FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 3 OF 12

COOK COUNTY, ILLINOIS

AND INCORPORATED AREAS

*See Table 1: Listing of NFIP Jurisdictions for a complete listing of the communities represented in this Flood Insurance Study Report.

REVISED PRELIMINARY

November 18, 2022

REVISED:

TBD

FLOOD INSURANCE STUDY NUMBER
17031CV003K
Version Number 2.6.3.6

FEMA

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Flood Insurance Rate Map (FIRM)

5.2 Hydraulic Analyses

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

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

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

Table 12: Summary of Hydrologic and Hydraulic Analyses

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
57th Street Ditch	The confluence with East Avenue Ditch	2,300 feet above confluence with East Avenue (approximately downstream side of La Grange Road)	N/A	N/A	2/9/2006	X	Name was changed from East Avenue Ditch Tributary in August 19, 2008 FIS. The 1 percent annual chance flood discharge was contained in culvert in 2006. Starting Water-Surface Elevation is at the confluence with East Avenue.
59th Street Ditch	1,650 feet above the mouth at Flag Creek	3,050 feet above the mouth at Flag Creek (approximately County Line Road) Cook/DuPage county boundary	Regional Equation 1974	WSP-2	02/1979	AE w/ Floodway	Starting Water-Surface Elevation was determined by the slope/area method at Burr Ridge limit.
63rd Street Ditch	400 feet above the mouth at Flag Creek	At upstream face of Interstate 294	HEC-1	HEC-2	8/19/2008	AE	
63rd Street Ditch	At upstream face of Interstate 294	2,960 feet above the mouth at Flag Creek (approximately 900 feet above Pleasant Hollow Drive) Cook/ DuPage county boundary	HEC-1	HEC-2	8/19/2008	AE w/ Floodway	

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
67th Street Ditch	7,000 feet above the mouth at Des Plaines River	8,895 feet above the mouth at Des Plaines River (approximately 345 feet above Sunset Avenue)	Regional Equation 1974	WSP-2	04/1979	AE w/ Floodway	Starting Water-Surface Elevation was determined by the slope/area method.
71st Street Ditch	The mouth at Chicago Sanitary Drainage and Ship Canal	3,910 feet above the mouth at Chicago Sanitary Drainage and Ship Canal (approximately 230 feet above 86th Avenue)	TR-20	HEC-2	11/1979	AE w/ Floodway	Starting Water-Surface Elevation was set to normal depth.
76th Avenue Ditch	The mouth at Midlothian Creek	8,080 feet above the mouth at Midlothian Creek (approximately 40 feet below 159th Street)	HEC-1	HEC-2	7/30/2004	AE w/ Floodway	Calibrated to USGS Gage 05536340 Midlothian Creek at Oak Forest, IL. Revised by LOMR 03-05-1457P. Starting Water-Surface Elevation was set to the confluence with Midlothian Creek.
79th Street Ditch	The confluence with Flag Creek Tributary C	1,475 feet above the confluence with Flag Creek Tributary C (at county boundary)	Regional Equation 1973 and Log Pearson Type III	WSP-2	6/20/1993	AE w/ Floodway	Calibrated to USGS Gage 05533000 Flag Creek near Willow Springs, IL Revised per LOMR 93-05-181P. Starting Water-Surface Elevation was set to the confluence with Flag Creek Tributary C.
Addison Creek	Approximately 530 feet downstream of Lake Street	Approximately 140 feet downstream of Hirsch Street	N/A	HEC-2	9/28/2006	AE w/ Floodway	Revised per LOMR 06-05-B017P.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Addison Creek	The confluence with Salt Creek (Lower Reach)	Approximately 530 feet downstream of Lake Street	HEC-1	HEC-2	6/2/2005	AE w/ Floodway	Uses effective date of the FIS. Starting Water-Surface Elevation was determined by the slope/area method.
Addison Creek	Approximately 140 feet downstream of Hirsch Street	45,900 feet above confluence with Salt Creek (Lower Reach) (approximately 200 feet above Tri-State Tollway-Interstate Route 294)	HEC-1	HEC-2	6/2/2005	AE w/ Floodway	Uses effective date of the FIS.
All Approximate Studies	Varies	Varies	Varies	Varies	Varies	A	
Alsip Drainage Ditch	Just upstream of Pulaski Road	Approximately 1,400 feet upstream of Pulaski Road	HEC-HMS	HEC-RAS	1/8/2016	AE	Revised per LOMR 15-05-5016P. Starting Water-Surface Elevation was known.
Arroyo Ditch	The confluence with Boca Rio Ditch	Approximately 1,140 feet upstream of confluence with Boca Rio Ditch (just downstream of Victoria Drive)	HEC-HMS 3.5	HEC-RAS 4.1.0	7/31/2014	AE	Starting Water-Surface Elevation was set to normal depth. NRCS CN method and Bulletin 71 were used during hydrology.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Belaire Creek	The mouth at Dixie Creek	At the downstream face of Albany Avenue	Regional Equation 1977 and TR-55	WSP-2	03/1983	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Dixie Creek.
Belaire Creek	At the downstream face of Albany Avenue	6,250 feet above the mouth at Dixie Creek (approximately 350 feet above Albany Avenue)	Regional Equation 1977 and TR-55	WSP-2	03/1983	AE	
Boca Rio Ditch	The confluence with Tinley Creek	Approximately 12,475 feet upstream of confluence with Tinley Creek (just downstream of Victoria Drive)	HEC-HMS 3.5	HEC-RAS 4.1.0	7/31/2014	AE w/ Floodway	Starting Water-Surface Elevation was set to normal depth. NRCS CN method and Bulletin 71 were used during hydrology.
Buffalo Creek	15,180 feet above confluence with Des Plaines River (approximately Elmhurst Road)	Approximately 350 feet upstream of Aptakisic Road	HEC-1	HEC-RAS 3.1.1 (USACE, 2003)	12/27/2002	AE w/ Floodway	Updated per LOMR 02-05-1847P. Starting Water-Surface Elevation was determined from the 20-percent annual chance flood elevations on Des Plaines River.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Buffalo Creek	Approximately 350 feet upstream of Aptakisic Road	30,150 feet above confluence with Des Plaines River (approximately 1,350 feet above Lake-Cook Road)	TR-20	WSP-2	03/1976	AE w/ Floodway	Calibrated to USGS Gage 05528500 Buffalo Creek near Wheeling, IL. Starting Water-Surface Elevation was determined by the Des Plaines Steering Committee data.
Buffalo Creek Tributary A	Approximately 100 feet upstream of Schaefer Road	Approximately 150 feet downstream of State Route 53	N/A	WSP-2	2/8/2002	AE w/ Floodway	Revised per LOMR 00-05-367P.
Buffalo Creek Tributary A	3,300 feet above the confluence with Buffalo Creek (Lake-Cook Road, Lake/Cook County Boundary)	Approximately 100 feet upstream of Schaefer Road	HEC-1	WSP-2	12/1994	AE w/ Floodway	Calibrated to USGS Gage 05528500 Buffalo Creek near Wheeling, IL. Starting Water-Surface Elevation was determined by the corresponding flood elevations on Wheeling Drainage Ditch effective water-surface elevations at Hicks Road and HY-8 was used for rating curves of the nearby reservoir.
Buffalo Creek Tributary A	Approximately 150 feet downstream of State Route 53	25,200 feet above the confluence with Buffalo Creek (approximately 500 feet above Staples Road)	HEC-1	WSP-2	12/1994	AE w/ Floodway	Calibrated to USGS Gage 05528500 Buffalo Creek near Wheeling, IL.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Butterfield Creek	The confluence with Thorn Creek	Just upstream of U.S. Highway 30 (Lincoln Highway)	TR-20 / Log-Pearson Type III	WSP-2	8/19/2008	AE w/ Floodway	Calibrated to USGS Gage 05536255 Butterfield Creek at Flossmoor, IL. The downstream boundary condition was the only change in the model from the November 11, 2000 FIS. Uses effective FIS Date. Starting Water-Surface Elevation was set to the confluence with Thorn Creek.
Butterfield Creek	Upstream of Ridgeland Avenue	78,500 feet above confluence with Thorn Creek (approximately 2,400 feet above Ridgeland Avenue)	TR-20 / Log-Pearson Type III	WSP-2	8/19/2008	AE w/ Floodway	Calibrated to USGS Gage 05536255 Butterfield Creek at Flossmoor, IL. The downstream boundary condition was the only change in the model from the November 11, 2000 FIS. Uses effective FIS date.
Butterfield Creek	Approximately 370 feet upstream of Ridgeland	Just upstream of U.S. Highway 30 (Lincoln Highway)	TR-20 / Log-Pearson Type III	WSP-2	8/19/2008	AE w/ Floodway	Uses effective FIS date.
Butterfield Creek	Just upstream of U.S. Highway 30 (Lincoln Highway)	Upstream of Ridgeland Avenue	N/A	HEC-RAS	9/24/2007	AE w/ Floodway	Revised per LOMR 06-05-BR51P
Butterfield Creek	Approximately 2,385 feet downstream of Ridgeland Avenue	Approximately 370 feet upstream of Ridgeland	N/A	WSP-2	7/22/2005	AE w/ Floodway	Revised per LOMR 04-05-3545P

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Butterfield Creek East Branch	The confluence with Butterfield Creek	22,660 feet above confluence with Butterfield Creek (approximately 1,935 feet above Polk Avenue, Cook/Will County Boundary)	TR-20	WSP-2	12/1994	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Butterfield Creek.
Butterfield Creek East Branch Tributary	The confluence with Butterfield Creek East Branch	13,400 feet above the confluence with Butterfield Creek East Branch (Steger Road)	TR-20	WSP-2	12/1994	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Butterfield Creek East Branch.
Butterfield Creek East Branch Tributary A	The confluence with Butterfield Creek East Branch Tributary	0.42 miles above confluence with Butterfield Creek East Branch Tributary (approximately 0.04 miles above Imperial Drive)	Regional Equation 1974 / TR-20	WSP-2	07/1978	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Butterfield Creek East Branch.
Butterfield Creek Tributary No. 1	The confluence with Butterfield Creek	0.37 miles above the confluence with Butterfield Creek (approximately 0.09 miles above Volmer Road)	Regional Equation 1974 / TR-20	WSP-2	08/1978	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Butterfield Creek.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Butterfield Creek Tributary No. 3	The confluence with Butterfield Creek	Downstream face of railroad culvert	TR-20	WSP-2	12/1994	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Butterfield Creek.
Butterfield Creek Tributary No. 3	Downstream face of railroad culvert	0.95 miles above confluence with Butterfield Creek (approximately 0.02 miles above Kedzie Avenue)	TR-20	WSP-2	12/1994	AE	
Butterfield Creek Tributary No. 4	The confluence with Butterfield Creek Tributary No. 3	Downstream face of railroad culvert	TR-20	WSP-2	12/1994	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Butterfield Creek Tributary No. 3.
Butterfield Creek Tributary No. 4	Downstream face of railroad culvert	1.14 miles above confluence with Butterfield Creek Tributary No. 3 (0.03 miles above Governors Highway)	TR-20	WSP-2	12/1994	AE	
Calumet Sag Channel Tributary A	3,900 feet above mouth at Calumet Sag Channel (approximately 700 feet below Illinois State Highway Bridge)	14,400 feet above mouth at Calumet Sag Channel (5,775 feet above confluence of Calumet Sag Channel Tributary AA)	Log-Pearson Type III / Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was determined by discharge rating curves.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Calumet Sag Channel Tributary AA	The confluence the mouth at Calumet Sag Channel Tributary A	1,150 feet above the mouth at Calumet Sag Channel Tributary A	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Calumet Sag Channel Tributary A.
Calumet Sag Channel Tributary B	The confluence with Calumet Sag Channel	Downstream side of 199th Street	TR-20	WSP-2	11/14/2002	AE w/ Floodway	Revised per LOMR 01-05-3037P Updated hydraulic analysis to include bridges not included in the original study. Starting Water-Surface Elevation was set to the confluence with Calumet Sag Channel.
Calumet Sag Channel Tributary B	Downstream side of 199th Street	4,910 feet above the confluence with Calumet Sag Channel (approximately 15 feet above Woodland Trail)	TR-20	WSP-2	11/14/2002	AE	Revised per LOMR 01-05-3037P Updated hydraulic analysis to include bridges not included in the original study.
Calumet Sag Channel Tributary C	7,750 feet above mouth at Calumet Sag Channel (Midlothian Turnpike)	16,050 feet above mouth at Calumet Sag Channel (Central Avenue)	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was determined by the discharge rating curve for culvert at the downstream end of the study reach.
Calumet Union Drainage Ditch	The confluence with Little Calumet River	Approximately 150 feet above Page Avenue	HEC-1	HEC-RAS 3.1.1	8/19/2008	AE w/ Floodway	Modified the downstream boundary condition due to updated study on the Little Calumet River. Uses Effective FIS Date. Starting Water-Surface Elevation was set to the confluence with the Little Calumet River.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Calumet Union Drainage Ditch	Approximately 150 feet above Page Avenue	28,300 feet above confluence with Little Calumet River (approximately 1,000 feet above Central Park Avenue)	HEC-1	HEC-2	12/1994	AE w/ Floodway	Calibrated to USGS Gage 05536340 Midlothian Creek at Oak Forest, IL.
Calumet Union Drainage Ditch Southwest Branch	The confluence with Calumet Union Drainage Ditch	Approximately 200 feet below 167th Street	HEC-1	HEC-2	12/1994	AE w/ Floodway	Calibrated to USGS Gage 05536340 Midlothian Creek at Oak Forest, IL. Starting Water-Surface Elevation was set to the confluence with the Calumet Union Drainage Ditch.
Calumet Union Drainage Ditch Southwest Branch	Approximately 200 feet below 167th Street	At approximately 167th Street	HEC-1	HEC-2	12/1994	AE	Calibrated to USGS Gage 05536340 Midlothian Creek at Oak Forest, IL.
Calumet Union Drainage Ditch Southwest Branch	At approximately 167th Street	At upstream side of California Avenue	TR-20	WSP-2	04/1980	AE	
Calumet Union Drainage Ditch Southwest Branch	At upstream side of California Avenue	At 175th Street	TR-20	WSP-2	04/1980	AE w/ Floodway	

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Calumet Union Drainage Ditch Southwest Branch	Approximately at Central Park Avenue	25,291 feet above the confluence with Calumet Union Drainage Ditch (approximately 1,000 feet above Kostner Avenue)	Regional Equation 1973 / Regional Equation 1974	WSP-2	12/1978	AE w/ Floodway	
Calumet Union Drainage Ditch Southwest Branch Tributary N	The mouth at Calumet Union Drainage Ditch Southwest Branch	6,550 feet above the mouth at Calumet Union Drainage Ditch Southwest Branch (Cicero Avenue)	Regional Equation 1973/ Regional Equation 1974	WSP-2	12/1978	AE w/ Floodway	
Calumet Union Drainage Ditch Southwest Branch Tributary S	The mouth at Calumet Union Drainage Ditch Southwest Branch	1.30 miles above the mouth at Calumet Union Drainage Ditch Southwest Branch (approximately 0.33 miles above 183rd Street)	Regional Equation 1973/ Regional Equation 1974	WSP-2	12/1978	AE w/ Floodway	

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Cherry Creek	27,900 feet above the confluence with Little Calumet River and Calumet Union Drainage Ditch (Rockwell Avenue)	30,100 feet above the confluence with Little Calumet River and Calumet Union Drainage Ditch (confluence of Cherry Creek East and West Branches)	TR-20	WSP-2	04/1980	AE w/ Floodway	
Cherry Creek East Branch	Approximately 450 feet above Governors Highway	Approximately 80 feet above Chayes Park Drive	TR-20	WSP-2	1/18/1984	AE w/ Floodway	Uses Effective FIS date.
Cherry Creek East Branch	The confluence with Cherry Creek	Approximately 450 feet above Governors Highway	TR-20	HEC-2	04/1980	AE w/ Floodway	
Cherry Creek East Branch	Approximately 80 feet above Chayes Park Drive	2.48 miles above confluence with Cherry Creek (Kedzie Avenue)	Regional Equation 1973 / Regional Equation 1974	WSP-2	03/1978	AE w/ Floodway	
Cherry Creek East Branch Tributary	The confluence with Cherry Creek East Branch	0.35 miles above confluence with Cherry Creek East Branch (Flossmoor/Governors Highway)	Regional Equation 1973 / Regional Equation 1974	WSP-2	03/1978	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Cherry Creek East Branch.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Cherry Creek West Branch	Mouth at Cherry Creek	8,690 feet above mouth at Cherry Creek (approximately 890 feet above Dam)	TR-20	WSP-2	04/1980	AE w/ Floodway	
Cherry Creek West Branch East Fork	0.51 miles above confluence with Cherry Creek West Branch	0.90 miles above confluence with Cherry Creek West Branch (Crawford Avenue)	Regional Equation 1973 / Regional Equation 1974	WSP-2	03/1978	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Cherry Creek West Branch.
Chicago River, North Branch	Approximately 30 feet above Golf Road	120,000 feet above the mouth at Chicago River (approximately 4,000 feet above East Lake Avenue)	HEC-1	HEC-2	12/1994	AE w/ Floodway	Calibrated to USGS Gage 05536000 North Branch Chicago River at Niles, IL.
Chicago River, North Branch	The Weir Dam (approximately 420 feet below North Albany Avenue)	8,500 feet above Weir Dam (approximately 160 feet above West Foster Avenue)	Log Pearson Type III / Regional Equation 1979	HEC-2	12/1994	AE w/ Floodway	Starting Water-Surface Elevation was set to the critical depth at the weir outlet.
Chicago River, North Branch	Approximately 55 feet above North Caldwell Avenue	Approximately 30 feet above Golf Road	TR-20	HEC-2	12/1994	AE w/ Floodway	Calibrated to USGS Gage 05536000 North Branch Chicago River at Niles, IL.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Chicago River, North Branch	76,550 feet above mouth at Chicago River (approximately 5,600 feet below Harts Road)	Approximately 55 feet above North Caldwell Avenue	TR-20	WSP-2 / HEC-2	12/1994	AE w/ Floodway	Calibrated to USGS Gage 05536000 North Branch Chicago River at Niles, IL. Starting Water-Surface Elevation set to normal depth.
Chicago River, North Branch – Skokie River	Transition between Chicago River, North Branch and Skokie River. No limits required.	Transition between Chicago River, North Branch and Skokie River. No limits required.	HEC-1	HEC-2	12/1994	AE w/ Floodway	
Chicago River, North Branch, Middle Fork	The confluence with Chicago River, North Branch and Skokie River	33,590 feet above confluence with Chicago River, North Branch and Skokie River (Lake-Cook Road, Cook/Lake County Boundary)	HEC-1	HEC-2	12/1994	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Chicago River, North Branch, coincident peak flow at Skokie River.
Chicago River, North Branch, West Fork	Just upstream of the unnamed road at Reservoir 29A	49,605 feet above confluence with Chicago River North Branch (Lake-Cook Road, Cook/Lake County Boundary)	HEC-1	HEC-2	9/6/2002	AE w/ Floodway	Revised per LOMR 02-05-2130P.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Chicago River, North Branch, West Fork	The confluence with the Chicago River North Branch	Just upstream of the unnamed road at Reservoir 29A	HEC-1	HEC-2	12/1994	AE w/ Floodway	Calibrated to USGS Gage 05534500 North Branch Chicago River at Deerfield, IL. Starting Water-Surface Elevation was set to the confluence with Chicago River, North Branch.
Crestwood Drainage Ditch West	Approximately 500 feet below 135th Street	5,950 feet above mouth at Calumet Sag Channel (approximately 1,000 feet above 135th Street)	Regional Equation 1975 / Log-Pearson Type III	WSP-2	6/15/2001	AE	Revised per LOMR 01-05-734P.
Crestwood Drainage Ditch West	Approximately 100 feet above mouth at Calumet Sag Channel	Approximately 500 feet below 135th Street	Regional Equation 1975 / Log-Pearson Type III	WSP-2	8/5/1986	AE w/ Floodway	Uses effective FIS date. Starting Water-Surface Elevation was determined by slope/area method.
Crystal Creek	The confluence with Des Plaines River	12,375 feet above confluence with Des Plaines River (approximately 1,000 feet above Lawrence Avenue)	HEC-1	HEC-2	12/1994	AE w/ Floodway	Calibrated to O'Hare Precipitation Gage. Starting Water-Surface Elevation was set to the confluence with Des Plaines River.
Crystal Creek Tributary	The confluence with Crystal Creek	6,000 feet above confluence with Crystal Creek (approximately 450 feet above Manheim Road)	HEC-1	HEC-2	12/1994	AE w/ Floodway	Calibrated to O'Hare Precipitation Gage. Starting Water-Surface Elevation was set to the confluence with Crystal Creek.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Deer Creek	The mouth at Thorn Creek	41,110 feet above the mouth at Thorn Creek (Steger Road)	TR-20 / Log-Pearson Type III / Regional Equation 1973	HEC-RAS 3.1.1	8/19/2008	AE w/ Floodway	Calibrated to USGS Gage 05536235 Deer Creek near Chicago Heights, IL. Uses Effective FIS Date. Starting Water-Surface Elevation was set to the confluence with Thorn Creek.
Deer Creek Tributary B	The mouth at Deer Creek	14,600 feet above the mouth at Deer Creek (approximately 1,330 feet above Cottage Grove Avenue)	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Deer Creek.
Des Plaines River	Approximately 900 feet below Interstate Route 55 North	36.32 miles above the mouth at the Illinois River (approximately 4,540 above Interstate Route 55)	N/A	HEC-2	09/1995	AE w/ Floodway	
Des Plaines River	2,700 feet above West 31st Street	403,300 feet above mouth at the Illinois River (Lake – Cook Road, Lake/Cook County Boundary)	HEC-1	HEC-2	09/1995	AE w/ Floodway	Calibrated to USGS Gage 05527800 Des Plaines River at Russell, IL; USGS Gage 0552800 Des Plaines River near Gurnee, IL; USGS Gage 05529000 Des Plaines River near Des Plaines, IL; USGS Gage 05532500 Des Plaines River at Riverside, IL. Starting Water-Surface Elevation was based on the discharge rating curves at Hoffman Dam.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Des Plaines River	Approximately 2,260 feet above Kingery Highway	Approximately 380 feet above South La Grange Road	Log-Pearson Type III	HEC-2	9/18/1986	AE w/ Floodway	Calibrated to USGS Gage 05532500 Des Plaines River at Riverside, IL. Used Effective FIS date. Starting Water-Surface Elevation was determined by the slope/area method.
Des Plaines River	Approximately 3,600 feet above Lemont Road	Approximately 3,890 feet above Lemont Road	HEC-1	HEC-2	12/4/1984	AE w/ Floodway	Calibrated to USGS Gage 05532500 Des Plaines River at Riverside, IL.
Des Plaines River	Approximately 5,000 feet above Millbridge Road	At West 31st Street	Log-Pearson Type III	WSP-2	01/1979	AE w/ Floodway	Calibrated to USGS Gage 05532500 Des Plaines River at Riverside, IL. Starting Water-Surface Elevation was determined by the slope/area method.
Des Plaines River	Approximately 2,000 feet above West 31st Street	Approximately 2,700 feet above West 31st Street	Log-Pearson Type III	WSP-2	01/1979	AE w/ Floodway	Calibrated to USGS Gage 05532500 Des Plaines River at Riverside, IL. Starting Water-Surface Elevation was determined by the slope/area method.
Des Plaines River	Approximately 380 feet above South La Grange Road	Approximately 900 feet below Interstate Route 55 North	Log-Pearson Type III	HEC-2	11/1979	AE w/ Floodway	Calibrated to USGS Gage 05532500 Des Plaines River at Riverside, IL. Starting Water-Surface Elevation was determined by the slope/area method.
Des Plaines River	227,700 feet above the mouth at the Illinois River	At Ogden Avenue	Log-Pearson Type III / HEC-1	WSP-2/ HEC-2	01/1978	AE w/ Floodway	Calibrated to USGS Gage 05532500 Des Plaines River at Riverside, IL. Starting Water-Surface Elevation was determined by the slope/area method.
Des Plaines River	Approximately 115 feet above Millbridge Road	Approximately 5,000 feet above Millbridge Road	Log-Pearson Type III	WSP-2	01/1978	AE w/ Floodway	Calibrated to USGS Gage 05532500 Des Plaines River at Riverside, IL. Starting Water-Surface Elevation was determined by the slope/area method.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Des Plaines River	At West 31st Street	2,000 feet above West 31st Street	HEC-1	HEC-2	12/1978	AE w/ Floodway	Calibrated to USGS Gage 05527800 Des Plaines River at Russell, IL; USGS Gage 0552800 Des Plaines River near Gurnee, IL; USGS Gage 05529000 Des Plaines River near Des Plaines, IL; USGS Gage 05532500 Des Plaines River at Riverside, IL. Starting Water-Surface Elevation was based on the discharge rating curves at Hoffman Dam.
Des Plaines River	At Ogden Avenue	At West 31st Street	Log-Pearson Type III / HEC-1	HEC-2	01/1978	AE w/ Floodway	Calibrated to USGS Gage 05532500 Des Plaines River at Riverside, IL. Starting Water-Surface Elevation was based on the discharge rating curves at Hoffman Dam.
Des Plaines River	Approximately 380 feet above South La Grange Road	36.32 miles above the mouth at the Illinois River (approximately 4,540 above Interstate Route 55)	Log-Pearson Type III	HEC-2	08/1977	AE w/ Floodway	Calibrated to USGS Gage 05532500 Des Plaines River at Riverside, IL. Starting Water-Surface Elevation was determined by the slope/area method.
Des Plaines River	Approximately 9,300 feet above Kingery Highway	Approximately 5,100 feet below Willow Springs Road	HEC-1	HEC-2	09/1976	AE	Starting Water-Surface Elevation was based on the discharge rating curves at Hoffman Dam.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Des Plaines River	Approximately 900 feet below Interstate Route 55 North	36.32 miles above the mouth at the Illinois River (approximately 4,540 above Interstate Route 55)	HEC-1	HEC-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was based on the discharge rating curves at Hoffman Dam.
Des Plaines River	At Ogden Avenue	Approximately 115 feet above Millbridge Road	HEC-1	HEC-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was based on the discharge rating curves at Hoffman Dam.
Des Plaines River	28.4 miles above the mouth at the Illinois River	Approximately 3,600 feet above Lemont Road	HEC-1	HEC-2	09/1976	AE	Calibrated to USGS Gage 05532500 Des Plaines River at Riverside, IL. Starting Water-Surface Elevation was based on the discharge rating curves at Hoffman Dam.
Des Plaines River Tributary A	Approximately 50 feet downstream of 55th Place	5,015 feet above Brainard Avenue (approximately 1,275 feet above 55th Place)	N/A	WSP-2/ HEC-2	7/25/2003	AE w/ Floodway	Revised per LOMR 03-05-1844P.
Des Plaines River Tributary A	Brainard Avenue	Approximately 50 feet downstream of 55th Place	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was determined by the discharge rating curve at the outlet culvert.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Dixie Creek	Dixie Highway	4,750 feet above Dixie Highway (approximately 1,250 feet above Interstate Route 294)	Regional Equation 1977 / TR-55	WSP-2	03/1983	AE w/ Floodway	Starting Water-Surface Elevation was determined by the stage-storage-discharge curve at Dixie Highway.
DuPage River West Branch	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)	326,700 feet above mouth of the DuPage River at the Des Plaines River (approximately 490 feet above Bradford Lane)	HEC-1	HEC-2	09/1977	AE w/ Floodway	Starting Water-Surface Elevation was set based on the USACE report (USACE 1975).
East Avenue Ditch	9,500 feet above mouth at Des Plaines River	14,225 feet above mouth at Des Plaines River (La Grange Road)	N/A	N/A	2/9/2006	AE	Revised per LOMR 05-05-1493P. Starting Water-Surface Elevation was determined by the slope/area method.
Elk Grove Boulevard Drainage Ditch	Mouth at Salt Creek Lower Reach	4,650 feet above mouth at Salt Creek Lower Reach (Toner Road)	Regional Equation 1973	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Salt Creek.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Farmer's Creek	The confluence with Des Plaines River	9,750 feet above confluence with Des Plaines River (950 feet above Emerson Street)	HEC-1	HEC-RAS 3.1.1	8/19/2008	AE w/ Floodway	Compared to 8 staff gages installed by OWR. Uses Effective FIS Date. Starting Water-Surface Elevation was determined by the slope/area method.
Farrington Ditch	The mouth at Buffalo Creek	500 feet above the mouth at Buffalo Creek (Lake – Cook Road, Lake-Cook County Boundary)	TR-20/ Regional Equation 1973	WSP-2	03/1976	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Buffalo Creek.
Feehanville Ditch	At downstream face of North Wolf Road	11,620 feet above confluence with Des Plaines River (approximately 3,230 feet above Foot Bridge)	TR-20	WSP-2	11/1980	AE w/ Floodway	
Feehanville Ditch	1,780 feet above confluence with Des Plaines River	Approximately 200 feet above North River Road/ US Route 45	TR-20 / Regional Equation 1977	WSP-2	06/1978	AE	Starting Water-Surface Elevation was set to the coincident peaks at the confluence.
Feehanville Ditch	Approximately 200 feet above North River Road/ US Route 45	At downstream face of North Wolf Road	TR-20 / Regional Equation 1977	WSP-2	06/1978	AE w/ Floodway	

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Filsen Park Ditch	The confluence with 76th Avenue Ditch	2,845 feet above confluence with 76th Avenue Ditch (115 feet above Harlem Avenue)	HEC-1	HEC-2	09/1977	AE	Calibrated to USGS Gage 05536340 Midlothian Creek at Oak Forest, IL. Starting Water-Surface Elevation was set to the confluence with 76th Avenue Ditch.
Flag Creek	Approximately 1,020 feet below 72nd Street	Approximately 60 feet above Wolf Road	TR-20 / Regional Equation 1977	WSP-2	12/1978	AE w/ Floodway	Calibrated to USGS Gage 05533000 Flag Creek near Willow Springs, IL
Flag Creek	Approximately 260 feet above Wolf Road	38,050 feet above mouth at Des Plaines River (approximately 565 feet above 47th street)	TR-20 / Regional Equation 1977	WSP-2	12/1978	AE w/ Floodway	Calibrated to USGS Gage 05533000 Flag Creek near Willow Springs, IL
Flag Creek	Approximately 60 feet above Wolf Road	Approximately 260 feet above Wolf Road	Log-Pearson Type III	WSP-2	08/1978	AE w/ Floodway	Calibrated to USGS Gage 05533000 Flag Creek near Willow Springs, IL
Flag Creek	1,500 feet above mouth at Des Plaines River	Approximately 1,020 feet below 72nd Street	Log-Pearson Type III	WSP-2	08/1978	AE w/ Floodway	Calibrated to USGS Gage 05533000 Flag Creek near Willow Springs, IL. Starting Water-Surface Elevation was set to the confluence with the Des Plaines River, 10-year water surface elevation.
Flag Creek Tributary A	The mouth at Flag Creek	5,315 feet above mouth Flag Creek (Prison Farm Drive)	Regional Equation 1973 / Log-Pearson Type III	WSP-2	08/1978	AE w/ Floodway	Calibrated to USGS Gage 05533000 Flag Creek near Willow Springs, IL. Starting Water-Surface Elevation was set to the critical depth at the confluence with Flag Creek.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Flag Creek Tributary B	The confluence with Flag Creek	5,270 feet above the confluence with Flag Creek (approximately 390 feet above Lincolnshire Drive)	Regional Equation 1973 / Log-Pearson Type III	WSP-2	08/1978	AE w/ Floodway	Calibrated to USGS Gage 05533000 Flag Creek near Willow Springs, IL. Starting Water-Surface Elevation was set to the critical depth at the confluence with Flag Creek.
Flag Creek Tributary C	Approximately 320 feet below Oak Knoll Drive	Approximately 1450 feet above Oak Knoll Drive	Regional Equation 1973 / Log-Pearson Type III	WSP-2	11/28/1990	AE w/ Floodway	Calibrated to USGS Gage 05533000 Flag Creek near Willow Springs, IL. Revised per LOMR 915001.
Flag Creek Tributary C	Approximately 580 feet below Arrowhead Farm Drive	7,775 feet above mouth at Flag Creek (County Line Road)	Regional Equation 1973 / Log-Pearson Type III	WSP-2	11/28/1990	AE w/ Floodway	Calibrated to USGS Gage 05533000 Flag Creek near Willow Springs, IL. Revised per LOMR 915001.
Flag Creek Tributary C	Mouth at Flag Creek	Approximately 320 feet below Oak Knoll Drive	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Started Water-Surface Elevation was set to the confluence with Flag Creek.
Flag Creek Tributary C	Approximately 1450 feet above Oak Knoll Drive	Approximately 580 feet below Arrowhead Farm Drive	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Flint Creek	78,915 feet above mouth at Des Plaines River (230 feet above Abbotsford Drive)	80,990 feet above mouth at Des Plaines River (approximately 3,195 feet above Abbotsford Drive)	Regional Equation 1974	WSP-2	06/1979	AE w/ Floodway	Starting Water-Surface Elevation was determined by slope/area method.
Flint Creek Tributary	16,000 feet above confluence with Flint Creek (approximately 10 feet below Lake-Cook Road, Lake-Cook County Boundary)	17,900 feet above confluence with Flint Creek (approximately 1,890 feet above Lake-Cook Road)	Regional Equation 1979 / HEC-1	HEC-2	04/1983	AE w/ Floodway	Starting Water-Surface Elevation was determined by slope/area method.
Flossmoor Ditch	5,310 feet above mouth at Union Drainage Ditch (Harlem Avenue, Will-Cook County Boundary)	10,460 feet above mouth at Union Drainage Ditch (approximately 3,010 feet above confluence of Flossmoor Ditch Tributary A)	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was set to normal depth, approximately 2,600 feet downstream of Will County boundary.
Flossmoor Ditch Tributary A	Approximately 50 feet upstream of Vollmer Road	8,600 feet above mouth at Flossmoor Ditch (approximately 4,770 feet above Volmer Road)	N/A	HEC-RAS 3.1.3	7/19/2007	AE w/ Floodway	

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Flossmoor Ditch Tributary A	Mouth at Flossmoor Ditch	Approximately 50 feet upstream of Vollmer Road	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Revised per LOMR 06-05-B267P. Starting Water-Surface Elevation was set to the confluence with Flossmoor Ditch.
Golf Course Tributary	1,890 feet above confluence with Des Plaines River	6,040 feet above confluence with Des Plaines River (Fullerton Avenue)	TR-55	WSP-2	03/1979	AE w/ Floodway	Starting Water-Surface Elevation was set to normal depth, with a starting slope of .0005 feet.
Grand Calumet River	8,700 feet above mouth at Little Calumet River (approximately 1,300 feet below Burnham Avenue)	14,625 feet above mouth at Little Calumet River (Illinois-Indiana State Boundary)	HEC-1	WSP-2	8/19/2008	AE w/ Floodway	Uses Effective FIS date. Starting Water Surface Elevation was set to the average water surface elevation at O'Brian Lock and Dam.
Hickory Creek	110,000 feet above mouth at Des Plaines River (approximately 75 feet below Harlem Avenue, Will-Cook County Boundary)	124,350 above mouth at Des Plaines River (approximately 2,075 feet above Sauk Road)	Regional Equation 1973/ Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was set to normal depth, at a point approximately 3,350 feet downstream of Will-Cook County boundary.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Hickory Creek Tributary A	119,400 feet above confluence of Hickory Creek and Des Plaines River (Harlem Avenue/ Will-Cook County Boundary)	125,000 feet above confluence of Hickory Creek and Des Plaines River (Steger Road/Cook-Will County Boundary)	Regional Equation 1973/ Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Hickory Creek.
Higgins Creek	The confluence with Willow Creek	Just downstream of Interstate 90 (Northwest Tollway)	TR-20 and ISWS Bulletin 70	HEC-RAS 3.1.3	7/2/2007	AE w/ Floodway	Revised per LOMR 07-05-1665P. Starting Water-Surface Elevations were based on rating curves based on the SCS profiles.
Higgins Creek Tributary A	Approximately 1,550 feet upstream of Higgins Road	Approximately 2,650 feet upstream of Higgins Road	N/A	HEC-RAS	8/30/2007	AE	Revised per LOMR 07-05-2483P
Higgins Creek Tributary A	the confluence with Higgins Creek	Approximately 1,550 feet upstream of Higgins Road	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Higgins Creek.
I-57 Drainage Ditch	Corporate Limits	5,500 feet above corporate limits (approximately 3,350 feet above Kedzie Avenue)	Regional Equation 1977 / TR-55	WSP-2	03/1983	AE w/ Floodway	Starting Water-Surface Elevation was set to confluence with Little Calumet River.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Illinois and Michigan Canal Tributary A	150 feet above mouth at Illinois and Michigan Canal	Approximately 1,750 feet above mouth at Illinois and Michigan Canal	Regional Equation 1973/ Regional Equation 1975	WSP-2	09/1976	AE	Starting Water-Surface Elevation was determined based on discharge rating curve at outlet culvert.
Illinois and Michigan Canal Tributary A	Approximately 1,750 feet above mouth at Illinois and Michigan Canal	6,700 feet above mouth at Illinois and Michigan Canal (approximately 6,450 feet above New Avenue)	Regional Equation 1973/ Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	
Illinois and Michigan Canal Tributary B	Mouth at Illinois and Michigan Canal	Approximately 600 feet upstream of the Illinois Central Railroad	N/A	HEC-RAS	5/26/2006	AE w/ Floodway	Revised per LOMR 06-05-BG46X. Starting Water-Surface Elevation was determined based on discharge rating curve at outlet culvert.
Illinois and Michigan Canal Tributary B	Approximately 600 feet upstream of the Illinois Central Railroad	5,919 feet above mouth at Illinois and Michigan Canal (approximately 40 feet above Walker Road Culvert)	Regional Equation 1973/ Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Illinois and Michigan Canal Tributary C	Mouth at Illinois and Michigan Canal Tributary B	3,710 feet above mouth at Illinois and Michigan Canal Tributary B (approximately 210 feet above Cog Hill Country Club Road)	Regional Equation 1973/ Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Illinois and Michigan Ship Canal Tributary B.
Illinois and Michigan Canal Tributary D	Mouth at Illinois and Michigan Canal	2,560 feet above mouth at Illinois and Michigan Canal (approximately 1,060 feet above Archer Avenue Culvert)	Regional Equation 1973	WSP-2	08/1977	AE w/ Floodway	Starting Water-Surface Elevation was determined by slope/area method.
Industrial Tributary	The confluence with Crystal Creek Tributary	3,040 feet above confluence with Crystal Creek Tributary (approximately 620 feet above Trans World Road)	HEC-1	HEC-2	02/1977	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Crystal Creek Tributary.
Justice Ditch	1,980 feet above mouth at Illinois and Michigan Canal	4,610 feet above mouth at Illinois and Michigan Canal (approximately 1,020 feet above Blazer Avenue)	TR-20	HEC-2	11/1979	AE w/ Floodway	Starting Water-Surface Elevation was set to the tie-in at the Justice corporate limit.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Lansing Ditch	The confluence with North Creek	40,625 feet above the Confluence with North Creek (approximately 4,070 feet above Gravel Road)	HEC-1	HEC-RAS / FEQ	12/1994	AE w/ Floodway	Calibrated to USGS Gage 05536265 Lansing Ditch near Lansing, IL and USGS Gage 05536260 Lansing Ditch at Sauk Village, IL. Starting Water-Surface Elevation was set to the confluence with North Creek.
Lansing Ditch East Tributary	Confluence with Lansing Ditch	10,075 feet above confluence with Lansing Ditch (Steger Road/ Cook-Will County Boundary)	HEC-1	HEC-2/ HEC-RAS	12/1994	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Lansing Ditch.
Lansing Ditch Lynwood Tributary	The confluence with North Creek	At Glenwood Lansing Road	HEC-1	HEC-RAS	12/1994	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with North Creek.
Lansing Ditch Lynwood Tributary	At Glenwood Lansing Road	14,015 feet above confluence with North Creek (approximately 2,645 feet above Burnham Avenue Culvert)	HEC-1	HEC-2/ HEC-RAS	12/1994	AE w/ Floodway	Starting Water-Surface Elevation was set to upstream of the confluence of Lansing Ditch confluence with North Creek Tributary A.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Lansing Ditch Torrence Tributary	The confluence with Lansing Ditch	6,400 feet above confluence with Lansing Ditch (approximately 5,050 feet above Dr. Mary Woodland Reservoir Outlet)	HEC-1	HEC-RAS/ FEQ	12/1994	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Lansing Ditch, Dr. Mary Woodland Reservoir storage.
Lansing Ditch Tributary A	The confluence with Lansing Ditch	5,495 feet above confluence with Lansing Ditch (Katz Corner Road)	HEC-1	HEC-RAS	12/1994	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Lansing Ditch.
Lansing Ditch West Tributary	The confluence with Lansing Ditch	4,900 feet above confluence with Lansing Ditch (approximately 1,875 feet above Torrence Avenue Culvert)	HEC-1	HEC-RAS	12/1994	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Lansing Ditch.
Little Calumet River	The confluence with Calumet Sag Channel	70,950 feet above the confluence with Calumet Sag Creek (approximately 2,250 feet above State Boundary)	HEC-1/ Bulletin 70	HEC-RAS 3.1.1	8/19/2008	AE w/ Floodway	Used an Un-steady HEC-RAS model. Calibrated to USGS gage 05536290 Little Calumet River at South Holland, IL. Uses Effective FIS Date.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Long Run	25,380 feet above the mouth at Chicago Sanitary Drainage and Ship Canal (approximately 1,720 feet below State Route 171)	67,970 feet above mouth at Chicago Sanitary Drainage and Ship Canal (approximately 2,160 feet above 143rd Street)	Log-Pearson Type III	WSP-2	09/1976	AE w/ Floodway	Calibrated to USGS Gage 05537500 Long Run near Lemont, IL. Starting Water-Surface Elevation was determined by the rating curve at USGS gage approximately 360 feet downstream of county line.
Long Run Tributary A	The mouth at Long Run	3,630 feet above the mouth at Long Run (approximately 175 feet above 143rd Street)	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Long Run.
Long Run Tributary B	The mouth at Long Run	11,900 feet above the mouth at Long Run (approximately 210 feet above Parker Road)	Regional Equation 1973 / Regional Equation 1975 / TR-20	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Long Run.
Long Run Tributary BA	Approximately 400 feet downstream of 131st Street	Approximately 80 feet downstream of 131st Street	Regional Equation 1973 / Regional Equation 1975	HEC-2	10/2004	AE w/ Floodway	Revised per LOMR 04-05-4062P.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Long Run Tributary BA	Mouth at Long Run Tributary B	Approximately 400 feet downstream of 131st Street	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Long Run Tributary B.
Long Run Tributary BA	Approximately 80 feet downstream of 131st Street	2,320 feet above the mouth at Long Run Tributary B (approximately 1,440 feet above 131st Street	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	
Long Run Tributary C	Mouth at Long Run	2,340 feet above the mouth at Long Run	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Long Run.
Lucas Ditch	The confluence with Stony Creek (West)	10,450 feet above the confluence with Stony Creek (West) (approximately 300 feet above 80th Court)	HEC-1	HEC-RAS	01/1979	AE w/ Floodway	Calibrated to USGS Gage 05533000 Flag Creek near Willow Springs, IL. Starting Water-Surface Elevation was set to a known water-surface elevation.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Lucas Ditch Cut-off	Confluence with Stony Creek (West)	6,500 feet above confluence with Stony Creek (West) (approximately 2,185 feet above confluence with Lucas Ditch Cut-off Tributary)	HEC-1	HEC-RAS	01/1979	AE w/ Floodway	Calibrated to USGS Gage 05533000 Flag Creek near Willow Springs, IL. Starting Water-Surface Elevation was set to a known water-surface elevation.
Marley Creek	23,500 feet above Mouth at Hickory Creek (approximately 250 feet above the Will-Cook County boundary)	Approximately 500 feet upstream of 179th Street	N/A	WSP-2	1/27/2005	AE w/ Floodway	Revised per LOMR 03-05-5180P. Starting Water-Surface Elevation was set to normal depth, approximately 5,030 feet downstream of Will-Cook County boundary.
Marley Creek	Approximately 1,450 feet upstream of 179th Street	Approximately 600 feet downstream of Consola Drive	HEC-1	WSP-2	04/1981	AE w/ Floodway	
Marley Creek	Approximately 300 feet upstream of Consola Drive	Approximately 620 feet upstream of Wolf Road	HEC-1	WSP-2	04/1981	AE w/ Floodway	
Marley Creek	Approximately 30 feet downstream of 167th Street	Approximately 40 feet upstream of Wolf Road	HEC-1	WSP-2	04/1981	AE w/ Floodway	

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Marley Creek	Approximately 560 feet downstream of 108th Avenue	44,075 feet above mouth at Hickory Creek (approximately at 159th Street)	HEC-1	WSP-2	04/1981	AE w/ Floodway	
Marley Creek	Approximately 500 feet upstream of 179th Street	Approximately 300 feet upstream of Consola Drive	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	
Marley Creek	Approximately 620 feet upstream of Wolf Road	Approximately 30 feet downstream of 167th Street	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	
Marley Creek	Approximately 40 feet upstream of Wolf Road	Approximately 560 feet downstream of 108th Avenue	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	
Marley Creek	Approximately 190 feet upstream of 108th Avenue	Approximately 800 feet upstream of 108th Avenue	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Marley Creek Tributary A	Just downstream of Wolf Road	5,000 feet above confluence with Marley Creek (approximately 900 feet above Fountain Hill Drive)	TR-20	WSP-2	1/15/2003	AE w/ Floodway	Revised per LOMR 02-05-2981P
Marley Creek Tributary A	The confluence with Marley Creek	Just downstream of Wolf Road	Regional Equation 1973/ Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Marley Creek.
Marley Creek Tributary B	The confluence with Marley Creek	3,065 feet above confluence with Marley Creek (approximately at 2,365 feet above US Route 6)	Regional Equation 1973/ Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Marley Creek.
Marley Creek Tributary C	Just downstream of 108th Avenue	6,350 feet above confluence with Marley Creek (approximately 1,390 feet above Farmer's Bridge)	HEC-HMS	HEC-RAS 3.12	2/28/2005	AE w/ Floodway	Revised per LOMR 03-05-3983P.
Marley Creek Tributary C	Confluence with Marley Creek	Just downstream of 108th Avenue	Regional Equation 1973/ Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Marley Creek.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Marley Creek Tributary D	Norfolk and Western Railway	9,425 feet above Norfolk and Western Railway (approximately 25 feet above 167th Street)	HEC-1	WSP-2	04/1981	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Marley Creek.
McDonald Creek	Approximately 320 feet below Edward Road	32,338 feet above the confluence with Des Plaines River (approximately 4,313 feet above Cornell Avenue)	TR-20	WSP-2	1983	AE w/ Floodway	Calibrated to USGS Gage 05529500 McDonald Creek near Mount Prospect, IL.
McDonald Creek	The confluence with Des Plaines River	Approximately 320 feet below Edward Road	Log-Pearson Type III	WSP-2	1983	AE w/ Floodway	Calibrated to USGS Gage 05529500 McDonald Creek near Mount Prospect, IL. Starting Water-Surface Elevation was set to the confluence with the Des Plaines River.
McDonald Creek North Branch	The confluence with Lake Arlington	7,240 above the confluence with Lake Arlington (approximately 180 feet above Mill Creek Drive)	ILLUDAS	HEC-2	1983	AE w/ Floodway	Starting Water-Surface Elevation was set to the elevation at the drop structure near the confluence with Lake Arlington.
McDonald Creek South Branch	The confluence with Lake Arlington	1,840 feet above confluence with Lake Arlington (approximately at Palatine Road)	ILLUDAS	HEC-2	1983	AE w/ Floodway	Starting Water-Surface Elevation was set to critical depth.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
McDonald Creek Tributary A	Approximately 860 feet downstream of Elm Avenue	6,400 feet above the confluence with McDonald Creek (approximately 100 feet above Camp McDonald Road)	N/A	WSP-2	5/16/2001	AE w/ Floodway	Revised per LOMR 00-05-225P.
McDonald Creek Tributary A	The confluence with McDonald Creek	Approximately 860 feet downstream of Elm Avenue	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with McDonald Creek.
McDonald Creek Tributary B	The confluence with McDonald Creek	Approximately 650 feet above the confluence with McDonald Creek	Regional Equation 1973 / Regional Equation 1975	WSP-2	11/1980	AE	Starting Water-Surface Elevation was set to the confluence with McDonald Creek.
McDonald Creek Tributary B	Approximately 650 feet above the confluence with McDonald Creek	Approximately 145 feet below Fairway Drive	Regional Equation 1973 / Regional Equation 1975	WSP-2	11/1980	AE w/ Floodway	
McDonald Creek Tributary B	Approximately 145 feet below Fairway Drive	5,200 feet above confluence with McDonald Creek (approximately at Wheeling Road)	Regional Equation 1973 / Regional Equation 1975	WSP-2 / HEC-2	09/1976	AE w/ Floodway	

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Melvina Ditch	Approximately 4,450 feet above the confluence with Stony Creek (West)	4,850 feet above the confluence with Stony Creek (West) (approximately 2,665 feet above 99th Street)	TR-20	WSP-2	01/1979	AE w/ Floodway	
Melvina Ditch	The confluence with Stony Creek (West)	Approximately 4,450 feet above the confluence with Stony Creek (West)	Regional Equation 1974 modified with TR-20	WSP-2	12/1978	AE w/ Floodway	Starting Water-Surface Elevation was set to normal depth and slope/area method.
Merrionette Park Ditch	The confluence with Stony Creek (East)	Approximately 66 feet above 123rd Street	Regional Equation 1973	WSP-2	12/1978	AE w/ Floodway	Starting Water-Surface Elevation was set to normal depth, using beginning channel bottom slope.
Merrionette Park Ditch	Approximately 66 feet above 123rd Street	3,500 feet above the confluence with Stony Creek (East) (approximately 2,010 feet above 123rd Street)	Regional Equation 1973	WSP-2	12/1978	AE	
Midlothian Creek	The confluence with Little Calumet River	66,730 feet above the confluence with Little Calumet River (approximately 140 feet above 175th Street)	HEC-1	HEC-RAS 3.1.1	8/19/2008	AE w/ Floodway	Calibrated to USGS Gage 05536340 Midlothian Creek at Oak Forest, IL. Uses effective FIS date. Starting Water-Surface Elevation was computed at three different points.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Midlothian Creek Western Branch	Just downstream of Leclaire Avenue	Just upstream of Laramie Avenue	N/A	N/A	05/2001	AE w/ Floodway	Revised per LOMR 00-05-323P
Midlothian Creek Western Branch	Mouth at Midlothian Creek	Just downstream of Leclaire Avenue	Regional Equation 1974 / Regional Equation 1975	WSP-2	09/1977	AE w/ Floodway	Calibrated to USGS Gage 05536340 Midlothian Creek at Oak Forest, IL. Starting Water-Surface Elevation was set to the confluence with Midlothian Creek.
Midlothian Creek Western Branch	Just upstream of Laramie Avenue	4,500 feet above mouth at Midlothian Creek (approximately 1,325 feet above Latrobe Avenue)	Regional Equation 1974 / Regional Equation 1975	WSP-2	09/1977	AE w/ Floodway	Calibrated to USGS Gage 05536340 Midlothian Creek at Oak Forest, IL
Midlothian Creek Western Tributary	Just downstream of 84th Avenue	6,675 feet above confluence with Midlothian Creek (approximately 175 feet above 88th Avenue)	N/A	N/A	3/10/2005	AE w/ Floodway	Revised per LOMR 03-05-3975P
Midlothian Creek Western Tributary	The confluence with Midlothian Creek	Just downstream of 84th Avenue	HEC-1	HEC-2	09/1977	AE w/ Floodway	Calibrated to USGS Gage 05536340 Midlothian Creek at Oak Forest, IL. Starting Water-Surface Elevation was set to the confluence with Midlothian Creek.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Mill Creek	The confluence with Calumet Sag Channel	Approximately 30,590 feet upstream of confluence with Calumet Sag Channel (just downstream of 88th Avenue)	HEC-HMS 3.5.0	HEC-RAS 4.1.0	7/31/2014	AE w/ Floodway	Starting Water-Surface Elevation was set to normal depth. NRCS CN method and Bulletin 71 were used during hydrology.
Mill Creek West Branch	The confluence with Mill Creek	Approximately 9,920 feet upstream of confluence with Mill Creek (just downstream of Creek Road)	HEC-HMS 3.5.0	HEC-RAS 4.1.0	7/31/2014	AE w/ Floodway	Starting Water-Surface Elevation was set to normal depth. NRCS CN method and Bulletin 71 were used during hydrology.
Motel Ditch	The confluence with Industrial Tributary	2,200 feet above confluence with Industrial Tributary	HEC-1	HEC-2	02/1977	AE	Calibrated to O'Hare Precipitation Gage. Starting Water-Surface Elevation was set to the confluence with Industrial Tributary.
Natalie Creek	Crawford Avenue	14,950 feet above Crawford Avenue (approximately 1,500 feet above James Drive/ 155th Street)	HEC-1	HEC-2	09/1977	AE w/ Floodway	Calibrated to USGS Gage 05536340 Midlothian Creek at Oak Forest, IL. Starting Water-surface Elevation was determined by the rating curve developed for Crawford Avenue diversion structure.
Natalie Creek Overland Flow	The confluence with Natalie Creek	4,200 feet above the confluence with Natalie Creek	HEC-1	HEC-2	09/1977	AE	Calibrated to USGS Gage 05536340 Midlothian Creek at Oak Forest, IL. Starting Water-Surface Elevation was set to the confluence with Midlothian Creek.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Navajo Creek	Approximately 400 feet downstream of Menominee Parkway	Approximately 450 feet upstream of 123rd Street	N/A	WSP-2	6/23/1999	AE w/ Floodway	Revised per LOMR 01-05-3012P.
Navajo Creek	Approximately 450 feet upstream of 123rd Street	15,010 feet above Calumet Sag Channel (131st Street)	Regional Equation 1974/ Log Pearson Type III	WSP-2	12/1978	AE w/ Floodway	Calibrated to USGS Gage 05536510 Navajo Creek at Palos Heights, IL.
Navajo Creek	Calumet Sag Channel (approximately 450 feet downstream of State Route 83)	Approximately 400 feet downstream of Menominee Parkway	Regional Equation 1974/ Log Pearson Type III	WSP-2	12/1978	AE w/ Floodway	Calibrated to USGS Gage 05536510 Navajo Creek at Palos Heights, IL. Starting Water-Surface Elevation was set to normal depth.
North Creek	The confluence with Thorn Creek	38,525 feet above the confluence with Thorn Creek (approximately 1,100 feet above Wentworth Avenue)	HEC-1	HEC-RAS 3.1.1	8/19/2008	AE w/ Floodway	Calibrated to USGS Gage 05536270 North Creek near Lansing, IL. Updated the downstream boundary condition. Uses Effective FIS date.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
North Navy Ditch	The confluence with Chicago River, North Branch, West Fork	2,300 feet above the confluence with Chicago River, North Branch, West Fork (approximately 2,050 feet above Access Road)	HEC-1	HEC-2	09/1995	AE w/ Floodway	Starting Water-Surface Elevation was determined by HEC-1 at the confluence of Chicago River, North Branch, West Fork.
North Tributary to Tinley Creek	3,375 feet above confluence with Tinley Creek	4,580 feet above confluence with Tinley Creek (approximately 560 feet above Maple Avenue)	N/A	N/A	N/A	AE w/ Floodway	
Oak Lawn Ditch	Approximately 2,960 feet above confluence with Stony Creek West	5,940 feet above confluence with Stony Creek (West) (Edison Avenue)	Regional Equation 1973 / Log-Pearson Type III	WSP-2	01/1979	AE w/ Floodway	
Oak Lawn Ditch	The confluence with Stony Creek (West)	Approximately 2,960 feet above confluence with Stony Creek West	Regional Equation 1974	WSP-2	12/1978	AE w/ Floodway	Starting Water-Surface Elevation was set to normal depth and the slop/area method.
Park Creek	Mouth at I-57 Drainage Ditch	3,835 feet above mouth at I-57 Drainage Ditch (approximately 2,685 feet above Kedzie Avenue)	Regional Equation 1977 / TR-55	WSP-2	03/1983	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with I-57 Drainage Ditch.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Plainfield Road Ditch	At the upstream side of the Tri-State Tollway	3,400 feet above confluence with Flag Creek (approximately 150 feet above Chute Road)	Regional Equation 1973 / Log-Pearson Type III	WSP-2	08/1978	AE w/ Floodway	
Plainfield Road Ditch	The confluence with Flag Creek	At the upstream side of the Tri-State Tollway	Regional Equation 1973 / Log-Pearson Type III	WSP-2	08/1978	AE	Calibrated to USGS Gage 05533000 Flag Creek near Willow Springs, IL
Plum Creek	Cook County, Illinois-Lake County, Indiana County State Boundary	11,400 feet above Cook-Will County Boundary (Steger Road)	HEC-1	HEC-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was determined by rating curves.
Poplar Creek	Approximately 5,025 feet upstream of confluence with Fox River at Kane/Cook County Boundary (Approximately 1,675 feet upstream of St. Charles Street/Illinois Route 25 in Kane County)	Approximately 95,315 feet upstream of confluence with Fox River (Approximately 75 feet downstream of Stover Road Extended)	HEC-HMS 3.5	HEC-RAS 4.1	6/28/2019	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Poplar Creek	Approximately 95,315 feet upstream of confluence with Fox River (Approximately 75 feet downstream of Stover Road Extended)	Approximately 97,863 feet upstream of confluence with Fox River (Approximately 2,475 feet upstream of Stover Road Extended)	Regional Equation 1974 / Regional Equation 1975	HEC-2	09/1976	AE w/ Floodway	Calibrated to USGS Gage 05550500 Poplar Creek at Elgin, IL
Poplar Creek East Branch	Confluence with Poplar Creek	Approximately 26,070 feet upstream of confluence with Poplar Creek (Just downstream of Windemere Lane)	HEC-HMS 3.5	HEC-RAS 4.1	6/28/2019	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number
Poplar Creek East Branch Tributary A	Confluence with Poplar Creek East Branch	Approximately 3,325 feet upstream of confluence with Poplar Creek East Branch (Just downstream of Charleston Lane)	HEC-HMS 3.5	HEC-RAS 4.1	6/28/2019	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number, previously labeled as the upstream reach of Poplar Creek East Branch

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Poplar Creek Lord's Park Overflow	Convergence with Poplar Creek Lord's Park Tributary	Approximately 3,564 feet upstream of convergence with Poplar Creek Lord's Park Tributary (Divergence from Poplar Creek)	HEC-HMS 3.5	HEC-RAS 4.1	6/28/2019	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number
Poplar Creek Lord's Park Tributary	Confluence with Poplar Creek	Approximately 7,800 feet upstream of confluence with Poplar Creek (Approximately 290 feet downstream of Franklin Boulevard in Kane County)	HEC-HMS 3.5	HEC-RAS 4.1	6/28/2019	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number, previously named Lord's Park Tributary
Poplar Creek Lord's Park Tributary 1	Confluence with Poplar Creek Lord's Park Tributary	Approximately 1,296 feet upstream of confluence with Poplar Creek Lord's Park Tributary (Tefft Avenue Extended)	HEC-HMS 3.5	HEC-RAS 4.1	6/28/2019	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Poplar Creek Lord's Park Tributary 1	Approximately 1,296 feet upstream of confluence with Poplar Creek Lord's Park Tributary (Tefft Avenue Extended)	Approximately 1,765 feet upstream of confluence with Poplar Creek Lord's Park Tributary (Approximately 500 feet upstream of Tefft Avenue Extended)	HEC-HMS 3.5	HEC-RAS 4.1	3/3/2020	A	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number
Poplar Creek Railroad Tributary	Confluence with Poplar Creek	Approximately 10,580 feet upstream of confluence with Poplar Creek (Just downstream of Jane Addams Memorial Tollway/ Interstate 90)	HEC-HMS 3.5	HEC-RAS 4.1	6/28/2019	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number
Poplar Creek Schaumburg Branch	Confluence with Poplar Creek	Approximately 17,066 feet upstream of confluence with Poplar Creek (Approximately 200 feet upstream of Braintree Road)	HEC-HMS 3.5	HEC-RAS 4.1	6/28/2019	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Poplar Creek South Branch	Confluence with Poplar Creek	Approximately 20,607 feet upstream of confluence with Poplar Creek (Approximately 1,270 feet upstream of Parkside Circle)	HEC-HMS 3.5	HEC-RAS 4.1	6/28/2019	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number
Poplar Creek South Branch Tributary A	Confluence with Poplar Creek South Branch	Approximately 1,074 feet upstream of confluence with Poplar Creek South Branch (Just downstream of Irving Park Road/Illinois Route 19)	HEC-HMS 3.5	HEC-RAS 4.1	6/28/2019	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number
Poplar Creek Tributary 1	Confluence with Poplar Creek	Approximately 831 feet upstream of confluence with Poplar Creek	HEC-HMS 3.5	HEC-RAS 4.1	6/28/2019	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number, previously named Poplar Creek Unnamed Tributary No. 1. Hydraulic model does not extend to upstream floodplain mapping limits; 1% and 0.2% chance floodplain mapping for upstream 265 feet of this stream are based on elevation from last modeled cross section.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Poplar Creek Tributary 2	Confluence with Poplar Creek	Approximately 2,613 feet upstream of confluence with Poplar Creek (Just downstream of Palatine Road)	HEC-HMS 3.5	HEC-RAS 4.1	6/28/2019	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number, previously named Poplar Creek Unnamed Tributary No. 2
Poplar Creek Tributary 3	Confluence with Poplar Creek	Approximately 1,966 feet upstream of confluence with Poplar Creek (Bibury Lane Extended)	HEC-HMS 3.5	HEC-RAS 4.1	6/28/2019	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number, previously named Poplar Creek Unnamed Tributary No. 3
Poplar Creek Tributary 4	Confluence with Poplar Creek	Approximately 3,470 feet upstream of confluence with Poplar Creek (Just upstream of Pedestrian Walkway)	HEC-HMS 3.5	HEC-RAS 4.1	6/28/2019	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number
Poplar Creek Tributary A	Confluence with Poplar Creek	Approximately 6,410 feet upstream of confluence with Poplar Creek (Just downstream of Tennis Club Lane)	HEC-HMS 3.5	HEC-RAS 4.1	6/28/2019	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Prairie Creek	The confluence with Farmer's Creek	7,800 feet above confluence with Farmer's Creek	HEC-1/ Bulletin 70	HEC-RAS 3.1.1	8/19/2008	AE w/ Floodway	Compared to 8 staff gages installed by OWR. Uses Effective FIS Date.
Salt Creek (Lower Reach)	Approximately 1,990 feet below Maple Avenue	Approximately 2,610 feet below West 31st Street	Log-Pearson Type III	WSP-2	11/6/2000	AE w/ Floodway	Calibrated to USGS Gage 05531500 Salt Creek at Western Springs, IL. Uses Effective FIS date.
Salt Creek (Lower Reach)	Tthe confluence with Des Plaines River	Approximately 1,990 feet below Maple Avenue	TR-20	WSP-2	11/6/2000	AE w/ Floodway	Calibrated to USGS Gage 05531500 Salt Creek at Western Springs, IL. Uses effective FIS date. Starting Water-Surface Elevation was set to the confluence with Des Plaines River.
Salt Creek (Lower Reach)	Approximately 2,610 feet below West 31st Street	At West 31st Street	TR-20 / Regional Equation 1973	WSP-2	11/6/2000	AE w/ Floodway	Uses Effective FIS date. Starting Water-Surface Elevation was determined by the slope/area method.
Salt Creek (Lower Reach)	140,250 feet above confluence with Des Plaines River (Devon Avenue)	Approximately 680 feet above East Devon Avenue	Log-Pearson Type III	WSP-2	11/6/2000	AE w/ Floodway	Calibrated to USGS Gage 05531500 Salt Creek at Western Springs, IL. Uses Effective FIS Date. Starting Water-Surface Elevation was determined by the State of Illinois and SCS profiles.
Salt Creek (Lower Reach)	Approximately 680 feet above East Devon Avenue	148,260 feet above confluence with Des Plaines River (Arlington Heights Road, below Busse Woods Reservoir)	TR-20	WSP-2	11/6/2000	AE w/ Floodway	Uses Effective FIS Date.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Salt Creek (Lower Reach)	At West 31st Street	37,090 feet above confluence with Des Plaines River (5,590 feet above 31st Street)	TR-20 / Regional Equation 1958	WSP-2	11/6/2000	AE w/ Floodway	Uses Effective FIS Date. Starting Water-Surface Elevation was determined by the slope/area method.
Salt Creek (Upper Reach)	Approximately 50 feet upstream of Palatine Road	Approximately 100 feet upstream of Clyde Avenue	N/A	N/A	10/22/2001	AE w/ Floodway	Revised per LOMR 01-05-1413P
Salt Creek (Upper Reach)	State Route 58	Approximately 50 feet upstream of Palatine Road	HEC-1	FEQ/HEC-2	11/6/2000	AE w/ Floodway	Calibrated to Algonquin Road USGS Gage. Starting Water-Surface Elevation was set to the upstream of State Route 58.
Salt Creek (Upper Reach)	Approximately 100 feet upstream of Clyde Avenue	51,150 feet above State Route 58 (approximately 750 feet above Poteet Avenue)	HEC-1	FEQ/HEC-2	11/6/2000	AE w/ Floodway	Calibrated to Algonquin Road USGS Gage
Salt Creek, Arlington Heights Branch	Approximately 1,770 feet above Euclid Avenue	Approximately 2,990 feet above Euclid Avenue	HEC-1	HEC-2	11/6/2000	AE	
Salt Creek, Arlington Heights Branch	The confluence with Salt Creek (Upper Reach)	Approximately 1,770 feet above Euclid Avenue	HEC-1	HEC-2	11/6/2000	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Salt Creek (Upper Reach).
Salt Creek, Arlington Heights Branch	Approximately 2,990 feet above Euclid Avenue	Approximately 15 feet above North Quentin Road	HEC-1	HEC-2	11/6/2000	AE w/ Floodway	

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Salt Creek, Arlington Heights Branch	Approximately 15 feet above North Quentin Road	45,660 feet above confluence with Salt Creek (Upper Reach) (approximately 1,560 feet above Quentin Road)	HEC-1	HEC-2	11/6/2000	AE	
Salt Creek, Arlington Heights Branch, Anderson Drive Tributary	The confluence with Salt Creek Arlington Heights Branch	Approximately 390 feet below Evergreen Drive	HEC-1	HEC-2	11/6/2000	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Salt Creek, Arlington Heights Branch.
Salt Creek, Arlington Heights Branch, Anderson Drive Tributary	At Evergreen Drive	7,150 feet above confluence with Salt Creek Arlington Heights Branch (approximately 450 feet above Evergreen Drive)	HEC-1	HEC-2	11/6/2000	AE	
Salt Creek Middle Fork	The confluence with Salt Creek Tributary	1,520 feet above confluence with Salt Creek Tributary (approximately 1,475 feet above Wolf Road)	TR-20	WSP-2	04/1979	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Salt Creek.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Salt Creek South Fork	The confluence with Salt Creek Tributary	3,420 feet above confluence with Salt Creek Tributary (approximately 1,350 feet above Wolf Road)	TR-20	WSP-2	04/1979	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Salt Creek.
Salt Creek Tributary	2,140 feet above Salt Creek Lower Reach	3,248 feet above Salt Creek Lower Reach (approximately 390 feet above Diversion Orifice)	TR-20	WSP-2	04/1979	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Salt Creek.
Salt Creek Tributary A	The confluence with Salt Creek (Upper Reach)	6,960 feet above the confluence with Salt Creek (Upper Reach) (approximately 1,460 feet above Jules Road)	HEC-1	HEC-2	11/6/2000	AE w/ Floodway	Uses Effective FIS Date. Starting Water-Surface Elevation was set to the confluence with Salt Creek (Upper Reach).
Salt Creek Tributary B	The confluence with Salt Creek (Upper Reach)	3,875 feet above the confluence with Salt Creek (Upper Reach) (approximately 575 feet above Palatine Road)	HEC-1	HEC-2	11/6/2000	AE w/ Floodway	Uses Effective FIS Date. Starting Water-Surface Elevation was set to the confluence with Salt Creek (Upper Reach).

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Salt Creek Tributary C	The confluence with Salt Creek (Upper Reach)	10,085 feet above the confluence with Salt Creek (Upper Reach) (approximately 135 feet above Roselle Road)	HEC-1	HEC-2	11/6/2000	AE w/ Floodway	Uses Effective FIS Date. Starting Water-Surface Elevation was set to the confluence with Salt Creek (Upper Reach).
Salt Creek Tributary D	The confluence with Salt Creek (Upper Reach)	At downstream edge of West Central Road	HEC-1	HEC-2	11/6/2000	AE w/ Floodway	Uses Effective FIS Date. Starting Water-Surface Elevation was set to the confluence with Salt Creek (Upper Reach).
Salt Creek Tributary D	At downstream edge of West Central Road	12,355 feet above the confluence with Salt Creek (Upper Reach) [approximately 280 feet above Central Court (west)]	HEC-1	HEC-2	11/6/2000	AE	Uses Effective FIS Date.
Salt Creek West Branch	Limit of detailed study (located approximately 200 feet downstream of Interstate Route 290)	Approximately 50 feet above North Martingale Road	HEC-1	FEQ	11/6/2000	AE w/ Floodway	Uses Effective FIS Date.
Salt Creek West Branch	Approximately 50 feet above North Martingale Road	Approximately 350 feet below South Meacham Road	HEC-1	HEC-2	11/6/2000	AE w/ Floodway	Uses Effective FIS Date. Starting Water-Surface Elevation was determined by the rating curve at Interstate Route 290.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Salt Creek West Branch	Approximately 70 feet below South Meacham Road	Approximately 4,670 feet above South Meacham Road	TR-20	WSP-2	11/6/2000	AE w/ Floodway	Uses Effective FIS Date.
Salt Creek West Branch	Approximately 350 feet below South Meacham Road	Approximately 70 feet below South Meacham Road	HEC-1	FEQ	11/6/2000	AE w/ Floodway	Uses Effective FIS Date.
Salt Creek West Branch	Approximately 4,670 feet above South Meacham Road	At Jane Addams Memorial Tollway / Interstate 90	HEC-1	FEQ	11/6/2000	AE w/ Floodway	Uses Effective FIS Date.
Salt Creek West Branch	At Jane Addams Memorial Tollway / Interstate 90	Approximately 410 feet above Basswood Road	HEC-1	FEQ	11/6/2000	AE	Uses Effective FIS Date.
Salt Creek West Branch	Approximately 410 feet above Basswood Road	36,585 feet above the limit of detailed study (approximately 135 feet above Roselle Road)	HEC-1	FEQ	11/6/2000	AE w/ Floodway	Uses Effective FIS Date.
Salt Creek West Branch Tributary A	The confluence with Salt Creek West Branch	8,038 feet above the confluence with Salt Creek West Branch (approximately 100 feet above Apple Street)	HEC-1	HEC-2	11/6/2000	AE w/ Floodway	Uses Effective FIS Date. Starting Water-Surface Elevation was set to the confluence with Salt Creek West Branch.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Salt Creek West Branch Tributary 3	The confluence with Salt Creek West Branch	8,350 feet above the confluence with Salt Creek West Branch (approximately 350 feet above Roselle Road)	HEC-1	HEC-2	11/6/2000	AE w/ Floodway	Uses Effective FIS Date. Starting Water-Surface Elevation was set to the confluence with Salt Creek West Branch.
Salt Creek West Branch Tributary 4	Confluence with Salt Creek West Branch Tributary 3	3,720 feet above confluence with Salt Creek West Branch Tributary 3 (approximately 190 feet above Roselle Road)	HEC-1	HEC-2	11/6/2000	AE w/ Floodway	Uses Effective FIS Date. Starting Water-Surface Elevation was set to the confluence with Salt Creek West Branch.
Salt Creek West Branch Tributary 5	Confluence with Salt Creek West Branch Tributary 3	2,021 feet above confluence with Salt Creek West Branch Tributary 3 (approximately 246 feet above Summit Drive)	HEC-1	HEC-2	11/6/2000	AE w/ Floodway	Uses Effective FIS Date. Starting Water-Surface Elevation was set to the confluence with Salt Creek West Branch.
Salt Creek West Branch Tributary 6	The confluence with Salt Creek West Branch	6,526 feet above confluence with Salt Creek West Branch (approximately 105 feet above Summit Drive)	HEC-1	HEC-2	11/6/2000	AE w/ Floodway	Uses Effective FIS Date. Starting Water-Surface Elevation was set to the confluence with Salt Creek West Branch.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Salt Creek West Branch Tributary 7	The confluence with Salt Creek West Branch Tributary 6	5,990 feet above confluence with Salt Creek West Branch Tributary 6 (approximately 140 feet from Plum Grove Road)	HEC-1 / Regional Equation 1973	HEC-2	11/6/2000	AE w/ Floodway	Uses Effective FIS Date. Starting Water-Surface Elevation was set to the confluence with Salt Creek West Branch.
Sexton Ditch	The confluence with Crystal Creek Tributary	1,828 feet above the confluence with Crystal Creek Tributary	HEC-1	HEC-2	02/1977	AE w/ Floodway	Calibrated to O'Hare Precipitation Gage. Starting Water-Surface Elevation was set to the confluence with Crystal Creek Tributary.
Silver Creek	The mouth at Des Plaines River	Approximately 500 feet above the mouth of the Des Plaines River	TR-20	WSP-2	12/1978	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with the Des Plaines River.
Silver Creek	Approximately 500 feet above the mouth of the Des Plaines River	Approximately 60 feet below North 25th Avenue	TR-20	WSP-2	12/1978	AE w/ Floodway	Calibrated to USGS Gage 05532500 Des Plaines River at Riverside, IL and USGS Gage 05529000 Des Plaines River near Des Plaines, IL. Starting Water-Surface Elevation was set to the 10-year water surface elevation at the confluence with the Des Plaines River.
Silver Creek	At North 25th Avenue	Approximately 30 feet above Armitage Avenue	TR-20	WSP-2	12/1978	AE w/ Floodway	Calibrated to USGS Gage 05532500 Des Plaines River at Riverside, IL and USGS Gage 05529000 Des Plaines River near Des Plaines, IL.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Silver Creek	Approximately 60 feet below North 25th Avenue	At North 25th Avenue	TR-20	WSP-2	02/1977	AE w/ Floodway	Calibrated to USGS Gage 05532500 Des Plaines River at Riverside, IL and USGS Gage 05529000 Des Plaines River near Des Plaines, IL.
Silver Creek	At Franklin Avenue	6.43 miles above the mouth at Des Plaines River (approximately 105 feet above Irving Park Road)	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE	
Silver Creek	Approximately 30 feet above Armitage Avenue	At Franklin Avenue	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was determined by the rating curve based on SCS profiles.
Skokie River	At Willow Road	157,180 feet above the mouth at Chicago River (Lake-Cook Road, at Cook-Lake County Boundary)	HEC-1	FEQ	11/6/2000	AE w/ Floodway	Calibrated to USGS Gage 05536000 North Branch Chicago River at Niles, IL. Staring Water-Surface Elevation was based on the rating curve at Willow Road Dam.
Skokie River	120,000 feet above the mouth at Chicago River (approximately 1,200 feet below Chicago and North Western Railway)	At Willow Road	HEC-1	HEC-2	11/6/2000	AE w/ Floodway	Calibrated to USGS Gage 05536000 North Branch Chicago River at Niles, IL.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Skokie River, Botanical Garden Diversion	The confluence with Skokie River	5,400 feet above the confluence with Skokie River [approximately Maintenance Road (divergence from Skokie River)]	HEC-1	FEQ	11/6/2000	AE w/ Floodway	Uses Effective FIS Date. Starting Water-Surface Elevation was set to the confluence with Skokie River.
Skokie River, West Ditch	The confluence with Skokie River	8,640 feet above confluence with Skokie River	HEC-1	FEQ	11/6/2000	AE w/ Floodway	Uses Effective FIS Date. Starting Water-Surface Elevation was set to the confluence with Skokie River.
South Navy Ditch	The confluence with Chicago River, North Branch, West Fork	2,245 feet above the confluence with Chicago River, North Branch, West Fork (approximately 1,285 feet above Blackthorn Drive)	HEC-1	HEC-2	09/1995	AE w/ Floodway	Starting Water-Surface Elevation was determined by HEC-1 confluence at Chicago River, North Branch, West Fork.
South Tributary to Tinley Creek	Approximately 400 feet above the confluence of North Tributary to Tinley Creek (approximately 235 feet below 88th Avenue)	Approximately 1,275 feet above the confluence of North Tributary to Tinley Creek (approximately 315 feet above Dogwood Cypress Court)	N/A	N/A	8/26/2004	AE	Revised per LOMR 03-05-3383P.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Spring Creek	Approximately 180 feet downstream of 118th Avenue	16,250 feet above Will-Cook County Boundary (approximately 155 feet above 108th Avenue)	HEC-1	WSP-2	11/7/2000	AE w/ Floodway	Revised per LOMR 00-05-137P.
Spring Creek	Will-Cook County Boundary	Approximately 180 feet downstream of 118th Avenue	HEC-1	HEC-2	04/1981	AE w/ Floodway	
Spring Creek	Will-Cook County Boundary	Approximately 180 feet downstream of 118th Avenue	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was set to normal depth at a point approximately 4,800 feet downstream of Will-Cook County boundary.
Spring Creek (Fox)	County Line Road (At Cook and McHenry County boundary)	Approximately 41,651 feet upstream of County Line Road (At Cook and McHenry County boundary) (Approximately 145 feet upstream of Sutton Road/Illinois Route 59)	HEC-HMS 3.5	HEC-RAS 4.1	3/1/2018	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number, previously named Spring Creek (Barrington Hills) in LOMR 08-05-5003P

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Spring Creek (Fox) Overflow	Convergence with Spring Creek (Fox)	Approximately 4,410 feet upstream of convergence with Spring Creek (Fox) (Divergence from Spring Creek (Fox) Tributary D)	HEC-HMS 3.5	HEC-RAS 4.1	3/1/2018	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number
Spring Creek (Fox) Tributary A	Confluence with Spring Creek (Fox)	Approximately 8,685 feet upstream of confluence with Spring Creek (Fox) (Just downstream of Bartlett Road)	HEC-HMS 3.5	HEC-RAS 4.1	3/1/2018	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number, previously named Spring Creek Tributary. Hydraulic model does not extend to upstream floodplain mapping limits; 1% and 0.2% chance floodplain mapping for open channel reach upstream of Spring Creek Dr based on elevations of adjacent ponds.
Spring Creek (Fox) Tributary A1	At confluence with Spring Creek (Fox) Tributary A	Approximately 1,856 feet upstream of confluence with Spring Creek (Fox) Tributary A (Approximately 1,100 feet downstream of Eastings Way)	HEC-HMS 3.5	HEC-RAS 6	4/18/2022	A	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Spring Creek (Fox) Tributary B	Confluence with Spring Creek (Fox)	Approximately 2,843 feet upstream of confluence with Spring Creek (Fox)	HEC-HMS 3.5	HEC-RAS 4.1	3/1/2018	A, AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number
Spring Creek (Fox) Tributary C	Confluence with Spring Creek (Fox)	Approximately 2,932 feet upstream of confluence with Spring Creek (Fox) (Just downstream of Old Sutton Road)	HEC-HMS 3.5	HEC-RAS 4.1	3/1/2018	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number
Spring Creek (Fox) Tributary C	Approximately 2,932 feet upstream of confluence with Spring Creek (Fox) (Just downstream of Old Sutton Road)	Approximately 4,814 feet upstream of confluence with Spring Creek (Fox) (Approximately 940 feet upstream of Creekside Lane)	Regression Equations	HEC-RAS 4.1	11/1/2019	A	1D Steady State, USGS StreamStats 2004

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Spring Creek (Fox) Tributary D	Confluence with Spring Creek (Fox)	Approximately 14,540 feet upstream of confluence with Spring Creek (Fox) (Approximately 125 feet upstream of Dundee Road/Illinois Route 68)	HEC-HMS 3.5	HEC-RAS 4.1	3/1/2018	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number
Spring Creek (Fox) Tributary E	Confluence with Spring Creek (Fox)	Approximately 4,188 feet upstream of confluence with Spring Creek (Fox) (Approximately 1,660 feet upstream of Old Sutton Road)	HEC-HMS 3.5	HEC-RAS 4.1	3/1/2018	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number. Hydraulic model does not include Goose Lake; 1% and 0.2% chance floodplain mapping for Goose Lake are based on elevations from last modeled cross section of Zone AE study and downstream-most cross section of Zone A study.
Spring Creek (Fox) Tributary E	Approximately 6,264 feet upstream of confluence with Spring Creek (Fox) (Approximately 1,576 feet downstream of Brinker Road)	Approximately 10,985 feet upstream of confluence with Spring Creek (Fox) (Approximately 3,145 feet upstream of Brinker Road)	Regression Equations	HEC-RAS 4.1	11/1/2019	A	1D Steady State, USGS StreamStats 2004

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Spring Creek (Fox) Tributary F	Confluence with Spring Creek (Fox)	Approximately 7,358 feet upstream of confluence with Spring Creek (Fox) (Just downstream of Crawling Stone Road)	HEC-HMS 3.5	HEC-RAS 4.1	3/1/2018	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number. Hydraulic model does not extend to upstream floodplain mapping limits; 1% and 0.2% chance floodplain mapping for upstream 152 feet of this stream are based on elevation from last modeled cross section.
Spring Creek (Fox) Tributary F1	Confluence with Spring Creek (Fox) Tributary F	Approximately 1,369 feet upstream of confluence with Spring Creek (Fox) Tributary F (At Cook and Kane County boundary)	HEC-HMS 3.5	HEC-RAS 4.1	3/1/2018	AE w/ Floodway	1D Steady State, ISWS Bulletin 71 (An Areal Reduction Factor was applied), NRCS Curve Number
Stony Creek (East)	Approximately 1,430 feet above the confluence with Calumet Sag Channel (California Avenue)	18,852 feet above the confluence with Calumet Sag Channel (approximately 7,652 feet above Crawford Avenue)	Log-Pearson Type III / Regional Equation 1973	WSP-2	12/1978	AE w/ Floodway	Starting Water-Surface Elevation was set to normal depth using beginning channel bottom slope.
Stony Creek (West)	Mouth at Calumet Sag Channel	At South Harlem Avenue	TR-20	WSP-2	01/1979	AE w/ Floodway	Starting Water-Surface Elevation was determined from the SCS Report (USDA 1976)

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Stony Creek (West)	Approximately 350 feet below West 103rd Street	30,900 feet above mouth at Calumet Sag Channel (approximately Lawrence Avenue)	Regional Equation 1973 / Log-Pearson Type III	WSP-2	01/1979	AE w/ Floodway	Starting Water-Surface Elevation was set to normal depth and slope/area method.
Stony Creek (West)	At South Harlem Avenue	Approximately 350 feet below West 103rd Street	Regional Equation 1974	WSP-2	12/1978	AE w/ Floodway	
Techny Drain	Approximately 55 feet below Mallard Drive	11,240 feet above the confluence with Chicago River, North Branch, West Fork (approximately 1,145 feet above Fox Grove Ditch)	HEC-1	HEC-2	09/1994	AE	
Techny Drain	The confluence with Chicago River, North Branch, West Fork	Approximately 55 feet below Mallard Drive	HEC-1	HEC-2	09/1994	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Chicago River, North Branch, West Fork.
Techny Drain South Fork	The confluence with Techny Drain	2,800 feet above the confluence with Techny Drain (approximately 200 feet above Wood Drive)	HEC-1	HEC-2	09/1994	AE	Starting Water-Surface Elevation was determined by slope/area method.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Third Creek	The confluence with Deer Creek	13,660 feet above the confluence with Deer Creek (approximately 910 feet above Union Pacific Railroad)	Regional Equation 1973 / Regional Equation 1974 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Deer Creek.
Thorn Creek	USGS Gage 05536275 Thorn Creek at Thornton, IL	81,260 feet above confluence with Little Calumet River (approximately 1,520 feet above Western Avenue)	TR-20 / Log-Pearson Type III and Regional Equation 1973	WSP-2	8/19/2008	AE w/ Floodway	Calibrated to USGS Gage 04090500 and USGS Gage 04088000.
Thorn Creek	The confluence with Little Calumet River	USGS Gage 05536275 Thorn Creek at Thornton, IL	HEC-1/ Bulletin 70	HEC-RAS 3.1.1	8/19/2008	AE w/ Floodway	Used Un-steady HEC-RAS, Calibrated to USGS Gage 05536275 Thorn Creek at Thornton, IL. Starting-Water Surface Elevation was set to normal depth at the confluence of Little Calumet River.
Thorn Creek Tributary A	4,360 feet above mouth at Thorn Creek (approximately 1,100 feet below State Street)	8,970 feet above mouth at Thorn Creek (Lincoln Highway U.S. Route 30)	Regional Equation 1973 / Regional Equation 1975	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation is set to the confluence with Thorn Creek.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Thorn Creek Tributary B	The confluence with Thorn Creek	5,650 feet above the confluence with Thorn Creek (approximately 325 feet above Meadow Lane)	Regional Equation 1974 / Regional Equation 1975	WSP-2	08/1977	AE w/ Floodway	Starting Water-Surface Elevation is set to the confluence with Thorn Creek.
Tinley Creek	402 feet upstream of the confluence with the Calumet Sag Channel	Approximately 61,850 feet upstream of confluence with Calumet Sag Channel (approximately 975 feet above 169th Place)	HEC-HMS 3.5	HEC-RAS 4.1.0	7/31/2014	AE w/ Floodway	Starting Water-Surface Elevation is set to normal depth. NRCS CN method and Bulletin 71 were used during hydrology.
Tinley Creek Overflow	Convergence with Tinley Creek	Approximately 2,960 feet upstream of convergence with Tinley Creek	HEC-HMS	HEC-RAS	5/18/2018	AE	Updated per LOMR 16-05-7359P. Starting Water-Surface Elevation is set to normal depth.
Underwriters Tributary	Confluence with Chicago River, North Branch, West Fork	At approximately 175 feet upstream of the confluence with Chicago River, North Branch, West Fork	adICPR	adICPR	09/1995	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Chicago River, North Branch, West Fork.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Underwriters Tributary	At approximately 175 feet upstream of the confluence with Chicago River, North Branch, West Fork	At Helen Drive	adICPR	adICPR	09/1995	X	
Union Drainage Ditch	3,400 feet above 76th Avenue (approximately at Harlem Avenue, Will-Cook County boundary)	7,630 feet above 76th Avenue (approximately 1,640 feet above Oak Park Avenue)	Regional Equation 1973	WSP-2	09/1977	AE w/ Floodway	Starting Water-Surface Elevation was set to normal depth, approximately 0.5 miles downstream of reach.
Union Drainage Ditch Northern Tributary	3,120 feet above 80th Avenue (approximately at 183rd Street, Will-Cook Boundary)	5,850 feet above 80th Avenue (approximately at 80th Avenue)	Regional Equation 1973	WSP-2	09/1977	AE w/ Floodway	Starting Water-Surface Elevation was set to normal depth, approximately 0.5 miles downstream of reach.
Unnamed Creek	10,950 feet above Salt Creek	11,700 feet above Salt Creek (approximately 90 feet above Nerge Road)	Regional Equation 1973	WSP-2	09/1976	AE w/ Floodway	Starting Water-Surface Elevation is controlled by the culvert at Rohlwing Road.
Unnamed Tributary to Calumet Sag Channel Tributary B	The confluence with Calumet Sag Channel Tributary B	3,500 feet above the confluence with Calumet Sag Channel Tributary B (approximately at 121st Street)	TR-20	HEC-2	11/14/2002	AE	Revised per LOMR 01-05-3037P. Updated hydraulic analysis to include bridges not included in the original study. Starting Water-Surface Elevation was set to the confluence with Calumet Sag Channel Tributary B.

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Unnamed Tributary to Lake Emily	The confluence with Boca Rio Ditch	1,920 feet above the confluence with Boca Rio Ditch (approximately 1,450 feet above Moorings Lane)	N/A	N/A	N/A	AE	
Unnamed Tributary to Salt Creek Tributary D	The confluence with Salt Creek Tributary D	3,400 feet above the confluence with Salt Creek Tributary D	HEC-1	HEC-2	11/6/2000	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Salt Creek Tributary D.
Weller Creek	The confluence with Des Plaines River	31,550 feet above confluence with Des Plaines River (2,650 feet above Lincoln Street)	HEC-1/ Bulletin 70	HEC-RAS 3.1.1	8/19/2008	AE w/ Floodway	Calibrated to USGS Gage 05530000 Weller Creek at Des Plaines, IL. Uses Effective FIS date. Starting Water-Surface Elevation was set to the confluence with Des Plaines River.
West Ditch	The confluence with Boca Rio Ditch	1,800 feet above the confluence with Boca Rio Ditch (1,600 feet above Ridgewood Drive)	N/A	HEC-RAS	6/26/2002	AE	Revised per LOMR 02-05-1825P.
West Ditch	1,460 feet above Oak Park Avenue	3,290 feet above Oak Park Avenue (300 feet above Harlem Avenue)	N/A	N/A	N/A	AE	

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

Flooding Source	Study Limits Downstream Limit	Study Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Wheeling Drainage Ditch	The confluence with Des Plaines River	15,180 feet above the confluence with Des Plaines River (approximately Elmhurst Road (confluence with Buffalo Creek))	HEC-1	HEC-RAS 3.1.1 (USACE, 2003)	12/27/2002	AE w/ Floodway	Revised per LOMR 02-05-1847P.
White Pine Ditch	The mouth at Buffalo Creek	5,420 feet above the mouth at Buffalo Creek (approximately 400 feet above Dundee Road)	Regional Equation 1973	WSP-2	3/1/1976	AE w/ Floodway	Starting Water-Surface Elevation was set to the confluence with Buffalo Creek.
William Rogers Memorial Diversion Channel	The confluence with Des Plaines River	8,455 feet above the confluence with Des Plaines River (divergence from Wheeling Drainage Ditch)	Modeled as a junction with an inline weir	HEC-RAS 3.1.1 (USACE, 2003)	12/27/2002	AE w/ Floodway	Revised per LOMR 02-05-1847P.
Willow Creek	The confluence with Des Plaines River	4.2 miles above the confluence with Des Plaines River	TR-20	HEC-RAS 3.1.3	7/2/2007	AE w/ Floodway	Revised per LOMR 07-05-1665P.

Table 13: Roughness Coefficients

Flooding Source	Channel "n"	Overbank "n"
57th Street Ditch	0.047-0.060	0.037-0.040
59th Street Ditch	0.030-0.035	0.035-0.065
63rd Street Ditch	0.025-0.060	0.017-0.040
67th Street Ditch	0.050-0.070	0.040-0.050
71st Street Ditch	0.060-0.900	0.035-0.060
76th Avenue Ditch	0.08	0.026-0.040
79th Street Ditch	0.032-0.085	0.048-0.055
Addison Creek	0.065-0.100	0.020-0.069
Alsip Drainage Ditch	0.03	0.050-0.090
Arroyo Ditch	0.030-0.035	0.035-0.100
Belaire Creek	0.055-0.080	0.050-0.075
Boca Rio Ditch	0.030-0.055	0.030-0.185
Buffalo Creek	0.030-0.150	0.023-0.050
Buffalo Creek Tributary A	0.025-0.055	0.038-0.070
Butterfield Creek	0.045-0.070	0.015-0.065
Butterfield Creek East Branch	0.020-0.085	0.030-0.075
Butterfield Creek East Branch Tributary	0.035-0.065	0.030-0.075
Butterfield Creek East Branch Tributary A	0.035-0.065	0.030-0.075
Butterfield Creek Tributary No. 1	0.050-0.070	0.040-0.050
Butterfield Creek Tributary No. 3	0.030-0.060	0.040-0.070
Butterfield Creek Tributary No. 4	0.030-0.060	0.040-0.070
Calumet Sag Channel Tributary A	0.035-0.085	0.035-0.055
Calumet Sag Channel Tributary AA	0.055	0.045
Calumet Sag Channel Tributary B	0.050-0.075	0.045-0.055
Calumet Sag Channel Tributary C	0.032-0.080	0.030-0.055
Calumet Union Drainage Ditch	0.018-0.080	0.015-0.050
Calumet Union Drainage Ditch Southwest Branch	0.020-0.500	0.020-0.035
Calumet Union Drainage Ditch Southwest Branch Tributary N	0.040-0.060	0.030-0.055

Table 13: Roughness Coefficients (continued)

Flooding Source	Channel "n"	Overbank "n"
Calumet Union Drainage Ditch Southwest Branch Tributary S	0.040-0.090	0.022-0.060
Cherry Creek	0.025-0.075	0.050-0.100
Cherry Creek East Branch	0.020-0.085	0.020-0.035
Cherry Creek East Branch Relief Channel	0.040	0.060
Cherry Creek East Branch Tributary	0.020-0.080	0.035-0.040
Cherry Creek West Branch	0.025-0.075	0.050-0.100
Cherry Creek West Branch East Fork	0.050-0.095	0.040-0.075
Chicago River, North Branch	0.035-0.100	0.035-0.056
Chicago River, North Branch - Skokie River	*	*
Chicago River, North Branch, Middle Fork	0.020-0.080	0.035-0.065
Chicago River, North Branch, West Fork	0.040-0.080	0.045-0.125
Crestwood Drainage Ditch West	0.050-0.078	0.030-0.045
Crystal Creek	0.020-0.110	0.015-0.040
Crystal Creek Tributary	0.040-0.110	0.015-0.050
Deer Creek	0.040-0.085	0.040-0.060
Deer Creek Tributary B	0.045-0.070	0.050-0.055
Des Plaines River	0.100-0.480	0.025-0.040
Des Plaines River Tributary A	0.03	0.020-0.030
Dixie Creek	0.070-0.080	0.050-0.065
DuPage River West Branch	0.070-0.100	0.035-0.050
East Avenue Ditch	0.047-0.060	0.038-0.050
Elk Grove Boulevard Drainage Ditch	*	*
Farmer's Creek	0.025-0.100	0.025-0.100
Farrington Ditch	0.025-0.070	0.030-0.070
Feehanville Ditch	0.050-0.100	0.040-0.150
Filsen Park Ditch	*	*
Flag Creek	0.055-0.085	0.035-0.070

*Data not available

Table 13: Roughness Coefficients (continued)

Flooding Source	Channel “n”	Overbank “n”
Flag Creek Tributary A	0.035-0.050	0.04
Flag Creek Tributary C	0.07	0.055
Flint Creek	0.030-0.040	0.030-0.045
Flint Creek Tributary	0.030-0.045	0.025-0.060
Flossmoor Ditch	0.075	0.04
Flossmoor Ditch Tributary A	0.035-0.075	0.030-0.040
Golf Course Tributary	0.060-0.090	0.040-0.050
Grand Calumet River	0.045-0.060	0.042-0.045
Hickory Creek	0.045-0.050	0.038-0.042
Hickory Creek Tributary A	0.035-0.045	0.035-0.048
Higgins Creek	0.033-0.060	0.030-0.085
Higgins Creek Tributary A	0.035-0.048	0.035-0.040
I-57 Drainage Ditch	0.030-0.090	0.060-0.080
Illinois and Michigan Canal Tributary A	0.035-0.075	0.035-0.042
Illinois and Michigan Canal Tributary B	0.035-0.075	0.035-0.050
Illinois and Michigan Canal Tributary C	0.035-0.060	0.035-0.050
Illinois and Michigan Canal Tributary D	0.045-0.070	0.042-0.045
Industrial Tributary	0.035-0.070	0.015-0.040
Justice Ditch	0.060-0.085	0.035-0.050
Lansing Ditch	0.030-0.100	0.040-0.100
Lansing Ditch East Tributary	0.040-0.100	0.050-0.100
Lansing Ditch Lynwood Tributary	0.040-0.050	0.040-0.050
Lansing Ditch Torrence Tributary	0.050-0.055	0.050-0.075
Lansing Ditch Tributary A	0.050-0.100	0.060-0.100
Lansing Ditch West Tributary	0.050-0.100	0.060-0.100
Little Calumet River	0.050-0.053	0.20
Long Run	0.035-0.065	0.035-0.048
Long Run Tributary A	0.035-0.040	0.032-0.035
Long Run Tributary B	0.035-0.065	0.032-0.050
Long Run Tributary BA	0.032-0.065	0.040-0.055
Long Run Tributary C	0.050-0.100	0.040-0.075

Table 13: Roughness Coefficients (continued)

Flooding Source	Channel “n”	Overbank “n”
Lucas Ditch	0.040-0.075	0.040-0.095
Lucas Ditch Cut-off	0.045-0.070	0.030-0.060
Marley Creek	0.030-0.060	0.032-0.050
Marley Creek Tributary A	0.032-0.065	0.032-0.050
Marley Creek Tributary B	0.030-0.045	0.030-0.060
Marley Creek Tributary C	0.035-0.050	0.04
Marley Creek Tributary D	0.030-0.035	0.035-0.040
McDonald Creek	0.028-0.150	0.023-0.200
McDonald Creek North Branch	0.013	0.022-0.030
McDonald Creek South Branch	0.025	0.030-0.150
McDonald Creek Tributary A	0.030-0.080	0.030-0.060
McDonald Creek Tributary B	0.070-0.080	0.050-0.055
Melvina Ditch	0.050-0.090	0.030-0.045
Merrionette Park Ditch	0.065-0.070	0.045
Midlothian Creek	0.060-0.048	0.035-0.080
Midlothian Creek Western Branch	0.06	0.04
Midlothian Creek Western Tributary	0.035-0.120	0.030-0.150
Mill Creek	0.035-0.052	0.035-0.100
Mill Creek West Branch	0.020-0.070	0.020-0.100
Motel Ditch	0.04	0.024-0.040
Natalie Creek	0.070-0.150	0.04-0.05
Natalie Creek Overland Flow	*	*
Navajo Creek	0.025-0.056	0.035-0.090
North Creek	0.06	0.1
North Creek Tributary A	0.023-0.035	0.045-0.055
North Creek Tributary A Tributary A	0.023-0.035	0.055
North Creek Tributary A Tributary B	0.035	0.055
North Navy Ditch	0.08	0.065
North Tributary to Tinley Creek	*	*
Oak Lawn Ditch	0.050-0.090	0.030-0.045

*Data not available

Table 13: Roughness Coefficients (continued)

Flooding Source	Channel “n”	Overbank “n”
Park Creek	0.030-0.090	0.060-0.075
Plainfield Road Ditch	0.030-0.090	0.035-0.050
Plum Creek	0.073-0.075	0.06
Poplar Creek	0.030-0.091	0.030-0.100
Poplar Creek East Branch	0.030-0.070	0.035-0.100
Poplar Creek East Branch Tributary A	0.035-0.060	0.035-0.060
Poplar Creek Lord's Park Overflow	0.100	0.100
Poplar Creek Lord's Park Tributary 1	0.040-0.060	0.012-0.090
Poplar Creek Lords's Park Tributary	0.013-0.060	0.040-0.100
Poplar Creek Railroad Tributary	0.040-0.055	0.030-0.100
Poplar Creek Schaumburg Branch	0.030-0.050	0.030-0.100
Poplar Creek South Branch	0.013-0.070	0.035-0.100
Poplar Creek South Branch Tributary A	0.065	0.065-0.100
Poplar Creek Tributary 1	0.040	0.080
Poplar Creek Tributary 2	0.040	0.080
Poplar Creek Tributary 3	0.015-0.080	0.080
Poplar Creek Tributary 4	0.040-0.060	0.040-0.060
Poplar Creek Tributary A	0.030-0.060	0.030-0.100
Prairie Creek	0.020-0.050	0.035-0.050
Salt Creek (Lower Reach)	0.030-0.100	0.023-0.080
Salt Creek (Upper Reach)	0.050-0.060	0.060-0.080
Salt Creek, Arlington Heights Branch	0.040-0.070	0.060-0.090
Salt Creek, Arlington Heights Branch, Anderson Drive Tributary	0.05	0.060-0.080
Salt Creek Middle Fork	0.09	0.09
Salt Creek South Fork	0.080-0.095	0.065-0.095
Salt Creek Tributary	0.050-0.080	0.03
Salt Creek Tributary A	0.050-0.060	0.060-0.080
Salt Creek Tributary B	0.050-0.060	0.060-0.080

Table 13: Roughness Coefficients (continued)

Flooding Source	Channel “n”	Overbank “n”
Salt Creek Tributary C	0.050-0.060	0.060-0.080
Salt Creek Tributary D	0.050-0.060	0.060-0.080
Salt Creek West Branch	0.040-0.070	0.060-0.080
Salt Creek West Branch Tributary A	0.040-0.070	0.060-0.080
Salt Creek West Branch Tributary 3	0.040-0.070	0.060-0.080
Salt Creek West Branch Tributary 4	0.040-0.070	0.060-0.080
Salt Creek West Branch Tributary 5	0.040-0.070	0.060-0.080
Salt Creek West Branch Tributary 6	0.040-0.070	0.060-0.080
Salt Creek West Branch Tributary 7	0.040-0.070	0.060-0.080
Sexton Ditch	0.040-0.050	0.040-0.050
Silver Creek	0.030-0.100	0.030-0.085
Skokie River (upstream of Willow Road)	0.040-0.056	0.048-0.065
Skokie River	0.022-0.035	0.060-0.080
Skokie River, Botanical Garden Diversion	0.022-0.035	0.060-0.080
Skokie River, West Ditch	0.035	0.06
South Navy Ditch	0.045	0.08
South Tributary to Tinley Creek	*	*
Spring Creek	0.035-0.080	0.03-0.040
Spring Creek (Fox)	0.030-0.045	0.030-0.100
Spring Creek (Fox) Overflow	0.040	0.070-0.090
Spring Creek (Fox) Tributary A	0.035-0.065	0.030-0.100
Spring Creek (Fox) Tributary A1	0.035	0.035-0.050
Spring Creek (Fox) Tributary B	0.040-0.050	0.040-0.100
Spring Creek (Fox) Tributary C	0.045-0.100	0.040-0.100
Spring Creek (Fox) Tributary D	0.040-0.060	0.035-0.100
Spring Creek (Fox) Tributary E	0.045-0.060	0.012-0.100
Spring Creek (Fox) Tributary F	0.030-0.050	0.030-0.100

*Data not available

Table 13: Roughness Coefficients (continued)

Flooding Source	Channel “n”	Overbank “n”
Spring Creek (Fox) Tributary F1	0.030-0.065	0.030-0.100
Stony Creek (East)	0.048-0.098	0.014-0.050
Stony Creek (West)	0.050-0.140	0.030-0.045
Techny Drain	0.040-0.080	0.040-0.065
Techny Drain South Fork	0.040-0.080	0.040-0.065
Third Creek	0.045-0.060	0.047-0.070
Thorn Creek	0.055-0.085	0.046-0.180
Thorn Creek Tributary A	0.030-0.060	0.045-0.065
Thorn Creek Tributary B	0.035-0.080	0.037-0.060
Tinley Creek	0.010-0.089	0.013-0.106
Tinley Creek Overflow	0.060-0.100	0.01
Underwriters Tributary	0.05	0.05
Union Drainage Ditch	0.055-0.060	0.040-0.045
Union Drainage Ditch Northern Tributary	0.06	0.045
Unnamed Creek	*	*
Unnamed Tributary to Calumet Sag Channel Tributary B	*	*
Unnamed Tributary to Lake Emily	*	*
Unnamed Tributary to Salt Creek Tributary D	0.050-0.060	0.060-0.080
Weller Creek	0.030-0.300	0.015-0.080
West Ditch	*	*
Wheeling Drainage Ditch	0.070-0.080	0.055-0.074
White Pine Ditch	0.030-0.070	0.035-0.070
William Rogers Memorial Diversion Channel	*	*
Willow Creek	0.027-0.085	0.025-0.085

*Data not available