

FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 2 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.

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Published Separately

Flood Insurance Rate Map (FIRM)

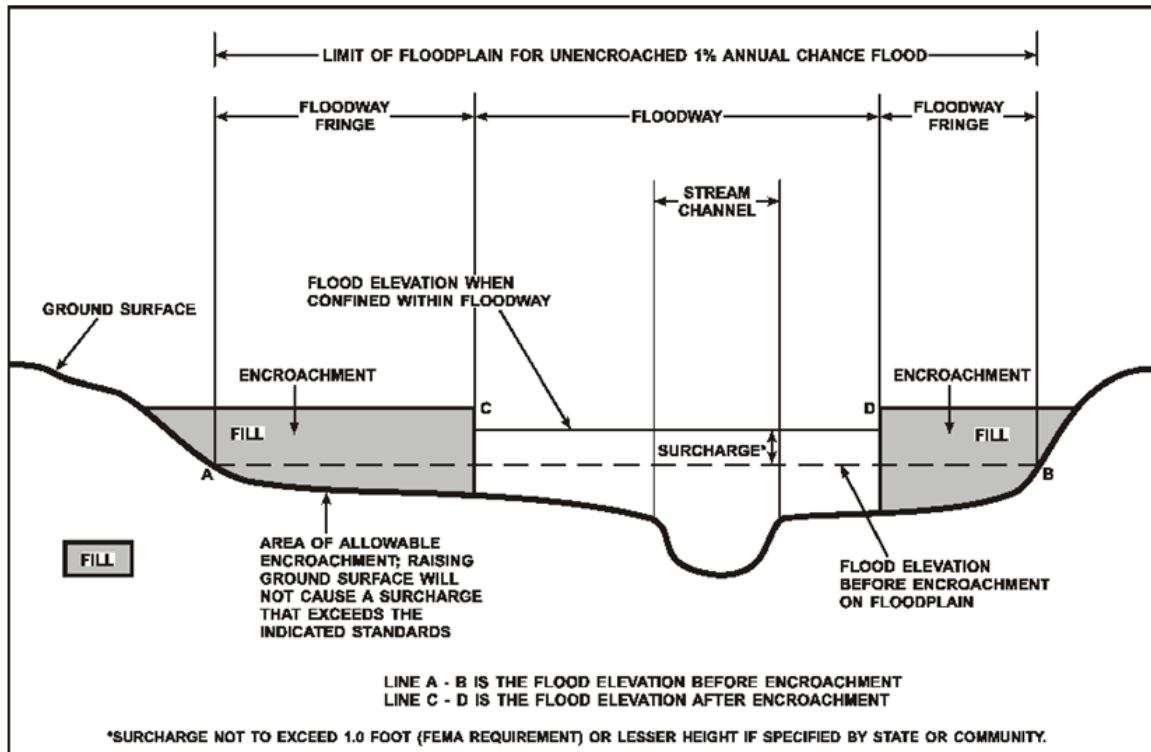
2.2 Floodways

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

For purposes of the NFIP, a floodway is used as a tool to assist local communities in balancing floodplain development against increasing flood hazard. With this approach, the area of the 1-percent annual chance floodplain on a river is divided into a floodway and a floodway fringe based on hydraulic modeling. The floodway is the channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment in order to carry the 1-percent annual chance flood. The floodway fringe is the area between the floodway and the 1-percent annual chance floodplain boundaries where encroachment is permitted. The floodway must be wide enough so that the floodway fringe could be completely obstructed without increasing the water surface elevation of the 1-percent annual chance flood more than 1 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to floodplain development are shown in Figure 4.

To participate in the NFIP, federal regulations require communities to limit increases caused by encroachment to 1.0 foot, provided that hazardous velocities are not produced. Regulations for the State of Illinois require communities in Cook County to limit increases caused by encroachment to 0.1 foot, no more than a 10 percent reduction in floodplain volume, and no more than a 10 percent increase in average velocity. The floodways in this project are presented to local agencies as minimum standards that can be adopted directly or that can be used as a basis for additional floodway projects.

Figure 4: Floodway Schematic



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

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

2.3 Base Flood Elevations

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

Cross sections with BFEs shown on the FIRM correspond to the cross sections shown in the Floodway Data table and Flood Profiles in this FIS Report. BFEs 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.

2.4 Non-Encroachment Zones

This section is not applicable to this Flood Risk Project.

2.5 Coastal Flood Hazard Areas

For most areas along rivers, streams, and small lakes, BFEs and floodplain boundaries are based on the amount of water expected to enter the area during a 1-percent annual chance flood and the geometry of the floodplain. Floods in these areas are typically caused by runoff from storm events. However, for areas on or near the Great Lakes, ocean coasts, large rivers, or other large bodies of water, the BFE and floodplain boundaries may be based on additional components that include storm surge and wave dynamics.

Coastal flooding sources that are included in this Flood Risk Project are shown in Table 2.

2.5.1 Water Elevations and the Effects of Waves

Specific terminology is used in coastal analyses to indicate which components have been included in evaluating flood hazards.

The stillwater elevation (SWEL or still water level) is the surface of the water resulting from astronomical tides, storm surge, and freshwater inputs, but excluding wave setup contribution or the effects of waves.

- *Astronomical tides* are periodic rises and falls in large bodies of water caused by the rotation of the earth and by the gravitational forces exerted by the earth, moon and sun. Tidal-induced fluctuations in the Great Lakes are small and their presence is masked by the normal fluctuations due to atmospheric forcing. The Great Lakes can be treated as if no tidal signal exists, and this contribution to water levels is neglected.
- *Storm surge, inclusive of wind setup and seiche-induced fluctuation*, is the additional water depth that occurs during large storm events. These events can bring air pressure changes and strong winds that force water up against the shore. The most common cause of a large seiche in the Great Lakes is the oscillating water level after a storm that moves over the lake, with the downwind portion of the lake subject to wind setup as water piles up against the coast and the upwind portion subject to a decrease in water levels.
- *Freshwater inputs* include rainfall that falls directly on the body of water, runoff from surfaces and overland flow, and inputs from rivers.

The 1-percent annual chance stillwater elevation is the stillwater elevation that has been calculated for a storm surge from a 1-percent annual chance storm. The 1-percent annual chance storm surge can be determined from analyses of water level station records, statistical study of regional historical storms, or other modeling approaches. Stillwater elevations for storms of other frequencies can be developed using similar approaches.

The total stillwater elevation (also referred to as the mean water level) is the stillwater elevation plus wave setup contribution but excluding the other effects of waves, such as wave runup and overland wave propagation.

- *Wave setup* is the increase in stillwater elevation at the shoreline caused by the breaking of waves in shallow water. It occurs as breaking wave momentum is transferred to the water column.

Like the stillwater elevation, the total stillwater elevation is based on a storm of a particular frequency, such as the 1-percent annual chance storm. Wave setup is typically estimated using standard engineering practices or calculated using models, since water level stations are often located in areas sheltered from wave action and do not capture wave height or wave setup information.

Coastal analyses may examine the effects of overland waves by analyzing storm-induced erosion, overland wave propagation, wave runup, and/or wave overtopping.

- *Storm-induced erosion* is the modification of existing topography by erosion caused by a specific storm event, as opposed to long-term erosion that occurs over time.
- *Overland wave propagation* describes the combined effects of variation in ground elevation, vegetation, and physical features on wave characteristics as waves move onshore.
- *Wave runup* is the uprush of water from wave action on a shore barrier. It is a function of the roughness and geometry of the shoreline at the point where the stillwater elevation intersects the land, as shown in Figure 5a.
- *Wave overtopping* refers to the flooding that occurs when wave runup passes over the crest of a barrier, as shown in Figure 5b.

Figure 5a: Wave Runup Transect Schematic

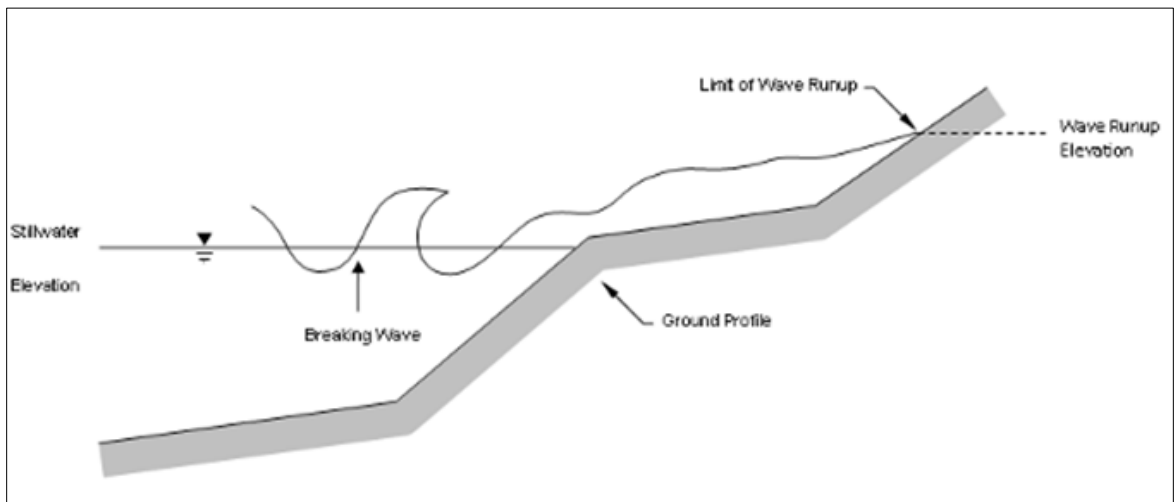


Figure 5b: Wave Overtopping Schematic



2.5.2 Floodplain Boundaries and BFEs for Coastal Areas

For coastal communities along the Atlantic and Pacific Oceans, the Gulf of Mexico, the Great Lakes, and the Caribbean Sea, flood hazards must take into account how storm surges, waves, and in some cases extreme tides or lake level variations interact with factors such as topography, structures, and vegetation. Storm surge and waves must also be considered in assessing flood risk for certain communities on rivers or large inland bodies of water.

Beyond areas that are affected by storm surge and waves, coastal communities can also have riverine floodplains with designated floodways, as described in previous sections.

Floodplain Boundaries

In many coastal areas, storm surge is the principle component of flooding. The extent of the 1-percent annual chance floodplain in these areas is derived from the stillwater elevation for the 1-percent annual chance storm. The methods used for calculation of stillwater elevations for coastal areas are described in Section 5.3 of this FIS Report.

In areas dominated by overland wave propagation, the coastal BFEs represent the wave dissipation and generation as the wave propagates landward from the shoreline. The landward extent of the 1-percent-annual-chance floodplain is determined by the stillwater elevation with the addition of wave setup, where applicable. The methods used for calculation of wave setup and overland wave propagation are described in Section 5.3 of this FIS Report.

In some areas, the 1-percent-annual-chance floodplain is determined based on the limit of wave runup or wave overtopping for the 1-percent-annual-chance storm surge. The Special Flood Hazard Area (SFHA) extent is determined based on the elevation of the land in relation to the wave runup elevation or the amount of wave overtopping. For areas dominated by wave runup, the coastal BFE can vary from reach to reach. Where wave runup exceeds the crest of a coastal feature, the SFHA extent is determined by the limit of the overtopping zone. The methods that were used for calculation of wave runup and overtopping hazards are described in Section 5.3 of this FIS Report.

Table 25 presents the types of coastal analyses that were used in mapping the 1-percent annual chance floodplain in coastal areas.

Coastal BFEs

Coastal BFEs are calculated as the stillwater elevation for the 1-percent annual chance storm plus the additional flood hazard from wave effects (storm-induced erosion, wave setup, overland wave propagation, wave runup and wave overtopping).

Where they apply, coastal BFEs are calculated along transects extending from offshore to the limit of coastal flooding onshore. Results of these analyses are accurate until local topography, vegetation, or development type and density within the community undergoes major changes.

Parameters that were included in calculating coastal BFEs for each transect included in this FIS Report are presented in Table 16, "Coastal Transect Parameters." The locations of transects are shown in Figure 9, "Transect Location Map." More detailed information about the methods used in coastal analyses and the results of intermediate steps in the coastal analyses are presented in Section 5.3 of this FIS Report. Additional information on specific mapping methods is provided in Section 6.4 of this FIS Report.

2.5.3 Coastal High Hazard Areas

Certain areas along the open coast and other areas may have higher risk of experiencing structural damage caused by wave action and/or high-velocity water during the 1-percent annual chance flood. These areas will be identified on the FIRM as Coastal High Hazard Areas.

- *Coastal High Hazard Area (CHHA)* is a SFHA extending from offshore to the inland limit of the primary frontal dune (PFD) or any other area subject to damages caused by wave action and/or high-velocity water during the 1-percent annual chance flood.
- *Primary Frontal Dune (PFD)* is a continuous or nearly continuous mound or ridge of sand with relatively steep slopes immediately landward and adjacent to the beach. The PFD is subject to erosion and overtopping from high tides and waves during major coastal storms.

The landward limit of the PFD occurs at a point where there is a distinct change from a relatively steep slope to a relatively mild slope; this point represents the landward extension of Zone VE.

CHHAs are designated as "VE" zones (for "velocity wave zones") and are subject to more stringent regulatory requirements and a different flood insurance rate structure. BFEs are assigned to Zone VE on the FIRM. More detailed information about the identification and designation of Zone VE is presented in Section 6.4 of this FIS Report.

Areas that are not within the CHHA but are SFHAs may still be impacted by coastal flooding and damaging waves; these areas are shown as "AE" zones on the FIRM.

Figure 6a, "Coastal Transect Schematic (Wave Runup and Overtopping)," illustrates the relationship between the base flood elevation, the 1-percent-annual-chance stillwater elevation, and the ground profile as well as the location of the Zone VE and Zone AE/AO in areas subject to wave runup and overtopping.

Figure 6a: Coastal Transect Schematic (Wave Runup and Overtopping)

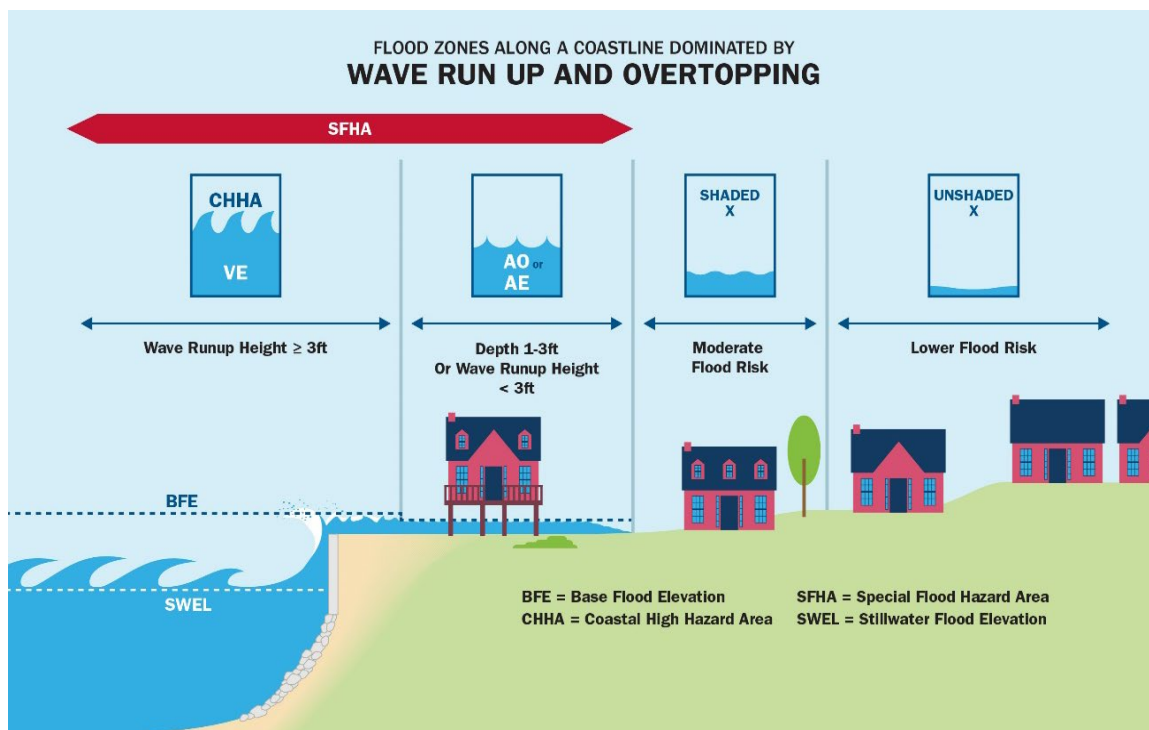
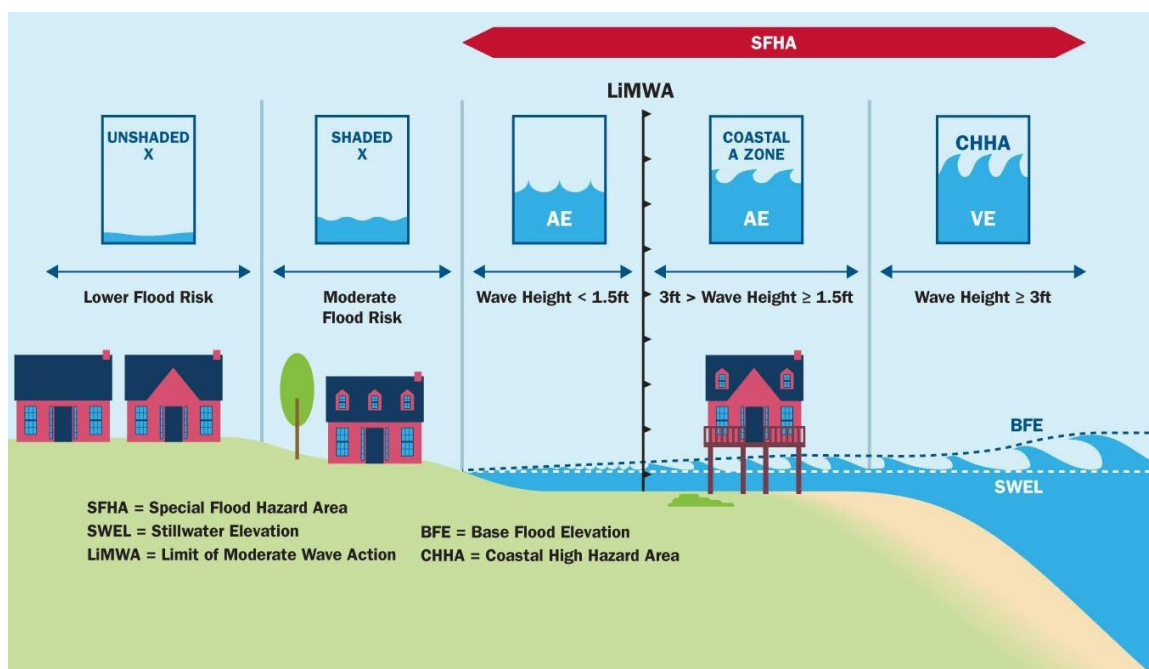


Figure 6b, “Coastal Transect Schematic (Overland Wave Propagation),” illustrates the relationship between the base flood elevation, the 1-percent-annual-chance stillwater elevation, and the ground profile as well as the location of the Zone VE and Zone AE in areas subject to overland wave propagation. This figure also illustrates energy dissipation and regeneration of a wave as it moves inland.

Figure 6b: Coastal Transect Schematic (Overland Wave Propagation)



Methods used in coastal analyses in this Flood Risk Project are presented in Section 5.3 and mapping methods are provided in Section 6.4 of this FIS Report.

Coastal floodplains are shown on the FIRM using the symbology described in Figure 3, “Map Legend for FIRM.” The BFE mapped on the FIRM at the shoreline is determined by the 1-percent-annual-chance total water elevation, which includes the stillwater elevation plus wave effects. The 1-percent-annual-chance total water elevations are included in Table 16, along with the statistical stillwater elevations. If the BFE on the FIRM is higher than the stillwater elevations shown in Table 16 due to the presence of wave effects, the higher elevation should be used for construction and/or floodplain management purposes.

2.5.4 Limit of Moderate Wave Action

Laboratory tests and field investigations have shown that wave heights as little as 1.5 feet can cause damage to and failure of typical Zone AE building construction. Wood-frame, light gage steel, and masonry walls on shallow footings or slabs are subject to damage when exposed to waves less than 3 feet in height. Other flood hazards associated with coastal waves (floating debris, high velocity flow, erosion, and scour) can also damage Zone AE construction.

Therefore, a LiMWA boundary may be shown on the FIRM as an informational layer to assist coastal communities in safe rebuilding practices. The LiMWA represents the approximate landward limit of the 1.5-foot breaking wave. The location of the LiMWA relative to Zone VE and Zone AE is shown in Figure 6b.

The effects of wave hazards in Zone AE between Zone VE (or the shoreline where Zone VE is not identified) and the LiMWA boundary are similar to, but less severe than, those in Zone VE where 3-foot or greater breaking waves are projected to occur during the 1-

percent annual chance flooding event. Communities are therefore encouraged to adopt and enforce more stringent floodplain management requirements than the minimum NFIP requirements in areas lakeward of the LiMWA. The NFIP Community Rating System provides credits for these actions.

In areas where wave runup elevations dominate over wave crest elevations (Figure 6a), the LiMWA should not be shown on the FIRM. Examples of runup dominated areas include shorelines with steeply sloped beaches, bluffs, or flood protection structures that lie parallel to the shore. Similarly, in areas where the Zone VE designation is based on the presence of a PFD or wave overtopping, the LiMWA is not shown on the FIRM.

SECTION 3.0 – INSURANCE APPLICATIONS

3.1 National Flood Insurance Program Insurance Zones

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

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

Table 3 lists the flood insurance zones in Cook County.

Table 3: Flood Zone Designations by Community

Community	Flood Zone(s)
Alsip, Village of	A, AE, X
Arlington Heights, Village of	A, AE, X
Barrington, Village of	A, AE, X
Barrington Hills, Village of	A, AE, X
Bartlett, Village of	A, X
Bedford Park, Village of	A, AE, X
Bellwood, Village of	AE, X
Bensenville, Village of	X
Berkeley, Village of	X
Berwyn, City of	X
Blue Island, City of	A, AE, X
Bridgeview, Village of	AE, X
Broadview, Village of	AE, X
Brookfield, Village of	AE, X
Buffalo Grove, Village of	A, AE, X
Burbank, City of	X
Burnham, Village of	A, AE, X
Burr Ridge, Village of	AE, X
Calumet City, City of	A, AE, X
Calumet Park, Village of	A, AE, X
Chicago, City of	A, AE, AH, AO, VE, X
Chicago Heights, City of	A, AE, X
Chicago Ridge, Village of	A, AE, X
Cicero, Town of	X
Cook County Unincorporated Areas	A, AE, AO, VE, X
Country Club Hills, City of	A, AE, X
Countryside, City of	AE, X
Crestwood, Village of	A, AE, X
Crete, Village of	A, X
Deer Park, Village of	X
Deerfield, Village of	AE, X
Des Plaines, City of	A, AE, AH, X

Table 3: Flood Zone Designation by Community (continued)

Community	Flood Zone(s)
Dixmoor, Village of	A, AE, AH, X
Dolton, Village of	A, AE, X
East Dundee, Village of	X
East Hazel Crest, Village of	A, X
Elgin, City of	A, AE, X
Elk Grove Village, Village of	A, AE, X
Elmhurst, City of	X
Elmwood Park, Village of	AE, X
Evanston, City of	A, AE, AH, AO, VE, X
Evergreen Park, Village of	X
Flossmoor, Village of	A, AE, X
Ford Heights, Village of	A, AE, X
Forest Park, Village of	AE, X
Forest View, Village of	A, X
Frankfort, Village of	X
Franklin Park, Village of	AE, X
Glencoe, Village of	A, AE, VE, X
Glenview, Village of	AE, X
Glenwood, Village of	A, AE, X
Golf, Village of	AE, X
Hanover Park, Village of	AE, X
Harvey, City of	A, AE, AH, X
Harwood Heights, Village of	X
Hazel Crest, Village of	A, AE, X
Hickory Hills, City of	AE, AH, X
Highland Park, City of	AE, X
Hillside, Village of	AE, X
Hinsdale, Village of	A, AE, X
Hodgkins, Village of	A, AE, X
Hoffman Estates, Village of	A, AE, X
Homer Glen, Village of	A, AE, X
Hometown, City of	X
Homewood, Village of	A, AE, X

Table 3: Flood Zone Designation by Community (continued)

Community	Flood Zone(s)
Indian Head Park, Village of	AE, X
Inverness, Village of	A, AE, X
Justice, Village of	A, AE, AH, X
Kenilworth, Village of	AE, VE, X
La Grange, Village of	AE, X
La Grange Park, Village of	A, AE, AH, X
Lansing, Village of	AE, X
Lemont, Village of	A, AE, X
Lincolnwood, Village of	A, X
Lynwood, Village of	A, AE, X
Lyons, Village of	A, AE, X
Markham, City of	A, AE, X
Matteson, Village of	A, AE, X
Maywood, Village of	AE, X
McCook, Village of	A, AE, X
Melrose Park, Village of	AE, X
Merrionette Park, Village of	A, X
Midlothian, Village of	AE, AH, X
Morton Grove, Village of	AE, X
Mount Prospect, Village of	A, AE, X
Niles, Village of	A, AE, X
Norridge, Village of	X
North Riverside, Village of	AE, X
Northbrook, Village of	A, AE, X
Northfield, Village of	A, AE, X
Northlake, City of	AE, X
Oak Brook, Village of	X
Oak Forest, City of	A, AE, X
Oak Lawn, Village of	A, AE, AH, X
Oak Park, Village of	X
Olympia Fields, Village of	A, AE, X
Orland Hills, Village of	A, AE, X
Orland Park, Village of	A, AE, X

Table 3: Flood Zone Designation by Community (continued)

Community	Flood Zone(s)
Palatine, Village of	A, AE, X
Palos Heights, City of	A, AE, AO, X
Palos Hills, City of	A, AE, X
Palos Park, Village of	A, AE, X
Park Forest, Village of	AE, X
Park Ridge, City of	AE, X
Phoenix, Village of	X
Posen, Village of	A, X
Prospect Heights, City of	A, AE, X
Richton Park, Village of	A, AE, X
River Forest, Village of	AE, X
River Grove, Village of	AE, X
Riverdale, Village of	A, AE, X
Riverside, Village of	AE, X
Riverwoods, Village of	X
Robbins, Village of	A, AE, X
Rolling Meadows, City of	A, AE, X
Roselle, Village of	X
Rosemont, Village of	AE, AH, X
Sauk Village, Village of	A, AE, X
Schaumburg, Village of	A, AE, X
Schiller Park, Village of	AE, X
Skokie, Village of	A, X
South Barrington, Village of	A, AE, X
South Chicago Heights, Village of	A, AE, X
South Holland, Village of	AE, X
Steger, Village of	A, AE, X
Stickney, Village of	A, X
Stone Park, Village of	AE, X
Streamwood, Village of	A, AE, X
Summit, Village of	A, X
Thornton, Village of	A, AE, X
Tinley Park, Village of	A, AE, AO, X

Table 3: Flood Zone Designation by Community (continued)

Community	Flood Zone(s)
University Park, Village of	AE, X
Westchester, Village of	A, AE, AO, X
Western Springs, Village of	A, AE, X
Wheeling, Village of	A, AE, X
Willow Springs, Village of	A, AE, X
Wilmette, Village of	A, AE, AO, VE, X
Winnetka, Village of	A, AE, VE, X
Woodridge, Village of	X
Worth, Village of	A, AE, X

SECTION 4.0 – AREA STUDIED

4.1 Basin Description

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

Table 4: Basin Characteristics

HUC-8 Sub-Basin Name	HUC-8 Sub-Basin Number	Primary Flooding Source	Description of Affected Area	Drainage Area (square miles)
Chicago	07120003	Chicago River	Largest watershed in Cook County, incorporates the city of Chicago. Covers about 40% of Cook County with 457 square miles.	656
Des Plaines	07120004	Des Plaines River	Second largest watershed in Cook County, located on the western side of the county. Covers about 33% of Cook County with 378 square miles.	1455
Lake Michigan	04060200	Lake Michigan	Located on the eastern side of the county and consists of the coastline. Covers about 15% of Cook County with 173 square miles.	22,473
Little Calumet-Galien	04040001	Little Calumet River	Watershed located on the southeastern area of Cook County, consists mostly of the city of Chicago. Covers about 1% of Cook County with 15 square miles.	689

Table 4: Basin Characteristics (continued)

HUC-8 Sub-Basin Name	HUC-8 Sub-Basin Number	Primary Flooding Source	Description of Affected Area	Drainage Area (square miles)
Lower Fox	07120007	Fox River	Located in the northwestern area of the county. Contains the smallest area of county, only about 5 square miles.	1,103
Pike-Root	04040002	Pike River	Located on the northeast section of Cook County and consists mostly of the coastline. Covers about 3% of Cook County with 31 square miles.	418
Upper Fox	07120006	Fox River	Watershed located in the northwestern section of Cook County. Covers about 6% of Cook County with 71 square miles.	1,544

4.2 Principal Flood Problems

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

Table 5: Principal Flood Problems

Flooding Source	Description of Flood Problems
Addison Creek	In April 2013, A record peakflow and river stage were recorded at the Bellwood, Illinois Gage (USGS Gage 055320000) (CNN 2008). Addison Creek has had continued significant risk for damages from overbank flooding due to communities' proximity to the creek (USGS 2017).
Chicago River, North Branch	6.64 inches of rain fell at O'Hare International Airport in September 2008 causing flooding (CNN 2008). In April 2013, heavy rain caused flooding (USGS 2017).
Des Plaines River	In September 1986, 10,000 dwellings and 263 business and industrial sites were flooded costing \$35 million in damages, displaced 15,000 people, and 7 lives were lost (FEMA). In April 2013, a record peak streamflow was recorded at USGS Gage 00529000 and superseded in April and November 2015 (USGS 2017).
Des Plaines River and Chicago River, North Branch	Between 4 and 8 inches of rain fell between April 17 and April 18, 2013 including areas experiencing up to 2 inches per hour. This along with the saturated soils and high water elevations of the surrounding streams, caused record flooding on portions of the Des Plaines River and the Chicago River, North Branch (NWS).

Table 5: Principal Flood Problems (continued)

Flooding Source	Description of Flood Problems
Chicago River, North Branch - West Fork; Chicago River, North Branch - Middle Fork; Chicago River, North Branch - Skokie River	Many factors increase the frequency of flooding and higher flood stages of the Chicago River, North Branch. These are the urbanization of upland areas in the watershed, floodplain encroachment, and floodplain development. Floods on these watersheds are affected by storm direction and intense rain events cause severe local flooding (FEMA 2015). The average annual flood damages for the Chicago River, North Branch Watershed was estimated at \$2,995,000 for 2014 (MWRDGC 2014).
Little Calumet River	Historic flooding and stream bank erosion is prevalent around this stream. Average annual flood damages have been estimated at \$5,835,000. The third highest river stage occurred at the South Holland, Illinois Gage during the 2008 flood (CDM 2009, MWRDGC 2014, and USGS 2017).
Flooding Sources Countywide	In September 2008, northeastern Illinois experienced flooding due to 2.39 to 10.51 inches of rain falling in a 51-hour window. The flooding caused evacuations, road closures, and damage to residences, businesses, and infrastructure. This was declared a Major Disaster on October 3, 2008 (USGS 2012).
Poplar Creek	The peak streamflow and river stages were set during the 2008 and 2013 floods (USGS 2017).
Salt Creek	Historic flooding and stream bank erosion problems exist in northwestern Cook County (MWRDGC NOV 2009). The river stage of record was set in August 1987 at Rolling Meadows, Illinois. A record 9.35 inches of rain fell at O'Hare International Airport between 9:16 p.m. Thursday, August 13 th , and 2:45 p.m. Friday, August 14 th . New peaks of record were set at Rolling Meadows and Western Springs (Curtis 1987). The second highest recorded river stage occurred in 2008 (USGS 2017).
Stony Creek (East), Stony Creek (West), Calumet Sag Channel	The Stony Creek system has a dense development within its area subject to flooding combined with the flat topography of the area results in significant damages (MWRDGC 2009). The 2014 average annual flood damages were estimated at \$2,646,000 (MWRDGC 2014).

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

Table 6: Historic Flooding Elevations

Flooding Source	Location	Historic Peak (Feet NAVD88)	Event Date	Approximate Recurrence Interval (years)	Source of Data
Des Plaines River	Des Plaines, Illinois	630.49	04/11/2015	N/A	USGS Gage 05529000
Des Plaines River	Des Plaines, Illinois	630.01	11/28/2015	N/A	USGS Gage 05529000

Table 6: Historic Flooding Elevations (continued)

Flooding Source	Location	Historic Peak (Feet NAVD88)	Event Date	Approximate Recurrence Interval (years)	Source of Data
Des Plaines River	Des Plaines, Illinois	626.96	04/19/2013	N/A	USGS Gage 05529000
Des Plaines River	Des Plaines, Illinois	626.91	10/01/1986	N/A	USGS Gage 05529000
Des Plaines River	Des Plaines, Illinois	626.03	09/14/2008	N/A	USGS Gage 05529000
Little Calumet River	South Holland, Illinois	595.22	11/28/1990	N/A	USGS Gage 05536290
Little Calumet River	South Holland, Illinois	594.92	06/14/1981	N/A	USGS Gage 05536290
Little Calumet River	South Holland, Illinois	594.88	09/14/2008	N/A	USGS Gage 05536290
Little Calumet River	South Holland, Illinois	594.83	07/14/1957	N/A	USGS Gage 05536290
Little Calumet River	South Holland, Illinois	594.73	07/19/1996	N/A	USGS Gage 05536290
North Branch Chicago River	Niles, Illinois	613.84	09/13/2008	N/A	USGS Gage 05536000
North Branch Chicago River	Niles, Illinois	613.83	04/18/2013	N/A	USGS Gage 05536000
North Branch Chicago River	Niles, Illinois	613.06	08/14/1987	N/A	USGS Gage 05536000
North Branch Chicago River	Niles, Illinois	612.34	02/21/1997	N/A	USGS Gage 05536000
North Branch Chicago River	Niles, Illinois	611.79	07/23/2011	N/A	USGS Gage 05536000
Poplar Creek	Elgin, Illinois	723.41	09/13/2008	N/A	USGS Gage 05550500
Poplar Creek	Elgin, Illinois	723.14	04/18/2013	N/A	USGS Gage 05550500
Poplar Creek	Elgin, Illinois	722.50	02/21/1997	N/A	USGS Gage 05550500
Poplar Creek	Elgin, Illinois	722.33	05/15/2020	N/A	USGS Gage 05550500
Poplar Creek	Elgin, Illinois	722.27	12/28/2008	N/A	USGS Gage 05550500
Salt Creek	Rolling Meadows, Illinois	700.15	08/14/1987	N/A	USGS Gage 05530990

Table 6: Historic Flooding Elevations (continued)

Flooding Source	Location	Historic Peak (Feet NAVD88)	Event Date	Approximate Recurrence Interval (years)	Source of Data
Salt Creek	Rolling Meadows, Illinois	699.11	09/13/2008	N/A	USGS Gage 05530990
Salt Creek	Rolling Meadows, Illinois	698.68	12/03/1982	N/A	USGS Gage 05530990
Salt Creek	Rolling Meadows, Illinois	698.63	07/23/2011	N/A	USGS Gage 05530990
Salt Creek	Rolling Meadows, Illinois	697.66	08/04/1989	N/A	USGS Gage 05530990

4.3 Non-Levee Flood Protection Measures

Table 7 contains information about non-levee flood protection measures within Cook County such as dams, jetties, and or dikes. Levees are addressed in Section 4.4 of this FIS Report.

Table 7: Non-Levee Flood Protection Measures

Flooding Source	Structure Name	Type of Measure	Location	Description of Measure
Addison Creek	William Redmond Reservoir	Reservoir	Village of Bensenville	685-acre-foot stormwater retention reservoir constructed in 1974 by IDNR. In 1999, the reservoir was modified to reshape the side-slope, replace the spillway chutes, and extend the pump station intake structure.
Calumet Union Drainage Ditch	N/A	Channel Improvements	From Halsted Street to Western Avenue in the City of Calumet City	MWRD constructed 1.74 miles of channel improvements along with 0.25 miles of concrete lining in 1988.
Cherry Creek	Calumet Union Reservoir	Reservoir	Located along Rockwell Avenue in the Village of Hazel Crest	A 650-acre-foot flood storage capacity constructed in 1976 by MSDGC (now MWRD).
Chicago River, North Branch, West Fork	Deerfield Reservoir	Reservoir	Village of Deerfield	It is a 575-acre-foot reservoir constructed in 1994 by the USACE designed for the 1-percent annual chance storm event and drains approximately 5,760 acres.
Chicago River, North Branch, West Fork	Techny Reservoirs	Reservoir	Glenview, Village of; Northbrook, Village of	The reservoirs were completed in 1979.
Crystal Creek	Crystal Creek Flood Control Project	Stream Improvement	Village of Franklin Park, Village of Schiller Park, and Cook County, Unincorporated Areas	Stream improvement designed and constructed by IDNR between 1991 and 2014.
Deer Creek	Deer Creek Reservoir	Reservoir	Village of Ford Heights	A 238-acre-foot gravity flow reservoir constructed by USACE.

Table 7: Non-Levee Flood Protection Measures (continued)

Flooding Source	Structure Name	Type of Measure	Location	Description of Measure
Lansing Ditch	N/A	Diversion weir	Approximately one mile south of Glenwood-Lansing Road and one-half mile east of Burnham Avenue	A diversion weir located on Lansing Ditch near the USGS stream gage near Lansing splits flow between Lansing Ditch and Lansing Ditch Lynwood Tributary.
McDonald Creek	N/A	Network of sewers and retention basins	Village of Arlington Heights	A complex network of storm sewers and retention basins retain and release runoff.
Midlothian Creek, North Branch Tributary	Midlothian Creek (Fernway Subdivision) Flood Control Project	Channel Improvement	Fernway Park Subdivision in the Village of Orland Park	This project includes culvert replacement underneath 171 st Street on the North Branch Tributary, construction of a diversion channel from 171 st Street to Midlothian Creek, and channel improvements on Midlothian Creek from the diversion channel to a detention basin on Tinley Park's property.
Salt Creek	Busse Woods Structure No. 1	Reservoir	Elk Grove Village	Three structures, Busse Woods Main Dam, North and South Lateral Dams, and Higgins Road and State Route 53, form the Busse Woods Reservoir.
Salt Creek	N/A	Diversion Conduit	Between Salt Creek and the Des Plaines River in the Village of Brookfield.	The State of Illinois constructed this conduit to reduce the peak discharges of Salt Creek through the Village of Brookfield. The flow has been reduced from 45 to 25 percent for the 10- to 0.2-percent annual chance floods.
Salt Creek	Tom T. Hamilton and Margreth Riemer Reservoirs	Reservoirs	Village of Palatine	These are off-channel, pump-evacuated reservoirs.

Table 7: Non-Levee Flood Protection Measures (continued)

Flooding Source	Structure Name	Type of Measure	Location	Description of Measure
Salt Creek Tributary C, Salt Creek Tributary D	Plum Grove, Structure No. 2; Plum Grove Structure No. 3	Drainage Structures	City of Plum Grove and Cook County, Unincorporated Areas	Gravity drained structures with concrete outlet structures and grassed emergency spillways.
Surface Runoff	Edward C. Howell Reservoir	Reservoir	East side of the Tri-State Tollway (I-294) immediately north of 167 th Street within the City of Markham.	A 400-acre-foot flood storage facility built in 1987 by MWRD.
Surface Runoff	McCook Reservoir	Reservoir	Village of Bedford Park	It was completed in 2017 and provides \$114 million in annual flood damage protection (MWRDGC 2017).
Surface Runoff	Oak Creek Plaza Detention Pond	Reservoir	Located southwest of the intersection of Long Street and 157 th Street in Oak Forest	A 97-acre-foot flood control facility constructed in 1988 by the City of Oak Forest.
Surface Runoff	Tinley Park Reservoir	Reservoir	Located northeast of the intersection of 80 th Street and 170 th Street in Tinley Park	A 616-acre-foot flood storage facility constructed in 1989. The reservoir is equipped with a by-pass channel.
Surface Runoff	Twin Lakes Reservoir	Reservoir	Located between 163 rd Street and 167 th Street in unincorporated Cook County	A 920-acre-foot flood storage facility constructed in 1974 by IDNR.
Thornton Creek	Thornton Composite Reservoir	Reservoir	Village of Thornton	Part of TARP and was completed in 2015. It protects 182,000 buildings and provides \$40 million in annual flood damage protection (MWRDGC 2017).
Upper Des Plaines/O'Hare Tunnel System	O'Hare Chicago Underflow Plan (CUP) Reservoir	Reservoir	Elk Grove Township	USACE constructed reservoir was placed in service in 1999 and holds 345 million gallons of combined sewer overflow.

Table 7: Non-Levee Flood Protection Measures (continued)

Flooding Source	Structure Name	Type of Measure	Location	Description of Measure
Varies	N/A	Reservoirs	Varies	Three reservoirs under construction to add 17 billion gallons of capacity by 2029 (Phase II of TARP)
Varies	N/A	Tunnels	Varies	109 miles of tunnels with 2.3 billion gallons of capacity (Phase I of Tunnel and Reservoir Plan (TARP))
Willow-Higgins Creek	Touhy Avenue Reservoir	Reservoir	O'Hare International Airport	Two-cell reservoir designed and constructed by the City of Chicago. Cell 1 is a 450-acre-foot excavated pump reservoir completed in 1984, and cell 2 is a 720 acre-foot excavated pump reservoir completed in 2005.
Willow-Higgins Creek	Willow-Higgins Reservoir	Reservoir	O'Hare International Airport	It is a 1,300-acre-foot pump-out reservoir designed and constructed by the City of Chicago placed in service in 2005 to assist with the drainage of O'Hare International Airport.

4.4 Levee Systems

For purposes of the NFIP, FEMA only recognizes levee systems that meet, and continue to meet, minimum design, operation, and maintenance standards that are consistent with comprehensive floodplain management criteria. The Code of Federal Regulations, Title 44, Section 65.10 (44 CFR 65.10) describes the information needed for FEMA to determine if a levee system reduces the flood hazard from the 1-percent-annual-chance flood. This information must be supplied to FEMA by the community or other party when a flood risk study or restudy is conducted, when FIRMs are revised, or upon FEMA request. FEMA reviews the information for the purpose of establishing the appropriate flood hazard zone.

Levee systems that are determined to reduce the hazard from the 1-percent-annual-chance flood are accredited by FEMA. FEMA can also grant provisional accreditation to a levee system that was previously accredited on an effective FIRM and for which FEMA is awaiting data and/or documentation to demonstrate compliance with 44 CFR 65.10. These levee systems are referred to as Provisionally Accredited Levees, or PALs. Provisional accreditation provides communities and levee owners with a specified timeframe to obtain

the necessary data to confirm the levee system's accreditation status. Accredited levee systems and PALs are shown on the FIRM using the symbology shown in Figure 3. If the required information for a PAL is not submitted within the required timeframe, or if information indicates that a levee system no longer meets 44 CFR 65.10, FEMA will consider the levee system as non-accredited and issue an effective FIRM showing the levee-impacted area as a SFHA or Zone D.

FEMA coordinated with the USACE, the local communities, and other organizations to compile a list of levee systems that exist within Cook County. Table 8, "Levee Systems," lists all accredited levee systems, PALs, and non-accredited levee systems shown on the FIRM for this FIS Report. Other categories of levees may also be included in the table. The Levee ID shown in this table may not match numbers based on other identification systems that were listed in previous FIS Reports. Levee systems identified in the table are displayed on the FIRM with notes to users to indicate their flood hazard mapping status.

Please note that the information presented in Table 8 is subject to change at any time. For that reason, the latest information regarding the levee systems presented in the table may be obtained by accessing the National Levee Database. For additional information, contact the levee owner/sponsor or the local community shown in Table 30.

Table 8: Levee Systems

Community	Flooding Source(s)	NLD Levee System ID	NLD Levee System Name	Levee System Status on Effective FIRM	FIRM Panel(s)	Levee Owner(s) / Sponsor(s)
Calumet City, City of	Little Calumet River	2605000010	Hammond Forest Ave	Non-Accredited	17031C0759J	USACE - Chicago District
Calumet City, City of Lansing, Village of	Little Calumet River	2605000012	Calumet City	Non-Accredited	17031C0756J 17031C0758J 17031C0759J	USACE - Chicago District
Cook County, Unincorporated Areas Des Plaines, City of Park Ridge, City of	Des Plaines River	2605000007	Levee 50	Non-Accredited	17031C0217J 17031C0236J 17031C0238J	USACE - Chicago District
Lansing, Village of	Little Calumet River	2605000011	Lansing	Non-Accredited	17031C0758J 17031C0759J	USACE - Chicago District
Lansing, Village of	Little Calumet River	2605000006	Munster	Non-Accredited	17031C0759J	USACE - Chicago District
Lyons, Village of McCook, Village of Summit, Village of	Des Plaines River	1505001130	Cook County Levee 1	Non-Accredited	17031C0487J 17031C0491J	N/A
Mount Prospect, Village of Prospect Heights, City of	Des Plaines River	2605000008	Levee 37	Non-Accredited	17031C0207J 17031C0209J	USACE - Chicago District
River Grove, Village of	N/A	1505901448	N/A	Non-Accredited	17031C0387J	N/A
Westchester, Village of	Salt Creek Tributary	1505001131	Village of Westchester Unnamed Levee	Non-Accredited	17031C0459J	N/A

SECTION 5.0 – ENGINEERING METHODS

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

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

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

5.1 Hydrologic Analyses

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

A summary of the discharges is provided in Table 9. Frequency Discharge-Drainage Area Curves used to develop the hydrologic models may also be shown in Figure 8 for selected flooding sources. A summary of stillwater elevations developed for non-coastal flooding sources is provided in Table 10. (Coastal stillwater elevations are discussed in Section 5.3 and shown in Table 16.) Stream gage information is provided in Table 11.

Table 9: Summary of Discharges

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

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Addison Creek	Approximately 50 feet upstream of Monroe Street	13.4	976	*	1,228	1,401	1,690
Addison Creek	Approximately 240 feet upstream of Chicago and North Western Railway	13.2	734	*	1,145	1,304	1,570
Addison Creek	Approximately 540 feet downstream of Chicago and North Western Railway	13.0	719	*	1,115	1,276	1,520
Addison Creek	Approximately 520 feet upstream of Chicago and North Western Railway	12.5	594	*	900	1,087	1,510
Addison Creek	Approximately 280 feet downstream of Lake Street	11.3	494	*	774	863	1,060
Addison Creek	Approximately 200 feet upstream of Mannheim Road	10.9	440	*	720	809	1,000
Addison Creek	Approximately 240 feet downstream of North Avenue	8.2	236	*	380	505	860
Addison Creek	Approximately 280 feet upstream of Prater Avenue	8.1	215	*	353	481	840
Addison Creek	Approximately 620 feet upstream of Palmer Avenue	6.8	161	*	374	473	780

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Addison Creek	Approximately 650 feet downstream of Tri-State Tollway	6.0	517	*	802	951	1,370
Alsip Drainage Ditch	Just upstream of Pulaski Road	0.4	88	*	166	212	*
Arroyo Ditch	At confluence with Boca Rio Ditch	0.2	43	64	85	110	179
Belaire Creek	At confluence with Dixie Creek	0.6	68	*	103	119	154
Belly Deep Slough	Just upstream of 95 th Street	0.2	*	*	*	429	*
Boca Rio Ditch	At confluence with Tinley Creek	2.6	402	610	824	1,080	1,760
Boca Rio Ditch	At 147 th Street	1.9	317	479	644	842	1,353
Boca Rio Ditch	At 151 st Street	0.9	135	210	287	381	617
Buffalo Creek	At Elmhurst Road	20.8	870	*	1,430	1,680	2,470
Buffalo Creek	Approximately 6,230 feet downstream of Buffalo Grove Road	20.5	800	*	1,390	1,650	2,420
Buffalo Creek	At Buffalo Grove Road	19.2	755	*	1,253	1,510	2,205
Buffalo Creek	At Raupp Boulevard	19.1	750	*	1,245	1,500	2,190
Buffalo Creek	At confluence of White Pine Ditch	19.0	745	*	1,237	1,490	2,175

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Buffalo Creek	At Lake-Cook Road (county boundary)	18.4	715	*	1,187	1,430	2,088
Buffalo Creek Tributary A	At confluence with Buffalo Creek	7.6	370	*	580	690	940
Buffalo Creek Tributary A	At State Route 53	4.3	225	*	360	425	585
Buffalo Creek Tributary A	At Rand Road	3.2	175	*	275	320	450
Buffalo Creek Tributary A	At Hicks Road	2.0	115	*	224	273	376
Buffalo Creek Tributary A	At Dundee Road	0.4	11	*	110	139	207
Buffalo Creek Tributary A	At State Route 68 (Dundee Road)	0.4	45	*	100	140	240
Buffalo Creek Tributary A	At Staples Road	0.1	0	*	0	40	110
Butterfield Creek	At confluence with Thorn Creek	26.0	1,720	*	*	2,740	3,725
Butterfield Creek	At Dixie Highway	23.0	1,650	*	*	2,770	3,920
Butterfield Creek	At Crawford Avenue	9.5	510	*	*	830	1,050
Butterfield Creek	At I-57	4.9	345	*	*	470	540
Butterfield Creek East Branch	At confluence with Butterfield Creek	7.0	1,000	*	*	1,400	1,715
Butterfield Creek East Branch	At Old Plank Road Trail	5.4	900	*	*	1,270	1,580
Butterfield Creek East Branch	At Sauk Trail	1.5	650	*	*	1,050	1,330

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Butterfield Creek East Branch Tributary	At Railroad	2.4	630	*	*	790	*
Butterfield Creek East Branch Tributary	At Cicero Avenue	1.3	480	*	*	700	*
Butterfield Creek East Branch Tributary A	Just downstream of Amy Drive	0.1	35	*	50	57	72
Butterfield Creek East Branch Tributary A	Just upstream of Imperial Drive	0.1	22	*	31	35	45
Butterfield Creek Tributary No. 1	At confluence with Butterfield Creek	0.6	120	*	180	200	250
Butterfield Creek Tributary No. 1	At Vollmer Road	0.5	119	*	171	193	245
Butterfield Creek Tributary No. 3	Just upstream of confluence with Butterfield Creek	0.8	196	*	281	317	402
Butterfield Creek Tributary No. 3	At Kedzie Avenue	0.4	55	*	*	159	*
Butterfield Creek Tributary No.4	Just upstream of confluence with Butterfield Creek Tributary No. 3	0.4	114	*	192	232	334
Butterfield Creek Tributary No.4	At Kedzie Avenue	0.4	55	*	*	159	*
Calumet Sag Channel Tributary A	At State Route 83	1.8	230	*	365	425	595

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Calumet Sag Channel Tributary AA	At confluence with Calumet Sag Channel Tributary A	0.3	70	*	120	170	270
Calumet Sag Channel Tributary B	At confluence with calumet Sag Channel	0.7	213	*	411	545	716
Calumet Sag Channel Tributary B	Just upstream of confluence with unnamed tributary to Calumet Sag Channel Tributary B	0.2	53	*	105	140	185
Calumet Sag Channel Tributary C	At Linder Avenue	0.5	80	*	140	190	290
Calumet Union Drainage Ditch	At Halsted Street	16.9	415	*	746	1,024	1,460
Calumet Union Drainage Ditch	At Park Avenue	12.9	382	*	683	891	1,248
Calumet Union Drainage Ditch	At Dixie Highway	12.7	555	*	870	1,110	1,836
Calumet Union Drainage Ditch	At Tri-State Tollway	2.8	229	*	413	523	675
Calumet Union Drainage Ditch	At Kedzie Avenue	1.9	166	*	299	379	489
Calumet Union Drainage Ditch	At St. Louis Avenue	1.3	96	*	173	219	282
Calumet Union Drainage Ditch Southwest Branch	At Central Park Avenue	2.6	360	*	660	920	1,330

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Calumet Union Drainage Ditch Southwest Branch	At Cypress Avenue	1.3	226	*	402	518	761
Calumet Union Drainage Ditch Southwest Branch Tributary N	At mouth	0.9	168	*	303	401	591
Calumet Union Drainage Ditch Southwest Branch Tributary N	At 175 th Street	0.5	113	*	210	280	415
Calumet Union Drainage Ditch Southwest Branch Tributary S	At mouth	0.6	155	*	285	376	560
Calumet Union Drainage Ditch Southwest Branch Tributary S	At 183 rd Street	0.2	81	*	156	209	316
Calumet Union Drainage Ditch Southwest Branch Tributary S	At 186 th Street	0.0	28	*	50	70	99
Cherry Creek ¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cherry Creek East Branch ¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cherry Creek East Branch Tributary ¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cherry Creek West Branch ¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Data not available

¹See Figures 7a through 7d for discharges

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10-Percent Annual Chance	4-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
Cherry Creek West Branch East Fork ¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chicago River, North Branch	At confluence of North Shore Channel	115	2,375	*	3,600	4,180	5,600
Chicago River, North Branch	At North Kedzie Avenue	114	2,342	*	3,550	4,120	5,520
Chicago River, North Branch	At Touhy Avenue	100	2,850	*	3,650	3,940	4,900
Chicago River, North Branch	At Beckwith Road	92.2	2,850	*	3,660	3,950	4,910
Chicago River, North Branch	At Golf Road	63.6	2,010	*	2,420	2,890	3,380
Chicago River, North Branch	Just Upstream of Glenview Road	61.1	1,830	*	1,967	2,361	2,897
Chicago River, North Branch, Middle Fork	At confluence with Skokie River	25.0	418	*	847	1,004	1,479
Chicago River, North Branch, Middle Fork	At Willow Road	24.1	430	*	814	943	1,338
Chicago River, North Branch, Middle Fork	At a point approximately 800 feet downstream of Sunset Drive	23.1	439	*	793	925	1,425

*Data not available

¹See Figures 7a through 7d for discharges

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Chicago River, North Branch, Middle Fork	At a point approximately 2,000 feet upstream of Sunset Ridge Road	22.4	450	*	767	902	1,451
Chicago River, North Branch, Middle Fork	At Chicago & North Western Railway	22.0	451	*	753	892	1,466
Chicago River, North Branch, Middle Fork	At Dundee Road	21.5	449	*	734	870	1,473
Chicago River, North Branch, Middle Fork	At Interstate Route 94	20.8	438	*	697	830	1,506
Chicago River, North Branch, Middle Fork	At Chicago River, North Branch, Middle Reservoir	20.8	545	*	929	1,134	1,623
Chicago River, North Branch, Middle Fork	At Lake-Cook Road	20.2	521	*	879	1,098	1,569
Chicago River, North Branch, West Fork	At confluence with Chicago River, North Branch	28.4	751	*	1,295	1,494	2,341
Chicago River, North Branch, West Fork	At Central Avenue	27.6	738	*	1,249	1,430	2,379
Chicago River, North Branch, West Fork	At Waukegan Road	26.0	607	*	1,006	1,148	2,271
Chicago River, North Branch, West Fork	At Glenview Road	24.8	517	*	832	1,106	2,194
Chicago River, North Branch, West Fork	At confluence of South Navy Ditch	23.8	455	*	689	1,211	2,387

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Chicago River, North Branch, West Fork	At Reservoir 32C (inflow)	21.0	650	*	1,241	1,605	2,274
Chicago River, North Branch, West Fork	At Reservoir 32C (bypass)	21.0	254	*	317	348	348
Chicago River, North Branch, West Fork	At Reservoir 32C (discharge)	21.0	253	*	764	1,409	2,305
Chicago River, North Branch, West Fork	At Reservoir 32B (inflow)	17.2	635	*	1,162	1,549	2,077
Chicago River, North Branch, West Fork	At Reservoir 32B (discharge)	17.2	505	*	1,128	1,495	2,036
Chicago River, North Branch, West Fork	At confluence of Techny Drain	16.1	561	*	1,158	1,433	1,848
Chicago River, North Branch, West Fork	At Reservoir 32A (inflow)	14.4	615	*	946	1,108	1,423
Chicago River, North Branch, West Fork	At Chicago & North Western Railway	14.4	360	*	921	1,108	1,421
Chicago River, North Branch, West Fork	At Reservoir 32A (bypass)	14.4	360	*	427	451	489
Chicago River, North Branch, West Fork	At Soo Line Railroad	12.7	477	*	718	848	1,165
Chicago River, North Branch, West Fork	At Dundee Road	11.5	378	*	535	623	1,187
Chicago River, North Branch, West Fork	At confluence of Underwriters Tributary	11.1	364	*	509	593	1,199

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Crestwood Drainage Ditch West	At State Route 83	1.1	242	*	343	384	500
Crestwood Drainage Ditch West	Just upstream of 135 th Street	0.2	38	*	73	94	156
Crystal Creek	At the confluence with the Des Plaines River	4.8	333	*	469	502	590
Crystal Creek	Just downstream of River Road	4.5	170	*	296	329	381
Crystal Creek	Just upstream of Lawrence Court culvert	4.5	328	*	459	495	569
Crystal Creek	At downstream face of Soo Line Railroad Yard	4.4	295	*	407	460	492
Crystal Creek	At upstream face of Soo Line Railroad Yard	3.9	300	*	451	612	730
Crystal Creek	At downstream face of 25 th Avenue	2.2	278	*	416	592	703
Crystal Creek	At confluence of Crystal Creek Tributary	*	251	*	366	553	644
Crystal Creek	Just upstream of confluence of Crystal Creek Tributary	*	58	*	97	285	320
Crystal Creek	Just downstream of I-294	*	53	*	88	276	316
Crystal Creek	Just upstream of Mannheim Road	*	40	*	65	264	295

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Crystal Creek	Approximately 900 feet upstream of Mannheim Road	*	17	*	28	34	51
Crystal Creek	At Lake O'Hare outlet	*	0	*	0	0	0
Crystal Creek Tributary	At confluence with Crystal Creek	*	194	*	271	321	389
Crystal Creek Tributary	At confluence of Industrial Tributary	*	194	*	260	319	358
Crystal Creek Tributary	Just downstream of Belle Plaine Avenue	*	110	*	131	138	172
Crystal Creek Tributary	Just downstream of Seymour Avenue	*	102	*	122	136	160
Crystal Creek Tributary	Just upstream of confluence of Sexton Ditch	*	72	*	83	89	100
Crystal Creek Tributary	Just downstream of Old Mannheim Road	*	64	*	*	153	*
Crystal Creek Tributary	At an open ditch just downstream of railroad yard	*	64	*	*	127	*
Deer Creek	At Young Street	28.2	1,195	*	1,810	2,079	2,800
Deer Creek	At a point approximately 1,400 feet downstream of Joe Orr road	23.2	948	*	1,400	1,647	2,190
Deer Creek	At Sauk Trail	17.4	684	*	1,020	1,203	1,585

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Deer Creek Tributary B	At a point approximately 1,800 feet upstream of confluence with Deer Creek	2.9	350	*	600	776	1,100
Deer Creek Tributary B	At Cottage Grove Avenue	2.3	300	*	520	675	970
Des Plaines River	At Interstate Route 55	650	6,000	*	7,500	8,400	9,300
Des Plaines River	At the Tri-State Tollway	650	6,000	*	7,500	8,400	9,300
Des Plaines River	At 47 th Street	632	5,930	*	7,370	7,900	9,000
Des Plaines River	At Ogden Avenue	631	5,923	*	7,363	7,895	8,990
Des Plaines River	At a point approximately 500 feet upstream of Hoffman Dam	629	5,833	*	7,203	7,706	8,883
Des Plaines River	At a point approximately 1,000 feet downstream of 31 st Street	485	5,139	*	6,272	6,692	7,510
Des Plaines River	At a point approximately 1,800 feet downstream of Chicago Avenue	460	4,990	*	6,100	6,508	7,286
Des Plaines River	At a point approximately 3,000 feet downstream of Kennedy Expressway	419	4,487	*	5,765	6,223	7,144
Des Plaines River	At Algonquin Road	382	4,385	*	5,728	6,193	7,256
Des Plaines River	At a point approximately 1,600 feet upstream of Golf Road	363	4,226	*	5,577	6,161	7,395

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10-Percent Annual Chance	4-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
Des Plaines River	At a point approximately 1,300 feet downstream of Palatine Road	358	4,322	*	5,780	6,308	7,470
Des Plaines River	At a point approximately 1,600 feet downstream of Dundee Road	327	3,727	*	5,367	6,018	7,511
Des Plaines River Tributary A	At Brainard Avenue	1.0	120	*	220	290	415
Dixie Creek	At Dixie Highway	1.2	66	*	100	135	250
DuPage River West Branch	At Irving Park Road	4.5	322	*	594	807	1,150
East Avenue Ditch	600 feet downstream of East Avenue Culvert	1.2	402	*	694	864	1,231
East Avenue Ditch	2,015 feet upstream of 58 th Street	0.2	190	*	334	414	595
East Pond and West Pond	Approximately 500 feet north of 179 th Street	0.3	*	*	*	82	*
Elk Grove Boulevard Drainage Ditch	At the mouth	1.7	125	*	200	233	325
Elk Grove Boulevard Drainage Ditch	Just downstream of Elk Grove Boulevard	1.5	104	*	164	194	295
Elk Grove Boulevard Drainage Ditch	Approximately 100 feet downstream of Ridge Avenue	1.3	80	*	125	148	205

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Elk Grove Boulevard Drainage Ditch	Approximately 100 feet downstream of Victoria Lane	1.1	76	*	120	142	202
Elk Grove Boulevard Drainage Ditch	Approximately 100 feet downstream of Crest Avenue	0.9	59	*	93	110	156
Elk Grove Boulevard Drainage Ditch	Approximately 100 feet downstream of Love Street	0.5	34	*	54	64	89
Elk Grove Boulevard Drainage Ditch	Approximately 100 feet downstream of Tonne Road	0.2	14	*	23	27	39
Farmer's Creek	At confluence with Des Plaines River	5.0	317	*	505	643	1,987
Farmer's Creek	At Ballard Road	2.6	52	*	85	106	474
Farrington Ditch	At Checker Road	0.6	95	*	162	200	290
Feehanville Ditch	Just downstream of Wolf Road	1.2	158	*	268	317	443
Filsen Park Ditch	At confluence with 76th Avenue	0.9	124	*	219	275	399
Flag Creek	At the mouth	18.1	1,660	*	2,650	3,180	4,500
Flag Creek	At 83 rd Street (German Church Road)	15.6	1,450	*	2,330	2,770	3,900
Flag Creek	At a point approximately 900 feet upstream of 79 th Street Ditch	15.3	1,420	*	2,300	2,720	3,850
Flag Creek	At Wolf Road	13.7	1,260	*	2,000	2,400	3,350

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Flag Creek	At a point approximately 0.25 mile upstream of confluence of Plainfield Road Ditch	11.2	1,080	*	1,730	2,050	2,900
Flag Creek	At 55 th Street	5.1	540	*	850	1,010	1,400
Flag Creek	At 47 th Street	3.7	400	*	620	740	1,020
Flag Creek Tributary A	At confluence with Flag Creek	0.2	120	*	220	300	460
Flag Creek Tributary B	At confluence with Flag Creek	0.6	160	*	300	460	610
Flag Creek Tributary C	At confluence with Flag Creek	3.0	350	*	500	640	880
Flint Creek	At a point approximately 500 feet upstream of Abbotsford Drive	0.9	49	*	75	98	111
Flint Creek Tributary	At Lake Louise outflow structure	1.3	205	*	265	270	335
Flossmoor Ditch	At Harlem Avenue	4.0	257	*	441	571	840
Flossmoor Ditch Tributary A	At Vollmer Road	0.8	116	*	209	277	400
Golf Course Tributary	At Thatcher Road	1.9	212	*	312	365	465
Golf Course Tributary	At south boundary of Oak Park Country Club	1.7	195	*	290	345	440
Grand Calumet River	At CSX Transportation	7.3	415	*	460	470	500

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Hickory Creek	At Harlem Avenue	3.1	550	*	860	1,014	1,400
Hickory Creek	At Sauk Trail	1.0	390	*	620	720	1,010
Hickory Creek Tributary A	Just downstream of Harlem Avenue	6.6	670	*	1,070	1,250	1,670
Higgins Creek	At Old Mt. Prospect Road	7.3	454	*	503	730	1,666
Higgins Creek	At Mt. Prospect Road	7.0	444	*	485	700	1,600
Higgins Creek	At Touhy Avenue Flood Control Reservoir Upstream Cell	6.8	700	*	920	1,260	2,140
Higgins Creek	At Northwest Tollway	6.8	907	*	1,394	1,623	2,270
Higgins Creek	At Elmhurst Road	5.4	511	*	626	852	1,145
Higgins Creek	At upstream side of Wille Road	3.0	450	*	755	975	1,365
Higgins Creek Tributary A	At confluence with Higgins Creek	2.3	228	*	407	451	548
Higgins Creek Tributary A	Above confluence of Higgins Creek Tributary B	1.5	206	*	310	410	418
I-57 Drainage Ditch	At Kedzie Avenue	1.2	202	*	315	368	457
Illinois and Michigan Canal Tributary A	At confluence with Illinois and Michigan Canal	0.9	300	*	530	700	1,000
Illinois and Michigan Canal Tributary A	Approximately 150 feet upstream of Roberta Street	0.1	100	*	190	260	380

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10-Percent Annual Chance	4-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
Illinois and Michigan Canal Tributary B	At confluence with Illinois and Michigan Canal	2.5	530	*	920	1,170	1,700
Illinois and Michigan Canal Tributary B	At Walker Road	0.6	110	*	210	270	420
Illinois and Michigan Canal Tributary C	At a point approximately 1,600 feet upstream of confluence with Illinois and Michigan Canal Tributary B	1.6	350	*	600	770	1,150
Illinois and Michigan Canal Tributary D	At the mouth	0.8	198	*	320	381	550
Illinois and Michigan Canal Tributary D	At Prospect Avenue	0.6	139	*	226	269	385
Industrial Tributary	At confluence with Crystal Creek Tributary	*	194	*	258	318	358
Justice Ditch	At confluence with Illinois and Michigan Canal	0.5	100	*	166	204	290
Lansing Ditch	Just downstream of intersection of Burnham and Glenwood-Lansing Roads	2.19 ²	199	*	279	316	408
Lansing Ditch	Just downstream of diversion structure at 202 nd Street	0.40 ²	91	*	235	285	445

*Data not available

²Contributing drainage area below diversion to Lansing Ditch Lynwood Tributary

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Lansing Ditch	Near USGS gage 05536265 just above diversion structure at 202 nd Street	9.5	188	*	299	357	643
Lansing Ditch	Just upstream of Linda Lane	9.1	211	*	304	424	873
Lansing Ditch	Just upstream of Glenwood-Dyer Road	8.4	126	*	209	410	876
Lansing Ditch	Just upstream of Orion Avenue	1.1	204	*	359	455	632
Lansing Ditch	Just upstream of 221 st Street	1.0	177	*	318	397	554
Lansing Ditch	Just upstream of Katz Road	0.9	157	*	284	356	501
Lansing Ditch East Tributary	Just upstream of Katz Road	2.3	299	*	557	712	1,023
Lansing Ditch East Tributary	Just upstream of Maintenance Department Entrance	1.7	227	*	404	518	741
Lansing Ditch East Tributary	Just upstream of Steger Road	1.4	194	*	341	441	674
Lansing Ditch East Tributary	Just downstream of Richton Road	0.2	31	*	43	73	193
Lansing Ditch Lynwood Tributary	Just downstream of Glenwood Lansing Road	1.6	277	*	390	449	544
Lansing Ditch Lynwood Tributary	Just downstream of 198 th Street	1.4	264	*	363	413	508

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Lansing Ditch Lynwood Tributary	Just downstream of 201 st Street (subdivision entrance)	1.4	258	*	350	398	495
Lansing Ditch Lynwood Tributary	Just downstream of Private Drive No. 5	1.1	230	*	298	326	373
Lansing Ditch Lynwood Tributary	Just downstream of Lake Lynwood Drive	1.0	226	*	290	324	406
Lansing Ditch Lynwood Tributary	Just downstream of Burnham Avenue	0.6	176	*	222	245	297
Lansing Ditch Lynwood Tributary	Just upstream of Burnham Avenue	0.4	149	*	179	190	219
Lansing Ditch Lynwood Tributary	Just downstream of Diversion Structure	*	135	*	140	148	202
Lansing Ditch Torrence Tributary	At confluence with Lansing Ditch	*	185	*	216	254	512
Lansing Ditch Torrence Tributary	Just upstream of Dr. Mary Woodland Reservoir spillway	*	134	*	300	390	554
Lansing Ditch Tributary A	Just downstream of Sauk Trail Road	0.8	69	*	117	145	210
Lansing Ditch West Tributary	At confluence with Lansing Ditch	0.5	48	*	67	79	108
Little Calumet River	At confluence with Calumet Sag Channel	291	3,090	*	4,290	4,670	6,110

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10-Percent Annual Chance	4-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
Little Calumet River	At Ashland Avenue	253	2,320	*	3,460	3,730	5,280
Little Calumet River	At USGS gage at Harvey	252	2,360	*	3,060	3,590	5,190
Little Calumet River	At USGS gage at South Holland	205	2,180	*	2,890	3,520	5,203
Little Calumet River	Upstream of confluence with Thorn Creek	96.1	1,050	*	1,370	1,390	1,910
Little Calumet River	At Illinois/Indiana State Line	90.7	1,010	*	1,250	1,290	1,551
Long Run	At State Street	20.8	1,460	*	2,300	2,670	3,500
Long Run	At Will-Cook Road	3.3	260	*	440	560	820
Long Run	At approximately 2,500 feet upstream of 143 rd Street	1.9	210	*	370	470	720
Long Run Tributary A	At Wolf Road	0.5	110	*	210	280	450
Long Run Tributary A	Just downstream of 143 rd Street	0.4	110	*	210	208	450
Long Run Tributary B	At a point approximately 1,500 feet upstream of confluence with Long Run	3.0	370	*	620	790	1,150
Long Run Tributary B	At a point approximately 2,500 feet downstream of 131 st Street	2.3	300	*	500	650	970
Long Run Tributary BA	At 131 st Street	0.2	100	*	190	260	410

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Long Run Tributary C	At a point approximately 1,250 feet upstream of confluence with Long Run	0.4	160	*	290	380	610
Lucas Ditch	At the mouth	1.6	268	*	*	459	633
Lucas Ditch	At 86 th Street	0.8	232	*	*	377	551
Lucas Ditch	At 103 Street	0.3	95	*	*	244	565
Lucas Ditch Cut-off	At confluence with Stony Creek (West)	3.2	370	*	*	626	1,029
Lucas Ditch Cut-off	At confluence of Lucas Ditch Cut-off Tributary	2.1	356	*	*	605	993
Marley Creek	At 179 th Street	8.3	530	*	830	976	1,370
Marley Creek	At 108 th Street	4.6	215	*	401	590	1,024
Marley Creek Tributary A	At confluence with Marley Creek	0.4	192	*	346	430	660
Marley Creek Tributary A	At Wolf Road	0.1	77	*	146	182	290
Marley Creek Tributary B	At confluence with Marley Creek	0.2	120	*	225	280	435
Marley Creek Tributary B	At U.S. Route 6	0.2	120	*	225	280	435
Marley Creek Tributary C	At Wolf Road	1.4	550	*	870	1,028	1,430
Marley Creek Tributary C	Just downstream of 108 th Avenue	1.3	128	*	317	385	875
Marley Creek Tributary D	At 104 th Avenue	1.3	155	*	276	345	544

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
McDonald Creek	At confluence with the Des Plaines River	8.0	535	*	800	913	1,240
McDonald Creek	At Foundry Road	7.7	525	*	*	895	*
McDonald Creek	At Camp McDonald Road	6.6	487	*	720	834	1,110
McDonald Creek	Approximately 800 feet upstream of Camp McDonald Road	6.3	404	*	640	757	1,050
McDonald Creek	Approximately 2,950 feet downstream of Wheeling Road	6.2	372	*	579	677	931
McDonald Creek	At Wheeling Road	6.1	353	*	542	628	859
McDonald Creek	At Palatine Road	4.6	230	*	309	335	574
McDonald Creek	At Schoenbeck Road	4.1	122	*	142	147	444
McDonald Creek	At Cornell Avenue	4.0	115	*	129	141	473
McDonald Creek North Branch	Just upstream of Windsor Drive	1.9	965	*	1,443	1,630	2,220
McDonald Creek South Branch	Upstream of Buffalo Grove Road	1.4	902	*	1,190	1,261	1,502
McDonald Creek Tributary A	At Elmhurst Road	0.8	140	*	240	300	440
McDonald Creek Tributary A	At Elm Avenue	0.7	125	*	215	265	400

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
McDonald Creek Tributary B	At Wheeling road	0.5	100	*	175	219	335
Melvina Ditch	At confluence with Stony Creek (West)	1.7	250	*	415	500	720
Melvina Ditch	At 95 th Street	1.4	175	*	322	400	610
Merrionette Park Ditch	At mouth	1.2	160	*	243	282	382
Midlothian Creek	At mouth	*	264	*	495	637	951
Midlothian Creek	Approximately 1,200 feet upstream of Western Avenue	*	264	*	462	600	837
Midlothian Creek	Just upstream of 137 th Street	*	406	*	681	829	1,292
Midlothian Creek	At I-294 Tollway	14.0	380	*	641	783	1,233
Midlothian Creek	At 147 th Street	13.4	286	*	503	622	1,249
Midlothian Creek	At Waverly Avenue	12.5	245	*	402	594	1,216
Midlothian Creek	At 160 th Street	11.7	210	*	285	598	1,216
Midlothian Creek	At Ridgeland Avenue	8.0	480	*	697	823	1,130
Midlothian Creek	At New England Avenue	7.2	322	*	432	575	1,072
Midlothian Creek	At 80 th Avenue	3.5	346	*	713	901	1,319
Midlothian Creek	At 84 th Avenue	2.0	254	*	573	728	1,078
Midlothian Creek Western Branch	At confluence with Midlothian Creek	0.6	155	*	225	255	335

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Midlothian Creek Western Tributary	At confluence with Midlothian Creek	0.7	20	*	26	31	38
Midlothian Creek Western Tributary	At 84 th Avenue	0.6	19	*	21	21	23
Mill Creek	At Calumet Sag Road	10.7	509	812	1,084	1,391	2,528
Mill Creek	Just upstream of confluence of Mill Creek West Branch	6.7	166 ³	289 ³	380 ³	468 ³	1,321 ³
Mill Creek	Approximately 2,000 feet upstream of Southwest Highway	5.6	184	335	496	704	1,434
Mill Creek	Just downstream of railroad	1.1	80	153	231	324	680
Mill Creek West Branch	At 123 rd Street, approximately 1,850 feet east of US Route 45	3.1	296	463	614	776	1,665
Motel Ditch	At confluence with Industrial Tributary	*	88	*	130	183	193
Natalie Creek	At Crawford Avenue	2.9	187	*	313	450	763
Natalie Creek	At Kenton Avenue	2.6	195	*	324	484	768
Natalie Creek	At Lavergne Avenue	2.3	174	*	293	462	759
Natalie Creek	At Long Drive	1.9	148	*	279	436	628
Natalie Creek	At 159 th and Central	0.7	51	*	104	136	183

*Data not available

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

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Natalie Creek Overland Flow	At divergence from Natalie Creek	*	13	*	93	230	543
Navajo Creek	At confluence with Calumet Sag Channel	3.3	516	*	741	836	1,080
Navajo Creek	At Oak Park Avenue	2.2	455	*	640	720	925
Navajo Creek	At Harlen Avenue	1.4	348	*	487	552	700
Navajo Creek	At 131 st Street	0.4	112	*	159	179	229
North Creek	At confluence with Thorn Creek	22.2	722	*	1,127	1,332	1,891
North Creek	Just upstream of Calumet Expressway	20.0	679	*	1,023	1,175	1,527
North Creek	Just upstream of Stony Island Avenue	18.7	656	*	947	1,062	1,281
North Creek	Near Torrence Avenue	16.9	682	*	1,000	1,185	1,535
North Creek	Just upstream of Bike Path	5.4	402	*	626	763	906
North Creek	Just downstream of Oakwood drive	4.4	349	*	558	674	858
North Creek	At Wentworth Avenue	0.3	28	*	44	51	62
North Navy Ditch	Just downstream of Soo Line Railroad	3.2	230	*	383	431	508
North Tributary to Tinley Creek	At 88 th Avenue	0.4	*	*	*	84	*

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10-Percent Annual Chance	4-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
Oak Lawn Ditch	At confluence with Stony Creek (West)	3.4	383	*	585	680	920
Oak Lawn Ditch	At Edison Avenue	3.0	330	*	510	590	800
Oak Lawn Ditch	At Kostner Avenue	1.3	159	*	243	282	383
Park Creek	At Interstate Route 57	1.2	79	*	121	139	181
Plainfield Road Ditch	At mouth at Flag Creek	1.1	197	*	310	367	510
Plainfield Road Ditch	At County Line Road	1.0	141	*	223	262	365
Plum Creek	At Steger Road	34.8	1,152	*	1,594	1,800	2,370
Poplar Creek	At confluence with Fox River ⁴	44.1	1,305	1,898	2,563	3,295	4,509
Poplar Creek	Approximately 1,500 feet downstream of Bluff City Boulevard	39.9	1,258	1,823	2,509	3,175	4,353
Poplar Creek	Just upstream of confluence of Poplar Creek Lord's Park Tributary	35.2	1,104 ⁵	1,397 ⁵	1,465 ⁵	1,513 ⁵	1,860 ⁵
Poplar Creek	Just upstream of divergence of Poplar Creek Lord's Park Overflow	35.2	1,213	1,884	2,491	3,050	5,313

*Data not available

⁴ Discharge location is in Kane County

⁵ Discharge on Poplar Creek decreases downstream of Poplar Creek Lord's Park Overflow

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Poplar Creek	Approximately 175 feet upstream of confluence of Poplar Creek South Branch	27.8	1,050	1,609	2,097	2,508	4,444
Poplar Creek	Approximately 335 feet upstream of confluence of Poplar Creek Railroad Tributary	23.9	978 ⁶	1,469	1,884	2,188	4,174
Poplar Creek	At Sutton Road/Illinois Route 59	22.3	998	1,448	1,799	2,082	3,951
Poplar Creek	At Bartlett Road	21.5	980	1,401	1,731	2,039	3,778
Poplar Creek	Approximately 1,000 feet downstream of Golf Road/Illinois Route 58	16.9	827	1,140	1,391	1,790	2,997
Poplar Creek	Approximately 765 feet upstream of confluence of Poplar Creek Schaumburg Branch	13.1	547	751	919	1,238	2,161
Poplar Creek	Approximately 1,425 feet upstream of confluence of Poplar Creek East Branch	7.8	348	463	559	704	1,196
Poplar Creek	Just upstream of confluence of Poplar Creek Tributary A	6.3	281	369	449	564	893
Poplar Creek	At Interstate 90/Jane Addams Memorial Tollway	6.1	252	348	439	549	877
Poplar Creek	At Mundhank Road	4.9	149	207	259	319 ⁶	631

⁶ Decrease in discharge due to floodplain storage

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Poplar Creek	At Algonquin Road/Illinois Route 62	3.0	131	183	242	321	512
Poplar Creek	Approximately 2,000 feet upstream of Algonquin Road/Illinois Route 62	2.6	123	177	229	292	453
Poplar Creek	Approximately 1,000 feet downstream of Barrington Road	2.2	89	131	173	221	326
Poplar Creek	At Barrington Road	1.3	74	107	138	175	243
Poplar Creek	Approximately 5,500 feet upstream of Barrington Road	0.5	50	73	94	119	197
Poplar Creek East Branch	Approximately 380 feet upstream of confluence with Poplar Creek	5.1	232	321	404	510	999
Poplar Creek East Branch	At West crossing of Hassell Road	2.9	50	137 ⁶	170 ⁶	330 ⁶	696 ⁶
Poplar Creek East Branch	Approximately 230 feet upstream of Central Road	2.6	50 ⁶	141 ⁶	177 ⁶	351 ⁶	698 ⁶
Poplar Creek East Branch	Approximately 3,400 feet upstream of Central Road	2.2	148	228	306	405	707
Poplar Creek East Branch	Just upstream of confluence of Poplar Creek East Branch Tributary A	0.8	78	108	146	186	311

⁶ Decrease in discharge due to floodplain storage

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Poplar Creek East Branch Tributary A	Just upstream of confluence with Poplar Creek East Branch	0.4	47	67	86	109	176
Poplar Creek Lord's Park Overflow	Approximately 360 feet downstream of divergence from Poplar Creek	N/A	109	487	1,026	1,537	3,454
Poplar Creek Lord's Park Tributary	Just upstream of confluence with Poplar Creek	3.7	231	484	1,054	1,670	3,487
Poplar Creek Lord's Park Tributary	At Laurel Street	3.6	156	228	298	383	661
Poplar Creek Lord's Park Tributary	At Grand Boulevard	2.8	79	114	149	193	396
Poplar Creek Lord's Park Tributary 1	Approximately 160 feet upstream of confluence with Poplar Creek Lord's Park Tributary	0.7	65	92	118	150	249
Poplar Creek Railroad Tributary	Approximately 385 feet upstream of confluence with Poplar Creek	2.8	160	236	309	399	649
Poplar Creek Railroad Tributary	Just upstream of North crossing of Mallard Lane	2.0	83	124	164	213	366
Poplar Creek Railroad Tributary	Approximately 120 feet upstream of Shoe Factory Road	1.5	49	72	94	121	202

N/A – Not applicable

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Poplar Creek Schaumburg Branch	Approximately 540 feet upstream of confluence with Poplar Creek	3.3	265	355	453	576	920
Poplar Creek Schaumburg Branch	Just upstream of Golf Road/Illinois Route 58	2.4	224	287	336	386	627
Poplar Creek South Branch	Just upstream of confluence with Poplar Creek	5.8	332	448	550	673	1,082
Poplar Creek South Branch	Just downstream of Sutton Road/Illinois Route 59	4.8	269	354	432	527	818
Poplar Creek South Branch	Approximately 750 feet upstream of Bartlett Road	2.8	137	182	224	271	602
Poplar Creek South Branch	Approximately 120 feet upstream of confluence of Poplar Creek South Branch Tributary A	1.6	52	67	77	88	352
Poplar Creek South Branch Tributary A	Approximately 200 feet upstream of confluence with Poplar Creek South Branch	0.7	72	94	115	142	217
Poplar Creek Tributary 1	Approximately 150 feet upstream of confluence with Poplar Creek	0.04	7	9	12	15	24
Poplar Creek Tributary 2	Approximately 115 feet upstream of confluence with Poplar Creek	0.7	16	26	35	47	82
Poplar Creek Tributary 3	Approximately 480 feet upstream of confluence with Poplar Creek	0.4	41	57	71	89	142

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10-Percent Annual Chance	4-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
Poplar Creek Tributary 4	Approximately 160 feet upstream of confluence with Poplar Creek	2.3	97	130	164	216	384
Poplar Creek Tributary A	Approximately 220 feet upstream of confluence with Poplar Creek	1.3	59	80	99	118	194
Poplar Creek Tributary A	Just upstream of Jane Addams Memorial Tollway/Interstate 90	1.2	47	71	84	103	176
Prairie Creek	At Kennedy Drive	1.8	137	*	210	269	1,336
Salt Creek (Lower Reach)	At the mouth	150	1,570	*	2,780	3,400	4,920
Salt Creek (Lower Reach)	At Logan Avenue	148	1,570	*	2,780	3,400	4,920
Salt Creek (Lower Reach)	Just downstream of confluence of Addison Creek	148	2,850	*	4,300	4,940	6,600
Salt Creek (Lower Reach)	At a point approximately 1,800 feet upstream of confluence of Addison Creek	117	2,150	*	3,150	3,640	4,700
Salt Creek (Lower Reach)	At La Grange Road	116	2,151	*	3,150	3,641	4,700
Salt Creek (Lower Reach)	At 31 st Street	115	2,153	*	3,150	3,643	4,700
Salt Creek (Lower Reach)	At York Road	112	2,158	*	3,150	3,650	4,400
Salt Creek (Lower Reach)	At Wolf Road	112	2,156	*	3,155	3,647	4,710

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10-Percent Annual Chance	4-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
Salt Creek (Lower Reach)	At Elk Grove Village	51.2	1,653	*	2,300	2,590	3,350
Salt Creek (Upper Reach)	At Golf Road	32.3	1,136	*	1,845	2,221	3,031
Salt Creek (Upper Reach)	At Algonquin Road	31.1	1,080	*	1,742	2,085	2,871
Salt Creek (Upper Reach)	Just downstream of Arlington Heights Branch	30.6	1,052	*	1,689	2,020	2,802
Salt Creek (Upper Reach)	Just upstream of Arlington Heights Branch	17.8	608	*	1,004	1,202	1,641
Salt Creek (Upper Reach)	At Briarwood Lane	16.7	557	*	910	1,083	1,486
Salt Creek (Upper Reach)	At Meacham Road	16.1	538	*	869	1,022	1,411
Salt Creek (Upper Reach)	Just downstream of confluence of Salt Creek Tributary D	15.9	526	*	838	989	1,384
Salt Creek (Upper Reach)	Just upstream of confluence of Salt Creek Tributary D	11.5	373	*	579	692	995
Salt Creek (Upper Reach)	Just downstream of confluence of Salt Creek Tributary C	11.2	353	*	545	649	940
Salt Creek (Upper Reach)	Just upstream of confluence of Salt Creek Tributary C	8.8	258	*	380	452	629
Salt Creek (Upper Reach)	At Illinois Avenue	7.7	224	*	313	363	479
Salt Creek (Upper Reach)	Just downstream of Reimer Reservoir Road	6.3	128	*	145	344	388

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Salt Creek (Upper Reach)	Just upstream of Reimer Reservoir Road	6.3	312	*	603	765	1,184
Salt Creek (Upper Reach)	Just downstream of confluence of Salt Creek Tributary A	5.3	259	*	504	650	994
Salt Creek (Upper Reach)	Just upstream of confluence of Salt Creek Tributary A	2.4	122	*	234	302	467
Salt Creek (Upper Reach)	Just downstream of confluence of Salt Creek Tributary B	2.1	106	*	206	267	409
Salt Creek (Upper Reach)	Just upstream of confluence of Salt Creek Tributary B	1.0	69	*	130	169	256
Salt Creek, Arlington Heights Branch	At confluence with Salt Creek (Upper Reach)	12.7	446	*	686	818	1,174
Salt Creek, Arlington Heights Branch	At Euclid Avenue	11.0	361	*	542	636	1,002
Salt Creek, Arlington Heights Branch	At Northwest Highway	9.9	300	*	444	543	870
Salt Creek, Arlington Heights Branch	At State Route 53	8.6	287	*	421	528	836
Salt Creek, Arlington Heights Branch	Just downstream of Twin Lakes	8.8	248	*	365	460	711
Salt Creek, Arlington Heights Branch	Just upstream of Twin Lakes	8.5	283	*	485	589	821

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Salt Creek, Arlington Heights Branch	Just downstream of confluence of Salt Creek, Arlington Heights Branch, Anderson Drive Tributary	8.1	258	*	443	536	744
Salt Creek, Arlington Heights Branch	Just upstream of confluence of Salt Creek, Arlington Heights Branch, Anderson Drive Tributary	6.1	190	*	312	358	462
Salt Creek, Arlington Heights Branch	Hicks Road	5.1	156	*	259	294	372
Salt Creek, Arlington Heights Branch	Just downstream of Hamilton Reservoir	4.0	102	*	153	161	171
Salt Creek, Arlington Heights Branch	Just upstream of Hamilton Reservoir	4.0	102	*	217	293	439
Salt Creek, Arlington Heights Branch	At Dundee Road	2.8	62	*	163	232	400
Salt Creek, Arlington Heights Branch	At Quentin Road	2.5	57	*	149	210	359
Salt Creek, Arlington Heights Branch, Anderson Drive Tributary	At confluence with Salt Creek, Arlington Heights Branch	2.0	68	*	140	184	286
Salt Creek, Arlington Heights Branch, Anderson Drive Tributary	At Lake Louise Outlet	1.5	47	*	103	136	214
Salt Creek Middle Fork	At the mouth	0.8	45	*	82	100	110

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Salt Creek South Fork	At the mouth	0.3	38	*	47	64	130
Salt Creek Tributary	At Mayfair Avenue	2.0	59	*	208	243	350
Salt Creek Tributary	At Wolf Road	0.5	80	*	136	171	240
Salt Creek Tributary A	At confluence with Salt Creek (Upper Reach)	2.9	140	*	269	348	526
Salt Creek Tributary A	Just downstream of Golf Course Tributary	2.9	140	*	269	348	526
Salt Creek Tributary A	Just upstream of Golf Course Tributary	1.6	66	*	123	158	253
Salt Creek Tributary A	Approximately 2,600 feet upstream of Ela Road	0.9	36	*	71	92	140
Salt Creek Tributary B	At confluence with Salt Creek (Upper Reach)	1.1	40	*	79	103	159
Salt Creek Tributary C	At confluence with Salt Creek (Upper Reach)	2.3	97	*	167	199	322
Salt Creek Tributary C	Just downstream of Plum Grove Reservoir Outlet	2.1	85	*	148	176	289
Salt Creek Tributary C	Just upstream of Plum Grove Reservoir Outlet	2.1	120	*	221	282	422
Salt Creek Tributary D	At confluence with Salt Creek (Upper Reach)	4.3	159	*	262	301	449
Salt Creek Tributary D	Just downstream of St. Michael's Reservoir	3.9	142	*	235	270	447

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Salt Creek Tributary D	Just upstream of St. Michael's Reservoir	2.3	115	*	210	268	400
Salt Creek West Branch	At Interstate Route 290	12.1	674	*	1,197	1,505	2,200
Salt Creek West Branch	At Meacham Road	11.0	605	*	1,073	1,349	1,974
Salt Creek West Branch	Just downstream of confluence of Salt Creek West Branch Tributary 6	10.8	587	*	1,043	1,314	1,923
Salt Creek West Branch	Just upstream of confluence of Salt Creek West Branch Tributary 6	8.4	457	*	802	1,006	1,467
Salt Creek West Branch	Just downstream of confluence of Salt Creek West Branch Tributary 3	8.0	444	*	776	971	1,419
Salt Creek West Branch	Just upstream of confluence of Salt Creek West Branch Tributary 3	5.7	305	*	525	655	945
Salt Creek West Branch	Just downstream of confluence of Salt Creek West Branch Tributary A	4.7	276	*	454	561	803
Salt Creek West Branch	Just upstream of confluence of Salt Creek West Branch Tributary A	2.5	106	*	170	209	296
Salt Creek West Branch	Just downstream of Unnamed Tributary	2.4	95	*	156	192	275

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Salt Creek West Branch	Just upstream of Unnamed Tributary	2.0	76	*	121	148	210
Salt Creek West Branch	At Wiley Road	1.1	50	*	94	122	185
Salt Creek West Branch Tributary A	At confluence with Salt Creek West Branch	2.2	176	*	299	372	537
Salt Creek West Branch Tributary A	At Higgins Road	0.8	84	*	139	171	243
Salt Creek West Branch Tributary 3	At confluence with Salt Creek West Branch	2.4	140	*	251	316	474
Salt Creek West Branch Tributary 3	Just downstream of confluence of Salt Creek West Branch Tributary 5	2.1	131	*	238	303	450
Salt Creek West Branch Tributary 3	Just downstream of confluence of Salt Creek West Branch Tributary 4	1.7	101	*	187	239	357
Salt Creek West Branch Tributary 3	Just upstream of confluence of Salt Creek West Branch Tributary 4	1.1	59	*	109	140	210
Salt Creek West Branch Tributary 4	At confluence with Salt Creek West Branch Tributary 3	0.7	42	*	77	99	147
Salt Creek West Branch Tributary 5	At confluence with Salt Creek West Branch Tributary 3	0.4	30	*	52	65	94

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Salt Creek West Branch Tributary 6	At confluence with Salt Creek West Branch	2.4	136	*	248	318	463
Salt Creek West Branch Tributary 6	Just downstream of confluence of Salt Creek Tributary 7	2.1	117	*	216	276	411
Salt Creek West Branch Tributary 6	Just upstream of confluence of Salt Creek Tributary 7	1.2	61	*	109	138	204
Salt Creek West Branch Tributary 7	At confluence with Salt Creek West Branch Tributary 6	0.9	57	*	109	140	211
Sexton Ditch	At confluence with Crystal Creek Tributary	*	102	*	122	136	160
Silver Creek	At mouth at Des Plaines River	11.6	465	*	712	842	1,125
Silver Creek	At North Avenue	10.3	443	*	680	802	1,075
Silver Creek	At Armitage Avenue	9.1	351	*	620	768	1,145
Silver Creek	Approximately 800 feet upstream of Fullerton Avenue	9.1	425	*	645	770	1,010
Silver Creek	Just upstream of Scott Street	8.7	420	*	640	760	1,000
Silver Creek	At Grand Avenue	7.4	303	*	545	669	1,015
Silver Creek	Approximately 1,800 feet upstream of Grand Avenue	6.8	370	*	570	670	890

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Silver Creek	Approximately 800 feet upstream of Belmont Avenue	6.6	360	*	560	660	880
Silver Creek	At Franklin Avenue	6.4	355	*	550	655	875
Silver Creek	At railroad yard	6.1	350	*	535	640	850
Skokie River	At Willow Road	29.2	429	*	1,202	1,624	2,197
Skokie River	At Willow Road Dam	24.4	359	*	788	890	996
Skokie River	At Tower Road	24.0	658	*	1,081	1,544	2,205
Skokie River	At Dundee Road	23.4	927	*	1,494	1,813	2,393
Skokie River	At Lake-Cook Road	22.1	1,084	*	1,559	1,844	2,401
Skokie River, Botanical Garden Diversion	At confluence with Skokie River	* 7	54	*	388	543	690
Skokie River, West Ditch	At confluence with Skokie River	1.2	72	*	333	638	1,141
Skokie River, West Ditch	At Tower Road	0.8	54	*	67	73	74
South Navy Ditch	Just downstream from Soo Line Railroad	1.9	217	*	351	410	527
South Tributary to Tinley Creek	At 88 th Avenue	0.4	*	*	*	51	*
Spring Creek	At 118 th Avenue	2.3	108	*	205	259	396
Spring Creek	At 159 th Street	1.6	61	*	90	97	117

*Data not available

⁷ Includes split from Skokie River downstream of Lake Cook Road plus local drainage

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10-Percent Annual Chance	4-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
Spring Creek	At 151 st Street and Wolf Road	0.8	64	*	112	139	195
Spring Creek (Fox)	Just upstream of County Line Road	20.5	747	1,079	1,390	2,044	4,832
Spring Creek (Fox)	Approximately 2,070 feet downstream of Donlea Road	16.4	771 ⁶	1,141 ⁶	1,533 ⁶	2,061 ⁶	3,940 ⁶
Spring Creek (Fox)	Just upstream of Donlea Road	15.4	762	1,121	1,491	1,981	3,715
Spring Creek (Fox)	Approximately 1,700 feet upstream of confluence with Spring Creek (Fox) Overflow	14.6	779	1,125	1,480	1,900	3,226
Spring Creek (Fox)	Approximately 2,100 feet upstream of confluence of Spring Creek (Fox) Tributary E	12.2	729	1,047	1,362	1,695	2,827
Spring Creek (Fox)	Just upstream of Algonquin Road/Illinois Route 62	8.4	502 ⁸	674 ⁸	842 ⁸	940 ⁸	1,612 ⁸
Spring Creek (Fox)	Approximately 1,600 feet upstream of confluence of Spring Creek (Fox) Tributary D	8.4	498	695	936	1,184	2,513
Spring Creek (Fox)	Approximately 1,800 feet upstream of Algonquin Road/Illinois Route 62	8.0	506	680	860	1,072	2,053

⁶ Decrease in discharge due to floodplain storage

⁸ Decrease in discharge due to interbasin flow within the watershed system

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Spring Creek (Fox)	Approximately 3,500 feet upstream of Dundee Road/Illinois Route 68	6.9	450	588	719	953	1,985
Spring Creek (Fox)	Approximately 1,100 feet upstream of Penny Road	5.3	398	551	691	886	1,539
Spring Creek (Fox)	Approximately 430 feet upstream of confluence of Spring Creek (Fox) Tributary A	2.1	197	250	300	372	578
Spring Creek (Fox) Overflow	Just upstream of convergence with Spring Creek (Fox)	0.5	5	12	33	90	475
Spring Creek (Fox) Tributary A	Just upstream of Sutton Road/Illinois Route 59	1.8	174	221	264	315	553
Spring Creek (Fox) Tributary A	Just upstream of Mesa Drive	0.8	91	130	167	216	351
Spring Creek (Fox) Tributary A	Just upstream of Penny Road	0.7	86	116	146	179	274
Spring Creek (Fox) Tributary B	Approximately 340 feet upstream of confluence with Spring Creek (Fox)	1.2	50	90	132	189	378
Spring Creek (Fox) Tributary C	Approximately 130 feet upstream of confluence with Spring Creek (Fox)	1.2	205	282	353	442	702
Spring Creek (Fox) Tributary C	Approximately 1,500 feet upstream of confluence with Spring Creek (Fox)	0.9	162	222	277	344	541

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Spring Creek (Fox) Tributary D	Just upstream of Algonquin Road/Illinois Route 62	2.6	232 ⁸	310 ⁸	353 ⁸	413 ⁸	640 ⁸
Spring Creek (Fox) Tributary D	Approximately 2,500 feet upstream of Algonquin Road/Illinois Route 62	1.9	185	275	358	458	829
Spring Creek (Fox) Tributary D	Approximately 2,600 feet downstream of Dundee Road/Illinois Route 68	1.6	169	251	331	431	753
Spring Creek (Fox) Tributary D	Approximately 2,200 feet downstream of Dundee Road/Illinois Route 68	0.9	98	142	187	238	423
Spring Creek (Fox) Tributary E	Approximately 700 feet upstream of confluence with Spring Creek (Fox)	1.5	96	133	171	216	346
Spring Creek (Fox) Tributary E	Just upstream of Old Sutton Road	1.4	74	104	133	169	276
Spring Creek (Fox) Tributary F	Approximately 640 feet upstream of confluence with Spring Creek (Fox)	3.3	262	421	657	908	1,639
Spring Creek (Fox) Tributary F	Just upstream of Bateman Road	2.7	211	369	563	774	1,371
Spring Creek (Fox) Tributary F	Approximately 3,900 feet upstream of Bateman Road	1.5	227	318	403	504	807

⁸ Decrease in discharge due to interbasin flow within the watershed system

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Spring Creek (Fox) Tributary F1	Approximately 375 feet upstream of confluence with Spring Creek (Fox) Tributary F	0.8	99	148	196	255	439
Stony Creek (East)	At confluence with Calumet Sag Channel	4.5	260	*	395	459	620
Stony Creek (East)	At Sacramento Avenue	4.3	255	*	390	454	615
Stony Creek (East)	At Central Park Avenue	3.6	205	*	315	365	495
Stony Creek (East)	At Crawford Avenue	2.4	158	*	239	277	372
Stony Creek (East)	At Cicero Avenue	0.2	50	*	75	100	150
Stony Creek (West)	At the mouth	26.8	1,420	*	1,900	2,100	2,620
Stony Creek (West)	At confluence of Lucas Ditch	26.3	1,420	*	1,900	2,100	2,620
Stony Creek (West)	At Roberts Road	23.2	1,355	*	1,815	2,013	2,490
Stony Creek (West)	At Southwest Highway	18.3	1,240	*	1,680	1,867	2,030
Stony Creek (West)	At Northfolk & Western Railway	9.3	935	*	1,250	1,405	1,720
Techny Drain	At confluence with Chicago River, North Branch, West Fork	1.8	292	*	506	617	839
Techny Drain	Just downstream of Chicago and North Western Railroad	1.7	245	*	315	320	320
Techny Drain	Just upstream of Chicago and North Western Railroad	1.7	300	*	508	619	840

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Techny Drain	At Shermer Road	1.2	187	*	327	401	562
Techny Drain	At confluence of Techny Drain, South Fork	1.0	154	*	277	347	481
Techny Drain South Fork	At confluence with Techny Drain	0.4	44	*	81	102	143
Third Creek	At a point approximately 2,400 feet upstream of confluence with Deer Creek	1.4	98	*	172	221	325
Third Creek	At Joe Orr Road	0.5	48	*	88	118	175
Third Creek	At Missouri Pacific Railroad	0.2	18	*	37	51	77
Thorn Creek	At the confluence with the Little Calumet River	108	1,156 ⁹	*	2,020 ⁹	2,870 ⁹	5,450 ⁹
Thorn Creek	Upstream of Tri-State Tollway (Interstate 80)	106	1,490 ¹⁰	*	2,220 ¹⁰	3,210 ¹⁰	6,010 ¹⁰
Thorn Creek	USGS gage at Thornton	104	3,650 ¹¹	*	5,220 ¹¹	5,940 ¹¹	7,740 ¹¹
Thorn Creek	At confluence with North Creek	103	4,323	*	6,180	7,442	9,650
Thorn Creek	Downstream of confluence of Butterfield Creek	79.7	3,803	*	5,700	6,510	8,800
Thorn Creek	At CSX Railroad	54.1	2,650	*	4,000	4,590	6,200

*Data not available

⁹Decrease in discharge due to routing storage

¹⁰Decrease in discharge due to Thornton Reservoir

¹¹Decrease in discharge due to difference in hydrologic analysis

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Thorn Creek	At a point approximately 700 feet downstream of Joe Orr Road	23.4	1,230	*	1,957	2,360	3,200
Thorn Creek	At a point approximately 300 feet downstream of Chicago Heights Road	16.3	900	*	1,458	1,750	2,420
Thorn Creek	At 15 th Street	14.9	858	*	1,375	1,650	2,280
Thorn Creek	At upstream Chicago Heights corporate limit (26 th Street)	9.5	578	*	912	1,140	1,640
Thorn Creek	At Sauk Trail	8.9	525	*	880	1,100	1,520
Thorn Creek	At a point approximately 1,500 feet upstream of Western Avenue	6.8	435	*	700	870	1,220
Thorn Creek Tributary A	At a point approximately 300 feet upstream of State Street	1.0	135	*	250	320	470
Thorn Creek Tributary B	At Parkside Avenue	2.3	405	*	560	640	795
Thorn Creek Tributary B	At Dixie Highway	1.9	375	*	520	590	735
Thorn Creek Tributary B	At Meadow Lane	1.4	300	*	413	464	590
Tinley Creek	At confluence with Calumet Sag Channel	12.9	1,227	1,821	2,394	2,835	4,509
Tinley Creek	Just upstream of confluence of Boca Rio Ditch	8.4	1,043	1,496	1,896	2,190	3,241

*Data not available

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Tinley Creek	Approximately 2,100 feet downstream of Harlem Avenue / IL Route 43	6.7	763	1,157	1,534	1,957	3,057
Tinley Creek	At 82 nd Avenue	5.2	690	1,029	1,347	1,709	2,704
Tinley Creek	Approximately 700 feet downstream of 151 st Street	3.4	447	659	861	1,104	1,686
Tinley Creek	At Wheeler Drive	2.8	373	537	693	867	1,373
Tinley Creek	At 86 th Avenue	2.1	281	419	552	707	1,083
Tinley Creek	Approximately 700 feet downstream of 159 th Street / US Route 6	1.3	163	225	283	348	504
Tinley Creek	Approximately 400 feet upstream of Laurel Drive	1.1	117	157	193	233	326
Tinley Creek	At 167 th Street	0.4	81	120	158	204	321
Tinley Creek Overflow	At convergence with Tinley Creek	N/A	**	**	**	**	882
Union Drainage Ditch	Approximately 1,100 feet upstream of Interstate 80	5.9	215	*	315	361	470
Union Drainage Ditch Northern Tributary	Approximately 1,900 feet downstream of 183 rd Street	1.5	156	*	226	258	340
Unnamed Creek	Approximately 500 feet downstream of Nerge Road	0.5	70	*	133	175	285

*Data not available

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

N/A – Not applicable

Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10- Percent Annual Chance	4- Percent Annual Chance	2- Percent Annual Chance	1- Percent Annual Chance	0.2- Percent Annual Chance
Unnamed Tributary to Calumet Sag Channel Tributary B	Just upstream of confluence with Calumet Sag Channel Tributary B	0.3	74	*	144	191	252
Unnamed Tributary Lake Emily	N/A	*	*	*	*	*	*
Unnamed Tributary to Long Run	At Will-Cook Road	0.2	*	*	*	53	*
Unnamed Tributary to Salt Creek Tributary D	At confluence with Salt Creek Tributary D	1.1	64	*	127	166	253
Unnamed Tributary to Salt Creek Tributary D	At Roselle Road	0.8	45	*	91	118	181
Weller Creek	Upstream entrance to diversion conduit	16.2	789	*	1,281	1,611	2,683
Weller Creek	At Golf Road	13.9	546	*	909	1,398	2,358
Weller Creek	At Lincoln Street	10.1	334	*	679	1,073	1,786
West Ditch	Approximately 1,460 feet upstream of Oak Park Avenue	0.4	*	*	*	291	*
West Ditch	Just downstream of Harlem Avenue	0.1	*	*	*	21	*
Wheeling Drainage Ditch	Approximately 1,390 feet downstream of Jeffery Avenue	21.0	1,166	*	1,788	2,117	3,607

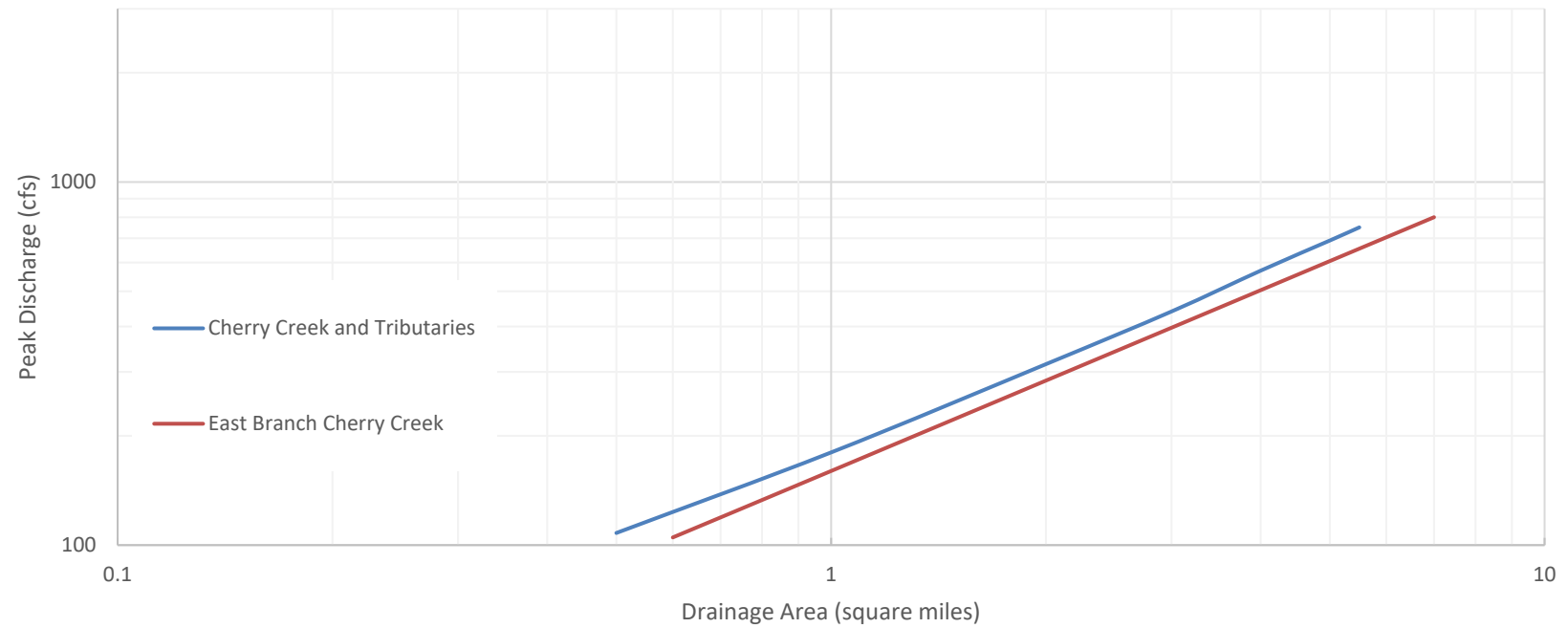
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Table 9: Summary of Discharges (continued)

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)				
			10-Percent Annual Chance	4-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
Wheeling Drainage Ditch	Approximately 277 feet upstream of Jeffrey Avenue	20.4	908	*	1,491	2,030	3,335
Wheeling Drainage Ditch	Approximately 355 feet downstream of Soo Line Railroad	20.1	885	*	1,468	1,823	2,787
White Pine Ditch	At St. Mary's Parkway	0.9	110	*	200	260	400
White Pine Ditch	At Bernard Drive	0.8	98	*	176	230	350
White Pine Ditch	At Dundee Road	0.1	20	*	40	54	90
William Rogers Memorial Diversion Channel	At the divergence from Wheeling Drainage Ditch	20.1	301	*	500	617	781
Willow Creek	At confluence with the Des Plaines River	20.2	1,337	*	1,670	1,800	3,055
Willow Creek	Approximately 1,200 feet upstream of Ruby Street	19.1	1,209	*	1,414	1,495	3,050
Willow Creek	At Higgins Road	18.5	1,023	*	1,152	1,208	3,030
Willow Creek	Approximately 1,500 feet downstream of Lee Street	17.9	996	*	1,100	1,148	3,064
Willow Creek	Downstream of Willow Creek flood control reservoir structure	15.8	910	*	960	990	3,000
Willow Creek	Confluence of Willow Creek and Higgins Creek	15.5	1,348	*	1,960	2,206	3,180

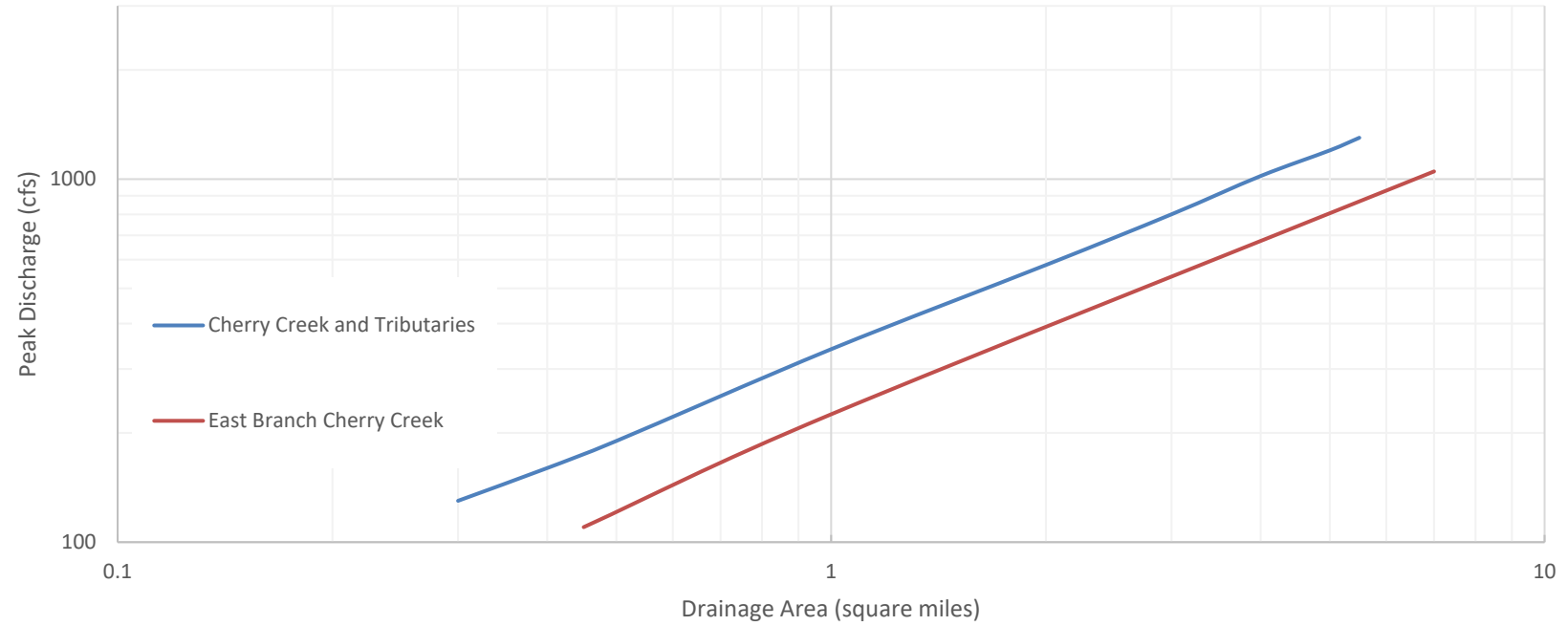
*Data not available

Figure 7a: Frequency Discharge-Drainage Area Curves (10% Annual Chance)



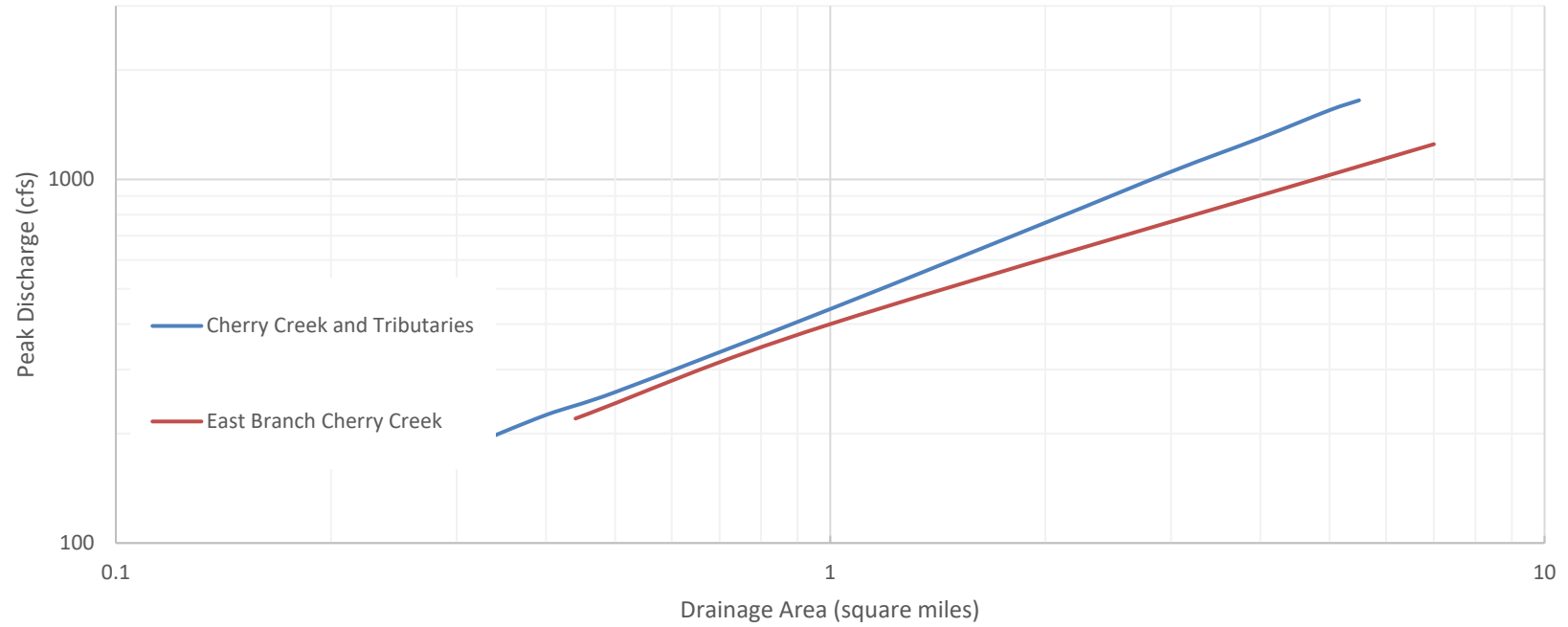
10% Annual Chance Discharges

Figure 7b: Frequency Discharge-Drainage Area Curves (2% Annual Chance)



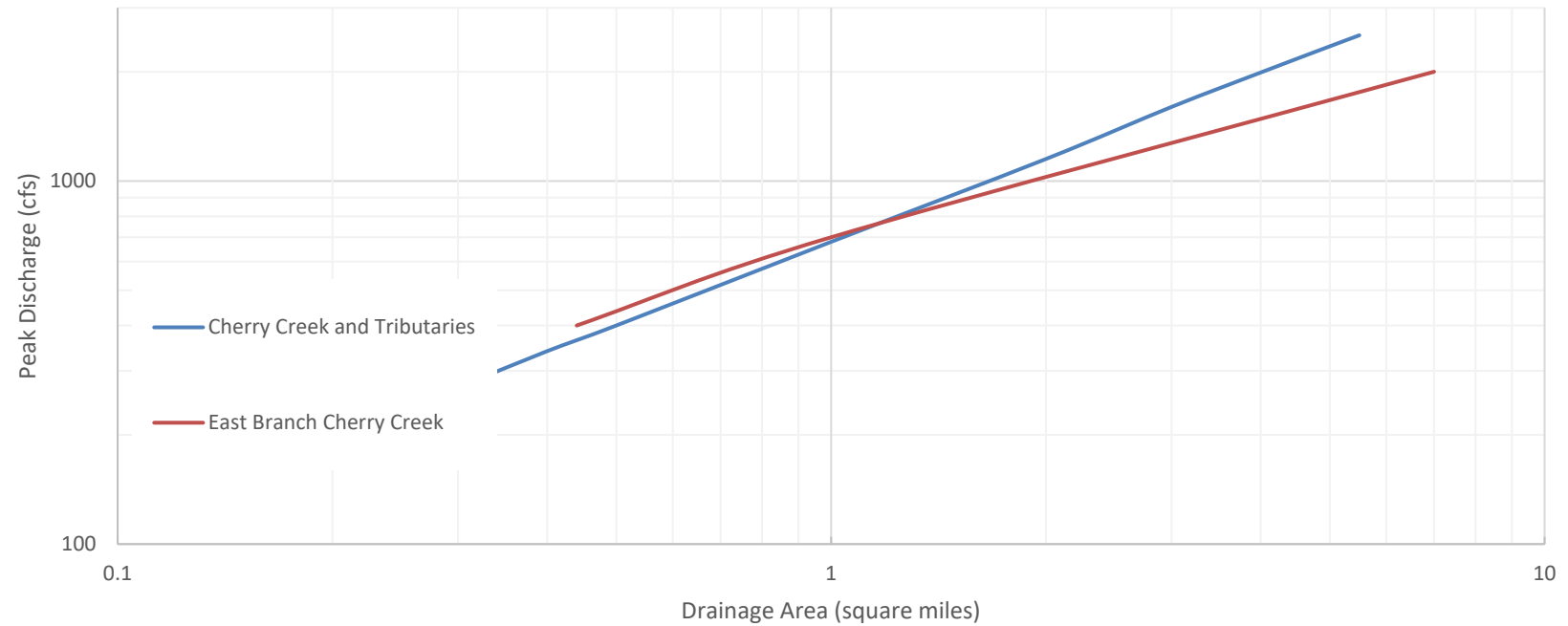
2% Annual Chance Discharges

Figure 7c: Frequency Discharge-Drainage Area Curves (1% Annual Chance)



1% Annual Chance Discharges

Figure 7d: Frequency Discharge-Drainage Area Curves (0.2% Annual Chance)



0.2% Annual Chance Discharges

Table 10: Summary of Non-Coastal Stillwater Elevations

Flooding Source	Location	Elevations (feet NAVD88) ¹				
		10-Percent Annual Chance	4-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
Area bounded by 95 th Street to the south, 93 rd Street to the north, and Kean Avenue to the west, along Belly Deep Slough	City of Hickory Hills	*	*	*	697.8	*
Bay Colony Pond	City of Des Plaines	*	*	*	632.7	*
Deer Chase Pond	Village of Orland Park	687.5	*	689.3	690.4	693.6
Detention Basin, located along an unnamed tributary to Long Run, just upstream of Will-Cook Road	Cook County, Unincorporated Areas	*	*	*	686.0	*
Detention Basin, located in area bounded by Wilson Street, Palatine Road, Middleton Avenue, and Crescent Avenue	Village of Palatine	*	*	*	754.7	*
Dude Ranch Pond	City of Des Plaines	*	*	*	631.6	*
East Pond	Village of Tinley Park	*	*	*	690.8	*

*Not calculated for this Flood Risk Project

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

Table 10: Summary of Non-Coastal Stillwater Elevations (continued)

Flooding Source	Location	Elevations (feet NAVD88) ¹				
		10-Percent Annual Chance	4-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
Hickory Hills Reservoir	City of Hickory Hills	*	*	*	623.4	*
Lake Mary Ann	City of Des Plaines	*	*	*	634.4	*
Lake Monad	Village of Schaumburg	*	*	*	800.4	*
MWRD Reservoir (West Touhy Avenue FCR)	Cook County, Unincorporated Areas	*	*	*	653.0	*
Pond 1	Village of Burr Ridge	705.2	*	705.4	705.5	705.7
Ponding Area No. 1	Village of Bensenville	653.2	*	654.4	655.0	*
Poplar Creek Schaumburg Branch	Country Club Pond	785.9	786.7	787.1	787.3	787.6
Schussler Pond, located approximately north of Golfview Drive, west of 88 th Avenue and south of 140 th Street	Village of Orland Park	*	*	*	688.9	*
Storage Basin 1	Village of Schaumburg	*	*	*	809.5	*
Storage Basin 2	Village of Schaumburg	*	*	*	805.9	*
Storage Basin 3	Village of Schaumburg	*	*	*	803.5	*

*Not calculated for this Flood Risk Project

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

Table 10: Summary of Non-Coastal Stillwater Elevations (continued)

Flooding Source	Location	Elevations (feet NAVD88) ¹				
		10-Percent Annual Chance	4-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
Storage Basin 4	Village of Schaumburg	*	*	*	800.4	*
Swallow Ridge Pond	Village of Orland Park	687.1	*	688.4	688.8	690.8
Touhy Avenue Reservoir (East Reservoir)	Cook County, Unincorporated Areas	*	*	*	649.8	*
Unnamed Ponds northwest of the intersection of Dundee Road and Milwaukee Avenue	Village of Wheeling	*	*	*	643.2	*
West Pond	Village of Tinley Park	*	*	*	690.8	*
Willow Higgins Flood Control Reservoir	City of Chicago	*	*	*	641.9	*

*Not calculated for this Flood Risk Project

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

Table 11: Stream Gage Information used to Determine Discharges

Flooding Source	Gage Identifier	Agency that Maintains Gage	Site Name	Drainage Area (Square Miles)	Period of Record*	
					From	To
Buffalo Creek	05528500	USGS	Buffalo Creek near Wheeling, IL	19.6	8/12/1952	3/1976 ¹ 12/1994 ²
Butterfield Creek	05536255	USGS	Butterfield Creek at Flossmoor, IL	23.5	3/19/1948	12/1994
Deer Creek	05536235	USGS	Deer Creek near Chicago Heights, IL	23.1	5/10/1948	6/5/2005
Des Plaines River	05532500	USGS	Des Plaines River at Riverside, IL	630	5/14/1914	9/1976 ³ 2/1977 ⁴ 1/1978 ⁵ 12/1978 ⁶ 1/1979 ⁷ 12/4/1984 ⁸
Des Plaines River	05527800	USGS	Des Plaines River at Russell, IL	123	4/2/1960	12/1994
Des Plaines River	05528000	USGS	Des Plaines River near Gurnee, IL	232	1/11/1946 4/3/1960	3/3/1958 12/1994
Des Plaines River	05529000	USGS	Des Plaines River near Des Plaines, IL	360	3/16/1941	2/1977 ⁴ 12/1978 ⁶

*Period of Record for some gages estimated from work completion date

¹Affects Village of Buffalo Grove

²Affects Village of Arlington Heights

³Affects Cook County, Unincorporated Areas

⁴Affects Village of Melrose Park

⁵Affects Village of Lyons

⁶Affects Village of Franklin Park, Village of Maywood, and Village of North Riverside

⁷Affects Village of Brookfield, Village of Hodgkins, and Village of Justice

⁸Affects Village of Lemont

Table 11: Stream Gage Information used to Determine Discharges (continued)

Flooding Source	Gage Identifier	Agency that Maintains Gage	Site Name	Drainage Area (Square Miles)	Period of Record*	
					From	To
Flag Creek	05533000	USGS	Flag Creek near Willow Springs, IL	16.5	7/26/1951	8/1978 ⁹ 12/1978 ¹⁰ 1/1979 ¹¹ 11/28/1990 ¹² 06/20/1993 ¹³
Lansing Ditch	05536265	USGS	Lansing Ditch near Lansing, IL	8.84	5/10/1948	12/1994
Lansing Ditch	05536260	USGS	Lansing Ditch at Sauk Village, IL	3.90	N/A	12/1994
Little Calumet River	05536290	USGS	Little Calumet River at South Holland, IL	208	4/6/1947	1/13/2005
Long Run	05537500	USGS	Long Run near Lemont, IL	20.9	9/27/1951	9/1976
McDonald Creek	05529500	USGS	McDonald Creek near Mount Prospect, IL	7.93	8/13/1952	1983
Midlothian Creek	05536340	USGS	Midlothian Creek at Oak Forest, IL	12.6	9/26/1951	1/13/2005 ¹⁴ 7/30/2004 ¹⁵ 12/1994 ¹⁶ 9/1977 ¹⁷

*Period of Record for some gages estimated from work completion date

⁹Affects Village of Burr Ridge

¹⁰Affects Village of Indian Park

¹¹Affects City of Palos Hills

¹²Affects Village of Burr Ridge

¹³Affects Village of Burr Ridge

¹⁴Affects City of Blue Island, Cook County, Unincorporated Areas, Village of Crestwood, Village of Midlothian, City of Oak Forest, Village of Robbins, and Village of Tinley Park

¹⁵Affects Cook County, Unincorporated Areas and Village of Tinley Park

¹⁶Affects Cook County, Unincorporated Areas, City of Harvey, Village of Hazel Crest, and City of Markham

¹⁷Affects Cook County, Unincorporated Areas, Village of Midlothian, City of Oak Forest, and Village of Tinley Park

Table 11: Stream Gage Information used to Determine Discharges (continued)

Flooding Source	Gage Identifier	Agency that Maintains Gage	Site Name	Drainage Area (Square Miles)	Period of Record*	
					From	To
Navajo Creek	05536510	USGS	Navajo Creek at Palos Heights, IL	1.69	9/24/1961	12/1978
North Branch Chicago River	05536000	USGS	North Branch Chicago River at Niles, IL	100	5/11/1951	11/06/2000 ¹⁸ 12/1994 ¹⁹
North Branch Chicago River	05534500	USGS	North Branch Chicago River at Deerfield, IL	19.7	3/15/1953	12/1994
North Creek	05536270	USGS	North Creek near Lansing, IL	16.8	3/20/1948	4/12/1979
Poplar Creek	05550450	USGS	Poplar Creek near Ontarioville, IL	16.7	1/1/1961	12/31/1977
Poplar Creek	05550500	USGS	Poplar Creek at Elgin, IL	35.2	1/1/1952	12/31/2015
Poplar Creek East Branch	05550430	USGS	East Branch Poplar Creek near Palatine, IL	2.6	1/1/1961	12/31/1977
Poplar Creek South Branch	05550470	USGS	Poplar Creek Tributary near Bartlett, IL	4.6	1/1/1961	12/31/1979
Salt Creek	05531500	USGS	Salt Creek at Western Springs, IL	115	1/9/1946	11/6/2000
Thorn Creek	05536275	USGS	Thorn Creek at Thornton, IL	104	4/5/1947	2/14/2005
N/A	04090500	USGS	N/A	N/A	N/A	11/1976
N/A	04088000	USGS	N/A	N/A	N/A	11/1976

*Period of Record for some gages estimated from work completion date

¹⁸Affects Cook County, Unincorporated Areas, Village of Glencoe, Village of Northbrook, Village of Northfield, Village of Wilmette, and Village of Winnetka

¹⁹Affects City of Chicago, Village of Morton Grove, and Village of Niles

Table 11: Stream Gage Information used to Determine Discharges (continued)

Flooding Source	Gage Identifier	Agency that Maintains Gage	Site Name	Drainage Area (Square Miles)	Period of Record*	
					From	To
Weller Creek	05530000	USGS	Weller Creek at Des Plaines, IL	13.2	2/19/1951	1/12/2005

*Period of Record for some gages estimated from work completion date