3	758.3	758.3	0.0
E	4,071	486	3,102	2.9	0	758.5	758.5	758.5	0.0
F	4,463	565	3,841	2.3	0	759.5	759.5	759.5	0.0
G	4,932	350	5,522	3.0	0	759.7	759.7	759.7	0.0
H	5,742	390	3,080	2.9	0	760.8	760.8	760.8	0.0
I	6,967	638	5,000	1.8	42	761.3	761.3	761.3	0.0
J	8,211	528	3,990	2.3	142	761.5	761.5	761.5	0.0
K	11,979	1,895	10,730	0.8	0	762.3	762.3	762.3	0.0
L	16,677	1,897	8,900	1.0	963	762.9	762.9	762.9	0.0
M	29,001	2,085	7,340	1.3	0	764.8	764.8	764.8	0.0
N	40,903	2,465	5,510	1.8	0	770.3	770.3	770.3	0.0
O	42,540	2,780	10,410	0.9	0	771.6	771.6	771.6	0.0
P	43,175	2,586	11,210	0.9	0	771.8	771.8	771.8	0.0
Q	47,621	2,327	6,190	1.6	0	773.1	773.1	773.1	0.0
R	52,184	753	3,230	3.2	0	777.6	777.6	777.6	0.0
S	56,358	885	4,450	2.3	0	782.5	782.5	782.5	0.0
T	57,558	1,372	6,520	1.6	0	785.3	785.3	785.3	0.0
U	57,815	1,339	4,100	2.5	0	785.4	785.4	785.4	0.0
V	58,430	1,453	7,090	1.5	0	786.2	786.2	786.2	0.0
W	63,827	1,537	7,280	0.5	0	787.1	787.1	787.1	0.0
X	66,370	713	1,025	3.3	0	788.3	788.3	788.3	0.0
Y	66,658	908	4,350	0.8	0	790.8	790.8	790.8	0.0
Z	67,490	1,159	3,620	1.1	0	790.8	790.8	790.8	0.0

<sup>1</sup>Feet above confluence with Rock River

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**ROCK COUNTY, WI**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**BASS CREEK**

FLOODING SOURCE		FLOODWAY				1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY (FEET)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BASS CREEK (continued)									
AA	73,763	184	1,050	4.2	0	799.2	799.2	799.2	0.0
AB	73,856	87	922	7.0	0	799.6	799.6	799.6	0.0
AC	73,870	115	732	6.0	0	800.7	800.7	800.7	0.0
AD	73,968	220	2,230	3.4	0	801.1	801.1	801.1	0.0
AE	74,371	767	5,165	1.4	0	801.5	801.5	801.5	0.0
AF	74,853	918	3,387	1.5	0	801.6	801.6	801.6	0.0
AG	75,349	539	1,414	3.4	237	801.6	801.6	801.6	0.0
AH	75,509	329	1,245	5.5	410	802.2	802.2	802.2	0.0
AI	75,788	557	3,481	1.6	216	803.2	803.2	803.2	0.0
AJ	76,382	942	2,809	2.0	0	803.6	803.6	803.6	0.0
AK	76,844	1,029	2,567	1.9	0	804.1	804.1	804.1	0.0
AL	77,449	626	2,660	3.1	0	804.7	804.7	804.7	0.0
AM	77,872	574	2,680	3.2	0	805.4	805.4	805.4	0.0
AN	78,348	584	2,063	3.3	0	806.6	806.6	806.6	0.0
AO	78,849	598	1,450	3.0	0	807.8	807.8	807.8	0.0
AP	79,372	396	2,365	2.6	0	808.8	808.8	808.8	0.0
AQ	79,847	384	1,350	3.3	0	809.4	809.4	809.4	0.0
AR	80,354	262	1,295	3.4	0	810.5	810.5	810.5	0.0
AS	80,852	157	980	6.7	0	811.6	811.6	811.6	0.0
AT	81,361	251	1,422	5.2	0	813.9	813.9	813.9	0.0

<sup>1</sup>Feet above confluence with Rock River

TABLE 6	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b> AND INCORPORATED AREAS	<b>FLOODWAY DATA</b>
		<b>BASS CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BLACKHAWK CREEK								
A	16,876	814	1,328	3.3	809.9	809.9	809.9	0.0
B	17,275	676	1,493	3.2	812.8	812.8	812.8	0.0
C	17,935	722	1,802	2.4	814.8	814.8	814.8	0.0
D	18,253	752	1,582	2.8	816.0	816.0	816.0	0.0
E	18,713	764	1,627	2.7	818.0	818.0	818.0	0.0
F	19,099	649	1,559	2.8	819.3	819.3	819.3	0.0
G	19,696	527	1,715	3.0	821.3	821.3	821.3	0.0
H	20,214	523	1,952	3.1	823.8	823.8	823.8	0.0
I	21,111	739	1,802	2.4	826.9	826.9	826.9	0.0
J	21,669	718	1,486	3.0	829.0	829.0	829.0	0.0
K	22,139	677	1,614	2.7	830.7	830.7	830.7	0.0
L	22,685	443	1,274	3.6	832.7	832.7	832.7	0.0
M	23,084	122	1,067	8.0	833.9	833.9	833.9	0.0
N	23,626	481	1,798	2.2	837.3	837.3	837.3	0.0
O	24,294	349	1,086	3.7	838.2	838.2	838.2	0.0
P	24,733	457	1,713	2.3	839.9	839.9	839.9	0.0
Q	25,284	409	1,529	2.6	841.3	841.3	841.3	0.0
R	25,437	592	1,716	2.3	841.8	841.8	841.8	0.0
S	25,887	678	1,987	2.0	843.1	843.1	843.1	0.0
T	26,280	587	1,607	2.5	843.9	843.9	843.9	0.0
U	26,652	612	1,721	2.4	844.5	844.5	844.5	0.0
V	27,109	620	1,419	2.8	845.5	845.5	845.5	0.0
W	27,931	595	1,641	2.4	847.8	847.8	847.8	0.0
X	28,889	509	1,337	3.0	849.8	849.8	849.8	0.0
Y	29,812	459	1,377	2.9	851.8	851.8	851.8	0.0
Z	30,761	367	1,697	3.7	853.6	853.6	853.6	0.0

<sup>1</sup> Feet above confluence with Rock River

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b>	<b>FLOODWAY DATA</b>
	<b>AND INCORPORATED AREAS</b>	<b>BLACKHAWK CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
BLACKHAWK CREEK (continued)								
AA	31,020	115	1,051	7.9	854.4	854.4	854.4	0.0
AB	31,489	352	1,436	2.9	857.2	857.2	857.2	0.0
AC	32,089	366	965	1.4	857.7	857.7	857.7	0.0
AD	33,137	175	425	3.3	859.9	859.9	859.9	0.0
AE	33,874	232	500	2.8	861.9	861.9	861.9	0.0
AF	34,287	223	493	2.8	862.6	862.6	862.6	0.0
AG	34,956	197	438	3.2	864.0	864.0	864.0	0.0
AH	35,451	266	523	2.7	865.1	865.1	865.1	0.0
AI	35,909	136	397	3.5	865.5	865.5	865.5	0.0
AJ	36,360	204	452	3.1	866.3	866.3	866.3	0.0
AK	36,959	180	770	1.8	871.5	871.5	871.5	0.0
AL	37,781	135	454	3.1	871.8	871.8	871.8	0.0
AM	38,446	112	363	3.8	872.9	872.9	872.9	0.0
AN	38,985	186	1,083	1.8	873.8	873.8	873.8	0.0
AO	39,542	210	483	2.9	875.0	875.0	875.0	0.0

<sup>1</sup> Feet above confluence with Rock River

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b>	<b>FLOODWAY DATA</b>
	<b>AND INCORPORATED AREAS</b>	<b>BLACKHAWK CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
EAST FORK RACCOON CREEK								
A	2,539	693	3,444	1.7	747.9	747.9	747.9	0.0
B	4,235	370	1,187	3.8	749.5	749.5	749.5	0.0
C	5,134	419	2,250	1.8	753.1	753.1	753.1	0.0
D	5,542	588	3,323	1.4	753.3	753.3	753.3	0.0
E	8,857	278	1,118	2.7	758.2	758.2	758.2	0.0
F	9,618	200	829	4.2	759.8	759.8	759.8	0.0
G	10,283	218	3,529	1.8	764.0	764.0	764.0	0.0
H	10,667	549	4,029	0.7	764.1	764.1	764.1	0.0
I	11,266	615	6,271	0.6	764.1	764.1	764.1	0.0
J	14,019	441	1,745	1.1	764.3	764.3	764.3	0.0
K	17,133	296	574	3.4	765.6	765.6	765.6	0.0
L	19,079	241	1,819	2.2	769.5	769.5	769.5	0.0
M	20,109	36	4,464	7.0	773.5	773.5	773.5	0.0

<sup>1</sup> Feet above county boundary

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**ROCK COUNTY, WI**  
 AND INCORPORATED AREAS

FLOODWAY DATA

EAST FORK RACCOON CREEK

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
FISHER CREEK								
A	462	119	562	2.3	760.1	759.5 <sup>2</sup>	759.5	0.0
B	876	63	730	4.6	760.1	760.0 <sup>2</sup>	760.0	0.0
C	1,012	82	313	5.4	760.7	760.7	760.7	0.0
D	1,063	97	311	5.3	760.8	760.8	760.8	0.0
E	1,501	87	502	4.7	763.3	763.3	763.3	0.0
F	2,494	191	399	3.2	768.6	768.6	768.6	0.0
G	3,013	104	445	5.4	771.6	771.6	771.6	0.0
H	5,002	249	391	3.3	783.0	783.0	783.0	0.0
I	7,908	42	177	8.4	802.9	802.9	802.9	0.0
J	8,015	52	234	5.4	805.0	805.0	805.0	0.0
K	8,051	53	250	5.1	805.3	805.3	805.3	0.0
L	8,378	164	415	3.2	805.5	805.5	805.5	0.0
M	9,015	40	1,016	9.3	811.6	811.6	811.6	0.0
N	9,365	66	295	4.6	814.5	814.5	814.5	0.0
O	9,492	50	249	4.4	814.7	814.7	814.7	0.0
P	9,641	45	416	5.0	814.9	814.9	814.9	0.0
Q	10,001	275	1,359	0.9	815.6	815.6	815.6	0.0
R	13,012	146	416	3.3	820.7	820.7	820.7	0.0
S	13,471	62	193	7.0	822.2	822.2	822.2	0.0
T	13,630	243	2,190	0.8	828.0	828.0	828.0	0.0
U	13,665	306	2,107	0.7	828.0	828.0	828.0	0.0
V	14,154	192	476	2.9	828.0	828.0	828.0	0.0
W	14,576	331	3,205	0.6	833.4	833.4	833.4	0.0
X	15,022	248	1,009	1.3	833.4	833.4	833.4	0.0
Y	17,523	211	202	3.9	844.2	844.2	844.2	0.0
Z	19,490	27	95	5.1	849.5	849.5	849.5	0.0

<sup>1</sup> Feet above confluence with Rock River

<sup>2</sup> Elevations without considering backwater effect from the Rock River

<b>TABLE 6</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>ROCK COUNTY, WI</b>	<b>FISHER CREEK</b>
	<b>AND INCORPORATED AREAS</b>	

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
FISHER CREEK (continued)								
AA	19,611 <sup>1</sup>	24	62	8.0	850.9	850.9	850.9	0.0
AB	19,688 <sup>1</sup>	38	108	3.6	852.1	852.1	852.1	0.0
AC	20,005 <sup>1</sup>	15	79	9.4	854.3	854.3	854.3	0.0
AD	22,959 <sup>1</sup>	39	57	6.8	891.5	891.5	891.5	0.0
AE	26,294 <sup>1</sup>	81	82	4.7	936.7	936.7	936.7	0.0
AF	26,414 <sup>1</sup>	191	1,179	0.4	946.9	946.9	946.9	0.0
AG	26,485 <sup>1</sup>	237	1,376	0.3	946.9	946.9	946.9	0.0
AH	27,000 <sup>1</sup>	154	210	2.3	946.9	946.9	946.9	0.0
AI	28,494 <sup>1</sup>	49	58	6.8	969.2	969.2	969.2	0.0
GREENBELT TRIBUTARY 1								
A	582 <sup>2</sup>	251	455	3.0	811.3	811.3	811.3	0.0
B	939 <sup>2</sup>	71	422	6.9	813.4	813.4	813.4	0.0
C	1,595 <sup>2</sup>	292	2,843	0.5	827.0	827.0	827.0	0.0
D	1,933 <sup>2</sup>	374	2,552	0.5	827.0	827.0	827.0	0.0
E	2,283 <sup>2</sup>	249	2,161	0.9	827.0	827.0	827.0	0.0
F	2,904 <sup>2</sup>	209	832	0.8	828.7	828.7	828.7	0.0
G	3,313 <sup>2</sup>	118	239	2.8	828.8	828.8	828.8	0.0
H	3,621 <sup>2</sup>	68	194	3.9	829.5	829.5	829.5	0.0
I	4,214 <sup>2</sup>	126	291	2.3	833.5	833.5	833.5	0.0
J	4,703 <sup>2</sup>	88	154	4.4	835.2	835.2	835.2	0.0
K	5,097 <sup>2</sup>	68	54	5.1	837.6	837.6	837.6	0.0
L	5,581 <sup>2</sup>	74	75	3.6	841.4	841.4	841.4	0.0

<sup>1</sup> Feet above confluence with Rock River

<sup>2</sup> Feet above confluence with Blackhawk Creek

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

**ROCK COUNTY, WI**

**AND INCORPORATED AREAS**

**FLOODWAY DATA**

**FISHER CREEK - GREENBELT TRIBUTARY 1**

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
GREENBELT TRIBUTARY 1 (continued)								
M	6,050	42	53	5.1	846.2	846.2	846.2	0.0
N	6,666	94	82	3.3	849.4	849.4	849.4	0.0
O	7,117	65	73	3.7	852.3	852.3	852.3	0.0
P	7,650	68	70	3.9	856.5	856.5	856.5	0.0
Q	8,046	65	72	3.7	858.8	858.8	858.8	0.0
R	8,449	46	62	4.4	861.6	861.6	861.6	0.0
S	8,710	34	49	5.6	864.2	864.2	864.2	0.0
T	9,276	59	133	2.3	869.4	869.4	869.4	0.0
U	9,709	56	94	2.9	870.2	870.2	870.2	0.0
V	10,006	41	67	4.4	871.5	871.5	871.5	0.0
W	10,350	180	370	0.7	874.9	874.9	874.9	0.0
X	10,611	82	302	0.6	875.0	875.0	875.0	0.0
Y	10,795	27	150	1.9	875.3	875.3	875.3	0.0
Z	11,135	63	130	0.8	876.8	876.8	876.8	0.0
AA	11,672	46	70	1.5	877.0	877.0	877.0	0.0
AB	12,078	42	49	2.2	877.4	877.4	877.4	0.0
AC	12,473	46	46	2.3	878.7	878.7	878.7	0.0

<sup>1</sup> Feet above confluence with Blackhawk Creek

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**ROCK COUNTY, WI**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**GREENBELT TRIBUTARY 1**

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
GREENBELT TRIBUTARY 2								
A	306 <sup>1</sup>	63	162	2.4	859.5	859.5	859.5	0.0
B	722 <sup>1</sup>	205	557	0.6	860.0	860.0	860.0	0.0
C	984 <sup>1</sup>	45	101	3.8	860.1	860.1	860.1	0.0
D	1,247 <sup>1</sup>	170	541	0.6	865.0	865.0	865.0	0.0
E	1,667 <sup>1</sup>	85	84	4.1	865.7	865.7	865.7	0.0
F	1,950 <sup>1</sup>	98	121	2.9	868.5	868.5	868.5	0.0
G	2,155 <sup>1</sup>	136	152	2.3	870.4	870.4	870.4	0.0
H	2,697 <sup>1</sup>	203	326	0.7	874.8	874.8	874.8	0.0
I	3,169 <sup>1</sup>	131	99	2.2	875.3	875.3	875.3	0.0
GREENBELT TRIBUTARY 3								
A	322 <sup>2</sup>	53	41	4.9	838.3	838.3	838.3	0.0
B	680 <sup>2</sup>	47	45	4.4	842.7	842.7	842.7	0.0
C	1,173 <sup>2</sup>	60	55	3.7	846.7	846.7	846.7	0.0
D	1,643 <sup>2</sup>	56	52	3.8	852.3	852.3	852.3	0.0
E	1,813 <sup>2</sup>	37	42	4.8	854.0	854.0	854.0	0.0
F	2,126 <sup>2</sup>	63	124	1.6	857.6	857.6	857.6	0.0
G	2,229 <sup>2</sup>	49	70	2.9	857.7	857.7	857.7	0.0
H	2,820 <sup>2</sup>	48	43	4.6	862.1	862.1	862.1	0.0
I	3,190 <sup>2</sup>	43	44	4.6	866.2	866.2	866.2	0.0
J	3,366 <sup>2</sup>	176	234	0.9	870.0	870.0	870.0	0.0
K	3,761 <sup>2</sup>	113	59	3.4	871.8	871.8	871.8	0.0
L	4,224 <sup>2</sup>	136	90	2.2	874.2	874.2	874.2	0.0
M	4,762 <sup>2</sup>	253	117	1.7	876.3	876.3	876.3	0.0

<sup>1</sup> Feet above confluence with Greenbelt Tributary 4

<sup>2</sup> Feet above confluence with Greenbelt Tributary 1

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

**ROCK COUNTY, WI**

**AND INCORPORATED AREAS**

**FLOODWAY DATA**

**GREENBELT TRIBUTARY 2 - GREENBELT TRIBUTARY 3**

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
GREENBELT TRIBUTARY 4								
A	322	378	2,022	0.4	828.6	828.6	828.6	0.0
B	729	281	1,036	0.7	858.7	858.7	858.7	0.0
C	1,119	141	284	2.7	828.7	828.7	828.7	0.0
D	1,363	148	150	4.6	829.7	829.7	829.7	0.0
E	1,733	152	239	2.7	831.6	831.6	831.6	0.0
F	2,008	88	125	5.8	834.0	834.0	834.0	0.0
G	2,488	156	326	2.0	838.0	838.0	838.0	0.0
H	3,033	102	172	3.8	840.8	840.8	840.8	0.0
I	3,523	96	164	4.0	844.4	844.4	844.4	0.0
J	3,623	67	193	4.5	845.0	845.0	845.0	0.0
K	4,080	155	247	2.6	848.3	848.3	848.3	0.0
L	4,386	71	142	4.6	850.0	850.0	850.0	0.0
M	4,759	103	214	3.0	851.7	851.7	851.7	0.0
N	4,857	53	103	6.3	852.0	852.0	852.0	0.0
O	4,873	39	178	2.3	853.1	853.1	853.1	0.0
P	5,314	53	67	4.7	854.1	854.1	854.1	0.0
Q	5,773	96	133	2.4	856.2	856.2	856.2	0.0
R	6,085	62	52	3.6	858.0	858.0	858.0	0.0
S	6,203	26	117	5.8	859.5	859.5	859.5	0.0
T	6,613	72	106	1.8	864.6	864.6	864.6	0.0
U	6,845	41	54	4.0	865.6	865.6	865.6	0.0
V	7,230	82	155	1.2	870.5	870.5	870.5	0.0
W	7,519	106	64	2.9	871.7	871.7	871.7	0.0
X	7,931	328	122	1.6	874.7	874.7	874.7	0.0
Y	8,224	144	64	2.9	878.4	878.4	878.4	0.0
Z	8,792	168	91	2.1	881.5	881.5	881.5	0.0
AA	9,310	101	66	2.8	885.0	885.0	885.0	0.0

<sup>1</sup> Feet above confluence with Greenbelt Tributary 1

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

**ROCK COUNTY, WI**  
AND INCORPORATED AREAS

**FLOODWAY DATA**

**GREENBELT TRIBUTARY 4**

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
GREENBELT TRIBUTARY 5								
A	323	25	21	4.9	831.5	831.5	831.5	0.0
B	533	41	35	4.2	833.2	833.2	833.2	0.0
C	1,033	53	37	2.7	837.6	837.6	837.6	0.0
D	1,616	60	41	2.5	842.1	842.1	842.1	0.0
E	1,901	39	30	3.4	844.9	844.9	844.9	0.0
F	2,310	50	35	2.9	847.9	847.9	847.9	0.0
G	2,730	62	34	3.0	851.9	851.9	851.9	0.0
H	2,973	68	45	2.3	853.3	853.3	853.3	0.0
I	3,205	69	61	1.7	855.2	855.2	855.2	0.0
J	3,523	79	46	2.2	857.9	857.9	857.9	0.0
K	4,056	39	33	3.1	861.9	861.9	861.9	0.0
L	4,290	57	30	3.5	865.0	865.0	865.0	0.0
M	4,721	83	46	2.2	868.2	868.2	868.2	0.0
N	5,090	56	36	2.8	870.7	870.7	870.7	0.0
O	5,474	67	42	2.4	872.7	872.7	872.7	0.0
P	5,900	97	46	2.2	875.3	875.3	875.3	0.0
Q	6,277	131	70	1.4	876.4	876.4	876.4	0.0
R	6,533	42	85	2.6	877.0	877.0	877.0	0.0
S	6,830	363	489	0.5	880.4	880.4	880.4	0.0
T	7,239	444	230	1.0	880.5	880.5	880.5	0.0
U	7,807	359	146	1.6	883.8	883.8	883.8	0.0

<sup>1</sup> Feet above confluence with Greenbelt Tributary 4

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b>	<b>FLOODWAY DATA</b>
	<b>AND INCORPORATED AREAS</b>	<b>GREENBELT TRIBUTARY 5</b>

FLOODING SOURCE		FLOODWAY				1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY (FEET)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
MARKHAM CREEK									
A	641	181	1,489	3.6	0	758.2	757.5 <sup>2</sup>	757.5	0.0
B	675	113	1,304	5.8	0	758.2	757.5 <sup>2</sup>	757.5	0.0
C	781	99	774	5.1	0	758.2	758.0 <sup>2</sup>	758.0	0.0
D	875	172	598	4.0	0	759.0	759.0	759.0	0.0
E	980	132	1,051	4.3	0	759.3	759.3	759.3	0.0
F	1,433	100	482	6.6	0	760.8	760.8	760.8	0.0
G	1,565	99	419	5.7	0	762.2	762.2	762.2	0.0
H	1,703	178	953	3.6	0	763.2	763.2	763.2	0.0
I	2,494	141	748	6.0	0	766.0	766.0	766.0	0.0
J	3,506	129	706	5.6	0	771.0	771.0	771.0	0.0
K	4,517	162	513	5.0	0	776.2	776.2	776.2	0.0
L	5,838	53	239	9.3	0	786.6	786.6	786.6	0.0
M	5,973	55	311	7.2	0	789.4	789.4	789.4	0.0
N	6,120	72	619	6.2	0	790.3	790.3	790.3	0.0
O	8,496	267	727	3.3	0	802.7	802.7	802.7	0.0
P	9,124	261	733	3.0	63	804.3	804.3	804.3	0.0
Q	9,316	666	3,248	0.9	0	807.3	807.3	807.3	0.0
R	9,418	686	2,860	0.9	0	807.3	807.3	807.3	0.0
S	10,008	907	4,189	0.6	0	807.3	807.3	807.3	0.0
T	10,371	1,278	4,557	0.5	0	807.4	807.4	807.4	0.0
U	10,513	1,480	4,731	0.5	0	807.4	807.4	807.4	0.0
V	10,621	1,533	6,040	0.5	0	807.4	807.4	807.4	0.0
W	11,478	747	5,671	0.8	0	807.4	807.4	807.4	0.0
X	12,008	888	3,393	0.9	0	807.5	807.5	807.5	0.0
Y	12,999	1,054	1,552	1.1	0	807.9	807.9	807.9	0.0
Z	14,003	1,464	2,616	0.7	0	808.4	808.4	808.4	0.0

<sup>1</sup>Feet above confluence with Rock River

<sup>2</sup>Elevations without considering backwater effects from the Rock River

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**ROCK COUNTY, WI**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**MARKHAM CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
MARKHAM CREEK (continued)								
AA	14,501	802	2,310	1.8	808.8	808.8	808.8	0.0
AB	16,512	758	2,185	1.7	810.3	810.3	810.3	0.0
AC	17,998	185	4,566	2.9	814.0	814.0	814.0	0.0
AD	18,201	113	2,836	5.5	814.2	814.2	814.2	0.0
AE	18,326	61	299	6.4	816.6	816.6	816.6	0.0
AF	18,372	129	6,285	2.0	818.6	818.6	818.6	0.0
AG	18,565	373	7,399	0.9	818.7	818.7	818.7	0.0
AH	19,507	699	4,938	0.6	818.7	818.7	818.7	0.0
AI	20,506	1,666	4,313	0.4	818.8	818.8	818.8	0.0

<sup>1</sup> Feet above confluence with Rock River

<b>TABLE 6</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>ROCK COUNTY, WI AND INCORPORATED AREAS</b>	<b>MARKHAM CREEK</b>

FLOODING SOURCE		FLOODWAY				1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY (FEET)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
MARSH CREEK									
A	2,043	46	271	12.8	0	781.5	781.5	781.5	0.0
B	2,357	330	1,693	2.0	0	785.1	785.1	785.1	0.0
C	2,955	180	699	5.0	0	786.4	786.4	786.4	0.0
D	3,447	32	317	10.9	0	792.6	792.6	792.6	0.0
E	5,800	262	829	4.2	0	799.3	799.3	799.3	0.0
F	8,748	228	553	6.3	0	808.0	808.0	808.0	0.0
G	11,644	698	1,399	2.5	0	818.4	818.4	818.4	0.0
H	20,410	481	1,366	2.5	0	834.4	834.4	834.4	0.0
I	22,112	354	1,279	2.7	0	839.0	839.0	839.0	0.0
J	22,419	309	2,004	1.7	43	843.1	843.1	843.1	0.0
K	22,699	230	1,292	2.7	122	843.6	843.6	843.6	0.0
L	23,551	207	1,092	3.2	50	845.1	845.1	845.1	0.0
M	24,431	288	1,284	2.7	0	846.4	846.4	846.4	0.0
N	27,937	387	781	3.8	0	856.5	856.5	856.5	0.0
O	28,649	452	1,067	2.8	0	858.6	858.6	858.6	0.0
P	28,971	436	2,280	1.3	0	859.9	859.9	859.9	0.0
Q	29,894	399	1,100	2.7	0	860.9	860.9	860.9	0.0
R	31,434	274	974	3.0	87	864.8	864.8	864.8	0.0
S	32,951	203	657	4.5	72	869.8	869.8	869.8	0.0
T	34,550	363	1,011	2.9	0	874.2	874.2	874.2	0.0
U	35,111	320	1,851	1.6	0	877.6	877.6	877.6	0.0
V	37,879	202	685	4.3	0	880.3	880.3	880.3	0.0
W	38,068	139	1,107	2.7	135	881.0	881.0	881.0	0.0

<sup>1</sup>Feet above confluence with Rock River

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**ROCK COUNTY, WI**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**MARSH CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
MORNINGSIDE TRIBUTARY								
A	421	104	144	6.7	807.9	807.6 <sup>2</sup>	807.6	0.0
B	559	186	641	1.5	812.1	812.1	812.1	0.0
C	928	166	332	2.9	812.6	812.6	812.6	0.0
D	1,263	111	172	5.7	814.0	814.0	814.0	0.0
E	1,349	216	657	1.5	817.1	817.1	817.1	0.0
F	1,764	149	254	3.8	817.9	817.9	817.9	0.0
G	2,235	129	270	3.6	820.0	820.0	820.0	0.0
H	2,824	200	449	2.2	822.9	822.9	822.9	0.0
I	3,095	169	333	2.9	824.7	824.7	824.7	0.0
J	3,593	146	300	3.2	827.8	827.8	827.8	0.0
K	4,145	78	168	3.8	830.1	830.1	830.1	0.0
L	4,628	135	209	3.1	832.5	832.5	832.5	0.0
M	4,782	64	182	5.4	833.3	833.3	833.3	0.0
N	5,039	169	2,161	0.4	845.2	845.2	845.2	0.0
O	5,508	253	1,790	0.4	845.2	845.2	845.2	0.0
P	5,984	40	708	2.6	845.2	845.2	845.2	0.0
Q	6,181	259	1,842	0.7	848.9	848.9	848.9	0.0
R	6,511	243	1,403	0.5	848.9	848.9	848.9	0.0
S	7,029	146	622	1.0	849.0	849.0	849.0	0.0
T	7,499	151	503	1.3	849.0	849.0	849.0	0.0
U	8,054	129	234	2.7	850.1	850.1	850.1	0.0
V	8,467	67	219	4.4	852.6	852.6	852.6	0.0
W	8,668	116	1,457	0.8	858.8	858.8	858.8	0.0
X	9,052	442	2,672	0.2	858.8	858.8	858.8	0.0
Y	9,533	289	1,269	0.5	858.8	858.8	858.8	0.0
Z	9,776	270	1,445	0.5	858.8	858.8	858.8	0.0

<sup>1</sup> Feet above confluence with Spring Brook (Janesville)

<sup>2</sup> Elevations without considering backwater effects from Spring Brook (Janesville)

<b>TABLE 6</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>ROCK COUNTY, WI</b>	<b>MORNINGSIDE TRIBUTARY</b>
	<b>AND INCORPORATED AREAS</b>	

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
MORNINGSIDE TRIBUTARY (continued)								
AA	10,063	84	88	4.4	864.8	864.8	864.8	0.0
AB	10,222	219	1,068	0.4	872.2	872.2	872.2	0.0
AC	10,635	194	627	0.6	872.2	872.2	872.2	0.0
AD	11,044	59	76	5.7	872.1	872.1	872.1	0.0
AE	11,204	54	282	2.6	874.3	874.3	874.3	0.0
AF	11,578	175	179	2.2	874.7	874.7	874.7	0.0
AG	11,809	59	163	4.7	875.5	875.5	875.5	0.0
AH	12,044	35	322	3.0	879.3	879.3	879.3	0.0
AI	12,118	55	221	1.1	880.1	880.1	880.1	0.0
AJ	12,478	92	298	1.0	880.7	880.7	880.7	0.0
AK	12,826	124	172	2.3	880.7	880.7	880.7	0.0
AL	12,884	247	256	1.3	881.0	881.0	881.0	0.0
AM	13,091	54	37	4.3	881.4	881.4	881.4	0.0
AN	13,275	90	52	3.1	882.5	882.5	882.5	0.0
AO	13,505	87	44	3.6	883.7	883.7	883.7	0.0
AP	13,705	112	60	2.6	884.8	884.8	884.8	0.0
AQ	13,905	113	50	3.2	885.7	885.7	885.7	0.0
AR	14,105	115	53	3.0	886.8	886.8	886.8	0.0
AS	14,305	135	67	2.4	887.6	887.6	887.6	0.0
AT	14,605	112	57	2.8	888.7	888.7	888.7	0.0
AU	14,805	135	65	2.5	889.5	889.5	889.5	0.0
AV	15,005	131	82	2.6	890.2	890.2	890.2	0.0
AW	15,205	92	66	2.9	891.0	891.0	891.0	0.0
AX	15,405	144	71	2.2	891.7	891.7	891.7	0.0
AY	15,605	82	41	3.9	892.5	892.5	892.5	0.0

<sup>1</sup> Feet above confluence with Spring Brook (Janesville)

**TABLE 6**

FEDERAL EMERGENCY MANAGEMENT AGENCY

**ROCK COUNTY, WI  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**MORNINGSIDE TRIBUTARY**

FLOODING SOURCE		FLOODWAY				1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY (FEET)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
MORNINGSIDE TRIBUTARY (continued)									
AZ	15,805 <sup>1</sup>	142	109	1.5	0	893.0	893.0	893.0	0.0
BA	16,011 <sup>1</sup>	87	43	3.7	0	893.4	893.4	893.4	0.0
BB	16,251 <sup>1</sup>	132	77	2.1	0	894.5	894.5	894.5	0.0
BC	16,431 <sup>1</sup>	149	148	1.1	0	894.6	894.6	894.6	0.0
OTTER CREEK									
A	30 <sup>2</sup>	700	2,488	1.7	0	782.9	782.9	782.9	0.0
B	2,352 <sup>2</sup>	362	1,367	3.1	0	785.8	785.8	785.8	0.0
C	6,633 <sup>2</sup>	423	1,390	3.1	36	792.1	792.1	792.1	0.0
D	10,207 <sup>2</sup>	495	1,542	2.8	0	798.6	798.6	798.6	0.0
E	11,493 <sup>2</sup>	74	484	8.8	0	801.7	801.7	801.7	0.0
F	12,272 <sup>2</sup>	544	2,427	1.8	0	803.9	803.9	803.9	0.0
G	14,556 <sup>2</sup>	392	1,504	2.8	0	805.2	805.2	805.2	0.0
H	16,188 <sup>2</sup>	342	483	8.8	0	809.0	809.0	809.0	0.0
I	17,702 <sup>2</sup>	285	2,285	1.9	0	820.8	820.8	820.8	0.0
J	17,912 <sup>2</sup>	339	2,678	1.6	0	821.2	821.2	821.2	0.0
K	18,840 <sup>2</sup>	509	4,277	1.0	0	821.3	821.3	821.3	0.0
L	22,865 <sup>2</sup>	330	1,788	2.4	0	826.2	826.2	826.2	0.0
M	23,299 <sup>2</sup>	360	1,364	3.1	0	826.4	826.4	826.4	0.0
N	25,695 <sup>2</sup>	330	1,114	3.8	65	830.4	830.4	830.4	0.0
O	27,269 <sup>2</sup>	387	2,930	1.5	0	839.3	839.3	839.3	0.0
P	31,147 <sup>2</sup>	169	827	5.1	0	845.2	845.2	845.2	0.0
Q	38,667 <sup>2</sup>	317	1,536	2.8	0	856.7	856.7	856.7	0.0
R	41,310 <sup>2</sup>	365	1,863	2.3	56	858.8	858.8	858.8	0.0

<sup>1</sup>Feet above confluence Spring Brook (Janesville)

<sup>2</sup>Feet above county boundary

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

**ROCK COUNTY, WI**  
AND INCORPORATED AREAS

**FLOODWAY DATA**

**MORNINGSIDE TRIBUTARY - OTTER CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
RACCOON CREEK								
A	1,549	593	3,537	2.3	744.4	744.4	744.4	0.0
B	3,476	568	7,578	2.1	747.7	747.7	747.7	0.0
C	5,042	857	2,031	2.7	750.0	750.0	750.0	0.0
D	5,742	829	3,282	1.8	751.6	751.6	751.6	0.0
E	6,169	998	4,036	1.4	751.9	751.9	751.9	0.0
F	7,891	544	2,735	2.5	753.1	753.1	753.1	0.0
G	8,971	356	1,895	3.2	754.4	754.4	754.4	0.0
H	9,311	333	3,228	1.8	758.0	758.0	758.0	0.0
I	9,652	263	2,255	2.4	758.9	758.9	758.9	0.0
J	10,048	338	1,464	3.8	759.0	759.0	759.0	0.0
K	11,081	474	2,763	2.4	760.1	760.1	760.1	0.0
L	14,063	558	2,291	1.5	762.1	762.1	762.1	0.0
M	16,189	464	1,997	1.7	763.5	763.5	763.5	0.0
N	19,300	331	1,498	3.0	767.6	767.6	767.6	0.0
O	21,834	624	1,988	1.7	771.2	771.2	771.2	0.0
P	22,127	118	2,136	4.8	771.5	771.5	771.5	0.0

<sup>1</sup> Feet above county boundary

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b> AND INCORPORATED AREAS	<b>FLOODWAY DATA</b>
		<b>RACCOON CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
ROCK RIVER								
A	160.767	265	2,433	7.3	738.6	738.6	738.6	0.0
B	160.788	286	2,741	6.4	738.9	738.9	738.9	0.0
C	160.861	293	2,793	6.3	739.3	739.3	739.3	0.0
D	160.953	211	2,166	8.1	739.3	739.3	739.3	0.0
E	161.016	251	2,745	6.4	740.0	740.0	740.0	0.0
F	161.060	330	4,758	3.7	740.5	740.5	740.5	0.0
G	161.081	342	3,455	5.1	740.5	740.5	740.5	0.0
H	161.134	258	2,938	6.0	740.5	740.5	740.5	0.0
I	161.159	265	3,270	5.4	740.6	740.6	740.6	0.0
J	161.218	221	2,556	6.9	740.6	740.6	740.6	0.0
K	161.239	239	2,540	6.9	740.9	740.9	740.9	0.0
L	161.264	239	2,599	6.8	741.0	741.0	741.0	0.0
M	161.358	217	2,475	7.1	741.3	741.3	741.3	0.0
N	161.430	231	2,640	6.7	741.6	741.6	741.6	0.0
O	161.556	329	3,406	5.2	742.2	742.2	742.2	0.0
P	161.620	418	3,877	4.5	742.5	742.5	742.5	0.0
Q	161.648	335	4,764	3.7	746.8	746.8	746.8	0.0
R	161.662	469	6,207	2.8	747.0	747.0	747.0	0.0
S	161.690	649	7,944	2.2	747.0	747.0	747.0	0.0
T	161.737	732	8,134	2.2	747.1	747.1	747.1	0.0
U	161.781	562	6,378	2.8	747.1	747.1	747.1	0.0
V	161.813	537	5,952	3.0	747.1	747.1	747.1	0.0
W	161.934	668	6,728	2.6	747.2	747.2	747.2	0.0
X	162.033	763	6,790	2.6	747.3	747.3	747.3	0.0
Y	162.162	629	6,442	2.7	747.3	747.3	747.3	0.0
Z	162.286	869	8,214	2.1	747.4	747.4	747.4	0.0

<sup>1</sup> Miles above mouth

**TABLE 6**

FEDERAL EMERGENCY MANAGEMENT AGENCY

**ROCK COUNTY, WI  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**ROCK RIVER**

FLOODING SOURCE		FLOODWAY				1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY (FEET)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
ROCK RIVER (continued)									
AA	162.487	890	8,493	2.1	0	747.5	747.5	747.5	0.0
AB	162.626	900	8,491	2.1	0	747.6	747.6	747.6	0.0
AC	162.690	669	7,724	2.3	0	747.6	747.6	747.6	0.0
AD	162.720	682	8,168	2.2	0	747.6	747.6	747.6	0.0
AE	162.791	1,049	9,583	1.8	0	747.7	747.7	747.7	0.0
AF	162.933	1,068	9,631	1.8	0	747.7	747.7	747.7	0.0
AG	163.072	1,125	10,159	1.7	0	747.7	747.7	747.7	0.0
AH	163.240	1,162	9,709	1.8	0	747.8	747.8	747.8	0.0
AI	163.412	855	8,149	2.2	0	747.8	747.8	747.8	0.0
AJ	163.672	1,180	9,923	1.8	0	747.9	747.9	747.9	0.0
AK	163.903	1,075	9,105	1.9	0	748.0	748.0	748.0	0.0
AL	164.010	1,018	10,170	1.7	0	748.1	748.1	748.1	0.0
AM	164.071	853	8,801	2.0	0	748.1	748.1	748.1	0.0
AN	164.117	765	6,876	2.6	0	748.1	748.1	748.1	0.0
AO	164.157	786	6,724	2.6	0	748.1	748.1	748.1	0.0
AP	164.348	618	5,961	3.0	0	748.2	748.2	748.2	0.0
AQ	164.641	663	6,516	2.7	0	748.4	748.4	748.4	0.0
AR	164.900	584	5,930	3.0	0	748.5	748.5	748.5	0.0
AS	165.094	874	8,227	2.1	0	748.7	748.7	748.7	0.0
AT	165.345	1,154	8,130	2.2	0	748.8	748.8	748.8	0.0
AU	165.520	1,521	10,533	1.7	0	748.9	748.9	748.9	0.0
AV	165.732	1,630	8,567	2.0	0	749.0	749.0	749.0	0.0
AW	165.921	1,093	6,226	2.7	0	749.1	749.1	749.1	0.0
AX	166.308	954	8,389	2.0	289	749.4	749.4	749.4	0.0
AY	166.476	1,111	7,318	2.3	0	749.5	749.5	749.5	0.0
AZ	166.612	1,382	8,415	2.0	0	749.7	749.7	749.7	0.0

<sup>1</sup>Miles above mouth

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b>	<b>FLOODWAY DATA</b>
	<b>AND INCORPORATED AREAS</b>	<b>ROCK RIVER</b>

FLOODING SOURCE		FLOODWAY				1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY (FEET)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
ROCK RIVER (continued)									
BA	166.731	720	6,112	2.7	0	749.9	749.9	749.9	0.0
BB	166.771	488	5,055	3.3	0	749.9	749.9	749.9	0.0
BC	166.802	443	4,566	3.7	0	750.1	750.1	750.1	0.0
BD	166.859	393	4,364	3.8	0	750.2	750.2	750.2	0.0
BE	167.105	854	7,735	2.2	0	750.7	750.7	750.7	0.0
BF	167.345	423	3,950	4.2	0	750.8	750.8	750.8	0.0
BG	167.550	742	5,781	2.9	0	751.4	751.4	751.4	0.0
BH	167.660	550	5,041	3.3	0	751.5	751.5	751.5	0.0
BI	167.698	365	4,077	4.1	0	751.6	751.6	751.6	0.0
BJ	167.722	380	4,205	4.0	0	751.6	751.6	751.6	0.0
BK	167.765	601	5,720	2.9	0	751.8	751.8	751.8	0.0
BL	167.886	769	6,054	2.8	0	752.0	752.0	752.0	0.0
BM	168.148	1,133	7,008	2.4	0	752.4	752.4	752.4	0.0
BN	168.399	950	6,833	2.5	64	752.8	752.8	752.8	0.0
BO	168.645	1,331	8,048	2.1	0	753.3	753.3	753.3	0.0
BP	168.909	1,346	8,013	2.1	0	753.7	753.7	753.7	0.0
BQ	169.289	2,217	13,519	1.2	0	754.1	754.1	754.1	0.0
BR	169.614	2,569	14,619	1.2	0	754.3	754.3	754.3	0.0
BS	169.918	2,151	10,755	1.6	0	754.5	754.5	754.5	0.0
BT	170.453	1,851	10,172	1.7	0	755.0	755.0	755.0	0.0
BU	170.720	1,736	9,257	1.8	0	755.2	755.2	755.2	0.0
BV	171.121	1,044	6,146	2.7	0	755.6	755.6	755.6	0.0
BW	171.372	497	5,630	3.0	0	755.8	755.8	755.8	0.0
BX	171.413	425	5,363	3.1	0	755.9	755.9	755.9	0.0
BY	171.442	444	5,576	3.0	0	756.0	756.0	756.0	0.0
BZ	171.468	512	5,864	2.8	0	756.0	756.0	756.0	0.0

<sup>1</sup>Miles above mouth

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

**ROCK COUNTY, WI**

**AND INCORPORATED AREAS**

**FLOODWAY DATA**

**ROCK RIVER**

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
ROCK RIVER (continued)								
CA	171.604	594	5,002	3.3	756.1	756.1	756.1	0.0
CB	171.767	615	4,832	3.4	756.2	756.2	756.2	0.0
CC	172.067	1,372	9,684	1.7	756.5	756.5	756.5	0.0
CD	172.404	449	3,885	4.3	756.6	756.6	756.6	0.0
CE	172.613	514	4,674	3.6	757.0	757.0	757.0	0.0
CF	172.846	465	4,726	3.5	757.2	757.2	757.2	0.0
CG	173.115	460	4,438	3.7	757.4	757.4	757.4	0.0
CH	173.299	405	3,782	4.4	757.5	757.5	757.5	0.0
CI	173.424	388	3,822	4.3	757.7	757.7	757.7	0.0
CJ	173.458	409	3,749	4.4	757.7	757.7	757.7	0.0
CK	173.505	433	3,953	4.2	757.9	757.9	757.9	0.0
CL	173.541	459	4,281	3.9	757.9	757.9	757.9	0.0
CM	173.750	473	3,883	4.3	758.0	758.0	758.0	0.0
CN	173.921	391	4,340	3.8	758.6	758.6	758.6	0.0
CO	174.248	679	6,036	2.8	758.9	758.9	758.9	0.0
CP	174.476	406	3,930	4.2	759.1	759.1	759.1	0.0
CQ	174.769	558	4,505	3.7	759.7	759.7	759.7	0.0
CR	174.986	773	5,795	2.9	760.1	760.1	760.1	0.0
CS	175.129	399	4,023	4.1	760.2	760.2	760.2	0.0
CT	175.256	459	4,872	3.4	760.4	760.4	760.4	0.0
CU	175.367	479	5,051	3.3	760.5	760.5	760.5	0.0
CV	175.414	563	4,831	3.4	760.5	760.5	760.5	0.0
CW	175.447	595	5,189	3.2	760.6	760.6	760.6	0.0
CX	175.489	638	5,912	2.8	760.7	760.7	760.7	0.0
CY	175.663	542	4,906	3.4	760.7	760.7	760.7	0.0
CZ	175.816	311	3,171	5.2	760.7	760.7	760.7	0.0

<sup>1</sup> Miles above mouth

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b>	<b>FLOODWAY DATA</b>
	<b>AND INCORPORATED AREAS</b>	<b>ROCK RIVER</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
ROCK RIVER (continued)								
DA	175.974	578	5,894	2.8	761.2	761.2	761.2	0.0
DB	176.243	383	3,255	5.1	761.4	761.4	761.4	0.0
DC	176.343	330	2,662	6.2	762.3	762.3	762.3	0.0
DD	176.352	303	4,052	4.1	762.8	762.8	762.8	0.0
DE	176.363	299	4,021	4.1	762.8	762.8	762.8	0.0
DF	176.423	414	3,723	4.5	763.2	763.2	763.2	0.0
DG	176.427	429	5,245	3.2	764.4	764.4	764.4	0.0
DH	176.463	397	4,083	4.1	764.7	764.7	764.7	0.0
DI	176.602	605	5,571	3.0	765.0	765.0	765.0	0.0
DJ	176.766	475	4,303	3.9	765.1	765.1	765.1	0.0
DK	176.922	911	7,385	2.3	765.4	765.4	765.4	0.0
DL	177.042	936	6,121	2.7	765.4	765.4	765.4	0.0
DM	177.175	382	3,062	5.4	765.5	765.5	765.5	0.0
DN	177.196	347	3,132	5.3	765.6	765.6	765.6	0.0
DO	177.237	368	3,153	5.3	765.8	765.8	765.8	0.0
DP	177.252	387	3,571	4.7	766.0	766.0	766.0	0.0
DQ	177.268	509	4,350	3.8	766.1	766.1	766.1	0.0
DR	177.406	561	4,268	3.9	766.3	766.3	766.3	0.0
DS	177.499	448	3,938	4.2	766.5	766.5	766.5	0.0
DT	177.641	363	3,521	4.7	766.7	766.7	766.7	0.0
DU	177.717	277	3,024	5.5	766.8	766.8	766.8	0.0
DV	177.746	298	3,214	5.2	766.9	766.9	766.9	0.0
DW	177.766	267	3,335	5.0	767.0	767.0	767.0	0.0
DX	177.845	293	3,098	5.4	767.2	767.2	767.2	0.0
DY	177.950	274	3,107	5.3	767.5	767.5	767.5	0.0
DZ	178.043	224	2,804	5.9	767.6	767.6	767.6	0.0

<sup>1</sup> Miles above mouth

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b>	<b>FLOODWAY DATA</b>
	<b>AND INCORPORATED AREAS</b>	<b>ROCK RIVER</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
ROCK RIVER (continued)								
EA	178.141	217	3,133	5.3	767.9	767.9	767.9	0.0
EB	178.156	221	3,401	4.9	768.0	768.0	768.0	0.0
EC	178.176	222	3,592	4.6	768.1	768.1	768.1	0.0
ED	178.250	204	2,798	5.9	768.5	768.5	768.5	0.0
EE	178.272	202	3,286	5.1	768.7	768.7	768.7	0.0
EF	178.290	220	3,227	5.1	768.9	768.9	768.9	0.0
EG	178.394	237	4,010	4.1	769.5	769.5	769.5	0.0
EH	178.462	326	6,334	2.6	769.7	769.7	769.7	0.0
EI	178.492	336	6,417	2.6	769.7	769.7	769.7	0.0
EJ	178.504	357	6,856	2.4	775.1	775.1	775.1	0.0
EK	178.535	370	5,963	2.8	775.2	775.2	775.2	0.0
EL	178.573	384	4,777	3.5	775.1	775.1	775.1	0.0
EM	178.659	485	6,779	2.5	775.5	775.5	775.5	0.0
EN	178.776	494	5,835	2.8	775.5	775.5	775.5	0.0
EO	178.866	583	5,674	2.9	775.5	775.5	775.5	0.0
EP	178.983	948	6,943	2.4	775.6	775.6	775.6	0.0
EQ	179.185	631	6,527	2.5	775.7	775.7	775.7	0.0
ER	179.282	558	5,546	3.0	775.7	775.7	775.7	0.0
ES	179.375	432	3,454	4.8	775.6	775.6	775.6	0.0
ET	179.553	656	7,410	2.2	776.1	776.1	776.1	0.0
EU	179.704	737	8,166	2.0	776.1	776.1	776.1	0.0
EV	179.907	613	6,883	2.4	776.2	776.2	776.2	0.0
EW	180.083	771	6,905	2.4	776.2	776.2	776.2	0.0
EX	180.311	1,007	8,788	1.9	776.3	776.3	776.3	0.0
EY	180.562	1,174	9,082	1.8	776.4	776.4	776.4	0.0
EZ	180.875	499	4,925	3.4	776.4	776.4	776.4	0.0

<sup>1</sup> Miles above mouth

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b>	<b>FLOODWAY DATA</b>
	<b>AND INCORPORATED AREAS</b>	<b>ROCK RIVER</b>

FLOODING SOURCE		FLOODWAY				1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY (FEET)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
ROCK RIVER (continued)									
FA	181.127	711	7,053	2.4	43	776.7	776.7	776.7	0.0
FB	181.327	465	5,078	3.3	0	776.7	776.7	776.7	0.0
FC	181.509	382	4,743	3.5	0	776.8	776.8	776.8	0.0
FD	181.855	772	7,609	2.2	0	777.0	777.0	777.0	0.0
FE	182.080	803	6,674	2.5	0	777.1	777.1	777.1	0.0
FF	182.314	543	6,088	2.7	0	777.2	777.2	777.2	0.0
FG	182.521	559	6,352	2.6	0	777.3	777.3	777.3	0.0
FH	182.682	553	6,530	2.5	0	777.4	777.4	777.4	0.0
FI	182.816	409	5,668	2.9	0	777.5	777.5	777.5	0.0
FJ	182.849	430	5,579	3.0	0	777.5	777.5	777.5	0.0
FK	182.940	697	7,670	2.2	0	777.7	777.7	777.7	0.0
FL	183.153	528	6,432	2.6	0	777.7	777.7	777.7	0.0
FM	183.339	415	4,785	3.5	0	777.7	777.7	777.7	0.0
FN	183.429	467	6,154	2.7	0	777.9	777.9	777.9	0.0
FO	183.645	600	7,104	2.3	0	778.0	778.0	778.0	0.0
FP	183.914	589	7,016	2.4	0	778.2	778.2	778.2	0.0
FQ	184.154	381	4,886	3.4	0	778.2	778.2	778.2	0.0
FR	184.464	611	6,312	2.6	0	778.5	778.5	778.5	0.0
FS	184.729	598	6,860	2.4	0	778.7	778.7	778.7	0.0
FT	184.921	740	7,343	2.3	0	778.8	778.8	778.8	0.0
FU	185.141	590	5,522	3.0	0	778.8	778.8	778.8	0.0
FV	185.434	487	5,894	2.8	0	779.1	779.1	779.1	0.0
FW	185.645	631	7,773	2.1	0	779.2	779.2	779.2	0.0
FX	185.875	604	7,135	2.3	0	779.3	779.3	779.3	0.0
FY	186.152	605	6,821	2.4	0	779.4	779.4	779.4	0.0
FZ	186.520	654	6,187	2.7	0	779.5	779.5	779.5	0.0

<sup>1</sup>Miles above mouth

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b>	<b>FLOODWAY DATA</b>
	<b>AND INCORPORATED AREAS</b>	<b>ROCK RIVER</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
ROCK RIVER (continued)								
GA	186.647	432	5,910	2.8	779.6	779.6	779.6	0.0
GB	186.841	557	6,942	2.4	779.7	779.7	779.7	0.0
GC	187.053	773	8,215	2.0	779.8	779.8	779.8	0.0
GD	187.245	630	6,794	2.4	779.9	779.9	779.9	0.0
GE	187.440	744	7,884	2.1	780.0	780.0	780.0	0.0
GF	187.642	522	6,296	2.6	780.1	780.1	780.1	0.0
GG	187.943	347	4,389	3.8	780.2	780.2	780.2	0.0
GH	188.293	629	6,363	2.6	780.6	780.6	780.6	0.0
GI	188.590	737	8,347	2.0	780.9	780.9	780.9	0.0
GJ	188.866	929	8,331	2.0	781.0	781.0	781.0	0.0
GK	189.267	1,028	10,813	1.4	781.2	781.2	781.2	0.0
GL	189.463	692	8,965	1.7	781.2	781.2	781.2	0.0
GM	189.640	634	8,711	1.7	781.2	781.2	781.2	0.0
GN	189.877	624	7,605	2.0	781.3	781.3	781.3	0.0
GO	190.162	781	9,335	1.6	781.4	781.4	781.4	0.0
GP	190.392	620	7,067	2.1	781.4	781.4	781.4	0.0
GQ	190.575	676	7,719	1.9	781.5	781.5	781.5	0.0
GR	190.800	572	6,968	2.1	781.5	781.5	781.5	0.0
GS	190.955	618	6,452	2.3	781.6	781.6	781.6	0.0
GT	191.007	642	9,100	1.6	781.7	781.7	781.7	0.0
GU	191.033	551	5,480	2.7	782.0	782.0	782.0	0.0
GV	191.057	485	5,454	2.7	782.0	782.0	782.0	0.0
GW	191.144	473	4,581	3.2	782.0	782.0	782.0	0.0
GX	191.331	616	6,458	2.3	782.3	782.3	782.3	0.0
GY	191.578	550	5,799	2.6	782.4	782.4	782.4	0.0
GZ	191.795	414	4,957	3.0	782.5	782.5	782.5	0.0

<sup>1</sup> Miles above mouth

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b>	<b>FLOODWAY DATA</b>
	<b>AND INCORPORATED AREAS</b>	<b>ROCK RIVER</b>

FLOODING SOURCE		FLOODWAY				1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY (FEET)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
ROCK RIVER (continued)									
HA	191.991	479	5,424	2.7	0	782.7	782.7	782.7	0.0
HB	192.198	547	5,601	2.7	0	782.8	782.8	782.8	0.0
HC	192.335	554	5,665	2.6	0	782.9	782.9	782.9	0.0
HD	192.410	543	5,999	2.5	0	783.0	783.0	783.0	0.0
HE	192.576	756	6,779	2.2	0	783.1	783.1	783.1	0.0
HF	192.763	541	5,619	2.6	0	783.2	783.2	783.2	0.0
HG	192.889	497	5,376	2.8	0	783.3	783.3	783.3	0.0
HH	193.071	515	5,475	2.7	0	783.4	783.4	783.4	0.0
HI	193.263	422	4,846	3.1	0	783.5	783.5	783.5	0.0
HJ	193.411	518	5,848	2.5	0	783.7	783.7	783.7	0.0
HK	193.598	554	5,485	2.7	0	783.7	783.7	783.7	0.0
HL	193.799	782	7,396	2.0	0	783.9	783.9	783.9	0.0
HM	194.006	930	9,137	1.6	0	784.0	784.0	784.0	0.0
HN	194.295	1,333	11,048	1.3	0	784.0	784.0	784.0	0.0
HO	194.613	789	8,730	1.7	0	784.1	784.1	784.1	0.0
HP	194.881	673	7,492	2.0	0	784.1	784.1	784.1	0.0
HQ	195.213	542	5,414	2.7	0	784.2	784.2	784.2	0.0
HR	195.479	670	6,562	2.3	45	784.4	784.4	784.4	0.0
HS	195.798	520	5,767	2.6	29	784.5	784.5	784.5	0.0
HT	196.065	461	5,557	2.7	0	784.6	784.6	784.6	0.0
HU	196.105	428	5,270	2.8	0	784.6	784.6	784.6	0.0
HV	196.208	483	5,744	2.6	0	784.7	784.7	784.7	0.0
HW	196.307	498	5,887	2.5	0	784.7	784.7	784.7	0.0
HX	196.392	621	8,166	1.8	0	784.8	784.8	784.8	0.0
HY	196.589	1,215	13,392	1.1	0	784.9	784.9	784.9	0.0
HZ	196.859	1,346	13,807	1.1	0	784.9	784.9	784.9	0.0

<sup>1</sup>Miles above mouth

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b>	<b>FLOODWAY DATA</b>
	<b>AND INCORPORATED AREAS</b>	<b>ROCK RIVER</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
ROCK RIVER (continued)								
IA	197.306 <sup>1</sup>	1,529	15,218	1.0	784.9	784.9	784.9	0.0
IB	197.935 <sup>1</sup>	5,094	64,647	0.2	784.9	784.9	784.9	0.0
IC	198.639 <sup>1</sup>	14,132	199,903	0.1	784.9	784.9	784.9	0.0
SAUNDERS CREEK								
A	1,006 <sup>2</sup>	319	1,866	2.1	783.2	781.0 <sup>3</sup>	781.0	0.0
B	1,502 <sup>2</sup>	150	674	5.1	783.2	781.6 <sup>3</sup>	781.6	0.0
C	1,553 <sup>2</sup>	125	600	5.9	783.2	781.8 <sup>3</sup>	781.8	0.0
D	1,648 <sup>2</sup>	57	236	8.3	783.2	782.3 <sup>3</sup>	782.3	0.0
E	1,666 <sup>2</sup>	62	316	6.2	783.6	783.6	783.6	0.0
F	1,755 <sup>2</sup>	160	1,104	3.2	784.1	784.1	784.1	0.0
G	1,994 <sup>2</sup>	281	943	2.1	784.5	784.5	784.5	0.0
H	2,501 <sup>2</sup>	310	596	3.3	785.7	785.7	785.7	0.0
I	2,998 <sup>2</sup>	560	595	3.3	787.6	787.6	787.6	0.0
J	3,495 <sup>2</sup>	292	404	5.0	790.3	790.3	790.3	0.0
K	4,002 <sup>2</sup>	200	478	5.2	793.1	793.1	793.1	0.0
L	4,500 <sup>2</sup>	174	367	5.3	795.7	795.7	795.7	0.0
M	5,000 <sup>2</sup>	279	441	4.4	798.5	798.5	798.5	0.0
N	5,213 <sup>2</sup>	189	1,602	1.9	799.5	799.5	799.5	0.0
O	5,479 <sup>2</sup>	50	463	6.5	799.2	799.2	799.2	0.0
P	5,523 <sup>2</sup>	52	440	6.3	800.4	800.4	800.4	0.0
Q	5,569 <sup>2</sup>	61	723	4.5	800.8	800.8	800.8	0.0
R	6,054 <sup>2</sup>	50	275	6.9	801.5	801.5	801.5	0.0
S	6,268 <sup>2</sup>	51	330	5.6	802.9	802.9	802.9	0.0

<sup>1</sup> Miles above mouth

<sup>3</sup> Elevations without considering backwater effect from Rock River

<sup>2</sup> Feet above confluence with Rock River

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

**ROCK COUNTY, WI**

**AND INCORPORATED AREAS**

**FLOODWAY DATA**

**ROCK RIVER - SAUNDERS CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
SAUNDERS CREEK (continued)								
T	6,283	51	334	5.6	803.0	803.0	803.0	0.0
U	6,331	40	338	5.9	803.1	803.1	803.1	0.0
V	6,780	46	311	8.4	803.9	803.9	803.9	0.0
W	6,941	46	355	6.4	805.3	805.3	805.3	0.0
X	6,965	45	404	5.4	806.6	806.6	806.6	0.0
Y	7,018	37	382	6.9	806.2	806.2	806.2	0.0
Z	7,223	45	251	7.4	807.1	807.1	807.1	0.0
AA	7,243	39	251	7.5	807.1	807.1	807.1	0.0
AB	7,293	38	218	11.2	806.7	806.7	806.7	0.0
AC	7,717	75	427	4.4	810.1	810.1	810.1	0.0
AD	7,916	46	352	5.7	810.4	810.4	810.4	0.0
AE	7,986	39	296	6.3	810.5	810.5	810.5	0.0
AF	8,063	54	424	4.8	811.0	811.0	811.0	0.0
AG	8,206	150	785	2.7	811.4	811.4	811.4	0.0
AH	8,862	59	451	4.6	811.9	811.9	811.9	0.0
AI	8,897	54	462	4.7	812.0	812.0	812.0	0.0
AJ	8,936	54	458	4.6	812.0	812.0	812.0	0.0
AK	10,149	40	441	5.1	813.3	813.3	813.3	0.0
AL	10,220	41	491	4.5	814.2	814.2	814.2	0.0
AM	10,453	127	1,925	2.1	814.7	814.7	814.7	0.0
AN	10,830	50	1,282	4.8	814.8	814.8	814.8	0.0
AO	10,965	43	399	5.3	814.9	814.9	814.9	0.0
AP	11,026	42	407	5.0	815.5	815.5	815.5	0.0
AQ	11,076	40	389	6.0	815.4	815.4	815.4	0.0
AR	11,732	283	1,253	1.5	816.8	816.8	816.8	0.0
AS	11,953	160	734	2.8	816.9	816.9	816.9	0.0

<sup>1</sup> Feet above confluence with Rock River

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b>	<b>FLOODWAY DATA</b>
	<b>AND INCORPORATED AREAS</b>	<b>SAUNDERS CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
SAUNDERS CREEK (continued)								
AT	12,094	38	179	10.6	816.4	816.4	816.4	0.0
AU	12,144	41	442	6.8	818.5	818.5	818.5	0.0
AV	12,246	100	922	2.5	819.6	819.6	819.6	0.0
AW	12,924	160	865	2.2	820.0	820.0	820.0	0.0
AX	12,935	161	821	2.3	820.0	820.0	820.0	0.0
AY	12,983	161	880	2.1	820.1	820.1	820.1	0.0
AZ	13,246	96	535	3.5	820.1	820.1	820.1	0.0
BA	13,641	259	977	1.9	820.6	820.6	820.6	0.0
BB	16,132	395	1,718	1.1	821.1	821.1	821.1	0.0
BC	17,348	431	1,615	1.2	821.5	821.5	821.5	0.0
BD	20,431	698	1,921	1.0	822.3	822.3	822.3	0.0
BE	20,948	639	1,663	0.9	822.5	822.5	822.5	0.0
BF	21,910	500	1,641	1.1	822.8	822.8	822.8	0.0

<sup>1</sup> Feet above confluence with Rock River

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b>	<b>FLOODWAY DATA</b>
	<b>AND INCORPORATED AREAS</b>	<b>SAUNDERS CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
SPRING BROOK (BELOIT)								
A	4,418	528	1,495	4.6	772.0	767.8 <sup>2</sup>	767.8	0.0
B	4,562	410	2,415	2.1	772.0	770.1 <sup>2</sup>	770.1	0.0
C	5,468	341	720	3.6	773.9	773.9	773.9	0.0
D	6,527	360	769	3.6	778.4	778.4	778.4	0.0
E	6,703	370	948	2.1	779.2	779.2	779.2	0.0
F	7,148	343	1,138	1.8	779.7	779.7	779.7	0.0
G	7,593	180	676	4.5	780.4	780.4	780.4	0.0
H	7,861	162	820	2.8	783.1	783.1	783.1	0.0
I	8,403	100	936	4.9	784.0	784.0	784.0	0.0
J	8,552	64	1,651	5.9	785.5	785.5	785.5	0.0
K	9,380	250	1,679	2.4	787.5	787.5	787.5	0.0
L	10,196	206	812	3.9	788.7	788.7	788.7	0.0
M	12,511	231	529	3.6	795.8	795.8	795.8	0.0
N	13,497	255	612	3.1	797.7	797.7	797.7	0.0
O	13,775	35	447	7.0	797.8	797.8	797.8	0.0
P	13,932	77	328	6.0	798.3	798.3	798.3	0.0
Q	14,464	230	669	2.9	801.4	801.4	801.4	0.0
R	15,392	75	461	6.8	802.9	802.9	802.9	0.0
S	15,591	57	445	8.8	804.5	804.5	804.5	0.0
T	15,991	111	954	3.5	807.8	807.8	807.8	0.0
U	16,451	182	1,911	1.7	810.9	810.9	810.9	0.0
V	16,889	223	1,731	2.0	811.1	811.1	811.1	0.0
W	17,050	281	1,397	1.7	811.3	811.3	811.3	0.0
X	17,143	370	1,887	1.1	811.4	811.4	811.4	0.0
Y	18,151	408	1,847	1.2	811.6	811.6	811.6	0.0
Z	19,166	527	1,979	1.0	811.8	811.8	811.8	0.0

<sup>1</sup> Feet above confluence with Turtle Creek

<sup>2</sup> Elevations without considering backwater from Turtle Creek

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

**ROCK COUNTY, WI**

**AND INCORPORATED AREAS**

**FLOODWAY DATA**

**SPRING BROOK (BELOIT)**

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
SPRING BROOK (BELOIT) (continued)								
AA	20,348	1,211	2,847	0.7	812.0	812.3	812.3	0.0
AB	21,476	949	794	2.5	813.7	814.1	814.1	0.0
AC	22,556	127	914	3.6	816.3	815.8	815.8	0.0
AD	23,620	591	1,437	1.4	820.5	820.4	820.4	0.0
AE	24,599	72	864	6.3	821.3	821.3	821.3	0.0
AF	24,802	122	518	4.2	823.4	823.4	823.4	0.0
AG	24,937	100	343	5.6	823.7	823.7	823.7	0.0
AH	25,080	62	367	5.7	825.4	825.4	825.4	0.0
AI	25,089	61	295	6.6	825.4	825.4	825.4	0.0
AJ	25,159	132	414	4.6	825.6	825.6	825.6	0.0
AK	26,523	167	717	2.7	828.9	828.9	828.9	0.0
AL	27,491	419	1,151	1.9	830.0	830.0	830.0	0.0
AM	29,280	116	421	4.9	833.0	833.0	833.0	0.0
AN	29,419	38	3,336	2.3	851.5	851.5	851.5	0.0
AO	32,806	126	2,649	2.0	851.7	851.7	851.7	0.0
AP	32,987	178	1,486	1.3	852.1	852.1	852.1	0.0
AQ	34,738	194	1,053	2.7	852.7	852.7	852.7	0.0
AR	34,892	142	1,207	2.4	854.2	854.2	854.2	0.0
AS	34,954	209	1,292	2.0	854.2	854.2	854.2	0.0
AT	36,022	113	295	4.8	857.3	857.3	857.3	0.0
AU	37,118	230	411	3.7	862.8	862.8	862.8	0.0
AV	37,904	66	230	6.8	866.6	866.6	866.6	0.0
AW	38,081	182	686	2.1	868.2	868.2	868.2	0.0
AX	39,572	203	406	3.5	870.9	870.9	870.9	0.0
AY	39,983	215	468	3.1	872.2	872.2	872.2	0.0
AZ	40,125	148	1,587	3.7	873.9	873.9	873.9	0.0

<sup>1</sup> Feet above confluence with Turtle Creek

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b>	<b>FLOODWAY DATA</b>
	<b>AND INCORPORATED AREAS</b>	<b>SPRING BROOK (BELOIT)</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
SPRING BROOK (BELOIT) (continued)								
BA	40,180	138	635	2.3	876.0	876.0	876.0	0.0
BB	40,356	120	528	2.7	876.2	876.2	876.2	0.0
BC	42,319	104	744	3.7	881.4	881.4	881.4	0.0
BD	42,615	190	1,117	1.4	885.1	885.1	885.1	0.0
BE	43,350	306	831	1.7	885.2	885.2	885.2	0.0
BF	44,002	283	427	3.3	885.9	885.9	885.9	0.0
BG	46,734	212	300	3.8	894.6	894.6	894.6	0.0
BH	46,776	287	711	1.6	896.8	896.8	896.8	0.0
BI	48,197	183	320	3.7	899.8	899.8	899.8	0.0
BJ	49,010	255	387	2.9	902.2	902.2	902.2	0.0
BK	50,853	224	320	3.6	906.7	906.7	906.7	0.0
BL	51,554	348	454	2.5	908.9	908.9	908.9	0.0
BM	52,443	70	284	5.3	911.3	911.3	911.3	0.0
BN	52,616	229	2,925	0.8	916.3	916.3	916.3	0.0
BO	53,609	749	2,765	0.4	916.4	916.4	916.4	0.0
BP	54,642	668	2,092	0.2	916.4	916.4	916.4	0.0
BQ	55,438	547	1,084	0.4	916.4	916.4	916.4	0.0
BR	56,300	302	224	2.0	917.3	917.3	917.3	0.0
BS	57,248	181	140	3.0	921.2	921.2	921.2	0.0
BT	58,148	114	117	3.6	926.4	926.4	926.4	0.0
BU	59,189	182	153	2.7	932.2	932.2	932.2	0.0
BV	60,151	106	112	2.7	934.6	934.6	934.6	0.0
BW	60,641	244	184	1.6	936.4	936.4	936.4	0.0
BX	60,801	432	2,950	0.4	940.9	940.9	940.9	0.0

<sup>1</sup> Feet above confluence with Turtle Creek

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b>	<b>FLOODWAY DATA</b>
	<b>AND INCORPORATED AREAS</b>	<b>SPRING BROOK (BELOIT)</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
SPRING BROOK (JANESVILLE)								
A	321	333	2,534	6.3	766.2	763.9 <sup>2</sup>	763.9	0.0
B	759	357	2,367	6.4	766.2	766.2	766.2	0.0
C	925	675	2,530	3.7	767.5	767.5	767.5	0.0
D	1,506	1,228	6,064	1.5	768.5	768.5	768.5	0.0
E	2,270	970	4,873	2.0	768.7	768.7	768.7	0.0
F	2,886	865	5,195	2.6	769.1	769.1	769.1	0.0
G	3,670	730	6,158	3.1	770.0	770.0	770.0	0.0
H	4,073	545	7,739	4.1	772.0	772.0	772.0	0.0
I	4,649	898	11,011	1.7	773.1	773.1	773.1	0.0
J	5,192	994	5,670	1.9	773.4	773.4	773.4	0.0
K	6,597	754	2,998	2.3	775.5	775.5	775.5	0.0
L	6,753	666	2,374	2.8	775.8	775.8	775.8	0.0
M	7,219	783	2,252	2.8	777.5	777.5	777.5	0.0
N	7,730	796	2,213	2.6	778.6	778.6	778.6	0.0
O	8,195	996	3,067	1.9	779.5	779.5	779.5	0.0
P	8,486	799	2,207	2.6	779.7	779.7	779.7	0.0
Q	8,799	719	1,980	3.5	781.3	781.3	781.3	0.0
R	9,165	649	2,508	2.5	783.2	783.2	783.2	0.0
S	9,563	277	2,127	5.1	784.4	784.4	784.4	0.0
T	10,271	477	4,123	1.7	789.7	789.7	789.7	0.0
U	11,034	480	2,680	3.3	790.3	790.3	790.3	0.0
V	11,506	428	2,052	3.3	791.1	791.1	791.1	0.0
W	12,153	396	1,328	4.1	793.0	793.0	793.0	0.0
X	12,677	684	2,417	2.3	794.9	794.9	794.9	0.0
Y	13,336	492	1,764	3.5	796.5	796.5	796.5	0.0
Z	13,598	368	1,125	5.6	797.6	797.6	797.6	0.0

<sup>1</sup> Feet above confluence with Rock River

<sup>2</sup> Elevations without considering backwater from Rock River

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

**ROCK COUNTY, WI**

**AND INCORPORATED AREAS**

**FLOODWAY DATA**

**SPRING BROOK (JANESVILLE)**

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
SPRING BROOK (JANESVILLE) (continued)								
AA	14,395 <sup>1</sup>	387	4,135	2.5	805.0	805.0	805.0	0.0
AB	14,854 <sup>1</sup>	514	3,128	2.7	805.3	805.3	805.3	0.0
AC	15,535 <sup>1</sup>	943	2,283	2.8	806.2	806.2	806.2	0.0
AD	16,037 <sup>1</sup>	890	2,431	2.7	807.9	807.9	807.9	0.0
AE	16,457 <sup>1</sup>	880	2,171	2.7	808.9	808.9	808.9	0.0
SUGAR RIVER								
A	251 <sup>2</sup>	2,570	10,604	2.4	743.1	743.1	743.1	0.0
B	4,288 <sup>2</sup>	3,395	18,742	1.4	745.9	745.9	745.9	0.0
C	15,318 <sup>2</sup>	2,720	14,769	1.7	748.8	748.8	748.8	0.0
D	21,129 <sup>2</sup>	2,091	13,980	1.8	751.6	751.6	751.6	0.0
E	25,446 <sup>2</sup>	3,173	15,256	1.7	753.9	753.9	753.9	0.0
F	26,527 <sup>2</sup>	3,930	13,011	2.0	754.6	754.6	754.6	0.0
G	33,703 <sup>2</sup>	2,407	19,710	1.2	757.1	757.1	757.1	0.0
H	42,101 <sup>2</sup>	3,323	19,930	1.2	759.1	759.1	759.1	0.0
I	48,389 <sup>2</sup>	4,457	20,822	1.2	760.6	760.6	760.6	0.0
J	59,226 <sup>2</sup>	4,450	9,663	2.4	763.6	763.6	763.6	0.0

<sup>1</sup> Feet above confluence with Rock River

<sup>2</sup> Feet above county boundary

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b> AND INCORPORATED AREAS	<b>FLOODWAY DATA</b>
		<b>SPRING BROOK (JANESVILLE) - SUGAR RIVER</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
TRIBUTARY TO FISHER CREEK								
A	135	113	256	2.9	857.1	857.1	857.1	0.0
B	319	271	325	2.0	857.5	857.5	857.5	0.0
C	861	271	305	2.1	861.2	861.2	861.2	0.0
D	1,272	261	250	2.5	866.2	866.2	866.2	0.0
E	1,889	24	39	4.2	872.2	872.2	872.2	0.0
F	2,231	188	106	1.7	879.8	879.8	879.8	0.0
G	2,743	203	124	1.6	886.8	886.8	886.8	0.0
H	3,317	86	64	2.6	895.4	895.4	895.4	0.0
I	3,867	23	48	6.1	904.0	904.0	904.0	0.0
J	4,085	74	61	2.8	907.4	907.4	907.4	0.0
K	4,591	71	49	3.4	918.2	918.2	918.2	0.0
L	4,915	51	45	3.7	924.6	924.6	924.6	0.0
M	5,385	39	42	3.9	931.1	931.1	931.1	0.0
N	5,632	59	54	3.1	934.0	934.0	934.0	0.0
O	6,151	122	76	2.2	939.3	939.3	939.3	0.0
P	6,217	390	1,207	1.0	944.1	944.1	944.1	0.0

<sup>1</sup> Feet above confluence with Fisher Creek

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b> AND INCORPORATED AREAS	<b>FLOODWAY DATA</b>
		<b>TRIBUTARY TO FISHER CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
TURTLE CREEK								
A	472	1,037 / 0 <sup>2</sup>	11,985	5.3	741.6	741.6	741.6	0.0
B	654	1,613 / 0 <sup>2</sup>	16,356	2.2	742.9	742.9	742.9	0.0
C	851	1,480 / 0 <sup>2</sup>	12,642	2.5	742.9	742.9	742.9	0.0
D	1,114	1,261 / 0 <sup>2</sup>	15,032	3.1	744.2	744.2	744.2	0.0
E	1,402	1,575 / 40 <sup>2</sup>	16,306	2.4	744.6	744.6	744.6	0.0
F	1,694	1,756 / 59 <sup>2</sup>	18,281	1.6	745.3	745.3	745.3	0.0
G	2,246	2,255 / 94 <sup>2</sup>	15,034	1.2	745.4	745.4	745.4	0.0
H	2,875	1,630 / 0 <sup>2</sup>	12,771	1.7	745.6	745.6	745.6	0.0
I	3,335	1,498 / 6 <sup>2</sup>	10,952	2.1	745.9	745.9	745.9	0.0
J	3,632	1,409 / 28 <sup>2</sup>	7,977	2.5	746.1	746.1	746.1	0.0
K	4,011	1,377 / 42 <sup>2</sup>	7,682	2.7	746.6	746.6	746.6	0.0
L	4,484	1,307 / 13 <sup>2</sup>	9,226	2.8	748.1	748.1	748.1	0.0
M	4,816	1,606 / 45 <sup>2</sup>	10,379	3.1	750.0	750.0	750.0	0.0
N	5,361	1,774 / 539 <sup>2</sup>	18,639	1.7	751.8	751.8	751.8	0.0
O	5,875	1,531 / 748 <sup>2</sup>	14,716	3.8	752.1	752.1	752.1	0.0
P	6,030	1,378 / 844 <sup>2</sup>	19,978	2.6	753.8	753.8	753.8	0.0
Q	6,436	912 / 818 <sup>2</sup>	20,473	4.4	754.2	754.2	754.2	0.0
R	6,629	712	8,606	5.9	754.7	754.7	754.7	0.0
S	7,073	323	8,272	6.9	756.9	756.9	756.9	0.0
T	7,641	140	5,089	11.5	757.3	757.3	757.3	0.0
U	8,298	941	11,423	2.3	760.4	760.4	760.4	0.0
V	8,884	1,370	12,396	1.8	760.8	760.8	760.8	0.0
W	9,477	1,788	10,422	1.8	761.1	761.1	761.1	0.0
X	9,992	1,880	9,396	1.8	761.5	761.5	761.5	0.0
Y	10,897	1,432	7,496	2.4	762.4	762.4	762.4	0.0
Z	11,250	1,171	6,178	3.0	762.9	762.9	762.9	0.0

<sup>1</sup> Feet above confluence with Rock River

<sup>2</sup> Width / width within Rock County limits

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

**ROCK COUNTY, WI**

**AND INCORPORATED AREAS**

**FLOODWAY DATA**

**TURTLE CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
TURTLE CREEK (continued)								
AA	11,868	476	5,758	5.9	764.4	764.4	764.4	0.0
AB	12,060	293	6,924	6.9	765.5	765.5	765.5	0.0
AC	12,232	367	7,954	4.8	766.8	766.8	766.8	0.0
AD	12,951	964	9,624	2.6	768.3	768.3	768.3	0.0
AE	13,368	1,217	8,881	2.5	769.1	769.1	769.1	0.0
AF	13,538	1,310	9,466	2.1	769.5	769.5	769.5	0.0
AG	15,110	401	8,509	5.1	772.0	772.0	772.0	0.0
AH	15,254	258	6,804	7.6	772.1	772.1	772.1	0.0
AI	15,474	242	6,106	5.7	773.6	773.6	773.6	0.0
AJ	15,851	661	8,344	2.8	774.4	774.4	774.4	0.0
AK	16,355	1,030	11,250	2.1	775.0	775.0	775.0	0.0
AL	17,769	1,161	8,088	1.8	776.0	776.0	776.0	0.0
AM	18,960	1,018	7,071	2.0	777.7	777.7	777.7	0.0
AN	19,757	954	7,131	2.0	778.3	778.3	778.3	0.0
AO	20,265	1,287	8,442	1.7	778.6	778.6	778.6	0.0
AP	20,809	1,337	8,277	1.8	778.9	778.9	778.9	0.0
AQ	21,511	1,281	6,337	2.2	779.3	779.3	779.3	0.0
AR	22,155	1,176	6,723	2.2	780.0	780.0	780.0	0.0
AS	23,248	1,099	6,348	2.2	781.4	781.4	781.4	0.0
AT	23,873	1,056	3,931	3.9	781.5	781.5	781.5	0.0
AU	24,523	942	5,560	2.6	783.6	783.6	783.6	0.0
AV	25,026	860	5,568	2.6	784.3	784.3	784.3	0.0
AW	25,517	963	5,799	2.4	784.6	784.6	784.6	0.0
AX	26,540	1,023	6,874	2.1	785.2	785.2	785.2	0.0
AY	27,203	983	5,197	2.7	785.5	785.5	785.5	0.0
AZ	28,249	751	7,008	2.6	787.0	787.0	787.0	0.0

<sup>1</sup> Feet above confluence with Rock River

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b>	<b>FLOODWAY DATA</b>
	<b>AND INCORPORATED AREAS</b>	<b>TURTLE CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
TURTLE CREEK (continued)								
BA	28,683	516	7,516	3.4	787.3	787.3	787.3	0.0
BB	29,519	814	6,850	2.4	789.0	789.0	789.0	0.0
BC	31,303	1,069	6,801	2.1	789.9	789.9	789.9	0.0
BD	32,563	888	6,068	2.3	790.6	790.6	790.6	0.0
BE	33,578	692	5,054	2.9	791.1	791.1	791.1	0.0
BF	34,606	763	5,638	2.5	791.8	791.8	791.8	0.0
BG	35,744	817	5,485	2.6	792.6	792.6	792.6	0.0
BH	36,872	617	4,619	3.1	793.4	793.4	793.4	0.0
BI	37,968	562	5,323	3.5	794.2	794.2	794.2	0.0
BJ	38,810	1,018	9,236	1.6	796.8	796.8	796.8	0.0
BK	39,849	746	6,830	2.0	797.2	797.2	797.2	0.0
BL	40,893	780	6,598	2.1	797.4	797.4	797.4	0.0
BM	42,060	924	6,718	2.1	797.9	797.9	797.9	0.0
BN	43,635	953	6,241	2.2	798.3	798.3	798.3	0.0
BO	44,965	551	4,145	3.3	798.7	798.7	798.7	0.0
BP	47,437	1,287	7,957	1.7	800.0	800.0	800.0	0.0
BQ	49,141	376	4,723	6.1	800.8	800.8	800.8	0.0
BR	50,105	800	6,178	2.3	804.0	804.0	804.0	0.0
BS	51,264	606	3,998	3.4	804.5	804.5	804.5	0.0
BT	52,194	549	3,876	3.7	804.9	804.9	804.9	0.0
BU	53,251	546	3,874	3.9	805.5	805.5	805.5	0.0
BV	53,969	639	3,896	3.5	806.0	806.0	806.0	0.0
BW	54,731	900	4,818	2.9	807.0	807.0	807.0	0.0
BX	55,774	833	4,646	3.0	807.8	807.8	807.8	0.0
BY	57,037	668	4,860	2.9	808.8	808.8	808.8	0.0
BZ	58,409	632	4,339	3.2	809.9	809.9	809.9	0.0

<sup>1</sup> Feet above confluence with Rock River

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b>	<b>FLOODWAY DATA</b>
	<b>AND INCORPORATED AREAS</b>	<b>TURTLE CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
TURTLE CREEK (continued)								
CA	59,515	599	3,693	3.7	810.8	810.8	810.8	0.0
CB	60,307	625	4,061	3.4	811.5	811.5	811.5	0.0
CC	60,924	849	5,493	2.5	812.2	812.2	812.2	0.0
CD	61,803	1,044	7,473	2.1	814.6	814.6	814.6	0.0
CE	62,818	1,170	7,012	2.0	814.9	814.9	814.9	0.0
CF	63,787	811	3,636	3.8	815.1	815.1	815.1	0.0
CG	64,679	499	3,364	4.1	816.2	816.2	816.2	0.0
CH	65,564	965	5,850	2.4	817.1	817.1	817.1	0.0
CI	66,473	696	4,293	3.2	817.5	817.5	817.5	0.0
CJ	67,225	598	5,183	3.6	818.1	818.1	818.1	0.0
CK	68,072	825	5,094	2.7	819.6	819.6	819.6	0.0
CL	68,875	1,481	9,296	1.4	820.2	820.2	820.2	0.0
CM	71,045	1,144	6,635	2.0	820.8	820.8	820.8	0.0
CN	73,131	1,092	5,975	2.2	821.7	821.7	821.7	0.0
CO	75,229	1,113	6,398	2.1	822.6	822.6	822.6	0.0
CP	77,155	1,009	5,612	2.3	823.2	823.2	823.2	0.0
CQ	79,420	773	4,534	2.9	824.5	824.5	824.5	0.0
CR	81,816	1,152	5,601	2.3	826.4	826.4	826.4	0.0
CS	83,575	993	5,102	2.6	827.5	827.5	827.5	0.0
CT	85,661	947	6,623	2.0	828.5	828.5	828.5	0.0
CU	86,425	888	4,226	3.1	828.8	828.8	828.8	0.0
CV	87,492	558	5,137	3.6	829.8	829.8	829.8	0.0
CW	88,478	654	5,294	2.5	832.2	832.2	832.2	0.0
CX	89,694	647	5,048	2.6	832.6	832.6	832.6	0.0
CY	91,739	750	5,957	2.2	833.7	833.7	833.7	0.0
CZ	94,255	318	2,933	4.5	834.7	834.7	834.7	0.0

<sup>1</sup> Feet above confluence with Rock River

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b>	<b>FLOODWAY DATA</b>
	<b>AND INCORPORATED AREAS</b>	<b>TURTLE CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
TURTLE CREEK (continued)								
DA	95,915	316	3,875	4.2	836.1	836.1	836.1	0.0
DB	97,645	500	5,122	3.0	838.4	838.4	838.4	0.0
DC	98,654	899	7,512	1.7	839.9	839.9	839.9	0.0
DD	100,864	910	6,484	1.9	840.5	840.5	840.5	0.0
DE	103,172	1,169	8,096	1.5	841.3	841.3	841.3	0.0
DF	105,308	1,046	5,243	2.3	842.1	842.1	842.1	0.0
DG	107,576	1,013	5,289	2.3	844.0	844.0	844.0	0.0
DH	109,276	1,168	4,465	2.7	845.8	845.8	845.8	0.0
DI	111,571	983	4,720	2.6	847.5	847.5	847.5	0.0
DJ	112,497	1,193	7,306	1.7	850.6	850.6	850.6	0.0
DK	114,356	725	7,235	1.0	850.8	850.8	850.8	0.0
DL	115,533	1,062	8,018	0.7	851.0	851.0	851.0	0.0
DM	117,703	970	6,316	0.7	851.1	851.1	851.1	0.0
DN	121,510	1,187	5,483	0.9	851.4	851.4	851.4	0.0
DO	122,880	1,083	4,864	1.0	851.8	851.8	851.8	0.0
DP	126,091	854	4,133	1.1	852.2	852.2	852.2	0.0
DQ	128,300	782	3,737	1.3	852.6	852.6	852.6	0.0
DR	130,379	806	3,497	1.3	853.1	853.1	853.1	0.0
DS	132,753	1,042 / 542 <sup>2</sup>	4,513	1.0	853.7	853.7	853.7	0.0

<sup>1</sup> Feet above confluence with Rock River

<sup>2</sup> Width / width within Rock County limits

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

**ROCK COUNTY, WI  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**TURTLE CREEK**

FLOODING SOURCE		FLOODWAY				1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY (FEET)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
UNNAMED TRIBUTARY 1 TO RACCOON CREEK									
A	1,047	312	1,669	1.9	0	761.5	761.5	761.5	0.0
B	1,840	291	1,413	2.0	0	762.2	762.2	762.2	0.0
C	3,822	154	657	2.5	0	765.3	765.3	765.3	0.0
D	4,504	196	368	4.1	0	767.6	767.6	767.6	0.0
E	4,978	64	1,414	3.8	0	770.0	770.0	770.0	0.0
F	5,367	379	1,364	1.4	0	770.5	770.5	770.5	0.0
G	7,033	511	1,687	1.6	50	771.7	771.7	771.7	0.0
H	13,595	555	766	1.9	0	790.4	790.4	790.4	0.0
I	16,892	196	315	2.4	0	800.9	800.9	800.9	0.0
J	17,375	39	1,015	5.4	0	803.3	803.3	803.3	0.0

<sup>1</sup>Feet above confluence with Raccoon Creek

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**ROCK COUNTY, WI**  
 AND INCORPORATED AREAS

FLOODWAY DATA

UNNAMED TRIBUTARY 1 TO RACCOON CREEK

FLOODING SOURCE		FLOODWAY				1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY (FEET)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
UNNAMED TRIBUTARY 1 TO ROCK RIVER									
A	1,506	683	6,035	1.2	0	753.2	752.1 <sup>2</sup>	752.1	0.0
B	1,997	759	3,805	1.3	0	753.2	752.3 <sup>2</sup>	752.3	0.0
C	2,495	496	2,140	2.6	0	753.2	752.4 <sup>2</sup>	752.4	0.0
D	2,983	610	2,400	2.6	0	753.2	753.2	753.2	0.0
E	3,503	285	1,211	5.2	0	754.8	754.8	754.8	0.0
F	3,900	73	814	6.5	98	756.9	756.9	756.9	0.0
G	4,304	345	2,625	2.1	0	759.7	759.7	759.7	0.0
H	4,497	272	1,948	2.6	90	759.8	759.8	759.8	0.0
I	5,001	559	1,991	2.0	0	760.7	760.7	760.7	0.0
J	5,504	576	1,725	2.3	0	761.4	761.4	761.4	0.0
K	5,994	622	1,232	3.2	0	762.9	762.9	762.9	0.0
L	6,506	652	1,283	3.1	0	764.8	764.8	764.8	0.0
M	7,010	590	1,553	2.6	39	766.6	766.6	766.6	0.0
N	7,490	455	1,016	3.9	0	767.8	767.8	767.8	0.0
O	7,987	477	1,620	2.4	33	769.3	769.3	769.3	0.0
P	8,481	516	1,305	3.0	0	770.3	770.3	770.3	0.0
Q	8,996	406	1,440	3.3	0	771.8	771.8	771.8	0.0
R	9,526	472	1,820	2.1	0	772.7	772.7	772.7	0.0
S	10,015	321	853	4.6	58	773.2	773.2	773.2	0.0
T	10,461	363	1,030	3.8	0	775.2	775.2	775.2	0.0
U	10,980	28	1,763	16.4	0	779.5	779.5	779.5	0.0

<sup>1</sup>Feet above confluence with Rock River

<sup>2</sup>Elevation not considering backwater effect from Rock River

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**ROCK COUNTY, WI**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**UNNAMED TRIBUTARY 1 TO ROCK RIVER**

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
UNNAMED TRIBUTARY 1 TO TURTLE CREEK								
A	1,569	341	452	2.9	820.1	817.8 <sup>2</sup>	817.8	0.0
B	2,466	159	366	3.5	820.6	820.6	820.6	0.0
C	3,177	153	328	4.0	823.6	823.6	823.6	0.0
D	4,282	144	380	3.4	827.5	827.5	827.5	0.0
E	5,356	164	413	3.1	830.4	830.4	830.4	0.0
F	6,538	229	516	2.5	834.9	834.9	834.9	0.0
G	7,936	200	423	3.1	838.7	838.7	838.7	0.0
H	8,907	262	643	2.0	841.5	841.5	841.5	0.0
I	9,349	224	711	2.2	843.1	843.1	843.1	0.0
J	9,520	337	1,406	1.3	845.1	845.1	845.1	0.0
K	10,185	410	710	1.8	845.5	845.5	845.5	0.0
L	11,071	201	311	2.8	847.6	847.6	847.6	0.0
M	11,966	94	225	3.8	850.3	850.3	850.3	0.0
N	12,458	57	238	5.2	851.8	851.8	851.8	0.0
O	12,566	121	872	2.0	854.2	854.2	854.2	0.0
P	12,801	222	956	0.9	854.4	854.4	854.4	0.0

<sup>1</sup> Feet above confluence with Turtle Creek

<sup>2</sup> Elevations without considering backwater effect from Turtle Creek

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**ROCK COUNTY, WI**  
 AND INCORPORATED AREAS

FLOODWAY DATA

UNNAMED TRIBUTARY 1 TO TURTLE CREEK

FLOODING SOURCE		FLOODWAY				1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY (FEET)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
UNNAMED TRIBUTARY 2 TO RACCOON CREEK									
A	1,078	198	498	2.6	0	763.8	763.8	763.8	0.0
B	2,194	164	326	3.6	0	768.2	768.2	768.2	0.0
C	3,574	113	1,117	2.2	0	774.1	774.1	774.1	0.0
D	5,108	250	386	3.0	0	778.4	778.4	778.4	0.0
E	6,404	150	854	1.4	105	786.8	786.8	786.8	0.0
F	6,865	50	192	6.0	0	787.5	787.5	787.5	0.0
G	9,020	101	306	3.8	0	796.1	796.1	796.1	0.0
H	10,671	157	626	3.3	0	801.2	801.2	801.2	0.0
I	12,211	206	318	2.8	0	807.3	807.3	807.3	0.0
J	14,795	13	912	8.9	0	821.2	821.2	821.2	0.0
K	15,660	65	194	4.9	0	826.7	826.7	826.7	0.0

<sup>1</sup>Feet above the confluence with Unnamed Tributary 1 to Raccoon Creek

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b> AND INCORPORATED AREAS	<b>FLOODWAY DATA</b>
		<b>UNNAMED TRIBUTARY 2 TO RACCOON CREEK</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
UNNAMED TRIBUTARY 2 TO TURTLE CREEK								
A	916	179	399	2.9	817.1	817.0 <sup>2</sup>	817.0	0.0
B	1,214	115	335	3.4	820.4	820.4	820.4	0.0
C	1,295	125	487	2.4	822.8	822.8	822.8	0.0
D	1,565	134	357	3.8	823.4	823.4	823.4	0.0
E	1,713	98	342	4.3	824.3	824.3	824.3	0.0
F	1,883	85	252	4.6	825.4	825.4	825.4	0.0
G	2,125	71	234	4.9	827.0	827.0	827.0	0.0
H	2,896	196	625	1.8	831.3	831.3	831.3	0.0
I	4,203	171	373	3.1	835.8	835.8	835.8	0.0
J	5,487	252	695	1.7	840.4	840.4	840.4	0.0
K	6,487	143	231	2.8	843.3	843.3	843.3	0.0
L	7,041	161	283	2.3	845.9	845.9	845.9	0.0
M	7,433	45	648	5.0	847.2	847.2	847.2	0.0
N	7,602	97	1,489	1.9	848.8	848.8	848.8	0.0
O	8,051	204	458	1.4	849.1	849.1	849.1	0.0
P	8,797	198	244	2.7	850.5	850.5	850.5	0.0
Q	8,855	227	377	1.7	851.1	851.1	851.1	0.0
R	9,159	201	247	2.7	851.6	851.6	851.6	0.0
S	10,205	98	174	3.7	857.6	857.6	857.6	0.0
T	11,413	266	344	1.9	862.3	862.3	862.3	0.0
U	12,396	328	353	1.8	866.3	866.3	866.3	0.0
V	13,172	161	359	2.6	869.5	869.5	869.5	0.0
W	13,271	159	322	2.6	870.8	870.8	870.8	0.0
X	13,812	146	2,051	0.8	879.1	879.1	879.1	0.0

<sup>1</sup> Feet above confluence with Turtle Creek

<sup>2</sup> Elevations without considering backwater effect from Turtle Creek

<b>TABLE 6</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>ROCK COUNTY, WI</b>	<b>UNNAMED TRIBUTARY 2 TO TURTLE CREEK</b>
	<b>AND INCORPORATED AREAS</b>	

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
UNNAMED TRIBUTARY 2 TO TURTLE CREEK (continued)								
Y	14,569	289	753	0.6	879.1	879.1	879.1	0.0
Z	15,274	64	110	4.3	880.8	880.8	880.8	0.0
AA	16,381	127	146	3.3	886.7	886.7	886.7	0.0
AB	17,274	199	227	2.1	892.1	892.1	892.1	0.0
AC	17,805	214	246	1.9	894.6	894.6	894.6	0.0
AD	17,893	230	645	1.5	897.5	897.5	897.5	0.0
AE	18,040	208	255	1.9	897.7	897.7	897.7	0.0
AF	18,351	146	205	2.3	899.5	899.5	899.5	0.0
AG	18,680	39	96	4.9	902.1	902.1	902.1	0.0
AH	18,820	115	1,431	1.3	904.0	904.0	904.0	0.0
AI	19,160	133	349	1.4	904.3	904.3	904.3	0.0
AJ	19,489	55	151	5.9	904.7	904.7	904.7	0.0

<sup>1</sup> Feet above confluence with Turtle Creek

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b> AND INCORPORATED AREAS	<b>FLOODWAY DATA</b>
		<b>UNNAMED TRIBUTARY 2 TO TURTLE CREEK</b>

FLOODING SOURCE		FLOODWAY				1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY (FEET)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
UNNAMED TRIBUTARY IN TURTLE TOWNSHIP									
A	20	42	6,808	5.7	0	791.3	791.3	791.3	0.0
B	494	210	8,698	1.2	0	792.0	792.0	792.0	0.0
C	1,496	74	8,619	3.8	0	792.1	792.1	792.1	0.0
D	2,498	23	9,375	7.2	0	793.1	793.1	793.1	0.0
E	3,502	21	14,825	8.4	0	796.4	796.4	796.4	0.0
F	4,000	28	8,258	5.3	0	798.4	798.4	798.4	0.0
G	5,001	27	9,216	5.8	0	799.9	799.9	799.9	0.0
H	6,009	52	3,469	3.7	0	801.2	801.2	801.2	0.0
I	7,013	70	211	5.9	0	802.3	802.3	802.3	0.0
J	7,239	29	111	11.1	0	803.0	803.0	803.0	0.0
K	7,453	92	249	4.2	0	805.2	805.2	805.2	0.0
L	8,511	87	222	4.8	0	808.0	808.0	808.0	0.0
M	15,499	45	244	5.5	0	831.8	831.8	831.8	0.0
N	18,002	34	87	9.1	0	847.1	847.1	847.1	0.0
O	18,152	52	202	4.5	0	848.7	848.7	848.7	0.0
P	18,317	32	181	4.4	0	850.9	850.9	850.9	0.0
Q	18,484	64	228	4.0	0	851.1	851.1	851.1	0.0
R	19,994	63	124	3.7	44	854.9	854.9	854.9	0.0
S	22,009	42	84	5.6	25	864.0	864.0	864.0	0.0
T	22,368	42	128	3.7	0	865.7	865.7	865.7	0.0
U	22,610	42	220	3.7	0	866.8	866.8	866.8	0.0
V	24,596	21	88	8.9	0	877.8	877.8	877.8	0.0
W	24,729	12	119	4.8	0	883.5	883.5	883.5	0.0
X	24,805	72	590	1.4	0	883.8	883.8	883.8	0.0
Y	24,998	102	434	1.3	0	883.9	883.9	883.9	0.0
Z	27,007	42	38	5.6	0	892.0	892.0	892.0	0.0

<sup>1</sup>Feet above 55 feet below state boundary

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

**ROCK COUNTY, WI  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**UNNAMED TRIBUTARY IN TURTLE TOWNSHIP**

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
UNNAMED TRIBUTARY IN TURTLE TOWNSHIP (continued)								
AA	29,004 <sup>1</sup>	83	116	2.5	904.8	904.8	904.8	0.0
AB	29,994 <sup>1</sup>	60	47	4.5	909.2	909.2	909.2	0.0
AC	30,175 <sup>1</sup>	26	54	4.3	910.1	910.1	910.1	0.0
AD	30,450 <sup>1</sup>	54	290	1.4	912.0	912.0	912.0	0.0
AE	31,003 <sup>1</sup>	25	33	6.6	914.4	914.4	914.4	0.0
AF	32,026 <sup>1</sup>	51	116	2.7	919.9	919.9	919.9	0.0
UNNAMED TRIBUTARY TO ALLEN CREEK								
A	9,821 <sup>2</sup>	273	951	1.3	902.0	902.0	902.0	0.0
B	10,689 <sup>2</sup>	595	1,455	0.8	902.2	902.2	902.2	0.0
C	11,518 <sup>2</sup>	607	761	1.6	902.4	902.4	902.4	0.0
D	12,385 <sup>2</sup>	259	657	1.8	903.2	903.2	903.2	0.0
E	12,796 <sup>2</sup>	100	148	2.1	903.5	903.5	903.5	0.0
F	13,199 <sup>2</sup>	89	117	2.6	904.5	904.5	904.5	0.0
G	13,820 <sup>2</sup>	95	108	2.8	906.3	906.3	906.3	0.0
H	14,524 <sup>2</sup>	91	102	3.0	910.5	910.5	910.5	0.0
I	14,889 <sup>2</sup>	44	59	5.2	914.1	914.1	914.1	0.0

<sup>1</sup>Feet above 55 feet below state boundary

<sup>2</sup>Feet above confluence with Allen Creek

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

**ROCK COUNTY, WI**

**AND INCORPORATED AREAS**

**FLOODWAY DATA**

**UNNAMED TRIBUTARY IN TURTLE TOWNSHIP**

**UNNAMED TRIBUTARY TO ALLEN CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
UNNAMED TRIBUTARY TO BLACKHAWK CREEK								
A	459	298	860	2.6	857.4	857.4	857.4	0.0
B	2,473	269	664	3.4	862.0	862.0	862.0	0.0
C	4,459	369	767	2.9	868.5	868.5	868.5	0.0
D	6,457	452	1,095	2.0	871.7	871.7	871.7	0.0
E	6,741	333	891	3.0	872.1	872.1	872.1	0.0
F	6,800	372	1,856	1.3	874.2	874.2	874.2	0.0
G	8,947	266	665	3.1	877.2	877.2	877.2	0.0
H	9,457	159	479	4.7	878.7	878.7	878.7	0.0
I	9,979	339	1,093	2.0	880.2	880.2	880.2	0.0
J	10,482	303	878	2.9	881.0	881.0	881.0	0.0
K	11,457	258	789	2.8	883.3	883.3	883.3	0.0
L	12,845	359	1,066	1.9	885.2	885.2	885.2	0.0

<sup>1</sup> Feet above confluence with Blackhawk Creek

**T  
A  
B  
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E  
6**

**FEDERAL EMERGENCY MANAGEMENT AGENCY**

**ROCK COUNTY, WI**

**AND INCORPORATED AREAS**

**FLOODWAY DATA**

**UNNAMED TRIBUTARY TO BLACKHAWK CREEK**

FLOODING SOURCE		FLOODWAY				1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY (FEET)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
UNNAMED TRIBUTARY TO EAST FORK RACCOON CREEK									
A	1,633	348	675	2.3	0	755.5	755.5	755.5	0.0
B	2,279	409	3,399	0.6	0	761.2	761.2	761.2	0.0
C	2,847	689	2,496	0.6	59	761.3	761.3	761.3	0.0
D	4,303	464	1,195	1.3	0	762.2	762.2	762.2	0.0
E	5,397	143	1,021	2.7	0	763.2	763.2	763.2	0.0
F	6,848	285	813	2.1	0	764.8	764.8	764.8	0.0
G	11,795	100	999	3.3	0	774.9	774.9	774.9	0.0
H	14,067	279	384	2.0	0	780.4	780.4	780.4	0.0
I	14,732	238	1,325	0.9	0	783.8	783.8	783.8	0.0
J	15,074	291	678	1.3	0	784	784.0	784.0	0.0
K	17,898	182	287	2.7	28	797.2	797.2	797.2	0.0
L	19,831	168	274	2.8	0	804.7	804.7	804.7	0.0
M	20,295	199	1,155	1.1	0	808.1	808.1	808.1	0.0
N	21,139	79	636	2.4	0	810	810.0	810.0	0.0
O	21,792	85	350	2.8	80	811.4	811.4	811.4	0.0
P	22,203	42	115	7.1	0	813.9	813.9	813.9	0.0

<sup>1</sup>Feet above confluence with East Fork Raccoon Creek

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**ROCK COUNTY, WI**  
AND INCORPORATED AREAS

**FLOODWAY DATA**

**UNNAMED TRIBUTARY TO EAST FORK RACCOON CREEK**

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
YAHARA RIVER								
A	3,866	871	4,204	2.0	781.1	778.5 <sup>2</sup>	778.5	0.0
B	6,873	1,562	4,605	1.2	781.1	780.6 <sup>2</sup>	780.6	0.0
C	9,383	613	2,659	2.2	782.3	782.3	782.3	0.0
D	10,724	961	3,342	1.6	784.0	784.0	784.0	0.0
E	11,876	954	2,762	1.9	784.7	784.7	784.7	0.0
F	12,895	976	3,378	1.6	785.4	785.4	785.4	0.0
G	14,550	296	938	5.7	787.7	787.7	787.7	0.0
H	15,198	155	928	5.8	788.9	788.9	788.9	0.0
I	15,748	129	862	6.7	789.5	789.5	789.5	0.0
J	16,380	102	824	7.3	790.5	790.5	790.5	0.0
K	17,841	516	2,105	2.6	792.9	792.9	792.9	0.0
L	19,405	421	1,664	3.2	794.0	794.0	794.0	0.0
M	20,746	526	1,761	3.0	795.0	795.0	795.0	0.0
N	21,519	403	1,920	2.8	795.6	795.6	795.6	0.0
O	22,630	262	1,446	3.7	796.2	796.2	796.2	0.0
P	23,614	316	1,759	4.2	797.1	797.1	797.1	0.0
Q	24,763	347	1,891	2.8	798.3	798.3	798.3	0.0
R	26,146	230	1,637	3.3	798.9	798.9	798.9	0.0
S	26,897	351	1,728	3.1	799.5	799.5	799.5	0.0
T	28,012	286	2,063	2.6	800.0	800.0	800.0	0.0
U	29,566	255	1,540	3.5	800.5	800.5	800.5	0.0
V	30,827	349	2,330	2.3	801.2	801.2	801.2	0.0
W	32,956	263	2,302	2.3	801.9	801.9	801.9	0.0
X	35,336	1,069	8,950	0.7	802.3	802.3	802.3	0.0
Y	35,797	730	6,948	1.0	802.3	802.3	802.3	0.0
Z	37,099	746	7,885	1.1	802.8	802.8	802.8	0.0

<sup>1</sup> Feet above confluence with Rock River

<sup>2</sup> Elevations without considering backwater effect from Rock River

<b>TABLE 6</b>	<b>FEDERAL EMERGENCY MANAGEMENT AGENCY</b>	<b>FLOODWAY DATA</b>
	<b>ROCK COUNTY, WI</b>	
	<b>AND INCORPORATED AREAS</b>	<b>YAHARA RIVER</b>

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
YAHARA RIVER (continued)								
AA	37,993	1,119	6,267	1.2	802.9	802.9	802.9	0.0
AB	39,893	979	6,574	0.6	803.8	803.8	803.8	0.0
AC	42,408	274	1,170	2.0	804.0	804.0	804.0	0.0
AD	44,391	816	2,112	1.1	804.5	804.5	804.5	0.0
AE	46,186	222	1,042	2.2	805.7	805.7	805.7	0.0
AF	46,669	83	589	5.7	806.0	806.0	806.0	0.0
AG	46,757	109	794	3.7	807.1	807.1	807.1	0.0
AH	46,854	88	487	4.7	807.1	807.1	807.1	0.0
AI	47,342	121	554	3.8	807.8	807.8	807.8	0.0

<sup>1</sup> Feet above confluence with Rock River

<b>TABLE 6</b>	FEDERAL EMERGENCY MANAGEMENT AGENCY <b>ROCK COUNTY, WI</b> AND INCORPORATED AREAS	<b>FLOODWAY DATA</b>
		<b>YAHARA RIVER</b>

## **5.0 INSURANCE APPLICATIONS**

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

### Zone A

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

### Zone AE

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

### Zone X

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

## **6.0 FLOOD INSURANCE RATE MAP**

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

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

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

The countywide FIRM presents flooding information for the entire geographic area of Rock County. Previously, FIRMs were prepared for each incorporated community and

the unincorporated areas of the County identified as flood-prone. Historical data relating to the maps, prepared for each community, up to and including this countywide FIS, are presented in Table 7, “Community Map History.”

## **7.0 OTHER STUDIES**

Flood Insurance Studies have been prepared for the following neighboring Counties in Wisconsin: Green, Dane, Jefferson and Walworth. Flood Insurance Studies have been prepared for the following neighboring Counties in Illinois: Winnebago and Boone.

This report either supersedes or is compatible with all previous studies on streams studied in this report and should be considered authoritative for purposes of the NFIP.

## **8.0 LOCATION OF DATA**

Information concerning the pertinent data used in preparation of this study can be obtained by contacting the Federal Insurance and Mitigation Division, FEMA Region V, 536 South Clark Street, Sixth Floor, Chicago, Illinois 60605.

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISION DATE(S)	FLOOD INSURANCE RATE MAP EFFECTIVE DATE	FLOOD INSURANCE RATE MAP REVISION DATE(S)
Beloit, City of	July 10, 1971	N/A	July 10, 1971	July 1, 1974 April 23, 1976 December 15, 1982
Brodhead, City of	February 8, 1974	April 16, 1976	September 29, 1989	
Clinton, Village of <sup>2</sup>	N/A	N/A	N/A	
Edgerton, City of	December 17, 1973	June 4, 1976	April 15, 1982	
Evansville, City of	June 14, 1974	May 14, 1976	January 18, 1984	May 4, 1992
Footville, Village of	May 31, 1974	October 15, 1976	July 3, 1986	
Janesville, City of	March 31, 1972	N/A	March 31, 1972	July 1, 1974 December 19, 1975 January 17, 1985
Milton, City of <sup>2</sup>	N/A	N/A	N/A	
Orfordville, Village of <sup>1,2</sup>	N/A	N/A	N/A	
Rock County (Unincorporated Areas)	August 1, 1983	N/A	August 1, 1983	

<sup>1</sup> No Special Flood Hazard Areas Identified in Rock County

<sup>2</sup> This community does not have map history prior to the first countywide mapping

TABLE 7

FEDERAL EMERGENCY MANAGEMENT AGENCY

**ROCK COUNTY , WI  
AND INCORPORATED AREAS**

**COMMUNITY MAP HISTORY**

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