

Volume 1 of 7

COMMUNITY NAME	COMMUNITY NUMBER	COMMUNITY NAME	COMMUNITY NUMBER	COMMUNITY NAME	COMMUNITY NUMBER	COMMUNITY NAME	COMMUNITY NUMBER
ALSIP, VILLAGE OF	170055	EAST HAZEL CREST, VILLAGE OF	170085	LANSING, VILLAGE OF	170116	PROSPECT HEIGHTS, CITY OF	170919
ARLINGTON HEIGHTS, VILLAGE OF	170056	ELGIN, CITY OF	170087	LEMONT, VILLAGE OF	170117	RIGHTON PARK, VILLAGE OF	170149
BARRINGTON, VILLAGE OF	170057	ELK GROVE VILLAGE, VILLAGE OF	170088	LINCOLNWOOD, VILLAGE OF	171001	RIVER FOREST, VILLAGE OF	170151
BARRINGTON HILLS, VILLAGE OF	170058	ELMHURST, CITY OF*	170205	LYNWOOD, VILLAGE OF	170119	RIVER GROVE, VILLAGE OF	170152
BARTLETT, VILLAGE OF	170059	ELMWOOD PARK, VILLAGE OF	170089	LYONS, VILLAGE OF	170120	RIVERDALE, VILLAGE OF	170150
BEDFORD PARK, VILLAGE OF	171007	EVANSTON, CITY OF	170090	MARKHAM, CITY OF	175169	RIVERSIDE VILLAGE OF	170153
BELLWOOD, VILLAGE OF	170061	EVERGREEN PARK, VILLAGE OF*	170733	MATTESON, VILLAGE OF	170123	ROBBINS, VILLAGE OF	170154
BENSENVILLE, VILLAGE OF*	170200	FLOSSMOOR, VILLAGE OF	170091	MAYWOOD, VILLAGE OF	170124	ROLLING MEADOWS, CITY OF	170155
BERKELEY, VILLAGE OF*	171039	FORD HEIGHTS, VILLAGE OF	170084	MCCOOK, VILLAGE OF	170121	ROSELLE, VILLAGE OF*	170216
BERWYN, CITY OF*	171036	FOREST PARK, VILLAGE OF	170092	MELROSE PARK, VILLAGE OF	170125	ROSEMONT, VILLAGE OF	170156
BLUE ISLAND, CITY OF	170064	FOREST VIEW, VILLAGE OF	170093	MERRIONETTE PARK, VILLAGE OF	170126	SAUK VILLAGE, VILLAGE OF	170157
BRIDGEVIEW, VILLAGE OF	170065	FRANKFORT, VILLAGE OF*	170701	MIDLOTHIAN, VILLAGE OF	170127	SCHAUMBURG, VILLAGE OF	170158
BROADVIEW, VILLAGE OF	170067	FRANKLIN PARK, VILLAGE OF	170094	MORTON GROVE, VILLAGE OF	170128	SCHILLER PARK, VILLAGE OF	170159
BROOKFIELD, VILLAGE OF	170066	GLENCOE, VILLAGE OF	170095	MOUNT PROSPECT, VILLAGE OF	170129	SKOKIE, VILLAGE OF	171000
BUFFALO GROVE, VILLAGE OF	170068	GLENVIEW, VILLAGE OF	170096	NILES, VILLAGE OF	170130	SOUTH BARRINGTON, VILLAGE OF	170161
BURBANK, CITY OF*	170069	GLENWOOD, VILLAGE OF	170097	NORRIDGE, VILLAGE OF*	170131	SOUTH CHICAGO HEIGHTS, VILLAGE OF	170162
BURNHAM, VILLAGE OF	170070	GOLF, VILLAGE OF	170098	NORTH RIVERSIDE, VILLAGE OF	170135	SOUTH HOLLAND, VILLAGE OF	170163
BURR RIDGE, VILLAGE OF	170071	HANOVER PARK, VILLAGE OF	170099	NORTHBROOK, VILLAGE OF*	170132	STEGER, VILLAGE OF	170173
CALUMET CITY, CITY OF	170072	HARVEY, CITY OF	170100	NORTHFIELD, VILLAGE OF	170133	STICKNEY, VILLAGE OF	170164
CALUMET PARK, VILLAGE OF	170073	HARWOOD HEIGHTS, VILLAGE OF*	170101	NORTHLAKE, CITY OF	170134	STONE PARK, VILLAGE OF	170165
CHICAGO CITY OF	170074	HAZEL CREST, VILLAGE OF	170102	OAK BROOK, VILLAGE OF	170214	STREAMWOOD, VILLAGE OF	170166
CHICAGO HEIGHTS, VILLAGE OF	170075	HICKORY HILLS, CITY OF	170103	OAK FOREST, CITY OF	170136	SUMMIT, VILLAGE OF	170167
CHICAGO RIDGE, VILLAGE OF	170076	HILLSDALE, VILLAGE OF	170104	OAK LAWN, VILLAGE OF	170137	THORNTON, VILLAGE OF	170168
CICERO, TOWN OF*	170077	HINDSDE, VILLAGE OF	170105	OAK PARK, VILLAGE OF*	171037	TINLEY PARK, VILLAGE OF	170169
COOK COUNTY (UNINCORPORATED AREAS)	170054	HODGKINS, VILLAGE OF	170106	OLYMPIA FIELDS, VILLAGE OF	170139	UNIVERSITY PARK, VILLAGE OF	170708
COUNTRY CLUB HILLS, CITY OF	170078	HOFFMAN ESTATES, VILLAGE OF	170107	ORLAND HILLS, VILLAGE OF	170172	WESTCHESTER, VILLAGE OF	170170
COUNTRYSIDE, CITY OF	170079	HOMER GLEN, VILLAGE OF*	171080	ORLAND PARK, VILLAGE OF	170140	WESTERN SPRINGS, VILLAGE OF	170171
CRESTWOOD, VILLAGE OF	170080	HOMETOWN, CITY OF*	171040	PALATINE, VILLAGE OF	175170	WHEELING, VILLAGE OF	170173
DEER PARK, VILLAGE OF*	171028	HOMEWOOD, VILLAGE OF	170109	PALOS HEIGHTS, CITY OF	170142	WILLOW SPRINGS, VILLAGE OF	170174
DEERFIELD, VILLAGE OF	170361	INDIAN HEAD PARK, VILLAGE OF	170110	PALOS HILLS, CITY OF	170143	WILMETTE, VILLAGE OF	170175
DES PLAINES, CITY OF	170361	INVERNESS, VILLAGE OF	170111	PALOS PARK, VILLAGE OF	170144	WINNETKA, VILLAGE OF	170176
DIXMOOR, VILLAGE OF	170081	JUSTICE, VILLAGE OF	170112	PARK FOREST, VILLAGE OF	170145	WOODRIDGE, VILLAGE OF*	170737
DOLTON, VILLAGE OF	170082	KENILWORTH, VILLAGE OF	170113	PARK RIDGE, CITY OF	170146	WORTH, VILLAGE OF	170177
EAST DUNDEE, VILLAGE OF*	170083	LA GRANGE, VILLAGE OF	170114	PHOENIX, VILLAGE OF*	170147		
	170323	LA GRANGE PARK, VILLAGE OF	170115	POSEN, VILLAGE OF	170148	* NO SPECIAL FLOOD HAZARD AREAS IDENTIFIED WITHIN COOK COUNTY	



REVISED: NOVEMBER 1, 2019

Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
17031CV001H

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: November 6, 2000

Revised FIS Report Dates: December 20, 2002
 February 4, 2004
 June 2, 2005
 December 16, 2005
 November 16, 2006
 April 16, 2007
 August 19, 2008
 November 1, 2019

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Exhibit 2 – Flood Insurance Rate Map Index and Flood Insurance Rate Map
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FLOOD INSURANCE STUDY

COOK 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 Cook County, Illinois, including: the cities of Berwyn, Blue Island, Burbank, Calumet City, Chicago, Chicago Heights, Country Club Hills, Countryside, Des Plaines, Elgin, Elmhurst, Evanston, Harvey, Hickory Hills, Hometown, Markham, Northlake, Oak Forest, Palos Heights, Palos Hills, Park Ridge, Prospect Heights, and Rolling Meadows; the villages of Alsip, Arlington Heights, Barrington, Barrington Hills, Bartlett, Bedford Park, Bellwood, Bensenville, Berkeley, Bridgeview, Broadview, Brookfield, Buffalo Grove, Burnham, Burr Ridge, Calumet Park, Chicago Ridge, Crestwood, Deer Park, Deerfield, Dixmoor, Dolton, East Dundee, East Hazel Crest, Elk Grove Village, Elmhurst, Elmwood Park, Evergreen Park, Flossmoor, Ford Heights (formerly East Chicago Heights), Forest Park, Forest View, Frankfort, Franklin Park, Glencoe, Glenview, Glenwood, Golf, Hanover Park, Harwood Heights, Hazel Crest, Hillside, Hinsdale, Hodgkins, Hoffman Estates, Homewood, Indian Head Park, Inverness, Justice, Kenilworth, La Grange, La Grange Park, Lansing, Lemont, Lincolnwood, Lynwood, Lyons, Matteson, Maywood, McCook, Melrose Park, Merrionette Park, Midlothian, Morton Grove, Mount Prospect, Niles, Norridge, North Riverside, Northbrook, Northfield, Oak Brook, Oak Lawn, Oak Park, Olympia Fields, Orland Hills (formerly Westhaven), Orland Park, Palatine, Palos Park, Park Forest, Phoenix, Posen, Richton Park, River Forest, River Grove, Riverdale, Riverside, Robbins, Roselle, Rosemont, Sauk Village, Schaumburg, Schiller Park, Skokie, South Barrington, South Chicago Heights, South Holland, Steger, Stickney, Stone Park, Streamwood, Summit, Thornton, Tinley Park, University Park (formerly Park Forest South), Westchester, Western Springs, Wheeling, Willow Springs, Wilmette, Winnetka, Woodridge and Worth; the town of Cicero; and the unincorporated areas of Cook County (hereinafter referred to collectively as Cook County); and aids in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973, with modification by the National Flood Insurance Reform Act of 1994 and the Flood Insurance Reform Act of 2004.

This study has developed flood risk data for the county that will be used to establish actuarial flood insurance rates. This information will also be used by Cook 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.

For this countywide FIS and FIRM, flood hazard information is shown only for the portions of the communities listed in Table 1 that lie within Cook County. The remaining portions of these communities lie within other counties as indicated. Please see separately published FIS reports and FIRMs for the portions of the communities that do not lie in Cook County.

Table 1 - Multi-County Communities

Community	Adjacent Counties
Arlington Heights, Village of	Lake
Barrington, Village of	Lake
Barrington Hills, Village of	Kane, Lake, McHenry
Bartlett, Village of	DuPage, Kane
Bensenville, Village of	DuPage
Buffalo Grove, Village of	Lake
Burr Ridge, Village of	DuPage
Chicago, City of	DuPage
Deer Park, Village of	Lake
Deerfield, Village of	Lake
East Dundee, Village of	Kane
Elgin, City of	Kane
Elk Grove Village, Village of	DuPage
Elmhurst, City of	DuPage
Frankfort, Village of	Will
Hanover Park, Village of	DuPage
Hinsdale, Village of	DuPage
Hoffman Estates, Village of	Kane
Homer Glen, Village of	Will
Lemont, Village of	DuPage, Will
Oak Brook, Village of	DuPage
Orland Park, Village of	Will
Palatine, Village of	Lake
Park Forest, Village of	Will
Roselle, Village of	DuPage
Sauk Village, Village of	Will
Schaumburg, Village of	DuPage
Steger, Village of	Will
Tinley Park, Village of	Will
University Park, Village of	Will
Wheeling, Village of	Lake
Woodridge, Village of	DuPage, Will

The cities of Berwyn, Burbank, and Hometown; the villages of Berkeley, Evergreen Park, Harwood Heights, Norridge, Oak Park and Phoenix; and the town of Cicero have no special flood hazard areas (SFHAs) identified.

Also, the portions of the City of Elmhurst, and the villages of Bensenville, Deer Park, East Dundee, Frankfort, Homer Glen, Roselle, and Woodridge within Cook County have no SFHAs identified. Please see separately published FIS reports and FIRMs for flood hazard information for these communities in their adjacent counties.

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, the Flood Disaster Protection Act of 1973, the National Flood Insurance Reform Act of 1994, and the Flood Insurance Reform Act of 2004.

For this revision, the portions of communities within Cook County, and communities entirely within Cook County, have been included. Information on the authority and acknowledgements for each jurisdiction included in this countywide FIS, as compiled from their previously printed FIS reports, is shown below:

Pre-Countywide FISs

Alsip, Village of:	The hydrologic and hydraulic analyses for the FIS dated March 1980 (Reference 1) were performed by PRC Toups Corporation for the Federal Insurance Administration (FIA), under Contract No. H-4564. That work was completed in December 1978.
Arlington Heights, Village of:	The hydrologic and hydraulic analyses for the FIS dated November 1977 were performed by Carl C. Crance, Inc., for the Federal Emergency Management Agency (FEMA), under Contract No. H-3681. That work was completed in December 1976. The revised analyses for the FIS dated March 1, 1984 (Reference 2) were performed by the Illinois Department of Transportation – Division of Water Resources (IDOT-DOWR). That work was completed in 1983.
Barrington, Village of:	The hydrologic and hydraulic analyses for the FIS dated April 16, 1984 (Reference 3) were performed by the U.S. Army Corps of Engineers (USACE), Chicago District, for

FEMA, under Inter-Agency Agreement No. EMW-E-0539, Project Order No. 9. That work was completed in April 1983.

Bartlett, Village of:

The hydrologic and hydraulic analyses for the FIS dated December 15, 1980 (Reference 4) 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.

Bellwood, Village of:

The hydrologic and hydraulic analyses for the FIS dated June 1979 (Reference 5) were performed by the Illinois State Water Survey for the FIA, under Contract No. H-3942. That work was completed in March 1978.

Bensenville, Village of:

Except for Addison Creek, a portion of Addison Creek Tributary No. 3, and Bensenville Ditch, the hydrologic and hydraulic analyses for the FIS dated August 1980 (Reference 6) were performed by the USACE, Chicago District, for FEMA, under Inter-Agency Agreement No. EMW-85-E-1822, Project Order No. 1. This study was completed in May 1987.

The hydrologic and hydraulic analyses for Addison Creek were taken from a stormwater management system evaluation report performed by Donohue & Associates, Inc., for the IDOT-DOWR (Reference 7).

A reanalysis of Bensenville Ditch performed by the IDOT-DOWR (Reference 8) and a reanalysis of Addison Creek Tributary No. 3 from upstream of Tributary A to the western corporate limits performed by Seton Engineering Company Inc., was incorporated in to the revised FIS dated March 2, 1993 (Reference 9).

Blue Island, City of:

The hydrologic and hydraulic analyses for the FIS dated June 1979 (Reference 10) were performed by the Illinois State Water Survey

for the FIA, under Contract No. H-3942. That work was completed in December 1978.

Bridgeview, Village of:

The hydrologic and hydraulic analyses for the FIS dated August 4, 1980 (Reference 11) were performed by Clark, Dietz Engineers, Inc., for the FIA, under Contract No. H-4719. That work was completed in September 1979.

Broadview, Village of:

The hydrologic and hydraulic analyses for the FIS dated July 16, 1980 (Reference 12) were performed by the U.S. Geological Survey (USGS), Water Resources Division, For the FIA, under Inter-Agency Agreement No. IAA-H-9-77, Project Order No. 5. That work was completed in April 1979.

Brookfield, Village of:

The hydrologic and hydraulic analyses for the FIS dated June 1980 (Reference 13) were performed by the U.S. Department of Agriculture, Soil Conservation Service (SCS), for the FIA, under Inter-Agency Agreement No. IAA-H-17-78, Project Order No.1. That work was completed in January 1979.

Buffalo Grove, Village of:

The hydrologic and hydraulic analyses for the original FIS were performed by Harza Engineering Company for the FIA, under Contract No. H-3809. That work was completed in March 1976.

The revised analyses for the FIS dated December 16, 1988 (Reference 14) were obtained from the FISs for the unincorporated areas of Cook and Lake Counties, the City of Prospect Heights, and the villages of Vernon Hills, Wheeling, Lincolnshire, Arlington Heights, and Long Grove (Reference 2, 15, 16, 17, 18, 19, 20, 21). Additional data was provided by PRC Engineering, Inc. All revised data were reviewed and accepted by FEMA.

Burnham, Village of:	The hydrologic and hydraulic analyses for the FIS dated December 1, 1980 (Reference 22) were performed by Clark, Dietz Engineers, Inc., for the FIA, under Contract No. H-4719. That work was completed in September 1979.
Burr Ridge, Village of:	The hydrologic and hydraulic analyses for the original FIS were performed by Harza Engineering Company for the FIA, under Contract No. H-3978. That work was completed in August 1978. The revised analyses for the FIS report dated August 2, 1990 (Reference 23) were performed by the USACE, Chicago District, and reviewed and accepted by FEMA.
Calumet City, City of:	The hydrologic and hydraulic analyses for the FIS dated October 1979 (Reference 24) were performed by Harza Engineering Company for the FIS, under Contract No. H-3978. That work was completed in April 1978.
Chicago, City of:	The hydrologic and hydraulic analyses for the FIS dated December 1, 1980 (Reference 25) were performed by Clark, Dietz Engineers, Inc., for the FIA, under Contract No. H-4719. That work was completed in September 1979.
Chicago Heights, City of:	The hydrologic and hydraulic analyses for the FIS dated May 1979 (Reference 26) were performed by Harza Engineering Company for the FIA, under Contract No. H-3978. That work was completed in August 1977.
Chicago Ridge, Village of:	The hydrologic and hydraulic analyses for the FIS dated May 1980 (Reference 27) were performed by Harris-Toups Associates for the FIA, under Contract No. H-4564. That work was completed in December 1978.
Cook County (Unincorporated Areas):	The hydrologic and hydraulic analyses for the revised FIS dated December 4, 1984

(Reference 15) were performed by Harza Engineering Company for the FIA, under Contract No. H-3809. That work was completed in September 1976.

Country Club Hills, City of:

The hydrologic and hydraulic analyses for the FIS dated January 1980 (Reference 28) were performed by DeLeuw, Cather & Company for the FIA, under Contract No. H-4573. That work was completed in December 1978.

Countryside, City of:

The hydrologic and hydraulic analyses for the FIS reported dated March 1980 (Reference 29) were performed by Harza Engineering Company for the FIA, under Contract No. H-4562. That work was completed in April 1979.

Crestwood, Village of:

The hydrologic and hydraulic analyses for the original FIS were performed by Harris-Toups Associates for the FIA, under Contract No. H-4564. That work was completed in April 1979. The analyses for the FIS dated October 16, 1984 were performed by the IDOT-DOWR, and Edmund M. Burke & Associates, Ltd., and reviewed and accepted by FEMA. The analyses for the FIS dated August 5, 1986 (Reference 30) were performed by SCS in cooperation with the IDOT-DOWR, and reviewed and accepted by FEMA.

Deerfield, Village of:

The hydrologic and hydraulic analyses for the original FIS were performed by SCS for the FIA, under Inter-Agency Agreement No. IAA-H-4-73, Project Order No. 11. That work was completed in December 1973.

The revised analyses for the FIS dated August 4, 1988 (Reference 31) were obtained from the FISs for the unincorporated areas of Cook and Lake Counties, and the village of Deerfield, and reviewed and accepted by FEMA (Reference 15, 16, 31).

Des Plaines, City of:	The hydrologic and hydraulic analyses for the original FIS were performed by the USGS for the FIA, under Inter-Agency Agreement No. IAA-H-20-74. The revised analyses for the FIS report dated December 15, 1980 (Reference 32) were performed by Dewberry, Nealon, and Davis under agreement with the FIA; that work was completed in June 1978.
Dixmoor, Village of:	The hydrologic and hydraulic analyses for the FIS dated December 1979 (Reference 33) were performed by DeLeuw, Cather & Company for the FIA, under Contract No. H-4573. That work was completed in March 1978.
Dolton, Village of:	The hydrologic and hydraulic analyses for the FIS dated January 1980 (Reference 34) were performed by DeLeuw, Cather & Company for the FIA, under Contract No. H-4573. That work was completed in March 1978.
East Dundee, Village of:	The hydrologic and hydraulic analyses for the FIS dated September 16, 1980 (Reference 35) 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.
Elgin, City of:	The hydrologic and hydraulic analyses for the FIS dated 1981 (Reference 36) 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.
Elk Grove Village, Village of:	The hydrologic and hydraulic analyses for the FIS dated December 1978 (Reference 37) were performed by Harza Engineering Company for the FIA, under Contract No. H-3809. That work was completed in September 1976.

Elmhurst, Village of:	The hydrologic and hydraulic analyses for the original FIS dated August 4, 1980 were performed by the ISWS for the FIA, under Contract No. H-3942. This study was completed in September 1978. For the FIS revision dated May 16, 1995 (Reference 38) the hydrologic and hydraulic analyses were prepared by Harza Engineering Company. This work was completed in April 1994.
Elmwood Park, Village of:	The hydrologic and hydraulic analyses for the FIS dated February 1980 (Reference 39) were performed by the SCS for the FIA, under Inter-Agency Agreement No. IAA-H-17-78, Project Order No. 1. That work was completed in February 1979.
Flossmoor, Village of:	The hydrologic and hydraulic analyses for the FIS dated May 1980 (Reference 40) were performed by DeLeuw, Cather & Company for the FIA, under Contract No. H-4573. That work was completed in March 1978.
Ford Heights, Village of:	The village of Ford Heights was formerly known as the village of East Chicago Heights. The hydrologic and hydraulic analyses for the village of East Chicago Heights dated March 1978 (Reference 41) were performed by Harza Engineering Company for the FIA, under Contract No. H-3978. That work was completed in June 1977.
Frankfort, Village of:	The hydrologic and hydraulic analyses for the FIS dated November 1, 1979 (Reference 42) were prepared by Harza Engineering Company for the FIA under Contract No. H-3978. That work was completed in February 1978.
Franklin Park, Village of:	The hydrologic and hydraulic analyses for the FIS dated March 1978 (Reference 43) were performed by the SCS for the FIA, under Inter-Agency Agreement No. IAA-H-75, Project Order No. 6. That work was completed in February 1977.

Glencoe, Village of:	The hydrologic and hydraulic analyses for the FIS dated June 1980 (Reference 44) were performed by Harza Engineering Company for the FIA, under Contract No. H-4562. That work was completed in November 1978.
Glenview, Village of:	The hydrologic and hydraulic analyses for the FIS dated December 1978 were performed by Harza Engineering Company for the FIA, under Contract No. H-3809. That work was completed in November 1976.
	For the revised FIS dated October 6, 1998 (Reference 45), the hydrologic and hydraulic analyses for the Chicago River, North Branch, and the Chicago River, North Branch, West Fork were prepared by T.Y. Lin International BASCOR, Inc., for FEMA, under Contract No. EMW-92-C-3807. This work was completed in September 1994. The hydrologic and hydraulic analyses for the North and South Navy Ditches, were also prepared by T.Y. Lin International BASCOR, Inc., for the village of Glenview. This work was completed in September 1995. The hydrologic and hydraulic analyses for the Des Plaines River were prepared by the USACE for FEMA, under Contract No. EMW-89-E-2978. This work was completed in September 1995.
Glenwood, Village of:	The hydrologic and hydraulic analyses for the FIS dated December 1977 (Reference 46) were performed by the SCS for the FIA, under Inter-Agency Agreement No. IAA-8-18-75. That work was completed in November 1976.
Golf, Village of:	The hydrologic and hydraulic analyses for the FIS dated May 1979 (Reference 47) were performed by Harza Engineering Company for the FIA, under Contract No. H-3978. That work was completed in October 1977.

Hanover Park, Village of:	The hydrologic and hydraulic analyses for the FIS dated May 1978 (Reference 48) were performed by the USACE, Chicago District, for the FIA, under Inter-Agency Agreement No. IAA-H-7-76, Project Order No. 19. That work was completed in September 1977.
Harvey, City of:	The hydrologic and hydraulic analyses for the original FIS dated April 17, 1978 (Reference 49) were performed by Harza Engineering Company for the FIA, under Contract No. H-3809. That work was completed in September 1976. The revised analyses for the FIS report dated February 15, 1985 (Reference 50) were performed by the SCS, and reviewed and accepted by FEMA.
Hazel Crest, Village of:	The hydrologic and hydraulic analyses for the FIS dated June 1980 (Reference 51) were performed by the SCS for the FIA, under Inter-Agency Agreement No. IAA-H-4-73, Project Order No. 11. The FIS was subsequently revised by Dewberry, Nealon and Davis in April 1980 due to appeals filed by community officials.
Hickory Hills, City of:	The hydrologic and hydraulic analyses for the FIS dated January 1980 (Reference 52) were performed by Harris-Toups Associates for the FIA, under Contract No. H-4564. That work was completed in December 1978.
Hinsdale, Village of:	The hydrologic and hydraulic analyses for the FIS dated July 16, 1980 (Reference 53) were performed by Harza Engineering Company for the FIA, under Contract No. H-4562. This study was completed in February 1979.
Hodgkins, Village of:	The hydrologic and hydraulic analyses for the FIS dated March 1979 (Reference 54) were performed by Harza Engineering Company for the FIA, under Contract No. H-

3978. That work was completed in August 1977.

Hoffman Estates, Village of:

The hydrologic and hydraulic analyses for the FIS dated May 19, 1984, were performed by Harza Engineering Company for the FIA, under Contract No. H-4562. That work was completed in June 1979. The revised analyses for the FIS dated November 20, 1991 (Reference 55) were performed by Harza Engineering Company, and reviewed and accepted by FEMA.

Homewood, Village of:

The hydrologic and hydraulic analyses for the FIS dated January 18, 1984 (Reference 56) were performed by the SCS for FEMA, under Inter-Agency Agreement No. IAA-H-4-73, Project Order No. 11.

Indian Head Park, Village of:

The hydrologic and hydraulic analyses for the FIS dated June 1979 (Reference 57) were performed by Harza Engineering Company for the FIA, under Contract no. H-3978. That work was completed in March 1978.

Inverness, Village of:

The hydrologic and hydraulic analyses for the FIS dated December 1, 1980 (Reference 58) were performed by Harza Engineering Company for the FIA under Contract No. H-4562. That work was completed in June 1979.

Justice, Village of:

The hydrologic and hydraulic analyses for the FIS dated November 19, 1980 (Reference 59) were performed by Clark, Dietz Engineers, Inc., for the FIA, under Contract No. H-4719. That work was completed in November 1979.

La Grange Park, Village of:

The hydrologic and hydraulic analyses for the FIS dated May 1978 (Reference 60) were performed by the USGS for the FIA, under Inter-Agency Agreement No. IAA-H-17-75, Project Order No. 8. That work was completed in November 1977. The SCS revised the original analyses, and Harza

Engineering Company prepared additional hydrologic analyses.

Lansing, Village of:

The hydrologic and hydraulic analyses for the FIS dated December 1, 1980 (Reference 61) were performed by Harza Engineering Company for the FIA, under Contract No. H-3978. That work was completed in April 1980.

Lemont, Village of:

The hydrologic and hydraulic analyses for the FIS dated August 4, 1988 (Reference 62) were obtained from the FIS for the unincorporated areas of Cook County (Reference 15).

Lynwood, Village of:

The hydrologic and hydraulic analyses for the FIS dated February 3, 1981 (Reference 63) were performed by Harza Engineering Company for the FIA, under Contract No. H-3978. That work was completed in October 1977.

Lyons, Village of:

The hydrologic and hydraulic analyses for the FIS dated May 1979 (Reference 64) were performed by Harza Engineering Company for the FIA, under Contract No. H-3978. That work was completed in January 1978.

Markham, City of:

The hydrologic and hydraulic analyses for the FIS dated February 15, 1984 (Reference 65) were performed by the SCS for FEMA, under Inter-Agency Agreement No. IAA-H-11-79, Amendment No. 3, Project Order No. 10. That work was completed in March 1983.

Matteson, Village of:

The hydrologic and hydraulic analyses for the FIS dated February 16, 1982 (Reference 66) were performed by DeLeuw, Cather and Company for FEMA under Contract No. H-4573. That work was completed in June 1978.

Maywood, Village of:

The hydrologic and hydraulic analyses for the FIS dated October 18, 1988 (Reference 67) were obtained from an IDOT-DOWR

report and the FIS for the village of Melrose Park (Reference 68, 69).

Melrose Park, Village of:

The hydrologic and hydraulic analyses for the original FIS dated July 1980 (Reference 69) were performed by Harza Engineering Company for the FIA, under Contract No. H-4562. That work was completed in December 1978.

Midlothian, Village of:

The hydrologic and hydraulic analyses for the original FIS were performed by the SCS for the FIA, under Inter-Agency Agreement No. IAA-H-18-75, Project Order No. 7. That work was completed in May 1977. Selected cross sections and bridge data were provided by the DOWR. The revised analyses for the FIS dated June 19, 1985 (Reference 70) were performed by Harza Engineering Company, and reviewed and accepted by FEMA.

Morton Grove, Village of:

The hydrologic and hydraulic analyses for the FIS dated December 1978 (Reference 71) were performed by Harza Engineering Company for the FIA, under Contract No. H-3978. That work was completed in September 1977.

Mount Prospect, Village of:

The hydrologic and hydraulic analyses for the FIS dated February 2, 1982 (Reference 72) were performed by the SCS for FEMA, under Contract No. H-4835. That work was completed in November 1980.

Niles, Village of:

The hydrologic and hydraulic analyses for the FIS dated December 1978 were performed by Harza Engineering Company for the FIA, under Contract No. H-3978. That work was completed in September 1977.

Northlake, City of:

The hydraulic data for the FIS dated January 3, 1986 (Reference 73) were obtained from the Illinois State Water Survey for FEMA, under Contract No. H-3942. The hydrologic and hydraulic analyses were performed by

the Resource Coordination Staff for FEMA. That work was completed in March 1984.

North Riverside, Village of:

The hydrologic and hydraulic analyses for the FIS dated June 1980 (Reference 74) were performed by the SCS for the FIA, under Inter-Agency Agreement No. IAA-H-17-78, Project Order No. 1. That work was completed in December 1978.

Northbrook, Village of:

The hydrologic and hydraulic analyses for the FIS dated May 1, 1984 (Reference 75) were performed by the SCS for the FIA. That work was completed in January 1977. Revised analyses were performed by the USACE, Chicago District, for FEMA, under Inter-Agency Agreement No. EMW-E-1153, Project Order No. 1, Amendment No. 23. That work was completed in January 1985. Further revised analyses were performed by STS Consultants, Ltd., for FEMA; that work was completed in March 1989. Further revised analyses for the FIS dated December 15, 1990 (Reference 76) were performed by Lindley and Sons, Inc., and accepted by FEMA. That work was completed in 1988. For the revision dated October 20, 1998 (Reference 77) the hydrologic and hydraulic analyses for the Chicago River, North Branch, Middle Fork, the Chicago River, North Branch, West Fork, and Underwriters Tributary were prepared by T.Y. Lin International BASCOR, Inc., for FEMA, under Inter-Agency Agreement No. EMW-92-C-3807. This work was completed in September 1994. The hydrologic and hydraulic analyses for Techny Drain and Techny Drain, South Fork were prepared by T.Y. Lin International BASCOR, Inc., for the village of Northbrook under separate contract. This work was also completed in September 1994.

Contour mapping at a 1-foot interval was provided by the Village of Northbrook for

delineation of special flood hazard areas within Northbrook (Reference 78).

Northfield, Village of:

The hydrologic and hydraulic analyses for the FIS dated June 1979 (Reference 79) were performed by Harza Engineering Company for the FIA under Contract No. H-3978. that work was completed in September 1977.

Oak Brook, Village of:

The hydrologic and hydraulic analyses for the FIS dated August 18, 1980 (Reference 80) were performed by the ISWS for the FIA, under Contract number H-3942. This study was completed in September 1978.

Oak Lawn, Village of:

They hydrologic and hydraulic analyses for the FIS dated July 1980 (Reference 81) were performed by Harris-Toups Associates for the FIA, under Contract No. H-4564. That work was completed in January 1979.

Oak Forest, City of:

The hydrologic and hydraulic analyses for the FIS dated June 1979 (Reference 82) were performed by Harza Engineering Company for the FIA, under Contract No. H-3978. That work was completed in September 1977.

Olympia Field, Village of:

The hydrologic and hydraulic analyses for the FIS dated February 1980 (Reference 83) were performed by DeLeuw, Cather & Company for the FIA, under Contract No. H-4573. That work was completed in August 1978.

Orland Hills, Village of:

The village of Orland Hills was known as the village of Westhaven until 1986. The hydrologic and hydraulic analyses for the FIS for the village of Westhaven dated September 15, 1981 (Reference 84) were performed by the FIA. That work was completed in April 1981.

Orland Park, Village of:

The hydrologic and hydraulic analyses for the FIS dated February 2, 1982 (Reference

85), were performed by FEMA. That work was completed in April 1981.

Palatine, Village of:

The FIS for the village of Palatine, dated December 1972 was a Type 15 FIS. The FIS was prepared by the Geological Survey at the request of the FIA. It was authorized by Inter Agency Agreement No. IAA-H-17-72, Project Order No. 6 and IAA-H-17-73, Project Order No. 1. The FIS dated October 17, 1978 were performed by the Harza Engineering Company for the FIA, under Contract No. H-3978. That work was completed in July 1977. The revised analyses for the report dated June 19, 1985 were obtained from the FIS for the unincorporated areas of Cook County and the DOWR; and were reviewed and accepted by FEMA (Reference 15, 86, 87, 88)

Palos Heights, City of:

The hydrologic and hydraulic analyses for the FIS dated January 1980 (Reference 89) were performed by Harris-Toups Associates for the FIS, under Contract No. H-4564. That work was completed in December 1978.

Palos Hills, City of:

The hydrologic and hydraulic analyses for the FIS dated July 16, 1980 (Reference 90) were performed by Harris-Toups Associates for the FIA, under Contract No. H-4564. That work was completed in January 1979.

Palos Park, Village of:

The hydrologic and hydraulic analyses for the FIS dated January 1980 were performed by Harris-Toups Associates for the FIA, under Contract No. H-4564. That work was completed in December 1978.

Park Forest, Village of:

The hydrologic and hydraulic analyses for the FIS dated January 1980 (Reference 91) were performed by DeLeuw, Cather & Company for the FIA, under Contract No. H-4573. That work was completed in February 1978.

Prospect Heights, City of:	The hydrologic and hydraulic analyses for the FIS dated February 1979 (Reference 17) were performed by Harza Engineering Company for the FIA, under Contract No. H-3809. That work was completed in September 1976.
Richton Park, Village of:	The hydrologic and hydraulic analyses for the FIS dated July 16, 1980 (Reference 92) were performed by DeLeuw, Cather & Company for the FIA, under Contract No. H-4573. That work was completed in July 1978.
River Forest, Village of:	The hydrologic and hydraulic analyses for the FIS dated October 18, 1988 (Reference 93) were obtained from a DOWR report and the FIS for the village of Melrose Park; and reviewed and accepted by FEMA (Reference 68, 69).
River Grove, Village of:	The hydrologic and hydraulic analyses for the FIS dated June 1980 (Reference 94) were performed by the SCS for the FIA, under Inter-Agency Agreement No. IAA-H-17-78, Project Order No. 1. That work was completed in March 1979.
Riverdale, Village of:	The hydrologic and hydraulic analyses for the FIS dated March 1978 (Reference 95) were performed by the SCS for the FIA, under Inter-Agency Agreement No. IAA-H-17-78, Project Order No. 1. That work was completed in January 1978.
Riverside, Village of:	The hydrologic and hydraulic analyses for the FIS dated June 1980 (Reference 96) were performed by the SCS for the FIA, under Inter-Agency Agreement No. IAA-H-17-78, Project Order No. 1. That work was completed in January 1978.
Robbins, Village of:	The hydrologic and hydraulic analyses for the FIS dated March 1978 (Reference 97) were performed by the Harza Engineering Company for the FIA, under Contract No. H-

3978. That work was completed in May 1977.

Rolling Meadows, City of:

The hydrologic and hydraulic analyses for the original FIS dated October 17, 1978 (Reference 98) were performed by the Harza Engineering Company for the FIA, under Contract No. H-3978. That work was completed in July 1977. The revised analyses for the FIS dated June 19, 1985 (Reference 99) were obtained from the FIS for the unincorporated areas of Cook County and the DOWR; and were reviewed and accepted by FEMA (Reference 15, 68).

Roselle, Village of:

The hydrologic and hydraulic analyses for the FIS dated November 19, 1980 (Reference 100) were performed by the Illinois State Water Survey (ISWS) for the FIA, under Contract No. H-45-22. Portions of Spring Brook were studied by the SCS and the information provided to the Study Contractor. This study was completed in September 1979.

Rosemont, Village of:

The hydrologic and hydraulic analyses for the original FIS dated November 15, 1979 (Reference 101) were performed by the SCS for the FIA, under Inter-Agency Agreement No. IAA-H-8-75, Project Order No. 8. That work was completed in July 1977. The revised analyses for the FIS dated July 3, 1985 (Reference 102) were obtained from the FISs for the city of Des Plaines and the unincorporated areas of Cook County; and were reviewed and accepted by FEMA (Reference 15, 32).

Sauk Village, Village of:

The hydrologic and hydraulic analyses for the FIS dated November 5, 1980 (Reference 103) were performed by Clark, Dietz Engineers, Inc., for the FIA, under Contract No. H-4719. That work was completed in October 1979.

Schaumburg, Village of:	The hydrologic and hydraulic analyses for the FIS dated August 1978 (Reference 104) were performed by Harza Engineering Company for the FIA, under Contract No. 3809. That work was completed in October 1977.
Schiller Park, Village of:	The hydrologic and hydraulic analyses for the FIS dated March 1978 (Reference 105) were performed by the SCS for the FIA, under Inter-Agency Agreement No. IAA-H-75, Project Order No. 6. That work was completed in February 1977.
South Barrington, Village of:	The hydrologic and hydraulic analyses for the FIS dated July 16, 1981 (Reference 106) were performed by Clark, Dietz Engineers, Inc., for the FIA, under Contract No. H-4719. That work was completed in October 1979.
South Holland, Village of:	The hydrologic and hydraulic analyses for the FIS dated February 1980 (Reference 107) were performed by DeLeuw, Cather & Company for the FIA, under Contract No. H-4573. That work was completed in November 1978.
Stone Park, Village of:	The hydrologic and hydraulic analyses for the FIS dated January 1980 (Reference 108) were performed by the ISWS for the FIA, under Contract No. H-3942. That work was completed in November 1977.
Streamwood, Village of:	The hydrologic and hydraulic analyses for the FIS dated May 1980 (Reference 109) were performed by Harza Engineering Company for the FIA, under Contract No. H-4652. That work was completed in November 1978.
Thornton, Village of:	The hydrologic and hydraulic analyses for the FIS dated February 1980 (Reference 110) were performed by DeLeuw, Cather & Company for the FIA, under Contract No. H-4573. That work was completed in November 1978.

Tinley Park, Village of:	The hydrologic and hydraulic analyses for the original FIS dated December 4, 1979, were performed by Harza Engineering Company for the FIA, under Contract No. H-3978. That work was completed in September 1977. The revised analyses for the FIS dated May 15, 1986 (Reference 111) were performed by the ISWS and FEMA; and reviewed and accepted by FEMA.
University Park, Village of:	The village of University Park was formerly known as the Village of Park Forest South. The hydrologic and hydraulic analyses for the Village of Park Forest FIS dated January 1980 (Reference 112) were performed by DeLeuw, Cather & Company for the FIA, under Contract No. H-4573. That work was completed in July 1978.
Westchester, Village of:	The hydrologic and hydraulic analyses for the original FIS were performed by the USGS for the FIA, under Inter-Agency Agreement No. IAA-H-17-75, Project Order No. 4. The updated analyses for the revised FIS dated December 1979 (Reference 113) were prepared by Dewberry, Nealon and Davis, Consulting Engineers, under the authority of an agreement with the FIA. The hydrologic and hydraulic analyses in the updated study were computed and obtained by the SCS. This revised work was completed in April 1979.
Western Springs, Village of:	The hydrologic and hydraulic analyses for the FIS dated July 1980 (Reference 114) were performed by Harza Engineering Company for the FIA, under Contract No. H-4562. That work was completed in December 1978.
Wheeling, Village of:	The hydrologic and hydraulic analyses for the original FIS dated September 15, 1978 were performed by the SCS for the FIA, under Inter-Agency Agreement No. IAA-H-23-74, Project Order No. 10, as amended. That work was completed in February 1977.

The revised analyses for the FIS dated October 18, 1983 (Reference 19) were obtained from the FIS for the unincorporated areas of Cook County and reviewed and accepted by FEMA (Reference 15).

Willow Springs, Village of:

The hydrologic and hydraulic analyses for the original FIS dated July 16, 1979 were performed by Harza Engineering Company for the FIA, under Contract No. H-3978. That work was completed in August 1977. The revised analyses for the FIS dated September 18, 1986 (Reference 115) were obtained from Harza Engineering and reviewed and accepted by FEMA.

Winnetka, Village of:

The hydrologic and hydraulic analyses for the FIS dated May 1980 (Reference 116) were performed by the FIA, under Contract No. H-4562. That work was completed in April 1979.

The authority and acknowledgements for the cities of Burbank, Evanston, Hometown, and Park Ridge; the villages of Barrington Hills, Bedford Park, Berkeley, Berwyn, Calumet Park, Deer Park, East Hazel Crest, Evergreen Park, Forest Park, Forest View, Harwood Heights, Hillside, Kenilworth, La Grange, Lincolnwood, McCook, Merrionette Park, Norridge, Oak Park, Park Ridge, Phoenix, Posen, Skokie, South Chicago Heights, Steger, Stickney, Summit, Willmette, and Worth; and the town of Cicero are not available because no pre-countywide FISs were ever published for those communities.

For communities located in Cook and one or more other counties, hydrologic and hydraulic analyses for only the portion of those communities located in Cook County have been incorporated into this FIS.

November 6, 2000 Initial Countywide FIS

The initial countywide FIS dated November 6, 2000 (Reference 117) was prepared to include the unincorporated areas of, and incorporated communities within, Cook County in a countywide format. Information on the hydrology and hydraulics for each jurisdiction included in the original countywide FIS was compiled from previously printed community-based studies. Revised hydrologic and hydraulic analyses were prepared for FEMA by: the USACE, Chicago District, under Inter-Agency Agreement No. EMW-89-E-2978, with work completed in September 1995; Engineering Enterprises, Inc.; TyLin International, BASCOR; and Patrick

Engineering, Inc., under Contract No. EMW-92-C-3808, with work completed in December 1994. The hydrologic and hydraulic analyses were performed by CTE Engineers, Inc., for Buffalo Creek Tributary A; by Lindley & Sons, Inc., for Butterfield Creek Tributary Nos. 3 and 4; by the Illinois Department of Natural Resources (IDNR) for Lansing Ditch and Tributaries to Lansing Ditch (Tributary A, Lynwood, Torrence, East and West Tributaries), North Creek, Skokie River West Ditch, and Skokie River Botanical Garden Diversion; and by CBBEL for Salt Creek (West Branch; West Branch Tributaries A, 3-7; Arlington Heights Branch, Anderson Drive Tributary, Tributaries A-D; Unnamed Tributary to Salt Creek Tributary D).

December 20, 2002
Revised Countywide FIS

In the revision dated December 20, 2002 (Reference 118), the FIS and FIRM were revised to designate the Cook County FIS and FIRM as the effective panels and FIS for the portion of the City of Elgin within Cook County.

February 4, 2004
Revised Countywide FIS

In the revision dated February 4, 2004 (Reference 119), the FIRM was corrected to include the DuPage County areas of the villages of Hanover Park and Schaumburg as part of the effective Cook County FIRM and FIS. All effective dates of panels for these two communities were revised. Also, the Grey Farms Lake LOMR 02-05-1126P (4/12/2002) was incorporated.

June 2, 2005
Revised Countywide FIS

For the revision dated June 2, 2005 (Reference 120), revised hydrologic and hydraulic analyses for Addison Creek were prepared for FEMA by Camp Dresser & McKee, Inc., on behalf of the IDNR.

December 16, 2005
Revised Countywide FIS

For the revision dated December 16, 2005 (Reference 120), the FIS and FIRM were revised to compile LOMRs and re-delineate Poplar Creek South Branch above Schaumburg Road in the vicinity of the Village of Streamwood. Revisions were also made to update the effective date of all panels effective for Streamwood, including those without SFHAs identified.

November 16, 2006
Revised Countywide FIS

For the revision dated November 16, 2006 (Reference 121), the FIS and FIRM were revised to include the Village of Barrington Hills. Additionally, this revision incorporated LOMR 05-05-0378P issued by FEMA, which became effective January 12, 2006. The area of restudy included Poplar Creek, from approximately 1,400 feet downstream to approximately 340 feet downstream of Barrington Road, Poplar Creek Unnamed Tributary No. 1, Poplar Creek Unnamed Tributary No. 2, and Poplar Creek Unnamed Tributary No. 3.

April 16, 2007
Revised Countywide FIS

The revision dated April 16, 2007 (Reference 122) includes revised analyses for the Wheeling Drainage Ditch and Buffalo Creek due to the construction of the William Rogers Memorial Diversion Channel, which was part of the Lower Des Plaines Tributaries Watershed Flood Control Project. The revision was initiated by a physical map revision request submitted by CBBEL on June 22, 2005. The revision also incorporates LOMR Case No. 02-05-1847P, effective December 27, 2002.

August 19, 2008
Revised Countywide FIS

The revision dated August 19, 2008 (Reference 123) was performed under the Cooperating Technical Partners (CTP) Agreement Nos. EMC-2004-GR-0214 and EMC-2005-GR-7026 between the IDNR and the FEMA, per the Mapping Activity Statement (MAS) Nos. IDNR04-06 and IDNR05-15.

Revised hydrologic and hydraulic analyses for the Little Calumet River and Thorn Creek below the USGS gage at Thornton were prepared by the ISWS to represent current conditions. This work was completed under contract number EMC-2004-GR-0214. Revised hydraulic analyses were also prepared for Midlothian Creek, Calumet Union Drainage Ditch, Thorn Creek above the gage at Thornton, Butterfield Creek, Deer Creek, and North Creek.

Revised hydrologic and hydraulic analyses for Farmer's, Prairie, and Weller Creeks were prepared by the ISWS on behalf of IDNR for FEMA under contract number EMC-2004-GR-0214.

An approximate zone of the Skokie Lagoons, which is backwater to Skokie Creek, was previously mapped incorrectly. The correct delineation of the floodplain has been included based on a restudy of Skokie Creek.

Base map information shown on the FIRM was provided in digital format by the USGS. Digital orthoimagery with a spatial resolution of 0.3 meter ground sample distance were photogrammetrically compiled from aerial photography acquired during the leaf-off period of spring 2005 (Reference 124).

November 1, 2019
Revised Countywide FIS

This Physical Map Revision (PMR) incorporates new hydrologic and hydraulic analyses of the Mill Creek watershed (Reference 125), which includes Mill Creek and Mill Creek West Branch as well as the Tinley Creek watershed (Reference 126), which includes Tinley Creek, Boca Rio Ditch, and Arroyo Ditch. The analyses were completed by the Illinois State Water Survey (ISWS) under the CTP Partnership Agreement Nos. EMC-2009-CA-7007 and EMC-2016-CA-00005-S01 between the ISWS and FEMA, per MAS Nos. ISWS 09-01 and ISWS 16-03. The mapping portion of this PMR project was also performed under the CTP Partnership Agreement No. EMC-2016-CA-00005-S01 per MAS No. ISWS16-03.

For the revised panels associated with this mapping project, the base map information was provided by the Cook County Board of Commissioners. This information was derived from digital orthoimagery at a spatial resolution of 0.5 feet from aerial photography dated 2012 (Reference 127).

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 Studies

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

Table 2 - CCO Meeting Dates for Pre-Countywide Studies

Community	Initial CCO Date	Final CCO Date
Alsip, Village of	May 1, 1977	August 27, 1979
Arlington Heights, Village of	*	December 7, 1976
Barrington, Village of	March 1, 1981	November 1, 1983
Bartlett, Village of	January 1976	September 15, 1980
Bellwood, Village of	*	January 8, 1979
Bensenville, Village of	October 4, 1984	October 13, 1988
Blue Island, City of	May 1, 1977	August 14, 1979
Bridgeview, Village of	March 8, 1978	February 14, 1980
Broadview, Village of	January 1, 1977	December 10, 1979
Brookfield, Village of	September 7, 1977	August 24, 1979
Buffalo Grove, Village of	*	February 16, 1977
Burnham, Village of	March 1, 1978	March 24, 1980
Burr Ridge, Village of	March 1, 1976	May 4, 1979
Calumet City, City of	*	January 18, 1979
Chicago, City of	March 1, 1978	June 20, 1980
Chicago Heights, City of	*	July 11, 1978
Chicago Ridge, Village of	May 1, 1977	September 24, 1979
Cook County (Unincorporated Areas)	*	December 13-15, 1977
Country Club Hills, City of	May 25, 1977	July 12, 1979
Countryside, City of	August 1, 1977	October 15, 1979
Crestwood, Village of	May 1, 1977	September 6, 1979
Deerfield, Village of	*	March 31, 1976
Des Plaines, City of	*	March 18, 1980
Dixmoor, Village of	May 25, 1977	May 2, 1979
Dolton, Village of	June 2, 1977	May 9, 1979
East Dundee, Village of	December 1977	April 28, 1980
Elgin, City of	December 1, 1977	*
Elk Grove Village, Village of	*	August 30, 1977
Elmhurst, City of	August 1976	January 8, 1980
Elmwood Park, Village of	September 8, 1977	August 24, 1979
Flossmoor, Village of	*	July 23, 1979
Ford Heights, Village of	*	September 27, 1977
Frankfort, Village of	*	October 16, 1978
Franklin Park, Village of	January 28, 1975	August 30, 1977
Glencoe, Village of	July 1, 1977	September 13, 1979
Glenview, Village of	*	November 18, 1976
Glenwood, Village of	June 10, 1975	March 14, 1977

* Data not available

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

Community	Initial CCO Date	Final CCO Date
Golf, Village of	*	August 11, 1978
Hanover Park, Village of	January 1, 1976	June 1, 1977
Harvey, City of	*	January 4, 1977
Hazel Crest, Village of	*	November 13, 1974
Hickory Hills, City of	May 1, 1977	August 7, 1979
Hinsdale, Village of	July 1977	December 3, 1979
Hodgkins, Village of	*	September 7, 1978
Hoffman Estates, Village of	July 1, 1977	January 14, 1980
Homewood, Village of	*	March 3, 1976
Indian Head Park, Village of	*	September 28, 1978
Inverness, Village of	July 1, 1977	January 14, 1980
Justice, Village of	*	June 12, 1980
La Grange Park, Village of	October 30, 1973	January 8, 1976
Lansing, Village of	April 1, 1976	July 16, 1980
Lemont, Village of	*	August 11, 1987
Lynwood, Village of	*	July 14, 1980
Lyons, Village of	*	October 31, 1978
Markham, City of	November 1, 1977	October 5, 1983
Matteson, Village of	June 1, 1977	October 27, 1980
Maywood, Village of	*	November 17, 1987
Melrose Park, Village of	*	October 31, 1979
Midlothian, Village of	June 10, 1975	August 16, 1978
Morton Grove, Village of	*	July 6, 1978
Mount Prospect, Village of	*	August 6, 1981
Niles, Village of	*	July 6, 1978
North Riverside, Village of	September 7, 1977	July 17, 1979
Northbrook, Village of	August 1, 1983	April 17, 1986
Northfield, Village of	*	September 11, 1978
Northlake, City of	*	February 4, 1985
Oak Brook, Village of	August 1976	January 10, 1980
Oak Forest, City of	*	July 26, 1978
Oak Lawn, Village of	May 1, 1977	October 11, 1979
Olympia Fields, Village of	May 25, 1977	May 21, 1979
Orland Hills, Village of	May 25, 1977	October 1, 1981
Orland Park, Village of	May 1, 1977	June 10 & 26, 1981
Palos Heights, City of	June 1, 1977	July 16, 1979
Palos Hills, City of	May 1, 1977	November 5, 1979
Palos Park, Village of	June 1, 1977	July 16, 1979
Park Forest, Village of	May 25, 1977	April 25, 1979
Prospect Heights, City of	July 1, 1975	September 1, 1978
Richton Park, Village of	May 25, 1977	May 19, 1979

* Data not available

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

Community	Initial CCO Date	Final CCO Date
River Forest, Village of	*	November 17, 1987
River Grove, Village of	September 8, 1977	September 12, 1979
Riverdale, Village of	June 1, 1975	September 1, 1977
Riverside, Village of	September 7, 1977	July 17, 1979
Robbins, Village of	March 1, 1976	September 1, 1977
Rolling Meadows, City of	*	September 20, 1977
Roselle, Village of	July 19, 1977	June 30, 1980
Rosemont, Village of	*	August 30, 1977
Sauk Village, Village of	March 1, 1978	April 14, 1980
Schaumburg, Village of	February 13, 1975	November 17, 1977
Schiller Park, Village of	January 28, 1975	August 30, 1977
South Barrington, Village of	July 26, 1979	May 7, 1980
South Holland, Village of	June 2, 1977	August 13, 1979
Stone Park, Village of	*	January 8, 1979
Streamwood, Village of	July 1, 1977	September 19, 1979
Thornton, Village of	June 1, 1977	May 6, 1979
Tinley Park, Village of	*	July 13, 1978
University Park, Village of	May 25, 1977	May 15, 1979
Westchester, Village of	March 1, 1973	February 26, 1979
Western Springs, Village of	July 1, 1977	May 10, 1979
Wheeling, Village of	*	October 14, 1977
Willow Springs, Village of	*	August 15, 1978
Winnetka, Village of	July 1, 1977	October 22, 1979

* Data not available

November 6, 2000 Initial Countywide FIS

The communities were notified by FEMA in a letter dated February 1, 1995, that a countywide FIS was being prepared. Final CCO meetings were held January 7, 1998 through January 29, 1998, and January 26, 1999 through February 4, 1999. These meetings were attended by representatives of the study contractors, the communities, the State of Illinois, and FEMA.

August 19, 2008 Revised Countywide FIS

The project team meeting for this countywide study was held on March 4, 2005, in Chicago, Illinois, and attended by representatives of the Villages of Arlington Heights, Northbrook, Schaumburg, and Wheeling, the City of Calumet City, Cook County, and the study contractor (IDNR). This meeting was intended to discuss various issues and concerns for the study area.

Two scoping meetings were held, one for the northern portion of the county and the other for the southern portion. On April 18, 2005 a scoping meeting was held in Des Plaines, Illinois. Representatives of FEMA, the county, the cities of Chicago, Des Plaines, Park Ridge, and Rolling Meadows, the villages of Bensenville, Elk Grove, Forest Park, Franklin Park, Glenview, Hillside, Hoffman Estates, Inverness, Morton Grove, Mount Prospect, Niles, North Riverside, Northbrook, Palatine, Roselle, Rosemont, Schaumburg, Wheeling, Wilmette and Winnetka, the Northeastern Illinois Planning Commission, the Metropolitan Water Reclamation District of Greater Chicago (MWRD), and the study contractor (IDNR) met to discuss the needs of the northern half of the county. On April 19, 2005 a scoping meeting was held in South Holland, Illinois. Representatives of FEMA, the county, the cities of Calumet City, Country Club Hills, Countryside, Harvey, Oak Forest, and Palos Hills, the villages of Burr Ridge, Dolton, Flossmoor, Glenwood, Homewood, Lansing, Midlothian, Orland Park, Palos Park, Park Forest, Posen, Robbins, South Chicago Heights, South Holland, Thornton, and Tinley Park, the South Suburban Mayors Association, the MWRD, and 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 Correction (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 three final open house meetings held on Tuesday, May 8, 2007, in South Holland, Wednesday, May 9, 2007, in Mount Prospect, and Thursday, May 10, 2007, in Chicago. The meetings were attended by representatives of Cook County, IDNR, FEMA, and several organizations, including the South Suburban Mayors Council and the Metropolitan Water Reclamation District of Greater Chicago. Representatives of the following communities were in attendance: the Villages of Arlington Heights, Barrington, Bellwood, Bensenville, Bridgeview, Buffalo Grove, Chicago Ridge, Dolton, East Hazel Crest, Elk Grove Village, Flossmoor, Ford Heights, Franklin Park, Glenview, Glenwood, Hanover Park, Hazel Crest, Hillside, Hoffman Estates, Indian Head Park, Inverness, Justice, Kenilworth, Lansing, Melrose Park, Midlothian, Mount Prospect, Niles, North Riverside, Northbrook, Northfield, Oak Lawn, Olympia Fields, Orland Hills, Orland Park, Palatine, Palos Park, Park Forest, Phoenix, Richton Park, Rosemont, Skokie, South Barrington, South Holland, Streamwood, and Wheeling, the Cities of Calumet City, Chicago, Chicago Heights, Countryside, Des Plaines, Elgin, Northlake, Oak Forest, Palos Heights, Palos Hills, Park Ridge, and Prospect Heights. All problems raised at that meeting have been addressed in this study.

November 1, 2019
Revised Countywide FIS

A Flood Risk Review (FFR) meeting was held on July 22, 2015 in Orland Park, Illinois to discuss the draft results of the Mill Creek watershed and Tinley Creek watershed studies with community officials. Technical comments were received during and following the FFR meeting, which required modifications to the hydraulic models.

The results of the PMR were reviewed at the final CCO meeting held on January 23, 2018 in Orland Park, Illinois and was attended by representatives of Cook County, the City of Oak Forest, the villages of Alsip, Crestwood, Orland Park, Palos Park, and Tinley Park, ISWS, and IDNR. All problems raised at that meeting have been addressed in this study.

2.0 AREA STUDIED

2.1 Scope of Study

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

Typically, areas studied by Zone AE methods are selected with priority given to all known flood hazards and areas of projected development or proposed construction.

The streams, or portions of streams, listed in Table 3, "Limits of New or Revised Zone AE Study," have new or revised hydrologic and hydraulic analyses for this PMR.

Table 3 - Limits of New or Revised Zone AE Study

Stream	Limits of New or Revised Zone AE Study
Alsip Drainage Ditch	From just upstream of Pulaski Road to approximately 1,400 feet upstream of Pulaski Road
Arroyo Ditch	From the confluence with Boca Rio Ditch to approximately 1,140 feet upstream of confluence with Boca Rio Ditch (just downstream of Victoria Drive)
Boca Rio Ditch	From the confluence with Tinley Creek to approximately 12,475 feet upstream of confluence with Tinley Creek (just downstream of Victoria Drive)
Mill Creek	From the confluence with Calumet Sag Channel to approximately 30,590 feet upstream of confluence with Calumet Sag Channel (just downstream of 88 th Avenue)
Mill Creek West Branch	From the confluence with Mill Creek to approximately 9,920 feet upstream of confluence with Mill Creek (just downstream of Creek Road)
Tinley Creek	From 402 feet upstream of the confluence with the Calumet Sag Channel to approximately 61,850 feet upstream of confluence with Calumet Sag Channel (approximately 975 feet above 169 th Place)
Tinley Creek Overflow	From convergence with Tinley Creek to approximately 2,960 feet upstream of convergence with Tinley Creek

The streams, or portions of streams, listed in Table 4, “Limits of New or Revised Zone AE Study,” have new or revised hydrologic and hydraulic analyses for this countywide FIS.

Table 4 - Limits of Zone AE Study

Flooding Source	Limits of Zone AE Study
57 th Street Ditch	From the confluence with East Avenue Ditch to 2,300 feet above confluence with East Avenue Ditch (approximately downstream side of La Grange Road)
59 th Street Ditch	From 1,650 feet above the mouth at Flag Creek to 3,050 feet above the mouth at Flag Creek (approximately County Line Road) Cook/DuPage county boundary
63 rd Street Ditch	From 400 feet above the mouth at Flag Creek to 2,960 feet above the mouth at Flag Creek (approximately 900 feet above Pleasant Hollow Drive) Cook/DuPage county boundary
67 th Street Ditch	From 7,000 feet above the mouth at Des Plaines River to 8,895 feet above the mouth at Des Plaines River (approximately 345 feet above Sunset Avenue)
71st Street Ditch	From the mouth at Chicago Sanitary Drainage and Ship Canal to 3,910 feet above the mouth at Chicago Sanitary Drainage and Ship Canal (approximately 230 feet above 86th Avenue)
76th Avenue Ditch	From the mouth at Midlothian Creek to 8,080 above the mouth at Midlothian Creek (approximately 40 feet below 159th Street)
79th Street Ditch	From the confluence with Flag Creek Tributary C to 1,475 feet above confluence with Flag Creek Tributary C (at county boundary)
Alsip Drainage Ditch	From just upstream of Pulaski Road to approximately 1,400 feet upstream of Pulaski Road
Arroyo Ditch	From the confluence with Boca Rio Ditch to approximately 1,140 feet upstream of confluence with Boca Rio Ditch (just downstream of Victoria Drive)
Addison Creek	From the confluence with Salt Creek (Lower Reach) to 45,900 feet above confluence with Salt Creek (Lower Reach) (approximately 200 feet above Tri-State Tollway-Interstate Route 294)
Belaire Creek	From the mouth at Dixie Creek to 6,250 feet above the mouth at Dixie Creek (approximately 350 feet above Albany Avenue)
Boca Rio Ditch	From the confluence with Tinley Creek to approximately 12,475 feet upstream of confluence with Tinley Creek (just downstream of Victoria Drive)

Table 4 - Limits of Zone AE Study (continued)

Flooding Source	Limits of Zone AE Study
Buffalo Creek	From 15,180 feet above confluence with Des Plaines River (approximately Elmhurst Road) to 30,150 feet above confluence with Des Plaines River (approximately 1,350 feet above Lake-Cook Road)
Buffalo Creek Tributary A	From 3,300 feet above the confluence with Buffalo Creek (Lake-Cook Road, Lake/Cook County Boundary) to 25,200 feet above the confluence with Buffalo Creek (approximately 500 feet above Staples Road)
Butterfield Creek	From the confluence with Thorn Creek to 78,500 feet above confluence with Thorn Creek (approximately 2,400 feet above Ridgeland Avenue)
Butterfield Creek East Branch	From the confluence with Butterfield Creek to 22,660 feet above confluence with Butterfield Creek (approximately 1,935 feet above Polk Avenue, Cook/Will County Boundary)
Butterfield Creek East Branch Tributary	From the confluence with Butterfield Creek East Branch to 13,400 feet above the confluence with Butterfield Creek East Branch (Steger Road)
Butterfield Creek East Branch Tributary A	From the confluence with Butterfield Creek East Branch Tributary to 0.42 miles above confluence with Butterfield Creek East Branch Tributary (approximately 0.04 miles above Imperial Drive)
Butterfield Creek East Branch Tributary A	From the confluence with Butterfield Creek East Branch Tributary to 0.42 miles above confluence with Butterfield Creek East Branch Tributary (approximately 0.04 miles above Imperial Drive)
Butterfield Creek Tributary No. 1	From the confluence with Butterfield Creek to 0.37 miles above the confluence with Butterfield Creek (approximately 0.09 miles above Volmer Road)
Butterfield Creek Tributary No. 3	From the confluence with Butterfield Creek to 0.95 miles above confluence with Butterfield Creek (approximately 0.02 miles above Kedzie Avenue)
Butterfield Creek Tributary No. 4	From the confluence with Butterfield Creek Tributary No. 3 to 1.14 miles above confluence with Butterfield Creek Tributary No. 3 (0.03 miles above Governors Highway)
Calumet Sag Channel Tributary A	From 3,900 feet above mouth at Calumet Sag Channel (approximately 700 feet below Illinois State Highway Bridge) to 14,400 feet above mouth at Calumet Sag Channel (5,775 feet above confluence of Calumet Sag Channel Tributary AA)

Table 4 - Limits of Zone AE Study (continued)

Flooding Source	Limits of Zone AE Study
Calumet Sag Channel Tributary AA	From the mouth at Calumet Sag Channel Tributary A to 1,150 feet above the mouth at Calumet Sag Channel Tributary A
Calumet Sag Channel Tributary B	From the confluence with Calumet Sag Channel to 4,910 feet above the confluence with Calumet Sag Channel (approximately 15 feet above Woodland Trail)
Calumet Sag Channel Tributary C	From 7,750 feet above mouth at Calumet Sag Channel (Midlothian Turnpike) to 16,050 feet above mouth at Calumet Sag Channel (Central Avenue)
Calumet Union Drainage Ditch	From the confluence with Little Calumet River to 28,300 feet above confluence with Little Calumet River (approximately 1,000 feet above Central Park Avenue)
Calumet Union Drainage Ditch Southwest Branch	From the confluence with Calumet Union Drainage Ditch to 25,291 feet above the confluence with Calumet Union Drainage Ditch (approximately 1,000 feet above Kostner Avenue)
Calumet Union Drainage Ditch Southwest Branch Tributary N	From the mouth at Calumet Union Drainage Ditch Southwest Branch to 6,550 feet above the mouth at Calumet Union Drainage Ditch Southwest Branch (Cicero Avenue)
Calumet Union Drainage Ditch Southwest Branch Tributary S	From the mouth at Calumet Union Drainage Ditch Southwest Branch to 1.30 miles above the mouth at Calumet Union Drainage Ditch Southwest Branch (approximately 0.33 miles above 183rd Street)
Cherry Creek	From 27,900 feet above the confluence with Little Calumet River and Calumet Union Drainage Ditch (Rockwell Avenue) to 30,100 feet above the confluence with Little Calumet River and Calumet Union Drainage Ditch (confluence of Cherry Creek East and West Branches)
Cherry Creek East Branch	From the confluence with Cherry Creek to 2.48 miles above confluence with Cherry Creek (Kedzie Avenue)
Cherry Creek East Branch Tributary	From the confluence with Cherry Creek East Branch to 0.35 miles above confluence with Cherry Creek East Branch (Flossmoor/Governors Highway)
Cherry Creek West Branch	From mouth at Cherry Creek to 8,690 feet above mouth at Cherry Creek (approximately 890 feet above Dam)
Cherry Creek West Branch East Fork	From 0.51 miles above confluence with Cherry Creek West Branch to 0.90 miles above confluence with Cherry Creek West Branch (Crawford Avenue)

Table 4 - Limits of Zone AE Study (continued)

Flooding Source	Limits of Zone AE Study
Chicago River, North Branch	From the Weir Dam (approximately 420 feet below North Albany Avenue) to 8,500 feet above Weir Dam (approximately 160 feet above West Foster Avenue) and From 76,550 feet above mouth at Chicago River (approximately 5,600 feet below Hartz Road) to 120,000 feet above the mouth at Chicago River (approximately 4,000 feet above East Lake Avenue)
Chicago River, North Branch - Skokie River	Transition between Chicago River, North Branch and Skokie River. No limits required.
Skokie River	From 120,000 feet above the mouth at Chicago River (approximately 1,200 feet below Chicago and North Western Railway) to 157,180 feet above the mouth at Chicago River (Lake-Cook Road, at Cook-Lake County Boundary)
Chicago River, North Branch Middle Fork	From the confluence with Chicago River, North Branch and Skokie River to 33,590 feet above confluence with Chicago River, North Branch and Skokie River (Lake-Cook Road, Cook/Lake County Boundary)
Chicago River, North Branch West Fork	From the confluence with the Chicago River North Branch to 49,605 feet above confluence with Chicago River North Branch (Lake-Cook Road, Cook/Lake County Boundary)
Crestwood Drainage Ditch West	From approximately 100 feet above mouth at Calumet Sag Channel to 5,950 feet above mouth at Calumet Sag Channel (approximately 1,000 feet above 135th Street)
Crystal Creek	From the confluence with Des Plaines River to 12,375 feet above confluence with Des Plaines River (approximately 1,000 feet above Lawrence Avenue)
Crystal Creek Tributary	From the confluence with Crystal Creek to 6,000 feet above confluence with Crystal Creek (approximately 450 feet above Manheim Road)
Deer Creek	From the mouth at Thorn Creek to 41,110 feet above the mouth at Thorn Creek (Steger Road)
Deer Creek Tributary B	From the mouth at Deer Creek to 14,600 feet above the mouth at Deer Creek approximately 1,330 feet above Cottage Grove Avenue)
Des Plaines River	From 28.4 miles above the mouth at the Illinois River to 36.32 miles above the mouth at the Illinois River (approximately 4,540 above Interstate Route 55), and 227,700 feet above the mouth at the Illinois River to 403,300 feet above mouth at the Illinois River (Lake – Cook Road, Lake/Cook County Boundary)

Table 4 - Limits of Zone AE Study (continued)

Flooding Source	Limits of Zone AE Study
Des Plaines River Tributary A	From Brainard Avenue to 5,015 feet above Brainard Avenue (approximately 1,275 feet above 55th Place)
Dixie Creek	From Dixie Highway to 4,750 feet above Dixie Highway (approximately 1,250 feet above Interstate Route 294)
DuPage River West Branch	From the Cook-DuPage County Boundary 58.07 miles above the mouth of the DuPage River at the Des Plaines River (approximately .55 miles below Walnut Avenue) to 326,700 feet above mouth of the DuPage River at the Des Plaines River (approximately 490 feet above Bradford Lane)
East Avenue Ditch	From 9,500 feet above mouth at Des Plaines River to 14,225 feet above mouth at Des Plaines River (La Grange Road)
Elk Grove Boulevard Drainage Ditch	From mouth at Salt Creek Lower Reach to 4,650 feet above mouth at Salt Creek Lower Reach (Toner Road)
Farmer's Creek	From the confluence with Des Plaines River to 9,750 feet above confluence with Des Plaines River (950 feet above Emerson Street)
Farrington Ditch	From the mouth at Buffalo Creek to 500 feet above the mouth at Buffalo Creek (Lake – Cook Road, Lake-Cook County Boundary)
Feehanville Ditch	From 1,780 feet above confluence with Des Plaines River to 11,620 feet above confluence with Des Plaines River (approximately 3,230 feet above Foot Bridge)
Filsen Park Ditch	From the confluence with 76th Avenue Ditch to 2,845 feet above confluence with 76th Avenue Ditch (115 feet above Harlem Avenue)
Flag Creek	From 1,500 feet above mouth at Des Plaines River 38,050 feet above mouth at Des Plaines River (approximately 565 feet above 47th street)
Flag Creek Tributary A	From the mouth at Flag Creek to 5,315 feet above mouth Flag Creek (Prison Farm Drive)
Flag Creek Tributary B	From the confluence with Flag Creek to 5,270 feet above the confluence with Flag Creek (approximately 390 feet above Lincolnshire Drive)
Flag Creek Tributary C	From mouth at Flag Creek to 7,775 feet above mouth at Flag Creek (County Line Road)
Flint Creek	From 78,915 feet above mouth at Des Plaines River (230 feet above Abbotsford Drive) to 80,990 feet above mouth at Des Plaines River (approximately 3,195 feet above Abbotsford Drive)

Table 4 - Limits of Zone AE Study (continued)

Flooding Source	Limits of Zone AE Study
Flint Creek Tributary	From 16,000 feet above confluence with Flint Creek (approximately 10 feet below Lake-Cook Road, Lake-Cook County Boundary) to 17,900 feet above confluence with Flint Creek (approximately 1,890 feet above Lake-Cook Road)
Flossmoor Ditch	From 5,310 feet above mouth at Union Drainage Ditch (Harlem Avenue, Will-Cook County Boundary) to 10,460 feet above mouth at Union Drainage Ditch (approximately 3,010 feet above confluence of Flossmoor Ditch Tributary A)
Flossmoor Ditch Tributary A	From mouth at Flossmoor Ditch to 8,600 feet above mouth at Flossmoor Ditch (approximately 4,770 feet above Volmer Road)
Golf Course Tributary	From 1,890 feet above confluence with Des Plaines River to 6,040 feet above confluence with Des Plaines River (Fullerton Avenue)
Grand Calumet River	From 8,700 feet above mouth at Little Calumet River (approximately 1,300 feet below Burnham Avenue) to 14,625 feet above mouth at Little Calumet River (Illinois-Indiana State Boundary)
Hickory Creek	From 110,000 feet above mouth at Des Plaines River (approximately 75 feet below Harlem Avenue, Will-Cook County Boundary) to 124,350 above mouth at Des Plaines River (approximately 2,075 feet above Sauk Road)
Hickory Creek Tributary A	From 119,400 feet above confluence of Hickory Creek and Des Plaines River (Harlem Avenue/ Will-Cook County Boundary) to 125,000 feet above confluence of Hickory Creek and Des Plaines River (Steger Road/Cook-Will County Boundary)
Higgins Creek	From the confluence with Willow Creek to just downstream of Interstate 90 (Northwest Tollway)
Higgins Creek Tributary A	From the confluence with Higgins Creek to 4,760 feet above the confluence with Higgins Creek (approximately 1,610 feet above Higgins Road)
I-57 Drainage Ditch	From Corporate Limits to 5,500 feet above corporate limits (approximately 3,350 feet above Kedzie Avenue)
Illinois and Michigan Canal Tributary A	From 150 feet above mouth at Illinois and Michigan Canal to 6,700 feet above mouth at Illinois and Michigan Canal (approximately 6,450 feet above New Avenue)
Illinois and Michigan Canal Tributary B	From mouth at Illinois and Michigan Canal to 5,919 feet above mouth at Illinois and Michigan Canal (approximately 40 feet above Walker Road Culvert)

Table 4 - Limits of Zone AE Study (continued)

Flooding Source	Limits of Zone AE Study
Illinois and Michigan Canal Tributary C	From mouth at Illinois and Michigan Canal Tributary B to 3,710 feet above mouth at Illinois and Michigan Canal Tributary B (approximately 210 feet above Cog Hill Country Club Road)
Illinois and Michigan Canal Tributary D	From mouth at Illinois and Michigan Canal to 2,560 feet above mouth at Illinois and Michigan Canal (approximately 1,060 feet above Archer Avenue Culvert)
Industrial Tributary	From the confluence with Crystal Creek Tributary to 3,040 feet above confluence with Crystal Creek Tributary (approximately 620 feet above Trans World Road)
Justice Ditch	From 1,980 feet above mouth at Illinois and Michigan Canal to 4,610 feet above mouth at Illinois and Michigan Canal (approximately 1,020 feet above Blazer Avenue)
Lansing Ditch	From the confluence with North Creek to 40,625 feet above the Confluence with North Creek (approximately 4,070 feet above Gravel Road)
Lansing Ditch East Tributary	From the confluence with Lansing Ditch to 10,075 feet above confluence with Lansing Ditch (Steger Road/ Cook-Will County Boundary)
Lansing Ditch Lynwood Tributary	From the confluence with North Creek to 14,015 feet above confluence with North Creek (approximately 2,645 feet above Burnham Avenue Culvert)
Lansing Ditch Torrence Tributary	From the confluence with Lansing Ditch to 6,400 feet above confluence with Lansing Ditch (approximately 5,050 feet above Dr. Mary Woodland Reservoir Outlet)
Lansing Ditch West Tributary	From the confluence with Lansing Ditch to 4,900 feet above confluence with Lansing Ditch (approximately 1,875 feet above Torrence Avenue Culvert)
Lansing Ditch Tributary A	From the confluence with Lansing Ditch to 5,495 feet above confluence with Lansing Ditch (Katz Corner Road)
Little Calumet River	From the confluence with Calumet Sag Channel to 70,950 feet above the confluence with Calumet Sag Creek (approximately 2,250 feet above State Boundary)
Long Run	From 25,380 feet above the mouth at Chicago Sanitary Drainage and Ship Canal (approximately 1,720 feet below State Route 171) to 67,970 feet above mouth at Chicago Sanitary Drainage and Ship Canal (approximately 2,160 feet above 143rd Street)
Long Run Tributary A	From the mouth at Long Run to 3,630 feet above the mouth at Long Run (approximately 175 feet above 143rd Street)

Table 4 - Limits of Zone AE Study (continued)

Flooding Source	Limits of Zone AE Study
Long Run Tributary B	From the mouth at Long Run to 11,900 feet above the mouth at Long Run (approximately 210 feet above Parker Road)
Long Run Tributary BA	From the mouth at Long Run Tributary B to 2,320 feet above the mouth at Long Run Tributary B (approximately 1,440 feet above 131st Street)
Long Run Tributary C	From the mouth at Long Run to 2,340 feet above the mouth at Long Run
Lord's Park Tributary	From the mouth at Poplar Creek to 4,950 feet above the mouth at Poplar Creek (approximately 750 feet above Laurel Street)
Lucas Ditch	From the confluence with Stony Creek (West) to 10,450 feet above the confluence with Stony Creek (West) (approximately 300 feet above 80th Court)
Lucas Ditch Cut-off	From confluence with Stony Creek (West) to 6,500 feet above confluence with Stony Creek (West) (approximately 2,185 feet above confluence with Lucas Ditch Cut-off Tributary)
Marley Creek	From 23,500 feet above Mouth at Hickory Creek (approximately 250 feet above the Will-Cook county boundary) to 44,075 feet above mouth at Hickory Creek (approximately at 150th Street)
Marley Creek Tributary A	From the confluence with Marley Creek to 5,000 feet above confluence with Marley Creek (approximately 900 feet above Fountain Hill Drive)
Marley Creek Tributary B	From the confluence with Marley Creek to 3,065 feet above confluence with Marley Creek (approximately at 2,365 feet above US Route 6)
Marley Creek Tributary C	From the confluence with Marley Creek to 6,350 feet above confluence with Marley Creek (approximately 1,390 feet above Farmer's Bridge)
Marley Creek Tributary D	From Norfolk and Western Railway to 9,425 feet above Norfolk and Western Railway (approximately 25 feet above 167th Street)
McDonald Creek	From the confluence with Des Plaines River to 32,338 feet above the confluence with Des Plaines River (approximately 4,313 feet above Cornell Avenue)
McDonald Creek North Branch	From the confluence with Lake Arlington to 7,240 above the confluence with Lake Arlington (approximately 180 feet above Mill Creek Drive)
McDonald Creek South Branch	From the confluence with Lake Arlington to 1,840 feet above confluence with Lake Arlington (approximately at Palatine Road)

Table 4 - Limits of Zone AE Study (continued)

Flooding Source	Limits of Zone AE Study
McDonald Creek Tributary A	From the confluence with McDonald Creek to 6,400 feet above the confluence with McDonald Creek (approximately 100 feet above Camp McDonald Road)
McDonald Creek Tributary B	From the confluence with McDonald Creek to 5,200 feet above confluence with McDonald Creek (approximately at Wheeling Road)
Melvina Ditch	From the confluence with Stony Creek (West) to 4,850 feet above the confluence with Stony Creek (West) (approximately 2,665 feet above 99th Street)
Merrionette Park Ditch	From the confluence with Stony Creek (East) to 3,500 feet above the confluence with Stony Creek (East) (approximately 2,010 feet above 123rd Street)
Midlothian Creek	From the confluence with Little Calumet River to 66,730 feet above the confluence with Little Calumet River (approximately 140 feet above 175th Street)
Midlothian Creek Western Branch	From mouth at Midlothian Creek to 4,500 feet above mouth at Midlothian Creek (approximately 1,325 feet above Latrobe Avenue)
Midlothian Creek Western Tributary	From the confluence with Midlothian Creek to 6,675 feet above confluence with Midlothian Creek (approximately 175 feet above 88th Avenue)
Mill Creek	From the confluence with Calumet Sag Channel to approximately 30,590 feet upstream of confluence with Calumet Sag Channel (just downstream of 88 th Avenue)
Mill Creek West Branch	From the confluence with Mill Creek to approximately 9,920 feet upstream of confluence with Mill Creek (just downstream of Creek Road)
Motel Ditch	From the confluence with Industrial Tributary to 2,200 feet above confluence with Industrial Tributary
Natalie Creek	From Crawford Avenue to 14,950 feet above Crawford Avenue (approximately 1,500 feet above James Drive/ 155th Street)
Natalie Creek Overland Flow	From the confluence with Natalie Creek to 4,200 feet above the confluence with Natalie Creek
Navajo Creek	From Calumet Sag Channel (approximately 450 feet downstream of State Route 83) to 15,010 feet above Calumet Sag Channel (131st Street)
North Creek	From the confluence with Thorn Creek to 38,525 feet above the confluence with Thorn Creek (approximately 1,100 feet above Wentworth Avenue)

Table 4 - Limits of Zone AE Study (continued)

Flooding Source	Limits of Zone AE Study
North Navy Ditch	From the confluence with Chicago River, North Branch, West Fork to 2,300 feet above the confluence with Chicago River, North Branch, West Fork (approximately 2,050 feet above Access Road)
North Tributary to Tinley Creek	From 3,375 feet above confluence with Tinley Creek to 4,580 feet above confluence with Tinley Creek (approximately 560 feet above Maple Avenue)
Oak Lawn Ditch	From the confluence with Stony Creek (West) to 5,940 feet above confluence with Stony Creek (West) (Edison Avenue)
Park Creek	From mouth at I-57 Drainage Ditch to 3,835 feet above mouth at I-57 Drainage Ditch (approximately 2,685 feet above Kedzie Avenue)
Plainfield Road Ditch	From the confluence with Flag Creek to 3,400 feet above confluence with Flag Creek (approximately 150 feet above Chute Road)
Plum Creek	From Cook County, Illinois-Lake County, Indiana County State Boundary to 11,400 feet above Cook-Will County Boundary (Steger Road)
Poplar Creek	From County boundary (4,800 feet above Fox River confluence) to 94,900 feet above Fox River (approximately 1,250 feet above Private Drive)
Poplar Creek East Branch	From the confluence of Poplar Creek to 14,050 feet above confluence of Poplar Creek (approximately 3,500 feet above Huntington Boulevard)
Poplar Creek Schaumburg Branch	From the confluence of Poplar Creek to 14,700 feet above confluence of Poplar Creek (approximately 4,500 feet above Harmon Boulevard)
Poplar Creek South Branch	From the confluence with Poplar Creek to 16,850 feet above confluence with Poplar Creek (approximately 820 feet above Bartlett Road)
Poplar Creek Tributary A	From the confluence with Poplar Creek to 5,310 feet above confluence with Poplar Creek (approximately 240 feet above Midlands Drive)
Poplar Creek Unnamed Tributary No. 1	From the confluence with Poplar Creek to 1,025 feet above the confluence with Poplar Creek (approximately 650 feet above Private Drive)
Poplar Creek Unnamed Tributary No. 2	From the confluence with Poplar Creek to 2,110 feet above the confluence with Poplar Creek (approximately 2,520 feet above Private Drive)

Table 4 - Limits of Zone AE Study (continued)

Flooding Source	Limits of Zone AE Study
Poplar Creek Unnamed Tributary No. 3	From the confluence with Poplar Creek to 2,025 feet above the confluence with Poplar Creek
Prairie Creek	From the confluence with Farmer's Creek to 7,800 feet above confluence with Farmer's Creek
Salt Creek (Lower Reach)	From the confluence with Des Plaines River to 37,090 feet above confluence with Des Plaines River (5,590 feet above 31st Street) and from 140,250 feet above confluence with Des Plaines River (Devon Avenue) to 148,260 feet above confluence with Des Plaines River (Arlington Heights Road, below Busse Woods Reservoir)
Salt Creek (Upper Reach)	From State Route 58 to 51,150 feet above State Route 58 (approximately 750 feet above Poteet Avenue)
Salt Creek, Arlington Heights Branch	From the confluence with Salt Creek (Upper Reach) to 45,660 feet above confluence with Salt Creek (Upper Reach) (approximately 1,560 feet above Quentin Road)
Salt Creek, Arlington Heights Branch, Anderson Drive Tributary	From the confluence with Salt Creek Arlington Heights Branch to 7,150 feet above confluence with Salt Creek Arlington Heights Branch (approximately 450 feet above Evergreen Drive)
Salt Creek Middle Fork	From the confluence with Salt Creek Tributary to 1,520 feet above confluence with Salt Creek Tributary (approximately 1,475 feet above Wolf Road)
Salt Creek South Fork	From the confluence with Salt Creek Tributary to 3,420 feet above confluence with Salt Creek Tributary (approximately 1,350 feet above Wolf Road)
Salt Creek Tributary	From 2,140 feet above Salt Creek Lower Reach to 3,248 feet above Salt Creek Lower Reach (approximately 390 feet above Diversion Orifice)
Salt Creek Tributary A	From the confluence with Salt Creek (Upper Reach) to 6,960 feet above the confluence with Salt Creek (Upper Reach) (approximately 1,460 feet above Jules Road)
Salt Creek Tributary B	From the confluence with Salt Creek (Upper Reach) to 3,875 feet above the confluence with Salt Creek (Upper Reach) (approximately 575 feet above Palatine Road)
Salt Creek Tributary C	From the confluence with Salt Creek (Upper Reach) to 10,085 feet above the confluence with Salt Creek (Upper Reach) (approximately 135 feet above Roselle Road)
Salt Creek Tributary D	From the confluence with Salt Creek (Upper Reach) to 12,355 feet above the confluence with Salt Creek (Upper Reach) [approximately 280 feet above Central Court (west)]

Table 4 - Limits of Zone AE Study (continued)

Flooding Source	Limits of Zone AE Study
Salt Creek West Branch	From limit of detailed study (located approximately 200 feet downstream of Interstate Route 290) to 36,585 feet above the limit of detailed study (approximately 135 feet above Roselle Road)
Salt Creek West Branch Tributary A	From the confluence with Salt Creek West Branch to 8,038 feet above the confluence with Salt Creek West Branch (approximately 100 feet above Apple Street)
Salt Creek West Branch Tributary 3	From the confluence with Salt Creek West Branch to 8,350 feet above the confluence with Salt Creek West Branch (approximately 350 feet above Roselle Road)
Salt Creek West Branch Tributary 4	From confluence with Salt Creek West Branch Tributary 3 to 3,720 feet above confluence with Salt Creek West Branch Tributary 3 (approximately 190 feet above Roselle Road)
Salt Creek West Branch Tributary 5	From confluence with Salt Creek West Branch Tributary 3 to 2,021 feet above confluence with Salt Creek West Branch Tributary 3 (approximately 246 feet above Summit Drive)
Salt Creek West Branch Tributary 6	From the confluence with Salt Creek West Branch to 6,526 feet above confluence with Salt Creek West Branch (approximately 105 feet above Summit Drive)
Salt Creek West Branch Tributary 7	From the confluence with Salt Creek West Branch Tributary 6 to 5,990 feet above confluence with Salt Creek West Branch Tributary 6 (approximately 140 feet from Plum Grove Road)
Sexton Ditch	From the confluence with Crystal Creek Tributary to 1,828 feet above the confluence with Crystal Creek Tributary
Silver Creek	From the mouth at Des Plaines River to 6.43 miles above the mouth at Des Plaines River (approximately 105 feet above Irving Park Road)
Skokie River (See entry following Chicago River, North Branch - Skokie River)	
Skokie River, Botanical Garden Diversion	From the confluence with Skokie River to 5,400 feet above the confluence with Skokie River [approximately Maintenance Road (divergence from Skokie River)]
Skokie River, West Ditch	From the confluence with Skokie River to 8,640 feet above confluence with Skokie River
South Navy Ditch	From the confluence with Chicago River, North Branch, West Fork to 2,245 feet above the confluence with Chicago River, North Branch, West Fork (approximately 1,285 feet above Blackthorn Drive)

Table 4 - Limits of Zone AE Study (continued)

Flooding Source	Limits of Zone AE Study
South Tributary to Tinley Creek	From approximately 400 feet above the confluence of North Tributary to Tinley Creek (approximately 235 feet below 88th Avenue) to approximately 1,275 feet above the confluence of North Tributary to Tinley Creek (approximately 315 feet above Dogwood Cypress Court)
Spring Creek	From Will-Cook County Boundary to 16,250 feet above Will-Cook County Boundary (approximately 155 feet above 108th Avenue)
Stony Creek (East)	From approximately 1,430 feet above the confluence with Calumet Sag Channel (California Avenue) to 18,852 feet above the confluence with Calumet Sag Channel (approximately 7,652 feet above Crawford Avenue)
Stony Creek (West)	From mouth at Calumet Sag Channel to 30,900 feet above mouth at Calumet Sag Channel (approximately Lawrence Avenue)
Techny Drain	From the confluence with Chicago River, North Branch, West Fork to 11,240 feet above the confluence with Chicago River, North Branch, West Fork (approximately 1,145 feet above Fox Grove Drive)
Techny Drain South Fork	From the confluence with Techny Drain to 2,800 feet above the confluence with Techny Drain (approximately 200 feet above Wood Drive)
Third Creek	From the confluence with Deer Creek to 13,660 feet above the confluence with Deer Creek (approximately 910 feet above Union Pacific Railroad)
Thorn Creek	From confluence with Little Calumet River to 81,260 feet above confluence with Little Calumet River (approximately 1,520 feet above Western Avenue)
Thorn Creek Tributary A	From 4,360 feet above mouth at Thorn Creek (approximately 1,100 feet below State Street) to 8,970 feet above mouth at Thorn Creek (Lincoln Highway U.S. Route 30)
Thorn Creek Tributary B	From the confluence with Thorn Creek to 5,650 feet above the confluence with Thorn Creek (approximately 325 feet above Meadow Lane)
Tinley Creek	From 402 feet upstream of the confluence with the Calumet Sag Channel to approximately 61,850 feet upstream of confluence with Calumet Sag Channel (approximately 975 feet above 169 th Place)
Tinley Creek Overflow	From convergence with Tinley Creek to approximately 2,960 feet upstream of convergence with Tinley Creek

Table 4 - Limits of Zone AE Study (continued)

Flooding Source	Limits of Zone AE Study
Union Drainage Ditch	From 3,400 feet above 76th Avenue (approximately at Harlem Avenue, Will-Cook County Boundary) to 7,630 feet above 76th Avenue (approximately 1,640 feet above Oak Park Avenue)
Union Drainage Ditch Northern Tributary	From 3,120 feet above 80th Avenue (approximately at 183rd Street, Will-Cook County Boundary) to 5,850 feet above 80th Avenue (approximately at 80th Avenue)
Unnamed Creek	From 10,950 feet above Salt Creek to 11,700 feet above Salt Creek (approximately 90 feet above Nerge Road)
Unnamed Tributary Calumet Sag Channel Tributary B	From the confluence with Calumet Sag Channel Tributary B to 3,500 feet above the confluence with Calumet Sag Channel Tributary B (approximately at 121st Street)
Unnamed Tributary Lake Emily	From the confluence with Boca Rio Ditch to 1,920 feet above the confluence with Boca Rio Ditch (approximately 1,450 feet above Moorings Lane)
Unnamed Tributary to Salt Creek Tributary D	From the confluence with Salt Creek Tributary D to 3,400 feet above the confluence with Salt Creek Tributary D
Weller Creek	From the confluence with Des Plaines River to 31,550 feet above confluence with Des Plaines River (2,650 feet above Lincoln Street)
West Ditch	From the confluence with Boca Rio Ditch to 1,800 feet above the confluence with Boca Rio Ditch (1,600 feet above Ridgewood Drive) and from 1,460 feet above Oak Park Avenue to 3,290 feet above Oak Park Avenue (300 feet above Harlem Avenue)
Wheeling Drainage Ditch	From the confluence with Des Plaines River to 15,180 feet above the confluence with Des Plaines River [approximately Elmhurst Road (confluence with Buffalo Creek)]
White Pine Ditch	From the mouth at Buffalo Creek to 5,420 feet above the mouth at Buffalo Creek (approximately 400 feet above Dundee Road)
William Rogers Memorial Diversion Channel	From the confluence with Des Plaines River to 8,455 feet above the confluence with Des Plaines River (divergence from Wheeling Drainage Ditch)
Willow Creek	From the confluence with Des Plaines River to 4.2 miles above the confluence with Des Plaines River

Letters of Map Revision

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 August 19, 2008 revised countywide FIS. This incorporation is summarized in Tables 5a-b, “Incorporated Letters of Map Change.” It should be noted that all or portions of a given map change may be superseded by subsequent Letters of Map Revision or restudies.

Table 5a – Incorporated Letters of Map Change (November 1, 2019)

LOMC Type	Case Number	Effective Date	Community	Flooding Source	Project Identifier
LOMR	09-05-3308X	05/06/2009	Orland Park	Unnamed Tributary to Orland Lake	Tuckaway Subdiv
LOMR	15-05-5016P	01/08/2016	Alsip	Alsip Drainage Ditch	Arkema, Inc.
LOMR	16-05-7359P	05/18/2018	Crestwood Alsip, Cook County	Tinley Creek Tinley Creek Overflow	TICR-3

Table 5b – Incorporated Letters of Map Change (August 19, 2008 FIS)

LOMC Type	Case Number	Date Effective	Community	Flooding Source	Project Identifier
LOMR	915001	11/28/1990	Burr Ridge	Flag Creek Tributary C	Arrowhead Farm
LOMR	93-05-181P	6/20/1993	Burr Ridge	79 th Street Ditch	Oak Werth of Burr Ridge (2 nd Submittal)
LOMR	97-05-019P	8/27/1997	Bensenville	Bensenville Ditch Tributary Ponding Areas	O’Hare Cargo Center, Phase 1
LOMR	00-05-137P	11/7/2000	Cook County Orland Park	Spring Creek	Spring Meadows Subdivision
LOMR	01-05-611P	4/24/2001	Orland Hills	Tinley Creek Unnamed Tributary	Pepperwood Subdivision
LOMR	00-05-323P	5/1/2001	Oak Forest	Midlothian Creek, Western Tributary	Sherwood Forest Subdivision
LOMR	00-05-225P	5/16/2001	Prospect Heights	McDonald Creek Tributary A	102 Pine Street
LOMR	01-05-734P	6/15/2001	Crestwood	Crestwood Drainage Ditch West	Crestwood Health Center
LOMR	01-05-2064P	6/26/2001	Chicago	Chicago River North Branch	Reissuance of LOMR 96-05-135P (River’s Edge at Sauganash)
LOMR	01-05-664P	9/20/2001	Crestwood	Calumet Sag Channel	13840 South Cicero Avenue
LOMR	01-05-1413P	10/22/2001	Palatine	Salt Creek, Upper Reach	Reissuance of 99-05-031P
LOMR	02-05-0239P	12/20/2001	Cook County Northbrook	Underwriter’s Tributary	Underwriter’s Tributary
LOMR	01-05-3012P	2/4/2002	Palos Heights	Navajo Creek	Trinity Christian College
LOMR	00-05-367P	2/8/2002	Arlington Heights	Buffalo Creek Tributary A	53 Park of Commerce
LOMR	01-05-2074P	2/24/2002	Cook County Willow Springs	Flag Creek	Correction of LOMR Effective 6/4/1987 and 7/19/1991 (85 th Street and Arizona Trail)

Table 5b – Incorporated Letters of Map Change (August 19, 2008 FIS) - continued

LOMC Type	Case Number	Date Effective	Community	Flooding Source	Project Identifier
LOMR	01-05-3831P	2/27/2002	Des Plaines	Higgins Creek	Floodway revision – Marshall Drive
LOMR	01-05-3901P	03/04/2002	Tinley Park	Union Drainage Ditch Northern Tributary	Tinley Crossings Corporate Center (2 nd Submittal)
LOMR	02-05-1259P	4/24/2002	South Barrington	Poplar Creek Tributary A	South Barrington Executive Center
LOMR	02-05-0381P	6/18/2002	Mount Prospect	McDonald Creek Tributary A	Old Orchard Golf Course
LOMR	02-05-1825P	6/26/2002	Cook County Oak Forest	Boca Rio Ditch, West Ditch, Lake Emily, Daniels Pond	Landings Subdivision And Ridgewood Estates Subdivision
LOMR	02-05-2130P	9/6/2002	Deerfield	Chicago River North Branch West Fork	Reservoir 29-A
LOMR	02-05-2333P	10/15/2002	Palos Park	Mill Creek	90 th Court and 121 st Street culverts
LOMR	01-05-3037P	11/14/2002	Palos Park	Calumet Sag Channel Tributary B and unnamed tributary	Calumet Sag Tributary B
LOMR	02-05-1847P	12/27/2002	Wheeling	Wheeling Drainage Ditch, overflow to Des Plaines River, unnamed ponds	One Milwaukee Place
LOMR	02-05-2981P	1/15/2003	Orland Park	Marley Creek Tributary A	Fountain Hills Subdivision
LOMR	03-05-1842P	5/29/2003	Oak Forest	Natalie Creek	Shibui Condos
LOMR	03-05-1844P	7/25/2003	Countryside	Des Plaines River Tributary A	Peck Avenue Ditch Improvements
LOMR	03-05-0548P	10/16/2003	Cook County	Unnamed Tributary to Long Run	Orland Trails Subdivision
LOMR	03-05-2578P	10/21/2003	Tinley Park	Union Drainage Ditch Northern Tributary	Avondale Lakes
LOMR	03-05-1460P	7/14/2004	Burr Ridge	Flag Creek Tributary A	Burr Ridge Park, Unit 1
LOMR	03-05-1457P	7/30/2004	Tinley Park	76th Avenue Ditch	Bremen Town Estates

Table 5b – Incorporated Letters of Map Change (August 19, 2008 FIS) - continued

LOMC Type	Case Number	Date Effective	Community	Flooding Source	Project Identifier
LOMR	04-05-3561P	8/6/2004	Chicago Cook County	Merrionette Park Ditch	FEMA Initiated
LOMR	03-05-3383P	8/26/2004	Orland Park	Schussler Pond, South Tributary to Tinley Creek, North Tributary to Tinley Creek	Orland Park Drainage Study, Silver Lakes-Unnamed Tributary
LOMR	03-05-3989P	9/30/2004	Cook County Orland Park	West Ditch	Catalina Subdivision
LOMR	04-05-4062P	10/1/2004	Cook County	Long Run Tributary BA	Sam Tabass Driveway Culvert
LOMR	04-05-0887P	12/16/2004	Cook County Palatine	Buffalo Creek Tributary A Unnamed Tributary	Dunhaven Woods South Subdivision
LOMR	03-05-5180P	1/27/2005	Cook County Orland Park	Marley Creek	Breckenridge Subdivision
LOMR	03-05-3983P	2/28/2005	Orland Park	Deer Chase Pond	Olde Mill Subdivision
LOMR	03-05-3975P	3/10/2005	Cook County Orland Park Tinley Park	Midlothian Creek, Western Tributary	Orland Park Drainage Study, Fernway South
LOMR	05-05-0128P	3/28/2005	Hickory Hills Justice	Hickory Hills Reservoir	Hickory Hills Reservoir Project
LOMR	04-05-3545P	7/22/2005	Matteson	Butterfield Creek	Gleneagle Trail
LOMR	04-05-2894P	9/29/2005	Cook County Orland Hills Orland Park Tinley Park	Tinley Creek	Orland Park Drainage Study – Fernway North
LOMR	05-05-0378P	1/12/2006	Cook County Inverness South Barrington	Poplar Creek	Glen of Inverness - Jung Property
LOMR	05-05-1493P	2/9/2006	Countryside McCook	57th Street Ditch, East Avenue Ditch	City of Countryside Flood Control Improvements

Table 5b – Incorporated Letters of Map Change (August 19, 2008 FIS) - continued

LOMC Type	Case Number	Date Effective	Community	Flooding Source	Project Identifier
LOMR	05-05-1222P	5/25/2006	Cook County	Illinois & Michigan Canal Tributary B	West Side Machine Company
LOMR	06-05-BG46X	5/26/2006	Cook County	Illinois & Michigan Canal Tributary B	West Side Machine Company (II)
LOMR	06-05-B017P	9/28/2006	Cook County Melrose Park Stone Park	Addison Creek	Addison Creek Conveyance Floodway
LOMR	07-05-0329X	10/31/2006	Cook County South Barrington	Spring Creek Tributary	Woods of South Barrington Subdivisions (II) - Pre-project condition
LOMR	06-05-BY82P	12/20/2006	Steger	Thorn Creek Tributary A	Steger Project 02-32 (IL)
LOMR	06-05-C262P	4/25/2007	Cook County	East Pond	Barrets Subdivision
LOMR	06-05-BT49P	6/7/2007	South Barrington	Poplar Creek	The Glen of South Barrington
LOMR	07-05-1665P	7/2/2007	Cook County	Willow/Higgins creek	Willow-Higgins Flood Control Project
LOMR	06-05-B267P	7/19/2007	Matteson	Flossmoor Ditch Tributary A	Greater Chicago Auto Auction
LOMR	07-05-2483P	8/30/2007	Oak Grove Cook County	Higgins Creek Tributary A	Dierking Terrace Property
LOMR	06-05-BR51P	9/24/2007	Cook County	Butterfield Creek	The Point by Montalbano Homes
LOMR	07-05-4501P	10/19/2007	Tinley Park	Union Drainage Ditch	Reissue LOMR 99-05-303P
LOMR	07-05-3481P	10/24/2007	City of Chicago	Wolf Lake	133 & 134 Street Property
LOMR	07-05-6033P	11/30/2007	Hickory Hills	Belly Deep Slough	90th Avenue Floodplain Remapping

FIRM Notes to Users

Each FIRM panel may contain specific notes to the user that provide additional information regarding the flood hazard data shown on that map. However, the FIRM panel does not contain enough space to show all the notes that may be relevant in helping to better understand the information on the panel. Figure 1 contains the full list of these notes.

Figure 1 - FIRM Notes to Users

NOTES TO USERS For information and questions about this map, available products associated with this FIRM including historic versions of this FIRM, how to order products, or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Flood Map Service Center website or by calling the FEMA Map Information eXchange. Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above. For community and countywide map dates, refer to Table 13 in this FIS Report. To determine if flood insurance is available in the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620. <u>PRELIMINARY FIS REPORT:</u> FEMA maintains information about map features, such as street locations and names, in or near designated flood hazard areas. Requests to revise information in or near designated flood hazard areas may be provided to FEMA during the community review period, at the final Consultation Coordination Officer's meeting, or during the statutory 90-day appeal period. Approved requests for changes will be shown on the final printed FIRM. The map is for use in administering the NFIP. It may not identify all areas subject to flooding, particularly from local drainage sources of small size. Consult the community map repository to find updated or additional flood hazard information. <u>BASE FLOOD ELEVATIONS:</u> For more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, consult the Flood Profiles and Floodway Data and/or Summary of Non-Coastal Stillwater Elevations tables within this FIS Report. Use the flood elevation data within the FIS Report in conjunction with the FIRM for construction and/or floodplain management.

Figure 1 - FIRM Notes to Users

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

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.

FLOOD CONTROL STRUCTURE INFORMATION: Certain areas not in Special Flood Hazard Areas may be protected by flood control structures.

PROJECTION INFORMATION: The projection used in the preparation of the map was State Plane Illinois East 1201. The horizontal datum was NAD83 HARN, GRS1980 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

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

Local vertical monuments may have been used to create the map. To obtain current monument information, please contact the appropriate local community.

BASE MAP INFORMATION: Base map information is panel-specific. The map panels should be referenced for this information.

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

NOTES FOR FIRM INDEX

REVISIONS TO INDEX: As new studies are performed and FIRM panels are updated within Cook County, IL, corresponding revisions to the FIRM Index will be incorporated to reflect the effective dates of those panels.

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

Map Legend for FIRM

Each FIRM panel contains an abbreviated legend for the features shown on the maps. However, the FIRM panel does not contain enough space to show the legend for all map features. Figure 2 shows the full legend of all map features. Note that not all of these features may appear on the FIRM panels in Cook County and, since each FIRM panel revised by a PMR receives a new effective date, variations may be noted in the map features for panels with differing effective dates.

Figure 2 - Map Legend for FIRM

SPECIAL FLOOD HAZARD AREAS: *The 1% annual chance flood, also known as the base flood or 100-year flood, has a 1% chance of happening or being exceeded each year. Special Flood Hazard Areas are subject to flooding by the 1% annual chance flood. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood. The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights. See note for specific types. If the floodway is too narrow to be shown, a note is shown.*



Special Flood Hazard Areas subject to inundation by the 1% annual chance flood (Zones A, AE, AH, AO, AR, A99, V and VE)

- Zone A The flood insurance rate zone that corresponds to the 1% annual chance floodplains. No base (1% annual chance) flood elevations (BFEs) or depths are shown within this zone.
- Zone AE The flood insurance rate zone that corresponds to the 1% annual chance floodplains. Base flood elevations derived from the hydraulic analyses are shown within this zone.
- Zone AH The flood insurance rate zone that corresponds to the areas of 1% annual chance shallow flooding (usually areas of ponding) where average depths are between 1 and 3 feet. Whole-foot BFEs derived from the hydraulic analyses are shown at selected intervals within this zone.
- Zone AO The flood insurance rate zone that corresponds to the areas of 1% annual chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 feet. Average whole-foot depths derived from the hydraulic analyses are shown within this zone.
- Zone AR The flood insurance rate zone that corresponds to areas that were formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- Zone A99 The flood insurance rate zone that corresponds to areas of the 1% annual chance floodplain that will be protected by a Federal flood protection system where construction has reached specified statutory milestones. No base flood elevations or flood depths are shown within this zone.
- Zone V The flood insurance rate zone that corresponds to the 1% annual chance coastal floodplains that have additional hazards associated with storm waves. Base flood elevations are not shown within this zone.
- Zone VE The flood insurance rate zone that corresponds to the 1% annual chance coastal floodplains that have additional hazards associated with storm waves. Base flood elevations derived from the coastal analyses are shown within this zone as static whole-foot elevations that apply throughout the zone.

Figure 2 - Map Legend for FIRM

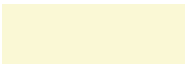
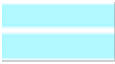
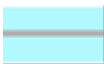
	Regulatory Floodway determined in Zone AE.
OTHER AREAS OF FLOOD HAZARD	
	Shaded Zone X: Areas of 0.2% annual chance flood hazards and areas of 1% annual chance flood hazards with average depths of less than 1 foot or with drainage areas less than 1 square mile.
	Shaded Zone X: Areas of 0.2% annual chance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

Figure 2 - Map Legend for FIRM

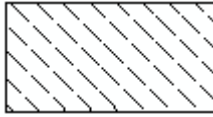
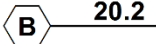
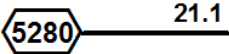
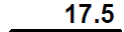
GENERAL STRUCTURES	
 Aqueduct Channel Culvert Storm Sewer	Channel, Culvert, Aqueduct, or Storm Sewer
 Dam Jetty Weir	Dam, Jetty, Weir
	Levee, Dike, or Floodwall
 Bridge	Bridge
COASTAL BARRIER RESOURCES SYSTEM (CBRS) AND OTHERWISE PROTECTED AREAS (OPA): <i>CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas. See Notes to Users for important information.</i>	
 CBRS AREA 09/30/2009	Coastal Barrier Resources System Area: Labels are shown to clarify where this area shares a boundary with an incorporated area or overlaps with the floodway.
 OTHERWISE PROTECTED AREA 09/30/2009	Otherwise Protected Area
REFERENCE MARKERS	
 22.0	River mile Markers
CROSS SECTION & TRANSECT INFORMATION	
	Lettered Cross Section with Regulatory Water Surface Elevation (BFE)
	Numbered Cross Section with Regulatory Water Surface Elevation (BFE)
	Unlettered Cross Section with Regulatory Water Surface Elevation (BFE)
	Coastal Transect

Figure 2 - Map Legend for FIRM

	Profile Baseline: Indicates the modeled flow path of a stream and is shown on FIRM panels for all valid studies with profiles or otherwise established base flood elevation.
	Coastal Transect Baseline: Used in the coastal flood hazard model to represent the 0.0-foot elevation contour and the starting point for the transect and the measuring point for the coastal mapping.
	Base Flood Elevation Line
ZONE AE (EL 16)	Static Base Flood Elevation value (shown under zone label)
ZONE AO (DEPTH 2)	Zone designation with Depth
ZONE AO (DEPTH 2) (VEL 15 FPS)	Zone designation with Depth and Velocity
BASE MAP FEATURES	
	River, Stream or Other Hydrographic Feature
	Interstate Highway
	U.S. Highway
	State Highway
	County Highway
	Street, Road, Avenue Name, or Private Drive if shown on Flood Profile
	Railroad
	Horizontal Reference Grid Line
	Horizontal Reference Grid Ticks
	Secondary Grid Crosshairs
Land Grant	Name of Land Grant
7	Section Number
R. 43 W. T. 22 N.	Range, Township Number
42° 76' 00" E	Horizontal Reference Grid Coordinates (UTM)
365000 FT	Horizontal Reference Grid Coordinates (State Plane)
80° 16' 52.5"	Corner Coordinates (Latitude, Longitude)

2.2 Community Description

Cook County is located in northeastern Illinois with a total land area of 963 square miles. Cook County is bordered by Lake County, Illinois, to the north; Lake Michigan to the east; Lake County, Indiana, to the southeast; Will County, Illinois, to the south; DuPage and Kane Counties, Illinois, to the west; and McHenry County, Illinois, to the northwest. According to the U.S. Census Bureau, Cook County had a population of 5,194,675 in 2010, with an estimated 2016 population of 5,203,499 (Reference 128).

The City of Chicago is the county seat and also a hub of a huge network of highways that extend all over Illinois and the country. Expressway systems that service the Chicagoland area include Interstate 94 (the Edens, Dan Ryan, and Bishop Ford), 90 (the Kennedy), 55 (the Stevenson), 88, 290 (the Eisenhower), the Chicago Skyway, and 294 (the Tri-state Tollway). Major highways servicing the area include US Highway 41, which includes Lake Shore Drive in Chicago. Facilities for ship and barge traffic are available, with the Chicago Sanitary and Ship Canal joining the Illinois River system and Lake Michigan. The Calumet Sag Channel also serves as a route for barge traffic from the Chicago Sanitary and Ship Canal to Lake Michigan. Lake Michigan gives the Chicago area a direct link, via the St. Lawrence Seaway, to ocean-traveling ships. Cook County is served by commercial and passenger rail service, and most commercial rail cars traveling cross-country pass through Chicago, which is headquarters to the largest intermediate switching terminal railroad in the country. Airports servicing Chicago include Midway and O'Hare International Airports (Reference 129). According to the U.S. Census Bureau, Chicago had a population of 2,695,598 in 2010 and an estimated 2015 population of 2,720,546 (Reference 128).

The climate of the area is classified as humid continental, which is characterized by cold winters, warm summers, and relatively large daily, monthly, and yearly variations in both temperatures and precipitation. Temperature data are published for 13 climatological stations in Cook County; however, all of these stations are in the metropolitan Chicago area. Data for the station at Chicago's Midway Airport are typical for these stations as well as the county. The average annual temperature at Midway Airport (derived from 1971-2000 averages) is 51 degrees Fahrenheit (°F), with average January temperatures of 23.5°F and average July temperatures of 75.5°F. Average annual precipitation at the Midway Airport gage (1971-2000) is 38.35 inches (Reference 130). The buffer action of Lake Michigan, with its storage of relatively warm waters, usually affects the path of cyclonic storms and air masses through the area.

The surface features of the Chicago area are the result of glaciation. The surficial geology of the region is predominantly depositional moraines, outwash plains, valley trains, filled lake basins, river floodplains, and sand dunes (Reference 130). These features include low morainic ridges which dominate the area. The irregularly shaped and variable sized floodplains are narrow where valleys are entrenched through moraines and beach ridges. Valley profiles are very irregular

with relatively steep slopes through beach ridges and moraines. Because of extensive urbanization, there are many areas of Cook County where geologic materials have been affected by human activities. It is recognized that a few feet of miscellaneous fills and/or regraded topsoil and other surficial material underlie most of the metropolitan Chicago area (Reference 123).

Drainage characteristics of the soils in Cook County vary across the drainage scale from well drained to very poorly drained. Poor drainage can result from a high water table, a slowly pervious layer within the profile, seepage, or a combination of these. The geologic and climatic events of glaciation and the subsequent receding of Lake Michigan have produced a generally poorly integrated drainage pattern with numerous poorly drained depressions and an absence of well-developed stream-cut valleys. The eastern boundary of the Des Plaines River watershed is formed by segments of moraines belonging to the Lake Border Morainic System. Most of Cook County is drained by the Des Plaines, Calumet, and Chicago Rivers (Reference 130).

2.3 Principal Flood Problems

Floods in Cook County are caused by rainfall from large frontal storms that may be in combination with snowmelt, runoff, and ice jams. The principal contributors to flooding in the county are urbanization and the inadequate capacity of some of the natural stream channels to contain runoff resulting from intense thunderstorm precipitation over the stream basins.

Major flooding occurred in northeastern Illinois during September 13–16, 2008, following extended storm activity. Rainfall recorded at select ISWS, National Weather Service (NWS), and USGS rain gages in northeastern Illinois, ranged from 2.39 to 10.51 inches throughout a 51-hour period during September 12–14, 2008. Excessive rainfall on saturated soils and impervious land surfaces resulted in extensive urban drainage and riverine flooding. The flooding caused the evacuation of residents, road closures, and extensive damages to residences, businesses, and infrastructure. On October 3, 2008, a Major Disaster Declaration was signed for Cook County (Reference 131).

In 2013, there were widespread showers and thunderstorms in the county from the later afternoon of April 17th through the morning of April 18th, with several rounds of thunderstorms producing torrential rainfall, major flash flooding and subsequent river flooding. Between 4 and 8 inches of rain fell across the most heavily impacted areas. Some of these areas experienced rainfall rates of up to 2 inches per hour. This was exacerbated by the fact that soils in these areas were already saturated and water levels in area rivers were already high due to a combination of snowmelt and a wet early spring. The heavy rain caused record flooding on portions of the Des Plaines River and the Chicago River, North Branch, widespread flooding across the county, and expressway closures (Reference 132).

The 2014 Cook County Stormwater Management Plan (CCSMP), created to reduce the potential for stormwater damage, identifies six major watersheds within the county for which flooding issues were considered: Lower Des Plaines, Calumet Sag Channel, Little Calumet River, Poplar Creek, Upper Salt Creek, and Chicago River, North Branch (Reference 133).

The North Branch Chicago River is an urban watershed that includes downtown areas, city neighborhoods, and suburban municipalities. Floodwater damage in the watershed can be attributed to a number of factors, the most notable of which is urbanization of upland areas, increasing the rate and volume of storm runoff. Another factor is floodplain filling (encroachment). Floodplain development has reduced natural floodplain storage, and it often obstructs conveyance of flood flows. In combination, these factors cause increased frequency of flooding and higher flood stages (Reference 134).

The North Branch Chicago River watershed includes three long and narrow subwatersheds: the West Fork, Middle Fork, and Skokie River. Floods on these long and narrow watersheds are affected by storm direction, with the worst floods caused by day-long rain events. However, since the watershed is narrow and short, intense rain events can also cause severe local flooding (Reference 134). The 2014 CCSMP estimates the average annual flood damages in the Chicago River, North Branch watershed at \$2,995,000 (Reference 133).

In September 2008, O'Hare International Airport recorded 6.64 inches of rain, breaking the all-time record of 6.49 inches set in 1987 and causing flooding of the Chicago River, North Branch (Reference 135). Again in April 2013, heavy rain caused record flooding on portions of the river. Table 6a, "Historical Flood Data (Chicago River, North Branch)" summarizes peak discharges and river stages at USGS gaging station No. 05531500 at Niles, Illinois (Reference 136).

Table 6a - Historical Flood Data (North Branch Chicago River)

Chicago River, North Branch at Niles, Illinois - USGS Gage Number 05536000

Date	Peak Streamflow (cfs)	River Stage (feet)
September 13, 2008	3,340	12.13
April 18, 2013	3,330	12.12
August 14, 1987	2,590	11.35
February 21, 1997	2,260	10.63
July 23, 2011	2,100	10.08

The majority of the Lower Des Plaines River Watershed is urban area within the Chicago metropolitan area (Reference 137). The Des Plaines River has a long history of flooding that has caused significant economic losses. In September 1986, there was an estimated \$35 million in damages to 10,000 dwellings and 263 business and industrial sites. More than 15,000 residents were evacuated from the flooded area and seven lives were lost (Reference 138).

In April 2013, heavy rain again caused record flooding on portions of the Des Plaines River forcing evacuations, expressway closures, and resulting in a state of emergency declaration (Reference 139). Within the watershed, Addison Creek set a record peak streamflow and river stage (1,120 cfs; 13.16 feet) at the Bellwood, Illinois gage (USGS Gage 055320000) (Reference 136). Addison creek has been identified as having continued significant risk for damages from overbank flooding because of the many communities with structures adjacent to the creek (Reference 137).

A record peak streamflow of 5,060 cfs was also recorded for the Des Plaines River in 2013 at USGS Gage 00529000 near Des Plaines, Illinois. River stages of record at this gage were set in April and November of 2015 (14.46 feet and 13.98 feet, respectively). Table 6b, “Historical Flood Data (Des Plaines River)” summarizes peak discharges and river stages at the Des Plaines, Illinois gage (Reference 136).

Table 6b - Historical Flood Data (Des Plaines River)

Des Plaines River near Des Plaines, Illinois - USGS Gage Number 05529000

Date	Peak Streamflow (cfs)	River Stage (feet)
April 11, 2015	2,060	14.46
November 28, 2015	1,870	13.98
April 19, 2013	5,060	10.93
October 1, 1986	4,900	10.88
September 14, 2008	3,010	10.00

The Calumet Sag Channel Watershed area north of the Calumet Sag Channel is heavily developed and characterized by low relief. It is drained principally by the East and West branches of Stony Creek, which both discharge into the Calumet Sag Channel. The Stony Creek system has the largest tributary area within the watershed, and the relatively dense development within the area subject to flooding combined with the very flat topography of the area can result in significant damages (Reference 140). The Calumet Sag Channel watershed area is approximately 126 square miles (excluding the Little Calumet watershed area), with over 25 miles of rivers and creeks. The 2014 CCSMP estimates the average annual flood damages at \$2,646,000 for residences and businesses (Reference 133).

The Little Calumet River Watershed is located predominantly in the southeast portion of Cook County. Locations with historic flooding and stream bank erosion problems on regional waterways exist throughout the watershed (Reference 141). Average annual flood damages for residential and business properties have been estimated at \$5,835,000 (Reference 133). The third highest river stage on the Little Calumet River at the South Holland, Illinois gage (20.16 feet) was set during the 2008 flood. Table 6c, “Historical Flood Data (Little Calumet River)” summarizes peak discharges and river stages at the South Holland gage (Reference 136).

Table 6c - Historical Flood Data (Little Calumet River)

Little Calumet River at South Holland, Illinois - USGS Gage Number 05536290

Date	Peak Streamflow (cfs)	River Stage (feet)
November 28, 1990	4,150	20.50
June 14, 1981	4,070	20.20
September 14, 2008	3,930	20.16
July 14, 1957	4,440	20.11
July 19, 1996	3,870	20.01

The Poplar Creek watershed area in the northwestern portion of the county is approximately 40 square miles, with 26 miles of rivers and creeks. During the 2008 and 2013 floods, peak streamflow and river stages of record were set for Poplar Creek at the Elgin, Illinois gage. Table 6d, “Historical Flood Data (Poplar Creek)” summarizes peak discharges and river stages for Poplar Creek at the Elgin, Illinois gage (Reference 136).

Table 6d - Historical Flood Data (Poplar Creek)

Poplar Creek at Elgin, Illinois - USGS Gage Number 05550500

Date	Peak Streamflow (cfs)	River Stage (feet)
September 13, 2008	1,560	7.69
April 18, 2013	1,430	7.42
February 21, 1997	1,180	6.78
December 28, 2008	1,170	6.55
April 23, 1999	882	6.13

Locations with historic flooding and stream bank erosion problems on regional waterways exist throughout the Upper Salt Creek watershed in northwestern Cook County (Reference 142). The river stage of record at the Salt Creek at Rolling Meadows, Illinois gage (USGS 05530990) of 14.03 feet was set in August 1987 when heavy rainfall on the 13th and 14th caused severe flooding of urban areas. An all-time 24-hour rainfall record was established for the Chicago area when 9.35 inches of rain fell at O'Hare International Airport between 9:16 p.m. Thursday, August 13th, and 2:45 p.m. Friday, August 14th. The areas most acutely affected by flooding were communities along the Des Plaines River and its tributary, Salt Creek. The severe flooding in the lower reach of the Des Plaines River basin was caused partly by the large inflow from Salt Creek. Salt Creek gages at Rolling Meadows and Western Springs set new peaks of record on August 14th of 1,650 and 3,230 ftl/s, respectively, which are equivalent to discharges 1.4 times greater than a 100-year discharge (Reference 143).

The second highest recorded river stage occurred during the 2008 flood with a gage height of 12.99 feet. Table 6e, “Historical Flood Data (Salt Creek)”

summarizes peak discharges and river stages for at the Rolling Meadows gage (Reference 136).

Table 6e - Historical Flood Data (Salt Creek)

Salt Creek at Rolling Meadows, Illinois - USGS Gage Number 05530990

Date	Peak Streamflow (cfs)	River Stage (feet)
August 14, 1987	1,650	14.03
September 13, 2008	2,510	12.99
December 3, 1982	1,060	12.56
July 23, 2011	2,870	12.51
August 4, 1989	1,110	11.54

2.4 Flood Protection Measures

In November 2004, Cook County stormwater management was placed under the supervision of the Metropolitan Water Reclamation District of Greater Chicago (MWRD) following Illinois General Assembly enactment of Public Act 93-1049 and the creation of a comprehensive Cook County stormwater management program. MWRD's history of involvement in regional watershed planning and implementation of large public works includes the construction and operation of the Tunnel and Reservoir Plan (TARP), which has been effective in reducing flooding in the Chicagoland combined sewer area, as well as more than 30 regional reservoirs for flood control purposes (Reference 133).

MWRD completed Phase I of TARP in 2006, which includes over 109 miles of tunnels with 2.3 billion gallons of capacity. Phase II of TARP includes three reservoirs that will increase the TARP system storage volume to approximately 20 billion gallons with completion expected by 2029. Work is currently underway to finish reservoir projects that will provide an additional 17 billion gallons of capacity when finished (Reference 144).

Other completed or ongoing projects included in MWRD's stormwater management program include:

- Streambank stabilization projects on reaches of Tinley Creek, Midlothian Creek, I&M Canal Tributary, Melvina Ditch, Oak Lawn Creek, Calumet Union Drainage Ditch, Middle Fork and West Fork of the North Branch of the Chicago River, Addison Creek, Higgins Creek, and McDonald Creek;
- Flood control projects on reaches of Upper Salt Creek, Deer Creek, Tinley Creek, Navajo Creek, Cherry Creek East Branch, Addison Creek, Des Plaines River, Buffalo Creek, Main Stem and the West Fork of the North Branch of the Chicago River, Skokie River and Farmers Prairie Creek;
- Engineering and design work for several of the alternatives recommended in Detailed Watershed Plans (DWPs), which have been developed for Cal-

Sag Channel, Little Calumet River, Lower Des Plaines, North Branch of the Chicago River, Poplar Creek, and Upper Salt Creek watersheds;

- A Watershed Management Ordinance (WMO), effective on May 1, 2014, establishing uniform, minimum, countywide stormwater management regulations throughout Cook County;
- Removal of debris and blockages from small streams as part of the Small Streams Maintenance Program (SSMP), which has the objective of preventing impediment to the natural drainage of Cook County's small streams and rivers that have the potential for flooding urban areas (Reference 145).

Heritage Park Flood Control Facility/USACE Levee 37: The Heritage Park Flood Control Facility, situated in the Des Plaines River watershed near the intersection of Dundee and Wolf Roads in Wheeling, was completed in 2015 and provides required compensatory storage for the USACE's Levee 37 project along the Des Plaines River. Levee 37 provides protection from future flooding for more than 600 existing homes and numerous businesses in Mount Prospect and Prospect Heights, with an estimated annual savings of more than \$3 million in avoided flood damage. The Heritage Park Flood Control Facility provides storage for the Levee 37 Project with a total capacity of more than 49 million gallons, and officials estimated they can protect hundreds of homes and businesses, and also provide increased stormwater detention at Heritage Park for the Village of Wheeling. The project included expansion of the existing stormwater detention reservoir known as Lake Heritage and excavation of new floodwater storage areas east and west of Buffalo Creek (Reference 145, 146, 147).

Rand Park Flood Control Project (Levee 50): The Rand Park Flood Control Project was constructed as part of the USACE Des Plaines River Phase I project. This project consists of a floodwall with operable gates and pumps that prevent Des Plaines water from backing up into the Farmers Prairie Creek subwatershed (Reference 137).

Phase II Stormwater Management Program: Phase I activities of the MWRD's Stormwater Management Program included the development of DWPs and the implementation of stormwater projects intended to address critical erosion and/or overbank flooding along regional waterways (Reference 133). In April 2013, MWRD initiated Phase II of its program to address local drainage problems, develop stormwater master plans across the county, and to initiate a program for the purchase of flood prone and flood damaged property (Reference 145).

Thornton Composite and McCook Reservoirs: The Thornton Composite Reservoir is part of MWRD's Tunnel and Reservoir Plan (TARP) and was completed in 2015. It benefits more than 556,000 people in 15 communities, protecting 182,000 buildings and providing more than \$40 million in annual flood damage. The McCook Reservoir is currently under construction and Phase 1 of the reservoir is planned to be completed by 2017. The McCook Reservoir will

provide more than \$114 million per year in flood damage reduction benefits to 3,100,000 people in 37 communities (Reference 148).

Documentation of flood protection measures noted in previous FISs includes the following:

The Crystal Creek Flood Control Project, which reduces flood damages from Crystal Creek in the villages of Franklin Park and Schiller Park and Cook County unincorporated areas, was designed and constructed by IDNR in four phases between 1991 and 2014.

The two-cell Touhy Avenue Reservoir was designed and constructed by the City of Chicago. Cell 1, the O'Hare Treatment Plant Retention Reservoir, is a 450 acre-foot excavated pump out design reservoir placed in service in 1984. Touhy Reservoir, cell 2, is a 720 acre-foot excavated pump-out design reservoir placed into service in 2005. The project included some channel modifications to the Willow-Higgins Creek.

The Willow-Higgins Reservoir is a 1,300 acre-foot excavated pump-out reservoir designed and constructed by the City of Chicago placed in service in 2005 to assist with the drainage of O'Hare International Airport.

The Midlothian Creek (Fernway Subdivision) flood control project is a channel improvement on the North Branch Tributary to 88th Avenue in Fernway Park Subdivision. The project includes replacement of a restrictive culvert underneath 171st Street on the North Branch Tributary, construction of a diversion channel from 171st Street to Midlothian Creek, and channel improvements on Midlothian Creek from the diversion channel to a detention basin on Tinley Park's Park District property. Overall reservoir construction was completed in 2003.

The William Redmond Reservoir, a 685-acre-foot stormwater retention reservoir, was constructed in 1974 by IDNR to alleviate serious flooding in the headwaters of Addison Creek in Bensenville. In 1999, modifications were made to the reservoir to reshape the side-slope, replace the spillway chutes, and extend the pump station intake structure.

The O'Hare Chicago Underflow Plan (CUP) Reservoir, spanning approximately 94 acres in Elk Grove Township, was placed in service in 1999. The USACE-constructed reservoir, designed to hold up to 345 million gallons of combined sewer overflow from the Upper Des Plaines/O'Hare Tunnel System, is currently operated and maintained by MWRD.

The Deerfield Reservoir, a 575 acre-foot reservoir located in the Village of Deerfield, was constructed in 1994 by the USACE on the Chicago River, North Branch, West Fork. It is an excavated pump out reservoir designed for 1-percent-annual-chance storm event and drains approximately 5,760 acres.

The Tinley Park Reservoir, a 616 acre-feet flood storage facility located northeast of the intersection of 80th Street and 170th Street in Tinley Park, was constructed by MWRD and the Tinley Park District in 1989. The pump-evacuated reservoir is equipped with a by-pass channel which allows some flow to be diverted around the reservoir.

The Oak Creek Plaza detention pond, a 97 acre-feet flood control facility located southwest of the intersection of Long Street and 157th Street in Oak Forest, was constructed by the City of Oak Forest in 1988.

The Calumet Union Drainage District and the MWRD constructed 1.74 miles of channel improvements along with 0.25 miles of concrete lining within Calumet Union Drainage Ditch in 1988, extending from Halsted Street to Western Avenue and increasing the flow capacity of the channel.

The Chicago Interharbor breakwater wall was raised in 1987 to prevent Lake Michigan flows from going into the Chicago River.

The Edward C. Howell Reservoir, a 400 acre-foot flood storage facility on the east side of the Tri-State Tollway (I-294) immediately north of 167th Street within the City of Markham, was built in 1987 by MWRD.

The Calumet Union Reservoir, located along Rockwell Avenue in the Village of Hazel Crest, was constructed with the sponsorship of the MSDGC (now MWRD) in 1976. The pump-evacuated reservoir has approximately 650 acre-feet of flood storage capacity and enables attenuation of flood peaks from 4.4 square miles of drainage area to Cherry Creek.

The Techny Reservoirs (three structures) were completed along the Chicago River, North Branch, West Fork in 1979.

The Twin Lakes Reservoir, a 920-acre-feet flood storage facility between 163rd Street and 167th Street in the unincorporated area of Cook County, was constructed by IDNR in 1974.

The State of Illinois constructed a diversion conduit between Salt Creek and the Des Plaines River, significantly reducing the peak Salt Creek discharges flowing through the Village of Brookfield. Flow reductions range from 45 to 25 percent for the 10- to 0.2-percent-annual-chance floods, respectively.

McDonald Creek and other streams in the Village of Arlington Heights are controlled by a complex network of storm sewers and retention basins. These basins collect and retain runoff, to be released later at a controlled rate. The existing basins are located at Camelot Park, Hashbrook Park, Marion and Douglas, Kirchoff and Wilke, Haven/Kennicott Basin, Lot 118 Basin, Lake Arlington, Greenbriar, Kenroy, and North Gate.

The Deer Creek Reservoir, a 238 acre-foot gravity flow reservoir, was constructed by the USACE. The project also included channel modifications to Deer Creek to improve flow conditions.

Busse Woods, Structure No. 1 to Salt Creek includes three significant structures: Busse Woods Main Dam; North and South Lateral Dams; and Higgins Road and State Route 53.

Plum Grove, Structure No. 2 to Salt Creek Tributary C and St. Michael's, Structure No. 3 to Salt Creek Tributary D are similar, gravity-drained structures with concrete outlet structures and grassed emergency spillways.

Tom T. Hamilton and Margreth Riemer Reservoirs, both to Salt Creek, are off-channel, pump-evacuated flood control reservoirs. A culvert crossing downstream of a grass-lined, side-channel weir allows a low-level bypass flow above which flow is diverted into the reservoir. After the storm passes, the water is pumped back into the creek.

Approximately one mile south of Glenwood-Lansing Road and one-half mile east of Burnham Avenue, there is a diversion weir at the USGS stream gage on Lansing Ditch near Lansing, which causes flows to split, with one reach going west around Lynwood (Lansing Ditch Lynwood Tributary) and the other reach going through Lansing Municipal Airport and Lansing (Lansing Ditch).

3.0 ENGINEERING METHODS

For the flooding sources studied by detailed methods in Cook 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-, 25-, 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-, 25-, 50-, 100-, and 500-year floods, have a 10-, 4-, 2-, 1-, and 0.2-percent chance, respectively, of being equaled or exceeded during any year. Although the recurrence interval represents the long term, average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when periods greater than 1 year are considered. For example, the risk of having a flood which equals or exceeds the 1-percent-annual-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 Cook 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 Zone AE methods affecting the county.

Pre-countywide FISs

For Buffalo Creek in Buffalo Grove, the SCS completed a comprehensive flood management study in conjunction with the Des Plaines River Steering Committee (Reference 149). Harza Engineering Company prepared hydrologic analyses which provided an independent review of the suitability of the SCS results.

For the Des Plaines River watershed, the discharges resulting from hydrologic analyses by the USGS for the Des Plaines River in the villages of Willow Springs and Hodgkins, together with the certified discharges computed by the ISWS at two locations in Joliet, were used to plot discharge-drainage area curves along the Des Plaines River (Reference 150). With known drainage areas, discharges for the studies of the villages were obtained from these curves. In the village of Lyons, a diversion structure, which diverts floodwater from Salt Creek to the Des Plaines River, is located approximately four miles downstream from the Western Springs gaging station. The discharges for Salt Creek were checked using the SCS rating curve at the diversion structure to subtract discharges diverted to the Des Plaines River. Due to spillage from the Salt Creek watershed, the 100- and 500-year discharges along Buffalo Creek Tributary A were adjusted; the spillage does not occur during the 10- and 50-year floods.

For the reach downstream of Touhy Avenue, discharges for the Chicago River, North Branch were assumed to be equal to the discharges at Touhy Avenue due to the small increase in drainage area.

In Harvey, Dixie Creek receives 500 cfs at Dixie Highway for the 1-percent-annual-chance discharge. A 60-inch pipe is used to divert the discharge of Dixie Creek into the Little Calumet River. This storm sewer pipe was not designed to pass the 1-percent-annual-chance flood discharge as an open channel flow; therefore, Dixie Creek is contributing overland flow to the floodplain. A 1-percent-annual-chance, 24-hour rainfall was obtained from TP-40 and a curve number was assumed (Reference 151). TR-55 yielded a runoff amount (Reference 152). A triangular hydrograph was developed and the base flow was subtracted as a result of the storm sewer. The final volume of overland flow which required storage was determined from the hydrograph.

In the City of Markham, when the water rises above 6 feet in the channel of the I-57 Drainage Ditch at the entrance to the 10-foot culvert, some excess water begins to flow along the Dixie Creek and stands in the ditches along I-57. The discharges on Dixie Creek were increased for the 100- and 500-year storms to reflect this overflow from the I-57 Drainage Ditch. However, this excess water will have a

later peak on Dixie Creek than that which travels in Belaire Creek. The I-57 Drainage Ditch enters a 10-foot diameter reinforced concrete pipe culvert at the corporate limits of the city of Markham with Cook County Unincorporated Areas; the conduit remains underground all the way to the Little Calumet River. Tailwater of the Little Calumet is estimated to be 13,000 feet.

For Navajo Creek in Palos Heights, shallow flooding areas, drainage area, runoff, and topography were determined from historical data, maps, and field reconnaissance.

For Stony Creek (East) in Blue Island and Alsip, Merrionette Park Ditch in Alsip, and Oak Lawn Ditch in Oak Lawn, adjustments in drainage area were made to incorporate the present effect of the Crawford Avenue segment of the Metropolitan Sanitary District of Greater Chicago's Tunnel and Reservoir Project.

For Thorn Creek Tributary B in Chicago Heights, discharges were computed after accounting for the diversion channel linking Thorn Creek Tributary B.

Storage capabilities of Orland Lake were modeled using the SCS TR-20 hydrology computer program to determine its effects on the upstream drainage area of Mill Creek in the village of Palos Park (Reference 153). It was found that Orland Lake, because of its storage capacity, would decrease the discharge for the 100-year storm.

For the portion of Higgins Creek not revised as part of LOMR 07-05-1665P, discharges for the 10-, 2-, 1-, and 0.2-percent-annual-chance floods were developed using the SCS watershed model TR-20.

November 6, 2000 Initial Countywide FIS

To calibrate models for Crystal Creek, Crystal Creek Tributary, Industrial Tributary, Motel Ditch, and Sexton Ditch, the precipitation amounts from actual storm events were input into the HEC-1 model. The point rainfall for each storm was obtained from O'Hare precipitation gage data which records daily and hourly rainfall amounts. The model calibrated well with the August 1987; August 4, 1989; and May 9, 1990, storms. The 24-hour duration storm was determined to be the critical duration for the 100-year frequency event and the 50-year event in reach 5, because of interbasin flow from the Bensenville Ditch watershed.

For the Des Plaines River in the Village of Glenview, the Chicago River, North Branch; Chicago River, North Branch, Middle Fork; the Chicago River, North Branch, West Fork; Techny Drain; Techny Drain, South Fork; North Navy Ditch; South Navy Ditch; and Underwriters Tributary, the Clark Method was selected as the most appropriate synthetic unit hydrograph for all flooding sources. The computed hydrograph storage coefficient parameter R, was based on the regression

equation technique developed by the USGS in Water Resources Investigations 82-22, "A Technique for Estimating Time of Concentration and Storage Coefficient Values for Illinois Streams" (Reference 154).

The USACE analysis of the Des Plaines River differed from the historic gage site statistics. The non-homogeneity of the gage records is due to the cumulative effects of urbanization and construction of reservoirs over the period of record. The USACE modified the gage records to develop a more uniform period of record at each of the gages. The Russell Road gage drainage area has experienced limited urbanization. This has resulted in homogeneous gage records. The Gurnee gage has experienced some urbanization throughout the gage record yet no significant reservoir construction. The gage records had to be adjusted for some urbanization impacts. The Des Plaines gage drainage area has experienced changes in urbanization and reservoir construction; similar to the Gurnee gage, adjustments were made to the record to account for urbanization impacts, including the effects of the reservoirs. The Riverside gage has the longest record of the four gages, extending from 1914 to the present; the drainage area has experienced the highest amount of urbanization and reservoir construction. Because of the highly urbanized nature of the lower Des Plaines watershed, another analysis was performed on the Riverside gage to determine the urbanization effects from the entire watershed above Riverside and below Des Plaines. The study included all of the Salt Creek watershed communities and all communities along the main stem from the Des Plaines gage down to the Riverside gage; the same procedure was carried out for adjusting the gage record for urbanization and reservoir effects.

For the study of Calumet Union Drainage Ditch Southwest Branch, areas serviced by the city of Markham combined sewer system were excluded from the watershed for the ditch. It was assumed that runoff from these combined sewer areas to the east of Dixie Highway, bordered by 161st Street and 167th Street, would be accommodated by the TARP.

In the watershed of Midlothian Creek, a box culvert under 171st street was installed with a restrictor plate causing the entire Midlothian Creek Western Tributary to act as a linear detention reservoir. Calculated flows through the tributary reflect discharges through the restrictor plate. Discharges along 76th Avenue Ditch and at Filsen Park Ditch were obtained from area ratio of discharges at the confluence of 76th Avenue Ditch with Midlothian Creek. Detention basins upstream of 159th Street on 76th Avenue Ditch were assumed to restrict discharges of less than and equal to a 100-year magnitude to 91 cfs (Reference 111).

June 2, 2005

Revised Countywide FIS

The Addison Creek HEC-1 model was revised to include diversions from Addison Creek to the subways at 25th Avenue and Mannheim Road along Interstate 290 (the Eisenhower Expressway). Addison Creek approaches I-290 from the north, turns

west and runs parallel to I-290 for approximately 1,000 feet, and then turns south to pass through the waterway opening under I-290. The IDNR-OWR obtained field survey data to identify the critical overflow points that control flow into the subways. Revised routing curves accounted for the additional storage resulting from extended cross sections in the HEC-2 model. Flood waters entering the I-290 diversion are no longer part of Addison Creek. Thus, the revised reach routing storage curves do not include the subway storage (subway storage is modeled as the loss of flow from Addison Creek, not storage of flow). Iterations were performed on HEC-1 and HEC-2 storage model until the final routing curves were computed.

April 16, 2007
Revised Countywide FIS

The USACE HEC-1 hydrologic model was used to determine values of the 10-, 1-, and 0.2-percent-annual-chance peak discharges for various points along Wheeling Drainage Ditch and Buffalo Creek. The William Rogers Memorial Diversion Channel is not included in the HEC-1 hydrologic model. Instead, CBBEL modeled the William Rogers Diversion Channel as a junction with an inline weir to improve optimization routine.

The precipitation amount used in the HEC-1 hydrologic model for the various modeled storm frequencies was obtained from “Part 2: Update of Heavy Rainfall Relations in Chicago and Northeastern Illinois” (Reference 155). In the case of the 0.2-percent-annual-chance flood it was extrapolated from the lower frequency storms. The aerial adjustment factor was obtained from Table 35 of “Frequency Distributions and Hydroclimatic Characteristics of Heavy Rainstorms in Illinois” (Reference 156).

August 19, 2008
Revised Countywide FIS

A revised hydrologic analysis for the Little Calumet River and Thorn Creek up to the gage at Thornton was performed by the USACE. HEC-1 hydrologic model was updated to include Bulletin 70 rainfall amounts. An Unsteady HEC-RAS model was used to simulate the hydraulics for the entire reach of the Little Calumet River in Illinois and Thorn Creek up to the USGS gage at Thornton. Flows from the HEC-1 model were input to the HEC-RAS model. The HEC-1/HEC-RAS models were calibrated to stage information from the USGS gages at South Holland and Thornton.

A revised hydrologic analysis for Weller Creek was performed by CTE for the US Army Corps of Engineers. A HEC-1 model was prepared using Bulletin 70 rainfall along with information from the Weller Creek at Des Plaines stream gage.

A revised hydrologic analysis for Farmer's and Prairie Creeks was performed by the IDNR-OWR. A HEC-1 model was prepared using Bulletin 70 rainfall along with information from eight staff gages installed by OWR.

LOMR 07-05-1665P revised the previous analysis on Willow Creek and the downstream portion of Higgins Creek. The TR-20 hydrologic model resulting from the 1976 Des Plaines River Floodwater Management Plan was revised to include the watershed boundary revisions that were caused by the construction of the Kirie Wastewater Treatment Plant. Additionally, new runoff curve number and times of concentration were developed, and the ISWS Bulletin 70 rainfall was adopted. The model was also revised to include O'Hare improvements, the Touhy Avenue and Willow Creek Flood Control Reservoirs, and the Willow Creek Flood Control Project.

November 1, 2019
Revised Countywide FIS

For the Mill Creek watershed study, which includes Mill Creek and Mill Creek West Branch, the hydrologic model was developed within USACE Hydrologic Engineering Center-Hydrologic Modeling System (HEC-HMS) Version 3.1.0. The Soil Conservation Service (SCS) curve number (CN) loss module was used with the SCS Unit hydrograph methodology within HEC-HMS to model basin hydrology.

For the Tinley Creek watershed study, which includes Tinley Creek, Arroyo Ditch, and Boca Rio Ditch, a hydrologic model was developed within the USACE HEC-HMS Version 3.5 modeling application. The SCS CN loss module was used with the SCS Unit hydrograph methodology within HEC-HMS to model basin hydrology.

Hydrologic methodology and available gage data for all streams studied by detailed methods are presented in Table 7, "Hydrologic Methodologies." The "Community" column entries shown as Cook County refer to the unincorporated areas of the county.

Table 7 - Hydrologic Methodologies

Stream	Community	Method(s) / Gage No(s).
57th Street Ditch	Countryside	TR-20
59th Street Ditch	Hinsdale	RE74
63rd Street Ditch	Burr Ridge	HEC-1
67th Street Ditch	Countryside	RE74
71st Street Ditch	Justice	TR-20
76th Street Ditch	Tinley Park	HEC-1 / Midlothian (05536340)
79th Street Ditch	Burr Ridge	RE73 (I-PTIII) / Willow Springs (05533000)
Addison Creek	North Riverside, Broadview, Westchester, Bellwood, Hillside, Maywood, Melrose Park, Stone Park, Northlake, Cook County	HEC-1, HEC-2 / Bellwood (05532000)
Alsip Drainage Ditch ¹	Alsip	HEC-HMS
Arroyo Ditch	Oak Forest	HEC-HMS
Belaire Creek	Markham	RE77, TR-55
Boca Rio Ditch	Cook County, Oak Forest	HEC-HMS
Buffalo Creek	Wheeling	HEC-1
	Buffalo Grove	TR-20 / near Wheeling (05528500)
Buffalo Creek Tributary A	Cook County	HEC-1 / near Wheeling (05528500)
Butterfield Creek	Glenwood, Homewood, Chicago Heights, Cook County, Flossmoor, Olympia Fields, Matteson	TR-20 (I-PTIII) / Flossmoor (05536255)
Butterfield Creek East Branch	Olympia Fields, Matteson, Richton Park, Cook County, University Park	TR-20
Butterfield Creek East Branch Tributary	Matteson, Richton Park	TR-20
Butterfield Creek East Branch Tributary A	Richton Park	RE74
Butterfield Creek Tributary No. 1	Flossmoor, Olympia Fields	RE74
Butterfield Creek Tributary No. 3	Flossmoor	RE74, TR-20
Butterfield Creek, Tributary No. 4	Flossmoor, Olympia Fields	RE74, TR-20
Calumet Sag Channel Tributary A	Lemont, Cook County	RE73, RE75
Calumet Sag Channel Tributary AA	Cook County	RE73, RE75
Calumet Sag Channel Tributary B ²	Palos Park	TR-20

¹Zone AE study performed for LOMR 15-05-5016P

²Zone AE study revised in its entirety by LOMR 01-05-3037P

Table 7 - Hydrologic Methodologies (continued)

Stream	Community	Method(s) / Gage No(s).
Calumet Sag Channel Tributary C	Cook County	RE73, RE75
Calumet Union Drainage Ditch	Cook County, Harvey, Markham, South Holland	HEC-1
Calumet Union Drainage Ditch Southwest Branch	Country Club Hills	RE73, RE74
	Hazel Crest	TR-20
	Markham, Cook County	HEC-1 / Midlothian (05536340)
Calumet Union Drainage Ditch Southwest Branch Tributary N	Country Club Hills	RE73, RE74
Calumet Union Drainage Ditch Southwest Branch Tributary S	Country Club Hills	RE73, RE74
Cherry Creek	Hazel Crest	TR-20
Cherry Creek East Branch	Hazel Crest, Homewood	TR-20
	Flossmoor	RE73, RE74
Cherry Creek East Branch Tributary	Flossmoor	RE73, RE74
Cherry Creek West Branch	Hazel Crest	TR-20
Cherry Creek West Branch East Fork	Flossmoor	RE73, RE74
Cherry Creek West Branch West Fork	Country Club Hills	RE73, RE74
Chicago River, North Branch	Chicago	l-PTIII (RE79)
	Morton Grove, Niles	TR-20 / Touhy Avenue (05536000)
	Cook County, Glenview, Wilmette	HEC-1
Skokie River	Wilmette, Cook County, Northfield, Winnetka, Northbrook, Glencoe	HEC-1 / Chicago River, North Branch at Niles (05536000)
Chicago River, North Branch, Middle Fork	Cook County, Northfield, Northbrook	HEC-1
Chicago River, North Branch, West Fork	Morton Grove, Golf, Glenview, Northbrook, Cook County	HEC-1/ Deerfield (05534500)
Crestwood Drainage Ditch West	Crestwood	RE75 (l-PTIII)
Crystal Creek, Crystal Creek Tributary	Schiller Park	HEC-1 / O'Hare precipitation gage
Deer Creek	Glenview, Cook County, Ford Heights, Sauk Village, Steger	TR-20 (l-PTIII, RE73) / near Chicago Heights (05536235)

Table 7 - Hydrologic Methodologies (continued)

Stream	Community	Method(s) / Gage No(s).
Deer Creek Tributary B	Cook County, Sauk Village, Steger	RE73, RE75
Des Plaines River	Willow Springs, Hodgkins, Lyons, Brookfield, Riverside	l-PTIII / Riverside (05532500)
	Riverside, Lyons, North Riverside, Cook County, Forest Park, Maywood, River Forest, Melrose Park, Elmwood Park, River Grove, Chicago, Franklin Park, Schiller Park, Rosemont, Des Plaines, Park Ridge, Mount Prospect, Prospect Heights, Wheeling	HEC-1/ Russell (0552700), Gurnee (0552800), Des Plaines (0552900), Riverside (05532500)
Des Plaines River Tributary A	Cook County	RE73, RE75
Dixie Creek	Markham	RE77, TR-55
DuPage River West Branch	Hanover Park, Schaumburg	HEC-1
East Avenue Ditch	Countryside, McCook	TR-20
Ehlert Park Tributary	Brookfield	RE73
Elk Grove Boulevard Drainage Ditch	Elk Grove Village	RE73
Farmer's Creek	Des Plaines	HEC-1
Farrington Ditch	Buffalo Grove	TR-20 (RE73)
Feehanville Ditch	Des Plaines	TR-20 (RE77)
	Mount Prospect	TR-20
Filsen Park Ditch	Tinley Park, Cook County	HEC-1 / Midlothian (05536340)
Flag Creek	Burr Ridge, Cook County, Willow Springs	l-PTIII / Willow Springs (05533000)
	Indian Head Park, Western Springs	TR-20 (RE77) / Willow Springs (05533000)
Flag Creek Tributary A	Burr Ridge	RE73 (l-PTIII) / Willow Springs (05533000)
	Cook County	RE73, RE75
Flag Creek, Tributary B	Burr Ridge	RE73 (l-PTIII) / Willow Springs (05533000)
	Cook County	RE73, RE75
Flag Creek, Tributary C	Burr Ridge,	RE73 (l-PTIII) / Willow Springs (05533000)
	Cook County	RE73, RE75
Flint Creek	Inverness	RE74
Flint Creek Tributary	Barrington	RE79, HEC-1
Flossmoor Ditch	Cook County	RE73, RE75
Flossmoor Ditch Tributary A	Cook County	RE73, RE75
Golf Course Tributary	River Grove, Elmwood Park	TR-55
Grand Calumet River	Burnham, Calumet City	HEC-1
Hickory Creek	Cook County	RE73, RE75

Table 7 - Hydrologic Methodologies (continued)

Stream	Community	Method(s) / Gage No(s).
Hickory Creek Tributary A	Cook County	RE73, RE75
Higgins Creek	Cook County	RE73, RE75
	Des Plaines	TR-20 (RE77)
Higgins Creek Tributary A	Cook County	RE73, RE75
I-57 Drainage Ditch	Markham	RE77, TR-55
Illinois and Michigan Canal Tributary A	Cook County	RE73, RE75
Illinois and Michigan Canal Tributary B	Cook County	RE73, RE75
Illinois and Michigan Canal Tributary C	Cook County	RE73, RE75
Illinois and Michigan Canal Tributary D	Willow Springs	RE73
Industrial Tributary	Schiller Park	HEC-1
Justice Ditch	Justice	TR-20
Lansing Ditch	Cook County, Lansing, Lynwood, Sauk Village	HEC-1 / Lansing Ditch (05536265), North Creek (05536270)
Lansing Ditch East Tributary	Sauk Village	HEC-1
Lansing Ditch Lynwood Tributary	Lynwood, Cook County	HEC-1
Lansing Ditch Torrence Tributary	*	HEC-1
Lansing Ditch West Tributary	*	HEC-1
Lansing Ditch Tributary A	Cook County	HEC-1
Little Calumet River	Blue Island, Calumet City, Dixmoor, Dolton, Lansing, Harvey, Riverdale, South Holland	HEC-1
Long Run	Cook County	l-PTIII / near Lemont (05537500)
Long Run Tributary A	Cook County	RE73, RE75
Long Run Tributary B	Cook County	RE73, RE75, TR-20
Long Run Tributary BA	Cook County	RE73, RE75
Long Run Tributary C	Cook County	RE73, RE75
Lord's Park Tributary	Elgin	RE74, RE75
Lucas Ditch	Palos Hills	HEC-1 / Flag Creek (0553300)
Lucas Ditch Cut-off	Bridgeview	HEC-1
	Hickory Hills	HEC-1 / adjusted to Willow Springs (05533000)
	Palos Hills	HEC-1 / Flag Creek (0553300)

*Data not available

Table 7 - Hydrologic Methodologies (continued)

Stream	Community	Method(s) / Gage No(s).
Marley Creek	Cook County	RE73, RE75
	Orland Park	HEC-1
Marley Creek Tributary A	Cook County, Orland Park	RE73, RE75
Marley Creek Tributary B	Cook County	RE73, RE75
Marley Creek Tributary C	Cook County, Orland Park	RE73, RE75
Marley Creek Tributary D	Cook County, Orland Park	HEC-1
McDonald Creek	Cook County, Mount Prospect	1-PTIII / Mount Prospect (05529500)
	Prospect Heights, Wheeling, Arlington Heights	TR-20 / Mount Prospect (05529500)
McDonald Creek North Branch	Arlington Heights	ILLUDAS
McDonald Creek South Branch	Arlington Heights	ILLUDAS
McDonald Creek Tributary A	Prospect Heights	RE73, RE75
McDonald Creek Tributary B	Mount Prospect, Prospect Heights	RE73, RE75, HEC-2, WSP-2
Melvina Ditch	Chicago Ridge	RE74 modified, TR-20
	Oak Lawn	TR-20
Merrionette Park Ditch	Alsip	RE73
Midlothian Creek	Blue Island, Robbins, Midlothian, Oak Forest, Cook County, Tinley Park	HEC-1 / Midlothian (05536340)
Midlothian Creek Western Branch	Oak Forest	RE74, RE75 / Midlothian (05536340)
Midlothian Creek Western Tributary	Cook County, Tinley Park	HEC-1 / Midlothian (05536340)
Mill Creek	Cook County, Orland Park, Palos Park	HEC-HMS
Mill Creek West Branch	Cook County, Palos Park	HEC-HMS
Motel Ditch	Schiller Park	HEC-1 / O'Hare precipitation gage
Natalie Creek	Oak Forest, Midlothian	HEC-1 / Midlothian (05536340)
Navajo Creek	Palos Heights	RE74 / Palos Heights (05536510)
North Creek	Cook County	HEC-1 / near Lansing (05536270)
	Lansing	HEC-1, TR20
North Navy Ditch	Glenview	HEC-1
Oak Lawn Ditch	Chicago Ridge	RE74
	Oak Lawn	RE73 (1-PTIII)
Park Creek	Markham	RE77, TR-55
Plainfield Road Ditch	Burr Ridge	RE73 (1-PTIII) / Willow Springs (05533000)
Plum Creek	Cook County	HEC-1

Table 7 - Hydrologic Methodologies (continued)

Stream	Community	Method(s) / Gage No(s).
Poplar Creek	Elgin, Cook County, Hoffman Estates, South Barrington	RE74, RE75 / Elgin (05550500)
	Inverness	HEC-2
Poplar Creek East Branch	Hoffman Estates	RE74, RE75
Poplar Creek Schaumburg Branch	Cook County, Hoffman Estates	RE74, RE75
Poplar Creek South Branch	Cook County, Streamwood	RE74, RE75
Poplar Creek Tributary A	Cook County	RE74, RE75
	South Barrington	RE77
Poplar Creek Unnamed Tributary No. 1	*	HEC-1
Poplar Creek Unnamed Tributary No. 2	*	HEC-1
Poplar Creek Unnamed Tributary No. 3	*	HEC-1
Prairie Creek	Cook County	HEC-1
	Des Plaines	RE73
Salt Creek (Lower Reach)	La Grange Park	TR-20 (RE58)
	Westchester	TR-20 (RE73)
	Lyons, Brookfield, Hinsdale North Riverside	TR-20 / Western Springs (05531500)
	Cook County	1-PTIII / Western Springs (05531500)
	Westchester	HEC-1 / Algonquin Road USGS gage
	Elk Grove Village, Oak Brook	TR-20
Salt Creek (Upper Reach)	*	HEC-1 / Algonquin Road USGS gage
Salt Creek, Arlington Heights Branch	*	HEC-1
Salt Creek, Arlington Heights Branch, Anderson Drive Tributary	*	HEC-1
Salt Creek Middle Fork	Westchester	TR-20
Salt Creek South Fork	Westchester	TR-20
Salt Creek Tributary	Westchester	TR-20
Salt Creek Tributary A	*	HEC-1
Salt Creek Tributary B	*	HEC-1
Salt Creek Tributary C	*	HEC-1
Salt Creek Tributary D	*	HEC-1

*Data not available

Table 7 - Hydrologic Methodologies (continued)

Stream	Community	Method(s) / Gage No(s).
Salt Creek West Branch	*	HEC-1 / IDNR crest-stage gage
	Elk Grove Village	TR-20
Salt Creek West Branch Tributary A	*	HEC-1
Salt Creek West Branch Tributary 3	*	HEC-1
Salt Creek West Branch Tributary 4	*	HEC-1
Salt Creek West Branch Tributary 5	*	HEC-1
Salt Creek West Branch Tributary 6	*	HEC-1
Salt Creek West Branch Tributary 7	Elk Grove Village	HEC-1 RE73
Sexton Ditch	Schiller Park	HEC-1 / O'Hare precipitation gage
Silver Creek	Cook County, Franklin Park	RE73, RE75
	Maywood	TR-20
	Melrose Park	TR-20 / Riverside and Des Plaines gages
Skokie River (See entry following Chicago River, North Branch)		
Skokie River, Botanical Garden Diversion	Cook County, Northbrook, Glencoe	HEC-1
Skokie River, West Ditch	Cook County, Northfield, Winnetka	HEC-1
South Navy Ditch	Glenview	HEC-1
Spring Creek	Cook County	RE73, RE75
	Orland Park	HEC-1
Stony Creek (East)	Alsip	RE73
	Blue Island	RE73, l-PTIII
Stony Creek East Tributary	Blue Island	l-PTIII, RE73
Stony Creek (West)	Chicago Ridge	RE74
	Oak Lawn	RE73 (l-PTIII)
	Palos Hills	TR-20
Techny Drain	Northbrook	HEC-1
Techny Drain South Fork	Northbrook	HEC-1
Third Creek	Cook County	RE73
	Chicago Heights	RE74, RE75

*Data not available

Table 7 - Hydrologic Methodologies (continued)

Stream	Community	Method(s) / Gage No(s).
Thorn Creek	South Holland, Cook County, Thornton	HEC-1
	Glenwood, Chicago Heights, South Chicago Heights, Park Forest	TR-20 (1-PTIII, RE73) / Thornton (04090500) Glenwood (04088000)
Thorn Creek Tributary A	Cook County	RE73, RE75
Thorn Creek Tributary B	Chicago Heights	RE74, RE75
Tinley Creek	Cook County, Alsip, Crestwood, Orland Hills, Orland Park, Tinley Park	HEC-HMS
Tinley Creek Overflow ³	Cook County, Alsip, Crestwood	HEC-HMS
Underwriters Tributary	Cook County, Northbrook	adICPR
Union Drainage Ditch	Tinley Park	RE73
Union Drainage Ditch Northern Tributary	Tinley Park	RE73
Unnamed Creek	Elk Grove Village	RE73
Unnamed Tributary to Calumet Sag Channel Tributary B ⁴	Palos Park	TR-20
Unnamed Tributary to Salt Creek Tributary D	*	HEC-1
Weller Creek	Des Plaines	1-PTIII / Weller Creek (0553000)
	Mount Prospect	TR-20
Wheeling Drainage Ditch	Cook County	HEC-1
White Pine Ditch	Buffalo Grove	RE73
Willow Creek	Chicago, Des Plaines, Rosemont	TR-20

³Zone AE study performed for LOMR 16-05-7359P

⁴Zone AE study revised in its entirety by LOMR 01-05-3037P

*Data not available

A summary of the drainage area-peak discharge relationships for all the streams studied by Zone AE methods is shown in Table 8, “Summary of Discharges” and in Figures 3 and 4 for Cherry Creek and Tributaries.

The stillwater elevations determined for flooding sources studied by Zone AE methods are summarized in Table 9, “Summary of Stillwater Elevations.”

Table 8 - Summary of Discharges

<i>Flooding Source and Location</i>	<i>Drainage Area (square miles)</i>	<i>Peak Discharges (cubic feet per second)</i>				
		<i>10-Percent- Annual-Chance</i>	<i>4-Percent- Annual-Chance</i>	<i>2-Percent- Annual-Chance</i>	<i>1-Percent- Annual-Chance</i>	<i>0.2-Percent- Annual-Chance</i>
57th Street Ditch						
At confluence with East Avenue Ditch	0.5	262	*	*	326	*
59th Street Ditch						
At County Line Road	0.5	112	*	183	212	293
63rd Street Ditch						
At mouth at Flag Creek	4.0	*	*	*	900	*
67th Street Ditch						
At Brainard Road	0.3	61	*	86	98	124
71st Street Ditch						
At confluence with Chicago Sanitary Drainage and Ship Canal	3.2	350	*	505	555	705
76th Avenue Ditch						
At confluence with Midlothian Creek	2.9	382	*	675	848	1,233
At N Place	1.9	195	*	275	322	536
At 159th Street	0.8	91	*	91	91	140
79th Street Ditch						
At County Line Road	1.0	91	*	141	165	226
Addison Creek						
At the confluence with Salt Creek (Lower Reach)	21.2	1,727	*	2,337	2,530	3,070
Approximately 1,200 feet upstream of 21st Street	20.5	1,606	*	2,166	2,323	2,830
Approximately 160 feet upstream of Indiana Harbor Belt Railroad	19.8	1,511	*	2,045	2,173	2,670
At Eisenhower Expressway	17.6	1,359	*	1,717	1,796	2,210
At 31st Avenue	14.8	1,147	*	1,412	1,608	2,200
Approximately 50 feet upstream of Monroe Street	13.4	976	*	1,228	1,401	1,690

*Data not available

Table 8 - Summary of Discharges (continued)

<i>Flooding Source and Location</i>	<i>Drainage Area (square miles)</i>	<i>Peak Discharges (cubic feet per second)</i>				
		<i>10-Percent- Annual-Chance</i>	<i>4-Percent- Annual-Chance</i>	<i>2-Percent- Annual-Chance</i>	<i>1-Percent- Annual-Chance</i>	<i>0.2-Percent- Annual-Chance</i>
Addison Creek (continued)						
Approximately 240 feet upstream of Chicago and North Western Railway	13.2	734	*	1,145	1,304	1,570
Approximately 540 feet downstream of Chicago and North Western Railway	13.0	719	*	1,115	1,276	1,520
Approximately 520 feet upstream of Chicago and North Western Railway	12.5	594	*	900	1,087	1,510
Approximately 280 feet downstream of Lake Street	11.3	494	*	774	863	1,060
Approximately 200 feet upstream of Mannheim Road	10.9	440	*	720	809	1,000
Approximately 240 feet downstream of North Avenue	8.2	236	*	380	505	860
Approximately 280 feet upstream of Prater Avenue	8.1	215	*	353	481	840
Approximately 620 feet upstream of Palmer Avenue	6.8	161	*	374	473	780
Approximately 650 feet downstream of Tri- State Tollway	6.0	517	*	802	951	1,370
Alsip Drainage Ditch						
Just upstream of Pulaski Road	0.4	88	*	166	212	*
Arroyo Ditch						
At confluence with Boca Rio Ditch	0.2	43	64	85	110	179
Belaire Creek						
At confluence with Dixie Creek	0.6	68	*	103	119	154
Belly Deep Slough						
Just upstream of 95th Street	0.2	*	*	*	429	*
Boca Rio Ditch						
At confluence with Tinley Creek	2.6	402	610	824	1,080	1,760
At 147th Street	1.9	317	479	644	842	1,353
At 151st Street	0.9	135	210	287	381	617

*Data not available

Table 8 - Summary of Discharges (continued)

<i>Flooding Source and Location</i>	<i>Drainage Area (square miles)</i>	<i>Peak Discharges (cubic feet per second)</i>				
		<i>10-Percent- Annual-Chance</i>	<i>4-Percent- Annual-Chance</i>	<i>2-Percent- Annual-Chance</i>	<i>1-Percent- Annual-Chance</i>	<i>0.2-Percent- Annual-Chance</i>
Buffalo Creek						
At Elmhurst Road	20.8	870	*	1,430	1,680	2,470
Approximately 6,230 feet downstream of Buffalo Grove Road	20.5	800	*	1,390	1,650	2,420
At Buffalo Grove Road	19.2	755	*	1,253	1,510	2,205
At Raupp Boulevard	19.1	750	*	1,245	1,500	2,190
At confluence of White Pine Ditch	19.0	745	*	1,237	1,490	2,175
At Lake-Cook Road (county boundary)	18.4	715	*	1,187	1,430	2,088
Buffalo Creek Tributary A						
At confluence with Buffalo Creek	7.6	370	*	580	690	940
At State Route 53	4.3	225	*	360	425	585
At Rand Road	3.2	175	*	275	320	450
At Hicks Road	2.0	115	*	224	273	376
At Dundee Road	0.4	11	*	110	139	207
At State Route 68 (Dundee Road)	0.4	45	*	100	140	240
At Staples Road	0.1	0	*	0	40	110
Butterfield Creek						
At confluence with Thorn Creek	26.0	1,720	*	*	2,740	3,725
At Dixie Highway	23.0	1,650	*	*	2,770	3,920
At Crawford Avenue	9.5	510	*	*	830	1,050
At I-57	4.9	345	*	*	470	540
Butterfield Creek East Branch						
At confluence with Butterfield Creek	7.0	1,000	*	*	1,400	1,715
At Old Plank Road Trail	5.4	900	*	*	1,270	1,580
At Sauk Trail	1.5	650	*	*	1,050	1,330
Butterfield Creek East Branch Tributary						
At Railroad	2.4	630	*	*	790	*
At Cicero Avenue	1.3	480	*	*	700	*
Butterfield Creek East Branch Tributary A						
Just downstream of Amy Drive	0.1	35	*	50	57	72
Just upstream of Imperial Drive	0.1	22	*	31	35	45

*Data not available

Table 8 - Summary of Discharges (continued)

Flooding Source and Location	Drainage Area (square miles)	Peak Discharges (cubic feet per second)				
		10-Percent- Annual-Chance	4-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- Annual-Chance	0.2-Percent- Annual-Chance
Butterfield Creek Tributary No. 1						
At confluence with Butterfield Creek	0.6	120	*	180	200	250
At Vollmer Road	0.5	119	*	171	193	245
Butterfield Creek Tributary No. 3						
Just upstream of confluence with Butterfield Creek	0.8	196	*	281	317	402
At Kedzie Avenue	0.4	55	*	*	159	*
Butterfield Creek Tributary No. 4						
Just upstream of confluence with Butterfield Creek						
Tributary No. 3	0.4	114	*	192	232	334
At Kedzie Avenue	0.4	55	*	*	159	*
Calumet Sag Channel Tributary A						
At State Route 83	1.8	230	*	365	425	595
Calumet Sag Channel Tributary AA						
At confluence with Calumet Sag Channel Tributary A	0.3	70	*	120	170	270
Calumet Sag Channel Tributary B						
At confluence with Calumet Sag Channel	0.7	213	*	411	545	716
Just upstream of confluence with unnamed tributary to Calumet Sag Channel Tributary B	0.2	53	*	105	140	185
Calumet Sag Channel Tributary C						
At Linder Avenue	0.5	80	*	140	190	290
Calumet Union Drainage Ditch						
At Halsted Street	16.9	415	*	746	1,024	1,460
At Park Avenue	12.9	382	*	683	891	1,248
At Dixie Highway	12.7	555	*	870	1,110	1,836
At Tri-State Tollway	2.8	229	*	413	523	675
At Kedzie Avenue	1.9	166	*	299	379	489
At St. Louis Avenue	1.3	96	*	173	219	282
Calumet Union Drainage Ditch Southwest Branch						
At Central Park Avenue	2.6	360	*	660	920	1,330
At Cypress Avenue	1.3	226	*	402	518	761

*Data not available

Table 8 - Summary of Discharges (continued)

Flooding Source and Location	Drainage Area (square miles)	Peak Discharges (cubic feet per second)				
		10-Percent- Annual-Chance	4-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- Annual-Chance	0.2-Percent- Annual-Chance
Calumet Union Drainage Ditch Southwest Branch Tributary N						
At mouth	0.9	168	*	303	401	591
At 175 th Street	0.5	113	*	210	280	415
Calumet Union Drainage Ditch Southwest Branch Tributary S						
At mouth	0.6	155	*	285	376	560
At 183 rd Street	0.2	81	*	156	209	316
At 186 th Street	0.0	28	*	50	70	99
Cherry Creek and Tributaries¹						
Chicago River, North Branch						
At confluence of North Shore Channel	114.6	2,375	*	3,600	4,180	5,600
At North Kedzie Avenue	114.1	2,342	*	3,550	4,120	5,520
At Touhy Avenue	100.0	2,850	*	3,650	3,940	4,900
At Beckwith Road	92.2	2,850	*	3,660	3,950	4,910
At Golf Road	63.6	2,010	*	2,420	2,890	3,380
Just upstream of Glenview Road	61.1	1,830	*	1,967	2,361	2,897
Skokie River						
At Willow Road	29.2	429	*	1,202	1,624	2,197
At Willow Road Dam	24.4	359	*	788	890	996
At Tower Road	24.0	658	*	1,081	1,544	2,205
At Dundee Road	23.4	927	*	1,494	1,813	2,393
At Lake-Cook Road	22.1	1,084	*	1,559	1,844	2,401
Chicago River, North Branch, Middle Fork						
At confluence with Skokie River	25.0	418	*	847	1,004	1,479
At Willow Road	24.1	430	*	814	943	1,388
At a point approximately 800 feet downstream of Sunset Drive	23.1	439	*	793	925	1,425
At a point approximately 2,000 feet upstream of Sunset Ridge Road	22.4	450	*	767	902	1,451
At Chicago & North Western Railway	22.0	451	*	753	892	1,466
At Dundee Road	21.5	449	*	734	870	1,473

¹See Figures 3 and 4 for discharges of Cherry Creek and Tributaries

*Data not available

Table 8 - Summary of Discharges (continued)

Flooding Source and Location	Drainage Area (square miles)	Peak Discharges (cubic feet per second)				
		10-Percent- Annual-Chance	4-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- Annual-Chance	0.2-Percent- Annual-Chance
Chicago River, North Branch, Middle Fork (continued)						
At Interstate Route 94	20.8	438	*	697	830	1,506
At Chicago River, North Branch, Middle Fork Reservoir	20.8	545	*	929	1,134	1,623
At Lake-Cook Road	20.2	521	*	879	1,098	1,569
Chicago River, North Branch, West Fork						
At confluence with Chicago River, North Branch	28.4	751	*	1,295	1,494	2,341
At Central Avenue	27.6	738	*	1,249	1,430	2,379
At Waukegan Road	26.0	607	*	1,006	1,148	2,271
At Glenview Road	24.8	517	*	832	1,106	2,194
At confluence of South Navy Ditch	23.8	455	*	689	1,211	2,387
At Reservoir 32C (inflow)	21.0	650	*	1,241	1,605	2,274
At Reservoir 32C (bypass)	21.0	254	*	317	348	348
At Reservoir 32C (discharge)	21.0	253	*	764	1,409	2,305
At Reservoir 32B (inflow)	17.2	635	*	1,162	1,549	2,077
At Reservoir 32B (discharge)	17.2	505	*	1,128	1,495	2,036
At confluence of Techny Drain	16.1	561	*	1,158	1,433	1,848
At Reservoir 32A (inflow)	14.4	615	*	946	1,108	1,423
At Chicago & North Western Railway	14.4	360	*	921	1,108	1,421
At Reservoir 32A (bypass)	14.4	360	*	427	451	489
At Soo Line Railroad	12.7	477	*	718	848	1,165
At Dundee Road	11.5	378	*	535	623	1,187
At confluence of Underwriters Tributary	11.1	364	*	509	593	1,199
Crestwood Drainage Ditch West						
At State Route 83	1.1	242	*	343	384	500
Just upstream of 135 th Street	0.2	38	*	73	94	156
Crystal Creek						
At the confluence with the Des Plaines River	4.8	333	*	469	502	590
Just downstream of River Road	4.5	170	*	296	329	381
Just upstream of Lawrence Court culvert	4.5	328	*	459	495	569
At downstream face of Soo Line Railroad Yard	4.4	295		407	460	492
At upstream face of Soo Line Railroad Yard	3.9	300	*	451	612	730
At downstream face of 25 th Avenue	2.2	278	*	416	592	703

*Data not available

Table 8 - Summary of Discharges (continued)

		Peak Discharges (cubic feet per second)				
Flooding Source and Location	Drainage Area (square miles)	10-Percent- Annual-Chance	4-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- Annual-Chance	0.2-Percent- Annual-Chance
Crystal Creek (continued)						
At confluence of Crystal Creek Tributary	*	251	*	366	553	644
Just upstream of confluence of Crystal Creek						
Tributary	*	58	*	97	285	320
Just downstream of I-294	*	53	*	88	276	316
Just upstream of Mannheim Road	*	40	*	65	264	295
Approximately 900 feet upstream of Mannheim						
Road	*	17	*	28	34	51
At Lake O'Hare outlet	*	0	*	0	0	0
Crystal Creek Tributary						
At confluence with Crystal Creek	*	194	*	271	321	389
At confluence of Industrial Tributary	*	194	*	260	319	358
Just downstream of Belle Plaine Avenue	*	110	*	131	138	172
Just downstream of Seymour Avenue	*	102	*	122	136	160
Just upstream of confluence of Sexton Ditch	*	72	*	83	89	100
Just downstream of Old Mannheim Road	*	64	*	*	153	*
At an open ditch just downstream of railroad						
yard	*	64	*	*	127	*
Deer Creek						
At Young Street	28.2	1,195	*	1,810	2,079	2,800
At a point approximately 1,400 feet downstream						
of Joe Orr Road	23.2	948	*	1,400	1,647	2,190
At Sauk Trail	17.4	684	*	1,020	1,203	1,585
Deer Creek Tributary B						
At a point approximately 1,800 feet upstream of						
confluence with Deer Creek	2.9	350	*	600	776	1,100
At Cottage Grove Avenue	2.3	300	*	520	675	970
Des Plaines River						
At Interstate Route 55	650.0	6,000	*	7,500	8,400	9,300
At the Tri-State Tollway	650.0	6,000	*	7,500	8,400	9,300
At 47th Street	632.0	5,930	*	7,370	7,900	9,000
At Ogden Avenue	630.8	5,923	*	7,363	7,895	8,990
At a point approximately 500 feet upstream of						
Hoffman Dam	629.3	5,833	*	7,203	7,706	8,883

*Data not available

Table 8 - Summary of Discharges (continued)

Flooding Source and Location	Drainage Area (square miles)	Peak Discharges (cubic feet per second)				
		10-Percent- Annual-Chance	4-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- Annual-Chance	0.2-Percent- Annual-Chance
Des Plaines River (continued)						
At a point approximately 1,000 feet downstream of 31st Street	484.5	5,139	*	6,272	6,692	7,510
At a point approximately 1,800 feet downstream of Chicago Avenue	459.8	4,990	*	6,100	6,508	7,286
At a point approximately 3,000 feet downstream of Kennedy Expressway	419.4	4,487	*	5,765	6,223	7,144
At Algonquin Road	382.1	4,385	*	5,728	6,193	7,256
At a point approximately 1,600 feet upstream of Golf Road	362.7	4,226	*	5,577	6,161	7,395
At a point approximately 1,300 feet downstream of Palatine Road	357.6	4,322	*	5,780	6,308	7,470
At a point approximately 1,600 feet downstream of Dundee Road	326.5	3,727	*	5,367	6,018	7,511
Des Plaines River Tributary A						
At Brainard Avenue	1.0	120	*	220	290	415
Dixie Creek						
At Dixie Highway	1.2	66	*	100	135	250
DuPage River West Branch						
At Irving Park Road	4.5	322	*	594	807	1,150
East Avenue Ditch						
600 feet downstream of East Avenue Culvert	1.2	402	*	694	864	1,231
2,015 feet upstream of 58th Street	0.2	190	*	334	414	595
East Pond and West Pond						
Approximately 500 feet north of 179th street	0.3	*	*	*	82	*
Elk Grove Boulevard Drainage Ditch						
At the mouth	1.7	125	*	200	233	325
Just downstream of Elk Grove Boulevard	1.5	104	*	164	194	295
Approximately 100 feet downstream of Ridge Avenue	1.3	80	*	125	148	205
Approximately 100 feet downstream of Victoria Lane	1.1	76	*	120	142	202

*Data not available

Table 8 - Summary of Discharges (continued)

Flooding Source and Location	Drainage Area (square miles)	Peak Discharges (cubic feet per second)				
		10-Percent- Annual-Chance	4-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- Annual-Chance	0.2-Percent- Annual-Chance
Elk Grove Boulevard Drainage Ditch (continued)						
Approximately 100 feet downstream of Crest Avenue	0.9	59	*	93	110	156
Approximately 100 feet downstream of Love Street	0.5	34	*	54	64	89
Approximately 100 feet downstream of Tonne Road	0.2	14	*	23	27	39
Farmer's Creek						
At confluence with Des Plaines River	5.0	317	*	505	643	1,987
At Ballard Road	2.6	52	*	85	106	474
Farrington Ditch						
At Checker Road	0.6	95	*	162	200	290
Feehanville Ditch						
Just downstream of Wolf Road	1.2	158	*	268	317	443
Filsen Park Ditch						
At confluence with 76th Avenue Ditch	0.9	124	*	219	275	399
Flag Creek						
At the mouth	18.1	1,660	*	2,650	3,180	4,500
At 83rd Street (German Church Road)	15.6	1,450	*	2,330	2,770	3,900
At a point approximately 900 feet upstream of 79th Street Ditch	15.3	1,420	*	2,300	2,720	3,850
At Wolf Road	13.7	1,260	*	2,000	2,400	3,350
At a point approximately 0.25 mile upstream of confluence of Plainfield Road Ditch	11.2	1,080	*	1,730	2,050	2,900
At 55th Street	5.1	540	*	850	1,010	1,400
At 47th Street	3.7	400	*	620	740	1,020
Flag Creek Tributary A						
At confluence with Flag Creek	0.2	120	*	220	300	460
Flag Creek Tributary B						
At confluence with Flag Creek	0.6	160	*	300	460	610

*Data not available

Table 8 - Summary of Discharges (continued)

<i>Flooding Source and Location</i>	<i>Drainage Area (square miles)</i>	<i>Peak Discharges (cubic feet per second)</i>				
		<i>10-Percent- Annual-Chance</i>	<i>4-Percent- Annual-Chance</i>	<i>2-Percent- Annual-Chance</i>	<i>1-Percent- Annual-Chance</i>	<i>0.2-Percent- Annual-Chance</i>
Flag Creek Tributary C						
At confluence with Flag Creek	3.0	350	*	500	640	880
Flint Creek						
At a point approximately 500 feet upstream of Abbotsford Drive	0.9	49	*	75	98	111
Flint Creek Tributary						
At Lake Louise outflow structure	1.3	205	*	265	270	335
Flossmoor Ditch						
At Harlem Avenue	4.0	257	*	441	571	840
Flossmoor Ditch Tributary A						
At Vollmer Road	0.8	116	*	209	277	400
Golf Course Tributary						
At Thatcher Road	1.9	212	*	312	365	465
At south boundary of Oak Park Country Club	1.7	195	*	290	345	440
Grand Calumet River						
At CSX Transportation	7.3	415	*	460	470	500
Hickory Creek						
At Harlem Avenue	3.1	550	*	860	1,014	1,400
At Sauk Trail	1.0	390	*	620	720	1,010
Hickory Creek Tributary A						
Just downstream of Harlem Avenue	6.6	670	*	1,070	1,250	1,670
Higgins Creek						
At Old Mt. Prospect Road	7.3	454	*	503	730	1,666
At Mt. Prospect Road	7.0	444	*	485	700	1,600
At Touhy Avenue Flood Control Reservoir						
Upstream Cell	6.8	700	*	920	1,260	2,140
At Northwest Tollway	6.8	907	*	1,394	1,623	2,270
At Elmhurst Road	5.4	511	*	626	852	1,145
At upstream side of Wille Road	3.0	450	*	755	975	1,365

*Data not available

Table 8 - Summary of Discharges (continued)

<i>Flooding Source and Location</i>	<i>Drainage Area (square miles)</i>	<i>Peak Discharges (cubic feet per second)</i>				
		<i>10-Percent- Annual-Chance</i>	<i>4-Percent- Annual-Chance</i>	<i>2-Percent- Annual-Chance</i>	<i>1-Percent- Annual-Chance</i>	<i>0.2-Percent- Annual-Chance</i>
Higgins Creek Tributary A						
At confluence with Higgins Creek	2.3	228	*	407	451	548
Above confluence of Higgins Creek Tributary B	1.5	206	*	310	410	418
I-57 Drainage Ditch						
At Kedzie Avenue	1.2	202	*	315	368	457
Illinois and Michigan Canal Tributary A						
At confluence with Illinois and Michigan Canal	0.9	300	*	530	700	1,000
Approximately 150 feet upstream of Roberta Street	0.1	100	*	190	260	380
Illinois and Michigan Canal Tributary B						
At confluence with Illinois and Michigan Canal	2.5	530	*	920	1,170	1,700
At Walker Road	0.6	110	*	210	270	420
Illinois and Michigan Canal Tributary C						
At a point approximately 1,600 feet upstream of confluence with Illinois and Michigan Canal Tributary B	1.6	350	*	600	770	1,150
Illinois and Michigan Canal Tributary D						
At the mouth	0.8	198	*	320	381	550
At Prospect Avenue	0.6	139	*	226	269	385
Industrial Tributary						
At confluence with Crystal Creek Tributary	*	194	*	258	318	358
Justice Ditch						
At confluence with Illinois and Michigan Canal	0.5	100	*	166	204	290
Lansing Ditch						
Just downstream of intersection of Burnham and Glenwood-Lansing Roads	2.19 ²	199	*	279	316	408
Just downstream of diversion structure at 202 nd Street	0.40 ²	91	*	235	285	445

*Data not available

²Contributing drainage area below diversion to Lansing Ditch Lynwood Tributary

Table 8 - Summary of Discharges (continued)

Flooding Source and Location	Drainage Area (square miles)	Peak Discharges (cubic feet per second)				
		10-Percent- Annual-Chance	4-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- Annual-Chance	0.2-Percent- Annual-Chance
Lansing Ditch (continued)						
Near USGS gage 05536265 just above diversion structure at 202 nd Street	9.5	188	*	299	357	643
Just upstream of Linda Lane	9.1	211	*	304	424	873
Just upstream of Glenwood-Dyer Road	8.4	126	*	209	410	876
Just upstream of Orion Avenue	1.1	204	*	359	455	632
Just upstream of 221 st Street	1.0	177	*	318	397	554
Just upstream of Katz Road	0.9	157	*	284	356	501
Lansing Ditch East Tributary						
Just upstream of Katz Road	2.3	299	*	557	712	1,023
Just upstream of Maintenance Department Entrance	1.7	227	*	404	518	741
Just upstream of Steger Road	1.4	194	*	341	441	674
Just downstream of Richton Road	0.2	31	*	43	73	193
Lansing Ditch Lynwood Tributary						
Just downstream of Glenwood Lansing Road	1.6	277	*	390	449	544
Just downstream of 198th Street	1.4	264	*	363	413	508
Just downstream of 201st Street (subdivision entrance)	1.4	258	*	350	398	495
Just downstream of Private Drive No. 5	1.1	230	*	298	326	373
Just downstream of Lake Lynwood Drive	1.0	226	*	290	324	406
Just downstream of Burnham Avenue	0.6	176	*	222	245	297
Just upstream of Burnham Avenue	0.4	149	*	179	190	219
Just downstream of Diversion Structure	*	135	*	140	148	202
Lansing Ditch Torrence Tributary						
At confluence with Lansing Ditch	*	185	*	216	254	512
Just upstream of Dr. Mary Woodland Reservoir spillway	*	134	*	300	390	554
Lansing Ditch West Tributary						
At confluence with Lansing Ditch	0.5	48	*	67	79	108
Lansing Ditch Tributary A						
Just downstream of Sauk Trail Road	0.8	69	*	117	145	210

*Data not available

Table 8 - Summary of Discharges (continued)

Flooding Source and Location	Drainage Area (square miles)	Peak Discharges (cubic feet per second)				
		10-Percent- Annual-Chance	4-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- Annual-Chance	0.2-Percent- Annual-Chance
Little Calumet River						
At confluence with Calumet Sag Channel	291.0	3,090	*	4,290	4,670	6,110
At Ashland Avenue	253.0	2,320	*	3,460	3,730	5,280
At USGS gage at Harvey	252.0	2,360	*	3,060	3,590	5,190
At USGS gage at South Holland	205.0	2,180	*	2,890	3,520	5,203
Upstream of confluence with Thorn Creek	96.1	1,050	*	1,370	1,390	1,910
At Illinois/Indiana State Line	90.7	1,010	*	1,250	1,290	1,551
Long Run						
At State Street	20.8	1,460	*	2,300	2,670	3,500
At Will-Cook Road	3.3	260	*	440	560	820
At approximately 2,500 feet upstream of 143 rd Street	1.9	210	*	370	470	720
Long Run Tributary A						
At Wolf Road	0.5	110	*	210	280	450
Just downstream of 143 rd Street	0.4	110	*	210	280	450
Long Run Tributary B						
At a point approximately 1,500 feet upstream of confluence with Long Run	3.0	370	*	620	790	1,150
At a point approximately 2,500 feet downstream of 131st Street	2.3	300	*	500	650	970
Long Run Tributary BA						
At 131st Street	0.2	100	*	190	260	410
Long Run Tributary C						
At a point approximately 1,250 feet upstream of confluence with Long Run	0.4	160	*	290	380	610
Lord's Park Tributary						
At the mouth	3.7	*	*	*	475	*
Lucas Ditch						
At the mouth	1.6	268	*	*	459	633
At 86th Avenue	0.8	232	*	*	377	551
At 103rd Street	0.3	95	*	*	244	565

*Data not available

Table 8 - Summary of Discharges (continued)

<i>Flooding Source and Location</i>	<i>Drainage Area (square miles)</i>	<i>Peak Discharges (cubic feet per second)</i>				
		<i>10-Percent- Annual-Chance</i>	<i>4-Percent- Annual-Chance</i>	<i>2-Percent- Annual-Chance</i>	<i>1-Percent- Annual-Chance</i>	<i>0.2-Percent- Annual-Chance</i>
Lucas Ditch Cut-off						
At confluence with Stony Creek (West)	3.2	370	*	*	626	1,029
At confluence of Lucas Ditch Cut-off Tributary	2.1	356	*	*	605	993
Marley Creek						
At 179th Street	8.3	530	*	830	976	1,370
At 108th Avenue	4.6	215	*	401	590	1,024
Marley Creek Tributary A						
At confluence with Marley Creek	0.4	192	*	346	430	660
At Wolf Road	0.1	77	*	146	182	290
Marley Creek Tributary B						
At confluence with Marley Creek	0.2	120	*	225	280	435
At U.S. Route 6	0.2	120	*	225	280	435
Marley Creek Tributary C						
At Wolf Road	1.4	550	*	870	1,028	1,430
Just downstream of 108th Avenue	1.3	128	*	317	385	875
Marley Creek Tributary D						
At 104 th Avenue	1.3	155	*	276	345	544
McDonald Creek						
At confluence with the Des Plaines River	8.0	535	*	800	913	1,240
At Foundry Road	7.7	525	*	*	895	*
At Camp McDonald Road	6.6	487	*	720	834	1,110
Approximately 800 feet upstream of Camp McDonald Road	6.3	404	*	640	757	1,050
Approximately 2,950 feet downstream of Wheeling Road	6.2	372	*	579	677	931
At Wheeling Road	6.1	353	*	542	628	859
At Palatine Road	4.6	230	*	309	335	574
At Schoenbeck Road	4.1	122	*	142	147	444
At Cornell Avenue	4.0	115	*	129	141	473
McDonald Creek North Branch						
Just upstream of Windsor Drive	1.9	965	*	1,443	1,630	2,220

*Data not available

Table 8 - Summary of Discharges (continued)

<i>Flooding Source and Location</i>	<i>Drainage Area (square miles)</i>	<i>Peak Discharges (cubic feet per second)</i>				
		<i>10-Percent- Annual-Chance</i>	<i>4-Percent- Annual-Chance</i>	<i>2-Percent- Annual-Chance</i>	<i>1-Percent- Annual-Chance</i>	<i>0.2-Percent- Annual-Chance</i>
McDonald Creek South Branch						
Upstream of Buffalo Grove Road	1.4	902	*	1,190	1,261	1,502
McDonald Creek Tributary A						
At Elmhurst Road	0.8	140	*	240	300	440
At Elm Avenue	0.7	125	*	215	265	400
McDonald Creek Tributary B						
At Wheeling Road	0.5	100	*	175	219	335
Melvina Ditch						
At confluence with Stony Creek (West)	1.7	250	*	415	500	720
At 95th Street	1.4	175	*	322	400	610
Merrionette Park Ditch						
At mouth	1.2	160	*	243	282	382
Midlothian Creek						
At mouth	*	264	*	495	637	951
Approximately 1,200 feet upstream of Western Avenue	*	264	*	462	600	837
Just upstream of 137 th Street	*	406	*	681	829	1,292
At I-294 Tollway	14.0	380	*	641	783	1,233
At 147 th Street	13.4	286	*	503	622	1,249
At Waverly Avenue	12.5	245	*	402	594	1,216
At 160 th Street	11.7	210	*	285	598	1,216
At Ridgeland Avenue	8.0	480	*	697	823	1,130
At New England Avenue	7.2	322	*	432	575	1,072
At 80 th Avenue	3.5	346	*	713	901	1,319
At 84 th Avenue	2.0	254	*	573	728	1,078
Midlothian Creek Western Branch						
At confluence with Midlothian Creek	0.6	155	*	225	255	335
Midlothian Creek Western Tributary						
At confluence with Midlothian Creek	0.7	20	*	26	31	38
At 84th Avenue	0.6	19	*	21	21	23

*Data not available

Table 8 - Summary of Discharges (continued)

<i><u>Flooding Source and Location</u></i>	<i><u>Drainage Area (square miles)</u></i>	<i><u>Peak Discharges (cubic feet per second)</u></i>				
		<i><u>10-Percent- Annual-Chance</u></i>	<i><u>4-Percent- Annual-Chance</u></i>	<i><u>2-Percent- Annual-Chance</u></i>	<i><u>1-Percent- Annual-Chance</u></i>	<i><u>0.2-Percent- Annual-Chance</u></i>
Mill Creek						
At Calumet Sag Road	10.7	509	812	1,084	1,391	2,528
Just upstream of confluence of Mill Creek West Branch	6.7	166 ³	289 ³	380 ³	468 ³	1,321 ³
Approximately 2,000 feet upstream of Southwest Highway	5.6	184	335	496	704	1,434
Just downstream of railroad	1.1	80	153	231	324	680
Mill Creek West Branch						
At 123rd Street, approximately 1,850 feet east of US Route 45	3.1	296	463	614	776	1,665
Motel Ditch						
At confluence with Industrial Tributary	*	88	*	130	183	193
Natalie Creek						
At Crawford Avenue	2.9	187	*	313	450	763
At Kenton Avenue	2.6	195	*	324	484	768
At Lavergne Avenue	2.3	174	*	293	462	759
At Long Drive	1.9	148	*	279	436	628
At 159th and Central	0.7	51	*	104	136	183
Natalie Creek Overland Flow						
At divergence from Natalie Creek	*	13	*	93	230	543
Navajo Creek						
At confluence with Calumet Sag Channel	3.3	516	*	741	836	1,080
At Oak Park Avenue	2.2	455	*	640	720	925
At Harlem Avenue	1.4	348	*	487	552	700
At 131st Street	0.4	112	*	159	179	229
North Creek						
At confluence with Thorn Creek	22.2	722	*	1,127	1,332	1,891
Just upstream of Calumet Expressway	20.0	679	*	1,023	1,175	1,527
Just upstream of Stony Island Avenue	18.7	656	*	947	1,062	1,281
Near Torrence Avenue	16.9	682	*	1,000	1,185	1,535
Just upstream of Bike Path	5.4	402	*	626	763	906
Just downstream of Oakwood Drive	4.4	349	*	558	674	858
At Wentworth Avenue	0.3	28	*	44	51	62

*Data not available

³Decrease in discharge due to basin storage upstream of Southwest Highway

Table 8 - Summary of Discharges (continued)

<i>Flooding Source and Location</i>	<i>Drainage Area (square miles)</i>	<i>Peak Discharges (cubic feet per second)</i>				
		<i>10-Percent- Annual-Chance</i>	<i>4-Percent- Annual-Chance</i>	<i>2-Percent- Annual-Chance</i>	<i>1-Percent- Annual-Chance</i>	<i>0.2-Percent- Annual-Chance</i>
North Navy Ditch						
Just downstream of Soo Line Railroad	3.2	230	*	383	431	508
North Tributary to Tinley Creek						
At 88th Avenue	0.4	*	*	*	84	*
Oak Lawn Ditch						
At confluence with Stony Creek (West)	3.4	383	*	585	680	920
At Edison Avenue	3.0	330	*	510	590	800
At Kostner Avenue	1.3	159	*	243	282	383
Park Creek						
At Interstate Route 57	1.2	79	*	121	139	181
Plainfield Road Ditch						
At mouth at Flag Creek	1.1	197	*	310	367	510
At County Line Road	1.0	141	*	223	262	365
Plum Creek						
At Steger Road	34.8	1,152	*	1,594	1,800	2,370
Poplar Creek						
At the mouth	42.3	1,085	*	1,709	2,010	2,794
Upstream of the confluence of Lord's Park						
Tributary	38.7	923	*	1,454	1,710	2,377
At Irving Park Road	36.5	918	*	1,445	1,700	2,363
At Golf Road, approximately 31,800 feet above						
confluence with Fox River	24.5	675	*	1,063	1,250	1,738
At Bartlett Road	23.2	678	*	1,067	1,255	1,744
At Higgins Road	5.8	243	*	382	450	625
At Algonquin Road	3.1	166	*	261	307	427
At Barrington Road	1.6	111	*	194	246	428
At Stover Road	1.2	76	*	119	140	195
Poplar Creek East Branch						
At the mouth	5.0	235	*	375	440	610
At Central Road	2.7	150	*	235	275	380

*Data not available

Table 8 - Summary of Discharges (continued)

<i>Flooding Source and Location</i>	<i>Drainage Area (square miles)</i>	<i>Peak Discharges (cubic feet per second)</i>				
		<i>10-Percent- Annual-Chance</i>	<i>4-Percent- Annual-Chance</i>	<i>2-Percent- Annual-Chance</i>	<i>1-Percent- Annual-Chance</i>	<i>0.2-Percent- Annual-Chance</i>
Poplar Creek Schaumburg Branch						
At the mouth	3.1	160	*	250	298	410
At Golf Road	2.1	151	*	238	280	389
Poplar Creek South Branch						
At confluence with Poplar Creek	6.6	258	*	406	478	664
At Sutton Road	5.9	248	*	391	460	639
At Bartlett Road	3.6	200	*	315	370	514
Poplar Creek Tributary A						
At confluence with Poplar Creek	1.5	100	*	160	190	270
At Interstate Route 90	1.1	99	*	153	176	230
Poplar Creek Unnamed Tributary No. 1						
Approximately 415 feet upstream of confluence with Poplar Creek	0.1	13	*	19	23	33
Poplar Creek Unnamed Tributary No. 2						
Approximately 1,082 feet upstream of confluence with Poplar Creek	0.8	69	*	112	139	238
Poplar Creek Unnamed Tributary No. 3						
Approximately 109 feet upstream of confluence with Poplar Creek	0.4	66	*	122	157	288
Prairie Creek						
At Kennedy Drive	1.8	137	*	210	269	1,336
Salt Creek (Lower Reach)						
At the mouth	150.0	1,570	*	2,780	3,400	4,920
At Logan Avenue	148.1	1,570	*	2,780	3,400	4,920
Just downstream of confluence of Addison Creek	148.0	2,850	*	4,300	4,940	6,600
At a point approximately 1,800 feet upstream of confluence of Addison Creek	117.0	2,150	*	3,150	3,640	4,700
At La Grange Road	116.2	2,151	*	3,150	3,641	4,700
At 31st Street	114.8	2,153	*	3,150	3,643	4,700
At York Road	112.0	2,158	*	3,150	3,650	4,400
At Wolf Road	111.8	2,156	*	3,155	3,647	4,710
At Elk Grove Village	51.2	1,653	*	2,300	2,590	3,350

*Data not available

Table 8 - Summary of Discharges (continued)

Flooding Source and Location	Drainage Area (square miles)	Peak Discharges (cubic feet per second)				
		10-Percent- Annual-Chance	4-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- Annual-Chance	0.2-Percent- Annual-Chance
Salt Creek (Upper Reach)						
At Golf Road	32.3	1,136	*	1,845	2,221	3,031
At Algonquin Road	31.1	1,080	*	1,742	2,085	2,871
Just downstream of Arlington Heights Branch	30.6	1,052	*	1,689	2,020	2,802
Just upstream of Arlington Heights Branch	17.8	608	*	1,004	1,202	1,641
At Briarwood Lane	16.7	557	*	910	1,083	1,486
At Meacham Road	16.1	538	*	869	1,022	1,411
Just downstream of confluence of Salt Creek						
Tributary D	15.9	526	*	838	989	1,384
Just upstream of confluence of Salt Creek						
Tributary D	11.5	373	*	579	692	995
Just downstream of confluence of Salt Creek						
Tributary C	11.2	353	*	545	649	940
Just upstream of confluence of Salt Creek						
Tributary C	8.8	258	*	380	452	629
At Illinois Avenue	7.7	224	*	313	363	479
Just downstream of Reimer Reservoir Road	6.3	128	*	145	344	388
Just upstream of Reimer Reservoir Road	6.3	312	*	603	765	1,184
Just downstream of confluence of Salt Creek						
Tributary A	5.3	259	*	504	650	994
Just upstream of confluence of Salt Creek						
Tributary A	2.4	122	*	234	302	467
Just downstream of confluence of Salt Creek						
Tributary B	2.1	106	*	206	267	409
Just upstream of confluence of Salt Creek						
Tributary B	1.0	69	*	130	169	256
Salt Creek, Arlington Heights Branch						
At confluence with Salt Creek (Upper Reach)	12.7	446	*	686	818	1,174
At Euclid Avenue	11.0	361	*	542	636	1,002
At Northwest Highway	9.9	300	*	444	543	870
At State Route 53	8.6	287	*	421	528	836
Just downstream of Twin Lakes	8.8	248	*	365	460	711
Just upstream of Twin Lakes	8.5	283	*	485	589	821
Just downstream of confluence of Salt Creek,						
Arlington Heights Branch, Anderson Drive						
Tributary	8.1	258	*	443	536	744

*Data not available

Table 8 - Summary of Discharges (continued)

Flooding Source and Location	Drainage Area (square miles)	Peak Discharges (cubic feet per second)				
		10-Percent- Annual-Chance	4-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- Annual-Chance	0.2-Percent- Annual-Chance
Salt Creek, Arlington Heights Branch (continued)						
Just upstream of confluence of Salt Creek, Arlington Heights Branch, Anderson Drive Tributary	6.1	190	*	312	358	462
Hicks Road	5.1	156	*	259	294	372
Just downstream of Hamilton Reservoir	4.0	102	*	153	161	171
Just upstream of Hamilton Reservoir	4.0	102	*	217	293	439
At Dundee Road	2.8	62	*	163	232	400
At Quentin Road	2.5	57	*	149	210	359
Salt Creek, Arlington Heights Branch Anderson Drive Tributary						
At confluence with Salt Creek, Arlington Heights Branch	2.0	68	*	140	184	286
At Lake Louise outlet	1.5	47	*	103	136	214
Salt Creek Middle Fork						
At the mouth	0.8	45	*	82	100	110
Salt Creek South Fork						
At the mouth	0.3	38	*	47	64	130
Salt Creek Tributary						
At Mayfair Avenue	2.0	59	*	208	243	350
At Wolf Road	0.5	80	*	136	171	240
Salt Creek Tributary A						
At confluence with Salt Creek (Upper Reach)	2.9	140	*	269	348	526
Just downstream of Golf Course Tributary	2.9	140	*	269	348	526
Just upstream of Golf Course Tributary	1.6	66	*	123	158	253
Approximately 2,600 feet upstream of Ela Road	0.9	36	*	71	92	140
Salt Creek Tributary B						
At confluence with Salt Creek (Upper Reach)	1.1	40	*	79	103	159
Salt Creek Tributary C						
At confluence with Salt Creek (Upper Reach)	2.3	97	*	167	199	322
Just downstream of Plum Grove Reservoir Outlet	2.1	85	*	148	176	289
Just upstream of Plum Grove Reservoir Outlet	2.1	120	*	221	282	422

*Data not available

Table 8 - Summary of Discharges (continued)

<i>Flooding Source and Location</i>	<i>Drainage Area (square miles)</i>	<i>Peak Discharges (cubic feet per second)</i>				
		<i>10-Percent- Annual-Chance</i>	<i>4-Percent- Annual-Chance</i>	<i>2-Percent- Annual-Chance</i>	<i>1-Percent- Annual-Chance</i>	<i>0.2-Percent- Annual-Chance</i>
Salt Creek Tributary D						
At confluence with Salt Creek (Upper Reach)	4.3	159	*	262	301	449
Just downstream of St. Michael's Reservoir						
Dam	3.9	142	*	235	270	447
Just upstream of St. Michael's Reservoir Dam	2.3	115	*	210	268	400
Salt Creek West Branch						
At Interstate Route 290	12.1	674	*	1,197	1,505	2,200
At Meacham Road	11.0	605	*	1,073	1,349	1,974
Just downstream of confluence of Salt Creek						
West Branch Tributary 6	10.8	587	*	1,043	1,314	1,923
Just upstream of confluence of Salt Creek West						
Branch Tributary 6	8.4	457	*	802	1,006	1,467
Just downstream of confluence of Salt Creek						
West Branch Tributary 3	8.0	444	*	776	971	1,419
Just upstream of confluence of Salt Creek West						
Branch Tributary 3	5.7	305	*	525	655	945
Just downstream of confluence of Salt Creek						
West Branch Tributary A	4.7	276	*	454	561	803
Just upstream of confluence of Salt Creek West						
Branch Tributary A	2.5	106	*	170	209	296
Just downstream of Unnamed Tributary	2.4	95	*	156	192	275
Just upstream of Unnamed Tributary	2.0	76	*	121	148	210
At Wiley Road	1.1	50	*	94	122	185
Salt Creek West Branch Tributary A						
At confluence with Salt Creek West Branch	2.2	176	*	299	372	537
At Higgins Road	0.8	84	*	139	171	243
Salt Creek West Branch Tributary 3						
At confluence with Salt Creek West Branch	2.4	140	*	251	316	474
Just downstream of confluence of Salt Creek						
West Branch Tributary 5	2.1	131	*	238	303	450
Just downstream of confluence of Salt Creek						
West Branch Tributary 4	1.7	101	*	187	239	357
Just upstream of confluence of Salt Creek West						
Branch Tributary 4	1.1	59	*	109	140	210

*Data not available

Table 8 - Summary of Discharges (continued)

<i>Flooding Source and Location</i>	<i>Drainage Area (square miles)</i>	<i>Peak Discharges (cubic feet per second)</i>				
		<i>10-Percent- Annual-Chance</i>	<i>4-Percent- Annual-Chance</i>	<i>2-Percent- Annual-Chance</i>	<i>1-Percent- Annual-Chance</i>	<i>0.2-Percent- Annual-Chance</i>
Salt Creek West Branch Tributary 4						
At confluence with Salt Creek West Branch Tributary 3	0.7	42	*	77	99	147
Salt Creek West Branch Tributary 5						
At confluence with Salt Creek West Branch Tributary 3	0.4	30	*	52	65	94
Salt Creek West Branch Tributary 6						
At confluence with Salt Creek West Branch Tributary 7	2.4	136	*	248	318	463
Just downstream of confluence of Salt Creek Tributary 7	2.1	117	*	216	276	411
Just upstream of confluence of Salt Creek Tributary 7	1.2	61	*	109	138	204
Salt Creek West Branch Tributary 7						
At confluence with Salt Creek West Branch Tributary 6	0.9	57	*	109	140	211
Sexton Ditch						
At confluence with Crystal Creek Tributary	*	102	*	122	136	160
Silver Creek						
At mouth at Des Plaines River	11.6	465	*	712	842	1,125
At North Avenue	10.3	443	*	680	802	1,075
At Armitage Avenue	9.1	351	*	620	768	1,145
Approximately 800 feet upstream of Fullerton Avenue	9.1	425	*	645	770	1,010
Just upstream of Scott Street	8.7	420	*	640	760	1,000
At Grand Avenue	7.4	303	*	545	669	1,015
Approximately 1,800 feet upstream of Grand Avenue	6.8	370	*	570	670	890
Approximately 800 feet upstream of Belmont Avenue	6.6	360	*	560	660	880
At Franklin Avenue	6.4	355	*	550	655	875
At railroad yard	6.1	350	*	535	640	850

Skokie River (See entry following Chicago River, North Branch)

*Data not available

Table 8 - Summary of Discharges (continued)

<i>Flooding Source and Location</i>	<i>Drainage Area (square miles)</i>	<i>Peak Discharges (cubic feet per second)</i>				
		<i>10-Percent- Annual-Chance</i>	<i>4-Percent- Annual-Chance</i>	<i>2-Percent- Annual-Chance</i>	<i>1-Percent- Annual-Chance</i>	<i>0.2-Percent- Annual-Chance</i>
Skokie River, Botanical Garden Diversion						
At confluence with Skokie River	*4	54	*	388	543	690
Skokie River, West Ditch						
At confluence with Skokie River	1.2	72	*	333	638	1,141
At Tower Road	0.8	54	*	67	73	74
South Navy Ditch						
Just downstream from Soo Line Railroad	1.9	217	*	351	410	527
South Tributary to Tinley Creek						
At 88th Avenue	0.4	*	*	*	51	*
Spring Creek						
At 118th Avenue	2.3	108	*	205	259	396
At 159th Street	1.6	61	*	90	97	117
At 151st Street and Wolf Road	0.8	64	*	112	139	195
Stony Creek (East)						
At confluence with Calumet Sag Channel	4.5	260	*	395	459	620
At Sacramento Avenue	4.3	255	*	390	454	615
At Central Park Avenue	3.6	205	*	315	365	495
At Crawford Avenue	2.4	158	*	239	277	372
At Cicero Avenue	0.2	50	*	75	100	150
Stony Creek (West)						
At the mouth	26.8	1,420	*	1,900	2,100	2,620
At confluence of Lucas Ditch	26.3	1,420	*	1,900	2,100	2,620
At Roberts Road	23.2	1,355	*	1,815	2,013	2,490
At Southwest Highway	18.3	1,240	*	1,680	1,867	2,030
At Norfolk & Western Railway	9.3	935	*	1,250	1,405	1,720
Techny Drain						
At confluence with Chicago River, North Branch, West Fork	1.8	292	*	506	617	839
Just downstream of Chicago and North Western Railroad	1.7	245	*	315	320	320
Just upstream of Chicago and North Western Railroad	1.7	300	*	508	619	840
At Shermer Road	1.2	187	*	327	401	562
At confluence of Techny Drain, South Fork	1.0	154	*	277	347	481

*Data not available

⁴Includes split flow from Skokie River downstream of Lake Cook Road plus local drainage

Table 8 - Summary of Discharges (continued)

Flooding Source and Location	Drainage Area (square miles)	Peak Discharges (cubic feet per second)				
		10-Percent- Annual-Chance	4-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- Annual-Chance	0.2-Percent- Annual-Chance
Techny Drain South Fork						
At confluence with Techny Drain	0.4	44	*	81	102	143
Third Creek						
At a point approximately 2,400 feet upstream of confluence with Deer Creek	1.4	98	*	172	221	325
At Joe Orr Road	0.5	48	*	88	118	175
At Missouri Pacific Railroad	0.2	18	*	37	51	77
Thorn Creek						
At the confluence with the Little Calumet River	107.7	1,156 ⁵	*	2,020 ⁵	2,870 ⁵	5,450 ⁵
Upstream of Tri-State Tollway (Interstate 80)	105.5	1,490 ⁶	*	2,220 ⁶	3,210 ⁶	6,010 ⁶
USGS gage at Thornton	104.0	3,650 ⁷	*	5,220 ⁷	5,940 ⁷	7,740 ⁷
At confluence with North Creek	103.3	4,323	*	6,180	7,442	9,650
Downstream of confluence of Butterfield Creek	79.7	3,803	*	5,700	6,510	8,800
At CSX Railroad	54.1	2,650	*	4,000	4,590	6,200
At a point approximately 700 feet downstream of Joe Orr Road	23.4	1,230	*	1,957	2,360	3,200
At a point approximately 300 feet downstream of Chicago Heights Road	16.3	900	*	1,458	1,750	2,420
At 15 th Street	14.9	858	*	1,375	1,650	2,280
At upstream Chicago Heights corporate limit (26 th Street)	9.5	578	*	912	1,140	1,640
At Sauk Trail	8.9	525	*	880	1,100	1,520
At a point approximately 1,500 feet upstream of Western Avenue	6.8	435	*	700	870	1,220
Thorn Creek Tributary A						
At a point approximately 300 feet upstream of State Street	1.0	135	*	250	320	470
Thorn Creek Tributary B						
At Parkside Avenue	2.3	405	*	560	640	795
At Dixie Highway	1.9	375	*	520	590	735
At Meadow Lane	1.4	300	*	413	464	590

⁵Decrease in discharge due to routing storage⁶Decrease in discharge due to Thornton Reservoir⁷Decrease in discharge due to difference in hydrologic analysis

*Data not available

Table 8 - Summary of Discharges (continued)

<i>Flooding Source and Location</i>	<i>Drainage Area (square miles)</i>	<i>Peak Discharges (cubic feet per second)</i>				
		<i>10-Percent- Annual-Chance</i>	<i>4-Percent- Annual-Chance</i>	<i>2-Percent- Annual-Chance</i>	<i>1-Percent- Annual-Chance</i>	<i>0.2-Percent- Annual-Chance</i>
Tinley Creek						
At confluence with Calumet Sag Channel	12.9	1,227	1,821	2,394	2,835	4,509
Just upstream of confluence of Boca Rio Ditch	8.4	1,043	1,496	1,896	2,190	3,241
Approximately 2,100 feet downstream of Harlem Avenue / IL Route 43	6.7	763	1,157	1,534	1,957	3,057
At 82nd Avenue	5.2	690	1,029	1,347	1,709	2,704
Approximately 700 feet downstream of 151st Street	3.4	447	659	861	1,104	1,686
At Wheeler Drive	2.8	373	537	693	867	1,373
At 86th Avenue	2.1	281	419	552	707	1,083
Approximately 700 feet downstream of 159th Street / US Route 6	1.3	163	225	283	348	504
Approximately 400 feet upstream of Laurel Drive	1.1	117	157	193	233	326
At 167th Street	0.4	81	120	158	204	321
Tinley Creek Overflow						
At convergence with Tinley Creek	N/A	**	**	**	**	882
Union Drainage Ditch						
Approximately 1,100 feet upstream of Interstate 80	5.9	215	*	315	361	470
Union Drainage Ditch Northern Tributary						
Approximately 1,900 feet downstream of 183rd Street	1.5	156	*	226	258	340
Unnamed Creek						
Approximately 500 feet downstream of Nerge Road	0.5	70	*	133	175	285
Unnamed Tributary to Calumet Sag Channel						
Tributary B						
Just upstream of confluence with Calumet Sag Channel Tributary B	0.3	74	*	144	191	252
Unnamed Tributary Lake Emily	*	*	*	*	*	*
Unnamed Tributary to Long Run						
At Will-Cook Road	0.2	*	*	*	53	*

*Data not available

**Overflow at convergence location does not occur for this recurrence interval

N/A – Not applicable

Table 8 - Summary of Discharges (continued)

Flooding Source and Location	Drainage Area (square miles)	Peak Discharges (cubic feet per second)				
		10-Percent- Annual-Chance	4-Percent- Annual-Chance	2-Percent- Annual-Chance	1-Percent- Annual-Chance	0.2-Percent- Annual-Chance
Unnamed Tributary to Salt Creek Tributary D						
At confluence with Salt Creek Tributary D	1.1	64	*	127	166	253
At Roselle Road	0.8	45	*	91	118	181
Weller Creek						
Upstream entrance to diversion conduit	16.2	789	*	1,281	1,611	2,683
At Golf Road	13.9	546	*	909	1,398	2,358
At Lincoln Street	10.1	334	*	679	1,073	1,786
West Ditch						
Approximately 1,460 feet upstream of Oak Park Avenue	0.4	*	*	*	291	*
Just downstream of Harlem Avenue	0.1	*	*	*	21	*
Wheeling Drainage Ditch						
Approximately 1,390 feet downstream of Jeffery Avenue	21.0	1,166	*	1,788	2,117	3,607
Approximately 277 feet upstream of Jeffery Avenue	20.4	908	*	1,491	2,030	3,335
Approximately 355 feet downstream of Soo Line Railroad	20.1	885	*	1,468	1,823	2,787
White Pine Ditch						
At St. Mary’s Parkway	0.9	110	*	200	260	400
At Bernard Drive	0.8	98	*	176	230	350
At Dundee Road	0.1	20	*	40	54	90
William Rogers Memorial Diversion Channel						
At the divergence from Wheeling Drainage Ditch	20.1	301	*	500	617	781
Willow Creek						
At confluence with the Des Plaines River	20.2	1,337	*	1,670	1,800	3,055
Approximately 1,200 feet upstream of Ruby Street	19.1	1,209	*	1,414	1,495	3,050
At Higgins Road	18.5	1,023	*	1,152	1,208	3,030
Approximately 1,500 feet downstream of Lee Street	17.9	996	*	1,100	1,148	3,064
Downstream of Willow Creek flood control reservoir structure	15.8	910	*	960	990	3,000
Confluence of Willow Creek and Higgins Creek	15.5	1,348	*	1,960	2,206	3,180

*Data not available

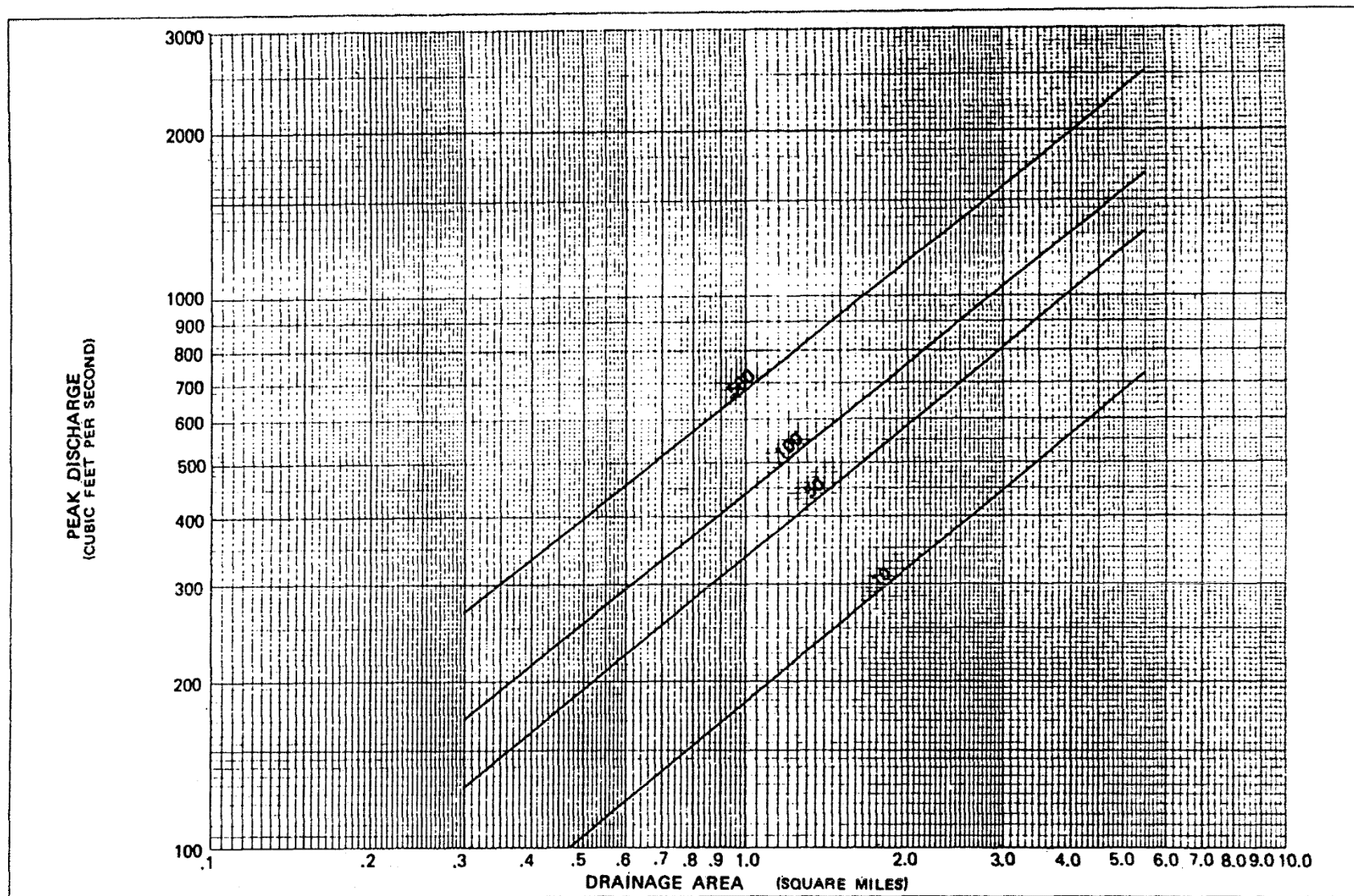


Figure 3 – Frequency-Discharge, Drainage Area Curves
Cherry Creek and Tributaries

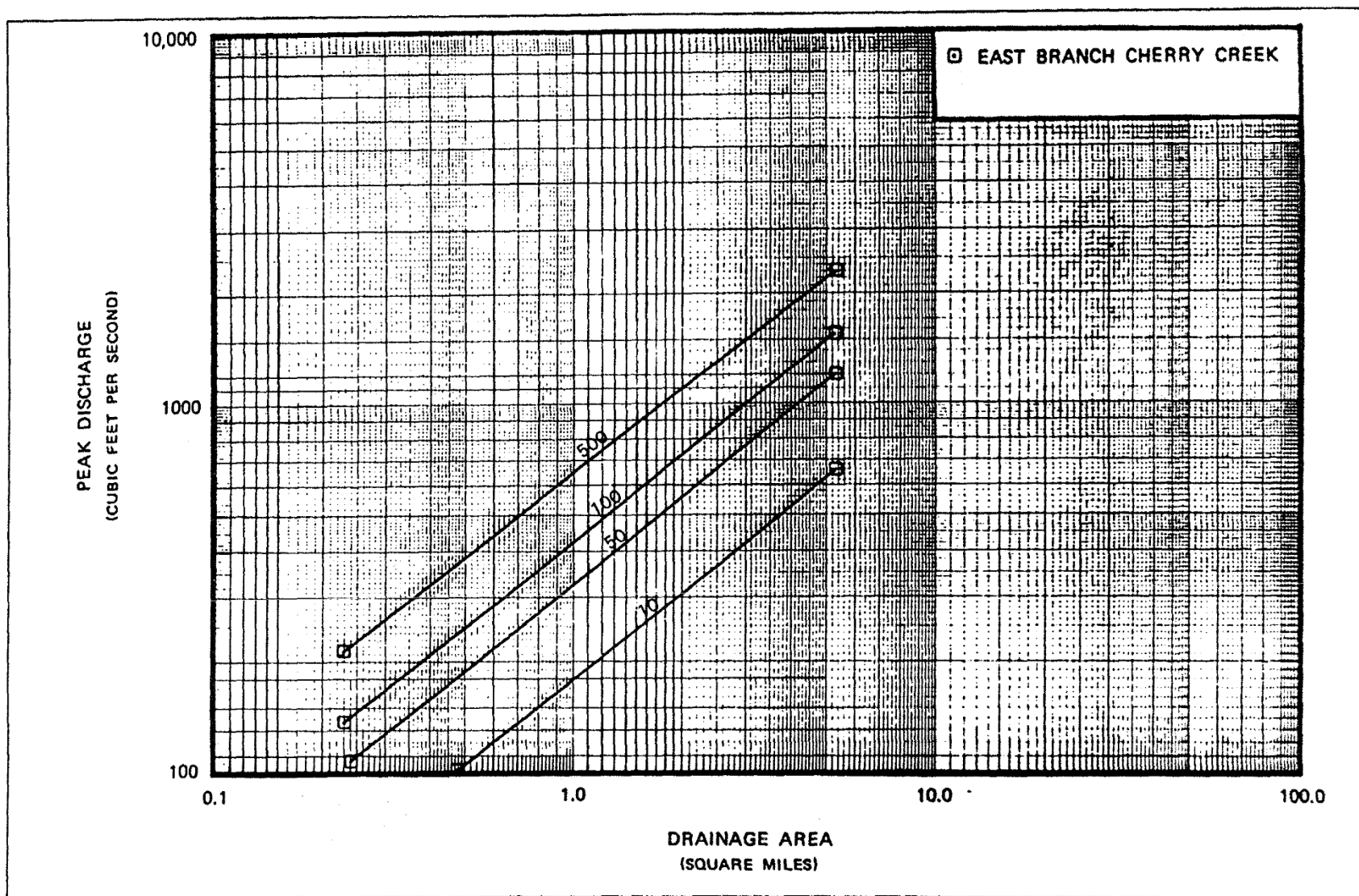


Figure 4 – Frequency-Discharge, Drainage Area Curves
East Branch Cherry Creek

Table 9 – Summary of Stillwater Elevations

<i>Location and Flooding Source</i>	<i>Elevation (feet NAVD 88)</i>			
	<i>10-Percent- Annual-Chance</i>	<i>2-Percent- Annual-Chance</i>	<i>1-Percent- Annual-Chance</i>	<i>0.2-Percent- Annual-Chance</i>
Lake Michigan¹	*	*	584.7	*
City of Chicago				
Willow Higgins Flood Control Reservoir	*	*	641.9	*
City of Des Plaines				
Lake Mary Ann	*	*	634.4	*
Dude Ranch Pond	*	*	631.6	*
Bay Colony Pond	*	*	632.7	*
City of Hickory Hills				
Hickory Hills Reservoir	*	*	623.4	*
Area bounded by 95 th Street to the south, 93 rd Street to the north, and Kean Avenue to the west, along Belly Deep Slough	*	*	697.8	*
Cook County (Unincorporated Areas)				
Detention Basin, located along an unnamed tributary to Long Run, just upstream of Will-Cook Road	*	*	686.0	*
Touhy Avenue Reservoir (East Reservoir)	*	*	649.8	*
MWRD Reservoir (West Touhy Avenue FCR)	*	*	653.0	*
Village of Bensenville				
Ponding Area No. 1	653.2	654.4	655.0	**
Village of Burr Ridge				
Pond 1	705.2	705.4	705.5	705.7
Village of Orland Park				
Deer Chase Pond	687.5	689.3	690.4	693.6
Schussler Pond, located approximately north of Golfview Drive, west of 88 th Avenue And south of 140 th Street	*	*	688.9	*
Swallow Ridge Pond	687.1	688.4	688.8	690.8
Village of Palatine				
Detention Basin, located in area bounded by Wilson Street, Palatine Road, Middleton Avenue, and Crescent Avenue	*	*	754.7	*
Village of Schaumburg				
Lake Monad	*	*	800.4	*
Storage Basin 1	*	*	809.5	*
Storage Basin 2	*	*	805.9	*
Storage Basin 3	*	*	803.5	*
Storage Basin 4	*	*	800.4	*
Village of Tinley Park				
East Pond	*	*	690.8	*
West Pond	*	*	690.8	*
Village of Wheeling				
Unnamed Ponds Northwest of the intersection of Dundee Road and Milwaukee Avenue	*	*	643.2	*

¹Stillwater elevation does not include tide or wave run-up

*Data not available