FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 1 OF 1



EFFINGHAM COUNTY, ILLINOIS

AND INCORPORATED AREAS

COMMUNITY NAME	COMMUNITY NUMBER
ALTAMONT, CITY OF	170228
BEECHER CITY, VILLAGE OF*	171105
DIETERICH, VILLAGE OF	171106
EDGEWOOD, VILLAGE OF*	171107
EFFINGHAM COUNTY UNINCORPORATED AREAS	170227
EFFINGHAM, CITY OF	170229
MASON, TOWN OF*	171108
MONTROSE, VILLAGE OF*	170230
SHUMWAY, VILLAGE OF*	171109
TEUTOPOLIS, VILLAGE OF	170231
WATSON, VILLAGE OF	170974
* N. C	

^{*} No Special Flood Hazard Areas Identified



PRELIMINARY

July 21, 2022

EFFECTIVE:

TBD

FLOOD INSURANCE STUDY NUMBER 17049CV000A Version Number 2.6.3.6

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Volume 1

Exhibits

Flood Profiles	<u>Panel</u>	
Big Creek Tributary A	01	Р
Little Wabash River Tributary N	02-03	Р
Little Wabash River Tributary N1	04-05	Р
Little Wabash River Tributary N1a	06	Р
Little Wabash River Tributary O	07	Р
Salt Creek	08-12	Р
Salt Creek Tributary A	13-16	Р
Salt Creek Tributary A1	17	Р
Salt Creek Tributary A2	18-19	Р
Salt Creek Tributary C	20-21	Р
Salt Creek Tributary D	22	Р
Salt Creek Tributary E	23-26	Р
Salt Creek Tributary F	27	Р
Salt Creek Tributary G	28-29	Р
Salt Creek Tributary G1	30-31	Р

Published Separately

Flood Insurance Rate Map (FIRM)

FLOOD INSURANCE STUDY REPORT EFFINGHAM COUNTY, ILLINOIS

SECTION 1.0 – INTRODUCTION

1.1 The National Flood Insurance Program

The National Flood Insurance Program (NFIP) is a voluntary Federal program that enables property owners in participating communities to purchase insurance protection against losses from flooding. This insurance is designed to provide an alternative to disaster assistance to meet the escalating costs of repairing damage to buildings and their contents caused by floods.

For decades, the national response to flood disasters was generally limited to constructing flood-control works such as dams, levees, sea-walls, and the like, and providing disaster relief to flood victims. This approach did not reduce losses nor did it discourage unwise development. In some instances, it may have actually encouraged additional development. To compound the problem, the public generally could not buy flood coverage from insurance companies, and building techniques to reduce flood damage were often overlooked.

In the face of mounting flood losses and escalating costs of disaster relief to the general taxpayers, the U.S. Congress created the NFIP. The intent was to reduce future flood damage through community floodplain management ordinances, and provide protection for property owners against potential losses through an insurance mechanism that requires a premium to be paid for the protection.

The U.S. Congress established the NFIP on August 1, 1968, with the passage of the National Flood Insurance Act of 1968. The NFIP was broadened and modified with the passage of the Flood Disaster Protection Act of 1973 and other legislative measures. It was further modified by the National Flood Insurance Reform Act of 1994 and the Flood Insurance Reform Act of 2004. The NFIP is administered by the Federal Emergency Management Agency (FEMA), which is a component of the Department of Homeland Security (DHS).

Participation in the NFIP is based on an agreement between local communities and the Federal Government. If a community adopts and enforces floodplain management regulations to reduce future flood risks to new construction and substantially improved structures in Special Flood Hazard Areas (SFHAs), the Federal Government will make flood insurance available within the community as a financial protection against flood losses. The community's floodplain management regulations must meet or exceed criteria established in accordance with Title 44 Code of Federal Regulations (CFR) Part 60, *Criteria for Land Management and Use*.

SFHAs are delineated on the community's Flood Insurance Rate Maps (FIRMs). Under the NFIP, buildings that were built before the flood hazard was identified on the community's FIRMs are generally referred to as "Pre-FIRM" buildings. When the NFIP was created, the U.S. Congress recognized that insurance for Pre-FIRM buildings would be prohibitively expensive if the premiums were not subsidized by the Federal Government. Congress also recognized that most of these floodprone buildings were built

by individuals who did not have sufficient knowledge of the flood hazard to make informed decisions. The NFIP requires that full actuarial rates reflecting the complete flood risk be charged on all buildings constructed or substantially improved on or after the effective date of the initial FIRM for the community or after December 31, 1974, whichever is later. These buildings are generally referred to as "Post-FIRM" buildings.

1.2 Purpose of this Flood Insurance Study Report

This Flood Insurance Study (FIS) Report provides information on the existence and severity of flood hazards for the study area. The studies described in this report developed flood hazard data that will be used to establish actuarial flood insurance rates and to assist communities in efforts to implement sound floodplain management.

In some states or communities, floodplain management criteria or regulations may exist that are more restrictive than the minimum Federal requirements. Contact your State NFIP Coordinator to ensure that any higher State standards are included in the community's regulations.

1.3 Jurisdictions Included in the Flood Insurance Study Project

This FIS Report covers the entire geographic area of Effingham County, Illinois.

The jurisdictions that are included in this project area, along with the Community Identification Number (CID) for each community and the United States Geological Survey (USGS) 8-digit Hydrologic Unit Code (HUC-8) sub-basins affecting each, are shown in Table 1. The FIRM panel numbers that affect each community are listed. If the flood hazard data for the community is not included in this FIS Report, the location of that data is identified.

The location of flood hazard data for participating communities in multiple jurisdictions is also indicated in the table.

Jurisdictions that have no identified SFHAs as of the effective date of this study are indicated in the table. Changed conditions in these communities (such as urbanization or annexation or the availability of new scientific or technical data about flood hazards could make it necessary to determine SFHAs in these jurisdictions in the future.

Table 1: Listing of NFIP Jurisdictions

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Altamont, City of	170228	05120114	17049C0142D 17049C0150D 17049C0161D 17049C0175D	
Beecher City, Village of ¹	171105	07140202	17049C0025D	
Dieterich, Village of	171106	05120114	17049C0217D 17049C0225D 17049C0250D ²	
Edgewood, Village of ¹	171107	05120114	17049C0300D	
Effingham County Unincorporated Areas	170227	05120112 05120114 07140201 07140202	17049C0025D 17049C0044D 17049C0045D 17049C0050D 17049C0055D 17049C0063D 17049C0063D 17049C0065D 17049C0068D 17049C0069D 17049C0070D 17049C0088D 17049C0100D 17049C0125D 2 17049C0150D 17049C0157D 17049C0157D 17049C0157D 17049C0175D 17049C0175D 17049C0175D 17049C0175D 17049C0175D 17049C0175D 17049C0175D 17049C0175D 17049C0175D 17049C0180D 17049C0181D 17049C0182D 17049C0183D 17049C0184D 17049C0187D 17049C0187D 17049C0187D 17049C0188D	

¹ No Special Flood Hazard Areas Identified

² Panel Not Printed

Table 1: Listing of NFIP Jurisdictions (continued)

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Effingham County Unincorporated Areas	170227	05120112 05120114 07140201 07140202	17049C0190D 17049C0191D 17049C0193D 17049C0195D 17049C0201D 17049C022D 17049C0225D 17049C0250D ² 17049C0275D 17049C0300D 17049C0305D 17049C0310D 17049C0315D 17049C0315D 17049C0320D 17049C0350D 17049C0375D ²	
Effingham, City of	170229	05120114	17049C0064D 17049C0068D 17049C0069D 17049C0070D 17049C0176D 17049C0181D 17049C0182D 17049C0183D	
Mason, Town of ¹	171108	05120114	17049C0300D 17049C0305D	
Montrose, Village of ^{1, 3}	170230	05120112 05120114	17049C0100D 17049C0125D ²	
Shumway, Village of ¹	171109	05120114 07140202	17049C0045D	
Teutopolis, Village of	170231	05120114	17049C0069D 17049C0088D 17049C0089D 17049C0201D 17049C0202D	

¹No Special Flood Hazard Areas Identified

² Panel Not Printed

³ Community is also in Cumberland County

Table 1: Listing of NFIP Jurisdictions (continued)

Community	CID	HUC-8 Sub-Basin(s)	Located on FIRM Panel(s)	If Not Included, Location of Flood Hazard Data
Watson, Village of	170974	05120114	17049C0187D 17049C0189D 17049C0191D 17049C0193D	

¹No Special Flood Hazard Areas Identified

² Panel Not Printed

³ Community is also in Cumberland County

1.4 Considerations for using this Flood Insurance Study Report

The NFIP encourages State and local governments to implement sound floodplain management programs. To assist in this endeavor, each FIS Report provides floodplain data, which may include a combination of the following: 10-, 4-, 2-, 1-, and 0.2-percent annual chance flood elevations (the 1-percent-annual-chance flood elevation is also referred to as the Base Flood Elevation (BFE)); delineations of the 1-percent-annual-chance and 0.2-percent-annual-chance floodplains; and 1-percent-annual-chance floodway. This information is presented on the FIRM and/or in many components of the FIS Report, including Flood Profiles, Floodway Data tables, Summary of Non-Coastal Stillwater Elevations tables, and Coastal Transect Parameters tables (not all components may be provided for a specific FIS).

This section presents important considerations for using the information contained in this FIS Report and the FIRM, including changes in format and content. Figures 1, 2, and 3 present information that applies to using the FIRM with the FIS Report.

 Part or all of this FIS Report may be revised and republished at any time. In addition, part of this FIS Report may be revised by a Letter of Map Revision (LOMR), which does not involve republication or redistribution of the FIS Report. Refer to Section 6.5 of this FIS Report for information about the process to revise the FIS Report and/or FIRM.

It is, therefore, the responsibility of the user to consult with community officials by contacting the community repository to obtain the most current FIS Report components. Communities participating in the NFIP have established repositories of flood hazard data for floodplain management and flood insurance purposes. Community map repository addresses are provided in Table 30, "Map Repositories," within this FIS Report.

New FIS Reports are frequently developed for multiple communities, such as entire
counties. A countywide FIS Report incorporates previous FIS Reports for individual
communities and the unincorporated area of the county (if not jurisdictional) into a
single document and supersedes those documents for the purposes of the NFIP.

The initial Countywide FIS Report for Effingham County became effective on TBD. Refer to Table 27 for information about subsequent revisions to the FIRMs.

 Selected FIRM panels for the community may contain information (such as floodways and cross sections) that was previously shown separately on the corresponding Flood Boundary and Floodway Map (FBFM) panels. In addition, former flood hazard zone designations have been changed as follows:

Old Zone	New Zone
A1 through A30	AE
V1 through V30	VE
В	X (shaded)
С	X (unshaded)

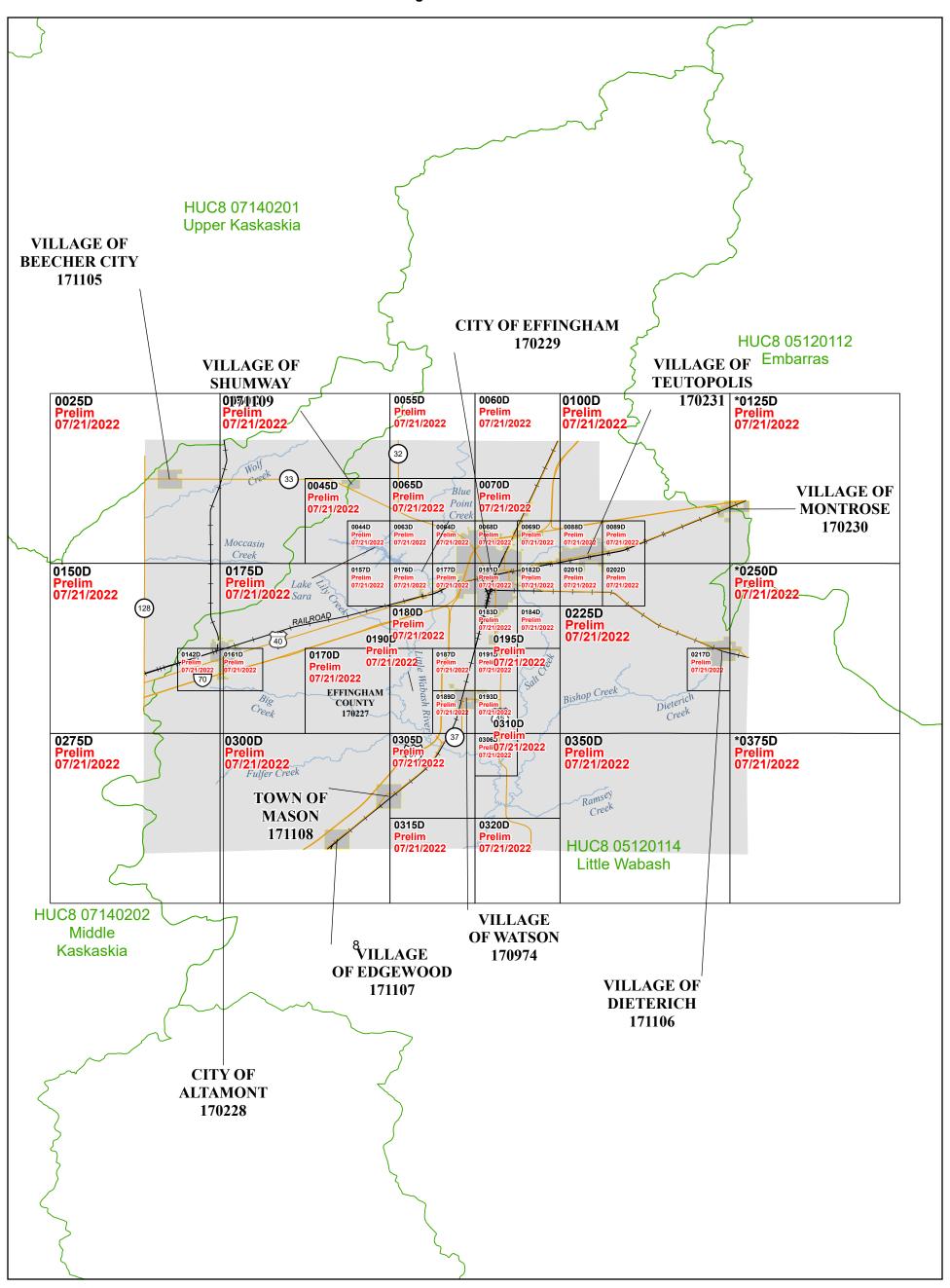
• The Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management activities that

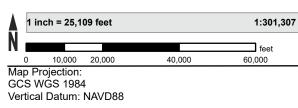
exceed the minimum NFIP requirements. Visit the FEMA Web site at www.fema.gov/flood-insurance/rules-legislation/community-rating-system or contact your appropriate FEMA Regional Office for more information about this program.

• FEMA has developed a *Guide to Flood Maps* (FEMA 258) and online tutorials to assist users in accessing the information contained on the FIRM. These include how to read panels and step-by-step instructions to obtain specific information. To obtain this guide and other assistance in using the FIRM, visit the FEMA Web site at www.fema.gov/flood-maps/tutorials.

The FIRM Index in Figure 1 shows the overall FIRM panel layout within Effingham County, and also displays the panel number and effective date for each FIRM panel in the county. Other information shown on the FIRM Index includes community boundaries, flooding sources, watershed boundaries, and USGS HUC-8 codes.

Figure 1: FIRM Index





THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT

HTTPS://MSC.FEMA.GOV

SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP INDEX

EFFINGHAM COUNTY, ILLINOIS And Incorporated Areas

PANELS PRINTED:

0025, 0044, 0045, 0050, 0055, 0060, 0063, 0064, 0065, 0068, 0069, 0070, 0088, 0089, 0100, 0142, 0150, 0157, 0161, 0170, 0175, 0176, 0177, 0180, 0181, 0182, 0183, 0184, 0187, 0189, 0190, 0191, 0193, 0195, 0201, 0202, 0217, 0225, 0275, 0300, 0305, 0306, 0310, 0315, 0320, 0350



MAP NUMBER 17049CIND1D

EFFECTIVE DATE Prelim Issue Date: 07/21/2022

Each FIRM panel may contain specific notes to the user that provide additional information regarding the flood hazard data shown on that map. However, the FIRM panel does not contain enough space to show all the notes that may be relevant in helping to better understand the information on the panel. Figure 2 contains the full list of these notes.

Figure 2: FIRM Notes to Users

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM including historic versions of this FIRM, how to order products, or the National Flood Insurance Program in general, please call the FEMA Mapping and Insurance eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Flood Map Service Center website or by calling the FEMA Mapping and Insurance eXchange.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates, refer to Table 27 in this FIS Report.

To determine if flood insurance is available in the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

<u>PRELIMINARY FIS REPORT</u>: FEMA maintains information about map features, such as street locations and names, in or near designated flood hazard areas. Requests to revise information in or near designated flood hazard areas may be provided to FEMA during the community review period, at the final Consultation Coordination Officer's meeting, or during the statutory 90-day appeal period. Approved requests for changes will be shown on the final printed FIRM.

The map is for use in administering the NFIP. It may not identify all areas subject to flooding, particularly from local drainage sources of small size. Consult the community map repository to find updated or additional flood hazard information.

BASE FLOOD ELEVATIONS: For more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, consult the Flood Profiles and Floodway Data and/or Summary of Non-Coastal Stillwater Elevations tables within this FIS Report. Use the flood elevation data within the FIS Report in conjunction with the FIRM for construction and/or floodplain management.

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

FLOOD CONTROL STRUCTURE INFORMATION: Certain areas not in Special Flood Hazard Areas may have reduced flood hazards due to flood control structures. Refer to Section 4.3 "Dams and Other Flood Hazard Reduction Measures" of this FIS Report for information on flood control structures for this jurisdiction.

Figure 2. FIRM Notes to Users

<u>PROJECTION INFORMATION</u>: The projection used in the preparation of the map was State Plane Illinois East 1201. The horizontal datum was the North American Datum of 1983 NAD83 HARN, GRS1980 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

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

Local vertical monuments may have been used to create the map. To obtain current monument information, please contact the appropriate local community listed in Table 30 of this FIS Report.

BASE MAP INFORMATION: Base map information shown on the FIRM was provided in digital format by the United States Geological Survey (USGS). The basemap shown is the USGS National Map: Orthoimagery. Last refreshed October 2020. For information about base maps, refer to Section 6.2 "Base Map" in this FIS Report.

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

NOTES FOR FIRM INDEX

<u>REVISIONS TO INDEX</u>: As new studies are performed and FIRM panels are updated within Effingham County, Illinois, corresponding revisions to the FIRM Index will be incorporated within the FIS Report to reflect the effective dates of those panels. Please refer to Table 27 of this FIS Report to determine the most recent FIRM revision date for each community. The most recent FIRM panel effective date will correspond to the most recent index date.

Figure 2. FIRM Notes to Users

SPECIAL NOTES FOR SPECIFIC FIRM PANELS

This Notes to Users section was created specifically for Effingham County, Illinois, effective TBD.

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

Each FIRM panel contains an abbreviated legend for the features shown on the maps. However, the FIRM panel does not contain enough space to show the legend for all map features. Figure 3 shows the full legend of all map features. Note that not all of these features may appear on the FIRM panels in Effingham County.

Figure 3: Map Legend for FIRM

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

is too narrow to be shown, a note is shown. Special Flood Hazard Areas subject to inundation by the 1% annual chance flood (Zones A, AE, AH, AO, AR, A99, V and VE) The flood insurance rate zone that corresponds to the 1% annual chance floodplains. No base (1% annual chance) flood elevations (BFEs) or depths are shown within this zone. Zone AE The flood insurance rate zone that corresponds to the 1% annual chance floodplains. Base flood elevations derived from the hydraulic analyses are shown within this zone. Zone AH The flood insurance rate zone that corresponds to the areas of 1% annual chance shallow flooding (usually areas of ponding) where average depths are between 1 and 3 feet. Whole-foot BFEs derived from the hydraulic analyses are shown at selected intervals within this zone. Zone AO The flood insurance rate zone that corresponds to the areas of 1% annual chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 feet. Average whole-foot depths derived from the hydraulic analyses are shown within this zone. 7one AR The flood insurance rate zone that corresponds to areas that were formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood. **7**one A99 The flood insurance rate zone that corresponds to areas of the 1% annual chance floodplain that will be protected by a Federal flood protection system where construction has reached specified statutory milestones. No base flood elevations or flood depths are shown within this zone. The flood insurance rate zone that corresponds to the 1% annual chance coastal floodplains that have additional hazards associated with storm waves. Base flood elevations are not shown within this zone. Zone VE Zone VE is the flood insurance rate zone that corresponds to the 1%

> with storm waves. Base flood elevations derived from the coastal analyses are shown within this zone as static whole-foot elevations that apply throughout the zone.

annual chance coastal floodplains that have additional hazards associated

Regulatory Floodway determined in Zone AE.

Figure 3: Map Legend for FIRM

OTHER AREAS OF FLOOD HAZARD Shaded Zone X: Areas of 0.2% annual chance flood hazards and areas of 1% annual chance flood hazards with average depths of less than 1 foot or with drainage areas less than 1 square mile. Future Conditions 1% Annual Chance Flood Hazard - Zone X: The flood insurance rate zone that corresponds to the 1% annual chance floodplains that are determined based on future-conditions hydrology. No base flood elevations or flood depths are shown within this zone. Area with Reduced Flood Hazard due to Accredited or Provisionally Accredited Levee System: Area is shown as reduced flood hazard from the 1-percent-annual-chance or greater flood by a levee system. Overtopping or failure of any levee system is possible. Area with Undetermined Flood Hazard due to Non-Accredited Levee System: Analysis and mapping procedures for non-accredited levee systems were applied resulting in a flood insurance rate zone where flood hazards are undetermined, but possible. **OTHER AREAS** Zone D (Areas of Undetermined Flood Hazard): The flood insurance rate zone that corresponds to unstudied areas where flood hazards are undetermined, but possible. **NO SCREEN** Unshaded Zone X: Areas of minimal flood hazard. FLOOD HAZARD AND OTHER BOUNDARY LINES Flood Zone Boundary (white line on ortho-photography-based mapping; gray line on vector-based mapping) (ortho) (vector) Limit of Study Jurisdiction Boundary Limit of Moderate Wave Action (LiMWA): Indicates the inland limit of the area affected by waves greater than 1.5 feet

Figure 3: Map Legend for FIRM

GENERAL STRUCTURE	s
Aqueduct Channel	Channel, Culvert, Aqueduct, or Storm Sewer
Culvert Storm Sewer	Chambel, Culvert, Aqueduct, of Ctoffi Cower
Storm Sewer	
 Dam	
Jetty Weir	Dam, Jetty, Weir
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	Levee, Dike, or Floodwall
	Bridge
Bridge	9-
REFERENCE MARKERS	3
22.0	River mile Markers
•	
CROSS SECTION & TRA	ANSECT INFORMATION
B 20.2	Lettered Cross Section with Regulatory Water Surface Elevation (BFE)
<u>5280</u> <u>21.1</u>	Numbered Cross Section with Regulatory Water Surface Elevation (BFE)
<u>17.5</u>	Unlettered Cross Section with Regulatory Water Surface Elevation (BFE)
8	Coastal Transect
	Profile Baseline: Indicates the modeled flow path of a stream and is shown on FIRM panels for all valid studies with profiles or otherwise established base flood elevation.
	Coastal Transect Baseline: Used in the coastal flood hazard model to
	represent the 0.0-foot elevation contour and the starting point for the
	transect and the measuring point for the coastal mapping.
~~~~ 513 ~~~~	Base Flood Elevation Line
ZONE AE (EL 16)	Static Base Flood Elevation value (shown under zone label)
ZONE AO (DEPTH 2)	Zone designation with Depth
ZONE AO (DEPTH 2) (VEL 15 FPS)	Zone designation with Depth and Velocity

Figure 3: Map Legend for FIRM

BASE MAP FEATURES	
Missouri Creek	River, Stream or Other Hydrographic Feature
234	Interstate Highway
234	U.S. Highway
(234)	State Highway
234	County Highway
MAPLE LANE	Street, Road, Avenue Name, or Private Drive if shown on Flood Profile
RAILROAD	Railroad
	Horizontal Reference Grid Line
	Horizontal Reference Grid Ticks
+	Secondary Grid Crosshairs
Land Grant	Name of Land Grant
7	Section Number
R. 43 W. T. 22 N.	Range, Township Number
⁴² 76 ^{000m} E	Horizontal Reference Grid Coordinates (UTM)
365000 FT	Horizontal Reference Grid Coordinates (State Plane)
80° 16' 52.5"	Corner Coordinates (Latitude, Longitude)

### **SECTION 2.0 – FLOODPLAIN MANAGEMENT APPLICATIONS**

## 2.1 Floodplain Boundaries

To provide a national standard without regional discrimination, the 1-percent-annual-chance (100-year) flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2-percent-annual-chance (500-year) flood is employed to indicate additional areas of flood hazard in the community.

Each flooding source included in the project scope has been studied and mapped using professional engineering and mapping methodologies that were agreed upon by FEMA and Effingham County as appropriate to the risk level. Flood risk is evaluated based on factors such as known flood hazards and projected impact on the built environment. Engineering analyses were performed for each studied flooding source to calculate its 1-percent-annual-chance flood elevations; elevations corresponding to other floods (e.g. 10-, 4-, 2-, 0.2-percent annual chance, etc.) may have also been computed for certain flooding sources. Engineering models and methods are described in detail in Section 5.0 of this FIS Report. The modeled elevations at cross sections were used to delineate the floodplain boundaries on the FIRM; between cross sections, the boundaries were interpolated using elevation data from various sources. More information on specific mapping methods is provided in Section 6.0 of this FIS Report.

Depending on the accuracy of available topographic data (Table 22), study methodologies employed (Section 5.0), and flood risk, certain flooding sources may be mapped to show both the 1-percent and 0.2-percent-annual-chance floodplain boundaries, regulatory water surface elevations (BFEs), and/or a regulatory floodway. Similarly, other flooding sources may be mapped to show only the 1-percent-annual-chance floodplain boundary on the FIRM, without published water surface elevations. In cases where the 1-percent and 0.2-percent-annual-chance floodplain boundaries are close together, only the 1-percent-annual-chance floodplain boundary is shown on the FIRM. Figure 3, "Map Legend for FIRM", describes the flood zones that are used on the FIRMs to account for the varying levels of flood risk that exist along flooding sources within the project area. Table 2 and Table 3 indicate the flood zone designations for each flooding source and each community within Effingham County, respectively.

Table 2, "Flooding Sources Included in this FIS Report," lists each flooding source, including its study limits, affected communities, mapped zone on the FIRM, and the completion date of its engineering analysis from which the flood elevations on the FIRM and in the FIS Report were derived. Descriptions and dates for the latest hydrologic and hydraulic analyses of the flooding sources are shown in Table 12. Floodplain boundaries for these flooding sources are shown on the FIRM (published separately) using the symbology described in Figure 3. On the map, the 1-percent-annual-chance floodplain corresponds to the SFHAs. The 0.2-percent-annual-chance floodplain shows areas that, although out of the regulatory floodplain, are still subject to flood hazards.

Small areas within the floodplain boundaries may lie above the flood elevations but cannot be shown due to limitations of the map scale and/or lack of detailed topographic data. The procedures to remove these areas from the SFHA are described in Section 6.5 of this FIS Report.

Table 2: Flooding Sources Included in this FIS Report

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub- Basin(s)	Length (mi) (streams or coastlines)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Beech Creek	Effingham County Unincorporated Areas	Approximately 1,525 feet above confluence with Cedar Creek (At Effingham County and Fayette County Boundary / Illinois Route 128 / N 1st Street)	Approximately 3,198 feet above confluence with Cedar Creek (Approximately 1,673 feet upstream of Effingham County and Fayette County Boundary / Illinois Route 128 / N 1st Street)	07140202	0.3	N	А	2020
Big Creek	Effingham County Unincorporated Areas	Confluence with Little Wabash River	Approximately 55,875 feet upstream of confluence with Little Wabash River (Approximately 3,375 feet upstream of N 300th Street)	05120114	10.6	N	А	2020
Big Creek Tributary A	Altamont, City of; Effingham County Unincorporated Areas	Approximately 366 feet upstream of confluence with Big Creek	Approximately 9,345 feet upstream of confluence with Big Creek (Approximately 1,200 feet upstream of South Main Street / Illinois Route 128)	05120114	1.7	Y	AE	2021
Bishop Creek	Effingham County Unincorporated Areas	Confluence with Ramsey Creek	Approximately 75,058 feet upstream of confluence with Ramsey Creek (Approximately 3,375 feet upstream of E 900th Avenue (extended))	05120114	14.2	N	А	2018
Blue Point Creek	Effingham County Unincorporated Areas	Confluence with Little Wabash River	Approximately 28,632 feet upstream of confluence with Little Wabash River (Approximately 140 feet downstream of N 700th Street)	05120114	5.4	N	А	2020

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub- Basin(s)	Length (mi) (streams or coastlines)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Brockett Creek	Effingham County Unincorporated Areas	Confluence with Big Creek	Approximately 26,684 feet upstream of confluence with Big Creek (Approximately 1,900 feet upstream of N 475th Street)	05120114	5.1	N	A	2020
Brush Creek	Effingham County Unincorporated Areas	Confluence with Salt Creek	Approximately 6,385 feet upstream of confluence with Salt Creek	05120114	1.2	N	А	2020
Cedar Creek	Effingham County Unincorporated Areas	At Effingham County and Fayette County Boundary / Illinois Route 128 / N 1st Street	Approximately 825 feet upstream of Effingham County and Fayette County Boundary / Illinois Route 128 / N 1st Street	07140202	0.2	N	А	2020
Coon Creek	Effingham County Unincorporated Areas	Confluence with Big Creek	Approximately 23,725 feet upstream of confluence with Big Creek (Approximately 200 feet upstream of E US Route 40)	05120114	4.5	N	А	2020
Corwin Branch	Effingham County Unincorporated Areas	Confluence with Wolf Creek	Approximately 10,420 feet upstream of confluence with Wolf Creek (Approximately 210 feet upstream of E 1950th Avenue)	07140202	2.0	N	А	2020
Dieterich Creek	Effingham County Unincorporated Areas	Confluence with Bishop Creek	Approximately 20,719 feet upstream of confluence with Bishop Creek (Approximately 290 feet upstream of N 2200th Street)	05120114	3.9	N	А	2018

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub- Basin(s)	Length (mi) (streams or coastlines)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Dieterich Creek	Dieterich, Village of; Effingham County Unincorporated Areas	Approximately 20,719 feet upstream of confluence with Bishop Creek (Approximately 290 feet upstream of N 2200th Street)	Approximately 30,002 feet upstream of confluence with Bishop Creek (Approximately 2,500 feet downstream of S Main Street)	05120114	1.8	N	А	2021
East Branch Green Creek	Effingham County Unincorporated Areas	Confluence with Green Creek	Approximately 21,974 feet upstream of confluence with Green Creek (Approximately 2,280 feet upstream of E 2000th Avenue)	05120114	4.2	N	А	2020
Fulfer Creek	Effingham County Unincorporated Areas	Confluence with Little Wabash River	Approximately 72,144 feet upstream of confluence with Little Wabash River (Approximately 3,100 feet upstream of N 300th Street)	05120114	13.7	N	А	2020
Fulfer Creek Tributary A	Effingham County Unincorporated Areas	Confluence with Fulfer Creek	Approximately 7,343 feet upstream of confluence with Fulfer Creek (Approximately 90 feet upstream of N 300th Street)	05120114	1.4	N	А	2020
Fulfer Creek Tributary A1	Effingham County Unincorporated Areas	Confluence with Fulfer Creek Tributary A	Approximately 2,619 feet upstream of confluence with Fulfer Creek Tributary A (Approximately 100 feet upstream of E 500th Avenue)	05120114	0.5	N	А	2020

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub- Basin(s)	Length (mi) (streams or coastlines)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Green Creek	Effingham County Unincorporated Areas	Confluence with Little Wabash River	Approximately 35,422 feet upstream of confluence with Little Wabash River (At Effingham County and Shelby County Boundary / Just downstream of E 2100th Avenue)	05120114	6.7	Z	А	2020
Henry Creek	Effingham County Unincorporated Areas	Confluence with Green Creek	Approximately 8,819 feet upstream of confluence with Green Creek (At Effingham County and Shelby County Boundary / Just downstream of E 2100th Avenue)	05120114	1.7	N	А	2020
Lily Creek	Effingham County Unincorporated Areas	Confluence with Little Wabash River	Approximately 35,602 feet upstream of confluence with Little Wabash River (Approximately 3,125 feet upstream of E 1350th Avenue)	05120114	6.7	N	А	2020
Limestone Creek	Effingham County Unincorporated Areas	Confluence with Fulfer Creek	Approximately 23,141 feet upstream of confluence with Fulfer Creek (Approximately 3,220 feet upstream of E 250th Avenue)	05120114	4.4	N	А	2020
Little Bishop Creek	Effingham County Unincorporated Areas	Confluence with Bishop Creek	Approximately 17,640 feet upstream of confluence with Bishop Creek (Approximately 7,000 feet upstream of N 1700th Street)	05120114	3.3	N	А	2018

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub- Basin(s)	Length (mi) (streams or coastlines)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Little Salt Creek	Effingham County Unincorporated Areas	Confluence with Salt Creek	Approximately 56,499 feet upstream of confluence with Salt Creek (Approximately 600 feet downstream of E 1300th Avenue)	05120114	10.7	N	A	2020
Little Wabash River	Effingham County Unincorporated Areas; Effingham, City of	Approximately 918,071 feet upstream of confluence with Wabash River (Approximately 920 feet downstream of Effingham County and Clay County Boundary / E 1st Avenue extended)	Approximately 1,111,532 feet upstream of confluence with Wabash River (At Effingham County and Shelby County Boundary / E 2100th Avenue extended)	05120114	36.5	Ν	A	2019
Little Wabash River Tributary M	Effingham County Unincorporated Areas	Confluence with Little Wabash River	Approximately 6,750 feet upstream of confluence with Little Wabash River	05120114	1.3	N	A	2020
Little Wabash River Tributary N	Effingham County Unincorporated Areas; Effingham, City of	Approximately 2,869 feet upstream of confluence with Little Wabash River (Approximately 2,135 feet downstream of North Outer Belt West)	Approximately 9,850 feet upstream of confluence with Little Wabash River (Approximately 2,550 feet upstream of Interstate 70 / Interstate 57)	05120114	1.3	Y	AE	2021

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub- Basin(s)	Length (mi) (streams or coastlines)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Little Wabash River Tributary N1	Effingham, City of	Confluence with Little Wabash River Tributary N	Approximately 6,852 feet upstream of confluence with Little Wabash River Tributary N (Approximately 580 feet upstream of North Maple Street)	05120114	1.3	Y	AE	2021
Little Wabash River Tributary N1a	Effingham, City of	Confluence with Little Wabash River Tributary N1	Approximately 1,943 feet upstream of confluence with Little Wabash River Tributary N1 (Just downstream of Hampton Drive)	05120114	0.4	Y	AE	2021
Little Wabash River Tributary O	Effingham County Unincorporated Areas	Approximately 1,616 feet upstream of confluence with Little Wabash River	Approximately 1,917 feet upstream of confluence with Little Wabash River (Just downstream of Lake Pauline)	05120114	0.06	Y	AE	2021
Moccasin Creek	Effingham County Unincorporated Areas	At Effingham County and Fayette County Boundary / Illinois Route 128 / N 1st Street	Approximately 33,463 feet upstream of Effingham County and Fayette County Boundary / Illinois Route 128 / N 1st Street (Approximately 500 feet downstream of N 500th Street)	07140202	6.3	N	А	2020
Morris Creek	Effingham County Unincorporated Areas	Confluence with Wolf Creek	Approximately 7,151 feet upstream of confluence with Wolf Creek (Approximately 5,775 feet upstream E 2000th Avenue)	07140202	1.4	N	А	2020

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub- Basin(s)	Length (mi) (streams or coastlines)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
North Fork Shoal Creek	Effingham County Unincorporated Areas	Confluence with Shoal Creek	Approximately 12,139 feet upstream of confluence with Shoal Creek (Approximately 5,175 feet upstream of E 2000th Avenue)	05120114	2.3	N	А	2020
Ramsey Creek	Effingham County Unincorporated Areas	Confluence with Little Wabash River	Approximately 34,018 feet upstream of confluence with Little Wabash River (Approximately 2,400 feet upstream of N 1800th Street)	oproximately 34,018 feet ostream of confluence with ttle Wabash River opproximately 2,400 feet		N	А	2018
Salt Creek	Effingham County Unincorporated Areas; Effingham, City of; Teutopolis, Village of	Approximately 57,480 feet upstream of confluence with Little Wabash (Approximately 385 feet upstream of East 1050th Road)	Approximately 109,429 feet upstream of confluence with Little Wabash (Approximately 1,760 feet upstream of North 1800th Street)	05120114	9.8	Y	AE	2021
Salt Creek	Effingham County Unincorporated Areas	Confluence with Little Wabash River	Approximately 57,480 feet upstream of confluence with Little Wabash River (Approximately 390 feet upstream of E 1050th Road)	05120114	10.9	N	А	2020
Salt Creek Tributary A	Effingham County Unincorporated Areas; Watson, Village of	Approximately 3,148 feet upstream of confluence with Salt Creek (Approximately 90 feet downstream of U.S. Route 45)	Approximately 33,374 feet upstream of confluence with Salt Creek (Approximately 700 feet upstream of Railroad)	05120114	5.7	Y	AE	2021

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub- Basin(s)	Length (mi) (streams or coastlines)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Salt Creek Tributary A1	Effingham County Unincorporated Areas; Watson, Village of	Confluence with Salt Creek Tributary A	Approximately 2,830 feet upstream of confluence with Salt Creek Tributary A (Approximately 1,600 feet upstream of Access Road)	05120114	0.5	Y	AE	2021
Salt Creek Tributary A2	Effingham County Unincorporated Areas; Watson, Village of	Confluence with Salt Creek Tributary A	Approximately 8,822 feet upstream of confluence with Salt Creek Tributary A (Approximately 170 feet upstream of North 1200th Street)	05120114	1.7	Y	AE	2021
Salt Creek Tributary B	Effingham County Unincorporated Areas	Confluence with Salt Creek	Approximately 9,483 feet upstream of confluence with Salt Creek (Approximately 1,770 feet upstream of E Dutch Lane)	05120114	1.8	N	А	2020
Salt Creek Tributary C	Effingham County Unincorporated Areas; Effingham, City of	Confluence with Salt Creek	Approximately 7,977 feet upstream of confluence with Salt Creek (Approximately 1,400 feet upstream of U.S. Route 45 / South Banker Street)	05120114	1.5	Y	AE	2021
Salt Creek Tributary D	Effingham, City of	Confluence with Salt Creek	Approximately 4,663 feet upstream of confluence with Salt Creek (Approximately 785 feet upstream of East Wabash Avenue)	05120114	0.9	Y	AE	2021

Table 2: Flooding Sources Included in this FIS Report (continued)

					-			
Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub- Basin(s)	Length (mi) (streams or coastlines)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Salt Creek Tributary E	Effingham County Unincorporated Areas; Teutopolis, Village of	Confluence with Salt Creek	Approximately 20,236 feet upstream of confluence with Salt Creek (Approximately 230 feet upstream of South Oak Street)	05120114	3.8	Y	AE	2021
Salt Creek Tributary F	Effingham County Unincorporated Areas; Effingham, City of	Confluence with Salt Creek	Approximately 2,840 feet upstream of confluence with Salt Creek (Approximately 1,500 feet upstream of Access Road)	05120114	0.5	Y	AE	2021
Salt Creek Tributary G	Effingham County Unincorporated Areas; Effingham, City of	Confluence with Salt Creek	Approximately 8,052 feet upstream of confluence with Salt Creek (Just downstream of Technology Drive)	05120114	1.5	Y	AE	2021
Salt Creek Tributary G1	Effingham County Unincorporated Areas; Effingham, City of	Confluence with Salt Creek Tributary G	Approximately 5,849 feet upstream of confluence with Salt Creek (Approximately 980 feet upstream of West Evergreen Avenue)	05120114	1.1	Y	AE	2021
Second Creek	Effingham County Unincorporated Areas	Confluence with Little Wabash River	Approximately 52,291 feet upstream of confluence with Little Wabash River (Approximately 615 feet upstream of N 450th Street)	05120114	9.9	N	А	2020

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub- Basin(s)	Length (mi) (streams or coastlines)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Second Creek Tributary A	Effingham County Unincorporated Areas	Confluence with Second Creek	Approximately 5,292 feet upstream of confluence with Second Creek (Approximately 4,700 feet upstream of E 925th Avenue)	05120114	1.0	N	А	2020
Second Creek Tributary B	Effingham County Unincorporated Areas	Confluence with Second Creek	Approximately 10,789 feet upstream of confluence with Second Creek (Approximately 900 feet upstream of Interstate70)	05120114	2.0	N	А	2020
Second Salt Creek	Effingham County Unincorporated Areas	Confluence with Salt Creek	Approximately 18,029 feet upstream of confluence with Salt Creek (Just downstream of E 1800th Avenue (extended) / Effingham County and Cumberland County Boundary)	05120114	3.4	N	А	2020
Shoal Creek	Effingham County Unincorporated Areas	Confluence with Little Wabash River	Approximately 17,557 feet upstream of confluence with Little Wabash River (Approximately 3,925 feet upstream of Illinois Route 32)	05120114	3.3	N	A	2020
Sugar Fork	Effingham County Unincorporated Areas	Confluence with Green Creek	Approximately 10,827 feet upstream of confluence with Green Creek (Just downstream of N 1500th Street)	05120114	2.1	N	А	2020

Table 2: Flooding Sources Included in this FIS Report (continued)

Flooding Source	Community	Downstream Limit	Upstream Limit	HUC-8 Sub- Basin(s)	Length (mi) (streams or coastlines)	Floodway (Y/N)	Zone shown on FIRM	Date of Analysis
Wolf Creek	Effingham County Unincorporated Areas	At Effingham County and Fayette County Boundary / Illinois Route 128 / N 1st Street	Approximately 53,324 feet upstream of Effingham County and Fayette County Boundary / Illinois Route 128 / N 1st Street (At Effingham County and Shelby County Boundary / E 2100th Avenue)	07140202	10.1	N	А	2020
Wolf Creek Tributary A	Effingham County Unincorporated Areas	Confluence with Wolf Creek	Approximately 14,513 feet upstream of confluence with Wolf Creek (Approximately 7,880 feet upstream of E 1800th Street)	07140202	2.7	N	А	2020
Wolf Creek Tributary B	Effingham County Unincorporated Areas	Confluence with Wolf Creek	Approximately 5,163 feet upstream of confluence with Wolf Creek (At Effingham County and Shelby County Boundary / E 2100th Avenue)	07140202	1.0	N	А	2020

## 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 Illinois require communities in Effingham 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.

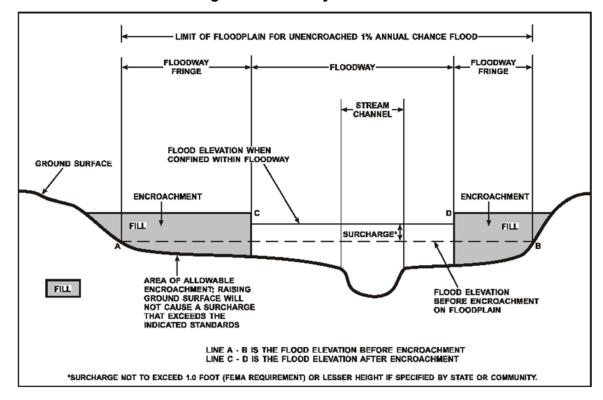


Figure 4: Floodway Schematic

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 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.

BFEs are primarily intended for flood insurance rating purposes. 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. 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. For example, the user may use the FIRM to determine the stream station of a location of interest and then use the profile to determine the 1-percent annual chance elevation at that location. Because only selected cross sections may be shown on the FIRM for riverine areas, the profile should be used to obtain the flood elevation between mapped cross sections. Additionally, for riverine areas, whole-foot elevations shown on the FIRM may not exactly reflect the elevations derived from the hydraulic analyses; therefore, elevations obtained from the profile may more accurately reflect the results of the hydraulic analysis.

## 2.4 Non-Encroachment Zones

This section is not applicable to this Flood Risk Project.

#### 2.5 Coastal Flood Hazard Areas

This section is not applicable to this Flood Risk Project.

#### 2.5.1 Water Elevations and the Effects of Waves

This section is not applicable to this Flood Risk Project.

## Figure 5: Wave Runup Transect Schematic

[Not applicable to this Flood Risk Project]

#### 2.5.2 Floodplain Boundaries and BFEs for Coastal Areas

This section is not applicable to this Flood Risk Project.

### 2.5.3 Coastal High Hazard Areas

This section is not applicable to this Flood Risk Project.

## **Figure 6: Coastal Transect Schematic**

[Not applicable to this Flood Risk Project]

#### 2.5.4 Limit of Moderate Wave Action

This section is not applicable to this Flood Risk Project.

#### **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 Effingham County.

**Table 3: Flood Zone Designations by Community** 

Community	Flood Zone(s)
Altamont, City of	AE, X
Beecher City, Village of	X
Dieterich, Village of	A, X
Edgewood, Village of	X
Effingham County Unincorporated Areas	A, AE, X
Effingham, City of	A, AE, X
Mason, Town of	X
Montrose, Village of	Х
Shumway, Village of	Х
Teutopolis, Village of	AE, X
Watson, Village of	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)
Embarras	05120112	Embarras River	Located in the northeast corner of the county, covers approximately 1% of Effingham County with 4 square miles	2,430
Little Wabash	05120114	Little Wabash River	Largest watershed in Effingham County, covers approximately 85% of the county with 410 square miles	2,120
Middle Kaskaskia	07140202	Kaskaskia River	Located in the western portion of the county, covers approximately 13% of Effingham County with 64 square miles	1,680
Upper Kaskaskia	07140201	Kaskaskia River	Located in the northwest corner of the county, covers less than 1% of Effingham County with 2 square miles	1,540

## 4.2 Principal Flood Problems

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

**Table 5: Principal Flood Problems** 

Flooding Source	Description of Flood Problems
Little Wabash River	Flooding in the Little Wabash River watershed often results during general heavy rains over the entire basin. According to the 2020 Effingham County Multi-Jurisdictional All Hazards Mitigation Plan, the record setting Little Wabash River flood in this area occurred on May 12, 2002 when the Little Wabash River crested at 24.27 feet near Effingham. The second and third highest crest at this location occurred in May 8, 1996 and July 5, 2000 respectively.
Salt Creek	Heavy rains over the last weekend of April 2017 led to flooding throughout the region. Between 4/26 and the afternoon of Sunday 4/30, over 5 inches of rain had been reported with another inch still expected to fall. Salt Creek was reported to have left its banks at several places. After heavy rain in May 2019, the Effingham County Highway Commissioner reported that all of the Salt Creek systems North and East of Teutopolis were flooded and impassable, including some side streets.

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

**Table 6: Historic Flooding Elevations** 

Flooding Source	Location	Historic Peak (Feet NGVD29)	Event Date	Approximate Recurrence Interval (years)	Source of Data
Salt Creek	900 feet downstream of Route 33	539.42	6/7/2008		City of Effingham
Salt Creek	Just downstream of Route 33	539.6	6/7/2008		City of Effingham
Salt Creek	Just downstream of Route 40	544.87	6/7/2008		City of Effingham
Salt Creek	Just upstream of Route 33	540.64	6/7/2008		City of Effingham
Salt Creek	Just upstream of Route 40	545.48	6/7/2008		City of Effingham

# 4.3 Dams and Other Flood Hazard Reduction Measures

Table 7 contains information about non-levee flood hazard reduction measures within Effingham County such as dams or jetties. Levee systems are addressed in Section 4.4 of this FIS Report.

### **Table 7: Dams and Other Flood Hazard Reduction Measures**

[Not applicable to this Flood Risk Project]

# 4.4 Levee Systems

This section is not applicable to this Flood Risk Project.

**Table 8: Levee Systems** 

[Not applicable to this Flood Risk Project]

#### **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 1 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.

In addition to these flood events, the "1-percent-plus", or "1%+", annual chance flood elevation has been modeled and included on the flood profile for certain flooding sources in this FIS Report. While not used for regulatory or insurance purposes, this flood event has been calculated to help illustrate the variability range that exists between the regulatory 1-percent-annual-chance flood elevation and a 1-percent-annual-chance elevation that has taken into account an additional amount of uncertainty in the flood discharges (thus, the 1% "plus"). For flooding sources whose discharges were estimated using regression equations, the 1%+ flood elevations are derived by taking the 1-percent-annual-chance flood discharges and increasing the modeled discharges by a percentage equal to the average predictive error for the regression equation. For flooding sources with gage- or rainfall-runoff-based discharge estimates, the upper 84-percent confidence limit of the discharges is used to compute the 1%+ flood elevations.

# 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. A summary of stillwater elevations developed for non-coastal flooding sources is provided in Table 10. Stream gage information is provided in Table 11.

Table 9: Summary of Discharges

			Peak Discharge (cfs)				
Flooding Source	Location	Drainage Area (Square Miles)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Big Creek Tributary A	Just upstream of Interstate 70	2.2	670	929	1,180	1,556	2,525
Big Creek Tributary A	Approximately 1,000 feet upstream of Interstate 70	2.0	568	777	982	1,296	2,186
Big Creek Tributary A	Approximately 250 feet upstream of South Main Street / Illinois Route 128	1.5	423	574	719	946	1,588
Little Wabash River Tributary N	At the confluence with Little Wabash River	2.7	1,094	1,410	1,675	2,018	2,714
Little Wabash River Tributary N	At North Outer Belt West	2.1	982	1,288	1,525	1,842	2,518
Little Wabash River Tributary N	Just upstream of Interstate 70 / Interstate 57	0.5	280	380	452	570	782
Little Wabash River Tributary N1	At confluence with Little Wabash River Tributary N	1.4	706	913	1,101	1,273	1,802
Little Wabash River Tributary N1	Just upstream of confluence with Little Wabash River Tributary N1a	0.8	418	551	732	891	1,201
Little Wabash River Tributary N1	Approximately 900 feet upstream of North Henrietta Street	0.5	274	374	469	611	1,011

Table 9: Summary of Discharges (continued)

			Peak Discharge (cfs)				
Flooding Source	Location	Drainage Area (Square Miles)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Little Wabash River Tributary N1	At West Temple Avenue	0.3	156	214	270	355	593
Little Wabash River Tributary N1a	At confluence with Little Wabash River Tributary N1	0.4	192	260	325	421	690
Little Wabash River Tributary O	At confluence with Little Wabash River	0.9	70	101	132	175	366
Salt Creek	Approximately 4,800 feet upstream of East 1050th Road	43.6	4,990	6,611	8,243	10,718	18,051
Salt Creek	Approximately 3,800 feet downstream of Railroad	39.1	4,925	6,471	8,031	10,442	17,464
Salt Creek	Just upstream of confluence with Salt Creek Tributary D	36.2	4,833	6,315	7,843	10,230	17,139
Salt Creek	Just upstream of confluence with Salt Creek Tributary F	31.6	4,540	5,888	7,344	9,628	15,952
Salt Creek	Just upstream of confluence with Salt Creek Tributary G	27.0	4,063	5,172	6,530	8,464	13,996
Salt Creek	Just upstream of North 1600th Street	23.0	3,604	4,573	5,766	7,435	12,213
Salt Creek	Approximately 850 feet upstream of North Green Street	11.7	1,991	2,452	3,075	3,938	6,296
Salt Creek Tributary A	At confluence with Salt Creek	11.2	1,859	2,378	2,936	3,862	6,317
Salt Creek Tributary A	Approximately 4,300 feet upstream of U.S. Route 45	9.6	1,654	2,126	2,627	3,386	5,475

Table 9: Summary of Discharges (continued)

			Peak Discharge (cfs)				
Flooding Source	Location	Drainage Area (Square Miles)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Salt Creek Tributary A	Approximately 4,900 feet upstream of U.S. Route 45	9.1	1,568	2,031	2,503	3,217	5,161
Salt Creek Tributary A	Approximately 3,000 feet downstream of Illinois Route 37	8.2	1,467	1,923	2,357	3,015	4,787
Salt Creek Tributary A	Just upstream of confluence with Salt Creek Tributary A1	7.2	1,297	1,715	2,110	2,680	4,246
Salt Creek Tributary A	Just upstream of confluence with Salt Creek Tributary A2	4.4	801	1,058	1,298	1,621	2,555
Salt Creek Tributary A	Approximately 3,700 feet upstream of East 825th Avenue	3.0	559	735	908	1,134	1,783
Salt Creek Tributary A	Just upstream of Railroad	2.2	445	585	717	904	1,414
Salt Creek Tributary A1	At confluence with Salt Creek Tributary A	0.9	171	267	352	478	834
Salt Creek Tributary A1	Approximately 2,000 feet upstream of the confluence with Salt Creek Tributary A	0.6	139	195	250	333	560
Salt Creek Tributary A2	At confluence with Salt Creek Tributary A2	2.4	452	611	764	980	1,555
Salt Creek Tributary A2	Approximately 800 upstream of confluence with Salt Creek Tributary A2	2.1	392	527	659	844	1,344
Salt Creek Tributary A2	Approximately 100 feet upstream of Railroad	1.4	282	376	466	593	939
Salt Creek Tributary C	Approximately 1,700 feet upstream of confluence with Salt Creek	1.4	553	747	933	1,202	1,974

Table 9: Summary of Discharges (continued)

			Peak Discharge (cfs)				
Flooding Source	Location	Drainage Area (Square Miles)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Salt Creek Tributary C	Approximately 850 feet downstream of Hoffman Drive	0.8	390	523	650	830	1,347
Salt Creek Tributary C	Just upstream of South Banker Street / U.S. Route 45	0.5	235	318	398	513	828
Salt Creek Tributary D	At confluence with Salt Creek	1.1	424	577	720	926	1,457
Salt Creek Tributary D	Approximately 1,000 feet upstream of confluence with Salt Creek	1.0	374	508	634	815	1,283
Salt Creek Tributary D	Just upstream of East Wabash Avenue	0.6	277	373	466	596	958
Salt Creek Tributary E	At confluence with Salt Creek	3.4	682	944	1,185	1,521	2,472
Salt Creek Tributary E	Just upstream of North 1600th Street	2.8	588	806	1,010	1,298	2,084
Salt Creek Tributary E	Approximately 1,750 feet upstream of North 1600th Street	2.2	426	581	724	928	1,468
Salt Creek Tributary E	Approximately 3,900 feet upstream of North 1600th Street	1.9	345	458	560	709	1,183
Salt Creek Tributary E	Approximately 250 feet upstream of North 1750th Street	1.0	208	280	348	446	716
Salt Creek Tributary F	At confluence with Salt Creek	0.3	110	164	217	297	533
Salt Creek Tributary G	At confluence with Salt Creek	4.2	745	1,004	1,244	1,568	2,464

Table 9: Summary of Discharges (continued)

			Peak Discharge (cfs)				
Flooding Source	Location	Drainage Area (Square Miles)	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Salt Creek Tributary G	Approximately 525 feet upstream of East Evergreen Avenue	2.7	558	758	946	1,215	1,963
Salt Creek Tributary G1	At confluence with Salt Creek Tributary G	1.1	221	299	366	491	857
Salt Creek Tributary G1	Just upstream of Railroad	0.9	133	185	234	307	507

Figure 7: Frequency Discharge-Drainage Area Curves

[Not applicable to this Flood Risk Project]

**Table 10: Summary of Non-Coastal Stillwater Elevations** 

		Elevation (FT NAVD88)					
Flooding Source	Location	10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance	
Lake Pauline	At Lake Pauline	572.0	572.4	572.8	573.2	574.3	

**Table 11: Stream Gage Information used to Determine Discharges** 

		Agency			Period o	f Record
Flooding Source	Gage Identifier	that Maintains Gage	Site Name	Drainage Area	From	То
Little Wabash River	03381500	USGS	LITTLE WABASH RIVER AT CARMI, IL	3,102	10/1/1939	5/8/2017
Little Wabash River	03379500	USGS	LITTLE WABASH RIVER BELOW CLAY CITY, IL	1,131	8/22/1914	9/30/2017
Little Wabash River	03378900	USGS	LITTLE WABASH RIVER AT LOUISVILLE, IL	745	8/9/1965	10/1/1992
Little Wabash River	03378635	USGS	LITTLE WABASH RIVER NEAR EFFINGHAM, IL	240	10/1/1966	5/4/2017

### 5.2 Hydraulic Analyses

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

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

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

Table 12: Summary of Hydrologic and Hydraulic Analyses

Flooding Source	Study Limits  Downstream Limit Upstream Limit		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Beech Creek	Approximately 1,525 feet above confluence with Cedar Creek (At Effingham County and Fayette County Boundary / Illinois Route 128 / N 1st Street)	Approximately 3,198 feet above confluence with Cedar Creek (Approximately 1,673 feet upstream of Effingham County and Fayette County Boundary / Illinois Route 128 / N 1st Street)	Regression Equations	HEC-RAS 3.1.1 and up	1/6/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Big Creek	Confluence with Little Wabash River	Approximately 55,875 feet upstream of confluence with Little Wabash River (Approximately 3,375 feet upstream of N 300th Street)	Regression Equations	HEC-RAS 3.1.1 and up	4/29/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Big Creek Tributary A	Approximately 366 feet upstream of confluence with Big Creek	Approximately 9,345 feet upstream of confluence with Big Creek (Approximately 1,200 feet upstream of South Main Street / Illinois Route 128)	HEC-HMS 3.0 and up (Dec 2005)	HEC-RAS 3.1.1 and up	5/17/2021	AE w/ Floodway	HEC-RAS v. 5.0.7, 1D Steady Flow; HEC-HMS v. 3.5, ISWS Bulletin 70, NRCS Curve Number; labeled as Unnamed Str on City of Altamont FIRM

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

Flooding Source	Study Downstream Limit	Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Bishop Creek	Confluence with Ramsey Creek	Approximately 75,058 feet upstream of confluence with Ramsey Creek (Approximately 3,375 feet upstream of E 900th Avenue (extended))	Regression Equations	HEC-RAS 3.1.1 and up	11/12/2018	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Blue Point Creek	Confluence with Little Wabash River	Approximately 28,632 feet upstream of confluence with Little Wabash River (Approximately 140 feet downstream of N 700th Street)	Regression Equations	HEC-RAS 3.1.1 and up	5/14/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Brockett Creek	Confluence with Big Creek	Approximately 26,684 feet upstream of confluence with Big Creek (Approximately 1,900 feet upstream of N 475th Street)	Regression Equations	HEC-RAS 3.1.1 and up	4/29/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Brush Creek	Confluence with Salt Creek	Approximately 6,385 feet upstream of confluence with Salt Creek	Regression Equations	HEC-RAS 3.1.1 and up	5/19/2020	A	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural

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

Flooding Source	Study Limits  Downstream Limit Upstream Limit		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Cedar Creek	At Effingham County and Fayette County Boundary / Illinois Route 128 / N 1st Street	Approximately 825 feet upstream of Effingham County and Fayette County Boundary / Illinois Route 128 / N 1st Street	Regression Equations	HEC-RAS 3.1.1 and up	1/6/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Coon Creek	Confluence with Big Creek	Approximately 23,725 feet upstream of confluence with Big Creek (Approximately 200 feet upstream of E US Route 40)	Regression Equations	HEC-RAS 3.1.1 and up	4/29/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Corwin Branch	Confluence with Wolf Creek	Approximately 10,420 feet upstream of confluence with Wolf Creek (Approximately 210 feet upstream of E 1950th Avenue)	Regression Equations	HEC-RAS 3.1.1 and up	1/6/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural

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

Flooding Source	Study Limits  Downstream Limit Upstream Limit		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Dieterich Creek	Confluence with Bishop Creek	Approximately 20,719 feet upstream of confluence with Bishop Creek (Approximately 290 feet upstream of N 2200th Street)	Regression Equations	HEC-RAS 3.1.1 and up	11/12/2018	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Dieterich Creek	Approximately 20,719 feet upstream of confluence with Bishop Creek (Approximately 290 feet upstream of N 2200th Street)	Approximately 30,002 feet upstream of confluence with Bishop Creek (Approximately 2,500 feet downstream of S Main Street)	Regression Equations	HEC-RAS 3.1.1 and up	7/30/2021	А	HEC-RAS v. 5.0.7, 1D Steady Flow; USGS StreamStats 2004, Rural
East Branch Green Creek	Confluence with Green Creek	Approximately 21,974 feet upstream of confluence with Green Creek (Approximately 2,280 feet upstream of E 2000th Avenue)	Regression Equations	HEC-RAS 3.1.1 and up	5/14/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural

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

Flooding Source	Study Limits  Downstream Limit Upstream Limit		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Fulfer Creek	Confluence with Little Wabash River	Approximately 72,144 feet upstream of confluence with Little Wabash River (Approximately 3,100 feet upstream of N 300th Street)	Regression Equations	HEC-RAS 3.1.1 and up	4/29/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Fulfer Creek Tributary A	Confluence with Fulfer Creek	Approximately 7,343 feet upstream of confluence with Fulfer Creek (Approximately 90 feet upstream of N 300th Street)	Regression Equations	HEC-RAS 3.1.1 and up	4/29/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Fulfer Creek Tributary A1	Confluence with Fulfer Creek Tributary A	Approximately 2,619 feet upstream of confluence with Fulfer Creek Tributary A (Approximately 100 feet upstream of E 500th Avenue)	Regression Equations	HEC-RAS 3.1.1 and up	4/29/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural

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

Flooding Source	Study Limits  Downstream Limit Upstream Limit		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Green Creek	Confluence with Little Wabash River	Approximately 35,422 feet upstream of confluence with Little Wabash River (At Effingham County and Shelby County Boundary / Just downstream of E 2100th Avenue)	Regression Equations	HEC-RAS 3.1.1 and up	5/14/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Henry Creek	Confluence with Green Creek	Approximately 8,819 feet upstream of confluence with Green Creek (At Effingham County and Shelby County Boundary / Just downstream of E 2100th Avenue)	Regression Equations	HEC-RAS 3.1.1 and up	5/14/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Lily Creek	Confluence with Little Wabash River	Approximately 35,602 feet upstream of confluence with Little Wabash River (Approximately 3,125 feet upstream of E 1350th Avenue)	Regression Equations	HEC-RAS 3.1.1 and up	4/29/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural

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

Flooding Source	Study Limits  Downstream Limit Upstream Limit		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Limestone Creek	Confluence with Fulfer Creek	Approximately 23,141 feet upstream of confluence with Fulfer Creek (Approximately 3,220 feet upstream of E 250th Avenue)	Regression Equations	HEC-RAS 3.1.1 and up	4/29/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Little Bishop Creek	Confluence with Bishop Creek	Approximately 17,640 feet upstream of confluence with Bishop Creek (Approximately 7,000 feet upstream of N 1700th Street)	Regression Equations	HEC-RAS 3.1.1 and up	11/12/2018	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Little Salt Creek	Confluence with Salt Creek	Approximately 56,499 feet upstream of confluence with Salt Creek (Approximately 600 feet downstream of E 1300th Avenue)	Regression Equations	HEC-RAS 3.1.1 and up	5/19/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural

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

Flooding Source	Study Downstream Limit	Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Little Wabash River	Approximately 918,071 feet upstream of confluence with Wabash River (Approximately 920 feet downstream of Effingham County and Clay County Boundary / E 1st Avenue extended)	Approximately 1,111,532 feet upstream of confluence with Wabash River (At Effingham County and Shelby County Boundary / E 2100th Avenue extended)	PEAKFQ 2.4 (April 1998) and up	HEC-RAS 3.1.1 and up	6/28/2019	А	HEC-RAS v. 4.1, 1D Steady Flow; PEAKFQ v. 7.1, USGS StreamStats 2004, Rural
Little Wabash River Tributary M	Confluence with Little Wabash River	Approximately 6,750 feet upstream of confluence with Little Wabash River	Regression Equations	HEC-RAS 3.1.1 and up	4/29/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Little Wabash River Tributary N	Approximately 2,869 feet upstream of confluence with Little Wabash River (Approximately 2,135 feet downstream of North Outer Belt West)	Approximately 9,850 feet upstream of confluence with Little Wabash River (Approximately 2,550 feet upstream of Interstate 70 / Interstate 57)	HEC-HMS 3.0 and up (Dec 2005)	HEC-RAS 3.1.1 and up	5/17/2021	AE w/ Floodway	HEC-RAS v. 5.0.7, 1D Steady Flow; HEC-HMS v. 3.5, ISWS Bulletin 70, NRCS Curve Number; Hydraulic model does not extend to upstream floodplain mapping limits; 1% and 0.2% annual chance floodplain mapping for upstream 125 feet of this stream is based on elevation from last modeled cross section.

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

Flooding Source	Study Limits  Downstream Limit Upstream Limit		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Little Wabash River Tributary N1	Confluence with Little Wabash River Tributary N	Approximately 6,852 feet upstream of confluence with Little Wabash River Tributary N (Approximately 580 feet upstream of North Maple Street)	HEC-HMS 3.0 and up (Dec 2005)	HEC-RAS 3.1.1 and up	5/17/2021	AE w/ Floodway	HEC-RAS v. 5.0.7, 1D Steady Flow; HEC-HMS v. 3.5, ISWS Bulletin 70, NRCS Curve Number; Hydraulic model does not extend to upstream floodplain mapping limits; 1% and 0.2% annual chance floodplain mapping for upstream 215 feet of this stream is based on elevation from last modeled cross section
Little Wabash River Tributary N1a	Confluence with Little Wabash River Tributary N1	Approximately 1,943 feet upstream of confluence with Little Wabash River Tributary N1 (Just downstream of Hampton Drive)	HEC-HMS 3.0 and up (Dec 2005)	HEC-RAS 3.1.1 and up	5/17/2021	AE w/ Floodway	HEC-RAS v. 5.0.7, 1D Steady Flow; HEC-HMS v. 3.5, ISWS Bulletin 70, NRCS Curve Number
Little Wabash River Tributary O	Approximately 1,616 feet upstream of confluence with Little Wabash River	Approximately 1,917 feet upstream of confluence with Little Wabash River (Just downstream of Lake Pauline)	HEC-HMS 3.0 and up (Dec 2005)	HEC-RAS 3.1.1 and up	5/17/2021	AE w/ Floodway	HEC-RAS v. 5.0.7, 1D Steady Flow; HEC-HMS v. 3.5, ISWS Bulletin 70, NRCS Curve Number

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

Flooding Source	Study Limits  Downstream Limit Upstream Limit		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Moccasin Creek	At Effingham County and Fayette County Boundary / Illinois Route 128 / N 1st Street	Approximately 33,463 feet upstream of Effingham County and Fayette County Boundary / Illinois Route 128 / N 1st Street (Approximately 500 feet downstream of N 500th Street)	Regression Equations	HEC-RAS 3.1.1 and up	1/6/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Morris Creek	Confluence with Wolf Creek	Approximately 7,151 feet upstream of confluence with Wolf Creek (Approximately 5,775 feet upstream E 2000th Avenue)	Regression Equations	HEC-RAS 3.1.1 and up	1/6/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
North Fork Shoal Creek	Confluence with Shoal Creek	Approximately 12,139 feet upstream of confluence with Shoal Creek (Approximately 5,175 feet upstream of E 2000th Avenue)	Regression Equations	HEC-RAS 3.1.1 and up	5/14/2020	Α	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural

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

Flooding Source	Study Limits  Downstream Limit Upstream Limit		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Ramsey Creek	Confluence with Little Wabash River	Approximately 34,018 feet upstream of confluence with Little Wabash River (Approximately 2,400 feet upstream of N 1800th Street)	Regression Equations	HEC-RAS 3.1.1 and up	11/12/2018	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Salt Creek	Approximately 57,480 feet upstream of confluence with Little Wabash (Approximately 385 feet upstream of East 1050th Road)	Approximately 109,429 feet upstream of confluence with Little Wabash (Approximately 1,760 feet upstream of North 1800th Street)	HEC-HMS 3.0 and up (Dec 2005)	HEC-RAS 3.1.1 and up	5/17/2021	AE w/ Floodway	HEC-RAS v. 5.0.7, 1D Steady Flow; HEC-HMS v. 3.5, ISWS Bulletin 70, NRCS Curve Number
Salt Creek	Confluence with Little Wabash River	Approximately 57,480 feet upstream of confluence with Little Wabash River (Approximately 390 feet upstream of E 1050th Road)	Regression Equations	HEC-RAS 3.1.1 and up	5/19/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural

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

Flooding Source	Study Downstream Limit	Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Salt Creek Tributary A	Approximately 3,148 feet upstream of confluence with Salt Creek (Approximately 90 feet downstream of U.S. Route 45)	Approximately 33,374 feet upstream of confluence with Salt Creek (Approximately 700 feet upstream of Railroad)	HEC-HMS 3.0 and up (Dec 2005)	HEC-RAS 3.1.1 and up	5/17/2021	AE w/ Floodway	HEC-RAS v. 5.0.7, 1D Steady Flow; HEC-HMS v. 3.5, ISWS Bulletin 70, NRCS Curve Number
Salt Creek Tributary A1	Confluence with Salt Creek Tributary A	Approximately 2,830 feet upstream of confluence with Salt Creek Tributary A (Approximately 1,600 feet upstream of Access Road)	HEC-HMS 3.0 and up (Dec 2005)	HEC-RAS 3.1.1 and up	5/17/2021	AE w/ Floodway	HEC-RAS v. 5.0.7, 1D Steady Flow; HEC-HMS v. 3.5, ISWS Bulletin 70, NRCS Curve Number
Salt Creek Tributary A2	Confluence with Salt Creek Tributary A	Approximately 8,822 feet upstream of confluence with Salt Creek Tributary A (Approximately 170 feet upstream of North 1200th Street)	HEC-HMS 3.0 and up (Dec 2005)	HEC-RAS 3.1.1 and up	5/17/2021	AE w/ Floodway	HEC-RAS v. 5.0.7, 1D Steady Flow; HEC-HMS v. 3.5, ISWS Bulletin 70, NRCS Curve Number

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

Flooding Source	Study Limits  Downstream Limit Upstream Limit		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Salt Creek Tributary B	Confluence with Salt Creek	Approximately 9,483 feet upstream of confluence with Salt Creek (Approximately 1,770 feet upstream of E Dutch Lane)	Regression Equations	HEC-RAS 3.1.1 and up	5/19/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Salt Creek Tributary C	Confluence with Salt Creek	Approximately 7,977 feet upstream of confluence with Salt Creek (Approximately 1,400 feet upstream of U.S. Route 45 / South Banker Street)	HEC-HMS 3.0 and up (Dec 2005)	HEC-RAS 3.1.1 and up	5/17/2021	AE w/ Floodway	HEC-RAS v. 5.0.7, 1D Steady Flow; HEC-HMS v. 3.5, ISWS Bulletin 70, NRCS Curve Number
Salt Creek Tributary D	Confluence with Salt Creek	Approximately 4,663 feet upstream of confluence with Salt Creek (Approximately 785 feet upstream of East Wabash Avenue)	HEC-HMS 3.0 and up (Dec 2005)	HEC-RAS 3.1.1 and up	5/17/2021	AE w/ Floodway	HEC-RAS v. 5.0.7, 1D Steady Flow; HEC-HMS v. 3.5, ISWS Bulletin 70, NRCS Curve Number

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

			Oto boli in its		, n		Hydrologic Model or	Hydraulic Model or	Date	Flood	
Flooding Source	Study  Downstream Limit	Limits Upstream Limit	Method Used	Method Used	Analyses Completed	Zone on FIRM	Special Considerations				
Salt Creek Tributary E	Confluence with Salt Creek	Approximately 20,236 feet upstream of confluence with Salt Creek (Approximately 230 feet upstream of South Oak Street)	HEC-HMS 3.0 and up (Dec 2005)	HEC-RAS 3.1.1 and up	5/17/2021	AE w/ Floodway	HEC-RAS v. 5.0.7, 1D Steady Flow; HEC-HMS v. 3.5, ISWS Bulletin 70, NRCS Curve Number				
Salt Creek Tributary F	Confluence with Salt Creek	Approximately 2,840 feet upstream of confluence with Salt Creek (Approximately 1,500 feet upstream of Access Road)	HEC-HMS 3.0 and up (Dec 2005)	HEC-RAS 3.1.1 and up	5/17/2021	AE w/ Floodway	HEC-RAS v. 5.0.7, 1D Steady Flow; HEC-HMS v. 3.5, ISWS Bulletin 70, NRCS Curve Number				
Salt Creek Tributary G	Confluence with Salt Creek	Approximately 8,052 feet upstream of confluence with Salt Creek (Just downstream of Technology Drive)	HEC-HMS 3.0 and up (Dec 2005)	HEC-RAS 3.1.1 and up	5/17/2021	AE w/ Floodway	HEC-RAS v. 5.0.7, 1D Steady Flow; HEC-HMS v. 3.5, ISWS Bulletin 70, NRCS Curve Number				

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

Flooding Source	Study Downstream Limit	Limits Upstream Limit	Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Salt Creek Tributary G1	Confluence with Salt Creek Tributary G	Approximately 5,849 feet upstream of confluence with Salt Creek (Approximately 980 feet upstream of West Evergreen Avenue)	HEC-HMS 3.0 and up (Dec 2005)	HEC-RAS 3.1.1 and up	5/17/2021	AE w/ Floodway	HEC-RAS v. 5.0.7, 1D Steady Flow; HEC-HMS v. 3.5, ISWS Bulletin 70, NRCS Curve Number; Hydraulic model does not extend to upstream floodplain mapping limits; 1% and 0.2% annual chance floodplain mapping for upstream 260 feet of this stream is based on elevation from last modeled cross section
Second Creek	Confluence with Little Wabash River	Approximately 52,291 feet upstream of confluence with Little Wabash River (Approximately 615 feet upstream of N 450th Street)	Regression Equations	HEC-RAS 3.1.1 and up	4/29/2020	A	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Second Creek Tributary A	Confluence with Second Creek	Approximately 5,292 feet upstream of confluence with Second Creek (Approximately 4,700 feet upstream of E 925th Avenue)	Regression Equations	HEC-RAS 3.1.1 and up	4/29/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural

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

Flooding Source	Study Limits  Downstream Limit Upstream Limit		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Second Creek Tributary B	Confluence with Second Creek	Approximately 10,789 feet upstream of confluence with Second Creek (Approximately 900 feet upstream of Interstate70)	Regression Equations	HEC-RAS 3.1.1 and up	4/29/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Second Salt Creek	Confluence with Salt Creek	Approximately 18,029 feet upstream of confluence with Salt Creek (Just downstream of E 1800th Avenue (extended) / Effingham County and Cumberland County Boundary)	Regression Equations	HEC-RAS 3.1.1 and up	5/19/2020	A	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Shoal Creek	Confluence with Little Wabash River	Approximately 17,557 feet upstream of confluence with Little Wabash River (Approximately 3,925 feet upstream of Illinois Route 32)	Regression Equations	HEC-RAS 3.1.1 and up	5/14/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural

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

Flooding Source	Study Limits  Downstream Limit Upstream Limit		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Sugar Fork	Confluence with Green Creek	Approximately 10,827 feet upstream of confluence with Green Creek (Just downstream of N 1500th Street)	Regression Equations	HEC-RAS 3.1.1 and up	5/14/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Wolf Creek	At Effingham County and Fayette County Boundary / Illinois Route 128 / N 1st Street	Approximately 53,324 feet upstream of Effingham County and Fayette County Boundary / Illinois Route 128 / N 1st Street (At Effingham County and Shelby County Boundary / E 2100th Avenue)	Regression Equations	HEC-RAS 3.1.1 and up	1/6/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Wolf Creek Tributary A	Confluence with Wolf Creek	Approximately 14,513 feet upstream of confluence with Wolf Creek (Approximately 7,880 feet upstream of E 1800th Street)	Regression Equations	HEC-RAS 3.1.1 and up	1/6/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural

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

Flooding Source	Study Limits  Downstream Limit Upstream Limit		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
Wolf Creek Tributary B	Confluence with Wolf Creek	Approximately 5,163 feet upstream of confluence with Wolf Creek (At Effingham County and Shelby County Boundary / E 2100th Avenue)	Regression Equations	HEC-RAS 3.1.1 and up	1/6/2020	А	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural

**Table 13: Roughness Coefficients** 

Beech Creek         0.035-0.075         0.035-0.075           Big Creek         0.035-0.075         0.035-0.075           Big Creek Tributary A         0.038-0.040         0.040-0.100           Bishop Creek         0.035-0.075         0.035-0.075           Blue Point Creek         0.035-0.075         0.035-0.075           Brockett Creek         0.035-0.075         0.035-0.075           Brush Creek         0.035-0.075         0.035-0.075           Cedar Creek         0.035-0.075         0.035-0.075           Coon Creek         0.035-0.075         0.035-0.075           Coon Creek         0.035-0.075         0.035-0.075           Cowin Branch         0.035-0.075         0.035-0.075           Dieterich Creek         0.035-0.075         0.035-0.075           Dieterich Creek         0.040         0.045-0.050           East Branch Green Creek         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A1         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A1         0.035-0.075         0.035-0.075           Henry Creek         0.035-0.075         0.035-0.075           Little Bishop Creek         0.035-0	Flooding Source	Channel "n"	Overbank "n"
Big Creek Tributary A         0.038-0.040         0.040-0.100           Bishop Creek         0.035-0.075         0.035-0.075           Blue Point Creek         0.035-0.075         0.035-0.075           Brockett Creek         0.035-0.075         0.035-0.075           Brush Creek         0.035-0.075         0.035-0.075           Cedar Creek         0.035-0.075         0.035-0.075           Coon Creek         0.035-0.075         0.035-0.075           Corwin Branch         0.035-0.075         0.035-0.075           Dieterich Creek         0.035-0.075         0.035-0.075           Dieterich Creek         0.040         0.045-0.050           East Branch Green Creek         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A1         0.035-0.075         0.035-0.075           Green Creek         0.035-0.075         0.035-0.075           Henry Creek         0.035-0.075         0.035-0.075           Lity Creek         0.035-0.075         0.035-0.075           Lity Creek         0.035-0.075         0.035-0.075           Little Bishop Creek         0.035-0.075         0.035-0.075           Little Wabash River         0.040-0.046	Beech Creek	0.035-0.075	0.035-0.075
Bishop Creek         0.035-0.075         0.035-0.075           Blue Point Creek         0.035-0.075         0.035-0.075           Brockett Creek         0.035-0.075         0.035-0.075           Brush Creek         0.035-0.075         0.035-0.075           Cedar Creek         0.035-0.075         0.035-0.075           Coon Creek         0.035-0.075         0.035-0.075           Corwin Branch         0.035-0.075         0.035-0.075           Dieterich Creek         0.040         0.045-0.050           East Branch Green Creek         0.035-0.075         0.035-0.075           Fulfer Creek         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A1         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A1         0.035-0.075         0.035-0.075           Henry Creek         0.035-0.075         0.035-0.075           Henry Creek         0.035-0.075         0.035-0.075           Lity Creek         0.035-0.075         0.035-0.075           Little Bishop Creek         0.035-0.075         0.035-0.075           Little Bishop Creek         0.035-0.075         0.035-0.075           Little Wabash River         0	Big Creek	0.035-0.075	0.035-0.075
Blue Point Creek         0.035-0.075         0.035-0.075           Brockett Creek         0.035-0.075         0.035-0.075           Brush Creek         0.035-0.075         0.035-0.075           Cedar Creek         0.035-0.075         0.035-0.075           Coon Creek         0.035-0.075         0.035-0.075           Corwin Branch         0.035-0.075         0.035-0.075           Dieterich Creek         0.035-0.075         0.035-0.075           Dieterich Creek         0.040         0.045-0.050           East Branch Green Creek         0.035-0.075         0.035-0.075           Fulfer Creek         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A1         0.035-0.075         0.035-0.075           Green Creek         0.035-0.075         0.035-0.075           Henry Creek         0.035-0.075         0.035-0.075           Lity Creek         0.035-0.075         0.035-0.075           Lity Creek         0.035-0.075         0.035-0.075           Little Bishop Creek         0.035-0.075         0.035-0.075           Little Salt Creek         0.035-0.075         0.035-0.075           Little Wabash River         0.040-0.046 <td>Big Creek Tributary A</td> <td>0.038-0.040</td> <td>0.040-0.100</td>	Big Creek Tributary A	0.038-0.040	0.040-0.100
Brockett Creek         0.035-0.075         0.035-0.075           Brush Creek         0.035-0.075         0.035-0.075           Cedar Creek         0.035-0.075         0.035-0.075           Coon Creek         0.035-0.075         0.035-0.075           Corwin Branch         0.035-0.075         0.035-0.075           Dieterich Creek         0.035-0.075         0.035-0.075           Dieterich Creek         0.040         0.045-0.050           East Branch Green Creek         0.035-0.075         0.035-0.075           Fulfer Creek         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A1         0.035-0.075         0.035-0.075           Green Creek         0.035-0.075         0.035-0.075           Henry Creek         0.035-0.075         0.035-0.075           Lity Creek         0.035-0.075         0.035-0.075           Little Bishop Creek         0.035-0.075         0.035-0.075           Little Salt Creek         0.035-0.075         0.035-0.075           Little Wabash River         0.040-0.046         0.046-0.098           Little Wabash River Tributary M         0.035-0.075         0.035-0.075           Little Wabash River Tributar	Bishop Creek	0.035-0.075	0.035-0.075
Brush Creek         0.035-0.075         0.035-0.075           Cedar Creek         0.035-0.075         0.035-0.075           Coon Creek         0.035-0.075         0.035-0.075           Corwin Branch         0.035-0.075         0.035-0.075           Dieterich Creek         0.040         0.045-0.050           East Branch Green Creek         0.035-0.075         0.035-0.075           Fulfer Creek         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A1         0.035-0.075         0.035-0.075           Green Creek         0.035-0.075         0.035-0.075           Henry Creek         0.035-0.075         0.035-0.075           Lity Creek         0.035-0.075         0.035-0.075           Limestone Creek         0.035-0.075         0.035-0.075           Little Bishop Creek         0.035-0.075         0.035-0.075           Little Salt Creek         0.035-0.075         0.035-0.075           Little Wabash River         0.040-0.046         0.046-0.098           Little Wabash River Tributary M         0.035-0.075         0.035-0.075           Little Wabash River Tributary N1         0.038         0.040-0.100           Little Wabash Ri	Blue Point Creek	0.035-0.075	0.035-0.075
Cedar Creek         0.035-0.075         0.035-0.075           Coon Creek         0.035-0.075         0.035-0.075           Corwin Branch         0.035-0.075         0.035-0.075           Dieterich Creek         0.040         0.045-0.050           East Branch Green Creek         0.035-0.075         0.035-0.075           Fulfer Creek         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A1         0.035-0.075         0.035-0.075           Green Creek         0.035-0.075         0.035-0.075           Henry Creek         0.035-0.075         0.035-0.075           Lity Creek         0.035-0.075         0.035-0.075           Limestone Creek         0.035-0.075         0.035-0.075           Little Bishop Creek         0.035-0.075         0.035-0.075           Little Salt Creek         0.035-0.075         0.035-0.075           Little Wabash River         0.040-0.046         0.046-0.098           Little Wabash River         0.040-0.120         0.040-0.120           Little Wabash River Tributary M         0.035-0.075         0.035-0.075           Little Wabash River Tributary N1         0.038         0.040-0.100           Little W	Brockett Creek	0.035-0.075	0.035-0.075
Coon Creek         0.035-0.075         0.035-0.075           Corwin Branch         0.035-0.075         0.035-0.075           Dieterich Creek         0.035-0.075         0.035-0.075           Dieterich Creek         0.040         0.045-0.050           East Branch Green Creek         0.035-0.075         0.035-0.075           Fulfer Creek         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A1         0.035-0.075         0.035-0.075           Green Creek         0.035-0.075         0.035-0.075           Henry Creek         0.035-0.075         0.035-0.075           Lily Creek         0.035-0.075         0.035-0.075           Limestone Creek         0.035-0.075         0.035-0.075           Little Bishop Creek         0.035-0.075         0.035-0.075           Little Salt Creek         0.035-0.075         0.035-0.075           Little Wabash River         0.040-0.046         0.032-0.098           Little Wabash River         0.040-0.120         0.040-0.120           Little Wabash River Tributary M         0.038         0.040-0.100           Little Wabash River Tributary N1         0.038         0.038-0.100           Little Wab	Brush Creek	0.035-0.075	0.035-0.075
Corwin Branch         0.035-0.075         0.035-0.075           Dieterich Creek         0.040         0.045-0.050           East Branch Green Creek         0.035-0.075         0.035-0.075           Fulfer Creek         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A1         0.035-0.075         0.035-0.075           Green Creek         0.035-0.075         0.035-0.075           Henry Creek         0.035-0.075         0.035-0.075           Lily Creek         0.035-0.075         0.035-0.075           Limestone Creek         0.035-0.075         0.035-0.075           Little Bishop Creek         0.035-0.075         0.035-0.075           Little Salt Creek         0.035-0.075         0.035-0.075           Little Wabash River         0.035-0.075         0.035-0.075           Little Wabash River         0.040-0.046         0.046-0.098           Little Wabash River         0.040-0.120         0.040-0.120           Little Wabash River Tributary M         0.038         0.040-0.100           Little Wabash River Tributary N1         0.038         0.040-0.100           Little Wabash River Tributary N1a         0.038         0.080-0.100	Cedar Creek	0.035-0.075	0.035-0.075
Dieterich Creek         0.035-0.075         0.035-0.075           Dieterich Creek         0.040         0.045-0.050           East Branch Green Creek         0.035-0.075         0.035-0.075           Fulfer Creek         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A1         0.035-0.075         0.035-0.075           Green Creek         0.035-0.075         0.035-0.075           Henry Creek         0.035-0.075         0.035-0.075           Lily Creek         0.035-0.075         0.035-0.075           Limestone Creek         0.035-0.075         0.035-0.075           Little Bishop Creek         0.035-0.075         0.035-0.075           Little Salt Creek         0.035-0.075         0.035-0.075           Little Wabash River         0.040-0.046         0.032-0.098           Little Wabash River         0.040-0.046         0.046-0.098           Little Wabash River Tributary M         0.035-0.075         0.035-0.075           Little Wabash River Tributary N1         0.038         0.040-0.100           Little Wabash River Tributary N1         0.038         0.080-0.100	Coon Creek	0.035-0.075	0.035-0.075
Dieterich Creek         0.040         0.045-0.050           East Branch Green Creek         0.035-0.075         0.035-0.075           Fulfer Creek         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A1         0.035-0.075         0.035-0.075           Green Creek         0.035-0.075         0.035-0.075           Henry Creek         0.035-0.075         0.035-0.075           Lily Creek         0.035-0.075         0.035-0.075           Limestone Creek         0.035-0.075         0.035-0.075           Little Bishop Creek         0.035-0.075         0.035-0.075           Little Salt Creek         0.035-0.075         0.035-0.075           Little Wabash River         0.035-0.075         0.035-0.075           Little Wabash River         0.040-0.046         0.032-0.098           Little Wabash River         0.040-0.120         0.040-0.120           Little Wabash River Tributary M         0.035-0.075         0.035-0.075           Little Wabash River Tributary N1         0.038         0.040-0.100           Little Wabash River Tributary N1a         0.038         0.080-0.100	Corwin Branch	0.035-0.075	0.035-0.075
East Branch Green Creek         0.035-0.075         0.035-0.075           Fulfer Creek         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A1         0.035-0.075         0.035-0.075           Green Creek         0.035-0.075         0.035-0.075           Henry Creek         0.035-0.075         0.035-0.075           Lily Creek         0.035-0.075         0.035-0.075           Limestone Creek         0.035-0.075         0.035-0.075           Little Bishop Creek         0.035-0.075         0.035-0.075           Little Salt Creek         0.035-0.075         0.035-0.075           Little Wabash River         0.040-0.046         0.032-0.098           Little Wabash River         0.040-0.120         0.040-0.120           Little Wabash River Tributary M         0.035-0.075         0.035-0.075           Little Wabash River Tributary N         0.038         0.040-0.100           Little Wabash River Tributary N1         0.038         0.038-0.100           Little Wabash River Tributary N1a         0.038         0.080-0.100	Dieterich Creek	0.035-0.075	0.035-0.075
Fulfer Creek         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A1         0.035-0.075         0.035-0.075           Green Creek         0.035-0.075         0.035-0.075           Henry Creek         0.035-0.075         0.035-0.075           Lily Creek         0.035-0.075         0.035-0.075           Limestone Creek         0.035-0.075         0.035-0.075           Little Bishop Creek         0.035-0.075         0.035-0.075           Little Salt Creek         0.035-0.075         0.035-0.075           Little Wabash River         0.035-0.075         0.032-0.098           Little Wabash River         0.040-0.046         0.046-0.098           Little Wabash River         0.040-0.120         0.040-0.120           Little Wabash River Tributary M         0.035-0.075         0.035-0.075           Little Wabash River Tributary N1         0.038         0.040-0.100           Little Wabash River Tributary N1         0.038         0.038-0.100           Little Wabash River Tributary N1a         0.038         0.080-0.100	Dieterich Creek	0.040	0.045-0.050
Fulfer Creek Tributary A         0.035-0.075         0.035-0.075           Fulfer Creek Tributary A1         0.035-0.075         0.035-0.075           Green Creek         0.035-0.075         0.035-0.075           Henry Creek         0.035-0.075         0.035-0.075           Lily Creek         0.035-0.075         0.035-0.075           Limestone Creek         0.035-0.075         0.035-0.075           Little Bishop Creek         0.035-0.075         0.035-0.075           Little Salt Creek         0.035-0.075         0.035-0.075           Little Wabash River         0.035-0.046         0.032-0.098           Little Wabash River         0.040-0.046         0.046-0.098           Little Wabash River Tributary M         0.035-0.075         0.035-0.075           Little Wabash River Tributary N         0.038         0.040-0.100           Little Wabash River Tributary N1         0.038         0.038-0.100           Little Wabash River Tributary N1a         0.038         0.080-0.100	East Branch Green Creek	0.035-0.075	0.035-0.075
Fulfer Creek Tributary A1         0.035-0.075         0.035-0.075           Green Creek         0.035-0.075         0.035-0.075           Henry Creek         0.035-0.075         0.035-0.075           Lily Creek         0.035-0.075         0.035-0.075           Limestone Creek         0.035-0.075         0.035-0.075           Little Bishop Creek         0.035-0.075         0.035-0.075           Little Salt Creek         0.035-0.075         0.035-0.075           Little Wabash River         0.035-0.046         0.032-0.098           Little Wabash River         0.040-0.046         0.046-0.098           Little Wabash River Tributary M         0.035-0.075         0.035-0.075           Little Wabash River Tributary N         0.038         0.040-0.100           Little Wabash River Tributary N1         0.038         0.038-0.100           Little Wabash River Tributary N1a         0.038         0.080-0.100	Fulfer Creek	0.035-0.075	0.035-0.075
Green Creek         0.035-0.075         0.035-0.075           Henry Creek         0.035-0.075         0.035-0.075           Lily Creek         0.035-0.075         0.035-0.075           Limestone Creek         0.035-0.075         0.035-0.075           Little Bishop Creek         0.035-0.075         0.035-0.075           Little Salt Creek         0.035-0.075         0.035-0.075           Little Wabash River         0.040-0.046         0.046-0.098           Little Wabash River         0.040-0.120         0.040-0.120           Little Wabash River Tributary M         0.035-0.075         0.035-0.075           Little Wabash River Tributary N         0.038         0.040-0.100           Little Wabash River Tributary N1         0.038         0.038-0.100           Little Wabash River Tributary N1a         0.038         0.080-0.100	Fulfer Creek Tributary A	0.035-0.075	0.035-0.075
Henry Creek       0.035-0.075       0.035-0.075         Lily Creek       0.035-0.075       0.035-0.075         Limestone Creek       0.035-0.075       0.035-0.075         Little Bishop Creek       0.035-0.075       0.035-0.075         Little Salt Creek       0.035-0.075       0.035-0.075         Little Wabash River       0.035-0.046       0.032-0.098         Little Wabash River       0.040-0.046       0.046-0.098         Little Wabash River       0.040-0.120       0.040-0.120         Little Wabash River Tributary M       0.035-0.075       0.035-0.075         Little Wabash River Tributary N       0.038       0.040-0.100         Little Wabash River Tributary N1       0.038       0.038-0.100         Little Wabash River Tributary N1a       0.038       0.080-0.100	Fulfer Creek Tributary A1	0.035-0.075	0.035-0.075
Lily Creek       0.035-0.075       0.035-0.075         Limestone Creek       0.035-0.075       0.035-0.075         Little Bishop Creek       0.035-0.075       0.035-0.075         Little Salt Creek       0.035-0.075       0.035-0.075         Little Wabash River       0.035-0.046       0.032-0.098         Little Wabash River       0.040-0.046       0.046-0.098         Little Wabash River       0.040-0.120       0.040-0.120         Little Wabash River Tributary M       0.035-0.075       0.035-0.075         Little Wabash River Tributary N       0.038       0.040-0.100         Little Wabash River Tributary N1       0.038       0.038-0.100         Little Wabash River Tributary N1a       0.038       0.080-0.100	Green Creek	0.035-0.075	0.035-0.075
Limestone Creek         0.035-0.075         0.035-0.075           Little Bishop Creek         0.035-0.075         0.035-0.075           Little Salt Creek         0.035-0.075         0.035-0.075           Little Wabash River         0.035-0.046         0.032-0.098           Little Wabash River         0.040-0.046         0.046-0.098           Little Wabash River         0.040-0.120         0.040-0.120           Little Wabash River Tributary M         0.035-0.075         0.035-0.075           Little Wabash River Tributary N         0.038         0.040-0.100           Little Wabash River Tributary N1         0.038         0.038-0.100           Little Wabash River Tributary N1a         0.038         0.080-0.100	Henry Creek	0.035-0.075	0.035-0.075
Little Bishop Creek         0.035-0.075         0.035-0.075           Little Salt Creek         0.035-0.075         0.035-0.075           Little Wabash River         0.035-0.046         0.032-0.098           Little Wabash River         0.040-0.046         0.046-0.098           Little Wabash River         0.040-0.120         0.040-0.120           Little Wabash River Tributary M         0.035-0.075         0.035-0.075           Little Wabash River Tributary N         0.038         0.040-0.100           Little Wabash River Tributary N1         0.038         0.038-0.100           Little Wabash River Tributary N1a         0.038         0.080-0.100	Lily Creek	0.035-0.075	0.035-0.075
Little Salt Creek         0.035-0.075         0.035-0.075           Little Wabash River         0.035-0.046         0.032-0.098           Little Wabash River         0.040-0.046         0.046-0.098           Little Wabash River         0.040-0.120         0.040-0.120           Little Wabash River Tributary M         0.035-0.075         0.035-0.075           Little Wabash River Tributary N         0.038         0.040-0.100           Little Wabash River Tributary N1         0.038         0.038-0.100           Little Wabash River Tributary N1a         0.038         0.080-0.100	Limestone Creek	0.035-0.075	0.035-0.075
Little Wabash River       0.035-0.046       0.032-0.098         Little Wabash River       0.040-0.046       0.046-0.098         Little Wabash River       0.040-0.120       0.040-0.120         Little Wabash River Tributary M       0.035-0.075       0.035-0.075         Little Wabash River Tributary N       0.038       0.040-0.100         Little Wabash River Tributary N1       0.038       0.038-0.100         Little Wabash River Tributary N1a       0.038       0.080-0.100	Little Bishop Creek	0.035-0.075	0.035-0.075
Little Wabash River       0.040-0.046       0.046-0.098         Little Wabash River       0.040-0.120       0.040-0.120         Little Wabash River Tributary M       0.035-0.075       0.035-0.075         Little Wabash River Tributary N       0.038       0.040-0.100         Little Wabash River Tributary N1       0.038       0.038-0.100         Little Wabash River Tributary N1a       0.038       0.080-0.100	Little Salt Creek	0.035-0.075	0.035-0.075
Little Wabash River       0.040-0.120       0.040-0.120         Little Wabash River Tributary M       0.035-0.075       0.035-0.075         Little Wabash River Tributary N       0.038       0.040-0.100         Little Wabash River Tributary N1       0.038       0.038-0.100         Little Wabash River Tributary N1a       0.038       0.080-0.100	Little Wabash River	0.035-0.046	0.032-0.098
Little Wabash River Tributary M         0.035-0.075         0.035-0.075           Little Wabash River Tributary N         0.038         0.040-0.100           Little Wabash River Tributary N1         0.038         0.038-0.100           Little Wabash River Tributary N1a         0.038         0.080-0.100	Little Wabash River	0.040-0.046	0.046-0.098
Little Wabash River Tributary N 0.038 0.040-0.100  Little Wabash River Tributary N1 0.038 0.038-0.100  Little Wabash River Tributary N1a 0.038 0.080-0.100	Little Wabash River	0.040-0.120	0.040-0.120
Little Wabash River Tributary N1 0.038 0.038-0.100  Little Wabash River Tributary N1a 0.038 0.080-0.100	Little Wabash River Tributary M	0.035-0.075	0.035-0.075
Little Wabash River Tributary N1a 0.038 0.080-0.100	Little Wabash River Tributary N	0.038	0.040-0.100
	Little Wabash River Tributary N1	0.038	0.038-0.100
Little Wabash River Tributary O 0.038-0.040 0.050-0.100	Little Wabash River Tributary N1a	0.038	0.080-0.100
	Little Wabash River Tributary O	0.038-0.040	0.050-0.100

Table 13: Roughness Coefficients (continued)

Flooding Source	Channel "n"	Overbank "n"
Moccasin Creek	0.035-0.075	0.035-0.075
Morris Creek	0.035-0.075	0.035-0.075
North Fork Shoal Creek	0.035-0.075	0.035-0.075
Ramsey Creek	0.035-0.075	0.035-0.075
Salt Creek	0.035-0.040	0.040-0.100
Salt Creek	0.035-0.075	0.035-0.075
Salt Creek Tributary A	0.035-0.038	0.038-0.100
Salt Creek Tributary A1	0.038	0.040-0.100
Salt Creek Tributary A2	0.038	0.038-0.100
Salt Creek Tributary B	0.035-0.075	0.035-0.075
Salt Creek Tributary C	0.038-0.040	0.040-0.100
Salt Creek Tributary D	0.038	0.040-0.100
Salt Creek Tributary E	0.032-0.040	0.040-0.100
Salt Creek Tributary F	0.030-0.038	0.040-0.100
Salt Creek Tributary G	0.038	0.040-0.100
Salt Creek Tributary G1	0.038	0.040-0.100
Second Creek	0.035-0.075	0.035-0.075
Second Creek Tributary A	0.035-0.075	0.035-0.075
Second Creek Tributary B	0.035-0.075	0.035-0.075
Second Salt Creek	0.035-0.075	0.035-0.075
Shoal Creek	0.035-0.075	0.035-0.075
Sugar Fork	0.035-0.075	0.035-0.075
Wolf Creek	0.035-0.075	0.035-0.075
Wolf Creek Tributary A	0.035-0.075	0.035-0.075
Wolf Creek Tributary B	0.035-0.075	0.035-0.075

# 5.3 Coastal Analyses

This section is not applicable to this Flood Risk Project.

# **Table 14: Summary of Coastal Analyses**

[Not applicable to this Flood Risk Project]

#### 5.3.1 Total Stillwater Elevations

This section is not applicable to this Flood Risk Project.

# Figure 8: 1% Annual Chance Total Stillwater Elevations for Coastal Areas

[Not applicable to this Flood Risk Project]

### Table 15: Tide Gage Analysis Specifics

[Not applicable to this Flood Risk Project]

#### 5.3.2 Waves

This section is not applicable to this Flood Risk Project.

### 5.3.3 Coastal Erosion

This section is not applicable to this Flood Risk Project.

### 5.3.4 Wave Hazard Analyses

This section is not applicable to this Flood Risk Project.

#### **Table 16: Coastal Transect Parameters**

[Not applicable to this Flood Risk Project]

### Figure 9: Transect Location Map

[Not applicable to this Flood Risk Project]

# 5.4 Alluvial Fan Analyses

This section is not applicable to this Flood Risk Project.

### **Table 17: Summary of Alluvial Fan Analyses**

[Not applicable to this Flood Risk Project]

### **Table 18: Results of Alluvial Fan Analyses**

[Not applicable to this Flood Risk Project]

#### **SECTION 6.0 – MAPPING METHODS**

### 6.1 Vertical and Horizontal Control

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

Flood elevations shown in this FIS Report and on the FIRMs are referenced to NAVD88. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between NGVD29 and NAVD88 or other datum conversion, visit the National Geodetic Survey website at <a href="https://www.ngs.noaa.gov">www.ngs.noaa.gov</a>.

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

To obtain current elevation, description, and/or location information for benchmarks in the area, please visit the NGS website at <a href="https://www.ngs.noaa.gov">www.ngs.noaa.gov</a>.

The datum conversion locations and values that were calculated for Effingham County are provided in Table 19.

### **Table 19: Countywide Vertical Datum Conversion**

[Not applicable to this Flood Risk Project]

#### Table 20: Stream-Based Vertical Datum Conversion

[Not applicable to this Flood Risk Project]

# 6.2 Base Map

The FIRMs and FIS Report for this project have been produced in a digital format. The flood hazard information was converted to a Geographic Information System (GIS) format that meets FEMA's FIRM Database specifications and geographic information standards. This information is provided in a digital format so that it can be incorporated into a local GIS and be accessed more easily by the community. The FIRM Database includes most of the tabular information contained in the FIS Report in such a way that the data can be associated with pertinent spatial features. For example, the information contained in the Floodway Data table and Flood Profiles can be linked to the cross sections that are shown on the FIRMs. Additional information about the FIRM Database and its contents can be found

in FEMA's *Guidelines and Standards for Flood Risk Analysis and Mapping*, www.fema.gov/flood-maps/guidance-partners/guidelines-standards.

Base map information shown on the FIRM was derived from the sources described in Table 21.

**Table 21: Base Map Sources** 

Data Type	Data Provider	Data Date	Data Scale	Data Description
Effingham County Municipal Boundaries	Effingham County, Illinois	July 7, 2021		Spatial feature and attribute information for political boundaries
Effingham County Roads	Effingham County, Illinois	July 7, 2021		Spatial feature and attribute information for transportation features
Illinois Public Land Survey System	Illinois State Geological Survey	April 2003	1:62,500	Spatial feature and attribute information for Public Land Survey System sections; features were refined using the USGS 7.5-Minute Series Topographic Maps
National Hydrography Dataset	U.S. Geological Survey	June 22, 2019	1:24,000	Spatial feature and attribute information for lakes and HUC-8 watershed boundaries
Runways	Federal Aviation Administration	June 17, 2021		Spatial feature and attribute information for airports
TIGER/Line Shapefile, 2020, state, Illinois, Current Place State- based	U.S. Census Bureau	February 2021		Spatial feature and attribute information for railroads
USGS 7.5- Minute Series Topographic Maps	U.S. Geological Survey	1989	1:24,000	FIRM paneling scheme
USGS National Map: Orthoimagery	U.S. Geological Survey	October 2020		Orthoimagery for FIRM panels effective TBD

### 6.3 Floodplain and Floodway Delineation

The FIRM shows tints, screens, and symbols to indicate floodplains and floodways as well as the locations of selected cross sections used in the hydraulic analyses and floodway computations.

For riverine flooding sources, the mapped floodplain boundaries shown on the FIRM have been delineated using the flood elevations determined at each cross section; between cross sections, the boundaries were interpolated using the topographic elevation data described in Table 22.

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

The floodway widths presented in this FIS Report and on the FIRM were computed for certain stream segments on the basis of equal conveyance reduction from each side of the floodplain. Floodway widths were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. Table 2 indicates the flooding sources for which floodways have been determined. The results of the floodway computations for those flooding sources have been tabulated for selected cross sections and are shown in Table 23, "Floodway Data."

Table 22: Summary of Topographic Elevation Data used in Mapping

		Source	for Topographic	c Elevation Data	
Community	Flooding Source	Description	Vertical Accuracy	Horizontal Accuracy	Citation
Effingham County	Beech Creek, Big Creek, Big Creek Tributary A, Bishop Creek, Blue Point Creek, Brockett Creek, Brush Creek, Codar Creek, Coon Creek, Corwin Branch, Dieterich Creek, East Branch Green Creek, Fulfer Creek, Fulfer Creek, Fulfer Creek, Tributary A, Fulfer Creek Tributary A1, Green Creek, Limestone Creek, Little Bishop Creek, Little Wabash River, Little Wabash River Tributary M, Little Wabash River Tributary N, Little Wabash River Tributary N1, Little Wabash River Tributary N1, Little Wabash River Tributary N1, Little Wabash River Tributary O, Moccasin Creek, Morris Creek, North Fork Shoal Creek,	2011 Digital Terrain Model	CVA 0.541 ft. at the 95% Confidence level	0.30 meters (per manufacturer's system specifications)	ISGS 2012

Table 22: Summary of Topographic Elevation Data used in Mapping (continued)

		Source for Topographic Elevation Data				
Community	Flooding Source	Description	Vertical Accuracy	Horizontal Accuracy	Citation	
Effingham County	Ramsey Creek, Salt Creek, Salt Creek Tributary A, Salt Creek Tributary A1, Salt Creek Tributary A2, Salt Creek Tributary B, Salt Creek Tributary C, Salt Creek Tributary D, Salt Creek Tributary E, Salt Creek Tributary F, Salt Creek Tributary G, Salt Creek Tributary G1, Second Creek Tributary G1, Second Creek Tributary A, Second Creek Tributary B, Second Salt Creek, Shoal Creek, Shoal Creek, Sugar Fork, Wolf Creek, Wolf Creek Tributary A, Wolf Creek Tributary B	2011 Digital Terrain Model	CVA 0.541 ft. at the 95% Confidence level	0.30 meters (per manufacturer's system specifications)	ISGS 2012	

BFEs shown at cross sections on the FIRM represent the 1-percent-annual-chance water surface elevations shown on the Flood Profiles and in the Floodway Data tables in the FIS Report.

**Table 23: Floodway Data** 

LOCA	ATION	FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A B C D E F G H	1,354 2,342 3,249 4,473 5,224 6,437 7,334 8,628	252 232 239 157 107 59 39 80	715 637 704 569 469 313 214 398	2.6 2.9 2.7 3.3 5.3 5.0 6.0 2.4	574.1 577.3 579.7 583.0 584.2 589.0 592.1 599.2	574.1 577.3 579.7 583.0 584.2 589.0 592.1 599.2	574.2 577.3 579.7 583.0 584.2 589.1 592.2 599.2	0.1 0.0 0.0 0.0 0.0 0.1 0.1

¹ Feet above confluence with Big Creek

FEDERAL EMERGENCY MANAGEMENT AGENCY

EFFINGHAM COUNTY, ILLINOIS

AND INCORPORATED AREAS

FLOODING SOURCE: BIG CREEK TRIBUTARY A

Table 23: Floodway Data (continued)

LOC	ATION	FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
A B C D E F G H	4,370 5,324 5,646 6,189 6,948 7,869 8,760 9,584	276 255 164 174 67 132 64 58	441 512 321 332 296 521 161 105	4.6 3.6 5.8 5.6 6.2 1.1 3.5 5.4	531.1 535.0 535.9 538.0 540.8 552.5 554.2 559.8	531.1 535.0 535.9 538.0 540.8 552.5 554.2 559.8	531.1 535.0 535.9 538.0 540.8 552.5 554.2 559.8	0.0 0.0 0.0 0.0 0.0 0.0 0.0

¹ Feet above confluence with Little Wabash River

TABLE	FEDERAL EMERGENCY MANAGEMENT AGENCY EFFINGHAM COUNTY, ILLINOIS	FLOODWAY DATA
23	AND INCORPORATED AREAS	FLOODING SOURCE: LITTLE WABASH RIVER TRIBUTARY N

Table 23: Floodway Data (continued)

LOCA	ATION	FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Α	277	36	120	10.6	542.8	542.8	542.8	0.0
В	1,287	346	2,696	0.5	557.5	557.5	557.5	0.0
C	2,094	197	827	1.1	557.5	557.5	557.5	0.0
D	2,751	22	100	8.9	558.6	558.6	558.6	0.0
Е	3,647	87	437	2.0	571.1	571.1	571.1	0.0
F	4,091	104	306	2.9	571.8	571.8	571.8	0.0
G	4,871	60	123	5.0	574.8	574.8	574.8	0.0
Н	5,869	135	428	0.8	583.2	583.2	583.2	0.0

¹ Feet above confluence with Little Wabash River Tributary N

TA	FEDERAL EMERGENCY MANAGEMENT AGENCY	FLOODWAY DATA
BLE	EFFINGHAM COUNTY, ILLINOIS	FLOODWAT DATA
23	AND INCORPORATED AREAS	FLOODING SOURCE: LITTLE WABASH RIVER TRIBUTARY N1

Table 23: Floodway Data (continued)

LOCA	ATION	FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
А	582	67	111	3.8	557.5	557.4	557.4	0.0
В	1,064	69	90	4.7	563.3	563.3	563.3	0.0
С	1,556	110	149	2.8	569.7	569.7	569.7	0.0
D	1,943	69	93	4.5	580.2	580.2	580.2	0.0

¹ Feet above confluence with Little Wabash River Tributary N1

TA	FEDERAL EMERGENCY MANAGEMENT AGENCY	FLOODWAY DATA
	EFFINGHAM COUNTY, ILLINOIS	FLOODWAY DATA
23	AND INCORPORATED AREAS	FLOODING SOURCE: LITTLE WABASH RIVER TRIBUTARY N1A

Table 23: Floodway Data (continued)

VITHOUT WITH FLOODW  531.9 2 531.9	AY
521 0 ² 521 0	
557.0 557.0	0.0

¹ Feet above confluence with Little Wabash River

² Elevation computed without consideration of backwater effects

TΑ	FEDERAL EMERGENCY MANAGEMENT AGENCY	FLOODWAY DATA
BLE	EFFINGHAM COUNTY, ILLINOIS	FLOODWAY DATA
23	AND INCORPORATED AREAS	FLOODING SOURCE: LITTLE WABASH RIVER TRIBUTARY O

Table 23: Floodway Data (continued)

LOCA	ATION	FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
٨	50 500	4 005	F 407	0.4	545.0	545.0	545.0	0.4
A	58,592	1,225	5,167	2.1	515.8	515.8	515.9	0.1
В	60,674	713	3,643	2.9	518.6	518.6	518.7	0.1
С	63,101	1,856	9,015	1.2	521.2	521.2	521.3	0.1
D	65,422	1,032	4,022	2.7	522.5	522.5	522.6	0.1
Е	68,514	887	3,672	3.1	526.0	526.0	526.0	0.0
F	70,906	800	3,739	2.8	528.5	528.5	528.5	0.0
G	73,493	423	2,139	4.9	531.0	531.0	531.0	0.0
Н	75,310	248	2,113	4.8	535.5	535.5	535.6	0.1
1	77,018	428	4,128	2.5	541.8	541.8	541.8	0.0
J	80,311	686	6,213	1.7	543.0	543.0	543.1	0.1
K	82,987	704	5,699	1.8	543.5	543.5	543.5	0.0
L	86,703	589	4,750	2.0	547.4	547.3	547.4	0.1
М	91,030	645	3,605	2.4	548.3	548.2	548.3	0.1
N	95,780	704	3,830	1.9	552.9	552.9	552.9	0.0
0	99,670	453	2,228	3.3	556.8	556.8	556.8	0.0
P	105,077	182	865	4.6	562.6	562.6	562.7	0.1
Q	108,786	436	2,232	1.8	569.1	569.1	569.1	0.0

¹ Feet above confluence with Little Wabash River

TA	FEDERAL EMERGENCY MANAGEMENT AGENCY	EL CODWAY DATA
BLE	EFFINGHAM COUNTY, ILLINOIS	FLOODWAY DATA
23	AND INCORPORATED AREAS	FLOODING SOURCE: SALT CREEK

**Table 23: Floodway Data (continued)** 

LOCA	ATION	FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Α	3,720	917	3,092	1.3	487.3	486.9 ²	486.9	0.0
В	4,715	846	1,960	2.0	487.9	480.9	487.9	0.0
С	6,576	589	1,616	2.4	491.0	491.0	491.1	0.0
D	9,019	473	1,165	2.8	495.7	495.7	495.8	0.1
E	11,022	499	1,356	2.4	498.9	498.9	499.0	0.1
F	13,237	437	871	3.5	501.7	501.7	501.8	0.1
G	15,115	297	779	3.5	506.1	506.1	506.1	0.0
Н	17,296	399	903	3.0	510.5	510.5	510.5	0.0
Ī	19,511	361	1,101	2.4	514.4	514.4	514.4	0.0
J	22,214	216	606	2.7	519.3	519.3	519.3	0.0
K	23,996	52	235	6.9	523.0	523.0	523.0	0.0
L	25,451	66	356	4.6	527.2	527.2	527.2	0.0
М	27,619	139	240	4.7	531.9	531.9	531.9	0.0
N	30,203	119	292	3.9	539.8	539.8	539.8	0.0
0	32,316	235	424	2.1	546.3	546.3	546.3	0.0

¹ Feet above confluence with Salt Creek

FEDERAL EMERGENCY MANAGEMENT AGENCY
EFFINGHAM COUNTY, ILLINOIS

AND INCORPORATED AREAS

FLOODING SOURCE: SALT CREEK TRIBUTARY A

² Elevation computed without consideration of backwater effects

Table 23: Floodway Data (continued)

LOC	LOCATION FLOODWAY		1% ANNU	AL CHANCE FL ELEVATION (F	OOD WATER SEET NAVD88)	URFACE		
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
А	406	210	283	1.7	504.5	504.5	504.6	0.1
B C	1,267 1,925	266 28	968 58	0.5 8.3	512.9 512.9	512.9 512.9	512.9 513.0	0.0 0.1

¹ Feet above confluence with Salt Creek Tributary A

TA	FEDERAL EMERGENCY MANAGEMENT AGENCY	FLOODWAY DATA
	EFFINGHAM COUNTY, ILLINOIS	I LOODWAT DATA
23	AND INCORPORATED AREAS	FLOODING SOURCE: SALT CREEK TRIBUTARY A1

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			LOCATION FLOODWAY 1% ANNUAL CHANCE FLOOD WATE				JRFACE
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE	
Α	1,376	69	179	4.7	516.2	516.1	516.2	0.1	
В	2,404	43	170	5.0	518.6	518.6	518.6	0.0	
С	3,686	35	147	5.8	522.2	522.2	522.2	0.0	
D	4,936	35	132	6.4	526.5	526.5	526.6	0.1	
E	6,558	52	142	4.2	532.9	532.9	532.9	0.0	
F	8,005	36	121	4.9	537.3	537.3	537.4	0.1	

¹ Feet above confluence with Salt Creek Tributary A

ΑT	FEDERAL EMERGENCY MANAGEMENT AGENCY	FLOODWAY DATA
BLE	EFFINGHAM COUNTY, ILLINOIS	FLOODWAT DATA
23	AND INCORPORATED AREAS	FLOODING SOURCE: SALT CREEK TRIBUTARY A2

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			FLOODWAY  1% ANNUAL CHANCE FLOOD WATER SURF ELEVATION (FEET NAVD88)			JRFACE
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
А	383	194	1,208	1.0	534.7	534.7	534.7	0.0
В	1,599	181	513	2.3	534.9	534.9	535.0	0.1
C	2,639	87	222	5.4	538.9	538.9	538.9	0.0
D	4,163	51	121	6.9	551.1	551.1	551.2	0.1
Е	5,557	87	286	2.9	574.4	574.4	574.4	0.0
F	6,779	72	382	1.3	582.4	582.4	582.4	0.0
G	7,697	87	208	2.5	583.0	583.0	583.0	0.0

¹ Feet above confluence with Salt Creek

_	FEDERAL EMERGENCY MANAGEMENT AGENCY	FLOODWAY DATA
ן פֿר	F   EFFINGHAM COUNTY. ILLINOIS	FLOODWAY DATA
2	AND INCORPORATED AREAS	FLOODING SOURCE: SALT CREEK TRIBUTARY C

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			LOCATION FLOODWAY 1% ANNUAL CHANCE FLOOD WATER ELEVATION (FEET NAVD88					
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE		
А	1,000	162	1,124	0.7	541.8	541.8	541.8	0.0		
В	1,701	133	978	1.1	541.8	541.8	541.8	0.0		
С	2,959	26	100	6.0	543.5	543.5	543.5	0.0		
D	4,248	154	819	0.7	559.6	559.6	559.6	0.0		

¹ Feet above confluence with Salt Creek

TA	FEDERAL EMERGENCY MANAGEMENT AGENCY	FLOODWAY DATA
	EFFINGHAM COUNTY, ILLINOIS	FLOODWAY DATA
23	AND INCORPORATED AREAS	FLOODING SOURCE: SALT CREEK TRIBUTARY D

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			LOCATION FLOODWAY 1% ANNUAL CHANCE FLOOD WA				URFACE
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE	
А	917	348	2,359	0.6	544.3	544.3	544.3	0.0	
В		255	1,068	1.4	544.4	544.4	544.4	0.0	
С	2,192	255 185	329	4.6	548.4	544.4 548.4	548.4	0.0	
	3,951								
D -	5,610	219	418	5.7	555.4	555.4	555.4	0.0	
E	7,845	36	187	5.0	563.8	563.8	563.8	0.0	
F	10,091	50	195	3.6	571.3	571.3	571.3	0.0	
G	12,612	90	221	3.2	579.8	579.8	579.8	0.0	
Н	14,426	152	295	1.5	585.3	585.3	585.3	0.0	
I	16,831	143	262	1.7	590.2	590.2	590.2	0.0	
J	18,572	592	654	0.7	593.4	593.4	593.4	0.0	
K	19,688	1,137	886	0.7	594.2	594.2	594.2	0.0	

¹ Feet above confluence with Salt Creek

TAB	FEDERAL EMERGENCY MANAGEMENT AGENCY	FLOODWAY DATA
Ē	EFFINGHAM COUNTY, ILLINOIS	
23	AND INCORPORATED AREAS	FLOODING SOURCE: SALT CREEK TRIBUTARY E

Table 23: Floodway Data (continued)

LOCA				FLOODWAY			NCE FLOOD WATER SURFACE FION (FEET NAVD88)		
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE	
A B C	873 1,494 2,314	330 106 25	1,431 260 57	0.2 1.1 5.2	547.4 551.1 557.3	547.4 551.1 557.3	547.4 551.1 557.3	0.0 0.0 0.0	

¹ Feet above confluence with Salt Creek

TA	FEDERAL EMERGENCY MANAGEMENT AGENCY	FLOODWAY DATA
BLE	EFFINGHAM COUNTY, ILLINOIS	FLOODWAT DATA
23	AND INCORPORATED AREAS	FLOODING SOURCE: SALT CREEK TRIBUTARY F

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			JRFACE
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Α	1,299	451	2,123	0.7	548.2	548.2	548.2	0.0
В	2,592	262	746	2.1	549.5	549.5	549.5	0.0
C	3,223	140	372	4.2	550.5	550.5	550.5	0.0
D	5,209	241	638	1.9	556.3	556.3	556.3	0.0
E	6,594	44	171	7.1	560.8	560.8	560.9	0.1
F	7,770	77	203	6.0	567.0	567.0	567.0	0.0

¹ Feet above confluence with Salt Creek

Ā	FEDERAL EMERGENCY MANAGEMENT AGENCY	EL CODWAY DATA			
BE	EFFINGHAM COUNTY, ILLINOIS	FLOODWAY DATA			
23	AND INCORPORATED AREAS	FLOODING SOURCE: SALT CREEK TRIBUTARY G			

Table 23: Floodway Data (continued)

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			JRFACE
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
А	279	234	457	1.1	556.6	556.6	556.6	0.0
В	1,212	77	131	3.7	560.0	560.0	560.0	0.0
С	2,414	29	80	6.2	566.6	566.6	566.7	0.0
D		108	252		580.1		580.1	0.1
E	4,143 5,849	40	97	1.8 3.2	585.7	580.1 585.7	585.7	0.0

¹ Feet above confluence with Salt Creek Tributary G

TA	FEDERAL EMERGENCY MANAGEMENT AGENCY	FLOODWAY DATA			
	EFFINGHAM COUNTY, ILLINOIS	FLOODWAY DATA			
23	AND INCORPORATED AREAS	FLOODING SOURCE: SALT CREEK TRIBUTARY G1			

#### Table 24: Flood Hazard and Non-Encroachment Data for Selected Streams

[Not applicable to this Flood Risk Project]

### 6.4 Coastal Flood Hazard Mapping

This section is not applicable to this Flood Risk Project.

#### **Table 25: Summary of Coastal Transect Mapping Considerations**

[Not applicable to this Flood Risk Project]

#### 6.5 FIRM Revisions

This FIS Report and the FIRM are based on the most up-to-date information available to FEMA at the time of its publication; however, flood hazard conditions change over time. Communities or private parties may request flood map revisions at any time. Certain types of requests require submission of supporting data. FEMA may also initiate a revision. Revisions may take several forms, including Letters of Map Amendment (LOMAs), Letters of Map Revision Based on Fill (LOMR-Fs), Letters of Map Revision (LOMRs) (referred to collectively as Letters of Map Change (LOMCs)), Physical Map Revisions (PMRs), and FEMA-contracted restudies. These types of revisions are further described below. Some of these types of revisions do not result in the republishing of the FIS Report. To assure that any user is aware of all revisions, it is advisable to contact the community repository of flood-hazard data (shown in Table 30, "Map Repositories").

#### 6.5.1 Letters of Map Amendment

A LOMA is an official revision by letter to an effective NFIP map. A LOMA results from an administrative process that involves the review of scientific or technical data submitted by the owner or lessee of property who believes the property has incorrectly been included in a designated SFHA. A LOMA amends the currently effective FEMA map and establishes that a specific property is not located in a SFHA.

To obtain an application for a LOMA, visit <a href="www.fema.gov/flood-maps/change-your-flood-zone">www.fema.gov/flood-maps/change-your-flood-zone</a> and download the form "MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill". Visit the "Flood Map-Related Fees" section to determine the cost, if any, of applying for a LOMA.

FEMA offers a tutorial on how to apply for a LOMA. The LOMA Tutorial Series can be accessed at <a href="https://www.fema.gov/flood-maps/tutorials">www.fema.gov/flood-maps/tutorials</a>.

For more information about how to apply for a LOMA, call the FEMA Mapping and Insurance eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627).

#### 6.5.2 Letters of Map Revision Based on Fill

A LOMR-F is an official revision by letter to an effective NFIP map. A LOMR-F states FEMA's determination concerning whether a structure or parcel has been elevated on fill above the base flood elevation and is, therefore, excluded from the SFHA.

Information about obtaining an application for a LOMR-F can be obtained in the same manner as that for a LOMA, by visiting <a href="www.fema.gov/flood-maps/change-your-flood-zone">www.fema.gov/flood-maps/change-your-flood-zone</a> for the "MT-1 Application Forms and Instructions for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill" or by calling the FEMA Mapping and Insurance eXchange, toll free, at 1-877-FEMA MAP (1-877-336-2627). Fees for applying for a LOMR-F, if any, are listed in the "Flood Map-Related Fees" section.

A tutorial for LOMR-F is available at www.fema.gov/flood-maps/tutorials.

## 6.5.3 Letters of Map Revision

A LOMR is an official revision to the currently effective FEMA map. It is used to change flood zones, floodplain and floodway delineations, flood elevations and planimetric features. All requests for LOMRs should be made to FEMA through the chief executive officer of the community, since it is the community that must adopt any changes and revisions to the map. If the request for a LOMR is not submitted through the chief executive officer of the community, evidence must be submitted that the community has been notified of the request.

To obtain an application for a LOMR, visit <a href="www.fema.gov/flood-maps/change-your-flood-zone">www.fema.gov/flood-maps/change-your-flood-zone</a> and download the form "MT-2 Application Forms and Instructions for Conditional Letters of Map Revision and Letters of Map Revision". Visit the "Flood Map-Related Fees" section to determine the cost of applying for a LOMR. For more information about how to apply for a LOMR, call the FEMA Mapping and Insurance eXchange; toll free, at 1-877-FEMA MAP (1-877-336-2627) to speak to a Map Specialist.

Previously issued mappable LOMCs (including LOMRs) that have been incorporated into the Effingham County FIRM are listed in Table 26.

#### Table 26: Incorporated Letters of Map Change

[Not applicable to this Flood Risk Project]

### 6.5.4 Physical Map Revisions

A Physical Map Revisions (PMR) is an official republication of a community's NFIP map to effect changes to base flood elevations, floodplain boundary delineations, regulatory floodways and planimetric features. These changes typically occur as a result of structural works or improvements, annexations resulting in additional flood hazard areas or correction to base flood elevations or SFHAs.

The community's chief executive officer must submit scientific and technical data to FEMA to support the request for a PMR. The data will be analyzed and the map will be revised if warranted. The community is provided with copies of the revised information and is afforded a review period. When the base flood elevations are changed, a 90-day appeal period is provided. A 6-month adoption period for formal approval of the revised map(s) is also provided.

For more information about the PMR process, please visit <a href="www.fema.gov">www.fema.gov</a> and visit the Floods & Maps "Change Your Flood Zone Designation" section.

#### 6.5.5 Contracted Restudies

The NFIP provides for a periodic review and restudy of flood hazards within a given community. FEMA accomplishes this through a national watershed-based mapping needs assessment strategy, known as the Coordinated Needs Management Strategy (CNMS). The CNMS is used by FEMA to assign priorities and allocate funding for new flood hazard analyses used to update the FIS Report and FIRM. The goal of CNMS is to define the validity of the engineering study data within a mapped inventory. The CNMS is used to track the assessment process, document engineering gaps and their resolution, and aid in prioritization for using flood risk as a key factor for areas identified for flood map updates. Visit <a href="https://www.fema.gov">www.fema.gov</a> to learn more about the CNMS or contact the FEMA Regional Office listed in Section 8 of this FIS Report.

### 6.5.6 Community Map History

The current FIRM presents flooding information for the entire geographic area of Effingham County. Previously, separate FIRMs, Flood Hazard Boundary Maps (FHBMs) and/or Flood Boundary and Floodway Maps (FBFMs) may have been prepared for the incorporated communities and the unincorporated areas in the county that had identified SFHAs. Current and historical data relating to the maps prepared for the project area are presented in Table 27, "Community Map History." A description of each of the column headings and the source of the date is also listed below.

- Community Name includes communities falling within the geographic area shown
  on the FIRM, including those that fall on the boundary line, nonparticipating
  communities, and communities with maps that have been rescinded. Communities
  with No Special Flood Hazards are indicated by a footnote. If all maps (FHBM,
  FBFM, and FIRM) were rescinded for a community, it is not listed in this table
  unless SFHAs have been identified in this community.
- Initial Identification Date (First NFIP Map Published) is the date of the first NFIP map that identified flood hazards in the community. If the FHBM has been converted to a FIRM, the initial FHBM date is shown. If the community has never been mapped, the upcoming effective date or "pending" (for Preliminary FIS Reports) is shown. If the community is listed in Table 27 but not identified on the map, the community is treated as if it were unmapped.
- Initial FHBM Effective Date is the effective date of the first FHBM. This date may be the same date as the Initial NFIP Map Date.
- FHBM Revision Date(s) is the date(s) that the FHBM was revised, if applicable.
- Initial FIRM Effective Date is the date of the first effective FIRM for the community.
- FIRM Revision Date(s) is the date(s) the FIRM was revised, if applicable. This is the revised date that is shown on the FIRM panel, if applicable. As countywide studies are completed or revised, each community listed should have its FIRM dates updated accordingly to reflect the date of the countywide study. Once the FIRMs exist in countywide format, as PMRs of FIRM panels within the county are completed, the FIRM Revision Dates in the table for each community affected by the PMR are updated with the date of the PMR, even if the PMR did not revise all the panels within that community.

The initial effective date for the Effingham County FIRMs in countywide format was TBD.

**Table 27: Community Map History** 

Community Name	Initial Identification Date	Initial FHBM Effective Date	FHBM Revision Date(s)	Initial FIRM Effective Date	FIRM Revision Date(s)
Altamont, City of	3/22/1974	3/22/1974	6/22/1979 6/11/1976	9/4/1985	TBD
Beecher City, Village of ^{1, 2}	TBD	N/A	N/A	TBD	N/A
Dieterich, Village of ²	TBD	N/A	N/A	TBD	N/A
Edgewood, Village of ^{1, 2}	TBD	N/A	N/A	TBD	N/A
Effingham County Unincorporated Areas	12/23/1977	12/23/1977	N/A	TBD	N/A
Effingham, City of	3/22/1974	3/22/1974	4/23/1976	7/18/1985	TBD
Mason, Town of	TBD	N/A	N/A	TBD	N/A
Montrose, Village of ^{1, 3}	2/4/2011	N/A	N/A	2/4/2011	TBD
Shumway, Village of ^{1, 2}	TBD	N/A	N/A	TBD	N/A
Teutopolis, Village of	2/22/1974	2/22/1974	6/4/1976	8/19/1985	TBD
Watson, Village of	2/2/1979	2/2/1979	N/A	TBD	N/A

¹ No Special Flood Hazard Areas Identified

² This community did not have a FIRM prior to the first countywide FIRM for Effingham County

 $^{^{\}rm 3}$  This community did not have a FIRM prior to the first countywide FIRM for Cumberland County

## SECTION 7.0 – CONTRACTED STUDIES AND COMMUNITY COORDINATION

### 7.1 Contracted Studies

Table 28 provides a summary of the contracted studies, by flooding source, that are included in this FIS Report.

Table 28: Summary of Contracted Studies Included in this FIS Report

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Beech Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	January 2020	Effingham County Unincorporated Areas
Big Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	April 2020	Effingham County Unincorporated Areas
Big Creek Tributary A	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2021	Altamont, City of; Effingham County Unincorporated Areas
Bishop Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	November 2018	Effingham County Unincorporated Areas
Blue Point Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2020	Effingham County Unincorporated Areas
Brockett Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	April 2020	Effingham County Unincorporated Areas
Brush Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2020	Effingham County Unincorporated Areas
Cedar Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	January 2020	Effingham County Unincorporated Areas

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Coon Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	April 2020	Effingham County Unincorporated Areas
Corwin Branch	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	January 2020	Effingham County Unincorporated Areas
Dieterich Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	November 2018	Dieterich, Village of; Effingham County Unincorporated Areas
Dieterich Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	July 2021	Effingham County Unincorporated Areas
East Branch Green Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2020	Effingham County Unincorporated Areas
Fulfer Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	April 2020	Effingham County Unincorporated Areas
Fulfer Creek Tributary A	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	April 2020	Effingham County Unincorporated Areas
Fulfer Creek Tributary A1	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	April 2020	Effingham County Unincorporated Areas
Green Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2020	Effingham County Unincorporated Areas
Henry Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2020	Effingham County Unincorporated Areas

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

	FIS			Work	
Flooding Source	Report Dated	Contractor	Number	Completed Date	Affected Communities
Lily Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	April 2020	Effingham County Unincorporated Areas
Limestone Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	April 2020	Effingham County Unincorporated Areas
Little Bishop Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	November 2018	Effingham County Unincorporated Areas
Little Salt Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2020	Effingham County Unincorporated Areas
Little Wabash River	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	June 2019	Effingham County Unincorporated Areas; Effingham, City of
Little Wabash River Tributary M	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	April 2020	Effingham County Unincorporated Areas
Little Wabash River Tributary N	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2021	Effingham County Unincorporated Areas; Effingham, City of
Little Wabash River Tributary N1	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2021	Effingham, City of
Little Wabash River Tributary N1a	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2021	Effingham, City of
Little Wabash River Tributary O	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2021	Effingham County Unincorporated Areas

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Moccasin Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	January 2020	Effingham County Unincorporated Areas
Morris Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	January 2020	Effingham County Unincorporated Areas
North Fork Shoal Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2020	Effingham County Unincorporated Areas
Ramsey Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	November 2018	Effingham County Unincorporated Areas
Salt Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2021	Effingham County Unincorporated Areas
Salt Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2020	Effingham County Unincorporated Areas; Effingham, City of; Teutopolis, Village of
Salt Creek Tributary A	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2021	Effingham County Unincorporated Areas; Watson, Village of
Salt Creek Tributary A1	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2021	Effingham County Unincorporated Areas; Watson, Village of
Salt Creek Tributary A2	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2021	Effingham County Unincorporated Areas; Watson, Village of

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Salt Creek Tributary B	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2020	Effingham County Unincorporated Areas
Salt Creek Tributary C	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2021	Effingham County Unincorporated Areas; Effingham, City of
Salt Creek Tributary D	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2021	Effingham, City of
Salt Creek Tributary E	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2021	Effingham County Unincorporated Areas; Teutopolis, Village of
Salt Creek Tributary F	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2021	Effingham County Unincorporated Areas; Effingham, City of
Salt Creek Tributary G	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2021	Effingham County Unincorporated Areas; Effingham, City of
Salt Creek Tributary G1	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2021	Effingham County Unincorporated Areas; Effingham, City of
Second Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	April 2020	Effingham County Unincorporated Areas
Second Creek Tributary A	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	April 2020	Effingham County Unincorporated Areas

Table 28: Summary of Contracted Studies Included in this FIS Report (continued)

Flooding Source	FIS Report Dated	Contractor	Number	Work Completed Date	Affected Communities
Second Creek Tributary B	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	April 2020	Effingham County Unincorporated Areas
Second Salt Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2020	Effingham County Unincorporated Areas
Shoal Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2020	Effingham County Unincorporated Areas
Sugar Fork	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	May 2020	Effingham County Unincorporated Areas
Wolf Creek	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	January 2020	Effingham County Unincorporated Areas
Wolf Creek Tributary A	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	January 2020	Effingham County Unincorporated Areas
Wolf Creek Tributary B	Pending	Illinois State Water Survey	EMC-2017- CA-00004- SO1	January 2020	Effingham County Unincorporated Areas

# 7.2 Community Meetings

The dates of the community meetings held for this Flood Risk Project and previous Flood Risk Projects are shown in Table 29. These meetings may have previously been referred to by a variety of names (Community Coordination Officer (CCO), Scoping, Discovery, etc.), but all meetings represent opportunities for FEMA, community officials, study contractors, and other invited guests to discuss the planning for and results of the project.

**Table 29: Community Meetings** 

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
		2/18/2020	Flood Risk Review	Fayette County, ISWS, Jasper County, and the community
Altamont, City of	Pending	TBD	Final CCO	*
		TBD	Other	*
Beecher City, Village		2/18/2020	Flood Risk Review	Fayette County, ISWS, Jasper County, and the community
of	Pending	TBD	Final CCO	*
		TBD	Other	*
	Pending	2/18/2020	Flood Risk Review	Fayette County, ISWS, Jasper County, and the community
Dieterich, Village of		TBD	Final CCO	*
		TBD	Other	*
		2/18/2020	Flood Risk Review	Fayette County, ISWS, and Jasper County
Edgewood, Village of	Pending	TBD	Final CCO	*
		TBD	Other	*
Effingham County		2/18/2020	Flood Risk Review	Fayette County, ISWS, Jasper County, and the community
Unincorporated Areas	Pending	TBD	Final CCO	*
		TBD	Other	*

^{*} To Be Determined

Table 29: Community Meetings (continued)

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
		2/18/2020 Flood Risk Review		Fayette County, ISWS, Jasper County, and the community
Effingham, City of	Pending	TBD	Final CCO	*
		TBD	Other	*
		2/18/2020	Flood Risk Review	Fayette County, ISWS, and Jasper County
Mason, Town of	Pending	TBD	Final CCO	*
		TBD	Other	*
	Pending	2/18/2020	Flood Risk Review	Fayette County, ISWS, and Jasper County
Montrose, Village of		TBD	Final CCO	*
		TBD	Other	*
		2/18/2020	Flood Risk Review	Fayette County, ISWS, and Jasper County
Shumway, Village of	Pending	TBD	Final CCO	*
		TBD	Other	*
	Pending	2/18/2020	Flood Risk Review	Fayette County, ISWS, and Jasper County
Teutopolis, Village of		TBD	Final CCO	*
		TBD	Other	*

^{*} To Be Determined

Table 29: Community Meetings (continued)

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
Watson, Village of	Pending	2/18/2020	Flood Risk Review	Fayette County, ISWS, and Jasper County
		TBD	Final CCO	*
		TBD	Other	*

^{*} To Be Determined

## **SECTION 8.0 – ADDITIONAL INFORMATION**

Information concerning the pertinent data used in the preparation of this FIS Report can be obtained by submitting an order with any required payment to the FEMA Engineering Library. For more information on this process, see <a href="https://www.fema.gov">www.fema.gov</a>.

Table 30 is a list of the locations where FIRMs for Effingham County can be viewed. Please note that the maps at these locations are for reference only and are not for distribution. Also, please note that only the maps for the community listed in the table are available at that particular repository. A user may need to visit another repository to view maps from an adjacent community.

**Table 30: Map Repositories** 

Community	Address	City	State	Zip Code
Altamont, City of	City Hall, 202 North Second Street	Altamont	⊒	62411
Beecher City, Village of ¹	Village Hall, 108 South George Street	Beecher City	⊒	62414
Dieterich, Village of	Village Hall, 103 West Section Street	Dieterich	L	62424
Edgewood, Village of ¹	Village Hall, 405 Route 37	Edgewood	L	62426
Effingham County Unincorporated Areas	ncorporated 101 North 4th Street, Suite			62401
Effingham, City of	am, City of City Hall, 201 East Jefferson Avenue		∟	62401
Mason, Town of ¹	Village Hall, 636 Independence Street	Mason	⊒	62443
Montrose, Village of	Montrose Village Hall, 203 West National Road	Montrose	⊒	62445
Shumway, Village of	way, Village of Village Hall, 202 East Main Street		⊒	62461
Teutopolis, Village of	Village Hall, 106 West Main Street	Teutopolis	L	62467
Watson, Village of	Village Hall, 104 North Monroe Street	Watson	L	62473

¹ No Special Flood Hazard Areas Identified

The National Flood Hazard Layer (NFHL) dataset is a compilation of effective FIRM Databases and LOMCs. Together they create a GIS data layer for a State or Territory. The NFHL is updated as studies become effective and extracts are made available to the

public monthly. NFHL data can be viewed or ordered from the website shown in Table 31.

Table 31 contains useful contact information regarding the FIS Report, the FIRM, and other relevant flood hazard and GIS data. In addition, information about the State NFIP Coordinator and GIS Coordinator is shown in this table. At the request of FEMA, each Governor has designated an agency of State or territorial government to coordinate that State's or territory's NFIP activities. These agencies often assist communities in developing and adopting necessary floodplain management measures. State GIS Coordinators are knowledgeable about the availability and location of State and local GIS data in their state.

**Table 31: Additional Information** 

FEMA and the NFIP						
FEMA and FEMA	www.fema.gov					
Engineering Library website	www.fema.gov/engineering-library					
NFIP website	www.fema.gov/national-flood-insurance-program					
NFHL Dataset	msc.fema.gov					
FEMA Region V	536 South Clark Street					
	Chicago, IL 60605					
	(312) 408-5500					
0	ther Federal Agencies					
USGS website	www.usgs.gov					
Hydraulic Engineering Center website	www.hec.usace.army.mil					
State A	Agencies and Organizations					
State NFIP Coordinator	Steve Altman (Acting Coordinator)					
	Illinois Department of Natural Resources					
	One Natural Resources Way					
	Springfield, IL 62702					
	(217) 524-1028					
	steve.altman@illinois.gov					
State GIS Coordinator	Dan Wilcox					
	Illinois Department of Transportation					
	2300 South Dirksen Parkway					
	Springfield, IL 62764					
	(217) 524-0031					
	dan.wilcox@illinois.gov					

# **SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES**

Table 32 includes sources used in the preparation of and cited in this FIS Report as well as additional studies that have been conducted in the study area.

Table 32: Bibliography and References

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/ Editor	Place of Publication	Publication Date / Date of Issuance	Link
EC 2021a	Effingham County, Illinois	Effingham County Municipal Boundaries		Effingham, IL	July 7, 2021	http://www.co.effingham.il.us
EC 2021b	Effingham County, Illinois	Effingham County Roads		Effingham, IL	July 7, 2021	http://www.co.effingham.il.us
EDN 2017	Effingham Daily News	Rain leads to flooding across area	Graham Milldrum	Effingham, IL	April 30, 2017	https://www.effinghamdailynews.com
ER 2019	Effingham Radio	Flooding Reported on Effingham Streets		Effingham, IL	May 29, 2019	https://www.effinghamradio.com
FAA 2021	Federal Aviation Administration	Runways		Silver Spring, MD	June 17, 2021	https://www.faa.gov
FEMA 1977	Federal Emergency Management Agency	Flood Hazard Boundary Map, Effingham County Unincorporated Areas, Illinois		Washington, DC	December 23, 1977	https://msc.fema.gov
FEMA 1979	Federal Emergency Management Agency	Flood Hazard Boundary Map, Village of Watson, Illinois, Effingham County		Washington, DC	February 2, 1979	https://msc.fema.gov

Table 32: Bibliography and References (continued)

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/ Editor	Place of Publication	Publication Date / Date of Issuance	Link
FEMA 1985a	Federal Emergency Management Agency	Flood Insurance Rate Map, City of Altamont, Illinois, Effingham County		Washington, DC	September 4, 1985	https://msc.fema.gov
FEMA 1985b	Federal Emergency Management Agency	Flood Insurance Rate Map, City of Effingham, Illinois, Effingham County		Washington, DC	July 18, 1985	https://msc.fema.gov
FEMA 1985c	Federal Emergency Management Agency	Flood Insurance Rate Map, Village of Teutopolis, Illinois, Effingham County		Washington, DC	August 19, 1985	https://msc.fema.gov
ISGS 2003	Illinois State Geological Survey	Illinois Public Land Survey System		Champaign, IL	April 2003	https://clearinghouse.isgs.illinois.edu
ISGS 2012	Illinois State Geological Survey	2011 Digital Terrain Model (DTM) for Effingham County, Illinois		Champaign, IL	June 25, 2012	https://clearinghouse.isgs.illinois.edu

Table 32: Bibliography and References (continued)

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/ Editor	Place of Publication	Publication Date / Date of Issuance	Link
ISWS 2021a	Illinois State Water Survey	Hydrologic and Hydraulic Modeling and Floodplain Mapping for Little Wabash River, Coles, Cumberland, Shelby, Effingham, Clay, Richland, Wayne, and Edwards Counties, Illinois		Champaign, IL	November 2021	
ISWS 2021b	Illinois State Water Survey	Hydrologic and Hydraulic Modeling and Floodplain Mapping for Little Wabash River and Tributaries, Effingham and Clay County, Illinois		Champaign, IL	November 2021	

Table 32: Bibliography and References (continued)

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/ Editor	Place of Publication	Publication Date / Date of Issuance	Link
ISWS 2021c	Illinois State Water Survey	Hydrologic and Hydraulic Modeling and Floodplain Mapping for Salt Creek and Tributaries, Little Wabash River Tributary N and Tributaries, Little Wabash River Tributary O, and Big Creek Tributary A, Effingham County, Illinois		Champaign, IL	May 2021	
USACE 1980	U.S. Army Corps of Engineers, Chicago District	Wabash River Basin, Central Illinois Public Service Dam, Effingham County, Illinois, Inventory Number 00606, Inspection Report, National Dam Safety Program		Chicago, IL	September 1980	

Table 32: Bibliography and References (continued)

Citation in this FIS	Publisher/ Issuer	Publication Title, "Article," Volume, Number, etc.	Author/ Editor	Place of Publication	Publication Date / Date of Issuance	Link
USCB 2020	U.S. Census Bureau	TIGER/Line Shapefile, 2020, state, Illinois, Current Place State-based		Washington, DC	February 2021	https://www.census.gov
USGS 1989	U.S. Geological Survey	USGS 7.5-Minute Series Topographic Maps		Sioux Falls, SD	1989	https://nationalmap.gov
USGS 2019	U.S. Geological Survey	National Hydrography Dataset		Reston, VA	June 22, 2019	https://www.usgs.gov
USGS 2020	U.S. Geological Survey	USGS National Map: Orthoimagery			October 2020	https://nationalmap.gov

