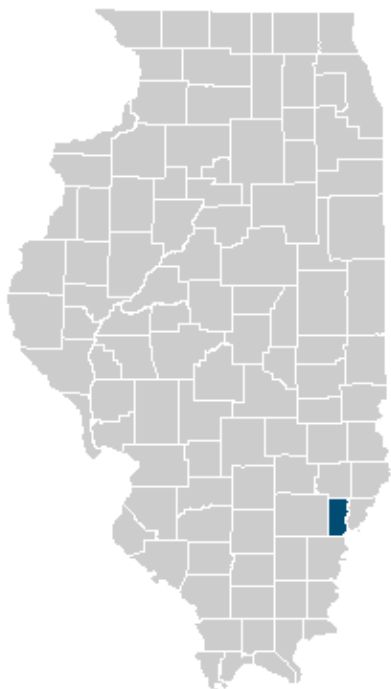


FLOOD INSURANCE STUDY

FEDERAL EMERGENCY MANAGEMENT AGENCY

VOLUME 1 OF 1



EDWARDS COUNTY, ILLINOIS

AND INCORPORATED AREAS

COMMUNITY NAME	COMMUNITY NUMBER
ALBION, CITY OF*	170866
BONE GAP, VILLAGE OF*	171103
BROWNS, VILLAGE OF	170226
EDWARDS COUNTY UNINCORPORATED AREAS	170937
GRAYVILLE, CITY OF	170683
WEST SALEM, VILLAGE OF*	171104

*No Special Flood Hazard Areas Identified

PRELIMINARY
08/20/2025

EFFECTIVE:

Date Pending

FLOOD INSURANCE STUDY NUMBER
17047CV000A
Version Number 2.8.4.6



FEMA

TABLE OF CONTENTS

Volume 1

	<u>Page</u>
SECTION 1.0 – INTRODUCTION	1
1.1 The National Flood Insurance Program	1
1.2 Purpose of this Flood Insurance Study Report	2
1.3 Jurisdictions Included in the Flood Insurance Study Project	2
1.4 Considerations for using this Flood Insurance Study Report	3
 SECTION 2.0 – FLOODPLAIN MANAGEMENT APPLICATIONS	 14
2.1 Floodplain Boundaries	14
2.2 Floodways	22
2.3 Base Flood Elevations	23
2.4 Non-Encroachment Zones	24
2.5 Coastal Flood Hazard Areas	24
2.5.1 Water Elevations and the Effects of Waves	24
2.5.2 Floodplain Boundaries and BFEs for Coastal Areas	24
2.5.3 Coastal High Hazard Areas	24
2.5.4 Limit of Moderate Wave Action	24
 SECTION 3.0 – INSURANCE APPLICATIONS	 24
3.1 National Flood Insurance Program Insurance Zones	24
 SECTION 4.0 – AREA STUDIED	 25
4.1 Basin Description	25
4.2 Principal Flood Problems	25
4.3 Dams and Other Flood Hazard Reduction Measures	26
4.4 Levee Systems	26
 SECTION 5.0 – ENGINEERING METHODS	 29
5.1 Hydrologic Analyses	29
5.2 Hydraulic Analyses	31
5.3 Coastal Analyses	41
5.3.1 Total Stillwater Elevations	41
5.3.2 Waves	41
5.3.3 Coastal Erosion	41
5.3.4 Wave Hazard Analyses	41
5.4 Alluvial Fan Analyses	41
 SECTION 6.0 – MAPPING METHODS	 42
6.1 Vertical and Horizontal Control	42
6.2 Base Map	42
6.3 Floodplain and Floodway Delineation	43
6.4 Coastal Flood Hazard Mapping	47
6.5 FIRM Revisions	47

6.5.1	Letters of Map Amendment	47
6.5.2	Letters of Map Revision Based on Fill	47
6.5.3	Letters of Map Revision	48
6.5.4	Physical Map Revisions	48
6.5.5	Contracted Restudies	49
6.5.6	Community Map History	49
SECTION 7.0 – CONTRACTED STUDIES AND COMMUNITY COORDINATION		50
7.1	Contracted Studies	50
7.2	Community Meetings	53
SECTION 8.0 – ADDITIONAL INFORMATION		57
SECTION 9.0 – BIBLIOGRAPHY AND REFERENCES		58

<u>Figures</u>	<u>Page</u>
Figure 1: FIRM Index	6
Figure 2: FIRM Notes to Users	7
Figure 3: Map Legend for FIRM	10
Figure 4: Floodway Schematic	23
Figure 5: Wave Runup Transect Schematic	24
Figure 6: Coastal Transect Schematic	24
Figure 7: Frequency Discharge-Drainage Area Curves	30
Figure 8: 1% Annual Chance Total Stillwater Elevations for Coastal Areas	41
Figure 9: Transect Location Map	41

<u>Tables</u>	<u>Page</u>
Table 1: Listing of NFIP Jurisdictions	2
Table 2: Flooding Sources Included in this FIS Report	15
Table 3: Flood Zone Designations by Community	25
Table 4: Basin Characteristics	25
Table 5: Principal Flood Problems	26
Table 6: Historic Flooding Elevations	26
Table 7: Dams and Other Flood Hazard Reduction Measures	26
Table 8: Levee Systems	28
Table 9: Summary of Discharges	30
Table 10: Summary of Non-Coastal Stillwater Elevations	30
Table 11: Stream Gage Information used to Determine Discharges	30
Table 12: Summary of Hydrologic and Hydraulic Analyses	32
Table 13: Roughness Coefficients	40
Table 14: Summary of Coastal Analyses	41

Table 15: Tide Gage Analysis Specifics	41
Table 16: Coastal Transect Parameters	41
Table 17: Summary of Alluvial Fan Analyses	41
Table 18: Results of Alluvial Fan Analyses	41
Table 19: Countywide Vertical Datum Conversion	42
Table 20: Stream-Based Vertical Datum Conversion	42
Table 21: Base Map Sources	43
Table 22: Summary of Topographic Elevation Data used in Mapping	44
Table 23: Floodway Data	46
Table 24: Flood Hazard and Non-Encroachment Data for Selected Streams	47
Table 25: Summary of Coastal Transect Mapping Considerations	47
Table 26: Incorporated Letters of Map Change	48
Table 27: Community Map History	50
Table 28: Summary of Contracted Studies Included in this FIS Report	50
Table 29: Community Meetings	54
Table 30: Map Repositories	57
Table 31: Additional Information	58
Table 32: Bibliography and References	59

Volume 1

Exhibits

Flood Profiles	<u>Panel</u>	
Wabash River	01	P

Published Separately

Flood Insurance Rate Map (FIRM)

FLOOD INSURANCE STUDY REPORT EDWARDS 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 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 Edwards 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
Albion, City of ¹	170866	05120113 05120114	17047C0125C 17047C0200C	
Bone Gap, Village of ¹	171103	05120113	17047C0125C 17047C0150C	
Browns, Village of	170226	05120113	17047C0138C 17047C0201C	

¹ No Special Flood Hazard Areas Identified

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
Edwards County Unincorporated Areas	170937	05120113 05120114	17047C0019C 17047C0025C 17047C0050C 17047C0075C 17047C0100C 17047C0125C 17047C0138C 17047C0150C 17047C0175C 17047C0200C 17047C0201C 17047C0205C 17047C0211C 17047C0212C 17047C0213C	
Grayville, City of ²	170683	05120113	17047C0200C 17047C0211C 17047C0213C	
West Salem, Village of ¹	171104	05120113	17047C0050C 17047C0075C	

¹ No Special Flood Hazard Areas Identified

² Community is also in White 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 Edwards 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:

<u>Old Zone</u>	<u>New Zone</u>
A1 through A30	AE
V1 through V30	VE
B	X (shaded)
C	X (unshaded)

- The 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/floodplain-management/community-rating-system or contact your appropriate FEMA Regional Office for more information about this program.
- FEMA does not design, build, inspect, operate, maintain, or certify levees. FEMA is responsible for accurately identifying flood hazards and communicating those hazards and risks to affected stakeholders. FEMA has identified one or more levee systems in this jurisdiction summarized in Table 8 of this FIS Report. For FEMA to accredit the identified levee systems, the levee systems must meet the criteria of the Code of Federal Regulations, Title 44, Section 65.10 (44 CFR 65.10), titled “Mapping of Areas Protected by Levee Systems.”

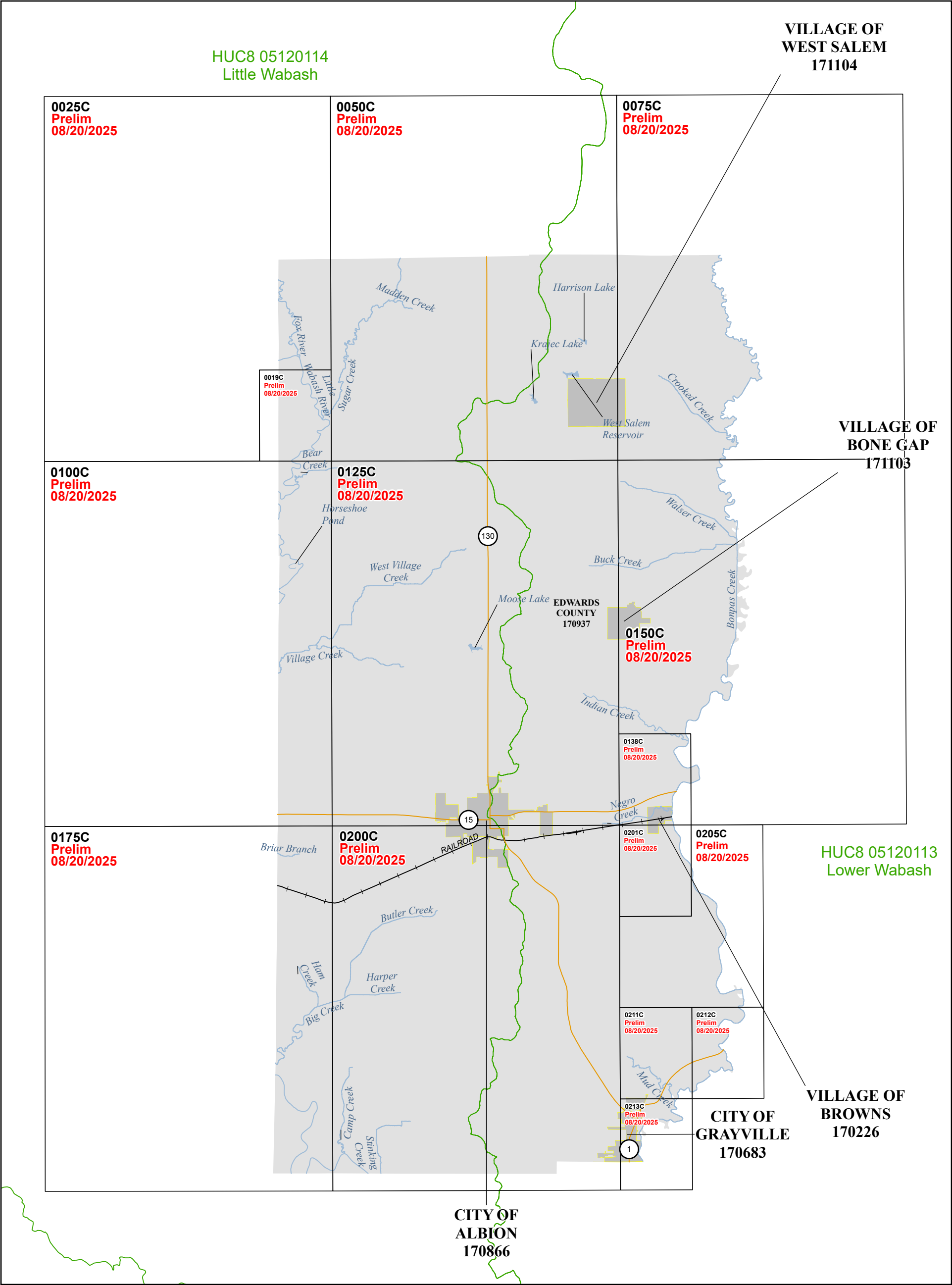
Information on the levee systems in this jurisdiction can be obtained from the USACE National Levee Database (<https://levees.sec.usace.army.mil/>). For additional information, the user should contact the appropriate jurisdiction floodplain administrator and the levee owner or sponsor.

- The U.S. Survey Foot was deprecated on December 31, 2022, in favor of the International Foot (referred to as foot). It may still be necessary to use U.S. Survey Feet for legacy data or for new data collected in locations which have not yet adopted the International Foot convention. The U.S. Survey Foot will not be supported in the modernized National Spatial Reference System (NSRS).
- 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 Edwards 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



1 inch = 11,860 feet 1:142,316

0 5,000 10,000 20,000 30,000 feet

Map Projection:
NAD 1983 StatePlane Illinois East FIPS 1201 Feet
Vertical Datum: NAVD88

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://MSC.FEMA.GOV)

SEE FLOOD INSURANCE STUDY FOR ADDITIONAL INFORMATION

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP INDEX

EDWARDS COUNTY, ILLINOIS, AND INCORPORATED AREAS

PANELS PRINTED:

0019, 0025, 0050, 0075, 0100, 0125, 0138, 0150, 0175, 0200, 0201, 0205, 0211, 0212, 0213



FEMA

MAP NUMBER
17047CIND0A

EFFECTIVE DATE
Prelim Issue Date: 08/20/2025

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.

PRELIMINARY FIS REPORT: 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.

Figure 2. FIRM Notes to Users

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

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.

PROJECTION INFORMATION: The projection used in the preparation of the map was State Plane Transverse Mercator, Illinois East Zone 1201. The horizontal datum was the North American Datum of 1983 NAD83 (2011), GRS 1980 spheroid. Differences in datum, spheroid, projection or State Plane zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

ELEVATION DATUM: Flood elevations on the FIRM are referenced to the North American Vertical Datum of 1988 (NAVD88). 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.

The map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables may reflect stream channel distances that differ from what is shown on the map.

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

NOTES FOR FIRM INDEX

REVISIONS TO INDEX: As new studies are performed and FIRM panels are updated within Edwards 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 Edwards County, Illinois, effective TBD.

NON-ACCREDITED LEVEE SYSTEM: This panel contains a levee system that has not been accredited and is therefore not recognized as reducing the 1-percent-annual-chance flood hazard.

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

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 Edwards County.

Figure 3: Map Legend for FIRM

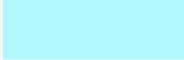

<p>SPECIAL FLOOD HAZARD AREAS: The 1% annual chance flood, also known as the base flood or 100-year flood, has a 1% chance of happening or being exceeded each year. Special Flood Hazard Areas are subject to flooding by the 1% annual chance flood. The Base Flood Elevation is the water surface elevation 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.</p>	
	Special Flood Hazard Areas subject to inundation by the 1% annual chance flood (Zones A, AE, AH, AO, AR, A99, V and VE)
Zone A	The flood insurance rate zone that corresponds to the 1% annual chance floodplains. No base (1% annual chance) flood elevations (BFEs) or depths are shown within this zone.
Zone AE	The flood insurance rate zone that corresponds to the 1% annual chance floodplains. Base flood elevations derived from the hydraulic analyses are shown within this zone.
Zone AH	The flood insurance rate zone that corresponds to the areas of 1% annual chance shallow flooding (usually areas of ponding) where average depths are between 1 and 3 feet. Whole-foot BFEs derived from the hydraulic analyses are shown at selected intervals within this zone.
Zone AO	The flood insurance rate zone that corresponds to the areas of 1% annual chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 feet. Average whole-foot depths derived from the hydraulic analyses are shown within this zone.
Zone AR	The flood insurance rate zone that corresponds to areas that were formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
Zone A99	The flood insurance rate zone that corresponds to areas of the 1% annual chance floodplain that will be protected by a Federal flood protection system where construction has reached specified statutory milestones. No base flood elevations or flood depths are shown within this zone.
Zone V	The flood insurance rate zone that corresponds to the 1% annual chance coastal floodplains that have additional hazards associated with storm waves. Base flood elevations are not shown within this zone.
Zone VE	Zone VE is the flood insurance rate zone that corresponds to the 1% annual chance coastal floodplains that have additional hazards associated with storm waves. Base flood elevations derived from the coastal analyses are shown within this zone as static whole-foot elevations that apply throughout the zone.
	Regulatory Floodway determined in Zone AE.

Figure 3: Map Legend for FIRM





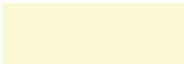






OTHER AREAS OF FLOOD HAZARD	
	Shaded Zone X: Areas of 0.2% annual chance flood hazards and areas of 1% annual chance flood hazards with average depths of less than 1 foot or with drainage areas less than 1 square mile.
	Future Conditions 1% Annual Chance Flood Hazard – Zone X: The flood insurance rate 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.
<div style="border: 1px solid black; padding: 2px; display: inline-block;">NO SCREEN</div>	Unshaded Zone X: Areas of minimal flood hazard.
FLOOD HAZARD AND OTHER BOUNDARY LINES	
<div style="display: flex; align-items: center;">  <div style="margin-left: 10px;">(ortho)</div>  <div style="margin-left: 10px;">(vector)</div> </div>	Flood Zone Boundary (white line on ortho-photography-based mapping; gray line on vector-based mapping)
	Limit of Study
	Jurisdiction Boundary
	Limit of Moderate Wave Action (LiMWA): Indicates the inland limit of the area affected by waves greater than 1.5 feet
GENERAL STRUCTURES	
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> ----- <i>Aqueduct</i> <i>Channel</i> <i>Culvert</i> <i>Storm Sewer</i> </div> </div>	Channel, Culvert, Aqueduct, or Storm Sewer
<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> _____ <i>Dam</i> <i>Jetty</i> <i>Weir</i> </div> </div>	Dam, Jetty, Weir
	Levee, Dike, or Floodwall

Figure 3: Map Legend for FIRM

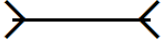

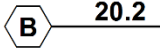


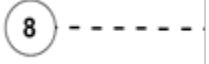













	Bridge
REFERENCE MARKERS	
	River mile Markers
CROSS SECTION & TRANSECT INFORMATION	
	Lettered Cross Section with Regulatory Water Surface Elevation (BFE)
	Numbered Cross Section with Regulatory Water Surface Elevation (BFE)
	Unlettered Cross Section with Regulatory Water Surface Elevation (BFE)
	Coastal Transect
	Profile Baseline: Indicates the modeled flow path of a stream and is shown on FIRM panels for all valid studies with profiles or otherwise established base flood elevation.
	Coastal Transect Baseline: Used in the coastal flood hazard model to represent the 0.0-foot elevation contour and the starting point for the transect and the measuring point for the coastal mapping.
	Base Flood Elevation Line
ZONE AE (EL 16)	Static Base Flood Elevation value (shown under zone label)
ZONE AO (DEPTH 2)	Zone designation with Depth
ZONE AO (DEPTH 2) (VEL 15 FPS)	Zone designation with Depth and Velocity
BASE MAP FEATURES	
	River, Stream or Other Hydrographic Feature
	Interstate Highway
	U.S. Highway
	State Highway
	County Highway

Figure 3: Map Legend for FIRM

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 Edwards 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 Edwards 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
Bear Creek	Edwards County Unincorporated Areas	Confluence with Little Wabash River	Approximately 12,747 feet upstream of confluence with Little Wabash River (Approximately 140 feet downstream of County Road 225 E)	05120114	2.4	N	A	2020
Bear Creek Tributary A	Edwards County Unincorporated Areas	Confluence with Bear Creek	Approximately 3,395 feet upstream of confluence with Bear Creek (Approximately 1,123 feet downstream of County Road 200 E)	05120114	0.6	N	A	2020
Big Creek	Edwards County Unincorporated Areas	Confluence with Little Wabash River	Approximately 24,553 feet upstream of confluence with Little Wabash River (At convergence of Butler Creek and Harper Creek)	05120114	4.7	N	A	2020
Big Creek Tributary C	Edwards County Unincorporated Areas	Confluence with Big Creek	Approximately 2,175 feet upstream of confluence with Big Creek (At Edwards County and Wayne County Boundary / County Road 3000 E)	05120114	0.4	N	A	2020
Bonpas Creek	Browns, Village of; Edwards County Unincorporated Areas; Grayville, City of	Approximately 9,675 feet upstream of confluence with Wabash River (At Edwards County and White County Boundary)	Approximately 201,834 feet upstream of confluence with Wabash River (Approximately 1,246 feet upstream of Edwards County and Richland County Boundary)	05120113	36.4	N	A	2022
Bonpas Creek Tributary 1	Edwards County Unincorporated Areas; Grayville, City of	Confluence with Bonpas Creek	Approximately 4,550 feet upstream of confluence with Bonpas Creek (Approximately 75 feet upstream of Illinois Route 130)	05120113	0.9	N	A	2022
Bonpas Creek Tributary 3	Edwards County Unincorporated Areas	Confluence with Bonpas Creek	Approximately 9,069 feet upstream of confluence with Bonpas Creek (Approximately 800 feet downstream of County Highway 12 / Browns/Grayville Road)	05120113	1.7	N	A	2022

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
Briar Branch	Edwards County Unincorporated Areas	Approximately 26,847 feet upstream of confluence with Little Wabash River (Approximately 92 feet downstream of Edwards County and Wayne County Boundary)	Approximately 29,952 feet upstream of confluence with Little Wabash River (Approximately 57 feet upstream of County Highway 10 / Ellery Road)	05120114	0.6	N	A	2019
Buck Creek	Edwards County Unincorporated Areas	Confluence with Bonpas Creek	Approximately 20,002 feet upstream of confluence with Bonpas Creek (Just downstream of County Road 760 N)	05120113	3.8	N	A	2022
Butler Creek	Edwards County Unincorporated Areas	Confluence with Big Creek	Approximately 18,420 feet upstream of confluence with Big Creek (Approximately 1,720 feet downstream of County Highway 6)	05120114	3.5	N	A	2020
Butler Creek Tributary A	Edwards County Unincorporated Areas	Confluence with Butler Creek	Approximately 11,740 feet upstream of confluence with Butler Creek (Approximately 845 feet downstream of County Road 800 N)	05120114	2.2	N	A	2020
Butler Creek Tributary A1	Edwards County Unincorporated Areas	Confluence with Butler Creek Tributary A	Approximately 7,175 feet upstream of confluence with Butler Creek Tributary A (Approximately 260 feet downstream of County Highway 100 / County Road 650 N)	05120114	1.4	N	A	2020
Butler Creek Tributary B	Edwards County Unincorporated Areas	Confluence with Butler Creek	Approximately 6,855 feet upstream of confluence with Butler Creek (Approximately 2,440 feet upstream of County Road 300 E)	05120114	1.3	N	A	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
Camp Creek	Edwards County Unincorporated Areas	Confluence with Little Wabash River	Approximately 13,854 feet upstream of confluence with Little Wabash River (Approximately 4,000 feet downstream of County Road 300 N)	05120114	2.6	N	A	2020
Crooked Creek	Edwards County Unincorporated Areas	Confluence with Bonpas Creek	Approximately 11,685 feet upstream of confluence with Bonpas Creek (Approximately 1,850 feet upstream of County Highway 3 / Lancaster Road)	05120113	2.2	N	A	2022
Fox River	Edwards County Unincorporated Areas	Confluence with Little Wabash River	Approximately 21,292 feet upstream of confluence with Little Wabash River (Approximately 4,110 feet upstream of Edwards County and Wayne County Boundary)	05120114	4.0	N	A	2020
Ham Creek	Edwards County Unincorporated Areas	Confluence with Big Creek	Approximately 6,159 feet upstream of confluence with Big Creek (Approximately 2,410 feet upstream of County Road 450 N)	05120114	1.2	N	A	2020
Harper Creek	Edwards County Unincorporated Areas	Confluence with Big Creek	Approximately 7,069 feet upstream of confluence with Big Creek (Approximately 2,350 feet upstream of County Road 250 E)	05120114	1.3	N	A	2020
Little Wabash River	Edwards County Unincorporated Areas	Approximately 291,206 feet upstream of confluence with Wabash River (Approximately 965 feet downstream of Edwards County and White County Boundary)	Approximately 344,543 feet upstream of confluence with Wabash River (Approximately 16,541 feet upstream of Edwards County and Wayne County Boundary)	05120114	10.1	N	A	2019

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	Edwards County Unincorporated Areas	Approximately 491,851 feet upstream of confluence with Wabash River (Approximately 417 feet downstream of Edwards County and White County Boundary)	Approximately 556,606 feet upstream of confluence with Wabash River (Approximately 8,647 feet upstream of Edwards County and Wayne County Boundary)	05120114	12.3	N	A	2019
Madden Creek	Edwards County Unincorporated Areas	Confluence with Sugar Creek	Approximately 3,252 feet upstream of confluence with Sugar Creek (Approximately 1,930 feet upstream of County Road 300 E)	05120114	0.6	N	A	2020
Mud Creek	Edwards County Unincorporated Areas	Confluence with Bonpas Creek	Approximately 13,820 feet upstream of confluence with Bonpas Creek (Approximately 125 feet upstream of County Road 875 E)	05120113	2.6	N	A	2022
Mud Creek Tributary 1	Edwards County Unincorporated Areas	Confluence with Mud Creek	Approximately 7,631 feet upstream of confluence with Mud Creek (Just downstream of County Road 400 N (extended))	05120113	1.4	N	A	2022
Negro Creek	Browns, Village of; Edwards County Unincorporated Areas	Confluence with Bonpas Creek	Approximately 11,338 feet upstream of confluence with Bonpas Creek (Approximately 7,075 feet upstream of County Road 900 N)	05120113	2.1	N	A	2022

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
Stinking Creek	Edwards County Unincorporated Areas	Approximately 1,450 feet upstream of confluence with Little Wabash River (Approximately 177 feet downstream of Edwards County and White County Boundary)	Approximately 12,470 feet upstream of confluence with Little Wabash River (Approximately 1,210 feet upstream of County Road 300 E)	05120114	2.1	N	A	2020
Sugar Creek	Edwards County Unincorporated Areas	Confluence with Little Wabash River	Approximately 37,000 feet upstream of confluence with Little Wabash River (Approximately 217 feet upstream of Edwards County and Richland County Boundary)	05120114	7.0	N	A	2020
Sugar Creek Tributary A	Edwards County Unincorporated Areas	Confluence with Sugar Creek	Approximately 2,960 feet upstream of confluence with Sugar Creek (Approximately 360 feet downstream of County Highway 14 / County Rd 1900 N)	05120114	0.6	N	A	2020
Sugar Creek Tributary B	Edwards County Unincorporated Areas	Confluence with Sugar Creek	Approximately 3,139 feet upstream of confluence with Sugar Creek	05120114	0.6	N	A	2020
Sugar Creek Tributary C	Edwards County Unincorporated Areas	Confluence with Sugar Creek	Approximately 37,544 feet upstream of Sugar Creek (Approximately 270 feet upstream of County Road 2200 N / E Edwards Lane)	05120114	0.6	N	A	2020
Village Creek	Edwards County Unincorporated Areas	Approximately 22,570 feet above confluence with Little Wabash River	Approximately 44,498 feet upstream of confluence with Little Wabash River (Approximately 80 feet downstream of County Road 300 E)	05120114	4.2	N	A	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
Wabash River	Edwards County Unincorporated Areas; Grayville, City of	Approximately 50.5 miles upstream of confluence with Ohio River (Approximately 2.75 miles upstream of Interstate 64)	Approximately 55 miles upstream of confluence with Ohio River (Approximately 7.25 miles upstream of Interstate 64)	05120113	4.5	Y	AE	2022
Walser Creek	Edwards County Unincorporated Areas	Confluence with Bonpas Creek	Approximately 17,041 feet upstream of confluence with Bonpas Creek (Just downstream of County Road 825 E)	05120113	3.2	N	A	2022
West Village Creek	Edwards County Unincorporated Areas	Confluence with Village Creek	Approximately 27,501 feet upstream of confluence with Village Creek (Approximately 2,770 feet upstream of County Road 1500 N)	05120114	5.2	N	A	2020
West Village Creek Tributary A	Edwards County Unincorporated Areas	Confluence with West Village Creek	Approximately 1,924 feet upstream of confluence with West Village Creek	05120114	0.4	N	A	2020
West Village Creek Tributary B	Edwards County Unincorporated Areas	Confluence with West Village Creek	Approximately 2,977 feet upstream of confluence with West Village Creek	05120114	0.6	N	A	2020
West Village Creek Tributary C	Edwards County Unincorporated Areas	Confluence with West Village Creek	Approximately 2,008 feet upstream of confluence with West Village Creek	05120114	0.4	N	A	2020
West Village Creek Tributary D	Edwards County Unincorporated Areas	Confluence with West Village Creek	Approximately 1,141 feet upstream of confluence with West Village Creek.	05120114	0.2	N	A	2020
West Village Creek Tributary D1	Edwards County Unincorporated Areas	Confluence with West Village Creek Tributary D	Approximately 1,200 feet upstream of confluence with West Village Creek Tributary D	05120114	0.2	N	A	2020
West Village Creek Tributary D2	Edwards County Unincorporated Areas	Confluence with West Village Creek Tributary D	Approximately 1,162 feet upstream of confluence with West Village Creek Tributary D	05120114	0.2	N	A	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
West Village Creek Tributary E	Edwards County Unincorporated Areas	Confluence with West Village Creek	Approximately 817 feet upstream of confluence with West Village Creek	05120114	0.2	N	A	2020

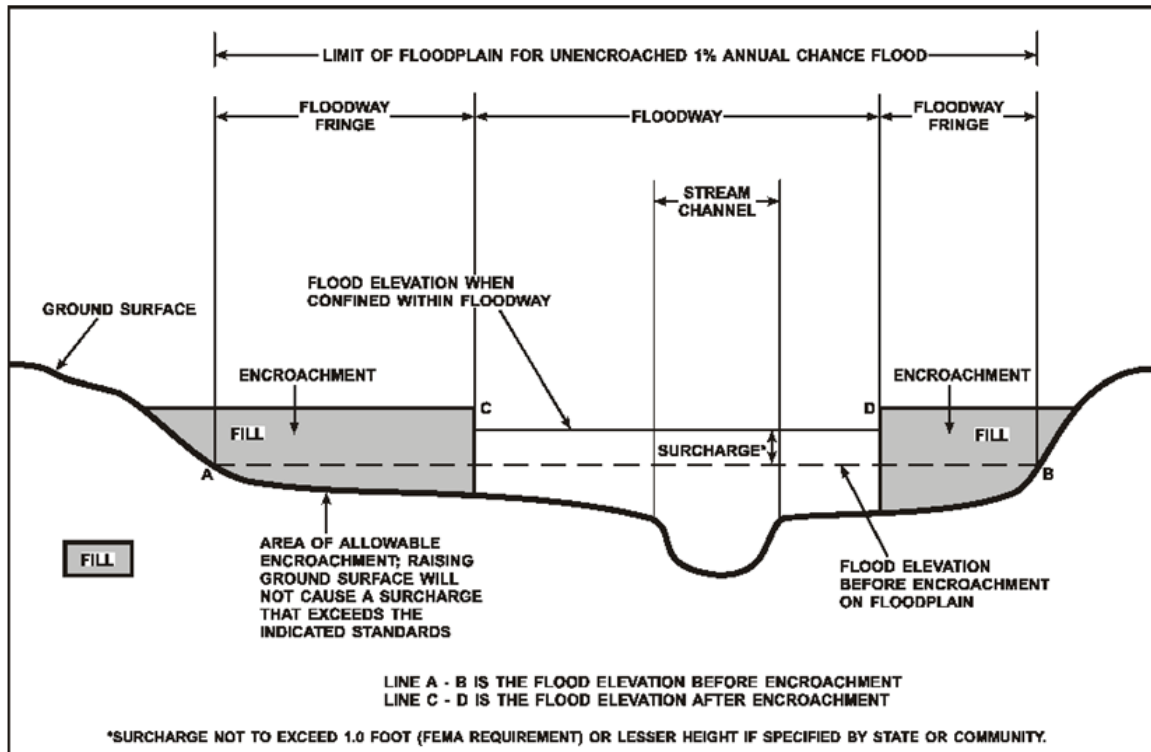
2.2 Floodways

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 the State of Illinois require communities in Edwards 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.

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 zones in Edwards County.

Table 3: Flood Zone Designations by Community

Community	Flood Zone(s)
Albion, City of	X
Bone Gap, Village of	X
Browns, Village of	A, X
Edwards County Unincorporated Areas	A, AE, X
Grayville, City of	A, AE, X
West Salem, Village of	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)
Little Wabash	05120114	Little Wabash River	Located in the western portion of the county, covers approximately 54% of Edwards County with 120 square miles	2,120
Lower Wabash	05120113	Wabash River	Located in the eastern portion of the county, covers approximately 46% of Edwards County with 104 square miles	1,300

4.2 Principal Flood Problems

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

Table 5: Principal Flood Problems

Flooding Source	Description of Flood Problems
Bonpas Creek	Bonpas Creek is a tributary of the Wabash River that forms the eastern border of Edwards County that experiences flooding in the spring and summer due to snowmelt and excessive rainfall. Flooding from Bonpas Creek primarily affects the Village of Browns and Illinois State Route 15 (IEMA 2017).
Wabash River	The Wabash River flows by the SE corner of Edwards County near the Village of Grayville. Grayville used to sit on the Wabash River, but a significant flood in 1985 cut the river off, leaving Grayville to sit on an oxbow bend (Grayville 2024). Significant flooding of the Wabash River can still impact Grayville, however, as well as Illinois State Route 1 northeast of Grayville (IEMA 2017).

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

Table 6: Historic Flooding Elevations

Flooding Source	Location	Historic Peak (Feet NAVD88)	Event Date	Approximate Recurrence Interval (years)	Source of Data
Bonpas Creek	Just upstream of IL State Route 15	395.88	5/10/1961	84	USGS Gage 03378000

4.3 Dams and Other Flood Hazard Reduction Measures

Table 7 contains information about non-levee flood hazard reduction measures within Edwards 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

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

Levee systems that are determined to reduce the hazard from the 1-percent-annual-chance flood are accredited by FEMA. FEMA can also grant provisional accreditation to a

levee system that was previously accredited on an effective FIRM and for which FEMA is awaiting data and/or documentation to demonstrate compliance with 44 CFR 65.10. These levee systems are referred to as Provisionally Accredited Levees, or PALs. Provisional accreditation provides communities and levee owners with a specified timeframe to obtain the necessary data to confirm the levee system's accreditation status. Accredited levee systems and PALs are shown on the FIRM using the symbology shown in Figure 3. If the required information for a PAL is not submitted within the required timeframe, or if information indicates that a levee system no longer meets 44 CFR 65.10, FEMA will consider the levee system as non-accredited and issue an effective FIRM showing the levee-impacted area as a SFHA or Zone D.

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

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

Table 8: Levee Systems

Community	Flooding Source	NLD Levee System ID	NLD Levee System Name	Levee System Status on Effective FIRM	FIRM Panels	Levee Owner/ Sponsor
Edwards County Unincorporated Areas	Little Wabash River	N/A	Union Drainage District of Wayne and Edwards Counties Levee	Non-Accredited	17047C0019C 17047C0025C 17047C0100C	Privately owned

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. 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 and/or in the FIRM database 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. Stream gage information is provided in Table 11.

Table 9: Summary of Discharges

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (CFS)				
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Wabash River	Approximately 7.7 miles upstream of Ohio River Scenic By Way / Illinois Route 141	28,635.0	224,500	259,500	283,700	306,300	354,900

Figure 7: Frequency Discharge-Drainage Area Curves

[Not applicable to this Flood Risk Project]

Table 10: Summary of Non-Coastal Stillwater Elevations

[Not applicable to this Flood Risk Project]

Table 11: Stream Gage Information used to Determine Discharges

Flooding Source	Gage Identifier	Agency that Maintains Gage	Site Name	Drainage Area (Square Miles)	Period of Record	
					From	To
Little Wabash River	03379500	USGS	LITTLE WABASH RIVER BELOW CLAY CITY, IL	1,131.0	8/22/1914	9/30/2017
Wabash River	03377500	USGS	WABASH RIVER AT MT. CARMEL, IL	28,635.0	10/1/1968	9/30/2015

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. 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		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
	Downstream Limit	Upstream Limit					
Bear Creek	Confluence with Little Wabash River	Approximately 12,747 feet upstream of confluence with Little Wabash River (Approximately 140 feet downstream of County Road 225 E)	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
Bear Creek Tributary A	Confluence with Bear Creek	Approximately 3,395 feet upstream of confluence with Bear Creek (Approximately 1,123 feet downstream of County Road 200 E)	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
Big Creek	Confluence with Little Wabash River	Approximately 24,553 feet upstream of confluence with Little Wabash River (At convergence of Butler Creek and Harper Creek)	Regression Equations	HEC-RAS 3.1.1 and up	1/2/2020	A	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Big Creek Tributary C	Confluence with Big Creek	Approximately 2,175 feet upstream of confluence with Big Creek (At Edwards County and Wayne County Boundary / County Road 3000 E)	Regression Equations	HEC-RAS 3.1.1 and up	1/2/2020	A	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural (Portion in Edwards County is backwater effects from Big Creek)
Bonpas Creek	Approximately 9,675 feet upstream of confluence with Wabash River (At Edwards County and White County Boundary)	Approximately 201,834 feet upstream of confluence with Wabash River (Approximately 1,246 feet upstream of Edwards County and Richland County Boundary)	Regression Equations	HEC-RAS 5.0 and up	4/21/2022	A	HEC-RAS v. 5.0.7, 1D Steady Flow; USGS StreamStats 2004, Rural (Downstream 39,689 feet of flooding effects are controlled by Wabash River)

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

Flooding Source	Study Limits		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
	Downstream Limit	Upstream Limit					
Bonpas Creek Tributary 1	Confluence with Bonpas Creek	Approximately 4,550 feet upstream of confluence with Bonpas Creek (Approximately 75 feet upstream of Illinois Route 130)	Regression Equations	HEC-RAS 5.0 and up	4/21/2022	A	HEC-RAS v. 5.0.7, 1D Steady Flow; USGS StreamStats 2004, Rural (Downstream 2,400 feet are backwater effects from Wabash River)
Bonpas Creek Tributary 3	Confluence with Bonpas Creek	Approximately 9,069 feet upstream of confluence with Bonpas Creek (Approximately 800 feet downstream of County Highway 12 / Browns/Grayville Road)	Regression Equations	HEC-RAS 5.0 and up	4/21/2022	A	HEC-RAS v. 5.0.7, 1D Steady Flow; USGS StreamStats 2004, Rural
Briar Branch	Approximately 26,847 feet upstream of confluence with Little Wabash River (Approximately 92 feet downstream of Edwards County and Wayne County Boundary)	Approximately 29,952 feet upstream of confluence with Little Wabash River (Approximately 57 feet upstream of County Highway 10 / Ellery Road)	Regression Equations	HEC-RAS 3.1.1 and up	3/8/2019	A	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Buck Creek	Confluence with Bonpas Creek	Approximately 20,002 feet upstream of confluence with Bonpas Creek (Just downstream of County Road 760 N)	Regression Equations	HEC-RAS 5.0 and up	4/21/2022	A	HEC-RAS v. 5.0.7, 1D Steady Flow; USGS StreamStats 2004, Rural
Butler Creek	Confluence with Big Creek	Approximately 18,420 feet upstream of confluence with Big Creek (Approximately 1,720 feet downstream of County Highway 6)	Regression Equations	HEC-RAS 3.1.1 and up	1/2/2020	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		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
	Downstream Limit	Upstream Limit					
Butler Creek Tributary A	Confluence with Butler Creek	Approximately 11,740 feet upstream of confluence with Butler Creek (Approximately 845 feet downstream of County Road 800 N)	Regression Equations	HEC-RAS 3.1.1 and up	1/2/2020	A	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Butler Creek Tributary A1	Confluence with Butler Creek Tributary A	Approximately 7,175 feet upstream of confluence with Butler Creek Tributary A (Approximately 260 feet downstream of County Highway 100 / County Road 650 N)	Regression Equations	HEC-RAS 3.1.1 and up	1/2/2020	A	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Butler Creek Tributary B	Confluence with Butler Creek	Approximately 6,855 feet upstream of confluence with Butler Creek (Approximately 2,440 feet upstream of County Road 300 E)	Regression Equations	HEC-RAS 3.1.1 and up	1/2/2020	A	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Camp Creek	Confluence with Little Wabash River	Approximately 13,854 feet upstream of confluence with Little Wabash River (Approximately 4,000 feet downstream of County Road 300 N)	Regression Equations	HEC-RAS 3.1.1 and up	1/2/2020	A	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Crooked Creek	Confluence with Bonpas Creek	Approximately 11,685 feet upstream of confluence with Bonpas Creek (Approximately 1,850 feet upstream of County Highway 3 / Lancaster Road)	Regression Equations	HEC-RAS 5.0 and up	4/21/2022	A	HEC-RAS v. 5.0.7, 1D Steady Flow; USGS StreamStats 2004, Rural

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

Flooding Source	Study Limits		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
	Downstream Limit	Upstream Limit					
Fox River	Confluence with Little Wabash River	Approximately 21,292 feet upstream of confluence with Little Wabash River (Approximately 4,110 feet upstream of Edwards County and Wayne County Boundary)	Regression Equations	HEC-RAS 3.1.1 and up	4/27/2020	A	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Ham Creek	Confluence with Big Creek	Approximately 6,159 feet upstream of confluence with Big Creek (Approximately 2,410 feet upstream of County Road 450 N)	Regression Equations	HEC-RAS 3.1.1 and up	1/2/2020	A	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Harper Creek	Confluence with Big Creek	Approximately 7,069 feet upstream of confluence with Big Creek (Approximately 2,350 feet upstream of County Road 250 E)	Regression Equations	HEC-RAS 3.1.1 and up	1/2/2020	A	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Little Wabash River	Approximately 291,206 feet upstream of confluence with Wabash River (Approximately 965 feet downstream of Edwards County and White County Boundary)	Approximately 344,543 feet upstream of confluence with Wabash River (Approximately 16,541 feet upstream of Edwards County and Wayne County Boundary)	PEAKFQ 2.4 (April 1998) and up	HEC-RAS 3.1.1 and up	6/20/2019	A	HEC-RAS v. 4.1, 1D Steady Flow; PEAKFQ v. 7.1, USGS StreamStats 2004, Rural

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

Flooding Source	Study Limits		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
	Downstream Limit	Upstream Limit					
Little Wabash River	Approximately 491,851 feet upstream of confluence with Wabash River (Approximately 417 feet downstream of Edwards County and White County Boundary)	Approximately 556,606 feet upstream of confluence with Wabash River (Approximately 8,647 feet upstream of Edwards County and Wayne County Boundary)	PEAKFQ 2.4 (April 1998) and up	HEC-RAS 3.1.1 and up	6/20/2019	A	HEC-RAS v. 4.1, 1D Steady Flow; PEAKFQ v. 7.1, USGS StreamStats 2004, Rural
Madden Creek	Confluence with Sugar Creek	Approximately 3,252 feet upstream of confluence with Sugar Creek (Approximately 1,930 feet upstream of County Road 300 E)	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
Mud Creek	Confluence with Bonpas Creek	Approximately 13,820 feet upstream of confluence with Bonpas Creek (Approximately 125 feet upstream of County Road 875 E)	Regression Equations	HEC-RAS 5.0 and up	4/21/2022	A	HEC-RAS v. 5.0.7, 1D Steady Flow; USGS StreamStats 2004, Rural (Downstream 10,083 feet are backwater effects from Wabash River)
Mud Creek Tributary 1	Confluence with Mud Creek	Approximately 7,631 feet upstream of confluence with Mud Creek (Just downstream of County Road 400 N (extended))	Regression Equations	HEC-RAS 5.0 and up	4/21/2022	A	HEC-RAS v. 5.0.7, 1D Steady Flow; USGS StreamStats 2004, Rural (Downstream 1,211 feet are backwater effects from Wabash River)
Negro Creek	Confluence with Bonpas Creek	Approximately 11,338 feet upstream of confluence with Bonpas Creek (Approximately 7,075 feet upstream of County Road 900 N)	Regression Equations	HEC-RAS 5.0 and up	4/21/2022	A	HEC-RAS v. 5.0.7, 1D Steady Flow; USGS StreamStats 2004, Rural

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

Flooding Source	Study Limits		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
	Downstream Limit	Upstream Limit					
Stinking Creek	Approximately 1,450 feet upstream of confluence with Little Wabash River (Approximately 177 feet downstream of Edwards County and White County Boundary)	Approximately 12,470 feet upstream of confluence with Little Wabash River (Approximately 1,210 feet upstream of County Road 300 E)	Regression Equations	HEC-RAS 3.1.1 and up	1/2/2020	A	HEC-RAS v. 4.1, 1D Steady Flow; USGS StreamStats 2004, Rural
Sugar Creek	Confluence with Little Wabash River	Approximately 37,000 feet upstream of confluence with Little Wabash River (Approximately 217 feet upstream of Edwards County and Richland County Boundary)	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
Sugar Creek Tributary A	Confluence with Sugar Creek	Approximately 2,960 feet upstream of confluence with Sugar Creek (Approximately 360 feet downstream of County Highway 14 / County Rd 1900 N)	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
Sugar Creek Tributary B	Confluence with Sugar Creek	Approximately 3,139 feet upstream of confluence with Sugar Creek	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
Sugar Creek Tributary C	Confluence with Sugar Creek	Approximately 37,544 feet upstream of Sugar Creek (Approximately 270 feet upstream of County Road 2200 N / E Edwards Lane)	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

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

Flooding Source	Study Limits		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
	Downstream Limit	Upstream Limit					
Village Creek	Approximately 22,570 feet above confluence with Little Wabash River	Approximately 44,498 feet upstream of confluence with Little Wabash River (Approximately 80 feet downstream of County Road 300 E)	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
Wabash River	Approximately 50.5 miles upstream of confluence with Ohio River (Approximately 2.75 miles upstream of Interstate 64)	Approximately 55 miles upstream of confluence with Ohio River (Approximately 7.25 miles upstream of Interstate 64)	HEC-SSP 2.0 (April 2009) and up	HEC-RAS 5.0 and up	2/1/2022	AE w/ Floodway	HEC-RAS v. 5.0.7, 1D Steady Flow; HEC-SSP v. 2.0
Walser Creek	Confluence with Bonpas Creek	Approximately 17,041 feet upstream of confluence with Bonpas Creek (Just downstream of County Road 825 E)	Regression Equations	HEC-RAS 5.0 and up	4/21/2022	A	HEC-RAS v. 5.0.7, 1D Steady Flow; USGS StreamStats 2004, Rural
West Village Creek	Confluence with Village Creek	Approximately 27,501 feet upstream of confluence with Village Creek (Approximately 2,770 feet upstream of County Road 1500 N)	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
West Village Creek Tributary A	Confluence with West Village Creek	Approximately 1,924 feet upstream of confluence with West Village Creek	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
West Village Creek Tributary B	Confluence with West Village Creek	Approximately 2,977 feet upstream of confluence with West Village Creek	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
West Village Creek Tributary C	Confluence with West Village Creek	Approximately 2,008 feet upstream of confluence with West Village Creek	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

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

Flooding Source	Study Limits		Hydrologic Model or Method Used	Hydraulic Model or Method Used	Date Analyses Completed	Flood Zone on FIRM	Special Considerations
	Downstream Limit	Upstream Limit					
West Village Creek Tributary D	Confluence with West Village Creek	Approximately 1,141 feet upstream of confluence with West Village Creek.	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
West Village Creek Tributary D1	Confluence with West Village Creek Tributary D	Approximately 1,200 feet upstream of confluence with West Village Creek Tributary D	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
West Village Creek Tributary D2	Confluence with West Village Creek Tributary D	Approximately 1,162 feet upstream of confluence with West Village Creek Tributary D	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
West Village Creek Tributary E	Confluence with West Village Creek	Approximately 817 feet upstream of confluence with West Village Creek	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

Table 13: Roughness Coefficients

Flooding Source	Channel “n”	Overbank “n”
Bear Creek	0.035-0.075	0.035-0.075
Bear Creek Tributary A	0.035-0.075	0.035-0.075
Big Creek	0.035-0.075	0.035-0.075
Big Creek Tributary C	0.035-0.075	0.035-0.075
Bonpas Creek	0.035	0.035-0.075
Bonpas Creek Tributary 1	0.035	0.035-0.075
Bonpas Creek Tributary 3	0.035	0.035-0.075
Briar Branch	0.035-0.075	0.035-0.075
Buck Creek	0.035-0.045	0.035-0.075
Butler Creek	0.035-0.075	0.035-0.075
Butler Creek Tributary A	0.035-0.075	0.035-0.075
Butler Creek Tributary A1	0.035-0.075	0.035-0.075
Butler Creek Tributary B	0.035-0.075	0.035-0.075
Camp Creek	0.035-0.075	0.035-0.075
Crooked Creek	0.035	0.035-0.075
Fox River	0.035-0.075	0.035-0.075
Ham Creek	0.035-0.075	0.035-0.075
Harper Creek	0.035-0.075	0.035-0.075
Little Wabash River	0.040-0.120	0.040-0.120
Madden Creek	0.035-0.075	0.035-0.075
Mud Creek	0.035	0.035-0.075
Mud Creek Tributary 1	0.035	0.035-0.075
Negro Creek	0.035	0.035-0.075
Stinking Creek	0.035-0.075	0.035-0.075
Sugar Creek	0.035-0.075	0.035-0.075
Sugar Creek Tributary A	0.035-0.075	0.035-0.075
Sugar Creek Tributary B	0.035-0.075	0.035-0.075
Sugar Creek Tributary C	0.035-0.075	0.035-0.075
Village Creek	0.035-0.075	0.035-0.075
Wabash River	0.034	0.034-0.100
Walser Creek	0.035	0.035-0.075
West Village Creek	0.035-0.075	0.035-0.075
West Village Creek Tributary A	0.035-0.075	0.035-0.075
West Village Creek Tributary B	0.035-0.075	0.035-0.075
West Village Creek Tributary C	0.035-0.075	0.035-0.075
West Village Creek Tributary D	0.035-0.075	0.035-0.075
West Village Creek Tributary D1	0.035-0.075	0.035-0.075
West Village Creek Tributary D2	0.035-0.075	0.035-0.075
West Village Creek Tributary E	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 www.ngs.noaa.gov.

Temporary vertical monuments are often established during the preparation of a flood hazard analysis for the purpose of establishing local vertical control. Although these monuments are not shown on the FIRM, they may be found in the 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 www.ngs.noaa.gov.

The datum conversion locations and values that were calculated for Edwards 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
2021 TIGER/Line Shapefiles	U.S. Census Bureau	October 2023	*	Spatial feature and attribute information for community boundaries and railroads
Illinois Counties	Illinois State Water Survey	October 25, 2024	1:24,000	County boundaries for Illinois Digital Flood Insurance Rate Maps
Illinois Highway System	Illinois Department of Transportation	February 28, 2023	1:64,000	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
National Hydrography Dataset	U.S. Geological Survey	March 5, 2023	1:24,000	Spatial feature and attribute information for lakes and HUC-8 watershed boundaries
National Levee Database	U.S. Army Corps of Engineers	August 9, 2024	*	Spatial and attribute information for levees, floodwalls, and closure structures
Stream Gages	U.S. Geological Survey	November 11, 2022	*	Spatial feature and attribute information for stream gages
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

* Data not available

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

Community	Flooding Source	Source for Topographic Elevation Data			
		Description	Vertical Accuracy	Horizontal Accuracy	Citation
Edwards County	Bonpas Creek, Bonpas Creek Tributary 1, Bonpas Creek Tributary 3, Buck Creek, Crooked Creek, Mud Creek, Mud Creek Tributary 1, Negro Creek, Walser Creek	2011/2012 Digital Terrain Model (DTM) for Lower and Middle Wabash watersheds (resolution of 5 foot cell size)	0.576 feet at the 95th percentile	0.30 meters	ISWS 2019
Albion, City of; Edwards County Unincorporated Areas	Bear Creek, Bear Creek Tributary A, Big Creek, Briar Branch, Butler Creek, Butler Creek Tributary A, Butler Creek Tributary A1, Butler Creek Tributary B, Camp Creek, Fox River, Ham Creek, Harper Creek, Little Wabash River, Madden Creek, Stinking Creek, Sugar Creek, Sugar Creek Tributary A, Sugar Creek Tributary B, Sugar Creek Tributary C, Village Creek, West Village Creek, West Village Creek Tributary A, West Village Creek Tributary B, West Village Creek Tributary C	2011 Digital Terrain Model (DTM) for Edwards County, Illinois (resolution of 3 foot cell size)	0.392 feet at the 95th percentile	0.30 meters	ISGS 2012

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

Community	Flooding Source	Source for Topographic Elevation Data			
		Description	Vertical Accuracy	Horizontal Accuracy	Citation
Albion, City of; Edwards County Unincorporated Areas	West Village Creek Tributary D, West Village Creek Tributary D1, West Village Creek Tributary D2, West Village Creek Tributary E	2011 Digital Terrain Model (DTM) for Edwards County, Illinois (resolution of 3 foot cell size)	0.392 feet at the 95th percentile	0.30 meters	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

LOCATION		FLOODWAY			1% ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET) ²	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
51.863	51.863	43,342 / 461	239,343	1.4	385.4	385.4	385.5	0.1
¹ Miles above confluence with Ohio River ² Total floodway width / width within Edwards County								
TABLE 23	FEDERAL EMERGENCY MANAGEMENT AGENCY EDWARDS COUNTY, ILLINOIS AND INCORPORATED AREAS			FLOODWAY DATA				
				FLOODING SOURCE: WABASH RIVER				

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 www.fema.gov/flood-maps/change-your-flood-zone 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 www.fema.gov/flood-maps/tutorials.

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 www.fema.gov/flood-maps/change-your-flood-zone 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 www.fema.gov/flood-maps/change-your-flood-zone 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 Edwards 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 www.fema.gov 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 www.fema.gov 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 Edwards County. Previously, separate FIRMs, Flood Hazard Boundary Maps (FHBM) 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 Edwards 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)
Albion, City of ^{1, 2}	TBD	N/A	N/A	TBD	N/A
Bone Gap, Village of ^{1, 2}	TBD	N/A	N/A	TBD	N/A
Browns, Village of	11/15/1974	11/15/1974	6/13/1980	8/24/1984	TBD
Edwards County Unincorporated Areas	10/27/1978	10/27/1978	N/A	12/7/1984	TBD
Grayville, City of	5/31/1974	5/31/1974	5/7/1976	8/24/1984	TBD
West Salem, Village of ^{1, 2}	TBD	N/A	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 Edwards 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
Bear Creek	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	April 2020	Edwards County Unincorporated Areas
Bear Creek Tributary A	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	April 2020	Edwards County Unincorporated Areas
Big Creek	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	January 2020	Edwards County Unincorporated Areas
Big Creek Tributary C	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	January 2020	Edwards County Unincorporated Areas
Bonpas Creek	Pending	Illinois State Water Survey	EMC-2018-CA-00010, ISWS18-03	April 2022	Browns, Village of; Edwards County Unincorporated Areas; Grayville, City 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
Bonpas Creek Tributary 1	Pending	Illinois State Water Survey	EMC-2018-CA-00010, ISWS18-03	April 2022	Edwards County Unincorporated Areas; Grayville, City of
Bonpas Creek Tributary 3	Pending	Illinois State Water Survey	EMC-2018-CA-00010, ISWS18-03	April 2022	Edwards County Unincorporated Areas
Briar Branch	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	March 2019	Edwards County Unincorporated Areas
Buck Creek	Pending	Illinois State Water Survey	EMC-2018-CA-00010, ISWS18-03	April 2022	Edwards County Unincorporated Areas
Butler Creek	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	January 2020	Edwards County Unincorporated Areas
Butler Creek Tributary A	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	January 2020	Edwards County Unincorporated Areas
Butler Creek Tributary A1	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	January 2020	Edwards County Unincorporated Areas
Butler Creek Tributary B	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	January 2020	Edwards County Unincorporated Areas
Camp Creek	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	January 2020	Edwards County Unincorporated Areas
Crooked Creek	Pending	Illinois State Water Survey	EMC-2018-CA-00010, ISWS18-03	April 2022	Edwards County Unincorporated Areas
Fox River	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	April 2020	Edwards County Unincorporated Areas
Ham Creek	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	January 2020	Edwards County Unincorporated Areas
Harper Creek	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	January 2020	Edwards County Unincorporated Areas
Little Wabash River	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	June 2019	Edwards County Unincorporated Areas
Madden Creek	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	April 2020	Edwards County Unincorporated Areas
Mud Creek	Pending	Illinois State Water Survey	EMC-2018-CA-00010, ISWS18-03	April 2022	Edwards 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
Mud Creek Tributary 1	Pending	Illinois State Water Survey	EMC-2018-CA-00010, ISWS18-03	April 2022	Edwards County Unincorporated Areas
Negro Creek	Pending	Illinois State Water Survey	EMC-2018-CA-00010, ISWS18-03	April 2022	Browns, Village of; Edwards County Unincorporated Areas
Stinking Creek	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	January 2020	Edwards County Unincorporated Areas
Sugar Creek	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	April 2020	Edwards County Unincorporated Areas
Sugar Creek Tributary A	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	April 2020	Edwards County Unincorporated Areas
Sugar Creek Tributary B	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	April 2020	Edwards County Unincorporated Areas
Sugar Creek Tributary C	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	April 2020	Edwards County Unincorporated Areas
Village Creek	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	April 2020	Edwards County Unincorporated Areas
Wabash River	Pending	Illinois State Water Survey	EMC-2018-CA-00010, ISWS18-03	February 2022	Edwards County Unincorporated Areas; Grayville, City of
Walser Creek	Pending	Illinois State Water Survey	EMC-2018-CA-00010, ISWS18-03	April 2022	Edwards County Unincorporated Areas
West Village Creek	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	April 2020	Edwards County Unincorporated Areas
West Village Creek Tributary A	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	April 2020	Edwards County Unincorporated Areas
West Village Creek Tributary B	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	April 2020	Edwards County Unincorporated Areas
West Village Creek Tributary C	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	April 2020	Edwards County Unincorporated Areas
West Village Creek Tributary D	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	April 2020	Edwards County Unincorporated Areas
West Village Creek Tributary D1	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	April 2020	Edwards 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
West Village Creek Tributary D2	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	April 2020	Edwards County Unincorporated Areas
West Village Creek Tributary E	Pending	Illinois State Water Survey	EMC-2017-CA-00004-SO1	April 2020	Edwards 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
Albion, City of	Pending	7/21/2011	Project Discovery	FEMA, Greater Wabash Regional Planning Commission, IDOT, IN DNR, ISWS, U of I Extension, US House of Representatives, and US Senate
		5/13/2015	Project Discovery	Edwards County Soil & Water Conservation District, FEMA, Greater Wabash Regional Planning Commission, IEMA, ISWS, USDA, and the community
		8/18/2016	Project Discovery	FEMA, Greater Wabash Regional Planning Commission, IDNR-OWR, IEMA, ISWS, and SIU
		2/20/2020	Flood Risk Review	ISWS
		3/17/2023	Flood Risk Review	ARC FEMA RSC, FEMA, Greater Wabash Regional Planning Commission, IDNR-OWR, IN DNR, ISWS, and The Polis Center
		TBD	CCO	*
		TBD	Other	*
Bone Gap, Village of	Pending	7/21/2011	Project Discovery	FEMA, Greater Wabash Regional Planning Commission, IDOT, IN DNR, ISWS, U of I Extension, US House of Representatives, and US Senate
		5/13/2015	Project Discovery	Edwards County Soil & Water Conservation District, FEMA, Greater Wabash Regional Planning Commission, IEMA, ISWS, and USDA
		8/18/2016	Project Discovery	FEMA, Greater Wabash Regional Planning Commission, IDNR-OWR, IEMA, ISWS, and SIU
		2/20/2020	Flood Risk Review	ISWS
		3/17/2023	Flood Risk Review	ARC FEMA RSC, FEMA, Greater Wabash Regional Planning Commission, IDNR-OWR, IN DNR, ISWS, and The Polis Center
		TBD	CCO	*
		TBD	Other	*

* To Be Determined

Table 29: Community Meetings (continued)

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
Browns, Village of	Pending	7/21/2011	Project Discovery	FEMA, Greater Wabash Regional Planning Commission, IDOT, IN DNR, ISWS, U of I Extension, US House of Representatives, and US Senate
		5/13/2015	Project Discovery	Edwards County Soil & Water Conservation District, FEMA, Greater Wabash Regional Planning Commission, IEMA, ISWS, and USDA
		8/18/2016	Project Discovery	FEMA, Greater Wabash Regional Planning Commission, IDNR-OWR, IEMA, ISWS, and SIU
		2/20/2020	Flood Risk Review	ISWS
		3/17/2023	Flood Risk Review	ARC FEMA RSC, FEMA, Greater Wabash Regional Planning Commission, IDNR-OWR, IN DNR, ISWS, The Polis Center, and the community
		TBD	CCO	*
		TBD	Other	*
Edwards County Unincorporated Areas	Pending	7/21/2011	Project Discovery	FEMA, Greater Wabash Regional Planning Commission, IDOT, IN DNR, ISWS, U of I Extension, US House of Representatives, US Senate, and the community
		5/13/2015	Project Discovery	Edwards County Soil & Water Conservation District, FEMA, Greater Wabash Regional Planning Commission, IEMA, ISWS, USDA, and the community
		8/18/2016	Project Discovery	FEMA, Greater Wabash Regional Planning Commission, IDNR-OWR, IEMA, ISWS, and SIU
		2/20/2020	Flood Risk Review	ISWS
		3/17/2023	Flood Risk Review	ARC FEMA RSC, FEMA, Greater Wabash Regional Planning Commission, IDNR-OWR, IN DNR, ISWS, The Polis Center, and the community
		TBD	CCO	*
		TBD	Other	*
Grayville, City of	Pending	7/21/2011	Project Discovery	FEMA, Greater Wabash Regional Planning Commission, IDOT, IN DNR, ISWS, U of I Extension, US House of Representatives, and US Senate
		5/13/2015	Project Discovery	Edwards County Soil & Water Conservation District, FEMA, Greater Wabash Regional Planning Commission, IEMA, ISWS, USDA, and the community
		8/18/2016	Project Discovery	FEMA, Greater Wabash Regional Planning Commission, IDNR-OWR, IEMA, ISWS, and SIU
		2/20/2020	Flood Risk Review	ISWS
		3/17/2023	Flood Risk Review	ARC FEMA RSC, FEMA, Greater Wabash Regional Planning Commission, IDNR-OWR, IN DNR, ISWS, The Polis Center, and the community
		TBD	CCO	*
		TBD	Other	*

* To Be Determined

Table 29: Community Meetings (continued)

Community	FIS Report Dated	Date of Meeting	Meeting Type	Attended By
West Salem, Village of	Pending	7/21/2011	Project Discovery	FEMA, Greater Wabash Regional Planning Commission, IDOT, IN DNR, ISWS, U of I Extension, US House of Representatives, and US Senate
		5/13/2015	Project Discovery	Edwards County Soil & Water Conservation District, FEMA, Greater Wabash Regional Planning Commission, IEMA, ISWS, and USDA
		8/18/2016	Project Discovery	FEMA, Greater Wabash Regional Planning Commission, IDNR-OWR, IEMA, ISWS, and SIU
		2/20/2020	Flood Risk Review	ISWS
		3/17/2023	Flood Risk Review	ARC FEMA RSC, FEMA, Greater Wabash Regional Planning Commission, IDNR-OWR, IN DNR, ISWS, and The Polis Center
		TBD	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 www.fema.gov.

Table 30 is a list of the locations where FIRMs for Edwards 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
Albion, City of ¹	City Hall, 27 West Elm Street	Albion	IL	62806
Bone Gap, Village of ¹	Edwards County Courthouse, 50 East Main Street	Albion	IL	62806
Browns, Village of	Village Hall, 311 Front Street	Browns	IL	62818
Edwards County Unincorporated Areas	Edwards County Courthouse, 50 East Main Street	Albion	IL	62806
Grayville, City of	City Hall, 119 South Middle Street	Grayville	IL	62844
West Salem, Village of ¹	Village Hall, 106 East South Street	West Salem	IL	62476

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 Engineering Library website	www.fema.gov/flood-maps/products-tools/know-your-risk/engineers-surveyors-architects
NFIP website	www.fema.gov/flood-insurance
NFHL Dataset	msc.fema.gov
FEMA Region V	536 South Clark Street, 6 th Floor Chicago, IL 60605 (312) 408-5500
Other Federal Agencies	
USGS website	www.usgs.gov
Hydraulic Engineering Center website	www.hec.usace.army.mil
State Agencies and Organizations	
State NFIP Coordinator	Erin C. Conley Illinois Department of Natural Resources One Natural Resources Way Springfield, IL 62702-1271 (217) 782-4428 erin.c.conley@illinois.gov
State GIS Coordinator	Mark Yacucci Illinois State Geological Survey 615 East Peabody Drive Champaign, IL 61820 (217) 265-0747 yacucci@illinois.edu

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
FEMA 1984a	Federal Emergency Management Agency	<i>Flood Insurance Rate Map, City of Grayville, Illinois, Edwards and White Counties</i>		Washington, DC	August 24, 1984	https://msc.fema.gov
FEMA 1984b	Federal Emergency Management Agency	<i>Flood Insurance Rate Map, Village of Browns, Illinois, Edwards County</i>		Washington, DC	August 24, 1984	https://msc.fema.gov
FEMA 1984c	Federal Emergency Management Agency	<i>Flood Insurance Rate Map, Edwards County, Illinois, Unincorporated Areas</i>		Washington, DC	December 7, 1984	https://msc.fema.gov
Grayville 2024	City of Grayville, Illinois	<i>Grayville History</i>	Patrick Seil	Grayville, IL	May 21, 2024	https://grayville-il.gov/grayville-illinois-history/
IDOT 2023	Illinois Department of Transportation	<i>Illinois Highway System</i>		Springfield, IL	February 28, 2023	https://idot.illinois.gov
IEMA 2017	Illinois Emergency Management Agency	<i>Edwards County, Illinois, Multi-Hazard Mitigation Plan</i>		Springfield, IL	June 13, 2017	https://iemaohs.illinois.gov
ISGS 2003	Illinois State Geological Survey	<i>Illinois Public Land Survey System</i>		Champaign, IL	April 2003	https://clearinghouse.isgs.illinois.edu
ISGS 2012	Illinois State Geological Survey	<i>2011 Digital Terrain Model (DTM) for Edwards County, Illinois</i>		Champaign, IL	June 25, 2012	https://clearinghouse.isgs.illinois.edu/
ISWS 2019	Illinois State Water Survey	<i>2011/2012 Digital Terrain Model (DTM) for Lower and Middle Wabash watersheds</i>		Champaign, IL	October 1, 2019	
ISWS 2020	Illinois State Water Survey	<i>Illinois State Water Survey Bulletin 75: Precipitation Frequency Study for Illinois</i>		Champaign, IL	March 2020	http://hdl.handle.net/2142/106653

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	<i>Hydrologic and Hydraulic Modeling and Floodplain Mapping for Little Wabash River, Coles, Cumberland, Shelby, Effingham, Clay, Richland, Wayne, and Edwards Counties, Illinois</i>		Champaign, IL	November 2021	
ISWS 2021b	Illinois State Water Survey	<i>Hydrologic and Hydraulic Modeling and Floodplain Mapping for Little Wabash River and Tributaries, Effingham and Clay County, Illinois</i>		Champaign, IL	November 2021	
ISWS 2023a	Illinois State Water Survey	<i>Hydraulic Modeling and Floodplain Mapping for Wabash River</i>		Champaign, IL	April 2023	
ISWS 2023b	Illinois State Water Survey	<i>Hydrologic and Hydraulic Modeling and Floodplain Mapping for Tributaries to the Wabash River in the Middle and Lower Wabash HUC 8 Watersheds Southeastern Illinois</i>		Champaign, IL	August 2023	
ISWS 2024	Illinois State Water Survey	<i>Illinois Counties</i>		Champaign, IL	October 25, 2024	
USACE 2016	U.S. Army Corps of Engineers Hydrologic Engineering Center	<i>HEC-RAS River Analysis System User's Manual</i>		Davis, CA	2016	https://www.hec.usace.army.mil
USACE 2018	U.S. Army Corps of Engineers Hydrologic Engineering Center	<i>HEC-HMS version 4.3</i>		Davis, CA	September 2018	https://www.hec.usace.army.mil

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
USACE 2024	U.S. Army Corps of Engineers	<i>National Levee Database</i>		unknown	August 9, 2024	https://levees.sec.usace.army.mil
USCB 2023	U.S. Census Bureau	<i>2021 TIGER/Line Shapefiles</i>		Washington, DC	October 2023	https://www.census.gov
USGS 1989	U.S. Geological Survey	<i>USGS 7.5-Minute Series Topographic Maps</i>		Sioux Falls, SD	1989	https://nationalmap.gov
USGS 2004	U.S. Geological Survey	<i>Estimating Flood-Peak Discharge Magnitudes and Frequencies for Rural Streams in Illinois, Science Investigations Report 2004-5103</i>		Reston, VA	2004	https://doi.org/10.3133/sir20045103
USGS 2020	U.S. Geological Survey	<i>USGS National Map: Orthoimagery</i>		unknown	October 2020	https://nationalmap.gov
USGS 2022	U.S. Geological Survey	<i>Stream Gages</i>		Reston, VA	November 11, 2022	https://waterdata.usgs.gov
USGS 2023	U.S. Geological Survey	<i>National Hydrography Dataset</i>		Reston, VA	March 5, 2023	https://www.usgs.gov

