

# KANE COUNTY, ILLINOIS AND INCORPORATED AREAS

Volume 1 of 3

| COMMUNITY                   | COMMUNITY |
|-----------------------------|-----------|
| NAME                        | NUMBER    |
| ALGONQUIN, VILLAGE OF       | 170474    |
| AURORA, CITY OF             | 170320    |
| BARRINGTON HILLS, VILLAGE ( | OF 170058 |
| BARTLETT, VILLAGE OF        | 170059    |
| BATAVIA, CITY OF            | 170321    |
| BIG ROCK, VILLAGE OF        | 171081    |
| *BURLINGTON, VILLAGE OF     | 171077    |
| CAMPTON HILLS, VILLAGE OF   | 171396    |
| CARPENTERSVILLE, VILLAGE (  | OF 170322 |
| EAST DUNDEE, VILLAGE OF     | 170323    |
| ELBURN, VILLAGE OF          | 171026    |
| ELGIN, CITY OF              | 170087    |
| GENEVA, CITY OF             | 170325    |
| GILBERTS, VILLAGE OF        | 170326    |
| HAMPSHIRE, VILLAGE OF       | 170327    |
| *HOFFMAN ESTATES, VILLAGE   | OF 170107 |
| HUNTLEY, VILLAGE OF         | 170480    |
| KANE COUNTY                 |           |

(UNINCORPORATED AREAS) 170896

| COMMUNITY                 | COMMUNITY |
|---------------------------|-----------|
| NAME                      | NUMBER    |
| * KANEVILLE, VILLAGE OF   | 171388    |
| LILY LAKE, VILLAGE OF     | 171023    |
| MAPLE PARK, VILLAGE OF    | 171018    |
| MONTGOMERY, VILLAGE OF    | 170328    |
| NORTH AURORA, VILLAGE OF  | 170329    |
| PINGREE GROVE, VILLAGE OF | 171078    |
| SLEEPY HOLLOW, VILLAGE OF | 170331    |
| SOUTH ELGIN, VILLAGE OF   | 170332    |
| ST. CHARLES, CITY OF      | 170330    |
| SUGAR GROVE, VILLAGE OF   | 170333    |
| VIRGIL, VILLAGE OF        | 171024    |
| WAYNE, VILLAGE OF         | 170865    |
| WEST DUNDEE, VILLAGE OF   | 170335    |
|                           |           |

NO SPECIAL FLOOD HAZARD AREAS IDENTIFIED IN KANE COUNTY



**PRELIMINARY** 

MAY 13, 2011



Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER 17089CV001D

# NOTICE TO FLOOD INSURANCE STUDY USERS

Communities participating in the National Flood Insurance Program have established repositories of flood hazard data for floodplain management and flood insurance purposes. This Flood Insurance Study (FIS) may not contain all data available within the Community Map Repository. It is advisable to 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 by the Letter of Map Revision process, which does not involve republication or redistribution of the FIS. It is, therefore, the responsibility of the user to consult with community officials and to check the Community Map Repository to obtain the most current FIS components.

Initial Countywide FIS Effective Date: December 20, 2002

Revised FIS Report Dates: November 16, 2006

August 3, 2009
To be determined

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## FLOOD INSURANCE STUDY KANE COUNTY, ILLINOIS AND INCORPORATED AREAS

#### 1.0 INTRODUCTION

#### 1.1 Purpose of Study

This Flood Insurance Study (FIS) revises and supersedes the FIS reports and/or Flood Insurance Rate Maps (FIRMs) and/or Flood Hazard Boundary Maps (FHBMs) in the geographic area of Kane County, Illinois, including: the cities of Aurora, Batavia, Elgin, Geneva and St. Charles; the villages of Algonquin, Barrington Hills, Bartlett, Big Rock, Burlington, Campton Hills, Carpentersville, East Dundee, Elburn, Gilberts, Hampshire, Hoffman Estates, Huntley, Kaneville, Lily Lake, Maple Park, Montgomery, North Aurora, Pingree Grove, Sleepy Hollow, South Elgin, Sugar Grove, Virgil, Wayne and West Dundee; and the unincorporated areas of Kane County (hereinafter referred to collectively as Kane County) and aids in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. This study has developed flood risk data for various areas of the county that will be used to establish actuarial flood insurance This information will also be used by Kane County to update existing floodplain regulations as part of the Regular Phase of the National Flood Insurance Program (NFIP), and 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 C.F.R. § 60.3.

The FIS and FIRMs show the flood-hazard information only for the portions of the cities of Aurora, Batavia, Elgin and St. Charles, and the villages of Algonquin, Barrington Hills, Bartlett, East Dundee, Hoffman Estates, Huntley, Maple Park, Montgomery, and Wayne that lie within Kane County. The remaining portions of these communities lie within other counties as indicated in Table 1, "Multi-County Communities." Please see separately published FIS report and FIRM for the portions of the communities that do not lie within Kane County.

**Table 1 - Multi-County Communities** 

| Community                    | <b>Adjacent Counties</b> |
|------------------------------|--------------------------|
| Algonquin, Village of        | McHenry                  |
| Aurora, City of              | DuPage                   |
| Barrington Hills, Village of | Cook, Lake, McHenry      |
| Bartlett, Village of         | DuPage, Cook             |
| Batavia, City of             | DuPage                   |
| East Dundee, Village of      | Cook                     |
| Elgin, City of               | Cook                     |
| Hoffman Estates, Village of  | Cook                     |
| Huntley, Village of          | McHenry                  |

**Table 1 - Multi-County Communities (continued)** 

| Community              | Adjacent Counties |
|------------------------|-------------------|
| Maple Park, Village of | DeKalb            |
| Montgomery, Village of | Kendall           |
| St. Charles, City of   | DuPage            |
| Wayne, Village of      | DuPage            |

Aurora, Bartlett, Batavia, St. Charles, and Wayne were included in their entirety in community based FISs. Only information for the portion of the community that lies within Kane County will be shown on the FIRM. The portion of these communities that lie within DuPage County will eventually be added to that county's FIS. However, until this occurs, their community based FISs should be consulted for the portion of those communities in DuPage County.

Note that the villages of Burlington and Kaneville, and the portion of the Village of Hoffman Estates within Kane County have no Special Flood Hazard Areas (SFHAs) identified.

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.

The FIS includes the unincorporated areas of, and incorporated communities within, Kane County. Information on the authority and acknowledgments for each jurisdiction included in this FIS, as compiled from their previously printed FIS reports, is shown below.

#### **Pre-Countywide FISs**

Village of Algonquin:

The hydrologic and hydraulic analyses for the FIS report dated September 16, 1980 (Reference 1) were performed by the U.S. Army Corps of Engineers (USACE), Chicago District, for the Federal Insurance Administration (FIA), under Inter-Agency Agreement No. IAA-H-18-78, Project Order No. 13. That work was completed in October 1979.

City of Aurora:

The hydrologic and hydraulic analyses for the FIS report dated December 1978 (Reference 2) were performed by Harza Engineering Company for the FIA under Contract No. H-3809. This work was completed in October 1976.

The hydraulic analyses for the FIS dated May 15, 1986 (Reference 3) were obtained from the Illinois Department of Transportation (IDOT).

The hydrologic and hydraulic analyses for the FIS dated January 5, 1989 (Reference 4) were taken from the FISs for the City of Aurora and the unincorporated areas of Kane County and DuPage County and from a Soil Conservation Service (SCS) floodplain management study for Indian Creek and tributaries (Reference 4, 5, 6, 7).

The hydrologic and hydraulic analyses for the revised FIS dated March 3, 1997 (Reference 8) were prepared by SCS and IDOT, Division of Water Resources. This work was completed in June 1989.

The hydrologic and hydraulic analyses for the FIS dated December 15, 1980 (Reference 9) were prepared for the FIA, under Inter-Agency Agreement No. IAA-H-7-76, Project Order No. 19. This work was completed in June 1977.

The hydrologic and hydraulic analyses for the FIS report dated March 2, 1981 (Reference 10) were performed by the USACE, Chicago District, for the FIA under Inter-Agency Agreement No. IAA-H-8-78, Project Order No. 13. That work was completed in February 1980.

The hydrologic and hydraulic analyses for the FIS report dated February 17, 1981 (Reference 11) were performed by the USACE, Chicago District, for the FIA under Inter-Agency Agreement No. IAA-H-18-78,

Village of Bartlett:

City of Batavia:

Village of Carpentersville:

Project Order No. 13. That work was completed in December 1979.

Village of East Dundee:

The hydrologic and hydraulic analyses for the FIS report dated September 16, 1980 (Reference 12) were performed by the USACE, Chicago District, for the Federal Insurance Administration, under Inter-Agency Agreement No. IAA-H-18-78, Project Order No. 13. This study was completed in October 1979.

City of Elgin:

The hydrologic and hydraulic analyses for the FIS report dated 1981 (Reference 13) were performed by the USACE, Chicago District, for the FIA, under Inter-Agency Agreement No. IAA-H-18-78, Project Order No. 13. This study was completed in January 1980.

City of Geneva:

The hydrologic and hydraulic analyses for the FIS report dated February 3, 1981 (Reference 14) were performed by the USACE, Chicago District, for the FIA, under Inter-Agency Agreement No. IAA-H-18-78, Project Order No. 13. That work was completed in December 1979.

Village of Hampshire:

The hydrologic and hydraulic analyses for the FIS report dated September 2, 1980 (Reference 15) and FIRM dated March 2, 1981 (Reference 16), were prepared by the USACE, Chicago District, for the FIA, under Inter-Agency Agreement No. IAA-H-18-78, Project Order No. 13. That work was completed in September 1979.

The hydrologic and hydraulic analyses for the FIS report dated November 2, 1995 (Reference 17) for Hampshire Creek and Hampshire Creek South No. 1 were prepared by Engineering Enterprise, Inc. That work was completed in April 1992.

Village of Huntley:

The hydrologic and hydraulic analyses for the FIS report dated December 15, 1992 (Reference 18) were prepared by the USACE, Chicago District for FEMA, under Inter-Agency Agreement No. EMW-99-E-2739,

Project Order No. 2. These analyses were then revised by a report prepared by Guillou & Associates, Inc., and Haeger & Associates Inc. (Reference 19).

For the revised FIS report dated May 19, 1997 (Reference 20), portions of the hydrologic and hydraulic analyses for the South Branch Kishwaukee River were prepared by Dewberry & Davis using an updated hydraulic analysis prepared by Envirodyne Engineers, Inc., and modified by SDI Consultants, Ltd., for the unincorporated areas of McHenry County FIS (Reference The modified hydraulic analysis was completed in February 1996. Additionally, the hydrologic and hydraulic analyses for Kishwaukee Creek were prepared Envirodyne Engineers, Inc., for FEMA, under Contract No. EMW-91-C3357. This work was completed in November 1992.

Kane County (Unincorporated Areas):

The hydrologic and hydraulic analyses for the FIS report dated March 1, 1982 (Reference 5) were prepared by the USACE, Chicago District, for the FIA, under Inter-Agency Agreement No. IAA-H-18-78, Project Order No. 13. That work was completed in June 1980.

The hydrologic and hydraulic analyses for the FIS report dated June 4, 1996 (Reference 22) for Mill Creek were prepared by the USACE, Buffalo District, for FEMA under Inter-Agency Agreement No. EMW-89-E-2994, LMMP No. 89-9. This work was completed in September 1991. Also, the hydrologic and hydraulic analyses for the Ferson/Otter Creek watershed were performed by Christopher B. Burke Engineering, Ltd., for FEMA under Contract No. EMW-90-C-3904. This work was completed in January 1992. hydrologic and hydraulic analyses for Hampshire Creek and its four tributaries were performed by Engineering Enterprises, Inc. That work was completed in April 1992. The hydrologic and hydraulic analyses for a

portion of Hampshire Creek South were taken from the FIS for the village of Hampshire.

Village of Maple Park:

The hydrologic and hydraulic analyses for the FIS report dated August 4, 1987 (Reference 23) were obtained from the U.S. Geological Survey (USGS) publication, *Floods in Maple Park Quadrangle*, *Northeastern Illinois* (Reference 24).

Village of Montgomery:

The hydrologic and hydraulic analyses for the FIS report dated February 1979 (Reference 25) were performed by the Illinois State Water Survey for the FIA, under Contract No. H-3825. That work, which was completed in December 1976, covered all significant flooding sources in the village of Montgomery.

Village of North Aurora:

The hydrologic and hydraulic analyses for the FIS report dated September 16, 1980 (Reference 26) were performed by the USACE, Chicago District, for the FIA, under Inter-Agency Agreement No. IAA-H-18-78, Project Order No. 13. That work was completed in November 1979.

Village of Sleepy Hollow:

The hydrologic and hydraulic analyses for the FIS report dated December 15, 1982 (Reference 27) were performed by the USACE, Chicago District, for FEMA, under Inter-Agency Agreement No. IAA-H-18-78, Project Order No. 13. That work was completed in August 1979.

Village of South Elgin:

The hydrologic and hydraulic analyses for the FIS report dated January 16, 1981 (Reference 28) were performed by the USACE, Chicago District, for the FIA, under Inter-Agency Agreement No. IAA-H-18-78, Project Order No. 13. That work was completed in November 1979.

City of St. Charles:

The hydrologic and hydraulic analyses for the FIS report dated March 2, 1981 (Reference 29) were performed by the USACE, Chicago District, for the FIA, under Inter-Agency

Agreement No. IAA-H-18-78, Project Order No. 13. That work was completed in March 1980.

Village of Sugar Grove:

The hydrologic and hydraulic analyses for the FIS report dated March 4, 1988 (Reference 30) were performed by the USACE, Chicago District, for FEMA, under Inter-Agency Agreement No. EMW-E-1153, Project Order No. 1. That work was completed in August 1985.

Village of Wayne:

The hydrologic and hydraulic analyses for the FIS report dated June 1, 1981 (Reference 31) were performed by the USACE, Chicago District, for the FIA, under Inter-Agency Agreement No. IAA-H-18-78, Project Order No. 13. That work was completed in February 1980.

Village of West Dundee:

The hydrologic and hydraulic analyses for the FIS report dated June 1, 1981 (Reference 32) were performed by the USACE, Chicago District, for the FIA, under Inter-Agency Agreement No. IAA-H-18-78, Project Order No. 13. That work was completed in October 1979

1979.

The authority and acknowledgements for the villages of Barrington Hills, Big Rock, Burlington, Campton Hills, Elburn, Gilberts, Hoffman Estates, Kaneville, Lily Lake, Pingree Grove, and Virgil are not included because there were no previously printed FISs for those communities.

#### December 20, 2002 Initial Countywide FIS

For the countywide FIS dated December 20, 2002 (Reference 33), revised hydrologic and hydraulic analyses for a portion of Sandy Creek, Pingree Creek and Tyler Creek upstream of Randall Road were prepared for FEMA by Consoer Townsend Envirodyne Engineers, Inc. The hydrologic and hydraulic analyses for the portion of Tyler Creek downstream of Randall Road were provided by Hey and Associates, Inc. The hydrologic analyses for the two studies for Tyler Creek were combined by the IDNR.

#### November 16, 2006 Revised Countywide FIS

The revised countywide FIS dated November 16, 2006 (Reference 34) included no new hydrologic and hydraulic analyses. The FIS and FIRM for Kane County, Illinois and incorporated areas were revised to include only information for certain communities within the boundaries of Kane County. Portions of the villages of Algonquin, Barrington Hills, and Huntley are located in other counties. Only the Kane County portions of these communities were included in the revised FIS.

#### August 3, 2009 Revised Countywide FIS

For the August 3, 2009 revision (Reference 35), the hydrologic and hydraulic analyses for the restudy of Indian Creek watershed (consisting of Indian Creek, Indian Creek Prairie Path Run, Selmarten Creek, South Tributary and Tollway Tributary) were completed by V<sub>3</sub> Companies of Illinois, Ltd. (Reference 36).

The hydrologic and hydraulic analyses for the Blackberry Creek watershed (consisting of Aurora Chain of Lakes, Aurora Chain of Lakes Cherry Hills Diversion, Blackberry Creek, East Run, East Run North Branch, East Run North Loop, Elburn Run, Jericho Lake Diversion, Lake Run, Lake Run Main Street Branch, Lake Run Nelson Lake Branch, Lake Run North of I-88 Overflow, Lake Run North of I-88 Overflow East Branch, Lake Run South of I-88 Diversion, Prestbury Branch, Route 38 Branch, Seavey Road Run, Seavey Road Run Green Road Branch, Seavey Road Run Main Street Branch) were completed by the USGS Contract No. EMC-2001-GR-0048.

Planimetric base map information consists of black and white digital orthophotos provided by the Kane County Information Technologies Department, GIS Technologies Division (Reference 37). The digital orthophotos have a 6-inch resolution and were photogrammetrically compiled from aerial photography and obtained during the spring of 2001.

The coordinate system used for the production of the digital FIRMs is Universal Transverse Mercator (UTM), North American Datum of 1983 (NAD 83), Geodetic Reference System 1980 (GRS80) spheroid.

This countywide FIS was performed under the Cooperating Technical Partners (CTP) Partnership Agreement Nos. EMC-2004-GR-0214, EMC-2005-GR-7026, and EMC-2006-CA-7015 between the Illinois Department of Natural Resources (hereafter referred to as IDNR) and the Federal Emergency Management Agency (FEMA), per the Mapping Activity Statement (MAS) Nos. IDNR04-03, IDNR05-20, and IDNR06-10.

#### To be determined Revised Countywide FIS

The hydrologic and hydraulic analyses for the Big Rock and Welch Creek watersheds were performed by the Illinois State Water Survey (ISWS) for Kane County (Reference 38). This study was published January 2009.

Planimetric base map information for the 10 affected panels was derived from digital orthophotos provided by the Kane County Information Technologies Department, GIS Technologies Division (Reference 39). Black and White digital orthophotos with a 6-inch pixel resolution were photogrammatically compiled from aerial photography obtained during the spring of 2008.

The coordinate system used for the production of the digital FIRMs is Universal Transverse Mercator (UTM), North American Datum of 1983 (NAD 83), Geodetic Reference System 1980 (GRS80) spheroid.

This Physical Map Revision (PMR) was performed under the Cooperating Technical Partners (CTP) Partnership Agreement No. EMC-2009-CA-7007 between the Illinois State Water Survey and the Federal Emergency Management Agency (FEMA), per the Mapping Activity Statement (MAS) No. ISWS09-07.

#### 1.3 Coordination

Coordination and outreach activities were performed to create a climate of understanding and ownership of the mapping process at the state and local levels. These activities were ongoing throughout the entirety of the project. The purpose of an initial consultation coordination officer (CCO) meeting, or project team meeting, is to discuss the scope of the project. An intermediate CCO meeting, or scoping meeting, is meant to continue outreach and create a climate of understanding throughout the process. A final CCO meeting, or open house, is held with public officials and the general public to review the results of the study.

#### **Pre-Countywide FISs**

The dates of the initial and final CCO meetings held for pre-countywide studies for Kane County's incorporated communities are shown in Table 2, "CCO Meeting Dates for Pre-Countywide Studies."

**Table 2 - CCO Meeting Dates for Pre-Countywide FISs** 

| Community             | <b>Initial CCO Date</b> | Final CCO Date     |
|-----------------------|-------------------------|--------------------|
| Algonquin, Village of | December 1977           | April 21, 1980     |
| Aurora, City of       | *                       | April 24, 1994     |
| Bartlett, Village of  | January 1976            | September 15, 1980 |
| Batavia, City of      | December 1977           | October 21, 1980   |

<sup>\*</sup> Data not available

**Table 2 - CCO Meeting Dates for Pre-Countywide FISs (continued)** 

| Community                          | <b>Initial CCO Date</b> | Final CCO Date     |  |  |  |
|------------------------------------|-------------------------|--------------------|--|--|--|
| Carpentersville, Village of        | December 1977           | September 24, 1980 |  |  |  |
| East Dundee, Village of            | December 1977           | April 28, 1980     |  |  |  |
| Elgin, City of                     | December 1977           | *                  |  |  |  |
| Geneva, City of                    | December 1977           | September 9, 1980  |  |  |  |
| Hampshire, Village of              | *                       | October 28, 1994   |  |  |  |
| Huntley, Village of                | August 7, 1990          | July 20, 1994      |  |  |  |
| Kane County (Unincorporated Areas) | July 1989               | *                  |  |  |  |
| Maple Park, Village of             | *                       | August 21, 1986    |  |  |  |
| Montgomery, Village of             | *                       | June 28, 1977      |  |  |  |
| North Aurora, Village of           | December 1977           | April 16, 1980     |  |  |  |
| Sleepy Hollow, Village of          | October 1977            | May 27, 1981       |  |  |  |
| South Elgin, Village of            | December 1977           | July 28, 1977      |  |  |  |
| St. Charles, City of               | December 1977           | October 14, 1980   |  |  |  |
| Sugar Grove, Village of            | July 1983               | September 11, 1986 |  |  |  |
| Wayne, Village of                  | December 1977           | January 16, 1981   |  |  |  |
| West Dundee, Village of            | December 1977           | April 9, 1980      |  |  |  |

<sup>\*</sup> Data not available

#### December 20, 2002 Initial Countywide FIS

For the initial Kane County countywide FIS dated December 20, 2002, acknowledgment letters were sent on October 14, 1999 and October 19, 1999.

#### November 16, 2006 Countywide FIS

For the revised Kane County countywide FIS dated November 16, 2006, no coordination meetings were noted in the FIS.

#### August 3, 2009 Revised Countywide FIS

The initial CCO meeting was held on February 7, 2005 and was attended by representatives of FEMA, Kane County, the cities of Aurora, Geneva, Elgin, and St. Charles, the Village of Carpentersville and the study contractor (IDNR). This meeting was intended to discuss various issues and concerns for the study area. An intermediate CCO meeting was held on March 11, 2005 in Geneva, Illinois and was attended by representatives from Kane County, the cities of Aurora, Batavia,

Geneva, Elgin, and St. Charles, the villages of Barrington Hills, Burlington, Carpentersville, Huntley, Sugar Grove, and West Dundee and the study contractor (IDNR).

A preliminary FIRM and FIS were prepared by merging effective FIS text, tables, and profiles with new study data. A preliminary Summary of Map Actions (PSOMA) was also prepared for all affected communities. The PSOMA lists pertinent information regarding Letters of Map Change (LOMCs) that will be affected by the issuance of the FIRM (i.e., superseded, incorporated, and revalidated). Preliminary copies of the FIRM, FIS, and SOMA were distributed to community officials for public review and comment.

The results of the study were reviewed at the final CCO meeting held on November 28, 2007 in Elgin and was attended by representatives of Kane County, IDNR, FEMA, and the following communities: Algonquin, Aurora, Barrington Hills, Big Rock, Campton Hills, Carpentersville, East Dundee, Elgin, Geneva, Huntley, Kane County, Maple Park, Montgomery, Pingree Grove, Sleepy Hollow, South Elgin, St. Charles, Virgil, Wayne, West Dundee. Representatives of the non-Kane County communities of Bolingbrook, Darien, Naperville, Oswego, Schaumburg, Waterman and Yorkville were also in attendance. All problems raised at that meeting have been addressed in this study.

#### To be determined Revised Countywide FIS

| The  | results | of | the  | <b>PMR</b> | were   | reviewed     | at   | the   | final   | CCO    | meeting   | held    | on   |
|------|---------|----|------|------------|--------|--------------|------|-------|---------|--------|-----------|---------|------|
|      |         |    | _, i | n          |        | _, Illinois, | ar   | nd a  | ttende  | d by   | represent | atives  | of   |
|      |         |    | . A  | ll prob    | lems r | aised at the | at n | neeti | ing hav | ve bee | n address | ed in t | this |
| stud | V.      |    |      | -          |        |              |      |       |         |        |           |         |      |

#### 2.0 AREA STUDIED

#### 2.1 Scope of Study

This FIS covers the geographic areas of Kane County including the incorporated areas listed in Section 1.1.

Typically, areas studied by detailed methods are selected with priority given to all known flood hazards and areas of projected development or proposed construction. Approximate analyses are used to study those areas having low development potential or minimal flood hazards.

Tables 3a-3c summarize the history of stream name changes that have occurred since the December 20, 2002 initial countywide FIS.

Table 3a - Stream Name Changes (December 20, 2002 FIS)

| Community              | Old Name               | New Name                      |
|------------------------|------------------------|-------------------------------|
| Kane County            | Unnamed Tributary      | Harmony Creek                 |
| (Unincorporated Areas) |                        |                               |
|                        | Unnamed Tributary      | Main Street Ditch             |
|                        | Tributary B            | Indian Creek Prairie Path Run |
|                        | Randall Road Tributary | Sandy Creek                   |
|                        |                        |                               |
| City of Elgin          | Randall Road Tributary | Sandy Creek                   |
|                        |                        |                               |
| Village of Sugar Grove | Tributary No. 1        | Welch Creek Tributary No. 1   |
|                        | Tributary No. 2        | Welch Creek Tributary No. 2   |
|                        |                        |                               |

Table 3b - Stream Name Changes (August 3, 2009 FIS)

| Community              | Old Name   | New Name                       |
|------------------------|--|--------------------------------|
| Kane County            | Blackberry Creek Tributary A                                       | East Run                       |
| (Unincorporated Areas) |  |                                |
|                        | Blackberry Creek Tributary B (Cross sections A to J)               | Lake Run                       |
|                        | Blackberry Creek Tributary B<br>(Cross sections K, L, Nelson Lake) | Lake Run Nelson Lake Branch    |
|                        | Blackberry Creek Tributary C                                       | Seavey Road Run                |
|                        | Blackberry Creek Tributary D                                       | Elburn Run                     |
|                        | Blackberry Creek Tributary E                                       | Prestbury Branch               |
|                        | Blackberry Creek Tributary F                                       | Lake Run                       |
|                        | Blackberry Creek Tributary G                                       | Jericho Lake Diversion         |
|                        | Blackberry Creek Tributary H (Cross sections A to C)               | Aurora Chain of Lakes          |
|                        | Bowes Creek Tributary  | Bowes Creek South              |
|                        | Coon Creek   | Burlington Creek               |
|                        | Eakin Creek Tributary  | Eakin Creek South              |
|                        | East Branch  | Anderson Road Run North Branch |
|                        | Hampshire Creek Tributary  | Hampshire Creek South          |
|                        | Johnson's Mound Run  | Johnsons Mound Run             |
|                        | Kendall Road Run   | Kendall Run                    |

Table 3b (continued) - Stream Name Changes (August 3, 2009 FIS)

| Community                                      | Old Name   | New Name  |
|--|--|---|
| Kane County (continued) (Unincorporated Areas) | Kishwaukee River Tributary                           | Eakin Creek West                                |
| ,  | Main Street Ditch                                    | Lake Run Main Street Branch                     |
|  | Mill Creek Tributary                                 | Mooseheart Creek                                |
|  | N. Plato Ditch                                       | North Plato Ditch                               |
|  | Otter Creek Tributary                                | Otter Creek West                                |
|  | Stoney Creek   | Stony Creek                                     |
|  | Unnamed Creek  | Great Western Run                               |
|  | Unnamed Tributary                                    | Corron Road Run                                 |
|  | Unnamed Tributary to Tyler Creek                     | Tyler Creek Unnamed Tributary                   |
|  | Waubansee Creek                                      | Waubonsee Creek                                 |
|  | West Branch  | Anderson Road Run                               |
|  | Welch Creek  | Sugar Grove Branch                              |
|  | Welch Creek Tributary No. 1                          | Sugar Grove Branch East                         |
|  | Young's Creek  | Youngs Creek                                    |
| City of Aurora                                 | Blackberry Creek Tributary A                         | East Run  |
|  | Blackberry Creek Tributary H (Cross sections A to C) | Aurora Chain of Lakes                           |
|  | Blackberry Creek Tributary H (Cross sections D to I) | Aurora Chain of Lakes Cherry<br>Hills Diversion |
|  | Indian Creek Tributary B                             | Indian Creek Prairie Path Run                   |
|  | Waubansee Creek                                      | Waubonsee Creek                                 |
| Village of Campton Hills                       | Otter Creek Tributary                                | Otter Creek West                                |
|  | Silver Glen Road Run                                 | Silver Glen Run                                 |
|  | Stoney Creek   | Stony Creek                                     |
| Village of Elburn                              | Blackberry Creek Tributary D                         | Elburn Run                                      |
| City of Elgin                                  | Otter Creek Tributary                                | Otter Creek West                                |
|  | Stoney Creek   | Stony Creek                                     |
| Village of Hampshire                           | Hampshire Creek Tributary                            | Hampshire Creek South                           |
|  | Kishwaukee River Tributary                           | Eakin Creek West                                |
| Village of Huntley                             | Eakin Creek Tributary                                | Eakin Creek South                               |
|  | Kishwaukee River Tributary                           | Eakin Creek West                                |

Table 3b (continued) - Stream Name Changes (August 3, 2009 FIS)

| Community                | Old Name                         | New Name                      |
|--------------------------|----------------------------------|-------------------------------|
| Village of Huntley       | Eakin Creek Tributary            | Eakin Creek South             |
|                          | Kishwaukee River Tributary       | Eakin Creek West              |
| Village of Montgomery    | Blackberry Creek Tributary G     | Jericho Lake Diversion        |
|                          | Waubansee Creek                  | Waubonsee Creek               |
| Village of North Aurora  | Blackberry Creek Tributary A     | East Run                      |
| Village of Pingree Grove | Unnamed Tributary to Tyler Creek | Tyler Creek Unnamed Tributary |
| Village of South Elgin   | Stoney Creek                     | Stony Creek                   |
|                          | Unnamed Tributary to Fox River   | Fox River Unnamed Tributary   |
| Village of Sugar Grove   | Blackberry Creek Tributary E     | Prestbury Branch              |
|                          | Welch Creek                      | Sugar Grove Branch            |
|                          | Welch Creek Tributary No. 1      | Sugar Grove Branch East       |
|                          | Welch Creek Tributary No. 2      | Sugar Grove Branch North      |

Table 3c - Stream Name Changes (To be determined FIS)

| Community               | Old Name                         | New Name                 |
|-------------------------|----------------------------------|--------------------------|
| Village of Big Rock and |                                  |                          |
| Kane County             |                                  |                          |
| (Unincorporated Areas)  | Unnamed                          | Duffin Drain Tributary 2 |
|                         | Unnamed                          | Welch Creek Tributary 1  |
|                         | Unnamed                          | Welch Creek Tributary 2  |
| Kane County             |                                  |                          |
| (Unincorporated Areas)  | Unnamed                          | Welch Creek Tributary 3  |
|                         | Unnamed                          | Welch Creek Tributary 4  |
|                         | Unnamed                          | Welch Creek Tributary 5  |
|                         | Unnamed Tributary to Welch Creek | Welch Creek Tributary 6  |
|                         | Unnamed                          | Youngs Creek Tributary 1 |
|                         | Unnamed                          | Youngs Creek Tributary 2 |
|                         | Unnamed                          | Youngs Creek Tributary 3 |

The streams, or portions of streams, listed in Table 4, "Revised or New Detailed Studies," have new or revised hydrologic and hydraulic analyses for this PMR.

Table 4 - Limits of Revised or New Detailed Study

| Stream                                    | Limits of Revised or New Detailed Study  |
|---|--|
| Big Rock Creek                            | From approximately 43,730 feet upstream of the confluence with Fox River, the Kane/Kendall County Boundary; to approximately 75,030 feet upstream of the confluence with Fox River, approximately the confluence of West Branch Big Rock Creek and East Branch Big Rock  |
| Duffin Drain                              | From the confluence with Sugar Grove Branch; to approximately 12,750 feet upstream of the confluence with Sugar Grove Branch, approximately the downstream side of Wheeler Road  |
| East Branch Big Rock Creek                | Downstream Reach: From the confluence with Big Rock Creek; to approximately 10,810 feet upstream of the confluence with Big Rock Creek, approximately the confluence with Malgren Drain <b>AND</b> Upstream Reach: From approximately 55,525 feet upstream of the confluence with Big Rock Creek, approximately the downstream side of Owens Road; to approximately 73,350 feet upstream of the confluence with Big Rock Creek, approximately the confluence with East Branch Big Rock Creek Tributary 2 |
| East Branch Big Rock Creek<br>Tributary 2 | From the confluence with East Branch Big Rock Creek; to approximately 8,090 feet upstream of the confluence with East Branch Big Rock Creek, approximately 2,450 feet upstream of Keslinger Road   |
| Malgren Drain                             | From the confluence with East Branch Big Rock Creek; to approximately 12,425 feet upstream of the confluence with East Branch Big Rock Creek, approximately the downstream side of Swan Road   |
| Sugar Grove Branch                        | From the confluence with Welch Creek; to approximately 3,565 feet upstream of the confluence with Welch Creek, approximately 1,150 feet downstream of Fay's Lane   |
| Welch Creek                               | From the confluence with Big Rock Creek; to approximately 89,160 feet upstream of the confluence with Big Rock Creek, approximately the downstream side of Keslinger Road  |
| West Branch Big Rock Creek                | From the confluence with Big Rock Creek; to approximately 14,390 feet upstream of the confluence with Big Rock Creek, approximately the downstream side of U.S. Highway 30   |

The portions of all streams studied in detail and included in this report are listed in Table 5, "Limits of Detailed Study." In some instances, the detailed studies extend beyond the county boundaries. See adjacent counties for more information. Limits of detailed study are also indicated on the Flood Profiles (Exhibit 1) and on the FIRM (Exhibit 2).

**Table 5 - Limits of Detailed Study** 

| Flooding Source                                 | Limits of Detailed Study  |
|---|---|
| 7 <sup>th</sup> Avenue Creek                    | From the confluence with Fox River to 10,400 feet above the confluence with Fox River (approximately 2,400 feet above 13 <sup>th</sup> Avenue)  |
| 7 <sup>th</sup> Avenue Creek Tributary          | From the confluence with 7 <sup>th</sup> Avenue Creek to 1,280 feet above the confluence with 7 <sup>th</sup> Avenue Creek (approximately 325 feet above State Avenue)  |
| Anderson Road Run                               | From confluence with Blackberry Creek to 5,575 feet above confluence with Blackberry Creek  |
| Anderson Road Run<br>North Branch               | From confluence with West Branch to about 5,050 feet above confluence with West Branch  |
| Aurora Chain of Lakes                           | From confluence with Blackberry Creek to 18,525 feet above confluence with Blackberry Creek (Indian Trail Road)   |
| Aurora Chain of Lakes<br>Cherry Hills Diversion | From confluence with Aurora Chain of Lakes to 4,763 feet above confluence with overflow from East Run (approximately 3,510 feet above bridge on Gilman Natural Trail)   |
| Big Rock Creek                                  | From approximately 43,730 feet upstream of the confluence with Fox River, the Kane/Kendall County Boundary; to approximately 75,030 feet upstream of the confluence with Fox River, approximately the confluence of West Branch Big Rock Creek and East Branch Big Rock Creek |
| Blackberry Creek                                | From 63,510 feet above confluence with Fox River (Route 30) to 185,436 feet above confluence with Fox River (approximately 1,225 feet above Route 38)   |
| Bowes Creek                                     | From the confluence with Stony Creek to 31,575 feet above the confluence with Stony Creek (approximately 200 feet above Dittman Road)   |
| Bowes Creek South                               | From confluence with Bowes Creek to 2,650 feet above confluence with Bowes Creek (approximately 180 feet above Dittman Road)  |

Table 5 - Limits of Detailed Study (continued)

| Flooding Source                           | Limits of Detailed Study  |
|---|---|
| Brewster Creek                            | From the confluence with Fox River to 4,400 feet above the confluence with Fox River (approximately 580 feet above Private Nursery Road)  |
| Carpenter Creek                           | From the confluence with Fox River to 2,000 feet above the confluence with Fox River (approximately 25 feet above Spring Street)  |
| Duffin Drain                              | From the confluence with Sugar Grove Branch; to approximately 12,750 feet upstream of the confluence with Sugar Grove Branch, approximately the downstream side of Wheeler Road   |
| Eakin Creek                               | From confluence with South Branch Kishwaukee River to 3,425 feet above confluence with South Branch Kishwaukee River (approximately 2,055 feet above county boundary)   |
| East Run                                  | From the confluence with Blackberry Creek to 20,950 feet above the confluence with Blackberry Creek (approximately 100 feet above Oak Street)   |
| East Branch Big Rock Creek                | Downstream Reach: From the confluence with Big Rock Creek; to approximately 10,810 feet upstream of the confluence with Big Rock Creek, approximately the confluence with Malgren Drain <b>AND</b>  |
|   | Upstream Reach: From approximately 55,525 feet upstream of the confluence with Big Rock Creek, approximately the downstream side of Owens Road; to approximately 73,350 feet upstream of the confluence with Big Rock Creek, approximately the confluence with East Branch Big Rock Creek Tributary 2 |
| East Branch Big Rock Creek<br>Tributary 2 | From the confluence with East Branch Big Rock Creek; to approximately 8,090 feet upstream of the confluence with East Branch Big Rock Creek, approximately 2,450 feet upstream of Keslinger Road  |
| East Run North Branch                     | From confluence with East Run to 4,622 feet above confluence with East Run (approximately 1,175 feet above inlet structure)   |
| East Run North Loop                       | From the confluence with East Run to 2,800 feet above the confluence with East Run (approximately 1,100 feet above Orchard Road)  |
| Elburn Run                                | From the confluence with Blackberry Creek to 16,525 feet above the confluence with Blackberry Creek (approximately 3,950 feet above Keslinger Road)   |

**Table 5 - Limits of Detailed Study (continued)** 

| Flooding Source                    | Limits of Detailed Study   |
|------------------------------------|--|
| Ferson Creek                       | From confluence with Fox River to 74,750 feet above confluence with Fox River (approximately 75 feet above North Avenue)   |
| Fitchie Creek                      | From confluence with Otter Creek to 26,300 feet above confluence with Otter Creek (approximately 175 feet above Russell Road)  |
| Four Winds Way Creek               | From confluence with Fox River to 2,200 feet above confluence with Fox River (approximately 70 feet above State Route 31)  |
| Fox River                          | From 242,000 feet above Illinois River to 431,300 feet above Illinois River (approximately 21,400 feet above Main Street)  |
| Fox River East Channel             | From 253,000 feet above confluence with Fox River to 258,900 feet above confluence with Fox River (approximately 400 feet above New York Street)   |
| Fox River Tributary                | From 875 feet above confluence with Fox River Tributary East Branch to 2,440 feet above confluence with Fox River Tributary East Branch (approximately 100 feet above Aucutt Road)   |
| Fox River Tributary East<br>Branch | From confluence with Fox River Tributary to 2,725 feet above confluence with Fox River Tributary (950 feet above Aucutt Road)  |
| Geneva Creek                       | From confluence with Fox River to 4,130 feet above confluence with Fox River (approximately 60 feet above South Street)  |
| Hampshire Creek                    | From 15,800 feet above confluence with Burlington Creek to 35,100 feet above confluence with Burlington Creek (approximately 12,400 feet above Rowell Road)  |
| Hampshire Creek South              | From confluence with Hampshire Creek to 1.62 miles above confluence with Hampshire Creek (approximately 1,680 feet above Getzelman Road) and from 2.82 miles above the confluence with Hampshire Creek to 3.25 miles about the confluence with Hampshire Creek (approximately .075 miles above Romke Road) |
| Hampshire Creek Tributary<br>No. 1 | From confluence with Hampshire Creek to 1,400 feet above confluence with Hampshire Creek (approximately 740 feet above Industrial Drive)   |
| Hampshire Creek Tributary No. 2    | From confluence with Hampshire Creek to 5,900 feet above confluence with Hampshire Creek (approximately 70 feet above Prairie Farm Drive)  |

Table 5 - Limits of Detailed Study (continued)

| Flooding Source                                   | Limits of Detailed Study   |
|---|--|
| Hampshire Creek Tributary<br>No. 3                | From confluence with Tributary No. 2 to 1,285 feet above confluence with Tributary No. 2.  |
| Hampshire Creek Tributary<br>No. 4                | From 175 feet above the confluence with Hampshire Creek to 745 feet above the confluence with Hampshire Creek                          |
| Indian Creek                                      | From confluence with Fox River to 33,350 feet above confluence with Fox River (Fermi Lab Berm)   |
| Indian Creek Prairie Path Run                     | From the confluence with Indian Creek to 4,580 feet above confluence with Indian Creek (approximately 860 feet above Loreen Drive)     |
| Jelkes Creek                                      | From the mouth at Fox River to 20,260 feet above mouth at Fox River (Sleepy Hollow Road)   |
| Jericho Lake Diversion                            | From 130 feet below Route 30 to 9,230 feet above Route 30 (approximately 1,560 feet above Jericho Road)                                |
| Lake Run  | From confluence with Blackberry Creek to 43,000 feet above confluence with Blackberry Creek (approximately 100 feet above Hughes Road) |
| Lake Run<br>Main Street Branch                    | From confluence with Lake Run to 6,100 feet above confluence with Lake Run (approximately 2,900 feet above Main Street)                |
| Lake Run<br>Nelson Lake Branch                    | From confluence with Lake Run to 7,850 feet above confluence with Lake Run (approximately 7,550 above Private Farm Road)               |
| Lake Run<br>North of I-88 Overflow                | From confluence with Lake Run to 4,500 feet above confluence with Lake Run   |
| Lake Run<br>North of I-88 Overflow<br>East Branch | From confluence with Lake Run North of I-88 Overflow to 1,875 feet above confluence with Lake Run North of I-88 Overflow               |
| Lake Run<br>South of I-88 Diversion               | From confluence with Lake Run to 7,400 feet above confluence with Lake Run   |
| Lords Park Tributary                              | From the mouth at Poplar Creek to 5,000 feet above the mouth at Poplar Creek (approximately 750 feet above Laurel Street)              |

**Table 5 - Limits of Detailed Study (Continued)** 

| Flooding Source          | Limits of Detailed Study   |
|--------------------------|--|
| Mahoney Creek            | From confluence with Fox River to 12,320 feet above confluence with Fox River (approximately 2,320 feet above Wilson Street)   |
| Malgren Drain            | From the confluence with East Branch Big Rock Creek; to approximately 12,425 feet upstream of the confluence with East Branch Big Rock Creek, approximately the downstream side of Swan Road |
| McKee Road Tributary     | From mouth at Mill Creek to 15,900 feet above mouth at Mill Creek (approximately 4,670 feet above Fabyan Parkway)  |
| Mill Creek Tributary 2   | From mouth to 2,500 feet above mouth (approximately 1,375 feet above Bridle Creek Drive)   |
| Mill Creek               | From mouth to 72,190 feet above mouth (approximately 210 feet above State Route 64)  |
| North Arm Brewster Creek | From mouth to 510 feet above mouth   |
| Norton Creek             | From mouth to 18,800 feet above mouth (approximately 2,800 above Dunham Road)  |
| Norton Creek Tributary   | From the mouth to 500 feet above the mouth (County Boundary)   |
| Otter Creek              | From the confluence with Ferson Creek to 29,750 feet above the confluence with Ferson Creek (approximately 0 feet above Randall Road)  |
| Pingree Creek            | From confluence with Tyler Creek to 14,506 feet above confluence with Tyler Creek (approximately 276 feet above U.S. Route 20)   |
| Poplar Creek             | From confluence with Fox River to 5,200 feet above the confluence with Fox River (approximately 1,700 feet above Saint Charles Street)   |
| Prestbury Branch         | From confluence with Blackberry Creek to 8,500 feet above confluence with Blackberry Creek (approximately 5,600 feet above Winthrop Road)  |
| Route 38 Branch          | From confluence with Blackberry Creek to 4,500 feet above confluence with Blackberry Creek (approximately 2,550 feet above Route 38)   |
| Sandy Creek              | From mouth to 17,925 feet above mouth (approximately 6,925 feet above Farmers Crossing)  |

Table 5 - Limits of Detailed Study (continued)

| Flooding Source                       | Limits of Detailed Study   |
|---------------------------------------|--|
| Seavey Road Run                       | From confluence with Blackberry Creek to 24,200 feet above confluence with Blackberry Creek (approximately 900 feet above Main Street)                     |
| Seavey Road Run<br>Green Road Branch  | From confluence with Seavey Road Run to 3,150 feet above confluence with Seavey Road Run (approximately 150 feet above Green Road)                         |
| Seavey Road Run<br>Main Street Branch | From confluence with Seavey Road Run to 6,100 feet above the confluence with Seavey Road Run (approximately 150 feet above Main Street)                    |
| Selmarten Creek                       | From confluence with Indian Creek to 4,900 feet above confluence with Indian Creek (approximately 1,350 feet above I-88)                                   |
| Sleepy Creek                          | From confluence with Fox River to 12,625 feet above confluence with Fox River (State Route 72)   |
| South Tributary                       | From confluence with Indian Creek to 6,150 feet above confluence with Indian Creek (approximately 3,300 feet above McClure Road)                           |
| State Street Creek                    | From confluence with Fox River to 4,500 feet above confluence with Fox River (approximately 220 feet above 12 <sup>th</sup> Street)                        |
| State Street Creek Tributary          | From confluence with State Street Creek to 1,650 feet above State Street Creek (approximately 220 feet above 15 <sup>th</sup> Street)                      |
| Stony Creek                           | From confluence with Otter Creek to 27,531 feet above confluence with Otter Creek (approximately 5,256 feet above Crawford Road)                           |
| Sugar Grove Branch                    | From the confluence with Welch Creek; to 17,115 feet upstream of the confluence with Welch Creek, approximately 3,350 feet upstream of Wheeler Road        |
| Sugar Grove Branch East               | From the confluence with Sugar Grove Branch to 5,300 feet above confluence with Sugar Grove Branch (approximately 3,700 feet above North-South Runway)     |
| Sugar Grove Branch North              | From the confluence with Sugar Grove Branch to 2,900 feet above confluence with Sugar Grove Branch (approximately 0 feet above U.S. Route 30/Granart Road) |

**Table 5 - Limits of Detailed Study (continued)** 

| Table 5                          | Limits of Detailed Study   |
|----------------------------------|--|
| Tollway Tributary                | From confluence with Indian Creek to 2,100 feet above the confluence with Indian Creek (approximately 700 feet above Molitor Road)   |
| Tyler Creek                      | From the confluence with Fox River to 71,400 feet above confluence with Fox River (approximately 220 feet above State Route 72)  |
| Tyler Creek Unnamed<br>Tributary | From the confluence with Tyler Creek to 8,550 feet above the confluence with Tyler Creek (approximately 4,550 feet above Reinking Road)                                    |
| Union Ditch No. 2                | From County Line road to 2,625 feet above County Line Road   |
| Waubonsee Creek                  | From 25,810 feet above the mouth at Fox River to 38,100 feet above the mouth at Fox River (approximately 580 feet above Montgomery Road)                                   |
| Welch Creek                      | From the confluence with Big Rock Creek; to approximately 89,160 feet upstream of the confluence with Big Rock Creek, approximately the downstream side of Keslinger Road  |
| West Branch Big Rock Creek       | From the confluence with Big Rock Creek; to approximately 14,390 feet upstream of the confluence with Big Rock Creek, approximately the downstream side of U.S. Highway 30 |

The streams, or portions of streams, listed in Table 6, "Limits of Approximate Study," have new or revised approximate analyses as part of this PMR.

Table 6 - Limits of Revised or New Approximate Study

| Flooding Source            | Limits of Revised or New Approximate Study   |  |  |  |  |  |
|----------------------------|--|--|--|--|--|--|
| East Branch Big Rock Creek | Downstream Reach: From approximately Malgren Drain; to   |  |  |  |  |  |
|                            | approximately 21,000 feet upstream of Malgren Drain, 300 feet  |  |  |  |  |  |
|                            | upstream of County Line Road (Kane/DeKalb County Boundary)   |  |  |  |  |  |
|                            | AND  |  |  |  |  |  |
|                            | Middle Reach: From County Line Road extended (Kane/DeKalb  |  |  |  |  |  |
|                            | County Boundary); to approximately 15,415 feet upstream of County  |  |  |  |  |  |
|                            | Line Road extended, the downstream side of Owens Road  |  |  |  |  |  |
|                            | AND  |  |  |  |  |  |
|                            | Upstream Reach: From approximately 2,315 feet upstream of  |  |  |  |  |  |
|                            | Interstate 88; to approximately 11,000 feet upstream of Interstate 88, approximately 310 feet upstream of Keslinger Road |  |  |  |  |  |

**Table 6 - Limits of Revised or New Approximate Study (continued)** 

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|--|--|--|--|--|--|
| Flooding Source  | Limits of Revised or New Approximate Study   |  |  |  |  |
| Duffin Drain   | From Wheeler Road; to approximately 19,415 feet upstream of Wheeler Road, 6,000 feet upstream of Lasher Road   |  |  |  |  |
| Duffin Drain West  | From the confluence with Duffin Drain; to approximately 2,920 feet upstream of the confluence with Duffin Drain, the downstream side of Scott Road                 |  |  |  |  |
| Duffin Drain Tributary 2   | From the confluence with Duffin Drain; to approximately 1,675 feet upstream of the confluence with Duffin Drain  |  |  |  |  |
| Malgren Drain  | From Swan Road; to approximately 8,965 feet upstream of Swan Road, approximately 4,065 feet upstream of Lasher Road  |  |  |  |  |
| Swan Drain   | From the confluence with Malgren Drain; to approximately 3,145 feet upstream of the confluence with Malgren Drain, the downstream side of Swan Road                |  |  |  |  |
| Welch Creek  | From Keslinger Road; to approximately 2,265 feet upstream of Keslinger Road  |  |  |  |  |
| Welch Creek Tributary 1  | From U.S. Highway 30; to approximately 19,370 feet upstream of U.S. Highway 30, approximately 385 feet downstream of Lasher Road                                   |  |  |  |  |
| Welch Creek Tributary 2  | From the confluence with Welch Creek; to approximately 9,630 feet upstream of the confluence with Welch Creek, approximately 370 feet downstream of Scott Road     |  |  |  |  |
| Welch Creek Tributary 4  | From the confluence with Welch Creek; to approximately 9,665 feet upstream of the confluence with Welch Creek, approximately 235 feet downstream of Keslinger Road |  |  |  |  |
| Welch Creek Tributary 6  | From the confluence with Welch Creek; to approximately 7,150 feet upstream of the confluence with Welch Creek, approximately 600 feet downstream of the Railroad   |  |  |  |  |

**Table 6 - Limits of Revised or New Approximate Study (continued)** 

| Tuble of The vised of New Approximate Study (continued) |   |  |  |  |
|---|---|--|--|--|
| Flooding Source   | Limits of Revised or New Approximate Study  |  |  |  |
| Youngs Creek  | Downstream Reach: From the confluence with East Branch Big Rock   |  |  |  |
|   | Creek; to approximately 1,480 feet upstream of the confluence with  |  |  |  |
|   | East Branch Big Rock Creek, County Line Road (Kane/DeKalb   |  |  |  |
|   | County Boundary)  |  |  |  |
|   | AND   |  |  |  |
|   | Middle Reach: From approximately 2,085 feet downstream of Owens   |  |  |  |
|   | Road (Kane/DeKalb County Boundary); to approximately 775 feet   |  |  |  |
|   | downstream of Owens Road (Kane/DeKalb County Boundary)  |  |  |  |
|   | AND   |  |  |  |
|   | Upstream Reach: From County Line Road (Kane/DeKalb County   |  |  |  |
|   | Boundary); to approximately 16,030 feet upstream of County Line   |  |  |  |
|   | Road (Kane/DeKalb County Boundary), 1,300 feet upstream of  |  |  |  |
|   | Keslinger Road  |  |  |  |
| Vannas Casals Taibutama 1                               | From the confluence with Voyage Creek to annewige stake 2 125 feet  |  |  |  |
| Youngs Creek Tributary 1                                | From the confluence with Youngs Creek; to approximately 2,135 feet upstream of the confluence with Youngs Creek, approximately 375 feet |  |  |  |
|   | upstream of the confidence with Todings Creek, approximately 373 feet upstream of Harter Road   |  |  |  |
|   | upstream of Trarter Road  |  |  |  |
| Youngs Creek Tributary 3                                | From the confluence with Youngs Creek; to approximately 2,995 feet  |  |  |  |
| Tours Crook Illouding 5                                 | upstream of the confluence with Youngs Creek, approximately 1,525   |  |  |  |
|   | distribution of the confidence with Tourigo Creek, approximately 1,323  |  |  |  |

feet upstream of Keslinger Road

#### For this Revision

This Physical Map Revision incorporates new studies of the Big Rock Creek and Welch Creek watersheds within Kane County. Detailed flood study with limited survey was conducted and supersedes previous studies within the limits provided in Table 4 for the following streams: Welch Creek, Duffin Drain, Sugar Grove Branch (downstream of the existing detailed study), Big Rock Creek, West Branch Big Rock Creek, East Branch Big Rock Creek, and Malgren Drain. Approximate studies were completed for the remaining stream reaches in the watershed within Kane County with limits as indicated in Table 6.

This FIS also provides a history of the incorporation of determination letters issued by FEMA that have resulted in map changes (Letter of Map Revision [LOMR]) since the December 20, 2002 initial countywide FIS. This incorporation is summarized in Tables 7a-c, "Letters of Map Change."

At the time of this PMR, there were no existing LOMRs affecting the 10 revised panels.

**Table 7a - Incorporated Letters of Map Change (December 20, 2002)** 

| LOMC Type | Case Number | Date Issued | Community                             | Flooding Source                          | Project Identifier                       |
|-----------|-------------|-------------|---------------------------------------|--|--|
| LOMR      | 97-05-153P  | 7/9/1997    | Aurora                                | Indian Creek                             | Savannah Subdivision                     |
| LOMR      | 97-05-230P  | 4/21/1997   | Batavia                               | Mills Creek Tributary                    | Robert's Lane Subdivision                |
| LOMR      | 94-05-159P  | 5/20/1994   | Batavia                               | Mills Creek Tributary                    | Correction of streamline & Zone A        |
| LOMR      | 92-05-135P  | 12/22/1992  | Batavia                               | McKee Road Tributary                     | Requestor: Leder                         |
| LOMR      | *           | 5/22/1990   | Batavia                               | *  | Requestor: Bergeson                      |
| LOMR      | *           | 7/28/2000   | Geneva                                | McKee Road Tributary                     | Eaglebrook Subdivision                   |
| LOMR      | 02-05-447P  | 6/12/2002   | Geneva                                | Geneva Creek                             | Herrington's Trail<br>Subdivision        |
| LOMR-F    | 98-05-4378A | 7/31/1998   | Hampshire                             | Hampshire Creek                          | Illinois Route 72 at<br>Getzelman Road   |
| LOMR      | 96-05-165P  | 6/5/1996    | Hampshire                             | Hampshire Creek South                    | Hampshire Prairie<br>Subdivision         |
| LOMR      | 99-05-103P  | 7/27/1999   | Hampshire                             | Hampshire Creek                          | Lunt Manufacturing/<br>Hampshire Creek   |
| LOMR      | 98-05-203P  | 8/27/1998   | Huntley                               | Eakin Creek                              | Eakin Creek Relocation                   |
| LOMR      | 99-05-157P  | 6/29/2000   | Huntley                               | South Branch of<br>Kishwaukee River      | Del Webb's Sun City                      |
| LOMR      | 00-05-061P  | 6/15/2000   | Huntley                               | Eakin Creek & Eakin<br>Creek Tributary 3 | Neighborhood 8 of Del<br>Webb's Sun City |
| LOMR      | 98-05-245P  | 2/19/1999   | Kane County<br>(Unincorporated Areas) | Mill Creek Main Channel                  | Fox Mill Subdivision                     |
| LOMR      | 98-05-203P  | 8/27/1998   | Kane County<br>(Unincorporated Areas) | Eakin Creek                              | Eakin Creek Relocation                   |

<sup>\*</sup> Data not available

Table 7a (continued) - Incorporated Letters of Map Change (December 20, 2002)

| LOMC Type | Case Number | Date Issued | Community                             | Flooding Source   | Project Identifier                                     |
|-----------|-------------|-------------|---------------------------------------|---|--|
| LOMR      | 97-05-3596P | 4/29/1998   | Kane County<br>(Unincorporated Areas) | Unnamed Tributary to<br>Ferson Creek                                  | Deer Run Creek Subdivision                             |
| LOMR      | 97-05-067P  | 7/17/1997   | Kane County<br>(Unincorporated Areas) | Mill Creek Tributary No. 2  | Fox Mill Subdivision, Unit 4                           |
| LOMR-F    | 96-05-311A  | 9/25/1996   | Kane County<br>(Unincorporated Areas) | Mill Creek Tributary No. 2  | Foxmill lots Unit 3, 93-95, 102 & 104-107              |
| LOMA      | 95-05-2366A | 11/8/1995   | Kane County<br>(Unincorporated Areas) | Fox River   | Lots 1, 2, 3, 4, 5 & 6, Block<br>15 - Algonquin Shores |
| LOMR-F    | 96-05-1862A | 5/22/1996   | Kane County<br>(Unincorporated Areas) | Blackberry Creek Tributary  | Lots 19 & 40-43 Victoria<br>Park Subdivision           |
| LOMR      | 00-05-027P  | 8/12/2000   | Kane County<br>(Unincorporated Areas) | Woods Creek   | Boyer Road   |
| LOMR      | *           | 1/6/1986    | Kane County (Unincorporated Areas)    | Sleepy Creek  | *  |
| LOMR      | 01-05-2373P | 12/18/2001  | Kane County<br>(Unincorporated Areas) | Fitchie Creek   | Russinwood Subdivision                                 |
| LOMR      | 01-05-2948P | 12/6/2001   | Kane County<br>(Unincorporated Areas) | Unnamed Tributary to<br>Ferson Creek                                  | Gilmore Property/ Pinehave<br>Subdivision              |
| LOMR      | 96-05-113P  | 5/15/1996   | Montgomery                            | Fox River Tributary, East<br>Branch                                   | Schaffers Green house                                  |
| LOMR      | 95-05-279P  | 1/11/1996   | Montgomery                            | Unnamed Ponding area<br>near Fox River Tributary /<br>Unnamed Wetland | Montgomery Business Park                               |

<sup>\*</sup> Data not available

Table 7a (continued) - Incorporated Letters of Map Change (December 20, 2002)

| LOMC Type | Case Number | Date Issued | Community    | Flooding Source            | Project Identifier   |
|-----------|-------------|-------------|--------------|----------------------------|--|
|           |             |             | •            |                            | Lots 19 & 40-43 Victoria                                     |
| LOMR-F    | 96-05-1862A | 5/22/1996   | North Aurora | Blackberry Creek Tributary | Park Subdivision   |
| LOMR      | 00-05-047P  | 7/10/2001   | South Elgin  | Otter Creek                | Thornwood Development  |
| LOMR-F    | 96-05-594A  | 6/13/1996   | St. Charles  | Fox River                  | Lots 22 & 21 Fox River Townhomes of the Willowgate           |
| LOWIK-I   | 90-03-394A  | 0/13/1990   | St. Charles  | POX RIVEI                  | S  |
|           |             |             |              |                            | Lots 3-6 of Fox River<br>Townhomes<br>(Units 252,1258,1260 & |
| LOMR-F    | 94-05-086A  | 5/19/1994   | St. Charles  | Fox River                  | 1266 Willowgate Lane)  |
| LOMR-F    | 93-05-074A  | 6/14/1993   | St. Charles  | Fox River                  | Units 7,8 and 15-18, Fox<br>River Townhomes                  |
| LOMK-L    | 33-03-0/4A  | 0/14/1993   | St. Charles  | I'OX KIVEI                 | Kivei Towillionles   |

**Table 7b - Incorporated Letters of Map Change (November 16, 2006 Revision)** 

| LOMC Type | Case Number | <b>Date Issued</b> | Community              | Flooding Source  | Project Identifier        |
|-----------|-------------|--------------------|------------------------|------------------|---------------------------|
|           |             |                    | Kane County            |                  |                           |
|           |             |                    | (Unincorporated Areas) | South Branch     |                           |
| LOMR      | 06-05-B010P | 5/18/2006          | Carpentersville        | Kishwaukee River | Winchester Heights        |
|           |             |                    | Kane County            |                  |                           |
|           |             |                    | (Unincorporated Areas) | Kishwaukee River |                           |
| LOMR      | 04-05-4080P | 8/6/2005           | Huntley                | Tributary        | Primepointe Business Park |

Table 7c - Incorporated Letters of Map Change (August 3, 2009 Revision)

| LOMC Type | Case Number  | Date Issued | Community              | Flooding Source             | Project Identifier       |
|-----------|--------------|-------------|------------------------|-----------------------------|--------------------------|
| LOMA      | 96-05-2038A  | *           | *                      | *                           | *                        |
| LOMR-F    | 02-05-0693A  | *           | *                      | *                           | *                        |
|           |              |             |                        | Blackberry Creek            |                          |
| LOMR-F    | 01-05-1170A  | 3/23/2001   | Aurora                 | Tributary H                 | The Lindens              |
|           |              |             |                        | Blackberry Creek            | The Lindens,             |
| LOMR-F    | 01-05-2918A  | 9/28/2001   | Aurora                 | Tributary H                 | Parcels 1 and 2          |
| LOMR-F    | 03-05-1227A  | 1/24/2003   | Aurora                 | Blackberry Creek            | The Lindens              |
| LOMR      | 07-05-5849P  | 6/27/2008   | Elgin                  | Sandy Creek                 | Tuscan Woods Subdivision |
|           |              |             |                        |                             | FEMA Initiated -         |
| LOMR      | 03-05-1473P  | 7/30/2003   | Geneva                 | McKee Road Tributary        | Reissuance               |
|           |              |             |                        | Hampshire Creek Tributary   |                          |
| LOMR      | 06-05-BC30P  | 12/28/2006  | Hampshire              | No. 4                       | Pasquinelli Development  |
| LOMR      | 08-05-3393P  | 8/26/2008   | Hampshire              | Eakin Creek West            | Hampshire High School    |
| LOMR      | 98-05-203P   | 8/27/1998   | Huntley                | Eakin Creek and Tributary 3 | Eakin Creek Relocation   |
|           |              |             |                        |                             | Del Webb's Sun City,     |
| LOMR      | 00-05-061P   | 6/15/2000   | Huntley                | Eakin Creek and Tributary 3 | Neighborhood 8           |
|           |              |             |                        | South Branch Kishwaukee     |                          |
| LOMR      | 99-05-157P   | 6/29/2000   | Huntley                | River                       | Del Webb's Sun City      |
|           |              |             | Kane County            | Unnamed Tributary to        |                          |
| LOMR      | 02-05-3575P  | 10/16/2002  | (Unincorporated Areas) | Ferson Creek                | Oak Shadows Subdivision  |
|           |              |             | Kane County            | West Branch                 |                          |
| LOMR      | 02-05-3913P  | 12/31/2002  | (Unincorporated Areas) | East Branch                 | Anderson Road Project    |
|           |              |             | Kane County            |                             |                          |
| LOMR-F    | 03-05-3972A  | 6/20/2003   | (Unincorporated Areas) | Mill Creek Tributary No. 2  | Fox Mill, Unit No. 3     |
| 1.03.54   | 06.05.0000   | c/10/0      | Kane County            | NOTE OF THE PARTY OF        |                          |
| LOMA      | 96-05-2038A  | 6/12/96     | (Unincorporated Areas) | Mill Creek Tributary No. 2  | Fox Mill Subdivision     |
| LOVE      | 00.05.0500.4 | 1 /00 /02   | Kane County            | MULCI I TO 1                | Lots 93-95; 102; 104-107 |
| LOMR-F    | 02-05-0693A  | 1/09/02     | (Unincorporated Areas) | Mill Creek Tributary No. 2  | – Unit 3 Fox Mill        |

<sup>\*</sup>Data not available

Table 7c (continued) - Incorporated Letters of Map Change (August 3, 2009 Revision)

| LOMO Town Composition Data Lord Community |             |             |                        |   |                            |
|---|-------------|-------------|------------------------|---|----------------------------|
| LOMC Type                                 | Case Number | Date Issued | Community              | Flooding Source   | Project Identifier         |
|   |             |             | Kane County            |   | Woodside Creek             |
| LOMR                                      | 03-05-3385P | 6/14/2004   | (Unincorporated Areas) | Mill Creek  | Subdivision                |
|   |             |             | Kane County            |   |                            |
| LOMR                                      | 05-05-0232P | 3/15/2005   | (Unincorporated Areas) | Welch Creek   | AE Fraesz Property         |
|   |             |             | Kane County            | Unnamed Tributary to  |                            |
| LOMR                                      | 05-05-0235P | 3/15/2005   | (Unincorporated Areas) | Ferson Creek  | Patrick Hunter             |
|   |             |             | Kane County            |   |                            |
| LOMR                                      | 07-05-0508P | 11/28/2006  | (Unincorporated Areas) | Unnamed Depressional Area   | Fox Creek Subdivision      |
|   |             |             | Kane County            | •   | McKee Road Tributary       |
| LOMR                                      | 06-05-BP93P | 5/16/2007   | Batavia                | McKee Road Tributary  | Flood Control Project      |
|   |             |             | Kane County            | Lord's Park Tributary   | FEMA Initiated -           |
| LOMR                                      | 03-05-3985P | 12/15/2003  | Elgin                  | Poplar Creek  | Reissuance                 |
|   |             |             | Kane County            | •   |                            |
| LOMR                                      | 03-05-1837P | 9/29/2003   | Gilberts               | Tyler Creek   | Timber Trails              |
|   |             |             | Kane County            | , in the second | Hampshire Creek South      |
| LOMR                                      | 06-05BT15P  | 1/18/2007   | Hampshire              | Hampshire Creek South   | LOMR                       |
|   |             |             | Kane County            | •   | The Settlement             |
| LOMR                                      | 03-05-3994P | 6/24/2004   | Maple Park             | Union Ditch No. 2   | Subdivision                |
|   |             |             | Kane County            |   | Woods of Fox Glen          |
| LOMR                                      | 02-05-2627P | 12/31/2002  | St. Charles            | Norton Creek  | Subdivision                |
|   |             |             |                        | Tyler Creek Unnamed   |                            |
| LOMR                                      | 05-05-0119P | 10/26/2005  | Pingree Grove          | Tributary   | Cambridge Grove            |
|   |             |             | Sleepy Hollow          | ,   |                            |
| LOMR                                      | 02-05-3595P | 8/1/2002    | West Dundee            | Sleepy Creek  | Holze Property             |
|   |             |             |                        |   |                            |
| LOMR                                      | 03-05-1474P | 4/17/2003   | South Elgin            | Otter Creek   | Reissuance                 |
|   |             |             | 5                      |   |                            |
| LOMR-F                                    | 05-05-5511A | 2/2/2006    | South Elgin            | Fox River   | River Place                |
|   |             |             | 5                      |   |                            |
| LOMR                                      | 07-05-0398P | 8/30/2007   | St. Charles            | Fox River   | First Street Redevelopment |
|   |             |             |                        |   | Aurora Municipal Airport   |
| LOMR                                      | 07-05-0178P | 5/1/2008    | Sugar Grove            | Sugar Grove Branch  | Master Drainage Study      |

#### 2.2 Community Description

Kane County is located in northeastern Illinois approximately 50 miles directly west of downtown Chicago. The county is bordered by Cook and DuPage Counties to the east, Kendall County to the south, DeKalb County to the west, and McHenry County to the north.

According to the US Census Bureau, Kane County encompasses 520.44 square miles and had a population of 404,119 in 2000, 317,471 in 1990, and 251,005 in 1970. The population of the county was estimated to be 493,735 in 2006 (Reference 40). Geneva, the county seat, had a population of 19,552 in 2000 (Reference 41). Aurora, the largest city, had a population of 142,990 in 2000. Population is denser in the east, along the Fox River, with more rural/agricultural land uses in the west (Reference 42).

The climate of the area is characterized as humid continental, typified by warm summers and moderately cold winters. The seasons are markedly distinct and generally lag three to five weeks behind the solstices. The proximity of Lake Michigan to the study area has a moderating effect on this climate.

At the Aurora climate station, the average annual temperature is about 48 degrees Fahrenheit (°F) with high temperatures averaging about 59°F and low temperatures averaging about 37°F. January is typically the coldest month and July the warmest month, with average temperatures of 20°F and 72°F, respectively. The lowest temperature on record is -26°F and was recorded in Aurora on January 20, 1985. The highest recorded temperature is 111°F, which occurred in Aurora on June 14, 1936 (Reference 43).

Precipitation within the county occurs as rain, sleet, snow, and hail with an average annual precipitation of 38.39 inches (Reference 43). Approximately sixty percent of annual rainfall occurs from April to September; the annual runoff being approximately 24 inches (Reference 44).

The Fox River basin is the one major drainage basin in Kane County. About sixty percent of the county lies in this drainage basin. The Fox River runs from north to south along eastern Kane County. The topography of the Fox River basin is characterized by rolling morainal hills, marking the northern and western portions of the basin. The land, east of these hills, forms a gently rolling plateau from the Fox River to the eastern boundary of the watershed. These differing landforms produce an asymmetrical topography with the western portion of the basin attaining greater elevations than the eastern portion. Elevation ranges from 630 feet above sea level in the City of Montgomery to 1,065 feet above sea level in Plato Township, on Tower Road. Johnson's Mound in the central part of the county, has an elevation of 898 feet (Reference 42).

The basin's topography is controlled by both subsurface geology and glacial erosion and deposition. The asymmetrical character of the basin is due to the gentle slope of the bedrock units from their highest elevations along the western

boundary down to the eastern boundary. With the recession of the last glacial sheet, large blocks of ice melted to form the Fox Chain of Lakes and other smaller lakes. Few topographical changes in the basin have occurred since glacial time due to low gradients within the basin (Reference 45).

From the northern Illinois state line south to southern Kane County, the terrain is relatively flat and abounds in lakes and low-lying wetlands. The river falls about 110 feet in this 70-mile stretch and the abundant lakes and wetlands obscure the channel between low banks and wide floodplains. Within this 70-mile reach but some distance from the river, topography usually changes to gently undulating prairie and hilly areas with maximum elevations of the basin found at the western boundary of this stretch (Reference 45).

The Blackberry Creek watershed is a 71.2 square mile watershed located in both Kane and Kendall Counties. While the watershed is primarily agricultural, it is experiencing rapid growth in both population and proportion of urban land area. By 2020, both are expected to double from the 1990 condition (Reference 46). Flood damages have increased in the urban areas of the watershed.

The Indian Creek watershed is a 14.7 square mile watershed located mostly in the City of Aurora. Over fifty percent of the watershed has undergone urbanization. A large portion of the open space and wooded area is associated with Fermi Lab, and the remaining agricultural use is now less than twenty percent of the watershed's total land area (Reference 36).

The Big Rock and Welch Creek watershed drains to the Fox River. Welch Creek joins Big Rock Creek 10.3 miles above its confluence with the Fox River. Big Rock Creek joins Fox River at 31 miles above the confluence with the Illinois River, south of the Kane–Kendall County boundary. The Big Rock and Welch Creek watershed is located in Kane, DeKalb, and Kendall counties in northeastern Illinois, and covers a drainage area of 108 square miles at the southwestern Kane County boundary (Reference 38). Within the watershed, 78 percent of the acreage is in row crops. The remainder of the area is made up of rural grassland (11 percent), forest (5 percent), surface water (1 percent), and urban areas (5 percent) (Reference 47). The watershed area includes a small portion of the Village of Elburn as well as the villages of Sugar Grove, Big Rock, and Kaneville, and the area is expected to experience development in the coming years (Reference 38).

#### 2.3 Principal Flood Problems

Flood peaks may increase as urbanization continues to replace agricultural and wooded lands within the watershed. Flooding is sometimes caused (or intensified) by ice jams, which form at bridges and narrow reaches of the river. Flooding has usually resulted either from heavy thunderstorms following a period of prolonged rainfall that has saturated the ground or from a severe storm during snowmelt conditions.

Overbank flood damage generally occurs along the Fox River as well as along some of the smaller creeks in the county. Floods have occurred in the study reaches of the Fox River basin and its tributaries during all seasons of the year.

Kane County has experienced severe flooding. In 1996, 16.9 inches of rain fell on the county in less than a 24-hour period. Flood stages on the Fox River in Aurora exceeded the 1-percent-annual-chance flood event. The Blackberry Creek in Aurora exceeded the 0.2-percent-annual-chance flood event. Several smaller creeks in southern Kane County were also severely flooded. In February 1997, only about 3.0 to 3.5 inches of rain fell on the county. However, the rain fell on snow covered and frozen ground causing significant runoff.

Major floods in Kane County can be documented from records of U.S. Geological Survey (USGS) gage number 05550000 on the Fox River at Algonquin. The drainage area at the gage is 1,403 square miles. Records are continuous from 1915 to the present. Historic floods and the corresponding river stages are shown in Table 8, "Historical Flood Data."

**Table 8 - Historical Flood Data**Fox River at Algonquin, Illinois - USGS Gage Number 05550000

Datum of gage is 729.48 feet NGVD 1929 Flood Stage 3 Feet

|             | 1 100d Stage 3 1 cet  |                    |
|-------------|-----------------------|--------------------|
| <u>Date</u> | Peak Streamflow (cfs) | River Stage (feet) |
| 05/22/2004  | 6,720                 | 3.09               |
| 04/02/1979  | 6,610                 | 4.00               |
| 10/03/1987  | 6,170                 | 3.99               |
| 04/23/1993  | 6,150                 | 3.75               |
| 04/01/1916  | 5,850                 | 4.50               |
| 07/05/1938  | 5,630                 | 4.37               |
| 03/16/1929  | 5,450                 | 4.42               |
| 06/17/2000  | 5,080                 | 3.42               |
| 05/23/1996  | 4,570                 | 3.43               |

Flooding and damages in the Blackberry Creek watershed area have increased over the past two decades, with major flood damage occurring during the storms of July 1983, July 1996, and February 1997. The storm of July 17-18, 1996 caused damage to over 1,000 homes and over \$13 million in damages (Reference 48).

In the Big Rock and Welch Creek watershed, the highest flood observed by local residents in 71 years (Reference 49) occurred after 10.48 inches of rain fell on October 10, 1954. Since the 1954 flood, the largest flood on record occurred on July 18, 1996 when 16.91 inches of rain were recorded at the Aurora College station (Reference 38).

In Batavia, the primary cause of flooding in the Mahoney Creek basin is usually a combination of snowmelt and rainfall. The approximately 2.39 square mile Mahoney Creek watershed is located entirely within Batavia's planning boundaries. Because of extensive urban development and steep overland slopes in the watershed, storm water runoff moves quickly toward the Mahoney Creek Tributary and rapidly through the stream channel itself. Consequently, high intensity, short duration storms tend to produce higher flood flows (Reference 50).

In Hampshire, the primary cause of flooding in the Hampshire Creek basin is usually a combination of snowmelt and rainfall events. Known flood events on Hampshire Creek South occurred in 1960, 1968, 1972, and 1979. Information on historical floods in the area was obtained from a gaging station on Hampshire Creek from the Village of Hampshire.

In Maple Park, the principal flooding problems are caused by the overflow of Union Ditch No. 2 in the southern section of the village.

In Montgomery, severe flooding occurs along the Fox River and the Waubonsee Creek near the Parkview Estates area. The principal causes of the Waubonsee Creek flooding include the channel's inadequate hydraulic capacity and a severe flow restriction caused by a railroad crossing. The flood of August 26, 1972, resulted in several hundred thousand dollars worth of property damage to the Parkview Estates subdivision.

In Sleepy Hollow, the primary cause of flooding in the Jelkes Creek and Sleepy Creek basins is usually a combination of snowmelt and rainfall events. Each creek frequently overflows its banks.

In Sugar Grove, overbank flooding from Welch Creek (now Sugar Grove Branch) was recorded on July 2, 1983 when 6.17 inches of rain fell within a 24-hour period. On June 13, 1981, 3.78 inches of rain fell within a 24-hour period. Both of these rainfall events were recorded at the Aurora Water Department.

In Wayne, the primary cause of flooding in the Norton Creek basin is usually a combination of snowmelt and rainfall events. The Norton Creek Tributary overflowed its banks on June 10, 1967.

Flooding from Mastodon Lake is not limited to the areas adjacent to the lake, but includes a large area west of the lake along Ashland Avenue.

#### 2.4 Flood Protection Measures

The majority of flood protection projects encompass the drainage basins of the Fox River. The remaining projects consist of the construction and maintenance of floodwater retarding structures, channel maintenance, dredgings, channel improvements, and debris removal for specific reaches of streams. There are no new major flood control projects proposed for the Fox River.

Discharges of the Fox River at Aurora are regulated by several dams upstream along the river. Discharges during a flood event are lower than those that would have occurred prior to regulation. The Aurora Dam and the North Aurora Dam are unregulated spillways. Neither dam offers flood protection; their sole purpose is to provide storage for recreational uses. North Aurora Dam was designed by IDOT, Division of Water Resources in 1974 and constructed by the State of Illinois in 1975.

The North Batavia Dam on the Fox River (north of Wilson Street) provides water storage for recreational use but offers no flood protection.

The Carpentersville Dam and Elgin Dam (river mile 71.84) are unregulated spillways. The crest elevation of the spillway and sluiceway is 708.4 feet for the Elgin Dam and 721.0 feet for Carpentersville Dam. Neither of these dams offer flood protection; their sole purpose is to provide water storage for recreational uses.

The Geneva Dam (river mile 58.67) is an unregulated spillway. The dam offers no flood protection; its sole purpose is to provide water storage for recreational uses.

Concrete retaining walls have been built along the banks of the Fox River approximately 450 feet upstream of Montgomery Dam, but offer little protection from high water. The Montgomery Dam itself is a low-level navigation dam, which also offers little or no flood protection.

South Elgin Dam (river mile 68.18) and St. Charles Dam (river mile 60.65) have unregulated spillways. The crest elevation for the spillway and sluiceway is 699.7 feet for South Elgin Dam and 684.3 feet for St. Charles Dame. Their sole purpose is to provide water storage for recreational uses.

Algonquin Dam, on Illinois Route 62 (Chicago Street) (river mile 82.6), is an unregulated spillway. Algonquin Dam offers little or no flood protection; its sole purpose is to provide water storage for recreational purposes.

The Kane County Board has enacted an ordinance on erosion and sedimentation regulating the floodplain and wetland areas (Reference 51). This ordinance states that no floodplain and/or wetland area shall be disturbed, reshaped or otherwise affected by channel relocation, channel deepening, filling or grading of any type, the erection of any structures, or the storage of any materials or equipment, except as permitted by a special use ordinance. The minimum floodplain elevation is defined as that elevation determined from the flood crest profile of the highest flood of record.

#### 3.0 ENGINEERING METHODS

For the flooding sources studied by detailed methods in Kane County, 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-, 50-, 100-, or 500-year period (recurrence interval) have been selected as having special significance for floodplain management and for flood insurance rates. These events, commonly termed the 10-, 50-, 100-, and 500-year floods, have a 10-, 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 which equals or exceeds the 1-percentannual-chance flood 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 Kane County 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 FISs**

Each incorporated community within, and the unincorporated areas of, Kane County, with the exceptions of the villages of Barrington Hills, Big Rock, Burlington, Campton Hills, Elburn, Gilberts, Hoffman Estates, Kaneville, Lily Lake, Pingree Grove, and Virgil, has a previously printed FIS report. The hydrologic analyses described in those reports that have not been superseded by new study information are summarized below.

Unit hydrograph characteristics for the Fox River were based on other studies conducted by the USACE for deriving regional unit hydrograph parameters for similar river basins in the northeastern portion of Illinois (Reference 52, 53, 54). Discharge hydrographs were calculated for selected flood events by utilizing precipitation data, runoff coefficients, base flows, and synthetic unit hydrographs. Rainfall data were generated by a statistical analysis of rain gage records. Four-hour increments of a 24-hour storm rainfall, corresponding to frequencies of 10-, 50-, and 100-years were obtained for the U.S. Weather Bureau Technical Paper No. 40 (Reference 55). Rainfall values for the 500-year storm were then extrapolated from values for the lower three frequencies. Sets of these rainfall increments were entered into the HEC-1 model in critical order to obtain peak discharges for the 10-, 2-, 1-, and 0.2-percent-annual-chance flood (Reference 56).

A HEC-1 hydrologic computer model was used to compute discharges for the Fox River basin (Reference 56). The HEC-1 model relates basin characteristics and

rainfall data to stream discharges. The basin characteristics include vegetation, topography, amount and nature of development, and soil types. The hydrologic model was calibrated with the 1973 event. The 1973 event was selected because it had a relatively uniform distribution over the Fox River basin. For the calibration runs, the actual streamflow gaging values of the Fox River gages were used.

A comparison between discharge-frequency analysis at the Fox River gages and the hydrologic model results was conducted to verify the outflow hydrograph. A log-Pearson Type III discharge-frequency analysis was performed for the peak annual series at the gaging stations using the computer skew coefficients 0.62 and 0.00 (Reference 57). The results of the HEC-1 model compare favorably with the analysis, which used 0.0 skew. Peak discharge-frequency determinations were based on an analysis of basin characteristics and rainfall data using the HEC-1 hydrologic computer model with the SCS option for Ferson Creek, McKee Road Tributary, Mill Creek, Norton Creek, Norton Creek Tributary, and Sandy Creek (Reference 56). As with the Fox River, unit hydrograph characteristics for the study area were based on other studies conducted by the USACE (Reference 54). Discharge hydrographs were calculated for selected flood events by utilizing precipitation data, runoff coefficients, base flows, and synthetic unit hydrographs.

Discharge-frequency relationships for the Fox River at Illinois Avenue were prepared by the USGS using regional flood-frequency relationships for streams in northern Illinois (Reference 58). The results were then adjusted to reflect the present channel conditions (Reference 59). Two other similar discharge-frequency curves were prepared for the Fox River, one at the East-West Tollway and the other at St. Peters School, both in Aurora. The locations are upstream and downstream of Illinois Avenue, respectively. Flood peaks originating from storm runoff from the drainage areas between the three locations were estimated using the rational method. In most cases, the local peak discharges will not synchronize with flood peaks on the Fox River that pass through the city. Therefore, it was assumed, for estimating peak discharges on the Fox River, that peak discharges that met the Fox River peak discharges from intervening areas have a magnitude equal to approximately one-half their corresponding peaks for a given recurrence interval.

In areas where the Fox River divides, the discharge was reduced along the main stem (always the west channel). The remainder of the total discharge was assigned to Fox River East Channel.

Within the Village of Montgomery, discharges for the 10-, 2-, 1-, and 0.2-percent-annual-chance floods for the Fox River were developed using a log-Pearson Type III distribution (Reference 57) of 29 years of historical data measured by the Illinois Division of Water Resources gage on the Fox River at Illinois Avenue in Aurora, Illinois. Results of this procedure were in agreement with flood frequency curves from the USGS publication *Floods in Aurora North Quadrangle, Illinois* (Reference 59) which were extrapolated by a straight line curve for the 1- and 0.2-percent-annual-chance intervals. For the tributaries to the Fox River frequency discharges for the 10-, 2-, and 1-percent-annual-chance floods were determined using regional regression equations from the report *Magnitude and Frequency of* 

Floods in Illinois (Reference 60). The 0.2-percent-annual-chance flood was determined from linear extrapolation performed on probability paper.

The stream gages used in the hydrologic analyses for the Fox River are listed in the following tabulation:

| Flooding Source and Location | Gage Number     | Drainage Area (sq. miles) |
|------------------------------|-----------------|---------------------------|
| Fox River                    |                 |                           |
| At McHenry Dam               | 05549500 (USGS) | 1,250                     |
| At Algonquin                 | 05550000 (USGS) | 1,402                     |
| At Dayton                    | 05552500 (USGS) | 2,570                     |
| At Aurora                    | 05551500 (USGS) | 1,705                     |
| At Batavia                   | 05551250 (USGS) | 1,649                     |
| At East Dundee               | 05550100 (USGS) | 1,446                     |
| At St. Charles               | 05551250 (USGS) | 1,649                     |
| At South Elgin               | 05551000 (USGS  | 1,556                     |
| At South Elgin               | IDOT-DWR        | 1,500                     |
| At Geneva                    | IDOT-DWR        | 1,580                     |
| At Aurora                    | IDOT-DWR        | 1,710                     |

There are no streamflow recording gages on Norton Creek. In order to simulate flows for Norton Creek and Norton Creek Tributary within Wayne, a regional frequency analysis has been completed for the gages in the vicinity of the Norton Creek drainage basin. Thirteen USGS gages with one to twenty years of record in the DuPage River drainage basin provided data for the regional frequency analysis. To enable the regional frequency model to more accurately predict the flows for a small basin, the DuPage data have been augmented by records from gages with small drainage areas. Also included in the study are six gages from DuPage County basin having drainage areas of less than 20.0 square miles and six gages from basins within the region having drainage areas less than 2.0 square miles. The technique for a regional frequency analysis outlined in Bulletin No. 17 from the U.S. Water Resources Council (Reference 57) has been used to calculate the discharges for Norton Creek and Norton Creek Tributary.

There are no streamflow recording gages on Mahoney Creek. In order to simulate flows for Mahoney Creek, a regional frequency analysis has been completed for the gages in the vicinity of the Mahoney Creek drainage basin. Thirteen USGS gages with adequate records in the DuPage River drainage basin provided data for the regional frequency analysis. To enable the regional frequency model to more accurately predict the flows for a small basin, the DuPage data have been augmented by records from gages with small drainage areas. Also included in the study are six gages from the DuPage County basin having drainage areas less than 20.0 square miles and six gages from basins within the region having drainage areas less than 2.0 square miles. The technique for a regional frequency analysis outlined in the *Flood Hydrograph Package* was used along with the HEC-1 rainfall-runoff computer model to calculate the discharges for Mahoney Creek (Reference 56).

For Four Winds Way Creek and Carpenter Creek, peak discharge-frequency determinations were based on analysis of basin characteristics and rainfall data

using the HEC-1 hydrologic computer model (Reference 56). The basin characteristics include vegetation, topography, amount and nature of development, and soil types. As with the Fox River, unit hydrograph characteristics for the study area were based on other studies conducted by the USACE (Reference 53, 54), and discharge hydrographs were calculated for selected flood events by utilizing precipitation data, runoff coefficients, base flows and synthetic unit hydrographs.

For Jelkes Creek and Sleepy Creek, peak discharge-frequency determinations were based on analysis of basin characteristics and rainfall data using the HEC-1 hydrologic computer model (Reference 56) with the SCS option (Reference 61). Discharges for Sleepy Creek were only computed for the 10- and 100-year storms because of the effects of a dam break which was determined to occur on Sleepy Creek. If the dam were to break sooner than assumed for this study, a greater peak discharge would result downstream. Interbasin flow was considered but found to be insignificant on an entire basin analysis of Jelkes Creek and Sleepy Creek.

For 7<sup>th</sup> Avenue Creek and 7<sup>th</sup> Avenue Creek Tributary, peak discharge-frequency determinations were based on analysis of basin characteristics and rainfall data using the HEC-1 hydrologic computer model (Reference 56). The basin characteristics include vegetation, topography, amount and nature of development, and soil types. As with the Fox River, unit hydrograph characteristics for the study area were based on others studies (Reference 55, 62), and discharge hydrographs were calculated for selected flood events by utilizing precipitation data, runoff coefficients, base flows, and synthetic unit hydrographs.

Within Kane County, the discharges for Waubonsee Creek were determined by the SWS using regional floodflow equations for northeast Illinois with modifications to account for the unusual bedrock outcroppings near the mouth of the basin. Only the 1-percent-annual-chance discharges were determined.

Estimates of the 10-, 2-, 1-, and 0.2-percent-annual-chance discharges for Waubonsee Creek were made using regional equations for Illinois (Reference 60). These equations were developed by a multiple regression analysis and considered the following basin characteristics: drainage area, main channel length and slope, mean basin elevation, percentage of forest cover, mean annual precipitation, rainfall intensity, area of lakes and ponds, and soil rainfall runoff relationships.

Discharges for the 10-, 2-, and 1-percent-annual-chance floods were plotted on lognormal probability paper, and the 0.2-percent-annual-chance flood discharges were estimated by straight line extrapolation. The 0.2-percent-annual-chance flood discharge is less reliable than the others because the average period of record for stream gages used to prepare the regional equations is approximately 30 years. The reliability of the 1-percent-annual-chance flood discharge is between those of the 2and 0.2-percent-annual-chance.

The 1-percent-annual-chance discharge value that was used in the FIS for the city of Aurora, dated December 1978, for Waubonsee Creek was also adopted for the revised FIS for the city of Aurora dated May 15, 1986. The analysis did not include the 10-, 2-, or 0.2-percent-annual-chance flood events. To allow for zone

calculations, the 10-percent-annual-chance flood elevation was generated by approximate methods.

The discharges for Union Ditch No. 2 were calculated by the Illinois State Water Survey, which reviewed data from past storms. Hydrologic analyses were carried out to establish peak discharge-frequency relationships.

The discharge values for Brewster Creek and North Arm Brewster Creek were based on the Illinois State Regression Equations modified for urbanized areas of northeastern Illinois (Reference 60).

The discharge information for Poplar Creek was obtained from the Flood Plain Information report for Poplar Creek watershed in which discharge values were determined from the modified Illinois State Regression Equations (Reference 60, 63).

The discharges for Ferson Creek and Otter Creek basin (Otter Creek, Otter Creek West, Fitchie Creek, Bowes Creek, Bowes Creek South and Stony Creek) were developed using the TR-20 hydrology program (Reference 64). These discharges were determined for the 10-, 2-, 1-, and 0.2-percent-annual-chance flood events. The SCS dimensionless unit hydrograph along with the Curve Number method for loss rates was adopted. A log-Pearson Type III discharge-frequency analysis was performed for the peak annual series at the Ferson Creek USGS gaging station located at Randall Road (Reference 57). The computed skew was weighted with the State of Illinois generalized skew coefficient according to Bulletin No. 17 (Reference 57). Rainfall depths were obtained from Bulletin No. 70 for the 10-, 2-, and 1-percent-annual-chance events (Reference 65). The rainfall value for the 0.2-percent-annual-chance storm was then extrapolated from values for the lower three frequencies. The TR-20 model was calibrated to the gage's log-Pearson Type III analysis. Based on IDOT-DWR criteria, future land use for the watershed was determined and applied to the TR-20 model.

A HEC-1 hydrologic computer model was used to compute peak discharges for Hampshire Creek South (Reference 56). The hydrologic model was calibrated on Ferson Creek with the 1968 and 1972 flood events. The events were selected because they had a relatively uniform distribution over the river basin. For the final calibration runs, the actual streamflow gaging values of Ferson Creek were used, since there were no gaging stations on Hampshire Creek South. A comparison between discharge-frequency analysis at Ferson Creek and the hydrologic model results was conducted to verify the outflow hydrograph. A log-Pearson Type III discharge-frequency analysis was performed for the peak annual series at the Ferson gaging station, using the computed skew coefficient 0.0 (Reference 57). The results of the HEC-1 model compared most favorably with the analysis which uses 0.0 skew. The 54.4-square-mile Ferson Creek drainage area was divided into four subareas. The subarea discharges were combined with the development of a composite HEC-1 rainfall runoff model for Ferson Creek. This model simulated the hydrologic behavior of the drainage patterns, storage, and flow restrictions in the river basin. Based on the Ferson Creek parameter recession analysis, similar recession parameters were assumed applicable to Hampshire Creek South. With

these recession parameters as inputs to the HEC-1 model, discharge hydrographs were computed at various locations in Hampshire Creek South.

In some areas, ponding occurs creating storage areas that cause a loss of discharge. There is a large loss of discharge due to a large ponding area, which forms upstream of the Soo Line Railroad because of a small culvert under the railroad, thereby restricting the flow of Hampshire Creek South.

The SCS Technical Release No. 20 was used for the hydrologic analysis of Hampshire Creek and Hampshire Creek Tributary No. 1 (Reference 64). Rainfall parameters used in the TR-20 model were taken from Bulletin 70 for the 10- and 1-percent-annual-chance recurrence interval storms of 3-, 6-, 12-, 18-, and 24-hour durations using the appropriate rainfall distributions published in Circular 173, *Time Distributions of Heavy Rainstorms in Illinois* (Reference 66). Watershed subareas were determined by review of existing topographic information, aerial photographs, and field reconnaissance. Only those drainage structures passing beneath railroad embankments were taken into consideration for the effects of storage and attenuation of flows.

The discharge-frequency analysis for Mill Creek was performed using stream gage records with Weibull Plotting Positions method. Although there are no USGS gaging stations located on Mill Creek, a staff gage was in place on Mill Creek at Kaneville Road from 1960 to 1979. The record from this gage was used to develop the discharge-frequency relationship, and in combination with a rating curve developed at the bridge, a discharge-frequency curve was produced.

The discharges for Geneva Creek were determined utilizing the USACE HEC-1 hydrologic model (Reference 56). Using 24-hour rainfall data obtained from the Weather Bureau (Reference 55) one-hour values, in critical order, were entered into the HEC-1 model of the basin to determine the 10-, 2-, 1-, and 0.2-percent-annual-chance peak discharge. After the discharges were determined, a flood routing was performed using the HEC-1 computer program at the Chicago and North Western railroad yard crossing with Geneva Creek. This routing was performed to determine the volume of water that would be retained by the structure due to the inadequate sizing of the culvert within the structure. It was determined that this structure would alter flows for the 2-, 1-, and 0.2-percent-annual-chance events.

For State Street Creek and State Street Creek Tributary, peak discharge-frequency determinations were based on an analysis of basin characteristics using the State of Illinois Regression Equations (Reference 60). The basin characteristics include vegetation, topography, amount and nature of development, and soil types.

There are no USGS gaging stations on Sugar Grove Branch (referenced at time of study as Welch Creek) and no previously developed discharge frequency information was available to the study contractor. Therefore, a hydrologic model of Sugar Grove Creek and Sugar Grove Branch East (referenced at time of study as Welch Creek Tributary No. 1) was developed using the USACE HEC-1 flood hydrograph package (Reference 56). The 36.5-square mile Sugar Grove Branch drainage basin was divided into 22 subareas. Peak discharges for each subarea were

determined by using the SCS method available with the HEC-1 computer program. The model includes storage routings at the Burlington Northern Railroad culvert, at the Aurora Airport's east-west runway culvert on Sugar Grove Branch and at the Aurora Airport's north-south runway culvert on Sugar Grove Branch East. The culverts were modified using the Modified Puls Routing procedures. The stage-area relationships that describe the storage characteristics of the basin upstream of the culverts were developed using the USGS Sugar Grove quadrangle map (Reference 67). The routings resulted in flow reductions of up to 60 percent. (Please note that this information applies only to the area south of the railroad. The detailed study of Sugar Grove Branch upstream of the railroad was superseded as a result of LOMR 07-05-0178P. See "August 3, 2009 Revised Countywide FIS" below.)

The 50-, 10-, 1-, and 0.2-percent-annual-chance discharges for Jericho Lake Diversion were determined using the SCS TR-20 computer program (Reference 64). This model was checked for reasonableness against the historic flood of 1983.

Discharges for Lord's Park Tributary, within the city of Elgin, were determined using regional equations.

The hydrologic analysis of Mastodon Lake used the SCS TR-20 computer program as well. Runoff curve numbers and time of concentration parameters for Mastodon Lake used in the SCS TR-20 model were determined by review of aerial photographs, available soils information, topographic maps and field interpretation.

# December 20, 2002 Initial Countywide FIS

The hydrology for Tyler Creek, Pingree Creek, and a portion of Sandy Creek was revised to define the peak flows in the area being studied. The revisions consisted of subdividing the watershed into smaller areas, adding channel and reservoir routings, using the State of Illinois Bulletin 70 precipitation amounts, and incorporating interbasin flow between Tyler Creek and Eakin Creek. The USACE HEC-1 computer program was used in the hydrologic modeling. The SCS Curve Number and Unit Hydrograph methods were used.

A HEC-1 model was used to compute discharges on Eakin Creek (Reference 68).

# November 16, 2006 Revised Countywide FIS

No new or revised hydrologic studies were incorporated into the November 16, 2006 revised countywide FIS.

# August 3, 2009 Revised Countywide FIS

The hydrologic analysis for the streams located within the Blackberry Creek watershed (Aurora Chain of Lakes, Aurora Chain of Lakes Cherry Hills Diversion, Blackberry Creek, East Run, East Run North Branch, East Run North Loop, Elburn Run, Lake Run, Lake Run Main Street Branch, Lake Run Nelson Lake Branch, Lake Run North of I-88 Overflow, Lake Run North of I-88 Overflow East Branch, Lake Run South of I-88 Diversion, Prestbury Branch, Route 38 Branch, Seavey Road Run, Seavey Road Run Green Road Branch, Seavey Road Run Main Street Branch) was revised by the USGS (Reference 48) to define peak flows. The 71.16 square mile drainage area of the Blackberry Creek watershed was divided into 49 subbasins. Flood-hazard analyses were performed for only the Kane County portion of the watershed.

The Hydrological Simulation Program - FORTRAN (HSPF) (Reference 69) was used to perform the hydrologic modeling for the Blackberry Creek watershed. Streamflow data was available at two locations in the watershed: the USGS streamflow-gaging station at Blackberry Creek near Yorkville (station 0551700), located close to the downstream end of the watershed; and the USGS streamflow gaging station at Blackberry Creek near Montgomery (station 05551675), located at the Jericho Road Bridge crossing. Utilizing the annual maximum series (AMS) determined from simulated streamflow records at various locations in the watershed from the hydrologic model, flood-frequency analysis was used to estimate flood quantiles. Procedures for the flood-frequency analysis followed the recommendations described in Bulletin 17B. The frequency analysis was done with the PEAKFQ program (Reference 70). The 1- and 0.2-percent-annual-chance floods determined in this analysis were then used in the hydraulic model analysis.

The hydrologic analysis for the Indian Creek watershed (Indian Creek, Indian Creek Prairie Path Run, Selmarten Creek, South Tributary, and Tollway Tributary) was completed by V<sub>3</sub> Companies of Illinois, Ltd (Reference 36). Precipitation data for the study was taken from the Huff Bulletin 70 (Reference 65) rainfall depths and Circular 173 distributions (Reference 66).

The Indian Creek watershed was modeled in two separate, but dependent sections. The northern portion of the Indian Creek watershed was modeled with the USACE HEC-1 hydrologic computer program (Reference 71). The computed HEC-1 output hydrographs were input into the northern FEQ hydraulic model. The southern portion was modeled conventionally with the resultant HEC-1 discharges at specific locations being input into the southern HEC-RAS hydraulic model. The hydrologic results for the entire Indian Creek watershed were computed for the 10-, 2-, 1-, and 0.2-percent-annual-chance storm events for durations of 3, 6, 12, 24, 48, and 72 hours (Reference 36).

LOMR 07-05-0178P should be referenced for hydrologic information for Sugar Grove Branch, Sugar Grove Branch East, and Sugar Grove Branch North (referenced in the LOMR as Welch Creek, Welch Creek Tributary No. 1, and

Welch Creek Tributary No. 2). The portion of the pre-countywide Sugar Grove Branch study area upstream of the railroad was superseded by this LOMR.

# To be determined Revised Countywide FIS

For this PMR, the hydrologic analysis for Big Rock and Welch Creek watershed was completed by the Illinois State Water Survey for Kane County in December 2008. The Big Rock Creek/south Kane-Kendall County border constitutes the downstream limit of the hydrologic study.

The Big Rock and Welch Creek watershed hydrology was modeled using HEC-HMS version 3.2 (Reference 72) to determine the 1-percent-annual-chance discharge. The analysis was performed using the SCS Curve number loss method, Clark Unit Hydrograph translation method, and Muskingum Cunge and Modified Puls routing calculations.

A precipitation gage and four stage gages captured data for the September 12-14, 2008 flood. The model was calibrated to this event, and flood discharge calculations were made using the slope-area method (Reference 73).

A summary of the drainage area-peak discharge relationships for all the streams studied by detailed methods is shown in Table 9, "Summary of Discharges."

**Table 9 - Summary of Discharges** 

Peak Discharges (cubic feet per second) Drainage Area 10-Percent-2-Percent-1-Percent-0.2-Percent-Flooding Source and Location (square miles) Annual-Chance Annual-Chance Annual-Chance Annual-Chance 7th AVENUE CREEK 2.9 At mouth 158 258 303 429 Approximately 6,864 feet from mouth 1.8 110 185 226 317 7th AVENUE CREEK TRIBUTARY At confluence with 7th 0.6 Avenue Creek 103 192 246 347 \* ANDERSON ROAD RUN \* ANDERSON ROAD RUN NORTH BRANCH AURORA CHAIN OF LAKES At confluence with Blackberry Creek (approximately 190 feet upstream of Jericho Road) 4.1 104 430 621 1,449 At intersection with Prairie Street 3.7 154 543 772 1,716 Aurora Chain-of-Lakes at intersection with Gilman Natural Trail 3.4 118 267 359 667 Aurora Chain of Lakes Orchard Road Overflow at intersection 2.8 5 28 98 364 with Orchard Road Approximately 670 feet upstream of Orchard Road 2.7 134 293 337 453 At intersection with Galena Road 2.3 219 425 533 829 Approximately 1100 feet upstream of Illinois Avenue 1.8 125 258 544 331 AURORA CHAIN OF LAKES CHERRY HILLS DIVERSION Aurora Chain of Lakes Cherry Hills Diversion at intersection with Gilman Natural Trail 3.6 4 280 438 1.207

<sup>\*</sup>Data not available

**Table 9 - Summary of Discharges (Continued)** 

Peak Discharges (cubic feet per second) 10-Percent-2-Percent-1-Percent-0.2-Percent-Flooding Source Drainage Area and Location (square miles) Annual-Chance Annual-Chance Annual-Chance Annual-Chance BIG ROCK CREEK Just Downstream of Welch 104.4 Creek Confluence 12,403 Just Downstream of East Branch/West Branch Confluence 60.7 7,990 BLACKBERRY CREEK At intersection with US Highway 30 57.1 1.325 2,302 2.808 4.218 At confluence with Aurora Chain of Lakes (approximately 190 feet upstream of Jericho Road) 52.4 1.347 2,373 2.910 4,421 Approximately 80 feet downstream of Burlington Railroad 51.4 1,497 2,465 2,952 4,286 At upstream of confluence with East Run and approximately 300 feet upstream of Galena Road 45.9 1,401 2,286 2,742 3,984 At confluence with Lake Run (approximately 1800 feet downstream of Illinois Route 56) 31.9 1.037 1,681 2.003 2,875 At confluence with Prestbury Branch (approximately 2740 feet upstream of Illinois Route 56) 27.8 995 1.637 1.961 2,847 Approximately 140 feet upstream of Ke-De-Ka Road 25.5 1,003 1,675 2,018 2,961 Approximately 4140 feet downstream from Illinois 992 2,017 Route 47 23.5 1,670 2,976 Approximately 550 feet upstream of Scott Road (90 feet upstream of junction with Seavey Road Run) 15.0 719 1,221 1,477 2,189 Approximately 240 feet upstream of Interstate 88 13.4 717 1,261 1,545 2,348 Approximately 50 feet upstream of Illinois Route 47 11.2 634 1,120 1,376 2,097

<sup>\*</sup>Data not available

**Table 9 - Summary of Discharges (Continued)** 

|   |                | Peak Discharges (cubic feet per second) |               |               |               |  |
|---|----------------|---|---------------|---------------|---------------|--|
| Flooding Source   | Drainage Area  | 10-Percent-                             | 2-Percent-    | 1-Percent-    | 0.2-Percent-  |  |
| and Location  | (square miles) | Annual-Chance                           | Annual-Chance | Annual-Chance | Annual-Chance |  |
| BLACKBERRY CREEK (continued)  |                |   |               |               |               |  |
| At confluence with Elburn<br>Run (approximately 3200 feet<br>upstream of Smith Road)  | 7.0            | 316                                     | 537           | 651           | 966           |  |
| Approximately 125 feet upstream of Hughes Road  | 6.0            | 303                                     | 523           | 637           | 956           |  |
| At intersection with a private road. The private road connects to Keslinger Road from south and approximately 250 feet east of Deneali Road           |                |   |               |               |               |  |
| intersection Approximately 670 feet downstream of BCNW  | 4.8            | 351                                     | 628           | 772           | 1,174         |  |
| Railroad At confluence with Route 38 Branch (approximately 1500 feet downstream of Pouley Road and southeastern to the intersection of Illinois Route | 3.1            | 326                                     | 561           | 677           | 985           |  |
| 38 and Pouley Road)   | 1.0            | 177                                     | 310           | 376           | 551           |  |
| BOWES CREEK   |                |   |               |               |               |  |
| At confluence with Stony Creek  | 8.2            | 246                                     | 542           | 617           | 1,354         |  |
| Approximately 4,660 feet above confluence with Stony Creek  | 7.7            | 239                                     | 526           | 600           | 1,313         |  |
| At Corron Road  | 6.6            | 203                                     | 433           | 492           | 995           |  |
| At Crawford Road Above confluence of Bowes  | 5.4            | 210                                     | 451           | 515           | 1,015         |  |
| Creek Tributary   | 2.9            | 173                                     | 357           | 406           | 745           |  |
| At Dittman Road   | 2.5            | 109                                     | 223           | 251           | 456           |  |
| BOWES CREEK SOUTH At confluence with Bowes  |                |   |               |               |               |  |
| Creek   | 1.8            | 94                                      | 194           | 217           | 394           |  |
| At Dittman Road   | 1.7            | 87                                      | 177           | 199           | 392           |  |
| BREWSTER CREEK At confluence with Fox River   | 17.7           | 162                                     | 265           | 327           | 482           |  |
| CARPENTER CREEK At confluence with Fox River  | 1.5            | 331                                     | 531           | 669           | 918           |  |

**Table 9 - Summary of Discharges (Continued)** 

Peak Discharges (cubic feet per second) 2-Percent-Flooding Source Drainage Area 10-Percent-1-Percent-0.2-Percent-Annual-Chance Annual-Chance and Location (square miles) Annual-Chance Annual-Chance **DUFFIN DRAIN** 979 At US 30 8.1 2.5 422 At Lasher Road **EAKIN CREEK** At confluence with South Branch Kishwaukee River 14.9 540 1,059 1,383 1,995 EAST BRANCH BIG ROCK **CREEK** Just Downstream of Malgren Drain Confluence 31.7 4,386 Just Downstream of Youngs Creek Confluence 22.9 3,473 Just Downstream of East Branch Big Rock Tributary 2 Confluence 3.7 679 At Keslinger Road 0.7 154 EAST BRANCH BIG ROCK **CREEK TRIBUTARY 2** 104 At Keslinger Road 0.4 EAST RUN At confluence with Blackberry Creek (approximately 520 feet 989 downstream of Hankes Road) 580 684 4.5 317 Approximately 580 feet upstream of Indian Trail Road 3.6 360 660 784 1,149 Approximately 370 feet downstream of culverts on Orchard Road 219 367 484 600 Approximately 50 feet upstream of inflow point to the pond by auto-dealers North East of I-88 Tollway and Orchard Road 322 588 643 921 On East Run approximately 490 feet upstream of inflow point to AutoDealers' Pond 257 417 486 641 Approximately 2500 feet downstream of Foxhill Lane 549 1.8 229 367 425 Approximately 120 feet upstream of Oak Street 1.0 214 341 400 546

<sup>\*</sup>Data not available

**Table 9 - Summary of Discharges (Continued)** 

|  | Peak Discharges (cubic feet per second) |               |                    |                |               |
|--|---|---------------|--------------------|----------------|---------------|
| Flooding Source                                    | Drainage Area                           | 10-Percent-   | Flooding<br>Source | Drainage Area  | 10-Percent-   |
| and Location                                       | (square miles)                          | Annual-Chance | and Location       | (square miles) | Annual-Chance |
| EAST RUN NORTH BRANCH                              |   |               |                    |                |               |
| On East Run North Branch                           |   |               |                    |                |               |
| approximately 250 feet upstream of inflow point to |   |               |                    |                |               |
| AutoDealers' Pond                                  | *                                       | 65            | 121                | 157            | 279           |
| Autobeaiers Folia                                  |   | 03            | 121                | 137            | 217           |
| EAST RUN NORTH LOOP                                |   |               |                    |                |               |
| On North Loop approximately                        |   |               |                    |                |               |
| 150 feet south of culvert outlet                   |   |               |                    |                |               |
| by I-88 Tollway                                    | *                                       | 213           | 414                | 447            | 734           |
| ELBURN RUN   |   |               |                    |                |               |
| At confluence with Blackberry                      |   |               |                    |                |               |
| Creek (approximately 3200 feet                     |   |               |                    |                |               |
| upstream of Smith Road)                            | 2.6                                     | 416           | 750                | 918            | 1,373         |
| At intersection with Hughes                        |   |               |                    |                |               |
| Road   | 1.8                                     | 281           | 494                | 599            | 879           |
| Approximately 146 feet                             |   |               |                    |                |               |
| upstream of Keslinger Road                         | 0.8                                     | 105           | 149                | 166            | 206           |
| FERSON CREEK                                       |   |               |                    |                |               |
| At mouth   | 54.5                                    | 1,959         | 3,486              | 4,020          | 6,430         |
| At Randall Road                                    | 51.2                                    | 1,296         | 2,700              | 3,075          | 6,020         |
| At Bolcum Road                                     | 46.3                                    | 1,295         | 2,662              | 3,027          | 5,649         |
| Just upstream of confluence                        |   |               |                    |                |               |
| of Otter Creek                                     | 11.3                                    | 342           | 740                | 843            | 1,641         |
| At Burr Road                                       | 11.2                                    | 342           | 740                | 843            | 1,641         |
| Approximately 2,300 feet                           |   |               |                    |                |               |
| upstream of Burr Road                              | 11.0                                    | 421           | 492                | 524            | 621           |
| Approximately 3,350 feet                           |   |               |                    |                |               |
| downstream of Denker Road                          | 10.6                                    | 202           | 448                | 516            | 1,034         |
| At Denker Road                                     | 9.0                                     | 205           | 489                | 563            | 1,034         |
| Just upstream of confluence                        |   |               |                    |                |               |
| of Ferson Creek Tributary                          | 8.6                                     | 211           | 584                | 680            | 1,341         |
| At Burlington Road                                 | 6.1                                     | 184           | 450                | 512            | 971           |
| Just above Lake Campton                            | 6.1                                     | 208           | 456                | 517            | 980           |
| Approximately 2,430 feet above                     |   |               |                    |                |               |
| Lake Campton                                       | 4.5                                     | 178           | 391                | 443            | 840           |
| At Retreat Court                                   | 3.4                                     | 156           | 342                | 387            | 735           |
| At the Great Western Trail                         | 2.0                                     | 118           | 260                | 294            | 558           |

<sup>\*</sup>Data not available

**Table 9 - Summary of Discharges (Continued)** 

Peak Discharges (cubic feet per second) 10-Percent-2-Percent-1-Percent-0.2-Percent-Flooding Source Drainage Area and Location (square miles) Annual-Chance Annual-Chance Annual-Chance Annual-Chance FITCHIE CREEK At confluence with Otter Creek 7.2 178 375 433 834 144 300 337 619 At Bowes Road 6.8 At Koshar Circle 5.6 127 265 298 547 Approximately 2,770 feet upstream from Nestler Road 5.0 120 250 313 515 At Russell Road 3.5 77 191 220 447 FOUR WINDS WAY CREEK At mouth of Fox River 1.8 181 297 357 561 FOX RIVER Upstream of U.S. 30 and downstream of Ashland Avenue 1,710 12,100 17,050 18,700 24,100 Approximately 1.2 miles downstream of North Avenue 17,000 1,705 12,100 18,600 24,100 At Aurora Dam 1,705 5,950 8,400 9,180 11,900 At North Aurora 1,680 8,565 12,770 14,350 18,760 At confluence of Mill Creek 1,670 18,760 8,565 12,770 14,350 Approximately 319,757 feet from mouth 11,225 16,875 1,649 7,535 12,250 At River Station 294,500 1,629 8,500 12,500 13,500 17,630 7,535 At Geneva Dam 1,580 11,225 12,250 16,875 Approximately 356,400 feet from mouth 1,568 16,875 7,535 11,225 12,250 Approximately 359,964 feet from mouth 1,556 6,870 9,965 11,350 14,680 Just upstream of confluence of Norton Creek 1,540 7,535 11,225 12,250 16,875 At U.S. Route 20 1.532 6.870 9,965 11.305 14.680 At Lawrence Avenue 1,509 5,910 8,950 10,540 13,475 Approximately 8,400 feet upstream of confluence of Jelkes Creek 1,446 5,910 8,950 10,540 13,475 At Carpentersville Dam 1,425 5,775 8,345 10,095 12,525 At Algonquin approximately 428.541 feet from mouth 1,403 5,480 7,990 9.690 11.800 Approximately 7,000 feet downstream of upstream county boundary 1,390 5,775 8,345 10,095 12,525

**Table 9 - Summary of Discharges (Continued)** 

Peak Discharges (cubic feet per second) 10-Percent-2-Percent-1-Percent-0.2-Percent-Flooding Source Drainage Area and Location (square miles) Annual-Chance Annual-Chance Annual-Chance Annual-Chance FOX RIVER EAST **CHANNEL** 1,705 6,150 8,600 9,420 12,200 At Aurora Dam FOX RIVER TRIBUTARY Upstream of confluence with 1.9 282 360 510 Fox River 134 FOX RIVER TRIBUTARY (EAST BRANCH) Upstream of confluence with Fox River Tributary 0.3 25 56 75 105 **GENEVA CREEK** Just downstream of the Chicago and North Western railroad yard 1.2 323 521 539 689 At South Street 1.1 305 784 466 568 **HAMPSHIRE CREEK** Approximately 80 feet downstream of confluence 1,406 of Hampshire Creek South 5.8 745 Approximately 45 feet downstream of confluence of Hampshire Creek South 1,288 3.8 618 Approximately 1,961 feet downstream of State Street 3.7 553 1,153 Approximately 107 feet upstream of State Street 533 1,153 3.5 Approximately 506 feet upstream of State Street 990 3.4 446 Approximately 1,650 feet upstream of Rowell Road 2.1 328 819 Approximately 3,101 feet upstream of Rowell Road 1.5 240 557 Approximately 4,437 feet upstream of Rowell Road 469 1.5 188 Approximately 4,000 feet downstream from Soo Line Railroad 1.1 166 415

<sup>\*</sup>Data not available

 $Table \ 9 \textbf{-} Summary \ of \ Discharges \ (Continued)$ 

|  |                | Peak Discharges (cubic feet per second) |               |               |               |
|--|----------------|---|---------------|---------------|---------------|
| Flooding Source                            | Drainage Area  | 10-Percent-                             | 2-Percent-    | 1-Percent-    | 0.2-Percent-  |
| and Location                               | (square miles) | Annual-Chance                           | Annual-Chance | Annual-Chance | Annual-Chance |
| HAMPSHIRE CREEK                            | isquare miles) | Innual Chance                           | Innual Chance | Innual Chance | minut Chance  |
| (continued)                                |                |   |               |               |               |
| · ·  |                |   |               |               |               |
| Approximately 1,927 feet downstream of Soo |                |   |               |               |               |
|  | 0.8            | 115                                     | *             | 250           | *             |
| Line Railroad                              | 0.8            | 115                                     | **            | 250           | -1-           |
| Approximately 210 feet                     |                |   |               |               |               |
| downstream of Soo                          | 0.7            | <b>~</b> 0                              | at.           | 120           | at.           |
| Line Railroad                              | 0.5            | 53                                      | *             | 139           | *             |
| Approximately 18 feet                      |                |   |               |               |               |
| upstream of Soo Line Railroad              | 0.5            | 61                                      | *             | 160           | *             |
| HAMPSHIRE CREEK                            |                |   |               |               |               |
| SOUTH                                      |                |   |               |               |               |
| At confluence with                         |                |   |               |               |               |
| Hampshire Creek                            | 2.0            | 170                                     | 237           | 276           | 336           |
| At Soo Line Railroad                       | 2.0            | 260                                     | 420           | 556           | 822           |
| At Romke Road                              | 1.1            | 138                                     | *             | 297           | *             |
| HAMPSHIRE CREEK                            |                |   |               |               |               |
| TRIBUTARY NO. 1                            |                |   |               |               |               |
| At confluence with                         |                |   |               |               |               |
| Hampshire Creek                            | 0.6            | 64                                      | *             | 117           | *             |
| Approximately 717 feet                     |                |   |               |               |               |
| upstream of Industrial Drive               | 0.5            | 64                                      | *             | 117           | *             |
| HAMPSHIRE CREEK                            |                |   |               |               |               |
| TRIBUTARY NO. 2                            |                |   |               |               |               |
| At confluence with                         |                |   |               |               |               |
| Hampshire Creek                            | 0.6            | 94                                      | *             | 294           | *             |
| Approximately 409 feet                     |                |   |               |               |               |
| downstream of Allen Road                   | 0.3            | 48                                      | *             | 150           | *             |
| Approximately 651 feet down-               | 0.0            | .0                                      |               | 100           |               |
| stream of Penstemon Lane                   | 0.2            | 29                                      | *             | 89            | *             |
| Approximately 566 upstream                 | 0.2            | 2)                                      |               | 07            |               |
| of Penstemon Lane                          | 0.1            | 19                                      | *             | 58            | *             |
| HAMDSHIDE CDEEK                            |                |   |               |               |               |
| HAMPSHIRE CREEK                            |                |   |               |               |               |
| TRIBUTARY NO. 3                            |                |   |               |               |               |
| At confluence with Hampshire               |                |   |               |               |               |
| Creek Tributary No. 2                      | 0.1            | 9                                       | *             | 33            | *             |
| HAMPSHIRE CREEK                            |                |   |               |               |               |
| TRIBUTARY NO. 4                            |                |   |               |               |               |
| At confluence with                         |                |   |               |               |               |
| Hampshire Creek                            | 0.2            | 24                                      | *             | 77            | *             |
| *Data not available                        |                |   |               |               |               |

**Table 9 - Summary of Discharges (Continued)** 

Peak Discharges (cubic feet per second) 10-Percent-2-Percent-1-Percent-0.2-Percent-Drainage Area Flooding Source and Location (square miles) Annual-Chance Annual-Chance Annual-Chance Annual-Chance INDIAN CREEK At Mouth (confluence with Fox River) 14.7 1.095 2,379 3.064 4,511 At confluence with South 13.9 939 2,521 **Tributary** 1,966 3,672 At Austin Avenue 10.7 706 1,472 1,873 2,624 At Scheffer Road 10.5 1.378 1.744 2,401 677 At Farnsworth Avenue 9.5 517 969 1.126 1,527 At Reckinger Road 9.5 505 943 1,097 1,517 At Prairie Path 9.4 491 907 1.056 1,507 At Farnsworth Avenue 7.8 560 743 1,290 353 At Molitor Road 7.6 345 736 814 1,220 At confluence with Selmartin 7.4 345 736 817 Creek 1,222 At Interstate 88 4.8 258 539 579 865 At Bilter Road 298 965 4.5 555 675 797 At Butterfield Road 3.6 231 417 497 INDIAN CREEK PRAIRIE PATH RUN At Farnsworth Avenue 0.5 46 120 139 146 JERICHO LAKE DIVERSION Approximately 1,000 feet downstream of Orchard Road 15 480 1,190 JELKES CREEK At confluence with Fox River 6.8 600 920 1,200 1,760 Just upstream of Boncosky Road 4.7 440 710 930 1,370 Approximately 300 feet downstream of Thorobred Lane 3.2 320 540 700 1,040 At upstream corporate limit of Village of Sleepy Hollow 280 480 930 2.8 620 LAKE RUN At confluence with Blackberry Creek (approximately 2680 feet downstream of Hankes Road) 13.0 532 844 1,004 1,419 On Lake Run after the confluence with South of I-88 Diversion (approximately 850 feet east of Route 56 and 2930 feet north of Hankes Road) 623 958 1.127 1.544

\*Data not available

<sup>52</sup> 

**Table 9 - Summary of Discharges (Continued)** 

|                                |                | P             | eak Discharges (cı | ıbic feet per secon | d)            |
|--------------------------------|----------------|---------------|--------------------|---------------------|---------------|
| Flooding Source                | Drainage Area  | 10-Percent-   | 2-Percent-         | 1-Percent-          | 0.2-Percent-  |
| and Location                   | (square miles) | Annual-Chance | Annual-Chance      | Annual-Chance       | Annual-Chance |
| LAKE RUN (continued)           |                |               |                    |                     |               |
| On Lake Run before the         |                |               |                    |                     |               |
| confluence with South of I-88  |                |               |                    |                     |               |
| Diversion (approximately 850   |                |               |                    |                     |               |
| feet east of Route 56 and 3710 |                |               |                    |                     |               |
| feet north of Hankes Road)     | *              | 602           | 732                | 764                 | 826           |
| Approximately 190 feet         |                |               |                    |                     |               |
| upstream of East Bound         |                |               |                    |                     |               |
| Illinois Route 56              | 11.6           | 672           | 896                | 957                 | 1,077         |
| Approximately 1850 feet        |                |               |                    |                     |               |
| upstream of Tanner Road        | 8.9            | 525           | 888                | 1,065               | 1,527         |
| At confluence with Lake Run    |                |               |                    |                     |               |
| Nelson Lake Branch             |                |               |                    |                     |               |
| (approximately 780 feet        |                |               |                    |                     |               |
| upstream of Seavey Road)       | 2.9            | 286           | 547                | 689                 | 1,104         |
| At confluence with Lake Run    |                |               |                    |                     |               |
| Main Street Branch             |                |               |                    |                     |               |
| (approximately 2570 feet       |                | 400           |                    |                     |               |
| downstream of Bliss Road)      | 1.7            | 199           | 369                | 457                 | 706           |
| LAKE RUN MAIN STREET           |                |               |                    |                     |               |
| BRANCH                         |                |               |                    |                     |               |
| At confluence with Lake Run    |                |               |                    |                     |               |
| (approximately 3200 feet       |                |               |                    |                     |               |
| downstream of Main Street)     | 2.9            | 77            | 162                | 212                 | 368           |
| Approximately 1310 feet        |                |               |                    |                     |               |
| upstream of Main Street        | 2.3            | 41            | 97                 | 133                 | 252           |
|                                |                |               |                    |                     |               |
| LAKE RUN NELSON LAKE           |                |               |                    |                     |               |
| BRANCH                         |                |               |                    |                     |               |
| At confluence with Lake Run    |                |               |                    |                     |               |
| (approximately 780 feet        |                |               |                    |                     |               |
| upstream of Seavey Road)       | 5.9            | 38            | 54                 | 60                  | 72            |
| LAKE BRANCH NORTH OF           |                |               |                    |                     |               |
| I-88 OVERFLOW EAST             |                |               |                    |                     |               |
| BRANCH                         |                |               |                    |                     |               |
| On North of I-88 Overflow      |                |               |                    |                     |               |
| approximately 1900 feet east   |                |               |                    |                     |               |
| of Lake Run and 2100 feet      |                |               |                    |                     |               |
| north of I-88 Tollway          | *              | 135           | 477                | 686                 | 1,253         |
| On North of I-88 Overflow East |                |               |                    |                     | ,             |
| Branch approximately 2430      |                |               |                    |                     |               |
| feet east of Lake Run and 2610 |                |               |                    |                     |               |
| feet north of I-88 Tollway     | *              | 33            | 51                 | 59                  | 78            |
| •                              |                |               | -                  |                     |               |
| *Data not available            |                |               |                    |                     |               |

**Table 9 - Summary of Discharges (Continued)** 

Peak Discharges (cubic feet per second) Flooding Source Drainage Area 10-Percent-2-Percent-1-Percent-0.2-Percentand Location (square miles) Annual-Chance Annual-Chance Annual-Chance LAKE BRANCH NORTH OF **I-88 OVERFLOW** On North of I-88 Overflow approximately 1590 feet east of Lake Run and 2670 feet 105 north of I-88 Tollway 430 632 1,181 **LAKE RUN SOUTH OF I-88** DIVERSION On South of I-88 Diversion before the confluence with Lake Run (approximately 1850 feet east of Route 56 and 3500 feet north of Hankes Road) 20 226 363 718 LORD'S PARK TRIBUTARY<sup>1</sup> At the mouth 3.7 475 MAHONEY CREEK At confluence with Fox River 2.5 209 344 422 601 MC KEE ROAD TRIBUTARY MALGREN DRAIN Just Downstream of Malgren Drain / Swan Drain Confluence \* 2.5 369 MC KEE ROAD TRIBUTARY At McKee Street 338 554 665 984 At Skyline Drive 4.9 334 970 546 657 At Randall Road 897 4.2 319 513 618 Approximately 3,820 feet upstream of Fabyan Parkway 0.8 336 527 157 269 MILL CREEK Approximately 200 feet downstream of abandoned railroad 30.3 1,756 2,987 3,602 5,250 At Kaneville Road 18.3 1,400 1,700 At State Route 38 8.4 952 1,160 \* \* \* At Campton Hills Drive 7.3 882 1.070 At La Fox Road 4.6 700 \* 850 \* \* At State Route 64 3.2 588 714

<sup>\*</sup>Data not available

<sup>&</sup>lt;sup>1</sup>Discharges for Lord's Park Tributary were taken from the Cook County FIS. The stream center line resides in Cook County.

**Table 9 - Summary of Discharges (Continued)** 

Peak Discharges (cubic feet per second) 10-Percent-2-Percent-1-Percent-0.2-Percent-Flooding Source Drainage Area and Location (square miles) Annual-Chance Annual-Chance Annual-Chance Annual-Chance **MILL CREEK TRIBUTARY NO. 2** At the confluence with Mill Creek Diversion Channel 158 231 \* **NORTH ARM BREWSTER CREEK** At confluence with Brewster Creek 3.4 87 120 131 148 NORTON CREEK At confluence with Fox River 11.5 560 849 984 1,325 Approximately 2,400 feet downstream of White Thorn Road 9.8 909 517 785 1,225 Approximately 3,000 feet upstream of White Thorn Road 7.4 438 771 665 1,038 At Dunham Road 4.8 438 771 1,038 665 Upstream of the confluence of Norton Creek Tributary 3.5 365 555 645 870 NORTON CREEK **TRIBUTARY** At confluence with Norton Creek 1.8 205 310 360 485 OTTER CREEK At confluence with Ferson Creek 33.6 1,061 2,209 2,531 4,853 Above confluence of Otter Creek Tributary 29.7 950 1.973 2,243 4,254 Approximately 1,935 feet downstream from McDonald Road 28.9 937 1,945 2,211 4,194 925 1,922 At McDonald Road 28.2 2,184 4,143 Above confluence of Stony Creek 15.8 526 1,122 1,254 2,362 At Hopps Road 15.3 488 1,025 1,159 2,171 Above confluence of Fitchie 7.2 Creek 367 738 812 1,491 At Bowes Road 5.0 306 614 675 1,241 Approximately 4,345 feet 195 upstream from Bowes Road 3.0 390 439 760 At Randall Road 1.0 72 145 165 263

<sup>\*</sup>Data not available

**Table 9 - Summary of Discharges (Continued)** 

|                                     | Peak Discharges (cubic feet per second) |                 |               |               |               |
|-------------------------------------|---|-----------------|---------------|---------------|---------------|
| Flooding Source                     | Drainage Area                           | 10-Percent-     | 2-Percent-    | 1-Percent-    | 0.2-Percent-  |
| and Location                        | (square miles)                          | Annual-Chance   | Annual-Chance | Annual-Chance | Annual-Chance |
| OTTER CREEK WEST                    |   |                 |               |               |               |
| At confluence with Otter Creek      | 3.6                                     | 211             | 378           | 450           | 916           |
| Approximately 260 feet              |   |                 |               |               |               |
| upstream of Falcon's Trail          | 2.7                                     | 182             | 327           | 389           | 791           |
| Just upstream of unnamed road       | 2.0                                     | 132             | 267           | 249           | 535           |
| PINGREE CREEK                       |   |                 |               |               |               |
| At mouth                            | 11.1                                    | 750             | 1,213         | 1,442         | 1,983         |
| At Highland Avenue                  | 9.5                                     | 695             | 1,119         | 1,316         | 1,868         |
| At Soo Line Railroad                | 9.0                                     | 690             | 1,117         | 1,301         | 1,854         |
| At U.S. Route 20                    | 8.7                                     | 691             | 1,139         | 1,308         | 1,884         |
| 110 0.5.110 4.0 20                  | 0.,                                     | 0,1             | 1,109         | 1,000         | 1,00.         |
| POPLAR CREEK                        |   |                 |               |               |               |
| At confluence with Fox River        | 42.3                                    | 1,085           | 1,709         | 2,010         | 2,794         |
| PRESTBURY BRANCH                    |   |                 |               |               |               |
| At confluence with Blackberry       |   |                 |               |               |               |
| Creek (approximately 720 feet       |   |                 |               |               |               |
| downstream of Hankes Road)          | 2.1                                     | 33              | 57            | 69            | 103           |
| At outlet of the upper lake         |   |                 |               |               |               |
| (approximately 1780 feet            |   |                 |               |               |               |
| upstream of Winthrop New            | 4.0                                     | 25              | =2            | 0.2           | 4.5           |
| Road)                               | 1.8                                     | 37              | 73            | 93            | 156           |
| ROUTE 38 BRANCH                     |   |                 |               |               |               |
| At confluence with Blackberry       |   |                 |               |               |               |
| Creek (approximately 1500 feet      |   |                 |               |               |               |
| downstream of Pouley Road and       |   |                 |               |               |               |
| southeastern to the intersection of |   |                 |               |               |               |
| Illinois Route 38 and Pouley Road)  | 0.6                                     | 58              | 92            | 107           | 143           |
| SANDY CREEK                         |   |                 |               |               |               |
| At confluence with Tyler Creek      | 2.5                                     | 320             | 560           | 720           | 1,050         |
| At Randall Road                     | 2.3                                     | 225             | 361           | 550           | 829           |
| At U.S. Route 20                    | 0.2                                     | 21              | 46            | 69            | 112           |
| SEAVEY ROAD RUN                     |   |                 |               |               |               |
| Approximately 1650 feet             |   |                 |               |               |               |
| downstream of Illinois Route 47     | 7.0                                     | 364             | 625           | 758           | 1,122         |
| Approximately 920 feet              | 7.0                                     | J0 <del>1</del> | 023           | 730           | 1,122         |
| upstream of Interstate 88           | 5.3                                     | 347             | 587           | 705           | 1,020         |
| appareum of interstate oo           | 5.5                                     | 317             | 557           | , 05          | 1,020         |

**Table 9 - Summary of Discharges (continued)** 

|  |                | Peak Discharges (cubic feet per second) |               |               |               |
|--|----------------|---|---------------|---------------|---------------|
| Flooding Source  | Drainage Area  | 10-Percent-                             | 2-Percent-    | 1-Percent-    | 0.2-Percent-  |
| and Location   | (square miles) | Annual-Chance                           | Annual-Chance | Annual-Chance | Annual-Chance |
| SEAVEY ROAD RUN (continued) At confluence of Seavey Road Run and Main Street Branch (approximately 1850 feet upstream of a road to a golf course) On Seavey Road Run approximately 780 feet upstream of the junction   | 1.9            | 159                                     | 289           | 357           | 549           |
| 2820 feet downstream of the bridge on Main Street  | *              | 48                                      | 87            | 108           | 166           |
| SEAVEY ROAD RUN GREEN ROAD BRANCH Approximately 2700 feet downstream (east) of Green Road bridge and approximately 380 feet upstream of the junction with Seavey Road Run SEAVEY ROAD RUN MAIN STREET BRANCH At confluence of Seavey Road Run and Main Street Branch (approximately 1850 feet upstream of a road to a golf | *              | 95                                      | 173           | 214           | 329           |
| course)  | 3.5            | 220                                     | 417           | 522           | 824           |
| SELMARTEN CREEK  |                |   |               |               |               |
| At Forest Preserve Pond  | 1.3            | 45                                      | 162           | 227           | 438           |
| SLEEPY CREEK   |                |   |               |               |               |
| At confluence with Fox River   | 2.2            | 152                                     | 338           | 517           | 1,039         |
| At Locust Street   | 1.5            | 97                                      | 259           | 414           | 746           |
|  | 1.3            | 91                                      | 239           | 414           | 740           |
| At cam approximately 430 feet upstream of Hillcrest Drive  | 0.9            | 145                                     | *             | 351           | *             |
| SOUTH TRIBUTARY  |                |   |               |               |               |
| At McClure Road  | 2.6            | 133                                     | 287           | 416           | 883           |
| At Mouth (confluence with Indian Creek)  | 2.9            | 277                                     | 532           | 659           | 984           |

<sup>\*</sup>Data not available

**Table 9 - Summary of Discharges (Continued)** 

Peak Discharges (cubic feet per second) Flooding Source Drainage Area 10-Percent-2-Percent-1-Percent-0.2-Percentand Location (square miles) Annual-Chance Annual-Chance Annual-Chance Annual-Chance STATE STREET CREEK 0.7 123 226 At mouth STATE STREET CREEK TRIBUTARY \* 0.1 6 11 \* At mouth STONY CREEK At confluence with Otter Creek 885 987 2,007 11.9 435 Above confluence of 794 3.3 183 386 434 **Bowes Creek** Approximately 5,320 feet above confluence of Bowes Creek 2.9 172 362 407 746 Approximately 2,970 feet downstream of Corron Road 2.8 167 353 397 726 At Corron Road 278 558 2.3 138 311 SUGAR GROVE BRANCH Just Downstream of Duffin Drain Confluence 13.2 1,561 At Fay's Lane 4.9 760 1,100 1,260 1,570 Downstream of the confluence with Sugar Grove Branch North 4.3 375 580 680 770 Upstream of the confluence with Sugar Grove Branch North 2.8 180 285 338 435 Downstream of the confluence 2.4 500 670 with Sugar Grove Branch East 245 415 Upstream of the confluence with Sugar Grove Branch East 440 1.1 135 260 310 SUGAR GROVE BRANCH **EAST** At confluence with Sugar Grove 1.4 140 180 200 265 Branch SUGAR GROVE BRANCH NORTH At confluence with Sugar Grove 200 Branch 1.5 285 325 349 TOLLWAY TRIBUTARY \* \*

<sup>\*</sup>Data not available

**Table 9 - Summary of Discharges (Continued)** 

Peak Discharges (cubic feet per second) Flooding Source 10-Percent-1-Percent-Drainage Area 2-Percent-0.2-Percentand Location (square miles) Annual-Chance Annual-Chance Annual-Chance Annual-Chance TYLER CREEK At Randall Road 32.7 1,237 2,073 2,638 3,569 At Big Timber Road 29.1 1,229 1,972 2,448 3,400 At Chicago and Northwestern Railroad 28.7 1,216 1,955 2,409 3,360 At confluence with Pingree Creek 21.1 1,094 1,742 2,096 2,819 At Big Timber Road 10.0 361 548 672 869 At State Route 72 6.2 305 455 547 684 TYLER CREEK UNNAMED TRIBUTARY At confluence with Tyler Creek 3.5 88 148 187 82 134 At Reinking Road 3.0 162 At SOO Railroad 2.5 82 127 153 At US Route 20 2.0 115 163 211 Approximately 4,200 feet upstream of Route 20 1.3 98 202 281 **UNION DITCH NO. 2** At County Line Road 2.9 356 Approximately 1,635 feet 287 upstream of County Line Road 2.1 WAUBONSEE CREEK Upstream of U.S. Route 30 18.7 774 1.170 1,447 2,700 Downstream of Elgin, Joliet and Eastern Railroad 17.4 734 1,108 1,373 2,500 At Kane-Kendall County 16.5 770 1,220 1,447 1,950 boundary WELCH CREEK Just Downstream of Sugar Grove **Branch Confluence** 36.1 4,408 Just Downstream of Welch Creek Tributary 1 Confluence 21.1 2,638 Just Downstream of Welch Creek Tributary 2 Confluence 18.5 2.303 At Main Street 11.8 1,407 At Rowe South 4.1 627 Just Upstream of Keslinger Road 2.2 474 WEST BRANCH BIG ROCK **CREEK** At US 30 26.6 3,552 \*Data not available

Stillwater elevations have been determined for the 10-, 2-, 1-, and 0.2-percentannual-chance floods for the flooding sources studied by detailed methods and are summarized in Table 10, "Summary of Stillwater Elevations."

**Table 10 - Summary of Stillwater Elevations** 

|  | Elevation (feet NAVD88) |               |               |               |  |  |  |
|--|-------------------------|---------------|---------------|---------------|--|--|--|
| Flooding Source                                  | 10-Percent-             | 2-Percent-    | 1-Percent-    | 0.2-Percent-  |  |  |  |
| and Location                                     | Annual-Chance           | Annual-Chance | Annual-Chance | Annual-Chance |  |  |  |
| CITY OF AURORA/<br>UNINCORPORATED KANE<br>COUNTY |                         |               |               |               |  |  |  |
| Mastodon Lake                                    | 659.38                  | *             | 661.29        | 662.99        |  |  |  |

<sup>\*</sup>Data not available

### 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 FIRM represent rounded whole-foot elevations and may not exactly reflect the elevations shown on the Flood Profiles or in the Floodway Data tables 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 encouraged to use the flood elevation data presented in this FIS in conjunction with the data shown on the FIRM.

#### **Pre-countywide FIS**

Each incorporated community within, and the unincorporated areas of, Kane County, with the exceptions of the villages of Barrington Hills, Big Rock, Burlington, Campton Hills, Elburn, Gilberts, Hoffman Estates, Kaneville, Lily Lake, Pingree Grove, and Virgil, has a previously printed FIS report. The hydraulic analyses described in those reports that have not been superseded by new study information are summarized below.

Within the unincorporated areas of Kane, water-surface elevations for floods of the selected recurrence intervals for Bowes Creek, Bowes Creek South, Brewster Creek, Ferson Creek, Fitchie Creek, Mahoney Creek, North Arm Brewster Creek, Otter Creek, and Otter Creek West were computed using the USACE HEC-2 step-backwater computer program (Reference 74).

The water-surface elevations for Poplar Creek were obtained from the floodplain information report for Poplar Creek watershed in which elevations were determined using the WSP-2 program (Reference 75, 76).

The water-surface elevations for Mill Creek were determined by the slope/area method and a rating curve from a cross section located 2,714 feet downstream of Kaneville Road.

Starting water-surface elevations were calculated using corresponding flood elevations on the main stem, flood profiles from previous studies by the State of Illinois for Brewster Creek, Ferson Creek, Hampshire Creek South, Mahoney Creek, McKee Road Tributary, Mill Creek, and North Arm Brewster Creek, and rating curves (Reference 4, 77).

The water-surface elevations on the Fox River, the Fox River East Channel, and Waubonsee Creek were computed using the USACE HEC-2 step-backwater program (Reference 74). Cross sections and structural data for the Fox River and the Fox River East Channel were provided by the IDOT-DWR from field surveys (Reference 78, 79). Cross sections and structural data for Waubonsee Creek were obtained from the Illinois State Water Survey (Reference 80). Cross sections for the backwater analyses were located at close intervals above and below bridges and culverts in order to compute the significant backwater effects from these structures.

The only serious backwater effect due to bridge constriction is on Waubonsee Creek. Backwater effects from Montgomery Dam have become a problem according to residents in the area. This situation was also studied.

In the unincorporated areas of Kane, starting water-surface elevations on the Fox River, the Fox River East Channel, and Waubonsee Creek were based on the slope/area method. Starting elevations for the 10-, 2-, 1-, and 0.2-percent-annual-chance floods for the Fox River, in other communities, were based upon the discharge recurrence interval rating curves at Carpentersville Dam, Elgin Dam, Geneva Dam, and South Elgin Dam (Reference 81).

In Montgomery, water-surface profiles for Fox River Tributary and Fox River Tributary (East Branch) were determined for the 10-, 2-, 1-, and 0.2-percent-annual-chance floods by use of the USACE HEC-2 computer program. Starting water-surface elevations were determined with either known high-water marks, by assuming critical depth, or by the slope/area method.

Water-surface elevation for floods of the selected recurrence intervals of Four Winds Way Creek and Carpenter Creek were computed through use of the USACE HEC-2 step-backwater computer program (Reference 74). This program relates stream geometry, characteristics, and discharge to stream elevation. Flood profiles were drawn showing computed water-surface elevations to an accuracy of 0.5 foot for floods of selected recurrence intervals.

Starting water-surface elevations for Carpenter Creek and Four Winds Way Creek were determined using normal depth analysis. Flood elevations can often be increased by ice jams during spring thaws or by debris clogging bridges.

Water-surface elevations of floods of the selected recurrence intervals of Geneva Creek were computed through use of the USACE HEC-2 backwater computer program (Reference 74). The starting water-surface elevation for Geneva Creek

was determined using the normal depth subroutine of the USACE HEC-2 computer model (Reference 74).

Cross sections for Hampshire Creek South were obtained from field surveys, except for some overbank portion cross sections that were determined using topographic maps (Reference 82). Cross sections for Hampshire Creek and Hampshire Creek Tributary No. 1 were obtained from field surveys performed by Engineering Enterprises, Inc. and aerial photographs (Reference 83, 84).

Water-surface elevations of floods of the selected recurrence intervals on Hampshire Creek South were computed using the USACE HEC-2 step-backwater computer program (Reference 74). For Hampshire Creek and Hampshire Creek Tributary No. 1, water-surface elevations of floods of the selected recurrence intervals were computed using the WSP-2 step-backwater computer program (Reference 76). Starting water-surface elevations for Hampshire Creek South and Hampshire Creek were calculated using the slope/area method. Starting water-surface elevations for Hampshire Creek Tributary No. 1 were calculated using the slope/area method, assuming non-coincident timing of peaks.

All data used in the hydraulic analyses for Union Ditch No. 2 were obtained from records of past floods and through engineering judgment. In cases where the flood elevations are close together on the flood profile, due to the limitations of the profile scale, only the 1-percent-annual-chance profile has been drawn.

Starting water-surface elevations for the 10-, 2-, 1-, and 0.2-percent-annual-chance floods for Jelkes Creek and the starting elevations for the 10- and 1-percent-annual-chance floods for Sleepy Creek were based upon the normal depth method.

Water-surface elevations of floods of the selected recurrence intervals of Jelkes Creek and Sleepy Creek were computed through use of the USACE HEC-2 step-backwater computer program (Reference 74). The hydraulic analysis for Sleepy Creek was made in two segments: between the mouth and Hillcrest Drive and between Hillcrest Drive and Illinois Route 72. This was done to correctly model a dam break at river station 11,000 at the dam located approximately 430 feet upstream of Hillcrest Drive. An analysis of the hydraulics indicated that a major flood would overtop the dam and result in failure.

The starting water-surface elevation for 7<sup>th</sup> Avenue Creek and 7<sup>th</sup> Avenue Creek Tributary were determined using the normal depth subroutine of the USACE HEC-2 computer model (Reference 74).

Water-surface elevations of floods of the selected recurrence intervals for Jericho Lake Diversion were computed using the USACE HEC-2 step-backwater computer program (Reference 74).

The water-surface elevations for floods of the selected recurrence intervals of 7<sup>th</sup> Avenue Creek and 7<sup>th</sup> Avenue Creek Tributary were computed through use of the USACE HEC-2 step-backwater computer program (Reference 74). Water-surface elevations for the floods of selected recurrence intervals of State Street Creek and State Street Creek Tributary were computed assuming normal depth at survey cross sections. Flood profiles were drawn showing computed water-surface elevations to an accuracy of 0.5 foot for floods of selected recurrence intervals. Flood elevations

can often be increased by ice jams during spring thaws or by debris clogging bridges. It should be noted that roughness values were increased during model calibration to reflect scour on 7<sup>th</sup> Avenue Creek and 7<sup>th</sup> Avenue Creek Tributary.

Cross sections for the backwater analyses on Sugar Grove Branch and Sugar Grove Branch East (referenced as Welch Creek and Welch Creek Tributary No. 1 at the time of study) were determined from field surveys. Water-surface elevations of floods of the selected recurrence intervals were computed through use of the USACE HEC-2 step-backwater computer program (Reference 74). The starting water-surface elevations used for Sugar Grove Branch and Sugar Grove Branch East were calculated using the slope/area method. (Please note that this information applies only to the area south of the railroad. The detailed study of Sugar Grove Branch upstream of the railroad was superseded as a result of LOMR 07-05-0178P. See "August 3, 2009 Revised Countywide FIS" below.)

The Hydrological Investigation Atlas for the Sugar Grove quadrangle accurately depicts past historical flooding (Reference 85). It was judged a satisfactory source for assessing the flood potential in those areas not studied by detailed methods in this report.

The starting downstream water-surface elevations used in the HEC-2 step-backwater program were computed by the normal depth methods for Norton Creek and Norton Creek Tributary (Reference 74). Water-surface elevations of floods of the selected recurrence intervals on Norton Creek and Norton Creek Tributary were computed through use of the USACE HEC-2 step-backwater computer program (Reference 74).

For Lord's Park Tributary in Elgin, the WSP-2 computer program was used to determine water-surface elevations of floods of the selected recurrence intervals. Starting water-surface elevations were computed by the normal depth methods.

### December 20, 2002 Initial Countywide FIS

The HEC-2 model of Tyler Creek was extended from Big Timber Road to Illinois Route 72. The new Randall Road Bridge was incorporated into the model. Additional cross sections were added downstream of Big Timber Road based on surveys prepared by the City of Elgin. The HEC-2 model of Sandy Creek was extended from Randall Road to U.S. Route 20. Pingree Creek was modeled using HEC-2 from its confluence with Tyler Creek to U.S. Route 20. The Tyler Creek floodway was redefined from Randall Road to Big Timber Road based on the latest State of Illinois criteria. Tyler Creek upstream of Big Timber Road, Sandy Creek upstream of Randall Road, and Pingree Creek floodways were defined according to the State of Illinois regulatory floodway criteria.

Cross sections for the backwater analyses for Eakin Creek were determined by field surveys, with some overbank sections determined from topographic maps. Cross section locations were at close intervals above and below bridges, dams, and culverts in order to compute the significant backwater effects of these structures. All bridges were surveyed to determine structural geometry. The 10-,

2-, 1-, and 0.2-percent-annual-chance recurrence intervals for Eakin Creek were studied using the USACE HEC-RAS model (Reference 86).

# November 16, 2006 Revised Countywide FIS

No new or revised hydraulic studies were incorporated into the November 16, 2006 revised countywide FIS.

### August 3, 2009 Revised Countywide FIS

The hydraulic analysis for the streams located within the Blackberry Creek watershed (Aurora Chain of Lakes, Aurora Chain of Lakes Cherry Hills Diversion, Blackberry Creek, East Run, East Run North Branch, East Run North Loop, Elburn Run, Lake Run, Lake Run Main Street Branch, Lake Run Nelson Lake Branch, Lake Run North of I-88 Overflow, Lake Run North of I-88 Overflow East Branch, Lake Run South of I-88 Diversion, Prestbury Branch, Route 38 Branch, Seavey Road Run, Seavey Road Run Green Road Branch, Seavey Road Run Main Street Branch) were prepared using the HEC-RAS hydraulic model (Reference 87). The HEC-RAS analysis was used to route the flood-peak discharge and determine the flood elevations throughout Blackberry Creek watershed.

The two-dimensional, finite-element, surface-water-modeling system (FESWMS) (Reference 88) was used for analyzing the flow diversion at Jericho Lake near Montgomery, Illinois. Results from the FESWMS model have been applied to determine the amount of discharge being diverted out of Blackberry Creek watershed through the lake. These results were used in the routing functions of the hydrologic model (Reference 48).

Cross sections from the WSP-2 hydraulic routing model developed by the U.S. Department of Agriculture, Soil Conservation Service study in 1985 (Reference 89) were used for the analysis of Blackberry Creek. Data for bridges and culverts constructed since the 1985 study were surveyed by the IDNR-OWR, Smith Engineering Consultants, Inc., and the USGS. The hydraulic model was calibrated and verified using high water marks and observed inundation maps for the July 17-18, 1996 flood event (Reference 48).

The hydraulic analysis for the Indian Creek watershed (Indian Creek, Indian Creek Prairie Path Run, Selmarten Creek, South Tributary, and Tollway Tributary) was modeled in two separate sections. For the northern portion of the watershed, the FEQ unsteady flow program was used. For the southern portion, the steady-state processor within HEC-RAS was used.

LOMR 07-05-0178P should be referenced for hydraulic information for Sugar Grove Branch, Sugar Grove Branch East, and Sugar Grove Branch North (referenced in the LOMR as Welch Creek, Welch Creek Tributary No. 1, and

Welch Creek Tributary No. 2). The portion of the pre-countywide Sugar Grove Branch study area upstream of the railroad was superseded by this LOMR.

# To be determined Revised Countywide FIS

For this PMR, the hydraulic analysis for Big Rock and Welch Creek watershed in Kane County was completed by the Illinois State Water Survey for Kane County in December 2008. The watershed was divided into two HEC-RAS version 4.0 models (Reference 90) - one for Big Rock Creek and its tributaries and one for Welch Creek and its tributaries. Detailed study with limited survey was completed for the following streams (limits given in Table 4) within Kane County: Welch Creek, Sugar Grove Branch (downstream of the existing detailed study), Big Rock Creek, West Branch Big Rock Creek, East Branch Big Rock Creek, and Malgren Drain.

Digital elevation data available from Kane County were used to generate cross section data input for the model. Where available, as-built bridge plans were reviewed and used to model these structures. Where bridge plans were not available, field measurements and survey data were collected. Photos were taken throughout the watershed to document existing conditions and determine roughness coefficients for modeling.

The models were calibrated to the September 12-14, 2008 flood event using stage gage data and high water observations. Peak discharges calculated using HEC-HMS were input to the RAS model, and water surface elevations and subsequent extent of flooding simulated by the model were compared with observations and information recorded at the stage gages. Only the 1-percent- annual-chance flood profile was determined as part of this study.

Approximate studies were completed for the remaining stream reaches in these watersheds within Kane County (see Table 6).

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.

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).

Effective flow areas of the floodplain, cross sections, loss coefficients, and overbank roughness coefficients (Manning's "n") were assigned to each cross section based on field inspection. The range of the Manning's "n" coefficients for each stream is shown in Table 11, "Roughness Coefficients (Manning's 'n' Values)."

Table 11 - Roughness Coefficients (Manning's "n" Values)

| <u>Stream</u><br>7 <sup>th</sup> Avenue Creek | <u>Channel "n"</u> 0.025-0.10 | Overbank "n"<br>0.05-0.08 |
|---|-------------------------------|---------------------------|
| 7 <sup>th</sup> Avenue Creek Tributary        | 0.05-0.06                     | 0.08                      |
| Anderson Road Run                             | *                             | *                         |
| Anderson Road Run                             |                               |                           |
| North Branch                                  | *                             | *                         |
| Aurora Chain of Lakes                         | 0.015-0.055                   | 0.02-0.10                 |
| Aurora Chain of Lakes                         |                               |                           |
| Cherry Hills Diversion                        | 0.015-0.055                   | 0.045-0.10                |
| Big Rock Creek                                | 0.02-0.045                    | 0.01-0.11                 |
| Blackberry Creek                              | 0.040-0.070                   | 0.06-0.13                 |
| Bowes Creek                                   | 0.035-0.072                   | 0.065-0.100               |
| Bowes Creek South                             | 0.045                         | 0.070                     |
| Brewster Creek                                | 0.060                         | 0.140                     |
| Carpenter Creek                               | 0.10                          | 0.12                      |
| Duffin Drain                                  | 0.02-0.045                    | 0.01-0.11                 |
| Eakin Creek                                   | 0.05                          | 0.06                      |
| East Branch Big Rock Creek                    | 0.02-0.045                    | 0.01-0.11                 |
| East Branch Big Rock Creek                    |                               |                           |
| Tributary 2                                   | 0.02-0.045                    | 0.01-0.11                 |
| East Run                                      | 0.040-0.080                   | 0.045-0.115               |
| East Run North Branch                         | 0.045                         | 0.105                     |
| East Run North Loop                           | 0.045                         | 0.105                     |
| Elburn Run                                    | 0.04-0.055                    | 0.065-0.115               |
| Ferson Creek                                  | 0.030-0.08                    | 0.070-0.100               |
| Fitchie Creek                                 | 0.035-0.104                   | 0.070-0.100               |
| Four Winds Way Creek                          | 0.10                          | 0.12                      |
| Fox River                                     | 0.025-0.10                    | 0.035-0.10                |
| Fox River East Channel                        | 0.025-0.040                   | 0.060-0.070               |
| Fox River Tributary                           | 0.020-0.060                   | 0.050-0.080               |
| Fox River Tributary East Branch               | 0.040                         | 0.050                     |
| Geneva Creek                                  | 0.040-0.085                   | 0.04-0.10                 |
| Hampshire Creek                               | 0.046-0.150                   | 0.035-0.145               |
| Hampshire Creek South                         | 0.030-0.100                   | 0.030-0.080               |
| Hampshire Creek                               |                               |                           |
| Tributary No. 1                               | 0.050-0.120                   | 0.050                     |

<sup>\*</sup>Data not available

Table 11 - Roughness Coefficients (Manning's "n" Values) (Continued)

| <u>Stream</u>                      | Channel "n" | Overbank "n" |
|------------------------------------|-------------|--------------|
| Hampshire Creek                    |             |              |
| Tributary No. 2                    | 0.035-0.110 | 0.040-0.090  |
| Hampshire Creek                    | 0.065.0.075 | 0.050        |
| Tributary No. 3                    | 0.065-0.075 | 0.050        |
| Hampshire Creek<br>Tributary No. 4 | 0.075-0.080 | *            |
| Indian Creek                       | 0.015-0.060 | 0.020-0.120  |
| Indian Creek Prairie Path Run      | *           | *            |
| Jelkes Creek                       | 0.035-0.070 | 0.050-0.090  |
| Jericho Lake Diversion             | 0.050-0.055 | 0.065-0.085  |
| Lake Run                           | 0.045-0.075 | 0.055-0.125  |
| Lake Run                           |             |              |
| Nelson Lake Branch                 | 0.045-0.075 | 0.055-0.125  |
| Lake Run                           |             |              |
| North of I-88 Overflow             |             |              |
| East Branch                        | 0.045-0.075 | 0.055-0.125  |
| Lake Run                           | 0.045.0.055 | 0.077.0.107  |
| South of I-88 Diversion            | 0.045-0.075 | 0.055-0.125  |
| Lake Run<br>Main St. Branch        | 0.045-0.075 | 0.055-0.125  |
| Lake Run                           | 0.043-0.073 | 0.033-0.123  |
| North of I-88 Overflow             | 0.045-0.075 | 0.055-0.125  |
| Lord's Park Tributary              | 0.060-0.080 | 0.015-0.040  |
| Mahoney Creek                      | 0.100       | 0.120        |
| Malgren Drain                      | 0.02-0.045  | 0.01-0.11    |
| McKee Road Tributary               | 0.035-0.090 | 0.050-0.100  |
| Mill Creek                         | 0.020-0.100 | 0.040-0.140  |
| Mill Creek Tributary 2             | 0.060       | 0.080-0.100  |
| North Arm Brewster Creek           | 0.080       | 0.120        |
| Norton Creek                       | 0.045-0.15  | 0.05-0.150   |
| Norton Creek Tributary             | 0.030-0.055 | 0.045-0.055  |
| Otter Creek                        | 0.035-0.075 | 0.070-0.090  |
| Otter Creek West                   | 0.035-0.075 | 0.070-0.030  |
|                                    | 0.055-0.065 | 0.05-0.08    |
| Pingree Creek                      |             |              |
| Poplar Creek                       | 0.015-0.040 | 0.060-0.080  |
| Prestbury Branch                   | 0.045-0.06  | 0.115-0.165  |
| Route 38 Branch                    | 0.04-0.06   | 0.085-0.105  |
| Sandy Creek                        | 0.04-0.09   | 0.07-0.12    |
| Seavey Road Run                    | 0.05-0.07   | 0.09-0.12    |

<sup>\*</sup>Data not available

Table 11 - Roughness Coefficients (Manning's "n" Values) (Continued)

| <u>Stream</u>                   | Channel "n" | Overbank "n" |
|---------------------------------|-------------|--------------|
| Seavey Road Run                 |             |              |
| Green Road Branch               | 0.05-0.063  | 0.08-0.12    |
| Seavey Road Run                 |             |              |
| Main St. Branch                 | 0.045-0.06  | 0.105-0.125  |
| Selmarten Creek                 | 0.015-0.059 | 0.030-0.100  |
| Sleepy Creek                    | 0.05-0.10   | 0.1          |
| South Tributary                 | 0.035-0.060 | 0.060-0.150  |
| State Street Creek              | *           | *            |
| State Street Creek Tributary    | *           | *            |
| Stony Creek                     | 0.030-0.072 | 0.060-0.110  |
| Sugar Grove Branch (downstream  |             |              |
| of profile station 3,565)       | 0.02-0.045  | 0.01-0.11    |
| Sugar Grove Branch (upstream of |             |              |
| profile station 3,565)          | 0.045-0.090 | 0.050-0.090  |
| Sugar Grove Branch East         | 0.045-0.090 | 0.050-0.090  |
| Sugar Grove Branch North        | *           | *            |
| Tollway Tributary               | *           | *            |
| Tyler Creek                     | 0.045-0.07  | 0.05-0.1     |
| Tyler Creek                     |             |              |
| Unnamed Tributary               | *           | *            |
| Union Ditch No. 2               | *           | *            |
| Waubonsee Creek                 | 0.035-0.055 | 0.050-0.070  |
| Welch Creek                     | 0.02-0.045  | 0.01-0.11    |
| West Branch Big Rock Creek      | 0.02-0.045  | 0.01- 0.11   |

<sup>\*</sup>Data not available

#### 3.3 Vertical Datum

All FISs 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 FISs and FIRMs was the National Geodetic Vertical Datum of 1929 (NGVD 29). With the finalization of the North American Vertical Datum of 1988 (NAVD 88), many FIS and FIRMs are being prepared using NAVD 88 as the referenced vertical datum.

All flood elevations shown in this FIS and on the FIRM are referenced to NAVD 88. Structure and ground elevations in the community must, therefore, be referenced to NAVD 88. It is important to note that adjacent counties may be referenced to NGVD 29. This may result in differences in base flood elevations (BFEs) across the county boundary.

For more information on NAVD 88, see *Guidelines and Specifications for Flood Hazard Mapping Partners Appendix B: Guidance for Converting to the North American Vertical Datum of 1988* (Reference 91) available at http://www.fema.gov/plan/prevent/fhm/dl\_cgs.shtm or contact the Vertical Network Branch, National Geodetic Survey, Coast and Geodetic Survey, National Oceanic and Atmospheric Administration, Rockville, Maryland 20910 (Internet address http://www.ngs.noaa.gov).

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

#### **August 3, 2009 FIS**

Information for the August 3, 2009 FIS was converted from NGVD 29 to NAVD 88 based on data presented in Figure 1 and Table 12a. Computations show an average conversion factor of -0.206 feet (NGVD 29 - 0.206 = NAVD 88) for the county. The Single Conversion Factor (countywide) method was applied uniformly across the county, except as noted below, and used to prepare the Summary of Stillwater Elevations Table, Floodway Data Tables, Flood Profiles, and FIRMs.

The Multiple Conversion Factors (stream-by-stream) method was implemented for a stream when a detailed study reach was located in two or more counties (multi-county stream) and the countywide conversion factor for each county differed by more than one-tenth of a foot. For the stream-by-stream method, the stream is assigned an average conversion factor based on the conversion factors computed at three points along the stream. These results are shown in Table 12b.

#### For this Revision

Study information for this PMR is referenced to NAVD 88 and required no conversion.

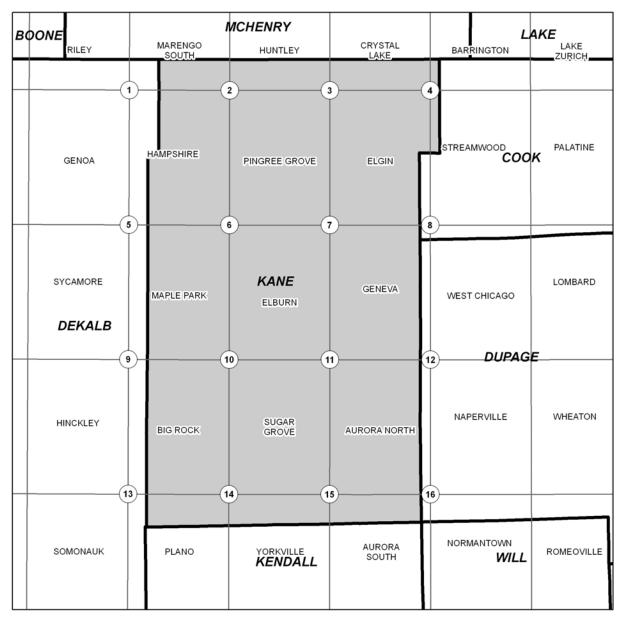


Figure 1 – Vertical Datum Conversion USGS Quadrangle Corner Intersections

The change in elevation for each Point ID is listed in Table 12a.

### Table 12a - Vertical Datum Conversions Single Conversion Factor (countywide) Method Kane County

| Point<br><u>ID</u> # | Quadrangle Name         | <u>Corner</u> | NAD83<br>Latitude<br>(dec. deg.) | NAD83<br>Longitude<br>(dec. deg.) | NGVD29 to NAVD88<br>Elevation Change<br>(feet) |
|----------------------|-------------------------|---------------|----------------------------------|-----------------------------------|--|
| 1                    | Hampshire               | NW            | 42.125                           | 88.625                            | -0.174   |
| 2                    | Pingree Grove           | NW            | 42.125                           | 88.500                            | -0.174   |
| 3                    | Elgin                   | NW            | 42.125                           | 88.375                            | -0.190   |
| 4                    | Streamwood              | NW            | 42.125                           | 88.250                            | -0.203   |
| 5                    | Maple Park              | NW            | 42.000                           | 88.625                            | -0.154   |
| 6                    | Elburn                  | NW            | 42.000                           | 88.500                            | -0.177   |
| 7                    | Geneva                  | NW            | 42.000                           | 88.375                            | -0.226   |
| 8                    | West Chicago            | NW            | 42.000                           | 88.250                            | -0.262   |
| 9                    | Big Rock                | NW            | 41.875                           | 88.625                            | -0.171   |
| 10                   | Sugar Grove             | NW            | 41.875                           | 88.500                            | -0.197   |
| 11                   | Aurora North            | NW            | 41.875                           | 88.375                            | -0.226   |
| 12                   | Naperville              | NW            | 41.875                           | 88.250                            | -0.240   |
| 13                   | Plano                   | NW            | 41.750                           | 88.625                            | -0.203   |
| 14                   | Yorkville               | NW            | 41.750                           | 88.500                            | -0.226   |
| 15                   | Aurora South            | NW            | 41.750                           | 88.375                            | -0.233   |
| 16                   | Normantown              | NW            | 41.750                           | 88.250                            | -0.243   |
|                      |                         |               |                                  |                                   |  |
| Range of             | f conversion values     |               |                                  |                                   | -0.262 through -0.154                          |
| Average              | conversion factor       |               |                                  |                                   | -0.206   |
| Maximu               | m variance from the ave | rage conver   | sion                             |                                   | 0.056  |
|                      |                         |               |                                  |                                   | 0.070  |

-0.052

Maximum variance from a no-conversion value

## Table 12b - Vertical Datum Conversions Multiple Conversion Factors (Stream by Stream) Method

|              |          |             |             | NGVD29 to        |               |            |
|--------------|----------|-------------|-------------|------------------|---------------|------------|
|              |          | NAD83       | NAD83       | NAVD88           |               |            |
| Point        |          | Latitude    | Longitude   | Elevation Change | Maximum       | Average    |
| Location     | County   | (dec. deg.) | (dec. deg.) | (Feet)           | <u>Offset</u> | Conversion |
| LORD'S PAR   | K TRIBUT | TARY        |             |                  |               |            |
| Downstream   | Cook     | 42.023      | 88.258      | -0.256           |               |            |
| Intermediate | Cook     | 42.029      | 88.262      | -0.256           |               |            |
| Upstream     | Cook     | 42.036      | 88.261      | -0.253           | -0.002        | -0.255     |
| NORTON CR    | EEK      |             |             |                  |               |            |
| Downstream   | Kane     | 47.949      | 88.311      | -0.243           |               |            |
| Intermediate | Kane     | 41.947      | 88.280      | -0.246           |               |            |
| Upstream     | DuPage   | 41.938      | 88.249      | -0.249           | -0.003        | -0.246     |
| NORTON CR    | EEK TRIE | BUTARY      |             |                  |               |            |
| Downstream   | Kane     | 41.948      | 88.264      | -0.249           |               |            |
| Intermediate | DuPage   | 41.954      | 88.253      | -0.253           |               |            |
| Upstream     | DuPage   | 41.958      | 88.242      | -0.253           | 0.003         | -0.251     |
| POPLAR CRI   | EEK      |             |             |                  |               |            |
| Downstream   | Kane     | 42.013      | 88.278      | -0.256           |               |            |
| Intermediate | Cook     | 42.044      | 88.165      | -0.256           |               |            |
| Upstream     | Cook     | 42.110      | 88.166      | -0.223           | 0.022         | -0.245     |
| WAUBONSEI    | E CREEK  |             |             |                  |               |            |
| Downstream   | Kendall  | 41.686      | 88.354      | -0.233           |               |            |
| Intermediate | Kendall  | 41.722      | 88.298      | -0.233           |               |            |
| Upstream     | DuPage   | 41.752      | 88.232      | -0.246           | -0.013        | -0.237     |
|              |          |             |             |                  |               |            |

#### 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 flood elevations and delineations of the 1- and 0.2-percent-annual-chance 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, Floodway Data tables, and Summary of Stillwater Elevation tables. Users should reference the data presented in the FIS as well as additional information that may be available at the local community 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 the flooding sources 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 interpolated on the basis of available topography.

#### August 3, 2009 Revision

Between cross sections, the floodplain boundaries for streams studied by detailed methods were re-delineated using the 2004 countywide 2-foot contour dataset prepared using 2001 aerial photography and provided by Kane County (Reference 37).

The floodplain boundaries for revised detailed studied streams were delineated on the basis of available topography. The streams included Indian Creek watershed (Indian Creek, Indian Creek Prairie Path Run, Selmarten Creek, South Tributary and Tollway Tributary) and Blackberry Creek watershed (Aurora Chain of Lakes, Aurora Chain of Lakes Cherry Hills Diversion, Blackberry Creek, East Run, East Run North Branch, East Run North Loop, Elburn Run, Lake Run, Lake Run Main Street Branch, Lake Run Nelson Lake Branch, Lake Run North of I-88 Overflow, Lake Run North of I-88 Overflow East Branch, Lake Run South of I-88 Diversion, Prestbury Branch, Route 38 Branch, Seavey Road Run, Seavey Road Run Green Road Branch, Seavey Road Run Main Street Branch).

The 1- and 0.2-percent-annual-chance floodplain boundaries were provided by the USGS for the streams within the Blackberry Creek watershed. The USGS used the 2004 Kane County topographic data from 2001 aerial photography to delineate the floodplain boundaries. The 1-percent-annual-chance floodplain boundaries for the streams in the Indian Creek watershed were provided by V<sub>3</sub> Companies, Ltd., and were delineated by V<sub>3</sub>, on the basis of the 1986 Kane County topographic data. Floodplain boundaries were revised where necessary to match the 2004 Kane

County topographic data. The 0.2-percent-annual-chance floodplain was manually delineated by the ISWS using the 2004 Kane County topographic data.

#### For this Revision

For this PMR, between cross sections the 1-percent-annual-chance floodplain boundaries for the streams studied by detailed methods with limited survey were delineated using the Kane County topographic data prepared using aerial photography obtained during spring 2001, which have 2-foot contour intervals (Reference 37).

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

For the streams studied by approximate methods, only the 1-percent-annual-chance floodplain boundary is shown on the FIRM (Exhibit 2). The boundaries of the 1-percent-annual-chance floodplains in approximate zones were delineated using the previously printed FIRMs for all of the incorporated and unincorporated areas within Kane County.

#### 4.2 Floodways

Encroachment on floodplains, such as structures and fill, has the potential to reduce flood-carrying capacity, increase flood heights and velocities, and increase flood hazards in areas beyond the encroachment itself. 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 flood fringe.

The floodway is the channel of a stream, plus any adjacent floodplain areas (see Figure 2, "Floodway Schematic") 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 1.0 foot, provided that hazardous velocities are not produced. In Illinois however, under the *Rivers, Lakes and Streams Act* (615 ILCS 5/23, 29 & 30 and 615 ILCS 5/18), encroachment in the floodplain is limited to that which will cause only an insignificant increase in flood heights (Reference 92). The State of Illinois has adopted this more stringent criterion which limits the increase in flood heights to 0.1 foot, no more than a 10 percent reduction in floodplain volume, and no more than a 10 percent increase in average velocity. This has generally been interpreted as the least surcharge measurable, consistent with the encroachment option of the computer program utilized for the floodway determination. The floodways in this

FIS are presented to local agencies as a minimum standard that can be adopted directly or that can be used as a basis for additional floodway studies.

Floodways in northeastern Illinois are further defined in Part 3708 of the *Rivers, Lakes and Streams Act*. Areas included in these regulations are Cook, DuPage, Kane, Lake, McHenry, and Will Counties, except for those areas which are within Chicago. Section 3708.60 (c) contains the floodway definition for northeastern Illinois as follows:

The regulatory floodway boundaries are determined by hydraulic and hydrologic analyses, which calculate that portion of the floodplain which must be preserved to store and discharge floodwaters without causing damaging or potentially damaging increases in flood stages and flood velocities or loss of flood storage which would result in singularly or cumulatively in more than a 0.1 foot increase in flood stage or a 10-percent increase in velocity.

This is commonly called the "storage floodway," whereas the typical floodway is commonly called the "conveyance-only floodway." These rules allow for communities to adopt a "conveyance-only floodway" instead of a "storage floodway" according to Section 3608.60 (d):

The need to preserve storage when defining the regulatory floodway will be waived by the Department if all of the municipalities and counties along a hydraulically significant portion of the watershed require effective compensatory storage for all construction and fill in the 100-year frequency floodplain. Effective compensatory storage requires floodplain storage volumes to be replaced at the same flood frequency event as previously existed. Additionally, legal assurances such as easements must be provided so that the compensatory site will remain open to the stream in order to allow floodwater to reach it.

The floodway presented in this FIS report and on the FIRM was computed for certain stream segments on the basis of equal conveyance reduction from each side of the floodplain. Floodway widths were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. The results of the floodway computations have been tabulated for selected cross sections (Table 13, "Floodway Data"). The computed floodways are shown on the FIRM (Exhibit 2). In cases where the floodway and 1-percent-annual-chance floodplain boundaries are either close together or collinear, only the floodway boundary is shown.

The area between the floodway and 1-percent-annual-chance floodplain boundaries is termed the flood fringe. The flood fringe encompasses the portion of the floodplain that could be completely obstructed without increasing the water-surface elevation of the 1-percent-annual-chance flood by more than 0.1 foot at any point. Typical relationships between the floodway and the flood fringe and their significance to floodplain development are shown in Figure 2, "Floodway Schematic."

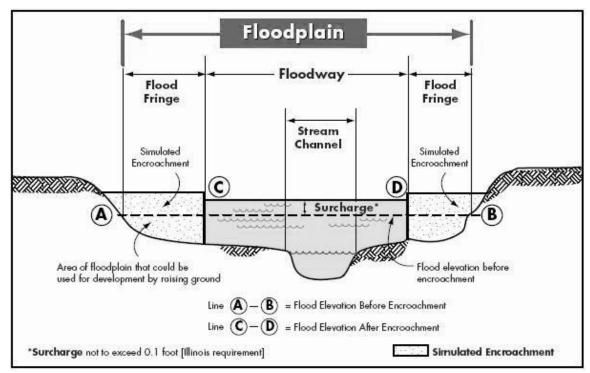


Figure 2 – Floodway Schematic

#### August 3, 2009 Revision

Floodways were established for Indian Creek, Selmarten Creek and South Tributary. Floodways were not established for Indian Creek Prairie Path Run and Tollway Tributary because their drainage areas do not exceed the one square mile limit established by the IDNR-OWR. Within the Blackberry Creek watershed, floodways were defined for the following streams: Aurora Chain of Lakes, Aurora Chain of Lakes Cherry Hills Diversion, Blackberry Creek, East Run, East Run North Branch, East Run North Loop, Elburn Run, Lake Run, Lake Run Main Street Branch, Lake Run Nelson Lake Branch, Lake Run South of I-88 Diversion, Prestbury Branch, Route 38 Branch, Seavey Road Run, Seavey Road Run Green Road Branch, and Seavey Road Run Main Street Branch. Floodways were not defined for Lake Run North of I-88 Overflow and Lake Run North of I-88 Overflow East Branch because their drainage areas do not exceed the one square mile limit established by the IDNR-OWR.

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 13, "Floodway Data" for certain downstream cross sections of Jelkes Creek, Hampshire Creek South, Bowes Creek, Sandy Creek, North Arm Brewster Creek, and Brewster Creek are lower than the regulatory flood elevations in that area, which must take into account the 1-percent-annual-chance flooding due to backwater from other sources.

#### For this Revision

No floodways were added or revised as a result of this PMR.

In the State of Illinois, any portion of a stream or watercourse that lies within the floodway fringe of a studied (AE) stream may have a state regulated floodway. The FIRM may not depict these state regulated floodways.

Floodways restricted by anthropogenic features such as bridges and culverts are drawn to reflect natural conditions and may not agree with the widths listed in the floodway data table in the Flood Insurance Study. The floodway as shown on the FIRM should be used for regulatory purposes.

Encroachment into areas subject to inundation by floodwaters having hazardous velocities aggravates the risk of flood damage, and heightens potential flood hazards by further increasing velocities. In order to reduce the risk of property damage in areas where the stream velocities are high, the community may wish to restrict development in areas outside the floodway.

In Illinois, along streams where floodways have not been computed, the community must obtain state permit approval (when applicable) for development. This ensures that the cumulative effect of development in the floodplain will not cause an increase in the base flood elevations that creates a potential for flood damages.

| FLOODING SOI                              | JRCE               | FLOODWAY        |                                     |  | 1-PERCENT-ANNUAL-CHANCE FLOOD<br>WATER SURFACE ELEVATION (FEET NAVD) |                     |                  |                    |
|---|--------------------|-----------------|-------------------------------------|--|--|---------------------|------------------|--------------------|
| CROSS SECTION                             | DISTANCE           | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY   | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY | INCREASE<br>(FEET) |
| 7 <sup>th</sup> Avenue Creek              |                    |                 |                                     |  |  |                     |                  |                    |
| Α   | 623 <sup>1</sup>   | 18              | 37                                  | 8.2                                      | 682.2  | 680.5 <sup>4</sup>  | 680.5            | 0.0                |
| В   | 2,878 <sup>1</sup> | 31              | 94                                  | 2.9                                      | 704.3  | 704.3               | 704.4            | 0.1                |
| С   | 5,232 <sup>1</sup> | 28              | 132                                 | 1.9                                      | 711.7  | 711.7               | 711.7            | 0.0                |
| D   | 6,238 <sup>1</sup> | 27              | 85                                  | 3.0                                      | 717.2  | 717.2               | 717.2            | 0.0                |
| E   | 7,176 <sup>1</sup> | 30              | 131                                 | 1.7                                      | 720.6  | 720.6               | 720.7            | 0.1                |
| F   | 7,952 <sup>1</sup> | 28              | 67                                  | 3.4                                      | 721.7  | 721.7               | 721.8            | 0.1                |
| G   | 9,340 <sup>1</sup> | 36              | 141                                 | 1.6                                      | 727.8  | 727.8               | 727.9            | 0.1                |
| 7 <sup>th</sup> Avenue Creek<br>Tributary |                    |                 |                                     |  |  |                     |                  |                    |
| A   | 63 <sup>2</sup>    | 21              | 44                                  | 5.6                                      | 719.3  | 719.3               | 719.4            | 0.1                |
| В   | 718 <sup>2</sup>   | 57              | 145                                 | 1.7                                      | 725.8  | 725.8               | 725.9            | 0.1                |
| С   | 1,177 <sup>2</sup> | 15              | 82                                  | 3.0                                      | 730.5  | 730.5               | 730.6            | 0.1                |
| Anderson Road Run                         | *                  | *               | *                                   | *  | *  | *                   | *                | *                  |
| Anderson Road Run<br>North Branch         | *                  | *               | *                                   | *  | *  | *                   | *                | *                  |
| Aurora Chain of Lakes                     |                    |                 |                                     |  |  |                     |                  |                    |
| Α   | 961 <sup>3</sup>   | 2,067           | 9,615                               | 0.1                                      | 665.8  | 665.8               | 665.9            | 0.1                |
| В   | $2,035^3$          | 761             | 5,382                               | 0.2                                      | 665.8  | 665.8               | 665.9            | 0.1                |
| С   | $2,890^3$          | 419             | 1,363                               | 0.6                                      | 665.8  | 665.8               | 665.9            | 0.1                |
| D   | 3,853 <sup>3</sup> | 375             | 3,282                               | 2.8                                      | 665.9  | 665.9               | 666.0            | 0.1                |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Fox River

## KANE COUNTY, IL AND INCORPORATED AREAS

### **FLOODWAY DATA**

7<sup>TH</sup> AVENUE CREEK - 7<sup>TH</sup> AVENUE CREEK TRIBUTARY - ANDERSON ROAD RUN - ANDERSON ROAD RUN NORTH BRANCH - AURORA CHAIN OF LAKES

<sup>&</sup>lt;sup>2</sup>Feet above confluence with 7th Avenue Creek

<sup>&</sup>lt;sup>3</sup>Feet above confluence with Blackberry Creek

<sup>&</sup>lt;sup>4</sup>Elevation computed without consideration of backwater effects from Fox River

<sup>\*</sup>Data not available

| FLOODING SOL                                    | FLOODING SOURCE     |                 |                                     | Y  | 1-PERCENT-ANNUAL-CHANCE FLOOD<br>WATER SURFACE ELEVATION (FEET NAVD) |                     |                  |                    |
|---|---------------------|-----------------|-------------------------------------|--|--|---------------------|------------------|--------------------|
| CROSS SECTION                                   | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY   | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY | INCREASE<br>(FEET) |
| Aurora Chain of Lakes (Continued)               |                     |                 |                                     |  |  |                     |                  |                    |
| Ė   | 4,421 <sup>1</sup>  | 432             | 1,431                               | 0.6                                      | 667.2  | 667.2               | 667.2            | 0.0                |
| F   | 5,141 <sup>1</sup>  | 382             | 2,916                               | 0.1                                      | 667.2  | 667.2               | 667.2            | 0.0                |
| G   | 5,943 <sup>1</sup>  | 293             | 1,629                               | 0.3                                      | 667.3  | 667.3               | 667.3            | 0.0                |
| H   | 6,576 <sup>1</sup>  | 128             | 993                                 | 0.4                                      | 668.7  | 668.7               | 668.6            | 0.0                |
| 1   | 7,271 <sup>1</sup>  | 181             | 1,389                               | 0.3                                      | 668.7  | 668.7               | 668.6            | 0.0                |
| J   | 7,780 <sup>1</sup>  | 179             | 172                                 | 3.6                                      | 671.3  | 671.3               | 671.3            | 0.0                |
| K   | 9,662 <sup>1</sup>  | 308             | 2,420                               | 0.2                                      | 672.6  | 672.6               | 672.6            | 0.0                |
| L   | 10,436 <sup>1</sup> | 77              | 434                                 | 1.2                                      | 672.6  | 672.6               | 672.6            | 0.0                |
| M   | 11,824 <sup>1</sup> | 149             | 1,187                               | 1.3                                      | 672.7  | 672.7               | 672.7            | 0.0                |
| N   | 12,295 <sup>1</sup> | 508             | 909                                 | 1.4                                      | 676.0  | 676.0               | 676.0            | 0.0                |
| 0   | 12,750 <sup>1</sup> | 386             | 1,561                               | 0.3                                      | 676.1  | 676.1               | 676.1            | 0.0                |
| Р   | 13,571 <sup>1</sup> | 284             | 677                                 | 0.7                                      | 676.1  | 676.1               | 676.1            | 0.0                |
| Q   | 14,008 <sup>1</sup> | 226             | 645                                 | 0.6                                      | 676.1  | 676.1               | 676.1            | 0.0                |
| R   | 14,704 <sup>1</sup> | 327             | 469                                 | 0.8                                      | 676.2  | 676.2               | 676.2            | 0.0                |
| S   | 15,006 <sup>1</sup> | 102             | 107                                 | 3.6                                      | 677.5  | 677.5               | 677.5            | 0.0                |
| Aurora Chain of Lakes<br>Cherry Hills Diversion |                     |                 |                                     |  |  |                     |                  |                    |
| A   | 803 <sup>2</sup>    | 211             | 1,503                               | 0.3                                      | 667.2  | 667.2               | 667.2            | 0.0                |
| В   | 1,345 <sup>2</sup>  | 274             | 883                                 | 0.8                                      | 667.2  | 667.2               | 667.2            | 0.0                |
| С   | 2,231 <sup>2</sup>  | 211             | 369                                 | 1.2                                      | 667.3  | 667.3               | 667.3            | 0.0                |
| D   | $2,506^2$           | 85              | 88                                  | 5.0                                      | 667.8  | 667.8               | 667.8            | 0.0                |
| E   | $3,489^2$           | 262             | 292                                 | 1.7                                      | 668.6  | 668.6               | 668.6            | 0.0                |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Blackberry Creek

# KANE COUNTY, IL AND INCORPORATED AREAS

### **FLOODWAY DATA**

AURORA CHAIN OF LAKES -AURORA CHAIN OF LAKES CHERRY HILLS DIVERSION

<sup>&</sup>lt;sup>2</sup>Feet above confluence with Aurora Chain of Lakes

| FLOODING SOI   | FLOODING SOURCE     |                 |                                     | Y  |            |                     | -CHANCE FLOO<br>ATION (FEET N |                    |
|--|---------------------|-----------------|-------------------------------------|--|------------|---------------------|-------------------------------|--------------------|
| CROSS SECTION  | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY              | INCREASE<br>(FEET) |
| Aurora Chain of Lakes<br>Cherry Hills Diversion<br>(Continued) |                     |                 |                                     |  |            |                     |                               |                    |
| F  | 4,035 <sup>1</sup>  | 140             | 317                                 | 1.3                                      | 668.8      | 668.8               | 668.8                         | 0.0                |
| G  | 4,764 <sup>1</sup>  | 420             | 452                                 | 0.9                                      | 670.2      | 670.2               | 670.2                         | 0.0                |
| Big Rock Creek   |                     |                 |                                     |  |            |                     |                               |                    |
| A  | 49,940 <sup>2</sup> | *               | *                                   | *  | 658.2      | 658.2               | *                             | *                  |
| В  | 56,687 <sup>2</sup> | *               | *                                   | *  | 665.3      | 665.3               | *                             | *                  |
| С  | 63,184 <sup>2</sup> | *               | *                                   | *  | 672.8      | 672.8               | *                             | *                  |
| D  | 66,739 <sup>2</sup> | *               | *                                   | *  | 678.3      | 678.3               | *                             | *                  |
| Blackberry Creek   |                     |                 |                                     |  |            |                     |                               |                    |
| A  | 63,819 <sup>2</sup> | 452             | 2,271                               | 1.2                                      | 660.0      | 660.0               | 660.0                         | 0.0                |
| В  | 67,324 <sup>2</sup> | 429             | 1,624                               | 1.8                                      | 661.8      | 661.8               | 661.8                         | 0.0                |
| С  | 71,081 <sup>2</sup> | 636             | 3,091                               | 1.0                                      | 663.8      | 663.8               | 663.7                         | 0.0                |
| D  | 72,970 <sup>2</sup> | 641             | 2,777                               | 1.1                                      | 665.0      | 665.0               | 664.9                         | 0.0                |
| E  | 73,417 <sup>2</sup> | 693             | 2,318                               | 1.3                                      | 665.7      | 665.7               | 665.7                         | 0.0                |
| F  | 76.619 <sup>2</sup> | 477             | 2,915                               | 2.1                                      | 667.0      | 667.0               | 667.0                         | 0.0                |
| G  | 78,929 <sup>2</sup> | 559             | 2,506                               | 2.4                                      | 668.6      | 668.6               | 668.7                         | 0.0                |
| Н  | 79,324 <sup>2</sup> | 211             | 1,091                               | 3.3                                      | 669.3      | 669.3               | 669.4                         | 0.1                |
| I  | 80,011 <sup>2</sup> | 523             | 2,601                               | 1.9                                      | 669.9      | 669.9               | 670.0                         | 0.1                |
| J  | 80,334 <sup>2</sup> | 895             | 5,838                               | 1.3                                      | 670.7      | 670.7               | 670.8                         | 0.1                |
| K  | 82,134 <sup>2</sup> | 475             | 3,597                               | 1.4                                      | 671.1      | 671.1               | 671.2                         | 0.1                |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Aurora Chain of Lakes

# KANE COUNTY, IL AND INCORPORATED AREAS

### **FLOODWAY DATA**

AURORA CHAIN OF LAKES CHERRY HILLS
DIVERSION – BIG ROCK CREEK –
BLACKBERRY CREEK

<sup>&</sup>lt;sup>2</sup>Feet above confluence with Fox River

<sup>\*</sup>Data not available

| FLOODING SO      | URCE                 | FLOODWAY        |                                     |  | 1-PERCENT-ANNUAL-CHANCE FLOOD<br>WATER SURFACE ELEVATION (FEET NAVD) |                     |                  |                    |
|------------------|----------------------|-----------------|-------------------------------------|--|--|---------------------|------------------|--------------------|
| CROSS SECTION    | DISTANCE             | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY   | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY | INCREASE<br>(FEET) |
| Blackberry Creek |                      |                 |                                     |  |  |                     |                  |                    |
| (Continued)      | 1                    |                 |                                     |  |  |                     |                  |                    |
| L                | 82,338 <sup>1</sup>  | 417             | 2,992                               | 1.7                                      | 671.2  | 671.2               | 671.3            | 0.1                |
| M                | 82,784 <sup>1</sup>  | 455             | 2,717                               | 2.5                                      | 671.5  | 671.5               | 671.6            | 0.1                |
| N                | 83,100 <sup>1</sup>  | 431             | 1,678                               | 3.5                                      | 671.7  | 671.7               | 671.7            | 0.1                |
| 0                | 85,290 <sup>1</sup>  | 762             | 3,414                               | 1.7                                      | 673.4  | 673.4               | 673.4            | 0.1                |
| Р                | 87,635 <sup>1</sup>  | 482             | 3,363                               | 1.9                                      | 674.8  | 674.8               | 674.9            | 0.1                |
| Q                | 91,979 <sup>1</sup>  | 527             | 3,483                               | 1.8                                      | 676.0  | 676.0               | 676.1            | 0.1                |
| R                | 92,487 <sup>1</sup>  | 568             | 3,751                               | 1.7                                      | 676.6  | 676.6               | 676.7            | 0.0                |
| S                | 95,548 <sup>1</sup>  | 969             | 3,443                               | 1.7                                      | 677.3  | 677.3               | 677.4            | 0.0                |
| Т                | 96,310 <sup>1</sup>  | 1912            | 6,742                               | 1.0                                      | 677.8  | 677.8               | 677.9            | 0.1                |
| U                | 104,948 <sup>1</sup> | 460             | 1,832                               | 2.4                                      | 686.6  | 686.6               | 686.7            | 0.0                |
| V                | 105,379 <sup>1</sup> | 482             | 2,757                               | 1.6                                      | 688.3  | 688.3               | 688.3            | 0.0                |
| W                | 108,915 <sup>1</sup> | 365             | 1,930                               | 2.1                                      | 690.9  | 690.9               | 690.9            | 0.0                |
| X                | 109,285 <sup>1</sup> | 412             | 2,292                               | 1.5                                      | 691.5  | 691.5               | 691.5            | 0.0                |
| Υ                | 114,088 <sup>1</sup> | 467             | 2,331                               | 2.0                                      | 694.6  | 694.6               | 694.6            | 0.0                |
| Z                | 120,569 <sup>1</sup> | 683             | 3,884                               | 1.4                                      | 702.0  | 702.0               | 702.0            | 0.0                |
| AA               | 121,210 <sup>1</sup> | 615             | 2,724                               | 1.6                                      | 702.7  | 702.7               | 702.7            | 0.0                |
| AB               | 124,477 <sup>1</sup> | 621             | 1,952                               | 2.6                                      | 706.0  | 706.0               | 706.1            | 0.0                |
| AC               | 125,096 <sup>1</sup> | 1103            | 3,377                               | 2.2                                      | 707.2  | 707.2               | 707.1            | 0.0                |
| AD               | 127,367 <sup>1</sup> | 665             | 1,864                               | 2.5                                      | 708.4  | 708.4               | 708.4            | 0.0                |
| AE               | 127,697 <sup>1</sup> | 650             | 2,586                               | 1.7                                      | 709.4  | 709.4               | 709.4            | 0.0                |
| AF               | 131,215 <sup>1</sup> | 237             | 738                                 | 2.8                                      | 712.9  | 712.9               | 713.0            | 0.1                |

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

**TABLE** 

FEDERAL EMERGENCY MANAGEMENT AGENCY

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

**BLACKBERRY CREEK** 

| FLOODING SO                     | OURCE                 | FLOODWAY        |                                     |  | 1-PERCENT-ANNUAL-CHANCE FLOOD<br>WATER SURFACE ELEVATION (FEET NAVD) |                     |                  |                    |
|---------------------------------|-----------------------|-----------------|-------------------------------------|--|--|---------------------|------------------|--------------------|
| CROSS SECTION                   | DISTANCE <sup>1</sup> | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY   | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY | INCREASE<br>(FEET) |
| Blackberry Creek<br>(Continued) |                       |                 |                                     |  |  |                     |                  |                    |
| ÀĞ                              | 131,857               | 216             | 767                                 | 3.4                                      | 714.8  | 714.8               | 714.9            | 0.1                |
| AH                              | 136,407               | 340             | 792                                 | 2.7                                      | 721.1  | 721.1               | 721.1            | 0.0                |
| Al                              | 139,767               | 186             | 827                                 | 2.2                                      | 727.6  | 727.6               | 727.6            | 0.0                |
| AJ                              | 139,956               | 348             | 1,788                               | 1.6                                      | 728.4  | 728.4               | 728.4            | 0.0                |
| AK                              | 145,220               | 208             | 849                                 | 2.5                                      | 735.4  | 735.4               | 735.4            | 0.0                |
| AL                              | 145,472               | 240             | 994                                 | 2.3                                      | 736.1  | 736.1               | 736.1            | 0.0                |
| AM                              | 150,442               | 624             | 538                                 | 2.8                                      | 741.1  | 741.1               | 741.1            | 0.0                |
| AN                              | 152,644               | 343             | 762                                 | 2.1                                      | 744.6  | 744.6               | 744.6            | 0.0                |
| AO                              | 153,016               | 268             | 623                                 | 2.4                                      | 745.4  | 745.4               | 745.5            | 0.1                |
| AP                              | 158,428               | 247             | 527                                 | 1.3                                      | 753.6  | 753.6               | 753.6            | 0.0                |
| AQ                              | 161,120               | 358             | 863                                 | 1.8                                      | 759.6  | 759.6               | 759.6            | 0.0                |
| AR                              | 161,437               | 324             | 720                                 | 2.5                                      | 760.2  | 760.2               | 760.2            | 0.0                |
| AS                              | 162,763               | 272             | 720                                 | 2.8                                      | 764.0  | 764.0               | 764.1            | 0.0                |
| AT                              | 164,379               | 162             | 434                                 | 2.4                                      | 768.1  | 768.1               | 768.1            | 0.0                |
| AU                              | 168,443               | 144             | 299                                 | 3.3                                      | 782.0  | 782.0               | 782.0            | 0.0                |
| AV                              | 169,912               | 239             | 444                                 | 2.9                                      | 787.4  | 787.4               | 787.4            | 0.0                |
| AW                              | 171,413               | 567             | 956                                 | 1.7                                      | 795.2  | 795.2               | 795.2            | 0.0                |
| AX                              | 174,780               | 329             | 93                                  | 8.1                                      | 804.8  | 804.8               | 804.9            | 0.1                |
| AY                              | 176,549               | 320             | 477                                 | 1.5                                      | 811.1  | 811.1               | 811.1            | 0.0                |
| AZ                              | 176,895               | 508             | 1,088                               | 1.1                                      | 813.5  | 813.5               | 813.5            | 0.0                |
| BA                              | 181,788               | 305             | 319                                 | 2.3                                      | 829.3  | 829.3               | 829.3            | 0.0                |
| BB                              | 183,780               | 206             | 536                                 | 1.7                                      | 843.3  | 843.3               | 843.3            | 0.0                |
| BC                              | 184,361               | 491             | 2,324                               | 0.5                                      | 847.6  | 847.6               | 847.6            | 0.0                |
| BD                              | 185,436               | 264             | 332                                 | 2.0                                      | 848.3  | 848.3               | 848.3            | 0.0                |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Fox

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

**BLACKBERRY CREEK** 

| FLOODING SO   | LOODING SOURCE        |                 | FLOODWA                             | Y  |            |                     | -CHANCE FLOC<br>ATION (FEET N |                    |
|---------------|-----------------------|-----------------|-------------------------------------|--|------------|---------------------|-------------------------------|--------------------|
| CROSS SECTION | DISTANCE <sup>1</sup> | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY              | INCREASE<br>(FEET) |
| Bowes Creek   |                       |                 |                                     |  |            |                     |                               |                    |
| Α             | 200                   | 644             | 959                                 | 0.6                                      | 792.6      | 792.4 <sup>2</sup>  | 792.4                         | 0.0                |
| В             | 1,600                 | 432             | 475                                 | 1.3                                      | 795.6      | 795.6               | 795.6                         | 0.0                |
| С             | 3,050                 | 885             | 761                                 | 0.8                                      | 797.1      | 797.1               | 797.1                         | 0.0                |
| D             | 3,600                 | 49              | 168                                 | 3.7                                      | 797.8      | 797.8               | 797.8                         | 0.0                |
| E             | 4,650                 | 42              | 157                                 | 3.8                                      | 802.3      | 802.3               | 802.4                         | 0.1                |
| F             | 6,650                 | 128             | 196                                 | 3.1                                      | 812.0      | 812.0               | 812.1                         | 0.1                |
| G             | 8,650                 | 29              | 123                                 | 4.9                                      | 823.5      | 823.5               | 823.5                         | 0.0                |
| Н             | 10,003                | 22              | 125                                 | 4.8                                      | 833.9      | 833.9               | 833.9                         | 0.0                |
| I             | 10,343                | 282             | 728                                 | 0.8                                      | 834.6      | 834.6               | 834.6                         | 0.0                |
| J             | 10,843                | 166             | 282                                 | 2.1                                      | 834.7      | 834.7               | 834.7                         | 0.0                |
| K             | 11,273                | 30              | 69                                  | 8.7                                      | 837.5      | 837.5               | 837.5                         | 0.0                |
| L             | 11,773                | 56              | 214                                 | 2.8                                      | 840.9      | 840.9               | 841.0                         | 0.1                |
| M             | 11,973                | 36              | 114                                 | 5.3                                      | 841.3      | 841.3               | 841.4                         | 0.1                |
| N             | 12,683                | 14              | 82                                  | 6.0                                      | 848.9      | 848.9               | 848.9                         | 0.0                |
| 0             | 12,913                | 136             | 329                                 | 1.5                                      | 850.1      | 850.1               | 850.1                         | 0.0                |
| Р             | 14,013                | 161             | 148                                 | 3.3                                      | 854.7      | 854.7               | 854.7                         | 0.0                |
| Q             | 14,513                | 283             | 458                                 | 1.1                                      | 857.3      | 857.3               | 857.3                         | 0.0                |
| R             | 15,413                | 191             | 143                                 | 3.4                                      | 860.6      | 860.6               | 860.6                         | 0.0                |
| S             | 16,363                | 245             | 295                                 | 1.7                                      | 864.5      | 864.5               | 864.5                         | 0.0                |
| T             | 17,569                | 30              | 76                                  | 6.8                                      | 869.3      | 869.3               | 869.3                         | 0.0                |
| U             | 18,112                | 125             | 272                                 | 1.9                                      | 871.7      | 871.7               | 871.7                         | 0.0                |
| V             | 19,042                | 38              | 79                                  | 6.6                                      | 874.8      | 874.8               | 874.8                         | 0.0                |
| W             | 21,542                | 252             | 323                                 | 1.6                                      | 886.8      | 886.8               | 886.8                         | 0.0                |
| X             | 23,942                | 248             | 156                                 | 3.3                                      | 896.3      | 896.3               | 896.4                         | 0.1                |

# KANE COUNTY, IL **AND INCORPORATED AREAS**

**FLOODWAY DATA** 

**BOWES CREEK** 

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Stony Creek <sup>2</sup>Elevation computed without consideration of backwater effects from Stony Creek

| FLOODING SOUI           | RCE                 | FLOODWAY        |                                     |  | 1-PERCENT-ANNUAL-CHANCE FLOOD<br>WATER SURFACE ELEVATION (FEET NAVD) |                     |                  |                    |
|-------------------------|---------------------|-----------------|-------------------------------------|--|--|---------------------|------------------|--------------------|
| CROSS SECTION           | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY   | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY | INCREASE<br>(FEET) |
| Bowes Creek (continued) | 1                   |                 |                                     |  |  |                     |                  |                    |
| Y                       | 25,142 <sup>1</sup> | 114             | 233                                 | 2.2                                      | 902.0  | 902.0               | 902.0            | 0.0                |
| Z                       | 26,407 <sup>1</sup> | 218             | 772                                 | 0.7                                      | 909.0  | 909.0               | 909.0            | 0.0                |
| AA                      | 26,597 <sup>1</sup> | 139             | 356                                 | 1.4                                      | 909.0  | 909.0               | 909.0            | 0.0                |
| AB                      | 26,717 <sup>1</sup> | 225             | 502                                 | 0.8                                      | 909.1  | 909.1               | 909.1            | 0.0                |
| AC                      | 27,642 <sup>1</sup> | 97              | 193                                 | 2.1                                      | 909.9  | 909.9               | 909.9            | 0.0                |
| AD                      | 28,717 <sup>1</sup> | 153             | 148                                 | 2.7                                      | 913.2  | 913.2               | 913.2            | 0.0                |
| AE                      | 30,017 <sup>1</sup> | 844             | 871                                 | 0.5                                      | 914.3  | 914.3               | 914.3            | 0.0                |
| AF                      | 30,897 <sup>1</sup> | 10              | 52                                  | 4.9                                      | 917.5  | 917.5               | 917.5            | 0.0                |
| Bowes Creek South       |                     |                 |                                     |  |  |                     |                  |                    |
| Α                       | 35 <sup>2</sup>     | 275             | 670                                 | 0.3                                      | 909.0  | $909.0^{3}$         | 909.0            | 0.0                |
| В                       | 1,735 <sup>2</sup>  | 27              | 34                                  | 6.4                                      | 909.3  | 909.3               | 909.3            | 0.0                |
| С                       | 2,505 <sup>2</sup>  | 10              | 55                                  | 4.0                                      | 913.3  | 913.3               | 913.4            | 0.1                |
| Brewster Creek          |                     |                 |                                     |  |  |                     |                  |                    |
| Α                       | 364 <sup>4</sup>    | 30              | 103                                 | 3.2                                      | 696.9  | 690.5 <sup>5</sup>  | 690.6            | 0.1                |
| В                       | 1,631 <sup>4</sup>  | 141             | 347                                 | 0.9                                      | 696.9  | 694.8 <sup>5</sup>  | 694.9            | 0.1                |
| С                       | 3,205 <sup>4</sup>  | 30              | 81                                  | 3.4                                      | 700.5  | 700.5               | 700.6            | 0.1                |
| D                       | 3,860 <sup>4</sup>  | 22              | 62                                  | 4.4                                      | 707.1  | 707.1               | 707.1            | 0.0                |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Stony Creek

# KANE COUNTY, IL AND INCORPORATED AREAS

## **FLOODWAY DATA**

BOWES CREEK - BOWES CREEK SOUTH - BREWSTER CREEK

<sup>&</sup>lt;sup>2</sup>Feet above confluence with Bowes Creek

<sup>&</sup>lt;sup>3</sup>Elevation computed without consideration of backwater effects from Bowes Creek

<sup>&</sup>lt;sup>4</sup>Feet above mouth at Fox River

<sup>&</sup>lt;sup>5</sup>Elevation computed without consideration of backwater effects from Fox River

| FLOODING SOU              | RCE  |                                    | FLOODWA                                | ΛY                                       |  |  | CHANCE FLOC<br>ATION (FEET N                       |  |
|---------------------------|--|------------------------------------|--|--|--|--|--|--|
| CROSS SECTION             | DISTANCE   | WIDTH<br>(FEET)                    | SECTION<br>AREA<br>(SQUARE<br>FEET)    | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY   | WITHOUT<br>FLOODWAY                                | WITH<br>FLOODWAY                                   | INCREASE<br>(FEET)                     |
| Carpenter Creek A B C D E | 334 <sup>1</sup><br>370 <sup>1</sup><br>450 <sup>1</sup><br>1,148 <sup>1</sup><br>1,872 <sup>1</sup><br>1,987 <sup>1</sup> | 17<br>11<br>101<br>98<br>96<br>190 | 111<br>108<br>571<br>231<br>285<br>899 | 6.0<br>6.2<br>1.2<br>2.9<br>2.3<br>0.7   | 723.0<br>725.1<br>725.9<br>729.8<br>736.5<br>738.6 | 723.0<br>725.1<br>725.9<br>729.8<br>736.5<br>738.6 | 723.0<br>725.2<br>726.0<br>729.9<br>736.6<br>738.7 | 0.0<br>0.1<br>0.1<br>0.1<br>0.1<br>0.1 |
| Duffin Drain  A B C D E   | 955 <sup>2</sup> 4,261 <sup>2</sup> 5,830 <sup>2</sup> 6,271 <sup>2</sup> 12,647 <sup>2</sup>                              | *<br>*<br>*<br>*                   | *<br>*<br>*<br>*                       | *<br>*<br>*<br>*                         | 681.0<br>689.3<br>693.3<br>701.3<br>702.3          | 681.0<br>689.3<br>693.3<br>701.3<br>702.3          | *     *     *     *     *                          | *<br>*<br>*                            |
| Eakin Creek A B C D       | 710 <sup>3</sup> 1,250 <sup>3</sup> 2,125 <sup>3</sup> 3,425 <sup>3</sup>  | 529<br>510<br>*                    | 1,375<br>1,582<br>*<br>*               | 1.2<br>1.9<br>*                          | 869.9<br>870.0<br>870.3<br>870.4                   | 869.9<br>870.0<br>870.3<br>870.4                   | 869.9<br>870.0<br>*<br>*                           | 0.0<br>0.0<br>*<br>*                   |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Fox River

# KANE COUNTY, IL AND INCORPORATED AREAS

## **FLOODWAY DATA**

CARPENTER CREEK – DUFFIN DRAIN – EAKIN CREEK

<sup>&</sup>lt;sup>2</sup>Feet above confluence with Sugar Grove Branch

<sup>&</sup>lt;sup>3</sup>Feet above confluence with South Branch Kishwaukee River

<sup>\*</sup>Data not available

| IRCE                |  | FLOODWA                             | ·Υ   | 1-PERCENT-ANNUAL-CHANCE FLOOD<br>WATER SURFACE ELEVATION (FEET NAVD)                        |  |  |  |
|---------------------|--|-------------------------------------|--|---|--|--|--|
| DISTANCE            | WIDTH<br>(FEET)  | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND)   | REGULATORY  | WITHOUT<br>FLOODWAY  | WITH<br>FLOODWAY   | INCREASE<br>(FEET)   |
|                     |  |                                     |  |   |  |  |  |
| 2,697 <sup>1</sup>  | *  | *                                   | *  | 694.1   | 694.1  | *  | *  |
| 6,760 <sup>1</sup>  | *  | *                                   | *  | 699.7   | 699.7  | *  | *  |
| 8,401 <sup>1</sup>  | *  | *                                   | *  | 702.4   | 702.4  | *  | *  |
| 10,206 <sup>1</sup> | *  | *                                   | *  | 708.7   | 708.7  | *  | *  |
| 60,294 <sup>1</sup> | *  | *                                   | *  | 786.7   | 786.7  | *  | *  |
| 65,228 <sup>1</sup> | *  | *                                   | *  | 795.0   | 795.0  | *  | *  |
| 71,180 <sup>1</sup> | *  | *                                   | *  | 807.5   | 807.5  | *  | *  |
|                     |  |                                     |  |   |  |  |  |
| 2,484 <sup>2</sup>  | *  | *                                   | *  | 820.4   | 820.4  | *  | *  |
| 4,662 <sup>2</sup>  | *  | *                                   | *  | 833.8   | 833.8  | *  | *  |
| 7,235 <sup>2</sup>  | *  | *                                   | *  | 842.8   | 842.8  | *  | *  |
|                     |  |                                     |  |   |  |  |  |
|                     | 2,697 <sup>1</sup> 6,760 <sup>1</sup> 8,401 <sup>1</sup> 10,206 <sup>1</sup> 60,294 <sup>1</sup> 65,228 <sup>1</sup> 71,180 <sup>1</sup> 2,484 <sup>2</sup> 4,662 <sup>2</sup> | DISTANCE WIDTH (FEET)  2,697¹       | DISTANCE WIDTH (FEET) SECTION AREA (SQUARE FEET)  2,697¹ * * * * * * * * * * * * * * * * * * * | DISTANCE   WIDTH (FEET)   SECTION AREA (SQUARE FEET)   WELOCITY (FEET PER SECOND)    2,697¹ | DISTANCE WIDTH (FEET) SECTION AREA (SQUARE FEET) SECOND)  2,697¹ | DISTANCE   WIDTH (FEET)   SECTION   AREA (SQUARE FEET)   REGULATORY   WITHOUT FLOODWAY | DISTANCE   WIDTH (FEET)   SECTION   AREA (SQUARE FEET)   SECOND)   REGULATORY   WITHOUT FLOODWAY   FLOODWAY   FLOODWAY |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Big Rock Creek

# KANE COUNTY, IL AND INCORPORATED AREAS

## **FLOODWAY DATA**

EAST BRANCH BIG ROCK CREEK – EAST BRANCH BIG ROCK CREEK TRIBUTARY 2

<sup>&</sup>lt;sup>2</sup>Feet above confluence with East Branch Big Rock Creek

<sup>\*</sup>Data not available

| FLOODING SO              | URCE                |                 | FLOODWA                             | Y  |            |                     | -CHANCE FLOC<br>ATION (FEET N |                    |
|--------------------------|---------------------|-----------------|-------------------------------------|--|------------|---------------------|-------------------------------|--------------------|
| CROSS SECTION            | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY              | INCREASE<br>(FEET) |
| East Run                 |                     |                 | -                                   | -  |            |                     |                               |                    |
| Α                        | 465 <sup>1</sup>    | 701             | 2,886                               | 0.7                                      | 674.1      | 674.1               | 674.1                         | 0.0                |
| В                        | 2,768 <sup>1</sup>  | 316             | 3,053                               | 0.3                                      | 674.1      | 674.1               | 674.1                         | 0.0                |
| С                        | 5,158 <sup>1</sup>  | 446             | 4,204                               | 0.2                                      | 674.2      | 674.2               | 674.2                         | 0.0                |
| D                        | 5,659 <sup>1</sup>  | 399             | 1,890                               | 0.6                                      | 674.4      | 674.4               | 674.4                         | 0.0                |
| E                        | 8,552 <sup>1</sup>  | 449             | 1,397                               | 0.8                                      | 675.3      | 675.3               | 675.2                         | 0.0                |
| F                        | 9,352 <sup>1</sup>  | 515             | 1,194                               | 1.2                                      | 675.9      | 675.9               | 675.9                         | 0.0                |
| G                        | 9,702 <sup>1</sup>  | 371             | 1,021                               | 1.4                                      | 676.0      | 676.0               | 676.0                         | 0.0                |
| Н                        | 10,685 <sup>1</sup> | 683             | 1,461                               | 1.0                                      | 677.4      | 677.4               | 677.5                         | 0.0                |
| 1                        | 11,224 <sup>1</sup> | 404             | 2,117                               | 0.3                                      | 681.7      | 681.7               | 681.7                         | 0.0                |
| J                        | 11,439 <sup>1</sup> | 547             | 4,830                               | 0.1                                      | 681.7      | 681.7               | 681.7                         | 0.0                |
| K                        | 11,739 <sup>1</sup> | 599             | 3,922                               | 0.1                                      | 681.7      | 681.7               | 681.7                         | 0.0                |
| L                        | 12,119 <sup>1</sup> | 290             | 1,790                               | 0.3                                      | 681.7      | 681.7               | 681.7                         | 0.0                |
| M                        | 15,214 <sup>1</sup> | 341             | 694                                 | 2.2                                      | 683.0      | 683.0               | 683.0                         | 0.0                |
| N                        | 15,539 <sup>1</sup> | 376             | 998                                 | 0.7                                      | 683.6      | 683.6               | 683.6                         | 0.0                |
| 0                        | 19,300 <sup>1</sup> | 58              | 160                                 | 2.9                                      | 690.6      | 690.6               | 690.6                         | 0.0                |
| Р                        | 20,582 <sup>1</sup> | 140             | 257                                 | 2.8                                      | 696.8      | 696.8               | 696.8                         | 0.1                |
| Q                        | 20,897 <sup>1</sup> | 174             | 634                                 | 1.5                                      | 701.1      | 701.1               | 701.1                         | 0.0                |
| East Run North<br>Branch |                     |                 |                                     |  |            |                     |                               |                    |
| A                        | 2,679 <sup>2</sup>  | 459             | 1,250                               | 0.1                                      | 682.5      | 682.5               | 682.6                         | 0.1                |
| В                        | 3,346 <sup>2</sup>  | 400             | 936                                 | 0.1                                      | 682.5      | 682.5               | 682.6                         | 0.1                |
| С                        | 3,471 <sup>2</sup>  | 451             | 1,035                               | 0.1                                      | 684.7      | 684.7               | 684.7                         | 0.0                |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Blackberry Creek

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

**EAST RUN - EAST RUN NORTH BRANCH** 

<sup>&</sup>lt;sup>2</sup>Feet above confluence with East Run

| FLOODING SO         | URCE                |                 | FLOODWA                             | Υ  |            |                     | -CHANCE FLOO<br>ATION (FEET N |                    |
|---------------------|---------------------|-----------------|-------------------------------------|--|------------|---------------------|-------------------------------|--------------------|
| CROSS SECTION       | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY              | INCREASE<br>(FEET) |
| East Run North Loop |                     |                 | -                                   |  |            |                     |                               |                    |
| A                   | 380 <sup>1</sup>    | 210             | 520                                 | 1.3                                      | 677.4      | 677.4               | 677.5                         | 0.0                |
| В                   | 765 <sup>1</sup>    | 327             | 1,303                               | 0.5                                      | 680.3      | 680.3               | 680.3                         | 0.1                |
| С                   | 1,553 <sup>1</sup>  | 70              | 202                                 | 2.3                                      | 680.4      | 680.4               | 680.4                         | 0.1                |
| D                   | 1,941 <sup>1</sup>  | 375             | 2,499                               | 0.1                                      | 682.4      | 682.4               | 682.5                         | 0.1                |
| Elburn Run          |                     |                 |                                     |  |            |                     |                               |                    |
| А                   | 1,133 <sup>2</sup>  | 287             | 489                                 | 5.0                                      | 743.6      | 743.6               | 743.7                         | 0.1                |
| В                   | 5,000 <sup>2</sup>  | 101             | 124                                 | 8.4                                      | 768.7      | 768.7               | 768.8                         | 0.1                |
| С                   | 5,307 <sup>2</sup>  | 80              | 225                                 | 5.3                                      | 772.2      | 772.2               | 772.2                         | 0.0                |
| D                   | 7,934 <sup>2</sup>  | 85              | 225                                 | 4.0                                      | 790.1      | 790.1               | 790.1                         | 0.0                |
| E                   | 8,464 <sup>2</sup>  | 130             | 464                                 | 1.7                                      | 793.4      | 793.4               | 793.4                         | 0.0                |
| F                   | 12,483 <sup>2</sup> | 234             | 259                                 | 1.9                                      | 806.0      | 806.0               | 806.0                         | 0.0                |
| G                   | 12,761 <sup>2</sup> | 496             | 1,098                               | 0.3                                      | 808.8      | 8.808               | 8.808                         | 0.0                |
| Н                   | 16,147 <sup>2</sup> | 217             | 98                                  | 1.3                                      | 824.6      | 824.6               | 824.6                         | 0.0                |
| I                   | 16,362 <sup>2</sup> | 390             | 298                                 | 0.4                                      | 834.4      | 834.4               | 834.4                         | 0.0                |
| Ferson Creek        |                     |                 |                                     |  |            |                     |                               |                    |
| А                   | 1,357 <sup>3</sup>  | 182             | 1,060                               | 3.8                                      | 692.9      | 692.9               | 693.0                         | 0.1                |
| В                   | 7,762 <sup>3</sup>  | 274             | 1,369                               | 2.9                                      | 706.1      | 706.1               | 706.2                         | 0.1                |
| С                   | 11,352 <sup>3</sup> | 250             | 1,284                               | 3.0                                      | 714.0      | 714.0               | 714.1                         | 0.1                |
| D                   | 16,062 <sup>3</sup> | 318             | 1,115                               | 3.5                                      | 727.4      | 727.4               | 727.4                         | 0.0                |
| E                   | 22,840 <sup>3</sup> | 334             | 1,946                               | 2.0                                      | 746.0      | 746.0               | 746.1                         | 0.1                |
| F P                 | 30,641 <sup>3</sup> | 951             | 4,115                               | 0.6                                      | 753.0      | 753.0               | 753.0                         | 0.0                |
| G                   | 30,881 <sup>3</sup> | 617             | 2,799                               | 0.9                                      | 753.1      | 753.1               | 753.2                         | 0.1                |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with East Run

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

EAST RUN NORTH LOOP - ELBURN RUN - FERSON CREEK

<sup>&</sup>lt;sup>2</sup>Feet above confluence with Blackberry Creek

<sup>&</sup>lt;sup>3</sup>Feet above confluence with Fox River

| FLOODING SO   | URCE                |                 | FLOODWA                             | Y  |            |                     | -CHANCE FLOC<br>ATION (FEET N |                    |
|---------------|---------------------|-----------------|-------------------------------------|--|------------|---------------------|-------------------------------|--------------------|
| CROSS SECTION | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY              | INCREASE<br>(FEET) |
| Ferson Creek  |                     |                 | ,                                   | ,  |            |                     |                               |                    |
| (Continued)   | 1                   |                 |                                     |  |            |                     |                               |                    |
| Н             | 31,441 <sup>1</sup> | 641             | 2,018                               | 1.3                                      | 753.2      | 753.2               | 753.3                         | 0.1                |
| !             | 31,716 <sup>1</sup> | 766             | 2,272                               | 1.1                                      | 753.3      | 753.3               | 753.4                         | 0.1                |
| J             | 31,766 <sup>1</sup> | 671             | 1,638                               | 1.5                                      | 753.3      | 753.3               | 753.4                         | 0.1                |
| K             | 31,866 <sup>1</sup> | 748             | 1,903                               | 1.3                                      | 753.5      | 753.5               | 753.6                         | 0.1                |
| L             | 32,076 <sup>1</sup> | 776             | 3,532                               | 0.7                                      | 753.6      | 753.6               | 753.7                         | 0.1                |
| M             | 32,926 <sup>1</sup> | 982             | 2,721                               | 0.9                                      | 753.7      | 753.7               | 753.8                         | 0.1                |
| N             | 34,461 <sup>1</sup> | 1,561           | 2,466                               | 1.0                                      | 754.5      | 754.5               | 754.6                         | 0.1                |
| 0             | 35,346 <sup>1</sup> | 715             | 1,123                               | 0.8                                      | 755.6      | 755.6               | 755.7                         | 0.1                |
| P             | 35,656 <sup>1</sup> | 474             | 886                                 | 1.0                                      | 755.6      | 755.6               | 755.7                         | 0.1                |
| Q             | 36,543 <sup>1</sup> | 31              | 141                                 | 6.0                                      | 758.4      | 758.4               | 758.4                         | 0.0                |
| R             | 36,843 <sup>1</sup> | 267             | 436                                 | 1.9                                      | 760.3      | 760.3               | 760.3                         | 0.0                |
| S             | 37,988 <sup>1</sup> | 397             | 704                                 | 1.2                                      | 763.0      | 763.0               | 763.1                         | 0.1                |
| T             | 38,218 <sup>1</sup> | 228             | 410                                 | 2.1                                      | 763.5      | 763.5               | 763.6                         | 0.1                |
| U             | 38,830 <sup>1</sup> | 189             | 632                                 | 1.3                                      | 769.5      | 769.5               | 769.5                         | 0.0                |
| V             | 39,040 <sup>1</sup> | 114             | 207                                 | 4.0                                      | 769.5      | 769.5               | 769.5                         | 0.0                |
| W             | 39,330 <sup>1</sup> | 31              | 170                                 | 4.9                                      | 771.2      | 771.2               | 771.2                         | 0.0                |
| X             | 40,630 <sup>1</sup> | 259             | 849                                 | 1.0                                      | 772.9      | 772.9               | 773.0                         | 0.1                |
| Υ             | 41,960 <sup>1</sup> | 957             | 2,453                               | 0.2                                      | 773.1      | 773.1               | 773.2                         | 0.1                |
| Z             | 42,540 <sup>1</sup> | 1,359           | 3,892                               | 0.1                                      | 773.1      | 773.1               | 773.2                         | 0.1                |
| AA            | 43,005              | 1,751           | 2,647                               | 0.2                                      | 773.1      | 773.1               | 773.2                         | 0.1                |
| AB            | 43,681 <sup>1</sup> | 320             | 273                                 | 1.9                                      | 773.1      | 773.1               | 773.2                         | 0.1                |
| AC            | 44,205 <sup>1</sup> | 42              | 138                                 | 3.7                                      | 774.3      | 774.3               | 774.3                         | 0.0                |
| AD            | 44,280 <sup>1</sup> | 201             | 305                                 | 1.7                                      | 775.6      | 775.6               | 775.6                         | 0.0                |
| AE            | 45,281 <sup>1</sup> | 24              | 108                                 | 5.2                                      | 778.5      | 778.5               | 778.5                         | 0.0                |
| AF            | 45,715 <sup>1</sup> | 163             | 420                                 | 1.3                                      | 779.6      | 779.6               | 779.6                         | 0.0                |

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

FEDERAL EMERGENCY MANAGEMENT AGENCY

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

**FERSON CREEK** 

| FLOODING SO   | URCE                          |                 | FLOODWA                             | Y  |                |                     | -CHANCE FLOC<br>ATION (FEET N |                    |
|---------------|-------------------------------|-----------------|-------------------------------------|--|----------------|---------------------|-------------------------------|--------------------|
| CROSS SECTION | DISTANCE                      | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY     | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY              | INCREASE<br>(FEET) |
| Ferson Creek  |                               |                 |                                     |  |                |                     |                               |                    |
| (Continued)   | 46,165 <sup>1</sup>           | 200             | 404                                 | 4 5                                      | 700.0          | 700.0               | 700.4                         | 0.4                |
| AG<br>AH      | 46,165<br>46,515 <sup>1</sup> | 36<br>87        | 124<br>162                          | 4.5<br>3.5                               | 780.0<br>781.4 | 780.0               | 780.1                         | 0.1                |
| An<br>Al      | 47,315 <sup>1</sup>           | 1,375           | 2,388                               | 3.5<br>0.2                               | 781.4<br>781.9 | 781.4<br>781.9      | 781.4<br>781.9                | 0.0<br>0.0         |
| AJ            | 47,815 <sup>1</sup>           | 1,089           | 2,366<br>290                        | 1.9                                      | 781.9<br>782.0 | 781.9<br>782.0      | 781.9<br>782.0                | 0.0                |
| AK            | 48,665 <sup>1</sup>           | 646             | 290<br>447                          | 1.5                                      | 784.2          | 784.2               | 784.2                         | 0.0                |
| AL            | 49,005 <sup>1</sup>           | 467             | 447<br>458                          | 1.5                                      | 785.8          | 785.8               | 785.8                         | 0.0                |
| AM            | 49,075<br>49,575 <sup>1</sup> | 472             | 558                                 | 1.5                                      | 786.9          | 786.9               | 786.9                         | 0.0                |
| AN            | 50,335 <sup>1</sup>           | 316             | 520                                 | 1.3                                      | 789.2          | 789.2               | 789.2                         | 0.0                |
| AO            | 51,905 <sup>1</sup>           | 84              | 213                                 | 3.2                                      | 793.8          | 793.8               | 793.8                         | 0.0                |
| AP            | 53,015 <sup>1</sup>           | 509             | 688                                 | 1.0                                      | 796.5          | 796.5               | 796.6                         | 0.0                |
| AQ            | 53,565 <sup>1</sup>           | 158             | 308                                 | 2.2                                      | 790.5<br>797.5 | 790.5<br>797.5      | 797.6                         | 0.1                |
| AR            | 54,369 <sup>1</sup>           | 107             | 501                                 | 1.4                                      | 804.2          | 804.2               | 804.2                         | 0.0                |
| AS            | 54,999 <sup>1</sup>           | 278             | 1,126                               | 0.6                                      | 804.3          | 804.3               | 804.3                         | 0.0                |
| AT            | 55,474 <sup>1</sup>           | 44              | 241                                 | 2.8                                      | 805.3          | 805.3               | 805.3                         | 0.0                |
| AU            | 56,809 <sup>1</sup>           | 353             | 1,686                               | 0.3                                      | 814.1          | 814.1               | 814.2                         | 0.1                |
| AV            | 58,209 <sup>1</sup>           | 537             | 3,227                               | 0.2                                      | 814.2          | 814.2               | 814.3                         | 0.1                |
| AW            | 59,809 <sup>1</sup>           | 425             | 878                                 | 0.6                                      | 814.2          | 814.2               | 814.3                         | 0.1                |
| AX            | 61,152 <sup>1</sup>           | 180             | 160                                 | 3.2                                      | 816.7          | 816.7               | 816.7                         | 0.0                |
| AY            | 61,409 <sup>1</sup>           | 159             | 203                                 | 2.2                                      | 820.0          | 820.0               | 820.1                         | 0.1                |
| AZ            | 62,809 <sup>1</sup>           | 128             | 258                                 | 1.7                                      | 824.9          | 824.9               | 824.9                         | 0.0                |
| BA            | 65,109 <sup>1</sup>           | 74              | 210                                 | 2.1                                      | 835.8          | 835.8               | 835.8                         | 0.0                |
| BB            | 65,930 <sup>1</sup>           | 16              | 71                                  | 6.2                                      | 841.1          | 841.1               | 841.1                         | 0.0                |
| BC            | 66,145 <sup>1</sup>           | 50              | 105                                 | 3.7                                      | 843.5          | 843.5               | 843.6                         | 0.1                |
| BD            | 68,275 <sup>1</sup>           | 150             | 272                                 | 1.4                                      | 849.1          | 849.1               | 849.1                         | 0.0                |
| BE            | 69,675 <sup>1</sup>           | 50              | 94                                  | 4.1                                      | 852.6          | 852.6               | 852.7                         | 0.1                |

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

FEDERAL EMERGENCY MANAGEMENT AGENCY

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

**FERSON CREEK** 

| FLOODING SO   | URCE   |  | FLOODWA   | Y   |   |   | -CHANCE FLOO<br>ATION (FEET N   |   |
|---|--|--|---|---|---|---|---|---|
| CROSS SECTION   | DISTANCE   | WIDTH<br>(FEET)  | SECTION<br>AREA<br>(SQUARE<br>FEET)                                   | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND)                                  | REGULATORY  | WITHOUT<br>FLOODWAY   | WITH<br>FLOODWAY  | INCREASE<br>(FEET)  |
| Ferson Creek (Continued)  BF  BG  BH  BI  BJ  BK  BL  Fitchie Creek  A  B  C  D | 71,015 <sup>1</sup> 72,149 <sup>1</sup> 72,839 <sup>1</sup> 73,439 <sup>1</sup> 74,062 <sup>1</sup> 74,701 <sup>1</sup> 1,880 <sup>2</sup> 2,952 <sup>2</sup> 3,732 <sup>2</sup> 4,845 <sup>2</sup> 5 230 <sup>2</sup> | 123<br>275<br>120<br>47<br>68<br>54<br>19<br>147<br>261<br>122<br>20 | 190<br>428<br>138<br>83<br>114<br>61<br>56<br>233<br>366<br>228<br>97 | 2.0<br>0.7<br>2.1<br>3.5<br>2.6<br>4.8<br>5.2<br>1.9<br>1.2<br>1.9<br>3.5 | 858.3<br>863.6<br>863.9<br>866.1<br>868.4<br>869.6<br>872.0<br>781.5<br>783.6<br>784.7<br>788.2 | 858.3<br>863.6<br>863.9<br>866.1<br>868.4<br>869.6<br>872.0<br>781.5<br>783.6<br>784.7<br>788.2 | 858.3<br>863.6<br>863.9<br>866.1<br>868.4<br>869.6<br>872.0<br>781.5<br>783.6<br>784.7<br>788.3 | 0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0 |
| E<br>F<br>G<br>H<br>I<br>J<br>K<br>L<br>M                                       | 5,230 <sup>2</sup> 6,280 <sup>2</sup> 7,090 <sup>2</sup> 9,140 <sup>2</sup> 9,755 <sup>2</sup> 9,955 <sup>2</sup> 10,305 <sup>2</sup> 10,405 <sup>2</sup> 11,716 <sup>2</sup>  | 136<br>174<br>346<br>78<br>15<br>235<br>107<br>42<br>16              | 205<br>168<br>266<br>124<br>78<br>347<br>244<br>48<br>101             | 1.6<br>2.0<br>1.3<br>2.7<br>3.8<br>0.9<br>1.2<br>6.2<br>2.9               | 790.2<br>794.5<br>798.0<br>805.8<br>813.2<br>813.7<br>813.9<br>813.9                            | 790.2<br>794.5<br>798.0<br>805.8<br>813.2<br>813.7<br>813.9<br>813.9                            | 790.3<br>794.5<br>798.0<br>805.8<br>813.2<br>813.7<br>813.9<br>813.9<br>825.2                   | 0.1<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0<br>0.0        |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Fox River

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

FERSON CREEK - FITCHIE CREEK

<sup>&</sup>lt;sup>2</sup>Feet above confluence with Otter Creek

| FLOODING SC                  | URCE                |                 | FLOODWA                             | Y  |            |                     | -CHANCE FLOC<br>ATION (FEET N |                    |
|------------------------------|---------------------|-----------------|-------------------------------------|--|------------|---------------------|-------------------------------|--------------------|
| CROSS SECTION                | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY              | INCREASE<br>(FEET) |
| Fitchie Creek<br>(Continued) |                     |                 |                                     |  |            |                     |                               |                    |
| l` Ń                         | 12,061 <sup>1</sup> | 242             | 445                                 | 0.7                                      | 825.6      | 825.6               | 825.6                         | 0.0                |
| O                            | 12,261 <sup>1</sup> | 137             | 206                                 | 1.4                                      | 825.8      | 825.8               | 825.8                         | 0.0                |
| P                            | 12,931 <sup>1</sup> | 100             | 147                                 | 2.0                                      | 829.1      | 829.1               | 829.1                         | 0.0                |
| Q                            | 13,761 <sup>1</sup> | 178             | 291                                 | 1.0                                      | 832.1      | 832.1               | 832.1                         | 0.0                |
| R                            | 14,651 <sup>1</sup> | 39              | 77                                  | 3.9                                      | 836.2      | 836.2               | 836.2                         | 0.0                |
| S<br>T                       | 15,391 <sup>1</sup> | 103             | 182                                 | 1.6                                      | 839.3      | 839.3               | 839.3                         | 0.0                |
| Т                            | 16,447 <sup>1</sup> | 168             | 112                                 | 2.7                                      | 842.7      | 842.7               | 842.7                         | 0.0                |
| U                            | 16,988 <sup>1</sup> | 126             | 118                                 | 2.5                                      | 843.9      | 843.9               | 844.0                         | 0.1                |
| V                            | 18,188 <sup>1</sup> | 127             | 204                                 | 1.5                                      | 847.9      | 847.9               | 847.9                         | 0.0                |
| W                            | 19,988 <sup>1</sup> | 69              | 99                                  | 3.2                                      | 854.5      | 854.5               | 854.5                         | 0.0                |
| X                            | 21,588 <sup>1</sup> | 141             | 232                                 | 1.3                                      | 861.1      | 861.1               | 861.1                         | 0.0                |
| Y                            | 22,668 <sup>1</sup> | 145             | 196                                 | 1.6                                      | 863.3      | 863.3               | 863.3                         | 0.0                |
| Z                            | 23,143 <sup>1</sup> | 35              | 100                                 | 3.1                                      | 865.4      | 865.4               | 865.5                         | 0.1                |
| AA                           | 23,693 <sup>1</sup> | 50              | 130                                 | 2.4                                      | 867.7      | 867.7               | 867.8                         | 0.1                |
| AB                           | 25,513 <sup>1</sup> | 125             | 125                                 | 2.5                                      | 874.4      | 874.4               | 874.4                         | 0.0                |
| AC                           | 26,163 <sup>1</sup> | 10              | 55                                  | 4.0                                      | 877.1      | 877.1               | 877.1                         | 0.0                |
| AD                           | 26,313 <sup>1</sup> | 19              | 41                                  | 5.4                                      | 877.4      | 877.4               | 877.4                         | 0.0                |
| Four Winds Way<br>Creek      |                     |                 |                                     |  |            |                     |                               |                    |
| A                            | 1,172 <sup>2</sup>  | 59              | 133                                 | 2.7                                      | 729.4      | 729.4               | 729.5                         | 0.1                |
| В                            | 1,928 <sup>2</sup>  | 70              | 206                                 | 1.7                                      | 737.2      | 737.2               | 737.3                         | 0.1                |
| C                            | 2,603 <sup>2</sup>  | 29              | 97                                  | 3.7                                      | 747.3      | 747.3               | 747.4                         | 0.1                |
| D                            | 3,630 <sup>2</sup>  | 44              | 188                                 | 1.9                                      | 768.9      | 768.9               | 768.9                         | 0.0                |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Fox River

**TABLE** 

FEDERAL EMERGENCY MANAGEMENT AGENCY

# KANE COUNTY, IL AND INCORPORATED AREAS

### **FLOODWAY DATA**

FITCHIE CREEK - FOUR WINDS WAY CREEK

<sup>&</sup>lt;sup>2</sup>Feet above confluence with Otter Creek

| FLOODING SO   | OURCE      |                 | FLOODWA                             | Y  |            |                     | -CHANCE FLOO<br>ATION (FEET N |                    |
|---------------|------------|-----------------|-------------------------------------|--|------------|---------------------|-------------------------------|--------------------|
| CROSS SECTION | DISTANCE 1 | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY              | INCREASE<br>(FEET) |
| Fox River     |            |                 |                                     |  |            |                     |                               |                    |
| Α             | 242,940    | 402             | 3,309                               | 5.7                                      | 616.3      | 616.3               | 616.4                         | 0.1                |
| В             | 243,640    | 453             | 4,058                               | 4.6                                      | 617.2      | 617.2               | 617.3                         | 0.1                |
| С             | 244,500    | 289             | 2,151                               | 8.7                                      | 617.4      | 617.4               | 617.5                         | 0.1                |
| D             | 244,625    | 390             | 3,626                               | 5.2                                      | 618.7      | 618.7               | 618.8                         | 0.1                |
| E             | 245,075    | 471             | 3,799                               | 4.9                                      | 619.1      | 619.1               | 619.2                         | 0.1                |
| F             | 245,715    | 399             | 4,477                               | 4.2                                      | 619.9      | 619.9               | 620.0                         | 0.1                |
| G             | 246,252    | 406             | 4,829                               | 3.9                                      | 620.3      | 620.3               | 620.4                         | 0.1                |
| Н             | 246,475    | 332             | 4,334                               | 4.3                                      | 620.4      | 620.4               | 620.5                         | 0.1                |
| I             | 246,690    | 480             | 5,670                               | 3.3                                      | 621.3      | 621.3               | 621.4                         | 0.1                |
| J             | 246,844    | 593             | 5,673                               | 3.3                                      | 621.4      | 621.4               | 621.5                         | 0.1                |
| K             | 248,334    | 369             | 4,201                               | 4.5                                      | 621.8      | 621.8               | 621.9                         | 0.1                |
| L             | 248,790    | 352             | 4,054                               | 4.6                                      | 621.9      | 621.9               | 622.0                         | 0.1                |
| M             | 249,330    | 522             | 4,922                               | 3.8                                      | 622.0      | 622.0               | 622.0                         | 0.0                |
| N             | 250,030    | 363             | 3,488                               | 5.3                                      | 622.0      | 622.0               | 622.1                         | 0.1                |
| 0             | 250,850    | 506             | 3,773                               | 4.9                                      | 622.5      | 622.5               | 622.5                         | 0.0                |
| Р             | 251,310    | 220             | 1,956                               | 9.5                                      | 622.5      | 622.5               | 622.6                         | 0.1                |
| Q             | 251,550    | 430             | 3,471                               | 5.4                                      | 623.3      | 623.3               | 623.4                         | 0.1                |
| R             | 252,290    | 609             | 5,261                               | 3.5                                      | 624.1      | 624.1               | 624.2                         | 0.1                |
| S             | 252,640    | 648             | 6,069                               | 3.1                                      | 624.2      | 624.2               | 624.3                         | 0.1                |
| Т             | 252,930    | 774             | 5,442                               | 3.4                                      | 624.3      | 624.3               | 624.4                         | 0.1                |
| U             | 253,260    | 190             | 1,687                               | 5.9                                      | 625.7      | 625.7               | 625.8                         | 0.1                |
| V             | 254,210    | 411             | 2,938                               | 3.5                                      | 626.9      | 626.9               | 626.9                         | 0.0                |
| W             | 254,570    | 497             | 2,802                               | 3.6                                      | 627.1      | 627.1               | 627.1                         | 0.0                |
| X             | 254,870    | 480             | 4,904                               | 3.7                                      | 627.3      | 627.3               | 627.4                         | 0.1                |
| Y             | 255,160    | 356             | 4,435                               | 4.2                                      | 628.1      | 628.1               | 628.2                         | 0.1                |
| Z             | 255,390    | 360             | 4,557                               | 4.1                                      | 628.2      | 628.2               | 628.3                         | 0.1                |

<sup>1</sup>Feet above mouth at Illinois River

FEDERAL EMERGENCY MANAGEMENT AGENCY

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

**FOX RIVER** 

| FLOODING SC           | OURCE                 |                 | FLOODWA                             | Υ  |            |                     | CHANCE FLOC<br>ATION (FEET N |                    |
|-----------------------|-----------------------|-----------------|-------------------------------------|--|------------|---------------------|------------------------------|--------------------|
| CROSS SECTION         | DISTANCE <sup>1</sup> | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY             | INCREASE<br>(FEET) |
| Fox River (continued) |                       |                 | ,                                   | ,  |            |                     |                              |                    |
| ÀÀ                    | 255,620               | 290             | 3,699                               | 5.0                                      | 628.3      | 628.3               | 628.4                        | 0.1                |
| AB                    | 256,100               | 340             | 3,610                               | 5.2                                      | 628.5      | 628.5               | 628.6                        | 0.1                |
| AC                    | 256,270               | 358             | 3,914                               | 4.8                                      | 628.6      | 628.6               | 628.7                        | 0.1                |
| AD                    | 256,520               | 463             | 5,570                               | 3.3                                      | 629.0      | 629.0               | 629.1                        | 0.1                |
| AE                    | 256,750               | 164             | 1,749                               | 5.2                                      | 629.0      | 629.0               | 629.1                        | 0.1                |
| AF                    | 257,250               | 161             | 1,633                               | 5.6                                      | 629.2      | 629.2               | 629.3                        | 0.1                |
| AG                    | 257,780               | 160             | 1,710                               | 5.4                                      | 629.6      | 629.6               | 629.7                        | 0.1                |
| AH                    | 257,970               | 164             | 1,596                               | 5.8                                      | 629.7      | 629.7               | 629.8                        | 0.1                |
| Al                    | 258,200               | 185             | 2,550                               | 3.6                                      | 634.8      | 634.8               | 634.8                        | 0.0                |
| AJ                    | 258,630               | 605             | 6,315                               | 2.9                                      | 635.0      | 635.0               | 635.0                        | 0.0                |
| AK                    | 259,100               | 648             | 6,484                               | 2.9                                      | 635.0      | 635.0               | 635.0                        | 0.0                |
| AL                    | 260,100               | 720             | 6,801                               | 2.7                                      | 635.2      | 635.2               | 635.2                        | 0.0                |
| AM                    | 262,310               | 840             | 7,253                               | 2.6                                      | 635.6      | 635.6               | 635.7                        | 0.1                |
| AN                    | 262,780               | 730             | 6,105                               | 2.8                                      | 635.7      | 635.7               | 635.7                        | 0.0                |
| AO                    | 263,140               | 710             | 6,953                               | 2.5                                      | 635.8      | 635.8               | 635.8                        | 0.0                |
| AP                    | 270,135               | 637             | 4,485                               | 3.2                                      | 640.1      | 640.1               | 640.2                        | 0.1                |
| AQ                    | 273,288               | 526             | 3,958                               | 3.6                                      | 642.0      | 642.0               | 642.1                        | 0.1                |
| AR                    | 274,972               | 594             | 3,425                               | 4.2                                      | 643.2      | 643.2               | 643.3                        | 0.1                |
| AS                    | 276,503               | 558             | 2,977                               | 4.8                                      | 644.4      | 644.4               | 644.5                        | 0.1                |
| AT                    | 277,380               | 652             | 5,674                               | 2.5                                      | 645.0      | 645.0               | 645.1                        | 0.1                |
| AU                    | 277,680               | 607             | 6,538                               | 2.2                                      | 650.9      | 650.9               | 651.0                        | 0.1                |
| AV                    | 279,254               | 754             | 6,158                               | 2.3                                      | 651.0      | 651.0               | 651.1                        | 0.1                |
| AW                    | 279,888               | 706             | 5,609                               | 2.6                                      | 651.1      | 651.1               | 651.2                        | 0.1                |
| AX                    | 282,781               | 776             | 4,440                               | 3.2                                      | 651.6      | 651.6               | 651.7                        | 0.1                |
| AY                    | 285,895               | 610             | 3,424                               | 3.9                                      | 653.7      | 653.7               | 653.8                        | 0.1                |
| AZ                    | 288,858               | 412             | 2,373                               | 5.7                                      | 655.3      | 655.3               | 655.3                        | 0.0                |

<sup>1</sup>Feet above mouth at Illinois River

FEDERAL EMERGENCY MANAGEMENT AGENCY

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

**FOX RIVER** 

| FLOODING SC           | OURCE                 |                 | FLOODWA                             | Y  |            |                     | CHANCE FLOC<br>ATION (FEET N |                    |
|-----------------------|-----------------------|-----------------|-------------------------------------|--|------------|---------------------|------------------------------|--------------------|
| CROSS SECTION         | DISTANCE <sup>1</sup> | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY             | INCREASE<br>(FEET) |
| Fox River (continued) |                       |                 |                                     |  |            |                     |                              |                    |
| BA                    | 290,100               | 675             | 4,720                               | 2.9                                      | 658.2      | 658.2               | 658.3                        | 0.1                |
| BB                    | 292,270               | 435             | 3,974                               | 3.4                                      | 659.7      | 659.7               | 659.8                        | 0.1                |
| BC                    | 294,050               | 475             | 4,293                               | 3.1                                      | 663.0      | 663.0               | 663.1                        | 0.1                |
| BD                    | 297,040               | 475             | 5,125                               | 2.6                                      | 668.0      | 668.0               | 668.1                        | 0.1                |
| BE                    | 300,790               | 534             | 4,871                               | 2.8                                      | 669.2      | 669.2               | 669.3                        | 0.1                |
| BF                    | 301,942               | 522             | 4,343                               | 3.1                                      | 669.5      | 669.5               | 669.6                        | 0.1                |
| BG                    | 304,999               | 459             | 3,791                               | 3.6                                      | 672.3      | 672.3               | 672.4                        | 0.1                |
| ВН                    | 307,439               | 425             | 3,431                               | 3.9                                      | 673.8      | 673.8               | 673.9                        | 0.1                |
| BI                    | 308,772               | 440             | 1,694                               | 7.2                                      | 678.9      | 678.9               | 679.0                        | 0.1                |
| BJ                    | 313,316               | 577             | 4,830                               | 2.5                                      | 681.5      | 681.5               | 681.6                        | 0.1                |
| BK                    | 319,303               | 360             | 3,417                               | 3.6                                      | 686.2      | 686.2               | 686.3                        | 0.1                |
| BL                    | 320,417               | 338             | 4,270                               | 2.9                                      | 688.7      | 688.7               | 688.9                        | 0.1                |
| BM                    | 325,016               | 843             | 5,783                               | 2.1                                      | 691.7      | 691.7               | 691.8                        | 0.1                |
| BN                    | 330,818               | 705             | 8,010                               | 1.5                                      | 692.6      | 692.6               | 692.7                        | 0.1                |
| ВО                    | 333,000               | 885             | 7,761                               | 1.6                                      | 692.9      | 692.9               | 693.0                        | 0.1                |
| BP                    | 339,200               | 592             | 5,964                               | 2.1                                      | 693.8      | 693.8               | 693.9                        | 0.1                |
| BQ                    | 341,832               | 776             | 6,765                               | 1.8                                      | 694.5      | 694.5               | 694.6                        | 0.1                |
| BR                    | 344,008               | 738             | 7,017                               | 1.7                                      | 695.0      | 695.0               | 695.1                        | 0.1                |
| BS                    | 347,604               | 637             | 6,629                               | 1.8                                      | 695.6      | 695.6               | 695.7                        | 0.1                |
| BT                    | 351,204               | 726             | 6,368                               | 1.9                                      | 696.4      | 696.4               | 696.5                        | 0.1                |
| BU                    | 353,781               | 510             | 4,450                               | 2.8                                      | 697.3      | 697.3               | 697.4                        | 0.1                |
| BV                    | 355,117               | 893             | 6,772                               | 1.8                                      | 697.7      | 697.7               | 697.8                        | 0.1                |
| BW                    | 356,400               | 819             | 4,436                               | 2.8                                      | 698.0      | 698.0               | 698.1                        | 0.1                |
| BX                    | 357,625               | 726             | 5,050                               | 2.4                                      | 698.9      | 698.9               | 699.0                        | 0.1                |
| BY                    | 359,425               | 438             | 4,378                               | 2.8                                      | 699.7      | 699.7               | 699.8                        | 0.1                |

<sup>1</sup>Feet above mouth at Illinois River

FEDERAL EMERGENCY MANAGEMENT AGENCY

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

**FOX RIVER** 

| FLOODING SO           | DURCE                 |                  | FLOODWA                              | ΑΥ                                       |            |                     | -CHANCE FLOC<br>ATION (FEET N |                    |
|-----------------------|-----------------------|------------------|--------------------------------------|--|------------|---------------------|-------------------------------|--------------------|
| CROSS SECTION         | DISTANCE <sup>1</sup> | WIDTH<br>(FEET)  | SECTION<br>AREA<br>(SQUAR<br>E FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY              | INCREASE<br>(FEET) |
| Fox River (continued) |                       |                  |                                      |  |            |                     |                               |                    |
| BZ                    | 359,874               | 512 <sup>2</sup> | 3,492                                | 3.5                                      | 700.3      | 700.3               | 700.4                         | 0.1                |
| CA                    | 359,964               | 367              | 1,301                                | 8.7                                      | 702.9      | 702.9               | 703.0                         | 0.1                |
| СВ                    | 363,232               | 795              | 6,150                                | 1.8                                      | 705.0      | 705.0               | 705.0                         | 0.0                |
| CC                    | 365,355               | 617              | 5,802                                | 1.9                                      | 705.4      | 705.4               | 705.4                         | 0.0                |
| CD                    | 367,995               | 620              | 4,211                                | 2.7                                      | 706.2      | 706.2               | 706.3                         | 0.1                |
| CE                    | 370,862               | 390              | 3,204                                | 3.5                                      | 708.1      | 708.1               | 708.2                         | 0.1                |
| CF                    | 373,037               | 522              | 5,572                                | 2.0                                      | 709.2      | 709.2               | 709.3                         | 0.1                |
| CG                    | 374,658               | 312              | 3,728                                | 3.0                                      | 709.6      | 709.6               | 709.7                         | 0.1                |
| CH                    | 376,015               | 384              | 4,450                                | 2.5                                      | 709.9      | 709.9               | 710.0                         | 0.1                |
| CI                    | 377,552               | 276              | 4,074                                | 2.8                                      | 710.2      | 710.2               | 710.3                         | 0.1                |
| CJ                    | 379,326               | 342              | 4,183                                | 2.7                                      | 711.1      | 711.1               | 711.2                         | 0.1                |
| CK                    | 379,621               | 456              | 5,782                                | 1.8                                      | 713.3      | 713.3               | 713.3                         | 0.0                |
| CL                    | 381,396               | 720              | 6,117                                | 1.7                                      | 713.5      | 713.5               | 713.5                         | 0.0                |
| CM                    | 384,653               | 492              | 2,928                                | 3.6                                      | 714.1      | 714.1               | 714.1                         | 0.0                |
| CN                    | 387,061               | 517              | 5,643                                | 1.9                                      | 714.9      | 714.9               | 715.0                         | 0.1                |
| CO                    | 389,516               | 652              | 6,004                                | 1.8                                      | 715.2      | 715.2               | 715.2                         | 0.0                |
| CP                    | 391,116               | 644              | 7,038                                | 1.5                                      | 715.4      | 715.4               | 715.4                         | 0.0                |
| CQ                    | 392,769               | 576              | 5,783                                | 1.8                                      | 715.5      | 715.5               | 715.6                         | 0.1                |
| CR                    | 395,700               | 619              | 5,758                                | 1.8                                      | 715.8      | 715.8               | 715.9                         | 0.1                |
| CS                    | 397,400               | 1,101            | 7,398                                | 1.4                                      | 716.1      | 716.1               | 716.2                         | 0.1                |
| CT                    | 402,518               | 469              | 2,669                                | 3.9                                      | 717.8      | 717.8               | 717.9                         | 0.1                |
| CU                    | 404,511               | 281              | 2,865                                | 3.7                                      | 719.6      | 719.6               | 719.7                         | 0.1                |
| CV                    | 406,439               | 381              | 3,508                                | 3.0                                      | 720.0      | 720.0               | 720.1                         | 0.1                |
| CW                    | 407,468               | 374              | 3,841                                | 2.7                                      | 720.4      | 720.4               | 720.5                         | 0.1                |
| CX                    | 409,944               | 227              | 2,352                                | 4.5                                      | 721.2      | 721.2               | 721.3                         | 0.1                |

<sup>&</sup>lt;sup>1</sup>Feet above mouth at Illinois River

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

**FOX RIVER** 

<sup>&</sup>lt;sup>2</sup>Floodway width reflects constricted section, see FIRM panel for regulatory floodway

| FLOODING SOURCE           |                      |                 | FLOODWA                             | DWAY 1-PERCENT-ANNUAL-CHANCE FI<br>WATER SURFACE ELEVATION (FEE |            |                     |                  |                    |  |
|---------------------------|----------------------|-----------------|-------------------------------------|---|------------|---------------------|------------------|--------------------|--|
| CROSS SECTION             | DISTANCE             | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND)                        | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY | INCREASE<br>(FEET) |  |
| Fox River (Continued)     |                      |                 | -                                   |   |            |                     |                  |                    |  |
| ĊY                        | 410,874 <sup>1</sup> | 708             | 5,994                               | 1.8   | 722.1      | 722.1               | 722.2            | 0.1                |  |
| CZ                        | 414,015 <sup>1</sup> | 575             | 4,181                               | 2.4   | 725.1      | 725.1               | 725.2            | 0.1                |  |
| DA                        | 417,841 <sup>1</sup> | 558             | 4,139                               | 2.4   | 726.9      | 726.9               | 727.0            | 0.1                |  |
| DB                        | 420,346 <sup>1</sup> | 650             | 4,101                               | 2.5   | 728.2      | 728.2               | 728.3            | 0.1                |  |
| DC                        | 422,521 <sup>1</sup> | 643             | 4,035                               | 2.5   | 729.0      | 729.0               | 729.1            | 0.1                |  |
| DD                        | 424,528 <sup>1</sup> | 787             | 5,117                               | 2.0   | 729.9      | 729.9               | 730.0            | 0.1                |  |
| DE                        | 428,504 <sup>1</sup> | 878             | 5,043                               | 2.0   | 731.8      | 731.8               | 731.9            | 0.1                |  |
| Fox River East<br>Channel |                      |                 |                                     |   |            |                     |                  |                    |  |
| Α                         | 253,290 <sup>2</sup> | 144             | 1,335                               | 6.3   | 624.8      | 624.8               | 624.8            | 0.0                |  |
| В                         | 254,170 <sup>2</sup> | 156             | 1,471                               | 5.7   | 626.1      | 626.1               | 626.2            | 0.1                |  |
| С                         | 254,360 <sup>2</sup> | 160             | 1,261                               | 6.7   | 626.3      | 626.3               | 626.4            | 0.1                |  |
| D                         | 257,060 <sup>2</sup> | 164             | 1,815                               | 5.2   | 629.1      | 629.1               | 629.2            | 0.1                |  |
| E<br>F                    | 257,530 <sup>2</sup> | 162             | 1,725                               | 5.5   | 629.3      | 629.3               | 629.4            | 0.1                |  |
|                           | 258,020 <sup>2</sup> | 171             | 1,580                               | 6.0   | 629.4      | 629.4               | 629.5            | 0.1                |  |
| G                         | 258,240 <sup>2</sup> | 171             | 1,680                               | 5.9   | 629.6      | 629.6               | 629.7            | 0.1                |  |
| Н                         | 258,470 <sup>2</sup> | 235             | 2,716                               | 3.5   | 634.8      | 634.8               | 634.8            | 0.0                |  |
| Fox River Tributary       |                      |                 |                                     |   |            |                     |                  |                    |  |
| A                         | $2,300^3$            | 250             | 223                                 | 1.61  | 640.6      | 640.6               | 640.7            | 0.1                |  |
|                           |                      |                 |                                     |   |            |                     |                  |                    |  |

<sup>&</sup>lt;sup>1</sup>Feet above mouth at Illinois River

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

FOX RIVER - FOX RIVER EAST CHANNEL - FOX RIVER TRIBUTARY

<sup>&</sup>lt;sup>2</sup>Feet above confluence with Fox River

<sup>&</sup>lt;sup>3</sup>Feet above confluence with Fox River Tributary (East Branch)

| CROSS SECTION         DISTANCE         (FEET)         (SQUARE FEET)         (FEET PER SECOND)         REGULATORY         FLOODWAY         FLOODWAY           Fox River Tributary East Branch         A         400¹         166         197         0.4         635.6         635.7         635.7         635.8         635.7         635.8         635.7         635.8         635.7         635.8         635.7         635.8         635.7         635.8         635.8         636.3         636.3         636.3         636.3         636.3         636.4           Geneva Creek         A         877²         56         172         3.7         682.2         682.2         682.3         688.6         898.9         698.9         688.6         698.8         698.9         698.9         705.2         705.2         705.3         705.3         705.3         705.3         705.2         705.2         705.3         705.3         705.3         705.2         705.2         705.3         705.3         705.2         705.2         705.3         705.3         705.2         705.2         705.3         705.3         705.2         705.2         705.3         705.3         705.2         705.3         705.3         705.2         705.2         705.3   | FLOODING SOURCE                 |   |
|--|---------------------------------|---|
| East Branch  A   | CROSS SECTION                   | INCREASE<br>(FEET)  |
| B  |                                 |   |
| A 877 <sup>2</sup> 56 172 3.7 682.2 682.3 698.8 698.9 C 3,103 <sup>2</sup> 100 321 2.7 705.2 705.2 705.3    Hampshire Creek  A 15,840 <sup>3</sup> 121 508 2.8 868.6 868.6 868.6 868.6 868.6 868.6 868.6 868.6 870.9 870 | B<br>C                          | 0.1<br>0.1<br>0.1<br>0.1                                    |
| A 15,840 <sup>3</sup> 121 508 2.8 868.6 868.6 868.6 B 16,443 <sup>3</sup> 216 535 2.6 870.9 870.9 870.9 C 16,854 <sup>3</sup> 311 443 3.2 872.9 872.9 873.0 D 16,969 <sup>3</sup> 471 579 2.2 873.4 873.4 873.4 E 17,447 <sup>3</sup> 444 616 2.0 874.8 874.8 F 18,149 <sup>3</sup> 787 574 2.0 877.1 877.2  | A<br>B                          | 0.1<br>0.1<br>0.1   |
| G     18,561³     725     629     1.8     878.4     878.4     878.4       H     19,400³     222     427     2.7     880.8     880.8     880.8       I     19,867³     281     385     3.0     882.1     882.1     882.1       J     20,003³     426     562     2.1     882.6     882.6     882.6  | A<br>B<br>C<br>D<br>E<br>F<br>G | 0.0<br>0.0<br>0.1<br>0.0<br>0.0<br>0.1<br>0.0<br>0.0<br>0.0 |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Fox River Tributary

# KANE COUNTY, IL AND INCORPORATED AREAS

## **FLOODWAY DATA**

FOX RIVER TRIBUTARY EAST BRANCH - GENEVA CREEK - HAMPSHIRE CREEK

<sup>&</sup>lt;sup>2</sup>Feet above confluence with Fox River

<sup>&</sup>lt;sup>3</sup>Feet above confluence with Burlington Creek

| FLOODING SOURCE             |                       |                 | FLOODWA                             | Υ  |            |                     | CHANCE FLOOI<br>TION (FEET NA |                    |
|-----------------------------|-----------------------|-----------------|-------------------------------------|--|------------|---------------------|-------------------------------|--------------------|
| CROSS SECTION               | DISTANCE <sup>1</sup> | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY              | INCREASE<br>(FEET) |
| Hampshire Creek (continued) |                       |                 |                                     |  |            |                     |                               |                    |
| Ĺ                           | 20,651                | 995             | 2,308                               | 0.4                                      | 884.9      | 884.9               | 884.9                         | 0.0                |
| M                           | 21,362                | 286             | 959                                 | 1.0                                      | 885.4      | 885.4               | 885.4                         | 0.0                |
| N                           | 21,660                | 59              | 176                                 | 5.6                                      | 888.2      | 888.2               | 888.3                         | 0.1                |
| 0                           | 22,128                | 163             | 346                                 | 2.9                                      | 891.4      | 891.4               | 891.5                         | 0.1                |
| Р                           | 22,605                | 326             | 479                                 | 2.1                                      | 893.1      | 893.1               | 893.1                         | 0.0                |
| Q                           | 22,868                | 406             | 872                                 | 1.1                                      | 893.9      | 893.9               | 893.9                         | 0.0                |
| R                           | 23,806                | 178             | 393                                 | 2.5                                      | 896.5      | 896.5               | 896.6                         | 0.1                |
| S                           | 24,200                | 194             | 416                                 | 2.4                                      | 897.6      | 897.6               | 897.6                         | 0.0                |
| Т                           | 24,673                | 243             | 262                                 | 3.1                                      | 899.3      | 899.3               | 899.3                         | 0.0                |
| U                           | 25,296                | 153             | 325                                 | 2.5                                      | 903.7      | 903.7               | 903.8                         | 0.1                |
| V                           | 25,728                | 156             | 388                                 | 2.1                                      | 905.7      | 905.7               | 905.8                         | 0.1                |
| W                           | 25,947                | 122             | 274                                 | 2.0                                      | 906.4      | 906.4               | 906.4                         | 0.0                |
| X                           | 26,424                | 111             | 171                                 | 3.3                                      | 909.0      | 909.0               | 909.0                         | 0.0                |
| Υ                           | 26,845                | 116             | 168                                 | 3.3                                      | 911.7      | 911.7               | 911.8                         | 0.1                |
| Z                           | 27,477                | 227             | 305                                 | 1.5                                      | 917.2      | 917.2               | 917.3                         | 0.1                |
| AA                          | 27,883                | 313             | 373                                 | 1.3                                      | 920.1      | 920.1               | 920.1                         | 0.0                |
| AB                          | 28,548                | 450             | 449                                 | 1.0                                      | 923.3      | 923.3               | 923.3                         | 0.0                |
| AC                          | 29,298                | 343             | 485                                 | 1.0                                      | 925.4      | 925.4               | 925.4                         | 0.0                |
| AD                          | 29,808                | 348             | 373                                 | 1.1                                      | 928.4      | 928.4               | 928.4                         | 0.0                |
| AE                          | 30,394                | 351             | 351                                 | 1.2                                      | 934.5      | 934.5               | 934.6                         | 0.1                |
| AF                          | 30,795                | 135             | 215                                 | 1.9                                      | 938.7      | 938.7               | 938.7                         | 0.0                |
| AG                          | 31,046                | 130             | 194                                 | 2.1                                      | 940.8      | 940.8               | 940.8                         | 0.0                |
| AH                          | 31,404                | 146             | 271                                 | 1.5                                      | 943.0      | 943.0               | 943.0                         | 0.0                |
| Al                          | 31,685                | 205             | 279                                 | 1.5                                      | 944.9      | 944.9               | 944.9                         | 0.0                |
| AJ                          | 31,897                | 94              | 142                                 | 1.8                                      | 946.5      | 946.5               | 946.5                         | 0.0                |

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

FEDERAL EMERGENCY MANAGEMENT AGENCY

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

**HAMPSHIRE CREEK** 

| FLOODING SOURCE                    |   |                                | FLOODWA                             | ·Υ                                       | 1-PERCENT-ANNUAL-CHANCE FLOOD<br>WATER SURFACE ELEVATION (FEET NAV |   |   |                                 |
|------------------------------------|---|--------------------------------|-------------------------------------|--|--|---|---|---------------------------------|
| CROSS SECTION                      | DISTANCE  | WIDTH<br>(FEET)                | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY   | WITHOUT<br>FLOODWAY                       | WITH<br>FLOODWAY                          | INCREASE<br>(FEET)              |
| Hampshire Creek (continued)        |   |                                |                                     |  |  |   |   |                                 |
| AK<br>AL<br>AM<br>AN<br>AO         | 32,421 <sup>1</sup><br>32,593 <sup>1</sup><br>32,842 <sup>1</sup><br>33,360 <sup>1</sup><br>33,624 <sup>1</sup> | 189<br>176<br>267<br>316<br>99 | 148<br>152<br>213<br>245<br>81      | 1.7<br>1.6<br>1.1<br>1.0<br>1.7          | 950.3<br>951.4<br>953.3<br>958.4<br>960.3                          | 950.3<br>951.4<br>953.3<br>958.4<br>960.3 | 950.3<br>951.4<br>953.3<br>958.4<br>960.3 | 0.0<br>0.0<br>0.0<br>0.0<br>0.0 |
| Hampshire Creek South              |   |                                |                                     |  |  |   |   |                                 |
| Α                                  | $0.064^{2}$   | 16                             | 74                                  | 3.7                                      | 873.1  | 872.6 <sup>3</sup>                        | 872.6                                     | 0.0                             |
| В                                  | 0.138 <sup>2</sup>  | 44                             | 110                                 | 2.5                                      | 875.8  | 875.8                                     | 875.8                                     | 0.0                             |
| С                                  | 0.319 <sup>2</sup>  | 94                             | 299                                 | 1.7                                      | 877.8  | 877.8                                     | 877.9                                     | 0.1                             |
| D                                  | 0.478 <sup>2</sup>  | 75                             | 255                                 | 1.9                                      | 880.7  | 880.7                                     | 880.7                                     | 0.0                             |
| E<br>F                             | 0.6122  | 115                            | 302                                 | 1.5                                      | 881.0  | 881.0                                     | 881.0                                     | 0.0                             |
|                                    | 0.915 <sup>2</sup><br>1.135 <sup>2</sup>  | 46                             | 170                                 | 2.7                                      | 890.5  | 890.5                                     | 890.6                                     | 0.1                             |
| G<br>H                             | 1.135<br>1.232 <sup>2</sup>   | 25<br>60                       | 88<br>250                           | 4.7<br>1.7                               | 894.2<br>897.6   | 894.2<br>897.6                            | 894.3<br>897.7                            | 0.1<br>0.1                      |
| П<br>  П                           | 1.232<br>1.310 <sup>2</sup>   | 51                             | 230                                 | 1.7                                      | 899.0  | 899.0                                     | 899.1                                     | 0.1                             |
| J                                  | 1.605 <sup>2</sup>  | 48                             | 133                                 | 2.2                                      | 903.7  | 903.7                                     | 903.8                                     | 0.1                             |
| Hampshire Creek<br>Tributary No. 1 | *   | *                              | *                                   | *  | *  | *   | *   | *                               |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Burlington Creek

KANE COUNTY, IL AND INCORPORATED AREAS

#### **FLOODWAY DATA**

HAMPSHIRE CREEK -HAMPSHIRE CREEK SOUTH -HAMPSHIRE CREEK TRIBUTARY NO. 1

<sup>&</sup>lt;sup>2</sup>Miles above confluence with Hampshire Creek

<sup>&</sup>lt;sup>3</sup>Elevations computed without consideration of backwater effects from Hampshire Creek

<sup>\*</sup>Data not available

| FLOODING SOURCE                    |                    | FLOODWAY        |                                     |  | 1-PERCENT-ANNUAL-CHANCE FLOOD<br>WATER SURFACE ELEVATION (FEET NAVD) |                     |                  |                    |
|------------------------------------|--------------------|-----------------|-------------------------------------|--|--|---------------------|------------------|--------------------|
| CROSS SECTION                      | DISTANCE           | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY   | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY | INCREASE<br>(FEET) |
| Hampshire Creek<br>Tributary No. 2 | *                  | *               | *                                   | *  | *  | *                   | *                | *                  |
| Hampshire Creek<br>Tributary No. 3 | *                  | *               | *                                   | *  | *  | *                   | *                | *                  |
| Hampshire Creek<br>Tributary No. 4 | *                  | *               | *                                   | *  | *  | *                   | *                | *                  |
| Indian Creek<br>A                  | 65 <sup>1</sup>    | 105             | 249                                 | 8.7                                      | 635.4  | 631.5               | 631.5            | 0.0                |
| B                                  | 90 <sup>1</sup>    | 185             | 361                                 | 6.1                                      | 635.4  | 632.4               | 632.5            | 0.0                |
| Č                                  | 330 <sup>1</sup>   | 127             | 259                                 | 10.1                                     | 637.6  | 637.6               | 637.6            | 0.0                |
| D                                  | 425 <sup>1</sup>   | 133             | 435                                 | 7.5                                      | 639.7  | 639.7               | 639.7            | 0.0                |
|                                    | 620 <sup>1</sup>   | 261             | 1,253                               | 2.7                                      | 641.5  | 641.5               | 641.5            | 0.0                |
| E<br>F                             | 715 <sup>1</sup>   | 110             | 398                                 | 5.6                                      | 643.8  | 643.8               | 643.8            | 0.0                |
| G                                  | 1,000 <sup>1</sup> | 83              | 247                                 | 13.7                                     | 645.1  | 645.1               | 645.2            | 0.1                |
| Н                                  | 1,050 <sup>1</sup> | 230             | 847                                 | 3.8                                      | 649.8  | 649.8               | 649.5            | 0.0                |
| I                                  | 1,280 <sup>1</sup> | 62              | 512                                 | 6.0                                      | 649.9  | 649.9               | 650.0            | 0.1                |
| J                                  | 1,680 <sup>1</sup> | 94              | 744                                 | 4.1                                      | 651.3  | 651.3               | 651.4            | 0.1                |
| K                                  | 2,080              | 40              | 280                                 | 10.9                                     | 653.5  | 653.5               | 653.4            | 0.0                |
| L                                  | 2,180 <sup>1</sup> | 52              | 357                                 | 8.6                                      | 657.9  | 657.9               | 657.9            | 0.0                |
| M                                  | 3,780              | 95              | 419                                 | 7.3                                      | 668.1  | 668.1               | 668.2            | 0.1                |
| N                                  | 4,655 <sup>1</sup> | 154             | 762                                 | 4.0                                      | 672.6  | 672.6               | 672.7            | 0.1                |
| 0                                  | 7,585              | 49              | 365                                 | 5.0                                      | 685.9  | 685.9               | 686.0            | 0.1                |
| Р                                  | 7,720 <sup>1</sup> | 40              | 306                                 | 5.9                                      | 686.4  | 686.4               | 686.5            | 0.1                |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Fox River

# KANE COUNTY, IL AND INCORPORATED AREAS

## **FLOODWAY DATA**

HAMPSHIRE CREEK TRIBUTARY NO. 2 - HAMPSHIRE CREEK TRIBUTARY NO. 3 - HAMPSHIRE CREEK TRIBUTARY NO. 4 - INDIAN CREEK

<sup>\*</sup> Data not available

| FLOODING SO   | URCE                |                 | FLOODWA                             | Y  | 1-PERCENT-ANNUAL-CHANCE FLOOD<br>WATER SURFACE ELEVATION (FEET NAV |                     |                  |                    |
|---------------|---------------------|-----------------|-------------------------------------|--|--|---------------------|------------------|--------------------|
| CROSS SECTION | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY   | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY | INCREASE<br>(FEET) |
| Indian Creek  |                     |                 |                                     |  |  |                     |                  |                    |
| (Continued)   | 1                   |                 |                                     |  |  |                     |                  |                    |
| Q             | 9,130 <sup>1</sup>  | 133             | 514                                 | 3.6                                      | 690.4  | 690.4               | 690.5            | 0.1                |
| R             | 9,295               | 73              | 454                                 | 4.1                                      | 691.5  | 691.5               | 691.6            | 0.1                |
| S             | 9,485               | 76              | 375                                 | 5.0                                      | 691.9  | 691.9               | 692.0            | 0.1                |
| T             | 9,765 <sup>1</sup>  | 272             | 1,397                               | 1.3                                      | 695.6  | 695.6               | 695.7            | 0.1                |
| U             | 10,365 <sup>1</sup> | 283             | 1,275                               | 1.5                                      | 695.8  | 695.8               | 695.9            | 0.1                |
| V             | 10,415 <sup>1</sup> | 317             | 1,247                               | 1.5                                      | 695.8  | 695.8               | 695.9            | 0.1                |
| W             | 11,745 <sup>1</sup> | 144             | 531                                 | 3.3                                      | 697.3  | 697.3               | 697.4            | 0.1                |
| X             | 11,885 <sup>1</sup> | 104             | 473                                 | 3.7                                      | 699.1  | 699.1               | 699.2            | 0.1                |
| Υ             | 13,095 <sup>1</sup> | 178             | 329                                 | 4.2                                      | 700.6  | 700.6               | 700.6            | 0.1                |
| Z             | 13,270 <sup>1</sup> | 141             | 750                                 | 1.9                                      | 702.6  | 702.6               | 702.6            | 0.0                |
| AA            | 14,110 <sup>1</sup> | 70              | 269                                 | 4.2                                      | 702.9  | 702.9               | 702.9            | 0.0                |
| AB            | 14,375 <sup>1</sup> | 43              | 260                                 | 4.3                                      | 704.6  | 704.6               | 704.7            | 0.1                |
| AC            | 14,880 <sup>1</sup> | 209             | 633                                 | 1.8                                      | 705.5  | 705.5               | 705.6            | 0.1                |
| AD            | 15,230 <sup>1</sup> | 55 <sup>2</sup> | 273                                 | 4.0                                      | 705.8  | 705.8               | 705.9            | 0.1                |
| AE            | 15,355 <sup>1</sup> | 129             | 564                                 | 2.0                                      | 706.8  | 706.8               | 706.9            | 0.1                |
| AF            | 16,185 <sup>1</sup> | 111             | 434                                 | 2.5                                      | 707.4  | 707.4               | 707.5            | 0.1                |
| AG            | 16,450 <sup>1</sup> | 106             | 492                                 | 2.2                                      | 707.6  | 707.6               | 707.7            | 0.1                |
| AH            | 16,606 <sup>1</sup> | 152             | 293                                 | 2.9                                      | 707.6  | 707.6 <sup>3</sup>  | 707.7            | 0.1                |
| Al            | 16,922 <sup>1</sup> | 45              | 212                                 | 4.0                                      | 708.3  | 708.3 <sup>3</sup>  | 708.3            | 0.0                |
| AJ            | 17,466 <sup>1</sup> | 42              | 229                                 | 3.6                                      | 709.1  | 709.1 <sup>3</sup>  | 709.2            | 0.1                |
| AK            | 17,709 <sup>1</sup> | 43              | 275                                 | 2.9                                      | 709.6  | 709.6 <sup>3</sup>  | 709.6            | 0.0                |
| AL            | 19,980 <sup>1</sup> | 265             | 285                                 | 3.0                                      | 712.8  | 712.8               | 712.8            | 0.0                |
| AM            | 20,175 <sup>1</sup> | 314             | 313                                 | 2.7                                      | 713.4  | 713.4               | 713.4            | 0.0                |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Fox River

KANE COUNTY, IL **AND INCORPORATED AREAS**  **FLOODWAY DATA** 

**INDIAN CREEK** 

<sup>&</sup>lt;sup>2</sup>Floodway width reflects constricted section, see FIRM panel for regulatory floodway

<sup>3</sup>The mapped floodplain elevation and flood profile at these cross sections are based on the critical duration storm and is at a higher elevation

| FLOODING SOL         | JRCE                |                 | FLOODWA                             | Y  | 1-PERCENT-ANNUAL-CHANCE FLOOD<br>WATER SURFACE ELEVATION (FEET NAVD) |                     |                  |                    |
|----------------------|---------------------|-----------------|-------------------------------------|--|--|---------------------|------------------|--------------------|
| CROSS SECTION        | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY   | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY | INCREASE<br>(FEET) |
| Indian Creek         |                     |                 |                                     |  |  |                     |                  |                    |
| (Continued)          |                     |                 |                                     |  |  |                     |                  |                    |
| AN                   | 20,803 <sup>1</sup> | 750             | 197                                 | 3.0                                      | 714.7  | 714.7               | 714.7            | 0.1                |
| AO                   | 22,055 <sup>1</sup> | 142             | 155                                 | 4.0                                      | 716.3  | 716.3               | 716.3            | 0.1                |
| AP                   | 27,878 <sup>1</sup> | 293             | 467                                 | 1.4                                      | 727.1  | 727.1               | 727.2            | 0.1                |
| AQ                   | 29,584 <sup>1</sup> | 228             | 319                                 | 2.0                                      | 730.6  | 730.6               | 730.6            | 0.1                |
| AR                   | 29,821 <sup>1</sup> | 192             | 570                                 | 1.1                                      | 731.8  | 731.8               | 731.8            | 0.1                |
| AS                   | 32,805 <sup>1</sup> | 135             | 114                                 | 3.9                                      | 733.4  | 733.4               | 733.5            | 0.1                |
| Indian Creek Prairie |                     |                 |                                     |  |  |                     |                  |                    |
| Path Run             | *                   | *               | *                                   | *  | *  | *                   | *                | *                  |
| Jelkes Creek         |                     |                 |                                     |  |  |                     |                  |                    |
| A                    | 364 <sup>2</sup>    | 499             | 1,153                               | 1.0                                      | 716.2  | 713.3 <sup>3</sup>  | 713.4            | 0.1                |
| В                    | 2,978 <sup>2</sup>  | 429             | 744                                 | 1.6                                      | 720.3  | 720.3               | 720.3            | 0.0                |
| С                    | 6,278 <sup>2</sup>  | 466             | 755                                 | 1.6                                      | 724.9  | 724.9               | 724.9            | 0.0                |
| D                    | $7,867^2$           | 119             | 745                                 | 1.4                                      | 732.9  | 732.9               | 733.0            | 0.1                |
| E<br>F               | 12,244 <sup>2</sup> | 317             | 883                                 | 0.9                                      | 739.6  | 739.6               | 739.6            | 0.0                |
| F                    | 13,453 <sup>2</sup> | 601             | 1,102                               | 0.7                                      | 740.2  | 740.2               | 740.3            | 0.1                |
| G                    | 16,099 <sup>2</sup> | 212             | 330                                 | 2.5                                      | 747.7  | 747.7               | 747.8            | 0.1                |
| Н                    | 17,070 <sup>2</sup> | 50              | 203                                 | 3.5                                      | 751.6  | 751.6               | 751.6            | 0.0                |
| I                    | 17,327 <sup>2</sup> | 296             | 916                                 | 0.8                                      | 753.8  | 753.8               | 753.8            | 0.0                |
| J                    | 17,614 <sup>2</sup> | 167             | 604                                 | 1.2                                      | 755.5  | 755.5               | 755.5            | 0.0                |
| K                    | 20,249 <sup>2</sup> | 41              | 103                                 | 6.0                                      | 768.6  | 768.6               | 768.6            | 0.0                |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Fox River

# KANE COUNTY, IL AND INCORPORATED AREAS

### **FLOODWAY DATA**

INDIAN CREEK - INDIAN CREEK PRAIRIE PATH RUN - JELKES CREEK

<sup>&</sup>lt;sup>2</sup>Feet above mouth at Fox River

<sup>&</sup>lt;sup>3</sup>Elevation computed without consideration of backwater effects from Fox River

<sup>\*</sup>Data not available

| FLOODING SO   | URCE                |                 | FLOODWA                             | Y  |            |                     | CHANCE FLOC<br>ATION (FEET N. |                    |
|---------------|---------------------|-----------------|-------------------------------------|--|------------|---------------------|-------------------------------|--------------------|
| CROSS SECTION | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY              | INCREASE<br>(FEET) |
| Jericho Lake  |                     |                 |                                     |  |            |                     |                               |                    |
| Diversion     | - 1                 |                 |                                     |  |            |                     |                               |                    |
| A             | 01                  | *               | *                                   | *  | 656.5      | 656.5               | *                             | *                  |
| В             | 4801                | *               | *                                   | *  | 661.0      | 661.0               | *                             | *                  |
| С             | 5,090 <sup>1</sup>  | *               | *                                   | *  | 661.9      | 661.9               | *                             | *                  |
| D             | 6,120 <sup>1</sup>  | *               | *                                   | *  | 663.3      | 663.3               | *                             | *                  |
| Lake Run      |                     |                 |                                     |  |            |                     |                               |                    |
| Α             | 1,436 <sup>2</sup>  | 455             | 2,242                               | 0.6                                      | 677.4      | 677.4               | 677.5                         | 0.1                |
| В             | 2,555 <sup>2</sup>  | 432             | 5,031                               | 0.4                                      | 677.4      | 677.4               | 677.5                         | 0.1                |
| С             | 2,806 <sup>2</sup>  | 305             | 4,003                               | 0.5                                      | 678.1      | 678.1               | 678.2                         | 0.1                |
| D             | 9,862 <sup>2</sup>  | 62              | 349                                 | 2.2                                      | 683.4      | 683.4               | 683.4                         | 0.0                |
| E             | 10,419 <sup>2</sup> | 155             | 2,221                               | 0.7                                      | 683.8      | 683.8               | 683.8                         | 0.0                |
| F             | 10,981 <sup>2</sup> | 117             | 3,228                               | 0.7                                      | 684.2      | 684.2               | 684.2                         | 0.0                |
| G             | 14,498 <sup>2</sup> | 800             | 1,739                               | 1.2                                      | 686.7      | 686.7               | 686.7                         | 0.0                |
| Н             | 18,290 <sup>2</sup> | 480             | 1,365                               | 2.0                                      | 687.3      | 687.3               | 687.2                         | 0.0                |
| 1             | 18,702 <sup>2</sup> | 547             | 972                                 | 3.4                                      | 688.7      | 688.7               | 688.7                         | 0.0                |
| J             | 24,879 <sup>2</sup> | 47              | 259                                 | 2.9                                      | 692.7      | 692.7               | 692.7                         | 0.0                |
|               |                     |                 |                                     |  |            |                     |                               |                    |
|               |                     |                 |                                     |  |            |                     |                               |                    |

<sup>&</sup>lt;sup>1</sup>Feet above downstream limit of detailed study <sup>2</sup>Feet above confluence with Blackberry Creek

**TABLE** 

FEDERAL EMERGENCY MANAGEMENT AGENCY

KANE COUNTY, IL AND INCORPORATED AREAS **FLOODWAY DATA** 

**JERICHO LAKE DIVERSION - LAKE RUN** 

<sup>\*</sup>Data not available

| FLOODING SOI         | URCE                |                 | FLOODWA                             | Y  | FLOODWAY         FLOODWAY         FLOODWAY         (FEET           693.8         693.8         693.8         0.0           705.6         705.6         705.6         0.0           727.3         727.3         727.3         0.0           732.7         732.7         0.0 |       |       |                    |  |
|----------------------|---------------------|-----------------|-------------------------------------|--|--|-------|-------|--------------------|--|
| CROSS SECTION        | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY   |       |       | INCREASE<br>(FEET) |  |
| Lake Run (Continued) |                     |                 |                                     |  |  |       |       |                    |  |
| K                    | 25,132 <sup>1</sup> | 63              | 182                                 | 4.0                                      | 693.8  | 693.8 | 693.8 | 0.0                |  |
| L                    | 30,436 <sup>1</sup> | 207             | 368                                 | 3.7                                      | 705.6  | 705.6 | 705.6 | 0.0                |  |
| M                    | 33,206 <sup>1</sup> | 23              | 108                                 | 4.2                                      | 727.3  | 727.3 | 727.3 | 0.0                |  |
| N                    | 33,530 <sup>1</sup> | 72              | 616                                 | 1.0                                      | 732.7  | 732.7 | 732.7 | 0.0                |  |
| 0                    | 33,811 <sup>1</sup> | 169             | 779                                 | 1.0                                      | 732.7  | 732.7 | 732.7 | 0.0                |  |
| Р                    | 34,193 <sup>1</sup> | 168             | 1,608                               | 0.6                                      | 734.3  | 734.3 | 734.3 | 0.0                |  |
| Q                    | 38,533 <sup>1</sup> | 218             | 233                                 | 2.0                                      | 748.3  | 748.3 | 748.3 | 0.0                |  |
| R                    | 39,548 <sup>1</sup> | 156             | 105                                 | 1.6                                      | 752.5  | 752.5 | 752.5 | 0.0                |  |
| S                    | 39,968 <sup>1</sup> | 230             | 180                                 | 1.1                                      | 757.8  | 757.8 | 757.8 | 0.0                |  |
| Т                    | 41,945 <sup>1</sup> | 140             | 82                                  | 1.1                                      | 769.6  | 769.6 | 769.6 | 0.0                |  |
| U                    | 42,766 <sup>1</sup> | 75              | 61                                  | 1.5                                      | 779.8  | 779.8 | 779.8 | 0.0                |  |
| Lake Run             |                     |                 |                                     |  |  |       |       |                    |  |
| Main Street Branch   |                     |                 |                                     |  |  |       |       |                    |  |
| Α                    | 488 <sup>2</sup>    | 217             | 567                                 | 0.7                                      | 706.2  | 706.2 | 706.2 | 0.0                |  |
| В                    | $2,410^{2}$         | 47              | 113                                 | 2.1                                      | 707.9  | 707.9 | 707.9 | 0.0                |  |
| С                    | $3,340^2$           | 315             | 357                                 | 1.1                                      | 708.1  | 708.1 | 708.1 | 0.0                |  |
| D                    | $4,460^2$           | 154             | 802                                 | 0.2                                      | 708.1  | 708.1 | 708.1 | 0.0                |  |
| Е                    | 6,065 <sup>2</sup>  | 100             | 112                                 | 1.1                                      | 708.4  | 708.4 | 708.5 | 0.0                |  |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Blackberry Creek

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

LAKE RUN - LAKE RUN MAIN STREET BRANCH

<sup>&</sup>lt;sup>2</sup>Feet above confluence with Lake Run

| FLOODING SOU                                   | RCE                |                 | FLOODWA                             | ·Υ                                       |            |                     | CHANCE FLOC<br>ATION (FEET N |                    |
|--|--------------------|-----------------|-------------------------------------|--|------------|---------------------|------------------------------|--------------------|
| CROSS SECTION                                  | DISTANCE           | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY             | INCREASE<br>(FEET) |
| Lake Run                                       |                    |                 |                                     |  |            |                     |                              |                    |
| Nelson Lake Branch                             |                    |                 |                                     |  |            |                     |                              |                    |
| Α  | 200 <sup>1</sup>   | 626             | 956                                 | 0.2                                      | 694.8      | 694.8               | 694.8                        | 0.0                |
| В  | 400 <sup>1</sup>   | 480             | 915                                 | 0.2                                      | 694.8      | 694.8               | 694.8                        | 0.0                |
| С  | 1,220 <sup>1</sup> | 228             | 240                                 | 0.3                                      | 694.8      | 694.8               | 694.8                        | 0.0                |
| D  | 5,130 <sup>1</sup> | 1391            | 2,004                               | 0.0                                      | 694.8      | 694.8               | 694.8                        | 0.0                |
| E  | 7,850 <sup>1</sup> | 776             | 894                                 | 0.1                                      | 694.8      | 694.8               | 694.8                        | 0.0                |
| Lake Run North of I-88<br>Overflow             | *                  | *               | *                                   | *  | *          | *                   | *                            | *                  |
| Lake Run North of I-88<br>Overflow East Branch | *                  | *               | *                                   | *  | *          | *                   | *                            | *                  |
| Lake Run South of I-88 Diversion               |                    |                 |                                     |  |            |                     |                              |                    |
| Α  | 891 <sup>1</sup>   | 330             | 1,175                               | 0.5                                      | 679.6      | 679.6               | 679.6                        | 0.0                |
| В  | 5,451 <sup>1</sup> | 381             | 625                                 | 0.8                                      | 681.4      | 681.4               | 681.3                        | 0.0                |
| Lord's Park Tributary                          |                    |                 |                                     |  |            |                     |                              |                    |
| $A^4$  | 500 <sup>2</sup>   | 161             | 348                                 | 3.2                                      | 717.7      | 717.7 <sup>3</sup>  | 717.8                        | 0.1                |
| $B^4$  | 2,185 <sup>2</sup> | 22              | 109                                 | 4.1                                      | 723.7      | 721.1 <sup>3</sup>  | 721.2                        | 0.1                |
| $C^4$  | 3,375 <sup>2</sup> | 495             | 953                                 | 0.7                                      | 725        | 721.5 <sup>3</sup>  | 721.6                        | 0.1                |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Lake Run

## KANE COUNTY, IL AND INCORPORATED AREAS

### **FLOODWAY DATA**

LAKE RUN NELSON LAKE BRANCH - LAKE RUN NORTH OF I-88 OVERFLOW - LAKE RUN NORTH OF I-88 OVERFLOW EAST BRANCH - LAKE RUN SOUTH OF I-88 DIVERSION - LORD'S PARK TRIBUTARY

<sup>&</sup>lt;sup>2</sup>Feet above mouth at Poplar Creek

<sup>&</sup>lt;sup>3</sup>Elevation computed without consideration of backwater effects from Poplar Creek

<sup>&</sup>lt;sup>4</sup>Portions of this floodway data are duplicated within the countywide FIS for Cook County, Illinois and Unincorporated Areas

<sup>\*</sup>Data not available

| FLOODING SOI         | URCE                |                 | FLOODWA                             | Y  |            |                     | CHANCE FLOC<br>ATION (FEET N. |                    |
|----------------------|---------------------|-----------------|-------------------------------------|--|------------|---------------------|-------------------------------|--------------------|
| CROSS SECTION        | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY              | INCREASE<br>(FEET) |
| Mahoney Creek        |                     |                 |                                     |  |            |                     |                               |                    |
| Α                    | 1,378 <sup>1</sup>  | 34              | 137                                 | 3.0                                      | 674.4      | 674.4               | 674.5                         | 0.1                |
| В                    | 3,265 <sup>1</sup>  | 201             | 393                                 | 1.0                                      | 691.0      | 691.0               | 691.1                         | 0.1                |
| С                    | 3,560 <sup>1</sup>  | 46              | 126                                 | 3.2                                      | 692.2      | 692.2               | 692.2                         | 0.0                |
| D                    | 4,759 <sup>1</sup>  | 52              | 163                                 | 2.5                                      | 699.1      | 699.1               | 699.1                         | 0.0                |
| E                    | 5,862 <sup>1</sup>  | 32              | 68                                  | 6.0                                      | 701.8      | 701.8               | 701.8                         | 0.0                |
| F                    | 7,140 <sup>1</sup>  | 56              | 163                                 | 1.7                                      | 707.1      | 707.1               | 707.1                         | 0.0                |
| G                    | 8,354 <sup>1</sup>  | 75              | 39                                  | 4.0                                      | 714.8      | 714.8               | 714.8                         | 0.0                |
| Н                    | 10,746 <sup>1</sup> | 28              | 40                                  | 3.4                                      | 729.5      | 729.5               | 729.5                         | 0.0                |
| I                    | 11,733 <sup>1</sup> | 85              | 83                                  | 1.5                                      | 736.3      | 736.3               | 736.3                         | 0.0                |
| Malgren Drain        |                     |                 |                                     |  |            |                     |                               |                    |
| Α                    | 3,181 <sup>2</sup>  | *               | *                                   | *  | 709.0      | 709.0               | *                             | *                  |
| В                    | 9,250 <sup>2</sup>  | *               | *                                   | *  | 731.3      | 731.3               | *                             | *                  |
| McKee Road Tributary |                     |                 |                                     |  |            |                     |                               |                    |
| Α                    | $3,949^3$           | 66              | 139                                 | 4.4                                      | 701.4      | 701.4               | 701.4                         | 0.0                |
| В                    | $6,563^3$           | 257             | 736                                 | 0.8                                      | 705.2      | 705.2               | 705.2                         | 0.0                |
| С                    | $9,203^3$           | 396             | 1,446                               | 0.4                                      | 705.9      | 705.9               | 705.9                         | 0.0                |
| D                    | 10,592 <sup>3</sup> | 565             | 3,067                               | 0.1                                      | 706.2      | 706.2               | 706.2                         | 0.0                |
| E                    | 11,535 <sup>3</sup> | 218             | 439                                 | 1.2                                      | 708.0      | 708.0               | 708.0                         | 0.0                |
| F                    | 14,078 <sup>3</sup> | 500             | 227                                 | 2.3                                      | 708.4      | 708.4               | 708.5                         | 0.1                |
| G                    | 14,997 <sup>3</sup> | 560             | 455                                 | 1.2                                      | 710.1      | 710.1               | 710.1                         | 0.0                |
| Н                    | 15,360 <sup>3</sup> | 30              | 105                                 | 3.2                                      | 712.5      | 712.5               | 712.6                         | 0.1                |
| Mill Creek           |                     |                 |                                     |  |            |                     |                               |                    |
| A                    | 850 <sup>4</sup>    | 41              | 402                                 | 9.0                                      | 657.8      | 657.8               | 657.8                         | 0.0                |
| В                    | 1,917 <sup>4</sup>  | 109             | 836                                 | 4.3                                      | 661.6      | 661.6               | 661.7                         | 0.1                |
| С                    | 2,893 <sup>4</sup>  | 75              | 417                                 | 8.6                                      | 663.3      | 663.3               | 663.4                         | 0.1                |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Fox River

# KANE COUNTY, IL AND INCORPORATED AREAS

### <sup>3</sup>Feet above mouth at Mill Creek

\*Date not available

Date not

### **FLOODWAY DATA**

MAHONEY CREEK - MALGREN DRAIN - MCKEE ROAD TRIBUTARY - MILL CREEK

<sup>&</sup>lt;sup>2</sup>Feet above confluence with East Branch Big Rock Creek

<sup>&</sup>lt;sup>4</sup>Feet above mouth

| FLOODING SC   | DURCE      |                 | FLOODWA                             | Y  | 1-PERCENT-ANNUAL-CHANCE FLOOD<br>WATER SURFACE ELEVATION (FEET NAVD) |                     |                  |                    |
|---------------|------------|-----------------|-------------------------------------|--|--|---------------------|------------------|--------------------|
|               |            |                 | OFOTION                             | NATANI                                   | WATERS   | ONFACE ELEV         | ATION (FEET N    | AVD)               |
| CROSS SECTION | DISTANCE 1 | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY   | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY | INCREASE<br>(FEET) |
| Mill Creek    |            |                 | ,                                   | ,  |  |                     |                  |                    |
| (continued)   |            |                 |                                     |  |  |                     |                  |                    |
| Ď             | 3,939      | 130             | 921                                 | 3.9                                      | 671.0  | 671.0               | 671.1            | 0.1                |
| Е             | 13,042     | 343             | 1,199                               | 2.8                                      | 691.7  | 691.7               | 691.7            | 0.0                |
| F             | 14,768     | 251             | 1,458                               | 2.3                                      | 695.9  | 695.9               | 695.9            | 0.0                |
| G             | 15,703     | 513             | 2,442                               | 1.4                                      | 697.4  | 697.4               | 697.5            | 0.1                |
| Н             | 16,706     | 672             | 3,279                               | 1.0                                      | 698.4  | 698.4               | 698.5            | 0.1                |
| 1             | 19,816     | 566             | 3,208                               | 1.0                                      | 698.9  | 698.9               | 699.0            | 0.1                |
| J             | 20,951     | 249             | 1,638                               | 1.6                                      | 700.7  | 700.7               | 700.8            | 0.1                |
| K             | 23,454     | 1,443           | 3,860                               | 0.7                                      | 701.6  | 701.6               | 701.7            | 0.1                |
| L             | 26,009     | 326             | 753                                 | 3.4                                      | 703.7  | 703.7               | 703.8            | 0.1                |
| M             | 28,875     | 93              | 468                                 | 3.6                                      | 709.5  | 709.5               | 709.5            | 0.0                |
| N             | 35,185     | 263             | 786                                 | 2.2                                      | 719.2  | 719.2               | 719.3            | 0.1                |
| 0             | 38,970     | 60              | 256                                 | 6.6                                      | 726.2  | 726.2               | 726.2            | 0.0                |
| Р             | 43,525     | 265             | 897                                 | 1.9                                      | 738.7  | 738.7               | 738.8            | 0.1                |
| Q             | 45,745     | 407             | 709                                 | 2.4                                      | 742.3  | 742.3               | 742.4            | 0.1                |
| R             | 50,175     | 242             | 861                                 | 2.0                                      | 756.3  | 756.3               | 756.4            | 0.1                |
| S             | 53,615     | 404             | 750                                 | 2.3                                      | 763.4  | 763.4               | 763.5            | 0.1                |
| Т             | 55,050     | 320             | 553                                 | 2.3                                      | 768.1  | 768.1               | 768.2            | 0.1                |
| U             | 55,557     | 344             | 938                                 | 1.2                                      | 771.3  | 771.3               | 771.4            | 0.1                |
| V             | 56,447     | 140             | 337                                 | 3.4                                      | 771.9  | 771.9               | 772.0            | 0.1                |
| W             | 57,247     | 129             | 310                                 | 3.7                                      | 775.2  | 775.2               | 775.3            | 0.1                |
| X             | 57,937     | 182             | 826                                 | 1.4                                      | 779.4  | 779.4               | 779.5            | 0.1                |
| Y             | 58,457     | 186             | 466                                 | 2.5                                      | 657.8  | 779.7               | 779.8            | 0.1                |
| Z             | 59,357     | 250             | 607                                 | 1.8                                      | 661.6  | 783.8               | 783.9            | 0.1                |
| AA            | 60,310     | 400             | 1,218                               | 0.9                                      | 784.8  | 784.8               | 784.9            | 0.1                |
| AB            | 60,890     | 334             | 890                                 | 1.2                                      | 785.3  | 785.3               | 784.9            | 0.1                |
| AC            | 61,600     | 495             | 1,250                               | 0.9                                      | 785.9  | 785.9               | 786.0            | 0.1                |

<sup>1</sup>Feet above mouth

FEDERAL EMERGENCY MANAGEMENT AGENCY

KANE COUNTY, IL AND INCORPORATED AREAS **FLOODWAY DATA** 

**MILL CREEK** 

| FLOODING SO                   | URCE                |                  | FLOODWA                             | Y  | 786.5         786.5         786.6         0.1           787.6         787.6         787.6         0.0           788.7         788.7         788.7         0.0           789.9         789.9         790.0         0.1           792.6         792.6         792.6         0.0           799.0         799.0         799.0         0.0           801.5         801.5         801.5         0.0           806.3         806.3         806.3         0.0           813.1         813.1         813.2         0.1           815.5         815.5         815.5         0.0           816.5         816.5         816.5         0.0           823.1         823.1         0.0         0.0 |                    |       |                    |
|-------------------------------|---------------------|------------------|-------------------------------------|--|---|--------------------|-------|--------------------|
| CROSS SECTION                 | DISTANCE            | WIDTH<br>(FEET)  | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY  |                    |       | INCREASE<br>(FEET) |
| Mill Creek (Continued)        |                     |                  |                                     |  |   |                    |       |                    |
| ÀD                            | 62,430 <sup>1</sup> | 820              | 1,140                               | 0.9                                      | 786.5   | 786.5              | 786.6 | 0.1                |
| AE                            | 63,460 <sup>1</sup> | 490              | 812                                 | 1.2                                      | 787.6   | 787.6              | 787.6 | 0.0                |
| AF                            | 63,980 <sup>1</sup> | 540              | 648                                 | 1.5                                      | 788.7   | 788.7              | 788.7 | 0.0                |
| AG                            | 64,550 <sup>1</sup> | 570              | 813                                 | 1.2                                      | 789.9   | 789.9              | 790.0 | 0.1                |
| AH                            | 65,700 <sup>1</sup> | 652 <sup>2</sup> | 809                                 | 1.2                                      | 792.6   | 792.6              | 792.6 | 0.0                |
| Al                            | 66,500 <sup>1</sup> | 289              | 381                                 | 2.2                                      | 796.2   | 796.2              | 796.2 | 0.0                |
| AJ                            | 66,630 <sup>1</sup> | 298              | 602                                 | 1.4                                      |   |                    |       | 0.0                |
| AK                            | 67,200 <sup>1</sup> | 387              | 976                                 | 0.9                                      |   |                    |       | 0.0                |
| AL                            | 67,500 <sup>1</sup> | 202              | 423                                 | 2.0                                      |   |                    |       | 0.0                |
| AM                            | 69,090 <sup>1</sup> | 335              | 427                                 | 2.0                                      |   |                    |       | 0.0                |
| AN                            | 70,620 <sup>1</sup> | 136              | 307                                 | 2.8                                      |   |                    |       | 0.1                |
| AO                            | 71,090 <sup>1</sup> | 264              | 443                                 | 1.9                                      |   |                    |       | 0.0                |
| AP                            | 71,260 <sup>1</sup> | 185              | 284                                 | 3.0                                      |   |                    |       | 0.0                |
| AQ                            | 71,500 <sup>1</sup> | 248              | 451                                 | 1.9                                      |   |                    |       | 0.0                |
| AR                            | 72,000 <sup>1</sup> | 494              | 2,056                               | 0.3                                      |   |                    |       | 0.0                |
| AS                            | 72,190 <sup>1</sup> | 626              | 2,556                               | 0.3                                      | 823.1   | 823.1              | 823.1 | 0.0                |
| Mill Creek Tributary<br>No. 2 |                     |                  |                                     |  |   |                    |       |                    |
| Α                             | 1,440 <sup>1</sup>  | 310              | 859                                 | 0.3                                      | 792.9   | 792.9              | 792.9 | 0.0                |
| В                             | 2,500 <sup>1</sup>  | 690              | 2,243                               | 0.1                                      | 792.9   | 792.9              | 792.9 | 0.0                |
| North Arm Brewster<br>Creek   | 1                   |                  |                                     |  |   | 3                  |       |                    |
| Α                             | 137 <sup>1</sup>    | 20               | 45                                  | 2.9                                      | 696.9   | 694.3 <sup>3</sup> | 694.4 | 0.1                |

<sup>&</sup>lt;sup>1</sup>Feet above mouth

## KANE COUNTY, IL AND INCORPORATED AREAS

### **FLOODWAY DATA**

MILL CREEK - MILL CREEK TRIBUTARY NO. 2 - NORTH ARM BREWSTER CREEK

<sup>&</sup>lt;sup>2</sup>Combined Mill Creek/Mill Creek Tributary No. 2 floodway

<sup>&</sup>lt;sup>3</sup>Elevation computed without consideration of backwater effects from Fox River

| FLOODING SO   | URCE                |                 | FLOODWA                             | Y  | 1-PERCENT-ANNUAL-CHANCE FLOOD<br>WATER SURFACE ELEVATION (FEET NAVD) |                     |                  |                    |
|---------------|---------------------|-----------------|-------------------------------------|--|--|---------------------|------------------|--------------------|
| CROSS SECTION | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY   | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY | INCREASE<br>(FEET) |
| Norton Creek  |                     |                 | -                                   | -  |  |                     |                  |                    |
| A             | 1,774 <sup>1</sup>  | 334             | 1,411                               | 0.7                                      | 695.7  | 695.7               | 695.8            | 0.1                |
| В             | 2,503 <sup>1</sup>  | 124             | 602                                 | 1.6                                      | 698.5  | 698.5               | 698.6            | 0.1                |
| С             | 6,621 <sup>1</sup>  | 74              | 268                                 | 3.7                                      | 715.3  | 715.3               | 715.4            | 0.1                |
| D             | 15,196 <sup>1</sup> | 172             | 562                                 | 1.5                                      | 736.4  | 736.4               | 736.5            | 0.1                |
| E             | 17,134 <sup>1</sup> | 194             | 1,202                               | 0.6                                      | 741.0  | 741.0               | 741.1            | 0.1                |
| Norton Creek  |                     |                 |                                     |  |  |                     |                  |                    |
| Tributary     | *                   | *               | *                                   | *  | *  | *                   | *                | *                  |
| Otter Creek   |                     |                 |                                     |  |  |                     |                  |                    |
| Α             | 140 <sup>2</sup>    | 1,308           | 2,340                               | 1.1                                      | 755.6  | 755.6               | 755.6            | 0.0                |
| В             | 980 <sup>2</sup>    | 1,868           | 2,436                               | 1.0                                      | 756.7  | 756.7               | 756.8            | 0.1                |
| С             | 1,100 <sup>2</sup>  | 1,919           | 3,069                               | 0.8                                      | 756.8  | 756.8               | 756.9            | 0.1                |
| D             | 1,370 <sup>2</sup>  | 1,976           | 3,624                               | 0.7                                      | 756.9  | 756.9               | 757.0            | 0.1                |
| E<br>F        | 1,740 <sup>2</sup>  | 1,618           | 2,411                               | 1.0                                      | 757.1  | 757.1               | 757.2            | 0.1                |
| F             | 1,940 <sup>2</sup>  | 1,767           | 4,338                               | 0.6                                      | 757.2  | 757.2               | 757.3            | 0.1                |
| G             | 2,300 <sup>2</sup>  | 1,504           | 3,613                               | 0.7                                      | 757.3  | 757.3               | 757.4            | 0.1                |
| Н             | 2,540 <sup>2</sup>  | 1,450           | 2,516                               | 1.0                                      | 757.5  | 757.5               | 757.6            | 0.1                |
| 1             | 3,175 <sup>2</sup>  | 781             | 1,273                               | 2.0                                      | 758.7  | 758.7               | 758.7            | 0.0                |
| J             | 3,675 <sup>2</sup>  | 631             | 1,920                               | 1.3                                      | 759.9  | 759.9               | 760.0            | 0.1                |
| K             | 4,205 <sup>2</sup>  | 787             | 849                                 | 2.6                                      | 760.2  | 760.2               | 760.3            | 0.1                |
| L             | 4,645 <sup>2</sup>  | 445             | 1,209                               | 1.9                                      | 762.5  | 762.5               | 762.5            | 0.0                |
| M             | 5,080 <sup>2</sup>  | 697             | 1,174                               | 1.9                                      | 763.0  | 763.0               | 763.1            | 0.1                |
| N             | 5,780 <sup>2</sup>  | 686             | 1,554                               | 1.4                                      | 763.8  | 763.8               | 763.9            | 0.1                |
| 0             | 6,050 <sup>2</sup>  | 668             | 1,638                               | 1.4                                      | 764.0  | 764.0               | 764.1            | 0.1                |

<sup>&</sup>lt;sup>1</sup>Feet above mouth

## KANE COUNTY, IL AND INCORPORATED AREAS

### **FLOODWAY DATA**

NORTON CREEK - NORTON CREEK TRIBUTARY - OTTER CREEK

<sup>&</sup>lt;sup>2</sup>Feet above confluence with Ferson Creek

<sup>\*</sup>Data not available

| FLOODING SO   | DURCE                 |                 | FLOODWA                             | Y  |            |                     | -CHANCE FLOC<br>ATION (FEET N |                    |
|---------------|-----------------------|-----------------|-------------------------------------|--|------------|---------------------|-------------------------------|--------------------|
| CROSS SECTION | DISTANCE <sup>1</sup> | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY              | INCREASE<br>(FEET) |
| Otter Creek   |                       |                 | -                                   | -  |            |                     |                               |                    |
| (continued)   |                       |                 |                                     |  |            |                     |                               |                    |
| Р             | 6,490                 | 767             | 1,803                               | 1.2                                      | 764.2      | 764.2               | 764.3                         | 0.1                |
| Q             | 6,895                 | 815             | 2,120                               | 1.1                                      | 764.6      | 764.6               | 764.7                         | 0.1                |
| R             | 7,105                 | 394             | 1,026                               | 2.2                                      | 764.7      | 764.7               | 764.8                         | 0.1                |
| S             | 7,305                 | 543             | 1,115                               | 2.0                                      | 765.1      | 765.1               | 765.2                         | 0.1                |
| Т             | 7,505                 | 491             | 1,251                               | 1.8                                      | 765.4      | 765.4               | 765.5                         | 0.1                |
| U             | 7,905                 | 573             | 1,503                               | 1.5                                      | 765.8      | 765.8               | 765.9                         | 0.1                |
| V             | 8,115                 | 464             | 1,333                               | 1.7                                      | 766.1      | 766.1               | 766.2                         | 0.1                |
| W             | 8,315                 | 447             | 1,386                               | 1.6                                      | 766.3      | 766.3               | 766.4                         | 0.1                |
| X             | 8,515                 | 522             | 1,686                               | 1.3                                      | 766.4      | 766.4               | 766.5                         | 0.1                |
| Υ             | 8,715                 | 556             | 1,890                               | 1.2                                      | 766.5      | 766.5               | 766.6                         | 0.1                |
| Z             | 8,935                 | 576             | 1,699                               | 1.3                                      | 766.6      | 766.6               | 766.7                         | 0.1                |
| AA            | 9,135                 | 509             | 1,490                               | 1.5                                      | 766.7      | 766.7               | 766.8                         | 0.1                |
| AB            | 9,335                 | 457             | 1,159                               | 1.9                                      | 766.9      | 766.9               | 767.0                         | 0.1                |
| AC            | 9,735                 | 629             | 1,555                               | 1.4                                      | 767.5      | 767.5               | 767.6                         | 0.1                |
| AD            | 10,336                | 1,024           | 2,504                               | 0.9                                      | 768.3      | 768.3               | 768.4                         | 0.1                |
| AE            | 10,536                | 532             | 1,581                               | 1.4                                      | 768.4      | 768.4               | 768.5                         | 0.1                |
| AF            | 10,936                | 452             | 1,445                               | 1.5                                      | 768.9      | 768.9               | 769.0                         | 0.1                |
| AG            | 11,508                | 558             | 2,401                               | 0.9                                      | 770.9      | 770.9               | 771.0                         | 0.1                |
| AH            | 11,708                | 478             | 1,954                               | 1.1                                      | 771.0      | 771.0               | 771.1                         | 0.1                |
| Al            | 11,908                | 498             | 1,784                               | 1.2                                      | 771.1      | 771.1               | 771.2                         | 0.1                |
| AJ            | 12,108                | 495             | 2,025                               | 1.1                                      | 771.2      | 771.2               | 771.3                         | 0.1                |
| AK            | 12,308                | 650             | 2,834                               | 0.8                                      | 771.2      | 771.2               | 771.3                         | 0.1                |
| AL            | 12,508                | 607             | 1,905                               | 1.1                                      | 771.3      | 771.3               | 771.4                         | 0.1                |
| AM            | 12,708                | 563             | 1,642                               | 1.3                                      | 771.4      | 771.4               | 771.5                         | 0.1                |
| AN            | 12,908                | 510             | 1,644                               | 1.3                                      | 771.5      | 771.5               | 771.6                         | 0.1                |
| AO            | 13,108                | 578             | 1,852                               | 1.2                                      | 771.8      | 771.8               | 771.9                         | 0.1                |

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

FEDERAL EMERGENCY MANAGEMENT AGENCY

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

**OTTER CREEK** 

| FLOODING SO      | URCE                |                 | FLOODWA                             | Y  |            |                     | -CHANCE FLOO<br>ATION (FEET N |                    |
|------------------|---------------------|-----------------|-------------------------------------|--|------------|---------------------|-------------------------------|--------------------|
| CROSS SECTION    | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY              | INCREASE<br>(FEET) |
| Otter Creek      |                     |                 |                                     |  |            |                     |                               |                    |
| (continued)      |                     |                 |                                     |  |            |                     |                               |                    |
| AP               | 14,038 <sup>1</sup> | 1,210           | 4,621                               | 0.3                                      | 773.1      | 773.1               | 773.2                         | 0.1                |
| AQ               | 14,808 <sup>1</sup> | 947             | 1,447                               | 0.9                                      | 773.2      | 773.2               | 773.3                         | 0.1                |
| AR               | 15,358 <sup>1</sup> | 342             | 487                                 | 2.6                                      | 773.9      | 773.9               | 773.9                         | 0.0                |
| AS               | 15,778 <sup>1</sup> | 251             | 539                                 | 2.3                                      | 775.3      | 775.3               | 775.3                         | 0.0                |
| AT               | 16,502 <sup>1</sup> | 41              | 287                                 | 4.0                                      | 777.0      | 777.0               | 777.1                         | 0.1                |
| AU               | 16,682 <sup>1</sup> | 554             | 1,403                               | 0.8                                      | 777.4      | 777.4               | 777.5                         | 0.1                |
| AV               | 17,229 <sup>1</sup> | 40              | 343                                 | 3.4                                      | 781.0      | 781.0               | 781.0                         | 0.0                |
| AW               | 17,469 <sup>1</sup> | 465             | 2,033                               | 0.6                                      | 781.3      | 781.3               | 781.3                         | 0.0                |
| AX               | 20,334 <sup>1</sup> | 1,406           | 6,059                               | 0.1                                      | 781.3      | 781.3               | 781.3                         | 0.0                |
| AY               | 20,914 <sup>1</sup> | 436             | 1,439                               | 0.6                                      | 781.3      | 781.3               | 781.3                         | 0.0                |
| AZ               | 21,550 <sup>1</sup> | 374             | 1,248                               | 0.5                                      | 783.8      | 783.8               | 783.8                         | 0.0                |
| BA               | 21,720 <sup>1</sup> | 354             | 1,042                               | 0.6                                      | 783.8      | 783.8               | 783.8                         | 0.0                |
| BB               | 22,670 <sup>1</sup> | 368             | 604                                 | 1.1                                      | 784.1      | 784.1               | 784.1                         | 0.0                |
| BC               | 22,750 <sup>1</sup> | 425             | 527                                 | 1.3                                      | 784.2      | 784.2               | 784.2                         | 0.0                |
| BD               | 24,150 <sup>1</sup> | 332             | 378                                 | 1.8                                      | 787.5      | 787.5               | 787.5                         | 0.0                |
| BE               | 24,695 <sup>1</sup> | 162             | 288                                 | 2.3                                      | 789.2      | 789.2               | 789.2                         | 0.0                |
| BF               | 24,815 <sup>1</sup> | 161             | 251                                 | 2.7                                      | 789.5      | 789.5               | 789.5                         | 0.0                |
| BG               | 25,415 <sup>1</sup> | 218             | 300                                 | 1.5                                      | 791.0      | 791.0               | 791.0                         | 0.0                |
| ВН               | 26,815 <sup>1</sup> | 59              | 141                                 | 3.1                                      | 793.1      | 793.1               | 793.1                         | 0.0                |
| ВІ               | 26,950 <sup>1</sup> | 66              | 138                                 | 3.2                                      | 793.3      | 793.3               | 793.3                         | 0.0                |
| BJ               | 27,920 <sup>1</sup> | 41              | 123                                 | 3.6                                      | 795.0      | 795.0               | 795.0                         | 0.0                |
| Otter Creek West |                     |                 |                                     |  |            |                     |                               |                    |
| Α                | 800 <sup>2</sup>    | 105             | 150                                 | 3.0                                      | 760.7      | 760.7               | 760.8                         | 0.1                |
| В                | 1,422 <sup>2</sup>  | 167             | 325                                 | 1.4                                      | 765.9      | 765.9               | 766.0                         | 0.1                |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Ferson Creek

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

**OTTER CREEK - OTTER CREEK WEST** 

<sup>&</sup>lt;sup>2</sup>Feet above confluence with Otter Creek

| FLOODING SO                  | OURCE                 |                 | FLOODWA                             | Y  |            |                     | -CHANCE FLOC<br>ATION (FEET N |                    |
|------------------------------|-----------------------|-----------------|-------------------------------------|--|------------|---------------------|-------------------------------|--------------------|
| CROSS SECTION                | DISTANCE <sup>1</sup> | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY              | INCREASE<br>(FEET) |
| Otter Creek West (continued) |                       |                 |                                     |  |            |                     |                               |                    |
| C                            | 1,867                 | 15              | 87                                  | 5.2                                      | 767.1      | 767.1               | 767.1                         | 0.0                |
| D                            | 2,237                 | 38              | 128                                 | 3.5                                      | 768.5      | 768.5               | 768.6                         | 0.1                |
| E                            | 2,967                 | 91              | 114                                 | 4.0                                      | 775.6      | 775.6               | 775.6                         | 0.0                |
| F                            | 3,074                 | 162             | 299                                 | 1.5                                      | 776.5      | 776.5               | 776.6                         | 0.1                |
| G                            | 3,296                 | 121             | 331                                 | 1.4                                      | 778.6      | 778.6               | 778.6                         | 0.0                |
| Н                            | 3,456                 | 178             | 211                                 | 2.1                                      | 778.7      | 778.7               | 778.7                         | 0.0                |
| I                            | 3,712                 | 16              | 60                                  | 7.5                                      | 779.3      | 779.3               | 779.4                         | 0.1                |
| J                            | 4,642                 | 136             | 403                                 | 1.1                                      | 786.4      | 786.4               | 786.4                         | 0.0                |
| K                            | 4,692                 | 105             | 226                                 | 2.0                                      | 786.4      | 786.4               | 786.4                         | 0.0                |
| L                            | 4,872                 | 116             | 191                                 | 2.4                                      | 786.8      | 786.8               | 786.8                         | 0.0                |
| M                            | 5,156                 | 119             | 193                                 | 2.3                                      | 788.2      | 788.2               | 788.2                         | 0.0                |
| N                            | 5,316                 | 120             | 173                                 | 2.6                                      | 788.8      | 788.8               | 788.8                         | 0.0                |
| 0                            | 6,726                 | 116             | 207                                 | 2.2                                      | 798.0      | 798.0               | 798.0                         | 0.0                |
| Р                            | 7,076                 | 96              | 182                                 | 2.5                                      | 799.3      | 799.3               | 799.3                         | 0.0                |
| Q                            | 8,176                 | 179             | 431                                 | 1.0                                      | 805.2      | 805.2               | 805.2                         | 0.0                |
| R                            | 8,281                 | 128             | 264                                 | 1.7                                      | 805.2      | 805.2               | 805.2                         | 0.0                |
| S                            | 8,447                 | 89              | 182                                 | 2.5                                      | 805.6      | 805.6               | 805.6                         | 0.0                |
| T                            | 8,647                 | 103             | 183                                 | 2.1                                      | 805.9      | 805.9               | 805.9                         | 0.0                |
| U                            | 9,177                 | 55              | 96                                  | 4.1                                      | 807.0      | 807.0               | 807.0                         | 0.0                |
| V                            | 9,567                 | 86              | 81                                  | 4.8                                      | 809.5      | 809.5               | 809.5                         | 0.0                |
| W                            | 10,237                | 248             | 327                                 | 1.2                                      | 812.8      | 812.8               | 812.8                         | 0.0                |
| X                            | 11,067                | 266             | 245                                 | 1.6                                      | 815.2      | 815.2               | 815.3                         | 0.1                |
| Υ                            | 11,657                | 85              | 122                                 | 3.2                                      | 819.4      | 819.4               | 819.4                         | 0.0                |
| Z                            | 12,237                | 765             | 3,275                               | 0.1                                      | 837.5      | 837.5               | 837.6                         | 0.1                |
| AA                           | 13,012                | 290             | 627                                 | 0.5                                      | 837.5      | 837.5               | 837.6                         | 0.1                |

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

FEDERAL EMERGENCY MANAGEMENT AGENCY

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

**OTTER CREEK WEST** 

| FLOODING SOL                          | IRCE                |                 | FLOODWA                             | ΛY                                       |            |                     | 837.6 837.7 0.1<br>839.6 839.6 0.0<br>893.4 893.5 0.1 |                    |  |  |
|---------------------------------------|---------------------|-----------------|-------------------------------------|--|------------|---------------------|---|--------------------|--|--|
| CROSS SECTION                         | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY |   | INCREASE<br>(FEET) |  |  |
| Otter Creek West<br>(continued)<br>AB | 13,477 <sup>1</sup> | 293             | 644                                 | 0.5                                      | 837.6      | 837.6               | 837.7   | 0.1                |  |  |
| AC                                    | 13,897 <sup>1</sup> | 98              | 82                                  | 3.6                                      | 839.6      |                     |   |                    |  |  |
| Pingree Creek                         |                     |                 |                                     |  |            |                     |   |                    |  |  |
| A                                     | 450 <sup>2</sup>    | 1,375           | 2,851                               | 0.5                                      | 893.4      | 893.4               | 893.5   | 0.1                |  |  |
| В                                     | 2,915 <sup>2</sup>  | 393             | 557                                 | 2.6                                      | 896.0      | 896.0               | 896.0   | 0.0                |  |  |
| С                                     | $3,744^2$           | 74              | 420                                 | 3.4                                      | 897.7      | 897.7               | 897.7   | 0.0                |  |  |
| D                                     | 5,221 <sup>2</sup>  | 524             | 1,375                               | 1.0                                      | 898.2      | 898.2               | 898.2   | 0.0                |  |  |
| E                                     | 6,558 <sup>2</sup>  | 190             | 589                                 | 2.2                                      | 899.4      | 899.4               | 899.5   | 0.1                |  |  |
| F F                                   | 7,031 <sup>2</sup>  | 70              | 461                                 | 2.9                                      | 899.9      | 899.9               | 900.0   | 0.1                |  |  |
| G                                     | $7,575^2$           | 58              | 401                                 | 3.3                                      | 900.7      | 900.7               | 900.8   | 0.1                |  |  |
| Н                                     | 9,666 <sup>2</sup>  | 64              | 344                                 | 3.8                                      | 900.9      | 900.9               | 901.0   | 0.1                |  |  |
| I                                     | 10,837 <sup>2</sup> | 410             | 944                                 | 1.4                                      | 901.6      | 901.6               | 901.7   | 0.1                |  |  |
| J                                     | 11,539 <sup>2</sup> | 828             | 4,197                               | 0.3                                      | 901.7      | 901.7               | 901.8   | 0.1                |  |  |
| K                                     | 13,702 <sup>2</sup> | 390             | 557                                 | 2.3                                      | 902.7      | 902.7               | 902.8   | 0.1                |  |  |
| L                                     | 14,179 <sup>2</sup> | 42              | 262                                 | 5.0                                      | 904.3      | 904.3               | 904.4   | 0.1                |  |  |
| Poplar Creek                          |                     |                 |                                     |  |            |                     |   |                    |  |  |
| А                                     | 1,305 <sup>3</sup>  | 159             | 437                                 | 4.6                                      | 706.2      | 706.2               | 706.2   | 0.0                |  |  |
| В                                     | $2,075^3$           | 463             | 1,546                               | 1.3                                      | 708.1      | 708.1               | 708.2   | 0.1                |  |  |
| С                                     | $2,350^3$           | 308             | 1,182                               | 1.7                                      | 708.1      | 708.1               | 708.2   | 0.1                |  |  |
| D                                     | $3,980^3$           | 680             | 1,300                               | 1.5                                      | 710.2      | 710.2               | 710.3   | 0.1                |  |  |
| Е                                     | 4,460 <sup>3</sup>  | 763             | 1,773                               | 1.1                                      | 710.2      | 710.2               | 710.3   | 0.1                |  |  |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Otter Creek

# KANE COUNTY, IL AND INCORPORATED AREAS

### **FLOODWAY DATA**

OTTER CREEK WEST - PINGREE CREEK - POPLAR CREEK

<sup>&</sup>lt;sup>2</sup>Feet above confluence with Tyler Creek

<sup>&</sup>lt;sup>3</sup>Feet above confluence with Fox River

| FLOODING SO      | URCE                |                 | FLOODWA                             | Y  |            |                     | -CHANCE FLOO<br>ATION (FEET N |                    |
|------------------|---------------------|-----------------|-------------------------------------|--|------------|---------------------|-------------------------------|--------------------|
| CROSS SECTION    | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY              | INCREASE<br>(FEET) |
| Prestbury Branch |                     |                 |                                     |  |            |                     |                               |                    |
| Α                | 552 <sup>1</sup>    | 220             | 672                                 | 0.2                                      | 678.2      | 678.2               | 678.3                         | 0.1                |
| В                | 686 <sup>1</sup>    | 186             | 1,093                               | 0.2                                      | 678.2      | 678.2               | 678.3                         | 0.1                |
| С                | 2,903 <sup>1</sup>  | 222             | 101                                 | 1.3                                      | 686.2      | 686.2               | 686.2                         | 0.0                |
| D                | 3,228 <sup>1</sup>  | 219             | 570                                 | 0.4                                      | 687.6      | 687.6               | 687.6                         | 0.0                |
| E                | 8,526 <sup>1</sup>  | 647             | 3,294                               | 0.0                                      | 687.7      | 687.7               | 687.7                         | 0.0                |
| Route 38 Branch  |                     |                 |                                     |  |            |                     |                               |                    |
| Α                | 1,086 <sup>1</sup>  | 49              | 62                                  | 1.6                                      | 833.9      | 833.9               | 833.9                         | 0.0                |
| В                | 1,809 <sup>1</sup>  | 257             | 164                                 | 1.1                                      | 835.3      | 835.3               | 835.3                         | 0.0                |
| С                | 2,158 <sup>1</sup>  | 369             | 2,539                               | 0.1                                      | 845.4      | 845.4               | 845.4                         | 0.0                |
| Sandy Creek      |                     |                 |                                     |  |            |                     |                               |                    |
| Α                | 709 <sup>2</sup>    | 177             | 390                                 | 1.8                                      | 796.2      | 795.9 <sup>3</sup>  | 796.0                         | 0.1                |
| В                | 1,450 <sup>2</sup>  | 162             | 388                                 | 1.9                                      | 798.4      | 798.4               | 798.4                         | 0.0                |
| С                | 5,240 <sup>2</sup>  | 1,020           | 1,811                               | 0.4                                      | 808.6      | 808.6               | 808.7                         | 0.1                |
| D                | 7,250 <sup>2</sup>  | 168             | 420                                 | 1.7                                      | 817.9      | 817.9               | 818.0                         | 0.1                |
| E                | 7,646 <sup>2</sup>  | 1,340           | 3,885                               | 0.1                                      | 825.5      | 825.5               | 825.5                         | 0.0                |
| F                | 8,977 <sup>2</sup>  | 103             | 172                                 | 3.2                                      | 829.3      | 829.3               | 829.3                         | 0.0                |
| G                | 9,278 <sup>2</sup>  | 132             | 233                                 | 2.4                                      | 831.6      | 831.6               | 831.6                         | 0.0                |
| H                | 10,033 <sup>2</sup> | 137             | 176                                 | 2.6                                      | 837.2      | 837.2               | 837.2                         | 0.0                |
| <u> </u>         | 10,487 <sup>2</sup> | 120             | 132                                 | 3.5                                      | 840.3      | 840.3               | 840.3                         | 0.0                |
| J                | 10,944 <sup>2</sup> | 185             | 148                                 | 3.1                                      | 844.1      | 844.1               | 844.1                         | 0.0                |
| K                | 11,075 <sup>2</sup> | 134             | 213                                 | 2.2                                      | 845.1      | 845.1               | 845.1                         | 0.0                |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Blackberry Creek

# KANE COUNTY, IL AND INCORPORATED AREAS

### **FLOODWAY DATA**

PRESTBURY BRANCH - ROUTE 38 BRANCH - SANDY CREEK

<sup>&</sup>lt;sup>2</sup>Feet above mouth

<sup>&</sup>lt;sup>3</sup>Elevation computed without consideration of backwater effects from Tyler Creek

| FLOODING SO     | URCE                                       |                 | FLOODWA                             | Y  |                |                     | -CHANCE FLOC<br>ATION (FEET N |                    |
|-----------------|--|-----------------|-------------------------------------|--|----------------|---------------------|-------------------------------|--------------------|
| CROSS SECTION   | DISTANCE                                   | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY     | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY              | INCREASE<br>(FEET) |
| Sandy Creek     |  |                 |                                     |  |                |                     |                               |                    |
| (continued)     | 1  |                 |                                     |  |                |                     |                               |                    |
| L               | 11,517 <sup>1</sup>                        | 37              | 142                                 | 3.3                                      | 847.4          | 847.4               | 847.4                         | 0.0                |
| M               | 13,176 <sup>1</sup>                        | 431             | 378                                 | 1.0                                      | 848.3          | 848.3               | 848.3                         | 0.0                |
| N               | 13,783 <sup>1</sup>                        | 386             | 209                                 | 1.8                                      | 852.6          | 852.6               | 852.5                         | 0.1                |
| 0               | 14,598 <sup>1</sup>                        | 70              | 124                                 | 3.1                                      | 859.7          | 859.7               | 859.7                         | 0.0                |
| P               | 15,107 <sup>1</sup>                        | 132             | 116                                 | 1.5                                      | 862.8          | 862.8               | 862.8                         | 0.0                |
| Q               | 15,616 <sup>1</sup>                        | 122             | 136                                 | 1.3                                      | 865.7          | 865.7               | 865.7                         | 0.0                |
| R               | 16,185 <sup>1</sup><br>16,936 <sup>1</sup> | 21              | 47                                  | 3.8                                      | 872.6          | 872.6               | 872.6                         | 0.0                |
| S<br>T          | 16,936<br>17,490 <sup>1</sup>              | 41<br>82        | 52<br>102                           | 3.4<br>1.8                               | 882.6<br>886.5 | 882.6<br>886.5      | 882.6<br>886.5                | 0.0<br>0.0         |
| Ü               | 17,490<br>17,918 <sup>1</sup>              | 109             | 112                                 | 0.6                                      | 888.4          | 888.4               | 888.4                         | 0.0                |
| Seavey Road Run |  |                 |                                     |  |                |                     |                               |                    |
| A               | 1,812 <sup>2</sup>                         | 307             | 818                                 | 2.1                                      | 708.3          | 708.3               | 708.4                         | 0.1                |
| В               | 2,198 <sup>2</sup>                         | 340             | 1,613                               | 1.0                                      | 709.1          | 709.1               | 709.1                         | 0.1                |
| C               | 4,470 <sup>2</sup>                         | 198             | 441                                 | 3.1                                      | 710.8          | 710.8               | 710.8                         | 0.0                |
| D               | 4,972 <sup>2</sup>                         | 484             | 1,987                               | 0.7                                      | 712.2          | 712.2               | 712.2                         | 0.0                |
| E               | 5,580 <sup>2</sup>                         | 390             | 1,239                               | 1.4                                      | 712.3          | 712.3               | 712.4                         | 0.0                |
| F               | 7,070 <sup>2</sup>                         | 129             | 452                                 | 2.7                                      | 713.5          | 713.5               | 713.4                         | 0.0                |
| G               | 7,384 <sup>2</sup>                         | 250             | 746                                 | 2.4                                      | 715.5          | 715.1               | 715.0                         | 0.0                |
| Н               | 11,386 <sup>2</sup>                        | 365             | 868                                 | 2.2                                      | 717.8          | 717.8               | 717.7                         | 0.0                |
| '               | 13,407 <sup>2</sup>                        | 174             | 486                                 | 2.6                                      | 717.0          | 720.0               | 720.0                         | 0.0                |
|                 | 13,407<br>13,683 <sup>2</sup>              | 240             | 893                                 | 1.6                                      | 720.0<br>721.2 | 720.0<br>721.2      | 720.0<br>721.2                | 0.0                |
| K               | 19,650 <sup>2</sup>                        | 155             | 203                                 | 3.0                                      | 721.2<br>724.1 | 721.2<br>724.1      | 721.2<br>724.1                | 0.1                |
| ^\              | 19,000                                     | 155             | 203                                 | 3.0                                      | 124.1          | 124.1               | 124.1                         | 0.0                |

### KANE COUNTY, IL AND INCORPORATED AREAS

### **FLOODWAY DATA**

**SANDY CREEK - SEAVEY ROAD RUN** 

**TABLE**  $\frac{1}{3}$ 

<sup>&</sup>lt;sup>1</sup>Feet above mouth <sup>2</sup>Feet above confluence with Blackberry Creek

| FLOODING SO                           | URCE                |                 | FLOODWA                             | Y  |            |                     | -CHANCE FLOO<br>ATION (FEET N |                    |
|---------------------------------------|---------------------|-----------------|-------------------------------------|--|------------|---------------------|-------------------------------|--------------------|
| CROSS SECTION                         | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY              | INCREASE<br>(FEET) |
| Seavey Road Run<br>(continued)        | 00.0451             | 40              | 0.4                                 | 0.0                                      | 704.7      | 704.7               | 704.7                         | 0.0                |
| L                                     | 20,615 <sup>1</sup> | 48              | 34                                  | 3.2                                      | 731.7      | 731.7               | 731.7                         | 0.0                |
| M                                     | 22,201              | 20              | 26                                  | 3.1                                      | 750.5      | 750.5               | 750.5                         | 0.0                |
| N                                     | 23,095 <sup>1</sup> | 102             | 56                                  | 1.9                                      | 762.5      | 762.5               | 762.5                         | 0.0                |
| 0                                     | 23,474 <sup>1</sup> | 180             | 318                                 | 0.3                                      | 766.4      | 766.4               | 766.4                         | 0.0                |
| Р                                     | 24,228 <sup>1</sup> | 143             | 68                                  | 0.8                                      | 768.6      | 768.6               | 768.6                         | 0.0                |
| Seavey Road Run<br>Green Road Branch  |                     |                 |                                     |  |            |                     |                               |                    |
| A                                     | 1,365 <sup>2</sup>  | 367             | 488                                 | 0.7                                      | 727.5      | 727.5               | 727.5                         | 0.0                |
| В                                     | 2,875 <sup>2</sup>  | 161             | 167                                 | 0.8                                      | 731.9      | 731.9               | 731.9                         | 0.0                |
| Seavey Road Run<br>Main Street Branch |                     |                 |                                     |  |            |                     |                               |                    |
| A                                     | 2,785 <sup>2</sup>  | 453             | 584                                 | 1.7                                      | 727.4      | 727.4               | 727.4                         | 0.0                |
| В                                     | 4,817 <sup>2</sup>  | 106             | 108                                 | 2.9                                      | 739.5      | 739.5               | 739.5                         | 0.0                |
| С                                     | 5,816 <sup>2</sup>  | 86              | 119                                 | 3.1                                      | 746.9      | 746.9               | 746.9                         | 0.0                |
| D                                     | 6,124 <sup>2</sup>  | 345             | 545                                 | 1.0                                      | 750.4      | 750.4               | 750.4                         | 0.0                |
|                                       |                     |                 |                                     |  |            |                     |                               |                    |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Blackberry Creek <sup>2</sup>Feet above confluence with Seavey Road Run

**TABLE** 

FEDERAL EMERGENCY MANAGEMENT AGENCY

### KANE COUNTY, IL AND INCORPORATED AREAS

### **FLOODWAY DATA**

**SEAVEY ROAD RUN - SEAVEY ROAD RUN GREEN ROAD BRANCH - SEAVEY ROAD RUN MAIN STREET BRANCH** 

| FLOODING SOL    | JRCE                |                 | FLOODWA                             | Y  |            |                     | -CHANCE FLOO<br>ATION (FEET N |                    |
|-----------------|---------------------|-----------------|-------------------------------------|--|------------|---------------------|-------------------------------|--------------------|
| CROSS SECTION   | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY              | INCREASE<br>(FEET) |
| Selmarten Creek |                     |                 |                                     |  |            |                     |                               |                    |
| Α               | 143 <sup>1</sup>    | 695             | 380                                 | 1.0                                      | 714.7      | 714.7               | 714.8                         | 0.1                |
| В               | 364 <sup>1</sup>    | 546             | 360                                 | 1.1                                      | 714.7      | 714.7               | 714.8                         | 0.1                |
| С               | 876 <sup>1</sup>    | 905             | 401                                 | 1.0                                      | 714.7      | 714.7               | 714.8                         | 0.1                |
| D               | 1,135 <sup>1</sup>  | 1,162           | 261                                 | 1.2                                      | 714.7      | 714.7               | 714.8                         | 0.1                |
| E<br>F          | 3,384 <sup>1</sup>  | 208             | 143                                 | 2.0                                      | 715.5      | 715.5               | 715.4                         | 0.0                |
|                 | 3,791 <sup>1</sup>  | 107             | 39                                  | 6.6                                      | 716.6      | 716.6               | 716.5                         | 0.0                |
| G               | 4,726 <sup>1</sup>  | 542             | 326                                 | 0.7                                      | 717.4      | 717.4               | 717.4                         | 0.0                |
| Sleepy Creek    |                     |                 |                                     |  |            |                     |                               |                    |
| Α               | 1,491 <sup>2</sup>  | 36              | 120                                 | 4.3                                      | 719.3      | 719.3               | 719.4                         | 0.1                |
| В               | 3,028 <sup>2</sup>  | 36              | 161                                 | 3.2                                      | 727.5      | 727.5               | 727.5                         | 0.0                |
| С               | 3,718 <sup>2</sup>  | 56              | 193                                 | 2.7                                      | 727.8      | 727.8               | 727.9                         | 0.1                |
| D               | 5,472 <sup>2</sup>  | 380             | 367                                 | 1.4                                      | 731.2      | 731.2               | 731.3                         | 0.1                |
| E               | 5,874 <sup>2</sup>  | 224             | 454                                 | 1.1                                      | 734.0      | 734.0               | 734.0                         | 0.0                |
| F               | 7,247 <sup>2</sup>  | 218             | 185                                 | 2.7                                      | 736.9      | 736.9               | 736.9                         | 0.0                |
| G               | 8,794 <sup>2</sup>  | 138             | 357                                 | 1.4                                      | 742.2      | 742.2               | 742.2                         | 0.0                |
| Н               | 9,787 <sup>2</sup>  | 231             | 308                                 | 1.6                                      | 743.2      | 743.2               | 743.2                         | 0.0                |
| I               | 10,611 <sup>2</sup> | 88              | 87                                  | 5.6                                      | 749.2      | 749.2               | 749.2                         | 0.0                |
| J               | 12,585 <sup>2</sup> | 36              | 74                                  | 4.7                                      | 767.8      | 767.8               | 767.8                         | 0.0                |
|                 |                     |                 |                                     |  |            |                     |                               |                    |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Indian Creek

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

**SELMARTEN CREEK - SLEEPY CREEK** 

<sup>&</sup>lt;sup>2</sup>Feet above confluence with Fox River

| FLOODING SO                     | URCE               |                 | FLOODWA                             | Υ  |            |                     | CHANCE FLOC<br>ATION (FEET N |                    |
|---------------------------------|--------------------|-----------------|-------------------------------------|--|------------|---------------------|------------------------------|--------------------|
| CROSS SECTION                   | DISTANCE           | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY             | INCREASE<br>(FEET) |
| South Tributary                 |                    |                 |                                     |  |            |                     |                              |                    |
| Α                               | 180 <sup>1</sup>   | 697             | 2,425                               | 3.6                                      | 689.0      | 689.0               | 689.0                        | 0.0                |
| В                               | 480 <sup>1</sup>   | 267             | 486                                 | 2.6                                      | 689.2      | 689.2               | 689.2                        | 0.0                |
| С                               | 9,751 <sup>1</sup> | 73              | 257                                 | 3.4                                      | 690.9      | 690.9               | 690.9                        | 0.0                |
| D                               | 1,350 <sup>1</sup> | 51              | 192                                 | 3.4                                      | 691.5      | 691.5               | 691.6                        | 0.1                |
| E                               | 1,450 <sup>1</sup> | 87              | 270                                 | 2.4                                      | 692.1      | 692.1               | 692.2                        | 0.1                |
| F                               | 1,688 <sup>1</sup> | 102             | 337                                 | 2.0                                      | 692.6      | 692.6               | 692.7                        | 0.1                |
| G                               | 1,836 <sup>1</sup> | 137             | 419                                 | 1.6                                      | 693.0      | 693.0               | 693.1                        | 0.1                |
| Н                               | 2,045 <sup>1</sup> | 175             | 382                                 | 1.7                                      | 693.2      | 693.2               | 693.3                        | 0.1                |
| 1                               | 2,220 <sup>1</sup> | 370             | 466                                 | 2.1                                      | 693.7      | 693.7               | 693.8                        | 0.1                |
| J                               | 2,675 <sup>1</sup> | 275             | 435                                 | 1.0                                      | 694.2      | 694.2               | 694.3                        | 0.1                |
| K                               | 2,985 <sup>1</sup> | 60              | 284                                 | 1.5                                      | 694.8      | 694.8               | 694.8                        | 0.0                |
| L                               | 5,030 <sup>1</sup> | 169             | 514                                 | 0.8                                      | 698.4      | 698.4               | 698.5                        | 0.1                |
| M                               | 5,575 <sup>1</sup> | 28              | 91                                  | 4.2                                      | 698.7      | 698.7               | 698.8                        | 0.1                |
| State Street Creek              |                    |                 |                                     |  |            |                     |                              |                    |
| Α                               | 985 <sup>2</sup>   | *               | *                                   | *  | 695.0      | 695.0               | *                            | *                  |
| В                               | 3,450 <sup>2</sup> | *               | *                                   | *  | 721.8      | 721.8               | *                            | *                  |
| State Street Creek<br>Tributary | 1 500 <sup>3</sup> | *               | *                                   | *  | 740.6      | 740.6               | *                            | *                  |
| A                               | 1,500 <sup>3</sup> |                 | <del>.</del>                        | <u></u>                                  | 740.6      | 740.6               |                              |                    |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Indian Creek

**TABLE** 

FEDERAL EMERGENCY MANAGEMENT AGENCY

# KANE COUNTY, IL AND INCORPORATED AREAS

### **FLOODWAY DATA**

SOUTH TRIBUTARY - STATE STREET CREEK - STATE STREET CREEK TRIBUTARY

<sup>&</sup>lt;sup>2</sup>Feet above confluence with Fox River

<sup>&</sup>lt;sup>3</sup>Feet above confluence with State Street Creek

<sup>\*</sup>Data not available

| FLOODING SO   | DURCE                 |                 | FLOODWA                             | Y  | REGULATORY         FLOODWAY         FLOODWAY         (FE           773.4         773.4         773.5         0           773.9         773.9         773.9         0           775.8         775.8         775.9         0           778.6         778.6         778.6         0           781.7         781.8         0           783.0         783.0         783.0         0           787.5         787.6         0         0           790.0         790.0         790.0         0           792.2         792.2         792.2         0           793.9         793.9         793.9         793.9           795.4         795.4         795.5         0           800.7         800.7         800.7         0           802.6         802.6         802.7         0           804.6         804.6         804.7         0           807.6         807.6         807.6         0 |       |       |                    |
|---------------|-----------------------|-----------------|-------------------------------------|--|--|-------|-------|--------------------|
| CROSS SECTION | DISTANCE <sup>1</sup> | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY   |       |       | INCREASE<br>(FEET) |
| Stony Creek   |                       |                 |                                     |  |  |       |       |                    |
| A             | 500                   | 203             | 466                                 | 2.1                                      | 773.4  | 773.4 | 773.5 | 0.1                |
| В             | 880                   | 35              | 160                                 | 6.2                                      | 773.9  | 773.9 | 773.9 | 0.0                |
| С             | 1,230                 | 185             | 335                                 | 2.9                                      | 775.8  | 775.8 | 775.9 | 0.1                |
| D             | 2,030                 | 221             | 480                                 | 2.1                                      | 778.6  | 778.6 | 778.6 | 0.0                |
| E             | 3,117                 | 38              | 177                                 | 5.6                                      | 781.7  | 781.7 | 781.8 | 0.1                |
| F             | 3,417                 | 36              | 136                                 | 7.3                                      | 783.0  | 783.0 | 783.0 | 0.0                |
| G             | 4,217                 | 117             | 300                                 | 3.3                                      | 787.5  | 787.5 | 787.6 | 0.1                |
| Н             | 5,017                 | 124             | 301                                 | 3.3                                      | 790.0  | 790.0 | 790.0 | 0.0                |
| I             | 6,417                 | 957             | 1,130                               | 0.9                                      | 792.2  | 792.2 | 792.2 | 0.0                |
| J             | 7,087                 | 564             | 700                                 | 0.6                                      | 792.9  | 792.9 | 792.9 | 0.0                |
| K             | 8,095                 | 94              | 118                                 | 3.7                                      | 793.9  | 793.9 | 793.9 | 0.0                |
| L             | 8,410                 | 44              | 133                                 | 3.3                                      | 795.4  | 795.4 | 795.5 | 0.1                |
| M             | 10,040                | 199             | 217                                 | 2.0                                      | 800.7  | 800.7 | 800.7 | 0.0                |
| N             | 10,940                | 57              | 202                                 | 2.1                                      | 802.6  | 802.6 | 802.7 | 0.1                |
| О             | 12,040                | 34              | 133                                 | 3.1                                      | 804.6  | 804.6 | 804.7 | 0.1                |
| Р             | 12,610                | 38              | 98                                  | 4.1                                      | 807.6  | 807.6 | 807.6 | 0.0                |
| Q             | 13,640                | 34              | 109                                 | 3.7                                      | 816.5  | 816.5 | 816.5 | 0.0                |
| R             | 15,240                | 90              | 217                                 | 1.8                                      | 823.1  | 823.1 | 823.1 | 0.0                |
| S             | 16,840                | 177             | 293                                 | 1.4                                      | 826.9  | 826.9 | 827.0 | 0.1                |
| T             | 17,240                | 35              | 98                                  | 4.0                                      | 828.1  | 828.1 | 828.2 | 0.1                |
| U             | 18,171                | 10              | 66                                  | 4.7                                      | 832.6  | 832.6 | 832.6 | 0.0                |
| V             | 18,536                | 251             | 613                                 | 0.5                                      | 833.2  | 833.2 | 833.2 | 0.0                |
| W             | 18,956                | 108             | 123                                 | 2.5                                      | 833.3  | 833.3 | 833.3 | 0.0                |
| X             | 19,806                | 353             | 389                                 | 0.8                                      | 836.4  | 836.4 | 836.4 | 0.0                |
| Υ             | 21,056                | 133             | 150                                 | 2.1                                      | 839.4  | 839.4 | 839.4 | 0.0                |
| Z             | 22,291                | 225             | 730                                 | 0.4                                      | 850.8  | 850.8 | 850.8 | 0.0                |

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

FEDERAL EMERGENCY MANAGEMENT AGENCY

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

**STONY CREEK** 

| FLOODING SOU               | RCE                 |                 | FLOODWA                             | ΛY                                       |            |                     | CHANCE FLOC<br>ATION (FEET N |                    |
|----------------------------|---------------------|-----------------|-------------------------------------|--|------------|---------------------|------------------------------|--------------------|
| CROSS SECTION              | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY             | INCREASE<br>(FEET) |
| Stony Creek                |                     |                 |                                     |  |            |                     |                              |                    |
| (Continued)                | 4                   |                 |                                     |  |            |                     |                              |                    |
| AA                         | 22,631 <sup>1</sup> | 229             | 978                                 | 0.3                                      | 850.9      | 850.9               | 850.9                        | 0.0                |
| AB                         | 23,631              | 35              | 47                                  | 6.7                                      | 850.9      | 850.9               | 850.9                        | 0.0                |
| AC                         | 25,031 <sup>1</sup> | 34              | 99                                  | 3.2                                      | 859.6      | 859.6               | 859.6                        | 0.0                |
| AD                         | 26,231 <sup>1</sup> | 32              | 78                                  | 4.0                                      | 863.4      | 863.4               | 863.4                        | 0.0                |
| AE                         | 27,531 <sup>1</sup> | 17              | 49                                  | 6.4                                      | 872.3      | 872.3               | 872.3                        | 0.0                |
| Sugar Grove Branch         |                     |                 |                                     |  |            |                     |                              |                    |
| A                          | 647 <sup>2</sup>    | *               | *                                   | *  | 677.0      | 677.0               | *                            | *                  |
| В                          | 2,639 <sup>2</sup>  | *               | *                                   | *  | 678.9      | 678.9               | *                            | *                  |
| С                          | 3,795 <sup>2</sup>  | 320             | 919                                 | 1.9                                      | 679.8      | 679.8               | 679.8                        | 0.0                |
| D                          | 5,705 <sup>2</sup>  | 39              | 193                                 | 7.2                                      | 682.4      | 682.4               | 682.5                        | 0.1                |
| E                          | 7,330 <sup>2</sup>  | *               | *                                   | *  | 685.4      | 685.4               | *                            | *                  |
| F                          | 8,760 <sup>2</sup>  | *               | *                                   | *  | 686.5      | 686.5               | *                            | *                  |
| G                          | 10,910 <sup>2</sup> | *               | *                                   | *  | 692.1      | 692.1               | *                            | *                  |
| Н                          | 12,950 <sup>2</sup> | *               | *                                   | *  | 696.1      | 696.1               | *                            | *                  |
| I                          | 17,115 <sup>2</sup> | *               | *                                   | *  | 710.9      | 710.9               | *                            | *                  |
| Sugar Grove Branch<br>East |                     |                 |                                     |  |            |                     |                              |                    |
| Α                          | 3,165 <sup>3</sup>  | *               | *                                   | *  | 693.4      | 693.4               | *                            | *                  |
| В                          | $5,300^3$           | *               | *                                   | *  | 694.8      | 694.8               | *                            | *                  |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Otter Creek

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

STONY CREEK - SUGAR GROVE BRANCH - SUGAR GROVE BRANCH EAST

<sup>&</sup>lt;sup>2</sup>Feet above mouth at Welch Creek

<sup>&</sup>lt;sup>3</sup>Feet above confluence with Sugar Grove Branch

<sup>\*</sup>Data not available

| FLOODING SO                 | URCE                |                 | FLOODWA                             | Y  |            |                     | CHANCE FLOC<br>ATION (FEET N |                    |
|-----------------------------|---------------------|-----------------|-------------------------------------|--|------------|---------------------|------------------------------|--------------------|
| CROSS SECTION               | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY             | INCREASE<br>(FEET) |
| Sugar Grove Branch<br>North |                     |                 |                                     |  |            |                     |                              |                    |
| A                           | 1,160 <sup>1</sup>  | *               | *                                   | *  | 686.6      | 686.6               | *                            | *                  |
| В                           | 2,170 <sup>1</sup>  | *               | *                                   | *  | 689.7      | 689.7               | *                            | *                  |
| С                           | 2,915 <sup>1</sup>  | *               | *                                   | *  | 692.3      | 692.3               | *                            | *                  |
| Tollway Tributary           | *                   | *               | *                                   | *  | *          | *                   | *                            | *                  |
| Tyler Creek                 |                     |                 |                                     |  |            |                     |                              |                    |
| A                           | 375 <sup>2</sup>    | 131             | 495                                 | 6.9                                      | 715.9      | 715.9               | 715.9                        | 0.0                |
| В                           | 1,045 <sup>2</sup>  | 255             | 1,191                               | 2.8                                      | 717.9      | 717.9               | 717.9                        | 0.0                |
| С                           | 1,555 <sup>2</sup>  | 500             | 1,502                               | 4.4                                      | 718.6      | 718.6               | 718.7                        | 0.1                |
| D                           | 2,015 <sup>2</sup>  | 700             | 1,835                               | 2.8                                      | 720.8      | 720.8               | 720.8                        | 0.0                |
| E<br>F                      | 2,875 <sup>2</sup>  | 115             | 451                                 | 7.6                                      | 726.5      | 726.5               | 726.6                        | 0.1                |
| F                           | 3,645 <sup>2</sup>  | 256             | 1,764                               | 1.9                                      | 732.8      | 732.8               | 732.8                        | 0.0                |
| G                           | 4,605 <sup>2</sup>  | 306             | 784                                 | 4.3                                      | 735.2      | 735.2               | 735.3                        | 0.1                |
| Н                           | 5,195 <sup>2</sup>  | 252             | 939                                 | 3.6                                      | 740.5      | 740.5               | 740.5                        | 0.0                |
| I                           | 7,935 <sup>2</sup>  | 130             | 756                                 | 4.5                                      | 756.3      | 756.3               | 756.3                        | 0.0                |
| J                           | 9,205 <sup>2</sup>  | 390             | 3,173                               | 1.0                                      | 774.6      | 774.6               | 774.6                        | 0.0                |
| K                           | 10,275 <sup>2</sup> | 325             | 3,102                               | 1.0                                      | 776.7      | 776.7               | 776.7                        | 0.0                |
| L                           | 10,575 <sup>2</sup> | 610             | 3,844                               | 0.9                                      | 776.7      | 776.7               | 776.7                        | 0.0                |
| M                           | 11,035 <sup>2</sup> | 503             | 2,777                               | 1.2                                      | 776.9      | 776.9               | 776.9                        | 0.0                |
| N                           | 12,065 <sup>2</sup> | 114             | 802                                 | 4.1                                      | 778.1      | 778.1               | 778.1                        | 0.0                |
| 0                           | 14,135 <sup>2</sup> | 151             | 550                                 | 6.2                                      | 785.2      | 785.2               | 785.3                        | 0.1                |
| Р                           | 16,215 <sup>2</sup> | 230             | 1,615                               | 2.1                                      | 793.1      | 793.1               | 793.1                        | 0.0                |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Sugar Grove Branch

# KANE COUNTY, IL AND INCORPORATED AREAS

### **FLOODWAY DATA**

SUGAR GROVE BRANCH NORTH - TOLLOWAY TRIBUTARY - TYLER CREEK

<sup>&</sup>lt;sup>2</sup>Feet above confluence with Fox River

<sup>\*</sup>Data not available

| FLOODING SO   | URCE                |                 | FLOODWA                             | Y  | 1-PERCENT-ANNUAL-CHANCE FLOOD<br>WATER SURFACE ELEVATION (FEET NAVD) |                     |                  |                    |
|---------------|---------------------|-----------------|-------------------------------------|--|--|---------------------|------------------|--------------------|
| CROSS SECTION | DISTANCE            | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN<br>VELOCITY<br>(FEET PER<br>SECOND) | REGULATORY   | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY | INCREASE<br>(FEET) |
| Tyler Creek   |                     |                 |                                     |  |  |                     |                  |                    |
| (continued)   |                     |                 |                                     |  |  |                     |                  |                    |
| Q             | 18,175 <sup>1</sup> | 345             | 1,524                               | 2.3                                      | 794.4  | 794.4               | 794.4            | 0.0                |
| R             | 20,725 <sup>1</sup> | 255             | 1,107                               | 2.5                                      | 797.5  | 797.5               | 797.6            | 0.1                |
| S             | 21,483 <sup>1</sup> | 520             | 2,341                               | 1.2                                      | 801.0  | 801.0               | 801.0            | 0.0                |
| Т             | 24,355 <sup>1</sup> | 455             | 1,166                               | 2.4                                      | 803.1  | 803.1               | 803.1            | 0.0                |
| U             | 26,307 <sup>1</sup> | 190             | 1,144                               | 2.4                                      | 807.5  | 807.5               | 807.6            | 0.1                |
| V             | 27,345 <sup>1</sup> | 450             | 757                                 | 3.6                                      | 808.9  | 808.9               | 808.9            | 0.0                |
| W             | 27,785 <sup>1</sup> | 600             | 2,367                               | 1.1                                      | 811.1  | 811.1               | 811.1            | 0.0                |
| X             | 30,864 <sup>1</sup> | 303             | 969                                 | 2.7                                      | 814.0  | 814.0               | 814.0            | 0.0                |
| Y             | 31,060 <sup>1</sup> | 349             | 1,116                               | 2.4                                      | 814.5  | 814.5               | 814.6            | 0.1                |
| Z             | 33,941 <sup>1</sup> | 461             | 1,256                               | 2.1                                      | 820.5  | 820.5               | 820.6            | 0.1                |
| AA            | 35,224 <sup>1</sup> | 296             | 863                                 | 3.1                                      | 824.6  | 824.6               | 824.7            | 0.1                |
| AB            | 36,581 <sup>1</sup> | 241             | 847                                 | 3.1                                      | 830.6  | 830.6               | 830.6            | 0.0                |
| AC            | 37,988 <sup>1</sup> | 450             | 1,361                               | 1.9                                      | 835.2  | 835.2               | 835.3            | 0.1                |
| AD            | 38,528 <sup>1</sup> | 440             | 3,368                               | 0.8                                      | 845.1  | 845.1               | 845.1            | 0.0                |
| AE            | 40,264 <sup>1</sup> | 76              | 473                                 | 5.6                                      | 846.3  | 846.3               | 846.3            | 0.0                |
| AF            | 40,420 <sup>1</sup> | 100             | 1,331                               | 2.0                                      | 853.8  | 853.8               | 853.8            | 0.0                |
| AG            | 43,087 <sup>1</sup> | 242             | 833                                 | 3.2                                      | 859.4  | 859.4               | 859.5            | 0.1                |
| AH            | 44,215 <sup>1</sup> | 70              | 331                                 | 7.4                                      | 864.7  | 864.7               | 864.7            | 0.0                |
| Al            | 44,351 <sup>1</sup> | 310             | 1,629                               | 1.5                                      | 867.0  | 867.0               | 867.1            | 0.1                |
| AJ            | 46,202 <sup>1</sup> | 165             | 641                                 | 3.8                                      | 870.5  | 870.5               | 870.5            | 0.0                |
| AK            | 48,137 <sup>1</sup> | 150             | 466                                 | 5.3                                      | 874.6  | 874.6               | 874.7            | 0.1                |
| AL            | 50,160 <sup>1</sup> | 435             | 1,148                               | 2.1                                      | 879.1  | 879.1               | 879.2            | 0.1                |
| AM            | 50,458 <sup>1</sup> | 50              | 353                                 | 6.8                                      | 881.8  | 881.8               | 881.8            | 0.0                |

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

**TABLE** 

FEDERAL EMERGENCY MANAGEMENT AGENCY

KANE COUNTY, IL AND INCORPORATED AREAS

**FLOODWAY DATA** 

**TYLER CREEK** 

| FLOODING SOU            | RCE                 |                  | FLOODWA                             | ·Υ                              |            |                     | CHANCE FLOC<br>ATION (FEET N |                    |
|-------------------------|---------------------|------------------|-------------------------------------|---------------------------------|------------|---------------------|------------------------------|--------------------|
| CROSS SECTION           | DISTANCE            | WIDTH<br>(FEET)  | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY             | INCREASE<br>(FEET) |
| Tyler Creek (continued) |                     |                  |                                     |                                 |            |                     |                              |                    |
| AN                      | 55,530 <sup>1</sup> | 263              | 826                                 | 2.7                             | 885.7      | 885.7               | 885.8                        | 0.1                |
| AO                      | 57,475 <sup>1</sup> | 100 <sup>2</sup> | 479                                 | 4.6                             | 887.8      | 887.8               | 887.8                        | 0.0                |
| AP                      | 57,951 <sup>1</sup> | 615              | 1,709                               | 1.3                             | 888.8      | 888.8               | 888.8                        | 0.0                |
| AQ                      | 62,816 <sup>1</sup> | 1,900            | 2,154                               | 1.0                             | 890.0      | 890.0               | 890.1                        | 0.1                |
| AR                      | 64,082 <sup>1</sup> | 1,395            | 1,826                               | 1.1                             | 891.8      | 891.8               | 891.8                        | 0.0                |
| AS                      | 64,500 <sup>1</sup> | 600              | 546                                 | 3.8                             | 892.3      | 892.3               | 892.3                        | 0.0                |
| AT                      | 65,541 <sup>1</sup> | 38               | 212                                 | 3.2                             | 894.2      | 894.2               | 894.2                        | 0.0                |
| AU                      | 66,630 <sup>1</sup> | 49               | 289                                 | 2.3                             | 896.0      | 896.0               | 896.0                        | 0.0                |
| AV                      | 67,158 <sup>1</sup> | 63               | 348                                 | 1.9                             | 896.4      | 896.4               | 896.4                        | 0.0                |
| AW                      | 71,140 <sup>1</sup> | 40               | 272                                 | 2.0                             | 896.7      | 896.7               | 896.7                        | 0.0                |
| Tyler Creek Unnamed     |                     |                  |                                     |                                 |            |                     |                              |                    |
| Tributary               | *                   | *                | *                                   | *                               | *          | *                   | *                            | *                  |
| Union Ditch No. 2       | *                   | *                | *                                   | *                               | *          | *                   | *                            | *                  |
| Waubonsee Creek         |                     |                  |                                     |                                 |            |                     |                              |                    |
| Α                       | 30,435 <sup>1</sup> | 1,062            | 2,983                               | 0.9                             | 666.3      | 666.3               | 666.4                        | 0.1                |
| В                       | 31,865 <sup>1</sup> | 601              | 1,239                               | 1.4                             | 666.7      | 666.7               | 666.7                        | 0.0                |
| С                       | 35,635 <sup>1</sup> | 65               | *                                   | *                               | 669.4      | 669.4               | 669.4                        | 0.0                |
| D                       | 36,525 <sup>1</sup> | 95               | *                                   | *                               | 670.0      | 670.0               | 670.0                        | 0.0                |
| E                       | 37,215 <sup>1</sup> | 60               | *                                   | *                               | 670.3      | 670.3               | 670.3                        | 0.0                |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Fox River

### KANE COUNTY, IL AND INCORPORATED AREAS

### **FLOODWAY DATA**

TYLER CREEK TYLER CREEK UNNAMED TRIBUTARY UNION DITCH NO. 2 - WAUBONSEE CREEK

<sup>&</sup>lt;sup>2</sup>Floodway width reflects constricted section, see FIRM panel for regulatory floodway

<sup>\*</sup>Data not available

| FLOODING SO                   | URCE       |                 | FLOODWA                             | ΛY                              |            |                     | CHANCE FLOC<br>ATION (FEET N |                    |
|-------------------------------|------------|-----------------|-------------------------------------|---------------------------------|------------|---------------------|------------------------------|--------------------|
| CROSS SECTION                 | DISTANCE 1 | WIDTH<br>(FEET) | SECTION<br>AREA<br>(SQUARE<br>FEET) | MEAN VELOCITY (FEET PER SECOND) | REGULATORY | WITHOUT<br>FLOODWAY | WITH<br>FLOODWAY             | INCREASE<br>(FEET) |
| Welch Creek                   |            |                 | -                                   |                                 |            |                     |                              |                    |
| Α                             | 2,440      | *               | *                                   | *                               | 666.8      | 666.8               | *                            | *                  |
| В                             | 8,678      | *               | *                                   | *                               | 671.5      | 671.5               | *                            | *                  |
| С                             | 16,644     | *               | *                                   | *                               | 685.5      | 685.5               | *                            | *                  |
| D                             | 18,150     | *               | *                                   | *                               | 689.2      | 689.2               | *                            | *                  |
| Е                             | 21,281     | *               | *                                   | *                               | 691.3      | 691.3               | *                            | *                  |
| F                             | 28,526     | *               | *                                   | *                               | 701.1      | 701.1               | *                            | *                  |
| G                             | 32,060     | *               | *                                   | *                               | 706.7      | 706.7               | *                            | *                  |
| Н                             | 40,564     | *               | *                                   | *                               | 725.9      | 725.9               | *                            | *                  |
| I                             | 47,792     | *               | *                                   | *                               | 742.3      | 742.3               | *                            | *                  |
| J                             | 63,515     | *               | *                                   | *                               | 774.9      | 774.9               | *                            | *                  |
| K                             | 67,002     | *               | *                                   | *                               | 784.0      | 784.0               | *                            | *                  |
| L                             | 68,253     | *               | *                                   | *                               | 786.7      | 786.7               | *                            | *                  |
| M                             | 74,380     | *               | *                                   | *                               | 792.4      | 792.4               | *                            | *                  |
| N                             | 79,054     | *               | *                                   | *                               | 793.5      | 793.5               | *                            | *                  |
| О                             | 81,584     | *               | *                                   | *                               | 795.7      | 795.7               | *                            | *                  |
| Р                             | 89,053     | *               | *                                   | *                               | 813.2      | 813.2               | *                            | *                  |
| West Branch Big Rock<br>Creek |            |                 |                                     |                                 |            |                     |                              |                    |
| А                             | 3,077      | *               | *                                   | *                               | 692.2      | 692.2               | *                            | *                  |
| В                             | 6,929      | *               | *                                   | *                               | 702.5      | 702.5               | *                            | *                  |
| С                             | 13,150     | *               | *                                   | *                               | 716.3      | 716.3               | *                            | *                  |

<sup>&</sup>lt;sup>1</sup>Feet above confluence with Big Rock Creek

# KANE COUNTY, IL AND INCORPORATED AREAS

### **FLOODWAY DATA**

WELCH CREEK – WEST BRANCH BIG ROCK CREEK

<sup>\*</sup>Data not available

#### 5.0 INSURANCE APPLICATIONS

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

#### Zone A

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

#### Zone AE

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

#### Zone AH

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

#### Zone AO

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

#### Zone X

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

#### 6.0 FLOOD INSURANCE RATE MAP

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

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

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

The current FIRM presents flooding information for the entire geographic area of Kane County. Previously, separate Flood Hazard Boundary Maps and/or FIRMs were prepared for each identified flood prone incorporated community and the unincorporated areas of the Kane County. The countywide FIRM also includes flood hazard information that was presented separately on Flood Boundary and Floodway Maps (FBFM), where applicable. Historical data relating to the community maps prepared is presented in Table 14, "Community Map History."

#### 7.0 OTHER STUDIES

FISs have been prepared for McHenry, Kendall, DeKalb, Cook, and DuPage Counties, Illinois (Reference 93).

Information pertaining to revised and unrevised flood hazards for each jurisdiction, or portion of each jurisdiction, located within Kane County has been compiled into this FIS. Therefore, this FIS supersedes all previously printed FIS Reports, FHBMs, FIRMs, and/or FBFMs for all the incorporated and unincorporated jurisdictions within Kane County.

#### 8.0 LOCATION OF DATA

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

|   | INITIAL                   | FLOOD HAZARD<br>BOUNDARY MAP | FLOOD INSURANCE<br>RATE MAP | FLOOD INSURANCE<br>RATE MAP REVISION                   |
|---|---------------------------|------------------------------|-----------------------------|--|
| COMMUNITY NAME                            | IDENTIFICATION            | REVISION DATE(S)             | EFFECTIVE DATE              | DATE(S)  |
| Algonquin, Village of                     | March 8, 1974             | March 26, 1976               | March 16, 1981              | None   |
| Aurora, City of                           | June 14, 1974             | September 24, 1976           | June 15, 1979               | May 15, 1986<br>January 5, 1989<br>March 3, 1997       |
| Barrington Hills, Village of <sup>1</sup> | April 5, 1974             | July 9, 1976                 | August 10, 1979             | None   |
| Bartlett, Village of                      | April 12, 1974            | August 6, 1976               | June 15, 1981               | March 15, 1984   |
| Batavia, City of                          | September 10, 1976        | None                         | September 2, 1981           | None   |
| Big Rock, Village of                      | May 14, 1976 <sup>2</sup> | None                         | March 1, 1982 <sup>2</sup>  | June 4, 1996 <sup>2</sup><br>May 19, 1997 <sup>2</sup> |
| Burlington, Village of <sup>3</sup>       | N/A                       | None                         | N/A                         | None   |
| Campton Hills, Village of                 | May 14, 1976 <sup>2</sup> | None                         | March 1, 1982 <sup>2</sup>  | June 4, 1996 <sup>2</sup><br>May 19, 1997 <sup>2</sup> |
| Carpentersville, Village of               | March 22, 1974            | January 9, 1976              | August 17, 1981             | None   |
| East Dundee, Village of                   | May 17, 1974              | January 2, 1976              | March 16, 1981              | June 1, 1984   |

<sup>&</sup>lt;sup>1</sup> No Special Flood Hazard Areas identified in Kane County. Map dates are from Cook County.

<sup>2</sup> Date from Kane County, Unincorporated Areas, Flood Insurance Rate Map

<sup>3</sup> No Special Flood Hazard Areas identified

N/A = Not applicable

FEDERAL EMERGENCY MANAGEMENT AGENCY

### KANE COUNTY, IL AND INCORPORATED AREAS

### **COMMUNITY MAP HISTORY**

| OOMMI INITY NAME                         | INITIAL                   | FLOOD HAZARD<br>BOUNDARY MAP      | FLOOD INSURANCE<br>RATE MAP | FLOOD INSURANCE<br>RATE MAP REVISION |
|--|---------------------------|-----------------------------------|-----------------------------|--------------------------------------|
| COMMUNITY NAME                           | IDENTIFICATION            | REVISION DATE(S)                  | EFFECTIVE DATE              | DATE(S)                              |
| Elburn, Village of                       | December 20, 2002         | None                              | December 20, 2002           | None                                 |
| Elgin, City of                           | May 3, 1974               | October 31, 1975<br>June 23, 1978 | March 1, 1982               | April 17, 1984<br>February 17, 1989  |
| Geneva, City of                          | August 9, 1974            | January 23, 1976                  | August 3, 1981              | None                                 |
| Gilberts, Village of                     | December 20, 2002         | None                              | December 20, 2002           | None                                 |
| Hampshire, Village of                    | May 3, 1974               | March 26, 1976                    | March 2, 1981               | November 2, 1995                     |
| Hoffman Estates, Village of <sup>2</sup> | September 20, 1974        | August 27, 1976                   | May 19, 1981                | November 20, 1991                    |
| Huntley, Village of                      | March 29, 1974            | February 6, 1976                  | December 15, 1992           | May 19, 1997                         |
| Kane County<br>(Unincorporated Areas)    | May 14, 1976              | None                              | March 1, 1982               | June 4, 1996<br>May 19, 1997         |
| Kaneville, Village of <sup>1</sup>       | N/A                       | None                              | N/A                         | None                                 |
| Lily Lake, Village of                    | May 14, 1976 <sup>3</sup> | None                              | June 16, 1992               | None                                 |
| Maple Park, Village of                   | August 4, 1987            | None                              | August 4, 1987              | None                                 |

<sup>&</sup>lt;sup>1</sup> No Special Flood Hazard Areas identified

KANE COUNTY, IL AND INCORPORATED AREAS

**COMMUNITY MAP HISTORY** 

<sup>&</sup>lt;sup>2</sup> No Special Flood Hazard Areas identified in Kane County. Map dates are from Cook County.

<sup>&</sup>lt;sup>3</sup> Date from Kane County, Unincorporated Areas, Flood Insurance Rate Map N/A = Not applicable

|                           | INITIAL                   | FLOOD HAZARD<br>BOUNDARY MAP      | FLOOD INSURANCE<br>RATE MAP | FLOOD INSURANCE<br>RATE MAP REVISION |
|---------------------------|---------------------------|-----------------------------------|-----------------------------|--------------------------------------|
| COMMUNITY NAME            | IDENTIFICATION            | REVISION DATE(S)                  | EFFECTIVE DATE              | DATE(S)                              |
| Montgomery, Village of    | October 26, 1973          | May 28, 1976                      | August 15, 1979             | None                                 |
| North Aurora, Village of  | March 1, 1974             | July 9, 1976<br>February 15, 1980 | March 16, 1981              | None                                 |
| Pingree Grove, Village of | December 20, 2002         | None                              | December 20, 2002           | None                                 |
| Sleepy Hollow, Village of | April 12, 1974            | April 9, 1976                     | June 15, 1982               | None                                 |
| South Elgin, Village of   | April 5, 1974             | April 23, 1976<br>July 7, 1978    | July 16, 1981               | None                                 |
| St. Charles, City of      | March 15, 1974            | June 4, 1976<br>December 17, 1976 | September 2, 1981           | None                                 |
| Sugar Grove, Village of   | September 30, 1976        | None                              | September 30, 1976          | March 4, 1988                        |
| Virgil, Village of        | May 14, 1976 <sup>1</sup> | None                              | June 2, 1992                | None                                 |
| Wayne, Village of         | August 15, 1975           | None                              | December 1, 1981            | None                                 |
| West Dundee, Village of   | April 5, 1974             | March 19, 1976                    | December 1, 1981            | June 1, 1984                         |
|                           |                           |                                   |                             |                                      |

<sup>&</sup>lt;sup>1</sup> Date from Kane County, Unincorporated Areas, Flood Insurance Rate Map

# KANE COUNTY, IL AND INCORPORATED AREAS

### **COMMUNITY MAP HISTORY**

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