

**RESOLUTION NO. 2018-16**

**A RESOLUTION TO ADOPT THE HUNTINGTON COUNTY  
FLOOD RESPONSE & EVACUATION PLAN.**

**WHEREAS**, the County of Huntington established a Flood Response Committee (“Committee”) in 2015 to prepare the County for future flood-related disasters and mitigate risk to life and property, and the Committee determined that a flood response plan would serve towards meeting those needs; and

**WHEREAS**, the Board of Commissioners of Huntington County, Indiana, contracted with Butler, Fairman & Seufert, Inc. to assist the Committee in preparing a Flood Response & Evacuation Plan (“FREP”) for all jurisdictions in Huntington County. The resulting FREP is attached and is incorporated hereto as Exhibit A; and

**WHEREAS**, the Board of Commissioners of Huntington County, Indiana, find after investigation and deliberation that the adoption of the FREP is necessary and prudent for the flood hazard safety of County citizens;

**WHEREAS**, this is a multi-jurisdictional plan and cities and towns that participated in the planning process may choose to also adopt the FREP;

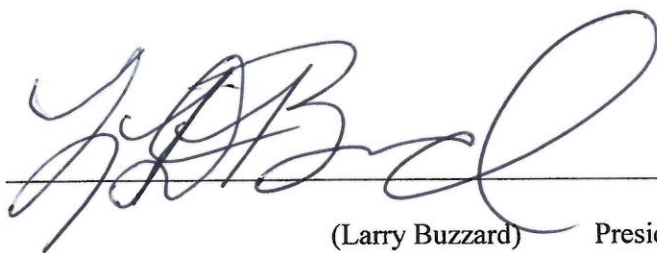
**NOW, THEREFORE, BE IT RESOLVED** by the Board of Commissioners of Huntington County, Indiana, that Huntington County supports the flood response and evacuation planning efforts and wishes to adopt the Huntington County Flood Response & Evacuation Plan, effective immediately.


[SIGNATURE BLOCK ON NEXT PAGE]

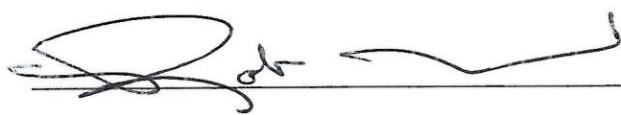
Resolution 2018-16  
Flood Response & Evacuation Plan Adoption

Adopted this 28 day of December, 2018.

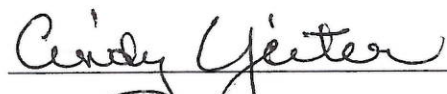
BOARD OF COMMISSIONERS, HUNTINGTON COUNTY, INDIANA

  
\_\_\_\_\_ as  
(Larry Buzzard) President

  
\_\_\_\_\_ as  
(Tom Wall) Member

  
\_\_\_\_\_ as  
(Rob Miller) Member

ATTEST:

  
\_\_\_\_\_  
(Cindy Yeiter) Auditor

# FREP

## FLOOD RESPONSE & EVACUATION PLAN

Huntington County, Indiana

Town of Andrews

City of Huntington

Town of Markle

Town of Mount Etna

Town of Roanoke

Town of Warren

Prepared By:

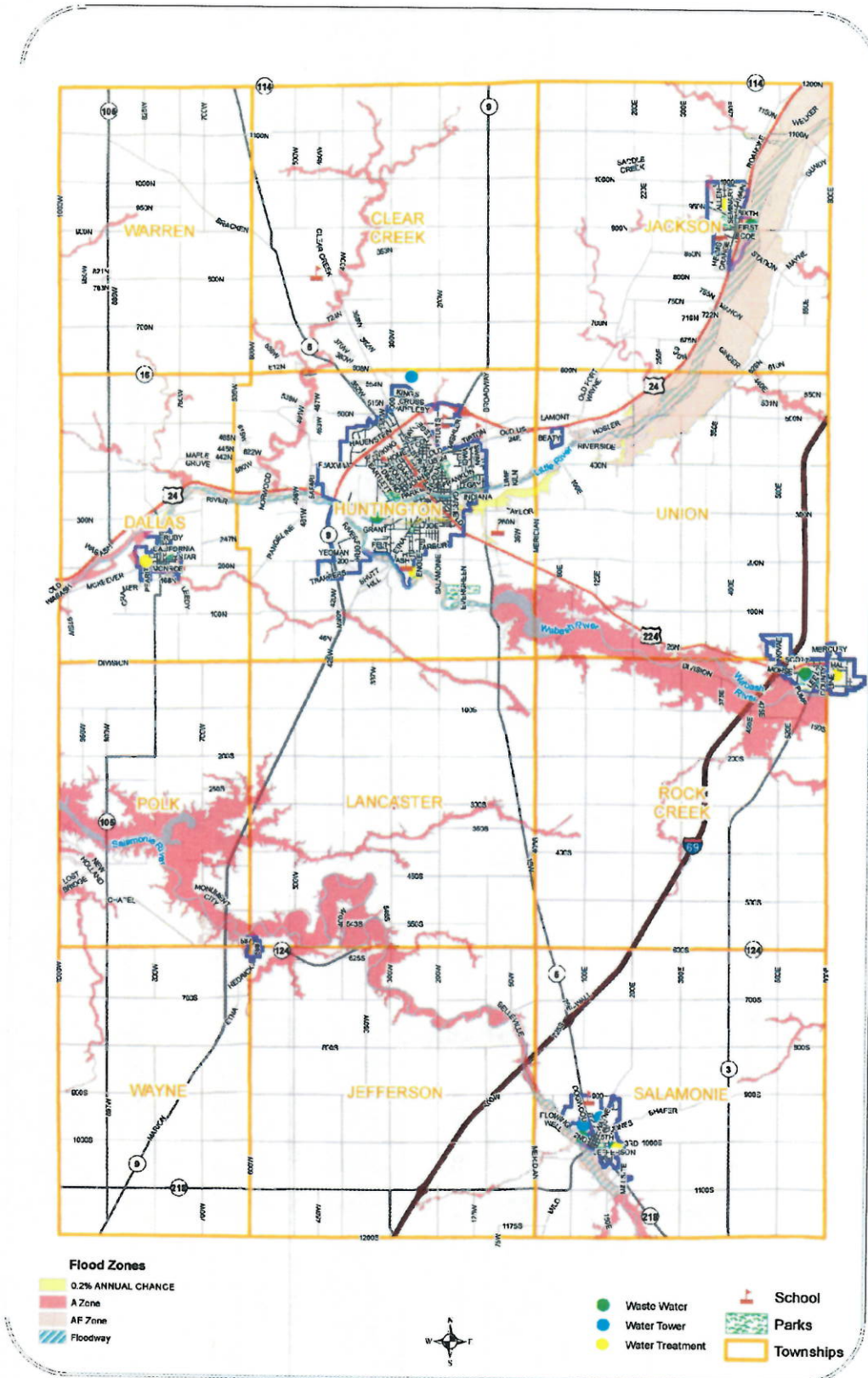
Butler, Fairman & Seufert, Inc.  
8450 Westfield Blvd., Suite 300  
Indianapolis, IN 46240

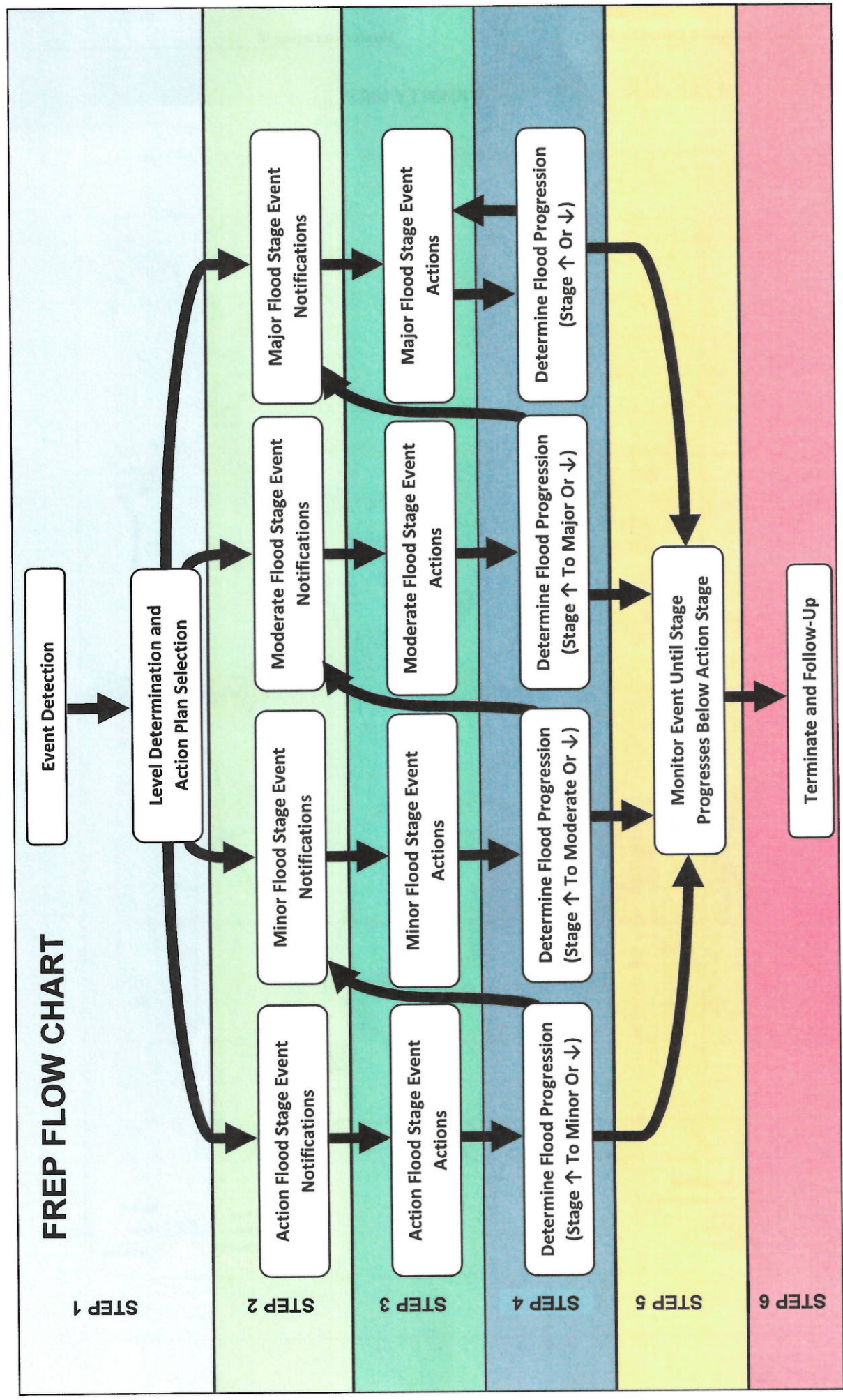


This Plan should go into effect whenever forecasted rainfall is expected to result in a significant flood stage in Huntington County. Monitoring of the major river systems and lakes including the Salamonie, Wabash, and Little Rivers and Huntington and Salamonie Lakes will be used to determine flood stage, approximate inundated area, and appropriate Action Plan. Monitoring of upstream conditions and forecasted rainfall will be used to proactively determine future flood stages, expected inundated area, and associated Action Plan. Dams and any associated failures are outside the scope of this document as they are within the jurisdiction of the United States Army Corps of Engineers (USACE) and emergencies will be directly communicated with the Emergency Management Agency (EMA).



## VICINITY MAP







## SUMMARY OF FREP PROCESS

There are six steps to the Flood Response and Evacuation Plan (FREP) that should be followed when a flood event occurs in the river systems upstream of Huntington County, in Huntington County, or is expected to occur in Huntington County from NOAA stage prediction data. The steps are:

Step 1: Event Detection, Level Determination, and Selection of Appropriate Action Plan

Step 2: Determine Notification Area and Communicate Response Message

Step 3: Execute Action Plan

Step 4: Determine Flood Stage Progression

Step 5: Monitor Flood Stages

Step 6: Terminate and Follow-Up

### Step–1: Event Detection, Level Determination, and Action Plan Selection

The first step to the FREP is event detection and categorization of the flood level into one of the following flood events:

- Action Stage Flood Event
- Minor Stage Flood Event
- Moderate Stage Flood Event
- Major Stage Flood Event

An Emergency Management Agency (EMA) representative will be responsible for event detection and will utilize data from the National Weather Service (NWS) and the National Oceanic and Atmospheric Administration's (NOAA) flood stage prediction data to determine approximately when a flood will occur and what category the flood stage will fall under. Other tools will be utilized for areas not monitored by NOAA.

Using this data, FREP Co-Coordinators will determine an appropriate Action Plan for their respective jurisdictions. More detailed procedure provided in **Sections 1.1 – 1.3**.

## **Step–2: Determine Notification Area and Communicate Response Message**

After an event has been detected, a level has been designated, and the Action Plan has been determined, a representative from the Emergency Management Agency (EMA) will determine the affected area and record and broadcast an emergency response message with CodeRED. More detailed procedure provided in **Sections 2.1 & 2.2**.

## **Step–3: Execute Action Plan**

After notifications have been made, the FREP Co-Coordinators will begin initiating the Action Plan. Communication with the FREP personnel responsible for carrying out tasks within the Action Plan should be initiated and instruction given. The Action Plan should only serve as a guideline due to the unpredictable nature of flooding. If deviations from the Action Plan need to be made during its execution, then communication with all involved parties shall be made and approved by the FREP Co-Coordinators or the Incident Commander from the jurisdiction. These deviations should be summarized during **Step 6** and may be used to modify Action Plans for future emergency responses to flooding. More detailed procedure provided in **Section 3.1**.

## **Step–4: Determine Flood Stage Progression**

An EMA representative will monitor data from NOAA and the NWS to determine whether the flood stages in the county are expected to increase to a more severe flood stage or will begin to decrease. Significant changes to previously expected flood stages should be communicated with the FREP Co-Coordinators. The FREP Co-Coordinators shall then decide what changes need to be made to their current Action Plan and communicate these changes to the respective responsible parties. More detailed procedure provided in **Section 4.1**.

## Step–5: Monitor Flood Stages

As flood waters begin to recede, an EMA representative will utilize data from the NWS and NOAA to determine approximately when flood waters are expected to recede to safe levels. Variables such as estimated time to reach safe levels and when evacuated residents can return should be communicated with the FREP Co-Coordiators in each affected region. Those FREP personnel in each region can then prepare to check that the flood waters are indeed receding and visually confirm it is safe to reenter evacuated areas. This confirmation should be relayed back to the EMA who can send a broadcast to citizens that it is safe to reenter evacuated areas. This information can also help those responsible for post-flood cleanup and damage assessment to prepare for their duties. An EMA representative will continue to monitor data from NOAA and the NWS until all flood stages have receded below Action Stage levels. More detailed procedure provided in **Section 5.1**.

## Step–6: Terminate and Follow-Up

After all flood stages have receded below Action stage levels, an EMA representative will alert the FREP Co-Coordiators that flooding has passed, as well as send out an emergency broadcast to notify the affected communities that it is safe to resume normal activity. The FREP Co-Coordiators will then communicate with their respective FREP personnel to let them know what, if any, additional actions need taken and to schedule a follow-up meeting or flood fight debrief. The flood fight debrief will be used to summarize the effectiveness of the Action Plan and what changes if any were made during its execution. The responsible committees will then determine what changes should be adopted into their Action Plan. More detailed procedure provided in **Sections 6.1 & 6.2**.



**TABLE OF CONTENTS**

VICINITY MAP .....	iii
FREP FLOW CHART .....	iv
SUMMARY OF FREP PROCESS .....	v
FREP PREREQUISITE INFORMATION .....	1
Purpose .....	1
Roles and Responsibilities .....	1
FREP Preparation .....	7
STEP 1 – EVENT DETECTION, LEVEL DETERMINATION, AND ACTION PLAN SELECTION .	
.....	9
1.1 Event Detection .....	9
1.2 Level Determination .....	11
1.3 Action Plan Selection .....	12
STEP 2 – DETERMINE NOTIFICATION AREA AND COMMUNICATE RESPONSE MESSAGE	
.....	13
2.1 Determine Notification Area .....	13
2.2 Communicate Response Message .....	13
STEP 3 – EXECUTE ACTION PLAN .....	16
3.1 Execute Action Plan .....	16
STEP 4 – DETERMINE FLOOD STAGE PROGRESSION .....	18
4.1 Determine Flood Stage Progression .....	18
STEP 5 – MONITOR FLOOD STAGES .....	20
5.1 Monitor Flood Stages .....	20
STEP 6 – TERMINATE AND FOLLOW-UP .....	21
6.1 Terminate .....	21
6.2 Follow-Up .....	21
APPENDICES .....	23



## FREP PREREQUISITE INFORMATION

### PURPOSE

The purpose of this document is to prepare and provide the FREP Co-Coordinators, the County, City and Town Departments, Elected Officials, and any External Partners that have flood fight responsibilities a comprehensive Action Plan during flooding scenarios. The main goal of the FREP is to increase flood response preparedness and to ultimately reduce injury, loss of life, and property damage.

### ROLES AND RESPONSIBILITIES

The roles and responsibilities for those responsible for carrying out the FREP are defined below:

**FREP Co-Coordinators:** The FREP Co-Coordinators for each jurisdiction are comprised of the Huntington County EMA Director, the local Fire Chief, and the Floodplain Administrator. The main responsibilities of the FREP Co-Coordinators are to serve as the central hub for incoming and outgoing communications to those responsible for carrying out the FREP, to determine the appropriate Action Plan for their jurisdiction, and to make necessary changes to that Action Plan during a flood fight scenario. As part of this duty the FREP Co-Coordinators should have an accurate and up-to-date contact list for all necessary individuals. In addition, the FREP Co-Coordinators are responsible for choosing the Incident Commander in their respective jurisdictions. The FREP Co-Coordinators should have a few candidates pre-selected prior to any flood fight and these candidates should be aware that they may be selected and be willing to perform the duties of Incident Commander. The individual responsibilities of the FREP Co-Coordinators and/or their constituents are detailed herein:

**FREP Co-Coordinator EMA** – The Huntington County EMA Director and their staff will be responsible for monitoring available data from the NWS and NOAA. The EMA should utilize NOAA's flood prediction data on the gaged waterbodies and watercourses to proactively determine when a flood stage will be reached and the corresponding flood event level. If NOAA does not currently have forecasted stage data available and the EMA feels that flooding may occur due to the amount of probable forecasted rainfall from the NWS, then the EMA should make

a request to the NOAA to forecast future stages. To aid in this request, the EMA can utilize the Precipitation Frequency data from NOAA to get a better idea of the size and severity of the forecasted rainfall.

Once it has been determined that a flood stage will likely be reached, the EMA will notify the other FREP Co-Coordination on important variables such as expected flood event level, time until the flood event level is reached, and the time until peak stage. The EMA will then help select the Action Plans for the affected jurisdictions and disseminate this information to the FREP personnel in those affected jurisdictions. The EMA will then be responsible for disseminating an emergency broadcast through CodeRED to the anticipated affected communities. Following the broadcast, the EMA should continuously monitor data from the NWS and NOAA to determine whether the flood event level is expected to increase to a higher level or decrease below the Action level. The EMA should communicate with the other FREP Co-Coordination regarding changes to previously predicted variables. Finally, once flood stages have receded below Action stage levels, the EMA will send out an emergency broadcast to those previously affected to announce that it is safe to resume normal activity. The EMA will then aid in damage assessment, documenting flooded areas and respective depths, evaluating damaged structures, collection and disposal of debris, reporting to Indiana Department of Homeland Security (IDHS), and restocking the sand bag supply.

**FREP Co-Coordinator Fire Chief** – The Fire Chief of the respective jurisdiction will primarily be responsible for helping select and disseminate their jurisdiction's Action Plan to firefighting personnel, directing firefighting personnel on evacuation and rescue efforts, deploying flood protection measures, and assisting other emergency responders with directing traffic to the flood safe routes.

**FREP Co-Coordinator Floodplain Administrator** – The Floodplain Administrator of the jurisdiction will primarily be responsible for helping select the Action Plan and for recording flood fight actions during a flood event. Floodplain Administrators should communicate with each other during a flood event on the selected Action Plan, any future changes to that Action Plan, and any unexpected emergencies. Following a flood fight, the Floodplain Administrators will aid in damage assessment, documentation of flooded areas and respective depths including high-water marks and evaluating damaged structures. The Floodplain Administrators will be responsible for making



Substantial Improvement/Substantial Damage (SI/SD) determinations and will require buildings located in the Special Flood Hazard Area (SFHA) to comply with new construction requirements and get a Floodplain Development permit for any repairs or development. They will also present their findings at the flood fight debrief on changes that occurred to the Action Plan, unexpected emergencies, and any items that may be helpful for planning future flood fights.

**Incident Commander** – The Incident Commanders are chosen by the FREP Co-Coordination and are responsible for implementing the selected Action Plans in their jurisdiction. These candidates should be aware that they may be selected and be willing to perform the duties of Incident Commander. The Incident Commanders should be selected prior to FREP activation and updated annually. During Moderate and Major flood stages the Incident Commanders are responsible for initiating an Emergency Operations Center (EOC). The Incident Commanders ensure all their FREP personnel are operating cohesively and conductively towards their common goal. The Incident Commanders are authorized to make changes to their respective Action Plans if a quick decision needs made to satisfy the ultimate goal of minimizing injury, loss of life, or property damage. These changes should be communicated to the FREP Co-Coordination, so they can be recorded and disseminated to the other FREP personnel that will be affected by the change and will allow the FREP Co-Coordination to make any necessary future changes to their Action Plan. If a change needs made to the Action Plan but does not require immediate action, then the Incident Commander should communicate the proposed change to the FREP Co-Coordination so that the best course of action can be determined. Following a flood fight, the Incident Commander will aid in damage assessment, documentation of flooded areas and respective depths, inspecting bridges for visible damage, collection and disposal of debris, close the EOC, lead the flood fight debrief, and assist with restocking the sand bag supply.

**Street/Utility Department** – The Street/Utility Department is primarily responsible for determining impassible roads and placing the appropriate signage within City/Town limits. In the case that a flood safe route is deemed impassible, the Street/Utility Department is responsible for placing signage and determining a new flood safe route. In addition, members of the Street/Utility Department should help man the sand bag pick-up. Following a flood fight, the Street/Utility Department is responsible for collection and disposal of debris and restocking and repairing signs and barricades.

**County Health Department** – The County Health Department is primarily responsible for helping evacuate endangered public during a Major flood stage and evaluating damaged structures post flood fight.

**County Highway Department** – The County Highway Department is primarily responsible for determining impassible roads and placing the appropriate signage within the unincorporated areas. In the case that a flood safe route is deemed impassible, the County Highway Department is responsible for placing signage and determining a new flood safe route. In addition, members of the County Highway Department should help prepare and man the sand bag pick-up. Following a flood fight, the County Highway Department is responsible for inspecting all non-INDOT bridges for damage, collection and disposal of debris, and restocking and repairing signs and barricades.

**Huntington County Public Safety Dispatch** – The Huntington County Public Safety Dispatch is primarily responsible for aiding in the identification of impassible roads and the affected public. Many of the FREP personnel including the EMA representatives, Incident Commanders, and Fire and Police departments should be actively communicating to Dispatch about flood related emergencies.

**EMA** – The EMA is primarily responsible for flood detection, notifying the public, preparing and manning the sand bag pick-up, aiding in identifying the affected public and impassible roads, and coordinating flood safe shelters. Following a flood fight, the EMA will begin collecting post flood data, aid in damage assessment, documenting flooded areas and respective depths, evaluating damaged structures, collecting and disposing of debris, closing shelters, restocking the sand bag supply, and participating in the flood fight debrief.

**Fire Department** – The Fire Department is primarily responsible for aiding in identifying the impassible roads and the affected public, evacuation and rescue efforts, deploying flood protection measures, and assisting other emergency responders with directing traffic to the flood safe routes.



**Law Enforcement** – Law Enforcement is primarily responsible for aiding in identifying the impassible roads and the affected public, evacuation and rescue efforts, opening flood safe shelters, and assisting other emergency responders with directing traffic to the flood safe routes.

**Mayor/Town Council** – The Mayor/Town Council will aid in coordinating flood safe shelters, notifying the affected public, evacuating endangered public, and closing the EOC.

**County Commissioners** – County Commissioners will primarily be responsible for coordinating flood safe shelters, notifying the affected public, evacuating endangered public, and closing the EOC.

**Indiana Department of Homeland Security** – The Indiana Department of Homeland Security (IDHS) will primarily be responsible for aiding in determining the affected areas, opening an EOC for Moderate and Major flood stages, preparing and opening flood safe shelters, and assisting in evacuating endangered public. Following a flood fight the IDHS will assist EMA with collecting post flood data, aid in damage assessment, evaluating damaged structures, documenting flooded areas and respective depths, collecting and disposing of debris, and closing shelters.

**Emergency Medical Services (EMS) / Hospitals** – The Hospitals and EMS will be responsible for continuing their regular duties during a flood fight and for evacuating patients with medical conditions if the hospitals are expected to be influenced by flood waters.

**Red Cross** – The Red Cross will be expected to assist with Moderate and Major flood events and their duties will consist of coordinating and preparing flood safe shelters. Following a flood fight, the Red Cross will then close the shelters.

**Public Utilities** – Public Utilities will primarily be responsible for ensuring public safety from damaged or downed facilities and for maintaining these facilities during flood events.

**Huntington County Community School Corporation (HCCSC) Buses** – The HCCSC Buses will help transport the endangered public to and from flood safe shelters during Moderate and Major flood events.

**Media** – The Media in Huntington County will assist with warnings and notifications to the affected public during Moderate and Major flood events.



## FREP PREPARATION

The FREP Co-Coordination should conduct tests annually, and after each flood fight, of all necessary flood notification systems and take measures to ensure that they have sufficient resources for a flood fight. These test measures include:

- Check to ensure the CodeRED emergency broadcast system is operational and functional.
- Conduct a test of all other communication systems (radios, cell phones, etc.) to ensure they are operational and functional.
- Check the list of important links in **Appendix A** to ensure they are still active and reference the correct material.
- Confirm that the sandbag equipment is operational and functional and garages that are to have a sandbag stockpile on hand have an adequate number of sandbags staged.
- Confirm that the FREP personnel and contact list is current and contact information easily accessible.
- Confirm that the County Highway and the City/Town Street Departments have adequate high-water signs and that the hinged high-water signs are still in place and undamaged.
- Check to ensure that the Flood Safe Routes are current, i.e. major infrastructure changes have not altered the route. Also, if construction is expected to occur during the year on a portion of a Flood Safe Route then this should be taken into consideration and, if necessary an alternate Flood Safe Route should be formulated.
- Review weather, stage, and flood prediction software from the NWS, NOAA, and USGS to ensure that the most up-to-date software is being used.
- Confirm that flood safe shelters are operable, and owners of each flood safe shelter are still willing for their facility to serve as a flood safe shelter.

All other FREP personnel should be familiar with their Action Plan responsibilities prior to flood fighting and should periodically review these responsibilities and maintain all necessary flood fighting assets.

## STEP 1 – EVENT DETECTION, LEVEL DETERMINATION, AND ACTION PLAN SELECTION

### 1.1 EVENT DETECTION

The first step in implementing the FREP is Event Detection. The primary goal of Event Detection is for the EMA to proactively determine when a flood is expected to occur. On the gaged rivers and lakes including the Salamonie, Wabash, and Little Rivers and the Huntington and Salamonie Lakes, the EMA can utilize the NOAA Flood Forecasting links in **Table 1** to determine if there is an impending flood expected in the county or upstream of the county. An automated way to determine current flood stages on the gaged waterbodies is through the USGS WaterAlert system. This system sends out an automated text or email after a user selected stage has been reached at the gage of interest. The links provided in **Table 3** provide access to the USGS WaterAlert form where information can be entered to receive automated alerts for gages of interest. The included flood stages in **Table 3** can be used to set alerts after each new flood level is reached.

For those streams that don't have a USGS gage but are a tributary to a stream that does, the EMA can rely on the gaged stream to predict flooding on the connected reaches. However, some officials in communities with connected reaches have explained that flooding on these reaches are more often the result of flash flooding and not caused by backwater from the larger gaged waterbody. To determine if a flash flood is probable from forecasted rainfall the EMA can utilize **Table 2** (or other rainfall thresholds that communities have determined induce flash flooding). Those reaches include Calf Creek, Cow Creek, Loon Creek, and McPherrin Ditch. For those reaches or low-lying areas that don't fit either criteria, the EMA will rely on the NWS guidance on rainfall required to produce flash flooding, **Table 2**, and the NWS forecasted rainfall to determine if a flash flood is likely. For rainfall events that do not fall under the flash flooding criteria, the EMA can utilize NOAA's [Precipitation Frequency Data Server](#) to determine the average recurrence interval between 1 and 1,000 years of an impending rain event which can be used to correlate the potential severity of a subsequent flood. It should be noted that a 1% annual chance rainfall event does not always correlate to a 1% annual chance flood as variables such as current river stages, soil saturation, and rainfall intensity can vary a river's response following a rainfall event. Finally, the EMA can utilize witness accounts from citizens and FREP personnel to help determine flooded areas. **Table 1** below serves as an event detection guide for the various procedures.

Table 1: Event Detection Guide

Gaged Waterbodies	Salamonie River, Little River, Wabash River, Huntington Lake, Salamonie Lake	NOAA Flood Forecasting - <a href="#">Salamonie River</a> <a href="#">Little River</a> <a href="#">Wabash River</a> <a href="#">Huntington Lake</a> <a href="#">Salamonie Lake</a>
		USGS Gages - <a href="#">Salamonie River near Warren</a> <a href="#">Salamonie River at Dora</a> <a href="#">Little River near Huntington</a> <a href="#">Wabash River at Linn Grove</a> <a href="#">Wabash River at Bluffton</a> <a href="#">Wabash River at Huntington</a> <a href="#">Wabash River at Wabash</a>
Connected Reaches	Little River - Calf Creek, Cow Creek, McPherran Ditch	NOAA Flood Forecasting- <a href="#">Little River</a> <a href="#">Wabash River</a>
	Wabash River - Loon Creek	USGS Gages- <a href="#">Little River near Huntington</a> <a href="#">Wabash River at Huntington</a>
Ungaged Waterbodies		NWS Flash Flood Guidance <b>Table 2</b>
		NWS Forecast Points- <a href="#">Andrews</a> <a href="#">Huntington</a> <a href="#">Markle</a> <a href="#">Mount Etna</a> <a href="#">Roanoke</a> <a href="#">Warren</a>

Table 2: NWS Average Rainfall That Produces Flash Flooding in Huntington County

	1 Hr	3 Hr	6 Hr	12 Hr	24 Hr
Inches	2.2	2.7	2.8	2.9	3.3

\*This is an estimate only and will vary with terrain.



**Table 3: USGS WaterAlerts and Corresponding Flood Stage Thresholds**

		Flood Stages			
		Action (ft)	Minor (ft)	Moderate (ft)	Major (ft)
USGS Water Alerts	<a href="#">Salamonie River near Warren</a>	10	12	15	17
	<a href="#">Salamonie River at Dora</a>	10	11	14	17
	<a href="#">Little River near Huntington</a>	12	15	16	19
	<a href="#">Wabash River at Linn Grove</a>	9	11	14	17
	<a href="#">Wabash River at Bluffton</a>	7	10	14	18
	<a href="#">Wabash River at Huntington</a>	18	20	21	23
	<a href="#">Wabash River at Wabash</a>	10	14	19	23

## 1.2 LEVEL DETERMINATION

The second step in implementing the FREP is Level Determination. The primary goal of Level Determination is for the EMA to determine the severity of an impending flood. Determining the flood level on the waterbodies part of NOAA's Flood Forecasting program is straightforward and can be determined by utilizing the links provided in **Table 1**. If there is currently a flood at the gage of interest or if a flood is predicted, the site will detail the river's stage as it varies with time, known as a hydrograph, and place it in one of the four flood categories: Action stage, Minor stage, Moderate stage, and Major stage. A short summary of the expected impacts per each flood stage are detailed below the hydrograph. Additionally, the USGS Automatic WaterAlert notification system can be utilized by all FREP personnel for USGS gaged waterbodies within their operating region (**Table 3**). This system can be set up to send an alert (email or text) whenever a stage has been reached i.e. Action Stage, Minor Stage, Moderate Stage, Major Stage, or a user chosen stage. Gages upstream of the county set up with a WaterAlert can provide advanced warning of a potential future flood in the county.

For the ungaged waterbodies and all other low-lying areas, the EMA can pair the NWS forecasted rainfall with NOAA's [Precipitation Frequency Data Server](#) to determine the average recurrence interval between 1 and 1,000 years of an impending rain event which can be used to correlate the potential severity of a subsequent flood. The severity of the potential floods can then be seen graphically with FEMA's [National Flood Hazard Layer](#). This layer shows the flood extents for the 1% and 0.2% annual chance floods and those zones of minimal flood hazard.

### 1.3 ACTION PLAN SELECTION

The third step in implementing the FREP is the Action Plan selection for Huntington County, as well as the communities of Andrews, Huntington, Markle, Mount Etna, Roanoke, and Warren. Each jurisdiction has their own Action Plan (**Appendix B**) that varies with the four flood categories; Action Stage, Minor Stage, Moderate Stage, and Major Stage. Once the EMA has disseminated all their findings to the FREP Co-Coordinators on Event Detection and Level Determination, appropriate Action Plans, aid requests, and special circumstances (i.e. road closures, personnel swaps, sandbag staging) will be determined.

The FREP Co-Coordinators will send out this information to all FREP personnel in their jurisdiction. The Floodplain Administrators will log the Action Plans, special circumstances, and aid requests for their jurisdictions and log any changes to these items during the flood fight. The EMA Co-Coordinator is a constant FREP Co-Coordinator for all jurisdictions so they will be responsible for making FREP personnel in adjacent flood fighting jurisdictions aware of how the other is operating. Additionally, the EMA Co-Coordinator will know how the whole county is operating and can determine where the greatest needs are and where available assets should be sent.

Changes will likely need made to the Action Plans and special circumstances will arise during a flood fight. Significant changes to the previously selected Action Plans should only be made by the FREP Co-Coordinators or Incident Commanders. Changes that need made should be geared towards minimizing injury, loss of life, or property damage. These changes should be well communicated and documented by the Floodplain Administrators. These documented changes will be important for meetings post flood fight where necessary changes to each respective Action Plan can be made (**Sections 6.1 & 6.2**).



## STEP 2 – DETERMINE NOTIFICATION AREA AND COMMUNICATE RESPONSE MESSAGE

### 2.1 DETERMINE NOTIFICATION AREA

Determining the potential inundated area is the next step in the FREP process and is the responsibility of the EMA. The EMA should have already established which reaches are expected to be out of their banks and the approximate severity of flooding. One way to establish the approximate inundated areas is through the use of FEMA's [National Flood Hazard Layer](#) which shows the inundated areas for a 1% and 0.2% annual chance flood. The EMA can navigate to the reach that is expected to flood and determine the potential inundation area. Additionally, not all reaches have a USGS gage so if the EMA is expecting approximately a 1% or 0.2% annual chance storm event in all or part of the county they can determine the approximate inundated areas across these regions. More precise flood mapping is currently on the horizon as new technologies emerge and flooding becomes a higher priority item. One such tool that is being used across Indiana, including one site in Fort Wayne, but has yet to reach Huntington County is the USGS [Flood Inundation Mapper](#) (FIM). This tool utilizes a USGS gage along a stretch of a river or stream, usually through a populated region, and maps the inundated area based on a user selected stage. What makes this tool so powerful is that it can be paired with the reaches that have flood forecasting in **Table 1** and forecasted stages can be mapped well before the river or stream experiences these stages. More information on how to get one of these FIM sites published [here](#).

### 2.2 COMMUNICATE RESPONSE MESSAGE

After the approximate inundated area has been determined, a response message will be transmitted through CodeRED to those in the community located in the potentially affected area. Partnerships with local media will also be used to broadcast emergency messages. Response messages may include any of the following: Flood Watch (Conditions are favorable for flooding), Flood Warning (Flooding is imminent), Flood Safe Shelter open, Evacuate, Reenter evacuated areas, and Flood Safe Shelters closed. Examples of what these response messages may sound like include the following:

**EXAMPLE RESPONSE MESSAGES**

**Flood Watch**

*"The National Weather Service is forecasting near record flooding along the Little River in Huntington County. If you live along the Little River, begin preparations now."*

**Flood Warning**

*"The National Weather Service has issued a flood warning along the Little River, with a projected crest of 18.7ft around midnight."*

**Flood Safe Shelter Open**

*"Due to extreme flooding along the Little River the Flood Safe Shelter at \_\_\_\_\_ is now open."*

**Evacuate**

*"Due to extreme flooding expected along the Little River please evacuate to higher ground or your community Flood Safe Shelter at \_\_\_\_\_."*

**Re-enter evacuated areas**

*"Flood stages along the Little River have receded to safe levels and it is safe to enter previously evacuated areas."*

**Flood Safe Shelter Closed**

*"The Flood Safe Shelter at \_\_\_\_\_ is now closed and it is safe to resume normal activity."*

**Table 4: Community Flood Safe Shelters**

Community	Building	Address
Andrews	Andrews Volunteer Fire Department	796 N Main St., Andrews
Andrews	Andrews Town Hall	66 N Main St., Andrews
Mount Etna	Mt. Etna United Methodist Church	6383 W 600 S, Huntington
Mount Etna	Salamonie Church of the Brethren	2662 W 600 S, Warren
Roanoke	Roanoke Elementary School	423 W Vine St., Roanoke
Warren	Knight Bergman Center	132 N Nancy St., Warren

**Table 5: Red Cross Shelters**

Building	Address
Andrews Elementary School	509 E Jefferson St., Andrews
Central Christian Church	500 Macgahan St., Huntington
First Presbyterian Church	50 E Tipton St., Huntington
First Church of the Nazarene	1555 Flaxmill Rd., Huntington
Faith Chapel United Methodist Church	2978 W 1100 N, Huntington
St. Peters First Community Church	206 Etna Ave., Huntington
Riverview Middle School	2465 Waterworks Rd., Huntington
Horace Mann Elementary School	2485 Waterworks Rd., Huntington
The Church of Jesus Christ LDS	1190 W 500 N, Huntington
Huntington Church of the Brethren	306 E Washington St., Huntington
Huntington North High School	450 Mcgahan St., Huntington
Lincoln Elementary	2037 E Taylor St., Huntington
Salvation Army Building	1424 E Market St., Huntington
UAW Local 2209	5820 E 900 N, Roanoke
Roanoke Elementary School	423 W Vine St., Roanoke
Lafayette Meadows Elementary School	11420 Ernst Rd., Roanoke
St. Joseph Catholic Church	641 N Main St., Roanoke
Lancaster Wesleyan Church	3147 W 543 S, Warren
Salamonie School	1063 E 900 S, Warren
Warren Church of Christ	302 Wayne St., Warren
Knight-Bergman Civic Center	132 Nancy St., Warren



## STEP 3 – EXECUTE ACTION PLAN

### 3.1 EXECUTE ACTION PLAN

Communication and preparedness by all FREP personnel is essential to the successful execution of the Action Plans. The Action Plans are executed as soon as the FREP becomes active. However, the first actions of the Action Plans are the same regardless of the potential flood severity and include everything in **Steps 1 & 2**. The Action Plans will begin in earnest and all FREP personnel who are not yet active should begin or prepare for their flood fighting duties once a notification from their FREP Co-Coordination for the Action Plan being utilized has been received. Due to the chaotic nature of natural disasters, all essential FREP personnel should have a backup person that can cover their duties during a leave of absence and, if possible, this should be communicated with one of the FREP Co-Coordination before a leave is initiated. The contact information for this backup person should be included on an automatic email response during a leave.

All FREP personnel should be familiar with their Action Plan responsibilities prior to a flood fight and be ready to perform these duties. FREP members who command volunteers or other persons as part of an organization need to coordinate their Action Plan duties with the flood fighting members of that organization and keep them informed of any important changes during a flood fight. Some organizations may find it helpful to have internal documentation or checklists that give more detailed explanations on performing their Action Plan duties. These documents should be updated as needed and easily accessible.

Incident Commanders will serve as the central hub for communications between those fighting a flood in their operating jurisdiction and the FREP Co-Coordination. Incident Commanders should have open communication with all organizations actively involved in fighting a flood in their jurisdiction and these organizations should periodically update their Incident Commander on flood fighting progress. The Incident Commanders should also be notified of items such as inaccessible roads, the opening of a flood safe shelter, and any flood related emergencies. Each organization listed on the Action Plans has predetermined tasks for which it is responsible. However, due to the unpredictable nature of flooding, the Incident Commander can redirect available resources and personnel to satisfy the ultimate goal of minimizing injury, loss of life, and property damage as those needs arise. It should be noted that the authority of the Incident Commander does not supersede those who command organizations involved in fighting a flood. They can, however,

provide valuable information to these organizations and make them aware of the greatest and most urgent needs. The responsibilities under the active Action Plan should continue until completion, flood stages recede below Action stage levels, or flood stages progress to a higher stage or regress to a lower stage and a new Action Plan is sent out.

## STEP 4 – DETERMINE FLOOD STAGE PROGRESSION

### 4.1 DETERMINE FLOOD STAGE PROGRESSION

Determining the progression of flood stages is the next step in implementing the FREP and will primarily be the responsibility of the EMA with help from those fighting a flood on the ground. After the EMA has completed their responsibilities in **Steps 1 & 2**, they will begin tracking the progression of rainfall and river stages by utilizing all the tools outlined in **Step 1** along with any witness accounts of localized flooding. They will utilize this information to determine whether actual rainfall values are varying from predicted rainfall, spatial rainfall patterns have varied, or more rainfall has been forecasted. Some floods can be multi-day affairs, so flood stages can have multiple peaks if more than one rainfall event occurs during a flood's progression or regression. Additionally, if rainfall events occur within quick succession, the predicted flood stage can increase to a more severe stage. Other factors that can influence flood stages are obstructions located in a stream or rivers floodway. Obstructions such as trees, limbs, corn stalks, etc. can get caught up on bridge abutments/piers or culverts and cause backwater conditions that exacerbate flood conditions upstream of the obstruction. If flood fighting members come across these obstructions, they should communicate them with the EMA, so this information can be used in the estimation of upstream flood severity and predicted inundated area. These obstructions should also be communicated with the Incident Commander in charge of the jurisdiction so that the removal of obstructions can be coordinated when it is safe to do so.

All significant changes in previously predicted variables such as estimated inundated area, flood severity, and time to peak will be communicated with the FREP Co-Coordiators where changes will be anticipated. The FREP Co-Coordiators will reevaluate their current Action Plan and decide if their Action Plan is currently sufficient, needs elevated to a higher level, downgraded to a lower level, or some changes to their current Action Plan are necessary. The FREP Co-Coordiators should then send out the new Action Plan to the respective Incident Commander and all FREP personnel in the jurisdiction with an accompanying message stating why the change was made i.e. *A new storm system is expected to advance the predicted flood stages from a Minor Stage to a Moderate Stage.* These changes should be communicated with FREP personnel outside of the jurisdiction that may be affected by the change as the FREP Co-Coordiators deem



necessary. The respective Floodplain Administrator will log this current Action Plan and communicate the new Action Plan to the other Floodplain Administrator(s).

## **STEP 5 – MONITOR FLOOD STAGES**

### **5.1 MONITOR FLOOD STAGES**

Monitoring of the flood stages will be the responsibility of the EMA and those fighting a flood on the ground. This step will begin after a flood has peaked and is beginning to recede. The goal of this step is to estimate when a flood is expected to recede to safe levels and when it is safe to reenter any evacuated areas. The EMA will utilize all tools in **Step 1** and witness accounts from the FREP personnel to aid in this determination. Once a determination is made, the EMA will communicate their findings with the FREP Co-Coordination. This will then get relayed to the FREP personnel in each region who can check that the flood waters are indeed receding and visually confirm it is safe to reenter evacuated areas. This confirmation should be relayed back to the EMA who can then send a broadcast through CodeRED to citizens that it is safe to reenter evacuated areas and/or resume normal activity. Local media can also aid in broadcasting these notifications. An EMA representative will continue to monitor data from the NOAA and the NWS until all FREP Co-Coordination confirm they are no longer experiencing flood stages and those reaches with USGS gages have receded below the Action stage.

## STEP 6 – TERMINATE AND FOLLOW-UP

### 6.1 TERMINATE

The flood fighting portion of the Action Plans will be officially terminated once the EMA has determined that all flood stages have reached safe levels and notified the FREP Co-Coordination. The FREP Co-Coordination will then send a notification to their respective flood fighting FREP personnel notifying them of the termination. In this notification, the FREP Co-Coordination will ask for feedback on how successful the individual believed the execution of the Action Plan was. These responses will be recorded and used for discussion purposes during the flood fight debrief in **Section 6.2**. Floodplain Administrators will conduct damage assessment once all termination notifications have been sent out. Afterwards, the Floodplain Administrators will begin compiling all the recorded actions during the flood fight including Action Plan changes, unforeseen events and emergencies, and feedback received. They will use this information to create an agenda of items to discuss during the flood fight debrief in **Section 6.2**.

### 6.2 FOLLOW-UP

Once the flood cleanup and damage assessment efforts have started to wind down, the Floodplain Administrators will send out their agenda and schedule a flood fight debrief between their fellow FREP Co-Coordination and FREP personnel. The purpose of the flood fight debriefs are to determine what actions worked well and what improvements need made during the next flood fight. Also, the FREP Co-Coordination will determine what permanent changes to their Action Plan are necessary at this time. Following the debriefs, the Floodplain Administrators will create a meeting summary with any approved changes along with any action items that were determined from the debrief. The Floodplain Administrators will then forward this summary to their FREP personnel. The Floodplain Administrators will also share this summary with each other, so they can learn what works well in the surrounding jurisdictions and assess if these types of actions or behaviors would work well for them, as well as some of the pitfalls to avoid.

For extensive flooding requiring coordination between multiple flood fighting jurisdictions, the EMA Co-Coordinator and Floodplain Administrator Co-Coordinator(s) of the affected jurisdictions will conduct their own flood fight debrief if they deem it necessary. This debrief will be different from the jurisdiction debriefs in that they will discuss the collaboration between jurisdictions and overall FREP effectiveness in addition to Action Plan changes, unforeseen events and emergencies, and



feedback received. The goal of this meeting is to determine what improvements can be made individually or collectively to facilitate the successful execution of each jurisdiction's Action Plan. These could be items such as changes to the FREP, methods to improve communication between entities, sandbag staging areas, additional flood fighting assets, warning systems, etc. A meeting summary will be created with the recommended improvements and any action items and sent to all FREP Personnel. Follow-up communication should be sent to the FREP personnel once the approved changes and improvements that were recommended have been determined along with a potential timeline for their completion. Finally, the FREP Co-Coordinators should complete the items in the **FREP Preparation** Section and update any items found to be deficient.

## APPENDICES

A	– IMPORTANT FORMS AND LINKS .....	24
B	– ACTION PLANS.....	26
B.1	Huntington County Action Plan .....	26
B.2	Andrews Action Plan .....	28
B.3	Huntington Action Plan .....	30
B.4	Markle Action Plan .....	32
B.5	Mount Etna Action Plan .....	34
B.6	Roanoke Action Plan .....	36
B.7	Warren Action Plan .....	38
C	– COMMUNICATION FLOW CHART .....	40
D	– FIGURES.....	41
D.1	Vicinity Township FEMA Flood Map.....	41
D.2	Warren Township FEMA Flood Map .....	42
D.3	Clear Creek Township FEMA Flood Map .....	43
D.4	Jackson Township FEMA Flood Map .....	44
D.5	Dallas Township FEMA Flood Map .....	45
D.6	Huntington Township FEMA Flood Map .....	46
D.7	Union Township FEMA Flood Map.....	47
D.8	Polk Township FEMA Flood Map .....	48
D.9	Lancaster Township FEMA Flood Map .....	49
D.10	Rock Creek Township FEMA Flood Map .....	50
D.11	Wayne Township FEMA Flood Map .....	51
D.12	Jefferson Township FEMA Flood Map .....	52
D.13	Salamonie Township FEMA Flood Map.....	53
D.14	Andrews FEMA Flood Map.....	54
D.15	Huntington FEMA Flood Map .....	55
D.16	Markle FEMA Flood Map .....	56
D.17	Mount Etna Flood Map .....	57
D.18	Roanoke FEMA Flood Map .....	58
D.19	Warren FEMA Flood Map.....	59

## A – IMPORTANT FORMS AND LINKS

**Table 1: Event Detection Guide**

Gaged Waterbodies	Salamonie River, Little River, Wabash River, Huntington Lake, Salamonie Lake	NOAA Flood Forecasting -	<a href="#">Salamonie River</a> <a href="#">Little River</a> <a href="#">Wabash River</a> <a href="#">Huntington Lake</a> <a href="#">Salamonie Lake</a>
		USGS Gages -	<a href="#">Salamonie River near Warren</a> <a href="#">Salamonie River at Dora</a> <a href="#">Little River near Huntington</a> <a href="#">Wabash River at Linn Grove</a> <a href="#">Wabash River at Bluffton</a> <a href="#">Wabash River at Huntington</a> <a href="#">Wabash River at Wabash</a>
Connected Reaches	Little River - Calf Creek, Cow Creek, McPherran Ditch	NOAA Flood Forecasting-	<a href="#">Little River</a> <a href="#">Wabash River</a>
	Wabash River - Loon Creek	USGS Gages-	<a href="#">Little River near Huntington</a> <a href="#">Wabash River at Huntington</a>
Ungaged Waterbodies		NWS Flash Flood Guidance <b>Table 2</b>	
		NWS Forecast Points-	<a href="#">Andrews</a> <a href="#">Huntington</a> <a href="#">Markle</a> <a href="#">Mount Etna</a> <a href="#">Roanoke</a> <a href="#">Warren</a>

**Table 2: NWS Average Rainfall That Produces Flash Flooding in Huntington County**

	1 Hr	3 Hr	6 Hr	12 Hr	24 Hr
Inches	2.2	2.7	2.8	2.9	3.3

\*This is an estimate only and will vary with terrain.



**Approximate Average Time Lag Between Peak Stages**

Graham-McCulloch Ditch – Little River above Huntington: 6 hours

Wabash River at Linn Grove – Wabash River at Huntington: 18 hours

Wabash River at Bluffton – Wabash River at Huntington: 12 Hours

Salamonie River at Portland – Salamonie River at Warren: 18 Hours

[Precipitation Frequency Data Server](#) – NOAA

[National Flood Hazard Layer](#) - FEMA

[Flood Inundation Mapper](#) - USGS

[Publishing USGS Flood Inundation Map](#)

[Activating and Deactivating the EOC](#) - FEMA

## B – ACTION PLANS

## B.1 HUNTINGTON COUNTY ACTION PLAN

EVENT	ACTION	REFERENCE SECTION/ APPENDIX	I.C. INCIDENT COMMANDER	FREP CO-COORDINATORS			COUNTY DEPARTMENTS						C.E.O. COUNTY COMMISSIONERS	EXTERNAL PARTNERS				OTHER
				EMA DIRECTOR	FIRE CHIEF	DCD - FLOODPLAIN ADMINISTRATOR	COUNTY HEALTH	COUNTY HIGHWAY	911 DISPATCH	EMA	FIRE DEPT	LAW ENFORCEMENT		EMS / HOSPITAL	RED CROSS	PUBLIC UTILITIES	HCCSC BUSES	
ACTION FLOOD STAGE	Activate FREP			X	X	X												
	A. Monitor Data & Conditions	1.1 - 1.3		X	X	X								X				
	Monitor USGS/NWS Data	1.1 - 1.3		X	X	X								X				
	B. Determine Areas Affected	2.1		X	X	X												
	Run Flood Safe Routes	Appendix D		X	X	X												
MINOR FLOOD STAGE	Make Notifications	2.2		X														
	C. Warning & Evacuation	2.2 & 3.1		X														
	D. Record Observations & Actions			X	X	X												
	Evaluate the Situation	4.1 & 5.1		X	X	X												
	A. Monitor Data & Conditions	1.1 - 1.3		X	X	X								X				
MODERATE FLOOD STAGE	Monitor USGS/NWS Data	1.1 - 1.3		X	X	X								X				
	B. Determine Areas Affected	2.1		X	X	X		X						X				
	Open EOC	Appendix A		X														
	Run Flood Safe Routes	Appendix D		X	X	X				X								
	Make Notifications	2.2		X														
MODERATE FLOOD STAGE	Staff Sand Bag Pick-up		X	X						X								
	C. Warning & Evacuation	2.2 & 3.1		X														
	Identify Impassible Roads	3.1	X					X	X	X	X	X						
	Identify Affected Public	3.1	X	X	X	X									X		X	
	Prepare Shelters		X															
MODERATE FLOOD STAGE	Gathering Place Coordination		X		X					X								
	Notification to Affected Public	2.2	X	X						X								
	Record Observations & Actions		X	X	X	X			X									
	Initiate Post-Flood Data Collection		X	X	X	X				X								
	Evaluate the Situation	4.1 & 5.1	X	X	X	X												

EVENT	ACTION	REFERENCE SECTION/ APPENDIX	FREP CO-COORDINATORS			COUNTY DEPARTMENTS						C.E.O.	EXTERNAL PARTNERS					OTHER	
			INCIDENT COMMANDER	EMA DIRECTOR	FIRE CHIEF	DCD - FLOODPLAIN ADMINISTRATOR	COUNTY HEALTH	COUNTY HIGHWAY	911 DISPATCH	EMA	FIRE DEPT		LAW ENFORCEMENT	COUNTY COMMISSIONERS	IDHS	EMS / HOSPITAL	RED CROSS		PUBLIC UTILITIES
MAJOR FLOOD STAGE	A. Monitor Data & Conditions	1.1 - 1.3	X	X	X	X									X				MEDIA
	Monitor USGS/NWS Data	1.1 - 1.3	X	X	X	X									X				
	B. Determine Areas Affected	2.1	X	X	X	X		X							X				
	Run Flood Safe Routes	Appendix D	X	X	X	X				X									
	Make Notifications	2.2	X	X															X
	C. Warning & Evacuation	2.2 & 3.1	X	X															X
	Identify Impassible Roads	3.1	X					X	X	X	X								
	Identify Affected Public	3.1	X	X	X	X			X	X	X								
	Open Shelters		X							X	X	X			X	X			
	Gathering Place Coordination		X		X					X		X							
	Notification to Affected Public	2.2	X	X						X	X	X			X				X
	Evacuate Endangered Public		X	X	X							X							
	Record Observations & Actions	6.1	X	X	X	X													
	Post-Flood Data Collection	6.1	X	X	X	X													
Evaluate the Situation	4.1 & 5.1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
TERMINATE & FOLLOW-UP	A. Terminate Response/Begin Recovery	6.1	X	X	X	X													
	B. Run Flood Safe Routes	Appendix D	X	X	X	X													
	C. Make Notifications	2.2	X	X															X
	Conduct Damage Assessment		X	X		X									X				X
	Document Depth & Areas Flooded		X	X		X									X				
	Evaluate Damaged Structures		X	X		X									X				
	Inspect Bridges for Visible Damage		X	X		X									X				
	Collect & Dispose of Debris		X																
	Re-enter Evacuated Areas		X	X	X	X			X	X					X				X
	Close Shelters		X																
	Record Observations & Actions	6.1	X	X	X	X									X	X			X
	Close EOC	Appendix A	X																
	Conduct Flood Fight Debrief	6.2	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
	Restock Sand Bag Supply		X																
Restock & Repair Signs & Barricades							X												



B.2 ANDREWS ACTION PLAN

CTION PLAN

EVENT	ACTION	REFERENCE EXHIBIT/ APPENDIX	I.C.	FREP CO-COORDINATORS			COUNTY/TOWN DEPARTMENTS						C.E.O.	EXTERNAL PARTNERS				OTHER																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
				INCIDENT COMMANDER	EMA DIRECTOR	FIRE CHIEF	DCD - FLOODPLAIN ADMINISTRATOR	TOWN STREET / UTILITIES DEPT	COUNTY HEALTH	911 DISPATCH	EMA	FIRE DEPT		LAW ENFORCEMENT	TOWN COUNCIL	IDHS	EMS / HOSPITAL		RED CROSS	PUBLIC UTILITIES	HCCSC BUSES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
ACTION FLOOD STAGE	Activate FREP				X	X	X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

EVENT	ACTION	REFERENCE EXHIBIT/ APPENDIX	FREP CO-COORDINATORS			COUNTY/TOWN DEPARTMENTS						C.E.O.	EXTERNAL PARTNERS				OTHER			
			INCIDENT COMMANDER	EMA DIRECTOR	FIRE CHIEF	DCD - FLOODPLAIN ADMINISTRATOR	TOWN STREET / UTILITIES DEPT	COUNTY HEALTH	911 DISPATCH	EMA	FIRE DEPT	LAW ENFORCEMENT	TOWN COUNCIL	IDHS	EMS / HOSPITAL	RED CROSS		PUBLIC UTILITIES	HCCSC BUSES	
MAJOR FLOOD STAGE	A. Monitor Data & Conditions	1.1 - 1.3	X	X	X	X								X						MEDIA
	Monitor USGS/NWS Data	1.1 - 1.3	X	X	X	X								X						
	B. Determine Areas Affected	2.1	X	X	X	X	X													
	Run Flood Safe Routes	Appendix D	X	X	X	X														
	Make Notifications	2.2	X	X	X	X				X										X
	C. Warning & Evacuation	2.2 & 3.1	X	X																X
	Identify Impassible Roads	3.1	X				X		X	X	X									X
	Identify Affected Public	3.1	X	X	X	X			X	X	X	X								
	Open Shelters		X						X	X	X									
	Gathering Place Coordination		X		X				X	X	X									
	Notification to Affected Public	2.2	X	X	X					X		X				X				
	Evacuate Endangered Public		X	X	X							X								
	D. Record Observations & Actions	6.1	X	X	X	X			X		X	X	X		X		X		X	
TERMINATE & FOLLOW-UP	Post-Flood Data Collection	6.1	X	X	X	X			X		X	X	X		X					
	Evaluate the Situation	4.1 & 5.1	X	X	X	X	X	X	X	X	X	X	X							
	A. Terminate Response/Begin Recovery	6.1	X	X	X	X														
	B. Run Flood Safe Routes	Appendix D	X	X	X	X							X							
	C. Make Notifications	2.2	X	X		X														X
	D. Conduct Damage Assessment		X	X		X				X				X						X
	Document Depth & Areas Flooded		X	X		X														
	Evaluate Damaged Structures		X	X		X														
	Inspect Bridges for Visible Damage		X				X													
	E. Collect & Dispose of Debris		X	X			X													
	F. Re-enter Evacuated Areas		X	X	X	X	X	X	X											
	Close Shelters		X																	
	G. Record Observations & Actions	6.1	X	X	X	X														
H. Close EOC	Appendix A	X																		
I. Conduct Flood Fight Debrief	6.2	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
J. Restock Sand Bag Supply			X																	
Restock & Repair Signs & Barricades						X														





EVENT	REFERENCE EXHIBIT/ APPENDIX	ACTION	FREP CO-COORDINATORS		CITY/COUNTY DEPARTMENTS										ELECTED OFFICIALS		EXTERNAL PARTNERS					OTHERS	
			INCIDENT COMMANDER	EMA DIRECTOR	FIRE CHIEF	CDR - FLOODPLAIN ADMINISTRATOR	CITY SERVICES: STREET DEPT.	CITY UTILITIES	COUNTY HEALTH DEPARTMENT	COUNTY HIGHWAY	911 DISPATCH	EMA	ENGINEERING & PUBLIC WORKS	FIRE DEPT.	POLICE DEPT.	MAYOR	COUNTY COMMISSIONERS	IDHS	EMS / HOSPITAL	RED CROSS	PUBLIC UTILITIES		HCCSC BUSES
MAJOR FLOOD STAGE	A.	Monitor Data & Conditions	X	X	X	X											X						
		Monitor USGS/NWS Data	X	X	X	X												X					
	B.	Determine Areas Affected	X	X	X	X	X											X					
		Run Flood Safe Routes	X	X	X	X																	
		Make Notifications	X	X	X	X																	
	C.	Warning & Evacuation	X	X	X	X																	
		Identify Impassible Roads	X	X	X	X	X																
		Identify Affected Public	X	X	X	X																	
		Open Shelters	X	X	X	X																	
		Gathering Place Coordination	X	X	X	X																	
		Notification to Affected Public	X	X	X	X																	
TERMINATE & FOLLOW-UP		Evacuate Endangered Public	X	X	X	X																	
	D.	Record Observations & Actions	X	X	X	X	X																
		Post-Flood Data Collection	X	X	X	X																	
		Evaluate the Situation	X	X	X	X	X																
		4.1 & 5.1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	A.	Terminate Response/Begin Recovery	X	X	X	X																	
	B.	Run Flood Safe Routes	X	X	X	X																	
	C.	Make Notifications	X	X	X	X																	
		Conduct Damage Assessment	X	X	X	X																	
		Document Depth & Areas Flooded	X	X	X	X																	
	TERMINATE & FOLLOW-UP		Evaluate Damaged Structures	X	X	X	X																
		Inspect Bridges for Visible Damage	X	X	X	X																	
E.		Collect & Dispose of Debris	X	X	X	X	X																
		Re-enter Evacuated Areas	X	X	X	X																	
		Close Shelters	X	X	X	X																	
		Record Observations & Actions	X	X	X	X																	
		Close EOC	X	X	X	X																	
H.		Conduct Flood Fight Debrief	X	X	X	X																	
		Restock Sand Bag Supply	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
		Restock & Repair Signs & Barricades					X	X															

## B.4 MARKLE ACTION PLAN

ATION PLAN

EVENT	ACTION	REFERENCE EXHIBIT/ APPENDIX	FREP CO-COORDINATORS				COUNTY/TOWN DEPARTMENTS						C.E.O.	EXTERNAL PARTNERS				OTHER			
			INCIDENT COMMANDER	EMA DIRECTOR	FIRE CHIEF	DCD - FLOODPLAIN ADMINISTRATOR	TOWN STREET / UTILITIES DEPT.	COUNTY HEALTH	911 DISPATCH	EMA	FIRE DEPT	LAW ENFORCEMENT		TOWN COUNCIL	IDHS	EMS / HOSPITAL	RED CROSS		PUBLIC UTILITIES	HCCSC BUSES	
ACTION FLOOD STAGE	Activate FREP																				
	A. Monitor Data & Conditions	1.1 - 1.3		X	X	X									X						
	Monitor USGS/NWS Data	1.1 - 1.3		X	X	X									X						
	B. Determine Areas Affected	2.1		X	X	X															
	Run Flood Safe Routes	Appendix D		X	X	X															
	Make Notifications	2.2		X																	
	C. Warning & Evacuation	2.2 & 3.1		X																	
	D. Record Observations & Actions			X	X	X															
	Evaluate the Situation	4.1 & 5.1		X	X	X															
	A. Monitor Data & Conditions	1.1 - 1.3		X	X	X									X						
	Monitor USGS/NWS Data	1.1 - 1.3		X	X	X									X						
	B. Determine Areas Affected	2.1		X	X	X			X			X			X						
MINOR FLOOD STAGE	Run Flood Safe Routes	Appendix D		X	X	X					X										
	Make Notifications	2.2		X																	
	Arrange Self-Serve Sand Bag Pick-up			X							X										
	C. Warning & Evacuation	2.2 & 3.1		X																	
	Identify Impassible Roads	3.1						X		X	X										
	Identify Affected Public	3.1		X	X	X				X					X						
	D. Record Observations & Actions			X	X	X															
	Evaluate the Situation	4.1 & 5.1		X	X	X															
	A. Monitor Data & Conditions	1.1 - 1.3		X	X	X									X						
	Monitor USGS/NWS Data	1.1 - 1.3		X	X	X									X						
	B. Determine Areas Affected	2.1		X	X	X			X			X			X						
	Open EOC	Appendix A		X											X						
MODERATE FLOOD STAGE	Run Flood Safe Routes	Appendix D		X	X	X			X												
	Make Notifications	2.2		X																	
	Staff Sand Bag Pick-up		X	X					X												
	C. Warning & Evacuation	2.2 & 3.1	X	X																	
	Identify Impassible Roads	3.1	X					X		X	X	X									
	Identify Affected Public	3.1	X	X	X	X			X	X	X	X			X				X		
	Prepare Shelters		X																X		
	Gathering Place Coordination		X		X						X				X				X		
	Notification to Affected Public	2.2	X	X							X										
	D. Record Observations & Actions		X	X	X	X				X											
	Initiate Post-Flood Data Collection		X	X	X	X									X						
	Evaluate the Situation	4.1 & 5.1	X	X	X	X															

EVENT	ACTION	REFERENCE EXHIBIT/ APPENDIX	FREP CO-COORDINATORS				COUNTY/TOWN DEPARTMENTS						C.E.O.	EXTERNAL PARTNERS				OTHER		
			INCIDENT COMMANDER	EMA DIRECTOR	FIRE CHIEF	DCD - FLOODPLAIN ADMINISTRATOR	TOWN STREET / UTILITIES DEPT	COUNTY HEALTH	911 DISPATCH	EMA	FIRE DEPT	LAW ENFORCEMENT	TOWN COUNCIL	IDHS	EMS / HOSPITAL	RED CROSS	PUBLIC UTILITIES		HCCSC BUSES	
MAJOR FLOOD STAGE	A. Monitor Data & Conditions	1.1 - 1.3	X	X	X	X														MEDIA
	Monitor USGS/NWS Data	1.1 - 1.3	X	X	X	X														
	B. Determine Areas Affected	2.1	X	X	X	X	X													
	Run Flood Safe Routes	Appendix D	X	X	X	X														
	Make Notifications	2.2	X	X	X	X														
	C. Warning & Evacuation	2.2 & 3.1	X	X																
	Identify Impassible Roads	3.1	X				X													
	Identify Affected Public	3.1	X	X	X	X														
	Open Shelters		X																	
	Gathering Place Coordination		X		X															
	Notification to Affected Public	2.2	X	X	X															
	Evacuate Endangered Public		X	X	X															
TERMINATE & FOLLOW-UP	D. Record Observations & Actions	6.1	X	X	X	X														
	Post-Flood Data Collection	6.1	X	X	X	X														
	Evaluate the Situation	4.1 & 5.1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
	A. Terminate Response/Begin Recovery	6.1	X	X	X	X														
	B. Run Flood Safe Routes	Appendix D	X	X	X	X														
	C. Make Notifications	2.2	X	X																
	D. Conduct Damage Assessment		X	X		X														
	Document Depth & Areas Flooded		X	X		X														
	Evaluate Damaged Structures		X	X		X														
	Inspect Bridges for Visible Damage		X				X													
	E. Collect & Dispose of Debris		X	X			X													
	F. Re-enter Evacuated Areas		X	X	X	X	X	X	X											
Close Shelters		X																		
G. Record Observations & Actions	6.1	X	X	X	X															
H. Close EOC	Appendix A	X																		
I. Conduct Flood Fight Debrief	6.2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
J. Restock Sand Bag Supply		X																		
Restock & Repair Signs & Barricades						X														



B.5 MOUNT ETNA ACTION PLAN

ACTION PLAN

EVENT

REFERENCE EXHIBIT/ APPENDIX

ACTION

EVENT	REFERENCE EXHIBIT/ APPENDIX	ACTION	FREP CO-COORDINATORS			COUNTY/TOWN DEPARTMENTS						C.E.O.	EXTERNAL PARTNERS				OTHER			
			INCIDENT COMMANDER	EMA DIRECTOR	FIRE CHIEF	DCD - FLOODPLAIN ADMINISTRATOR	COUNTY HEALTH	COUNTY HIGHWAY	911 DISPATCH	EMA	FIRE DEPT		LAW ENFORCEMENT	TOWN COUNCIL	IDHS	EMS / HOSPITAL		RED CROSS	PUBLIC UTILITIES	HCCSC BUSES
ACTION FLOOD STAGE		Activate FREP		X	X	X														
		A. Monitor Data & Conditions		X	X	X								X						
		Monitor USGS/NWS Data		X	X	X								X						
		B. Determine Areas Affected		X	X	X														
		Appendix D		X	X	X														
		Run Flood Safe Routes		X																
		Make Notifications		X																
		C. Warning & Evacuation		X																
		D. Record Observations & Actions		X	X	X														
		Evaluate the Situation		X	X	X														
		4.1 & 5.1		X	X	X														
		A. Monitor Data & Conditions		X	X	X								X						
		Monitor USGS/NWS Data		X	X	X								X						
		B. Determine Areas Affected		X	X	X		X						X						
MINOR FLOOD STAGE		Appendix D		X	X	X														
		Run Flood Safe Routes		X						X										
		Make Notifications		X																
		2.2		X						X										
		Arrange Self-Serve Sand Bag Pick-up		X				X												
		C. Warning & Evacuation		X																
		Identify Impassible Roads		X				X	X	X	X									
		Identify Affected Public		X	X	X														
		D. Record Observations & Actions		X	X	X								X						
		Evaluate the Situation		X	X	X														
		4.1 & 5.1		X	X	X														
		A. Monitor Data & Conditions		X	X	X								X						
		Monitor USGS/NWS Data		X	X	X								X						
		B. Determine Areas Affected		X	X	X								X						
MODERATE FLOOD STAGE		Open EOC		X							X									
		Appendix A		X																
		Appendix D		X	X	X					X									
		Run Flood Safe Routes		X																
		Make Notifications		X																
		2.2		X																
		Staff Sand Bag Pick-up		X	X						X									
		C. Warning & Evacuation		X																
		Identify Impassible Roads		X						X	X	X								
		Identify Affected Public		X	X	X				X	X	X								
		3.1		X	X	X				X	X	X								
		Prepare Shelters		X																
		Gathering Place Coordination		X							X									
		Notification to Affected Public		X																
		D. Record Observations & Actions		X	X	X														
		Initiate Post-Flood Data Collection		X	X	X														
		Evaluate the Situation		X	X	X														
		4.1 & 5.1		X	X	X														

EVENT	ACTION	REFERENCE EXHIBIT/ APPENDIX	FREP CO-COORDINATORS			COUNTY/TOWN DEPARTMENTS						C.E.O.	EXTERNAL PARTNERS				OTHER		
			INCIDENT COMMANDER	EMA DIRECTOR	FIRE CHIEF	DCD - FLOODPLAIN ADMINISTRATOR	COUNTY HEALTH	COUNTY HIGHWAY	911 DISPATCH	EMA	FIRE DEPT		LAW ENFORCEMENT	TOWN COUNCIL	IDHS	EMS / HOSPITAL		RED CROSS	PUBLIC UTILITIES
MAJOR FLOOD STAGE	A. Monitor Data & Conditions	1.1 - 1.3	X	X	X	X									X				MEDIA
	Monitor USGS/NWS Data	1.1 - 1.3	X	X	X	X									X				
	B. Determine Areas Affected	2.1	X	X	X	X		X							X				
	Run Flood Safe Routes	Appendix D	X	X	X	X				X									
	Make Notifications	2.2	X	X	X	X													X
	C. Warning & Evacuation	2.2 & 3.1	X	X															X
	Identify Impassible Roads	3.1	X					X	X	X	X								X
	Identify Affected Public	3.1	X	X	X	X			X	X	X								
	Open Shelters		X											X	X				
	Gathering Place Coordination		X		X					X		X							
	Notification to Affected Public	2.2	X	X	X					X	X	X							X
	Evacuate Endangered Public		X	X	X	X								X	X				
TERMINATE & FOLLOW-UP	D. Record Observations & Actions	6.1	X	X	X	X													
	Post-Flood Data Collection	6.1	X	X	X	X								X					
	Evaluate the Situation	4.1 & 5.1	X	X	X	X		X		X	X	X			X	X			
	A. Terminate Response/Begin Recovery	6.1	X	X	X	X													
	B. Run Flood Safe Routes		X	X	X	X								X					
	C. Make Notifications	Appendix D	X	X	X	X													
	D. Conduct Damage Assessment	2.2	X	X	X	X								X					X
	Document Depth & Areas Flooded		X	X	X	X				X				X					X
	Evaluate Damaged Structures		X	X	X	X				X									
	Inspect Bridges for Visible Damage		X	X	X	X													
	E. Collect & Dispose of Debris		X	X															
	F. Re-enter Evacuated Areas		X	X	X	X		X	X	X				X					
Close Shelters		X	X	X	X								X					X	
G. Record Observations & Actions	6.1	X	X	X	X													X	
H. Close EOC		X	X	X	X														
I. Conduct Flood Fight Debrief	Appendix A	X									X								
J. Restock Sand Bag Supply	6.2	X	X	X	X		X	X	X	X	X	X	X	X	X				
Restock & Repair Signs & Barricades			X							X									

## B.6 ROANOKE ACTION PLAN

CTION PLAN

EVENT	ACTION	REFERENCE EXHIBIT/ APPENDIX	FREP CO-COORDINATORS			COUNTY/TOWN DEPARTMENTS							C.E.O.	EXTERNAL PARTNERS				OTHER	
			INCIDENT COMMANDER	EMA DIRECTOR	FIRE CHIEF	DCD - FLOODPLAIN ADMINISTRATOR	TOWN UTILITIES	COUNTY HEALTH	911 DISPATCH	EMA	FIRE DEPT	TOWN POLICE CHIEF / OFFICERS		TOWN COUNCIL	IDHS	EMS / HOSPITAL	RED CROSS		PUBLIC UTILITIES
ACTION FLOOD STAGE	Activate FREP			X	X	X	X												
	A. Monitor Data & Conditions	1.1 - 1.3		X	X	X	X						X	X					
	Monitor USGS/NWS Data	1.1 - 1.3		X	X	X	X						X	X					
	B. Determine Areas Affected	2.1		X	X	X	X												
	Run Flood Safe Routes	Appendix D		X	X	X	X						X						
	Make Notifications	2.2		X	X	X													
	C. Warning & Evacuation	2.2 & 3.1		X	X	X	X												
	D. Record Observations & Actions			X	X	X	X												
MINOR FLOOD STAGE	Evaluate the Situation	4.1 & 5.1		X	X	X	X												
	A. Monitor Data & Conditions	1.1 - 1.3		X	X	X	X						X	X					
	Monitor USGS/NWS Data	1.1 - 1.3		X	X	X	X						X	X					
	B. Determine Areas Affected	2.1		X	X	X	X						X	X					
	Run Flood Safe Routes	Appendix D		X	X	X	X						X						
	Make Notifications	2.2		X	X	X													
	Arrange Self-Serve Sand Bag Pick-up	2.2 & 3.1		X	X			X*											
	C. Warning & Evacuation	3.1		X	X			X	X	X	X								
MODERATE FLOOD STAGE	Identify Impassible Roads	3.1		X	X	X	X			X	X								
	Identify Affected Public	3.1		X	X	X	X			X			X						
	D. Record Observations & Actions			X	X	X	X												
	Evaluate the Situation	4.1 & 5.1		X	X	X	X												
	A. Monitor Data & Conditions	1.1 - 1.3		X	X	X	X						X	X					
	Monitor USGS/NWS Data	1.1 - 1.3		X	X	X	X						X	X					
	B. Determine Areas Affected	2.1		X	X	X	X						X	X					
	Open EOC	Appendix A		X	X	X								X					
MODERATE FLOOD STAGE	Run Flood Safe Routes	Appendix D		X	X	X				X			X						
	Make Notifications	2.2		X	X	X													
	Staff Sand Bag Pick-up		X	X	X			X*											
	C. Warning & Evacuation	2.2 & 3.1	X	X	X								X						X
	Identify Impassible Roads	3.1	X	X	X		X			X	X	X							
	Identify Affected Public	3.1	X	X	X	X				X	X	X							
	Prepare Shelters		X	X	X										X		X		
	Gathering Place Coordination		X	X	X									X		X			
MODERATE FLOOD STAGE	Notification to Affected Public	2.2	X	X	X														X
	D. Record Observations & Actions		X	X	X	X	X						X						
	Initiate Post-Flood Data Collection		X	X	X	X	X												
	Evaluate the Situation	4.1 & 5.1	X	X	X	X	X												



EVENT	ACTION	REFERENCE EXHIBIT/ APPENDIX	FREP			COUNTY/TOWN DEPARTMENTS						C.E.O.		EXTERNAL PARTNERS				OTHER
			I.C.	CO-COORDINATORS	ADMINISTRATOR	TOWN UTILITIES	COUNTY HEALTH	911 DISPATCH	EMA	FIRE DEPT	TOWN POLICE CHIEF / OFFICERS	TOWN COUNCIL	IDHS	EMS / HOSPITAL	RED CROSS	PUBLIC UTILITIES	HCCSC BUSES	
MAJOR FLOOD STAGE	A. Monitor Data & Conditions	1.1 - 1.3	X	X	X	X					X		X					
	B. Monitor USGS/NWS Data	1.1 - 1.3	X	X	X	X					X		X					
	C. Determine Areas Affected	2.1	X	X	X	X					X		X					
	D. Run Flood Safe Routes	Appendix D	X	X	X	X			X		X							
	E. Make Notifications	2.2	X	X	X													X
	F. Warning & Evacuation	2.2 & 3.1	X	X	X						X							X
	G. Identify Impassible Roads	3.1	X			X			X	X	X							
	H. Identify Affected Public	3.1	X	X	X				X	X	X							
	I. Open Shelters		X						X		X		X		X		X	
	J. Gathering Place Coordination		X						X		X		X		X			
	K. Notification to Affected Public	2.2	X	X					X		X		X					
	L. Evacuate Endangered Public		X	X					X	X	X		X	X		X	X	
	M. Record Observations & Actions	6.1	X	X	X	X	X		X				X					
TERMINATE & FOLLOW-UP	N. Post-Flood Data Collection	6.1	X	X	X	X			X				X					
	O. Evaluate the Situation	4.1 & 5.1	X	X	X	X	X		X	X	X	X	X		X			
	P. A. Terminate Response/Begin Recovery	6.1	X	X	X	X			X									
	Q. B. Run Flood Safe Routes	Appendix D	X	X	X				X		X							
	R. C. Make Notifications	2.2	X	X	X							X						
	S. D. Conduct Damage Assessment		X	X	X	X			X		X		X					X
	T. Document Depth & Areas Flooded		X	X	X	X			X				X					X
	U. Evaluate Damaged Structures		X	X	X	X	X		X		X		X					
	V. Inspect Bridges for Visible Damage		X			X												
	W. E. Collect & Dispose of Debris		X	X		X			X				X					
	X. F. Re-enter Evacuated Areas		X	X	X	X	X		X				X			X		
	Y. Close Shelters		X			X			X				X					X
	Z. G. Record Observations & Actions	6.1	X	X	X	X			X				X					X
	AA. H. Close EOC	Appendix A	X	X	X	X			X				X					
	AB. I. Conduct Flood Fight Debrief	6.2	X	X	X	X	X	X	X	X	X	X	X	X	X			
	AC. J. Restock Sand Bag Supply		X	X		X	X	X	X				X					
	AD. Restock & Repair Signs & Barricades					X												

\*If possible and/or if time allows

\*\*Town structures/property only

## B.7 WARREN ACTION PLAN

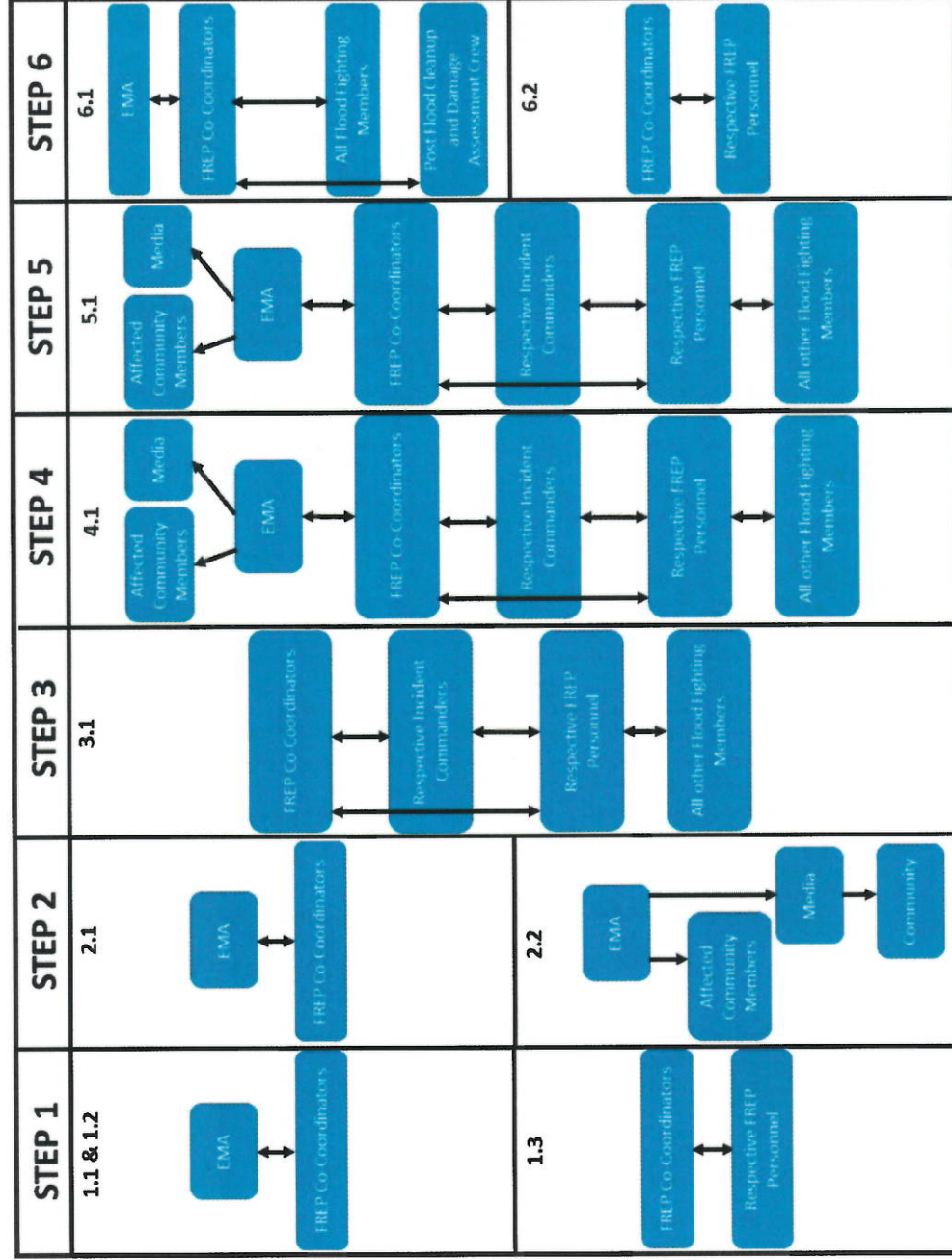
ATION PLAN

EVENT	REFERENCE EXHIBIT/ APPENDIX	ACTION	INCIDENT COMMANDER	FREP CO-COORDINATORS			COUNTY/TOWN DEPARTMENTS						C.E.O.	EXTERNAL PARTNERS				OTHER																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
				EMA DIRECTOR	FIRE CHIEF	DCD - FLOODPLAIN ADMINISTRATOR	TOWN STREET / UTILITIES DEPT.	COUNTY HEALTH	911 DISPATCH	EMA	FIRE DEPT	LAW ENFORCEMENT		TOWN COUNCIL	IDHS	EMS / HOSPITAL	RED CROSS		PUBLIC UTILITIES	HCCSC BUSES																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
ACTION FLOOD STAGE		Activate FREP		X	X	X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

EVENT	ACTION	REFERENCE EXHIBIT/ APPENDIX	FREP CO-COORDINATORS			COUNTY/TOWN DEPARTMENTS						C.E.O.	EXTERNAL PARTNERS				OTHER			
			INCIDENT COMMANDER	EMA DIRECTOR	FIRE CHIEF	DCD - FLOODPLAIN ADMINISTRATOR	TOWN STREET / UTILITIES DEPT	COUNTY HEALTH	911 DISPATCH	EMA	FIRE DEPT	LAW ENFORCEMENT	TOWN COUNCIL	IDHS	EMS / HOSPITAL	RED CROSS		PUBLIC UTILITIES	HCCSC BUSES	
MAJOR FLOOD STAGE	A. Monitor Data & Conditions	1.1 - 1.3	X	X	X	X								X						MEDIA
	B. Monitor USGS/NWS Data	1.1 - 1.3	X	X	X	X								X						
	C. Determine Areas Affected	2.1	X	X	X	X	X							X						
	D. Run Flood Safe Routes	Appendix D	X	X	X	X							X							
	E. Make Notifications	2.2	X	X																X
	F. Warning & Evacuation	2.2 & 3.1	X	X																X
	G. Identify Impassible Roads	3.1	X				X			X	X	X								
	H. Identify Affected Public	3.1	X	X	X	X			X	X	X	X								
	I. Open Shelters		X											X		X				
	J. Gathering Place Coordination		X		X				X	X		X			X		X			
	K. Notification to Affected Public	2.2	X	X	X					X	X	X								X
	L. Evacuate Endangered Public		X	X	X					X	X	X		X	X					
	M. Record Observations & Actions	6.1	X	X	X	X					X									
	N. Post-Flood Data Collection	6.1	X	X	X	X							X			X				
TERMINATE & FOLLOW-UP	O. Evaluate the Situation	4.1 & 5.1	X	X	X	X	X	X	X	X	X	X	X	X	X					
	A. Terminate Response/Begin Recovery	6.1	X	X	X	X														
	B. Run Flood Safe Routes	Appendix D	X	X	X	X							X							
	C. Make Notifications	2.2	X	X																X
	D. Conduct Damage Assessment		X	X		X			X				X	X						X
	E. Document Depth & Areas Flooded		X	X		X			X				X							X
	F. Evaluate Damaged Structures		X	X		X			X					X						
	G. Inspect Bridges for Visible Damage		X				X													
	H. Collect & Dispose of Debris		X																	
	I. Re-enter Evacuated Areas		X	X	X	X	X	X	X	X				X						
	J. Close Shelters		X	X										X						X
	K. Record Observations & Actions	6.1	X	X	X	X				X				X	X					X
	L. Close EOC	Appendix A	X																	
	M. Conduct Flood Fight Debrief	6.2	X	X	X	X	X	X	X	X	X	X	X	X	X					
N. Restock Sand Bag Supply		X	X																	
O. Restock & Repair Signs & Barricades						X														

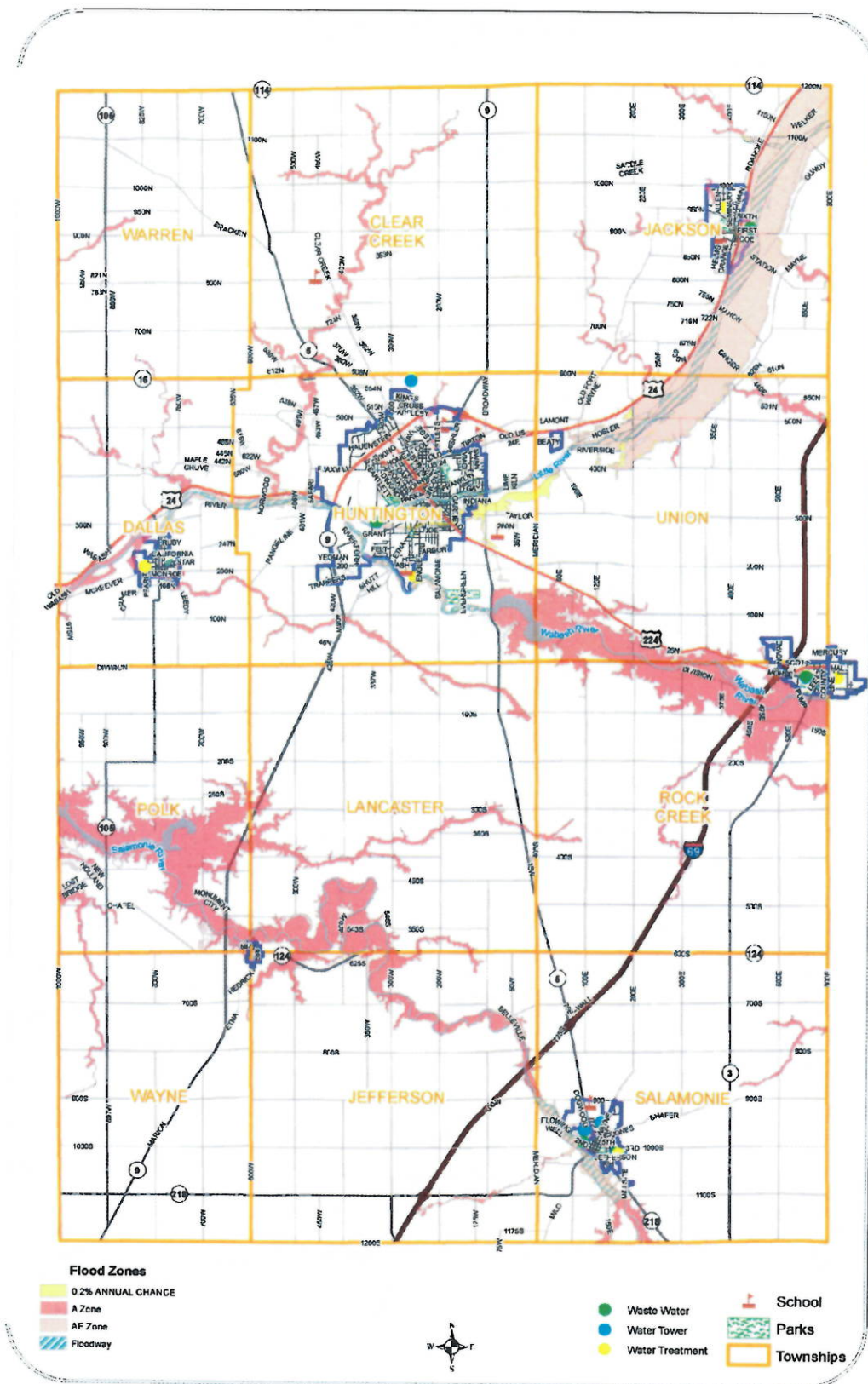


### C – COMMUNICATION FLOW CHART

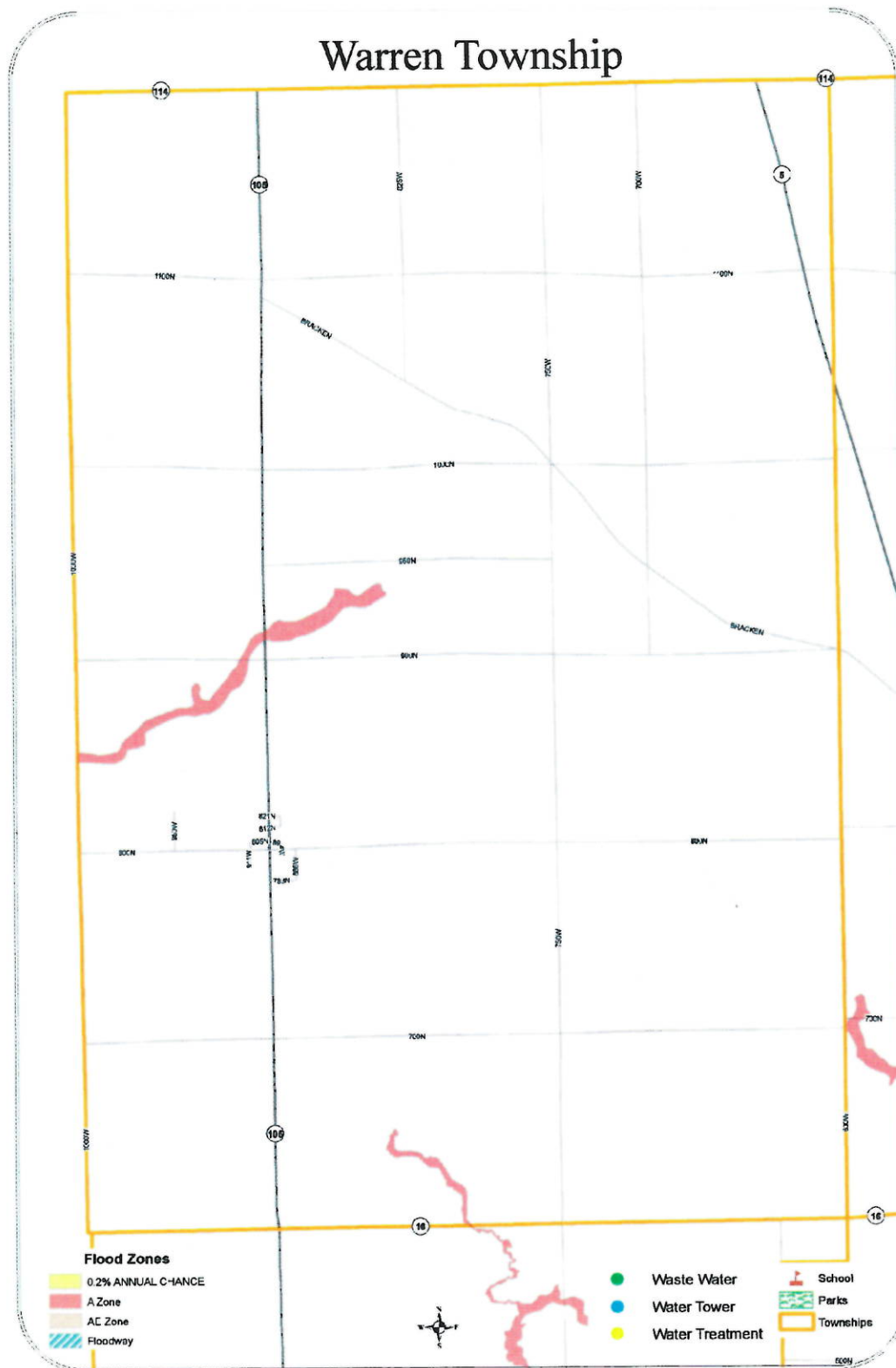


## D – FIGURES

## D.1 VICINITY TOWNSHIP FEMA FLOOD MAP

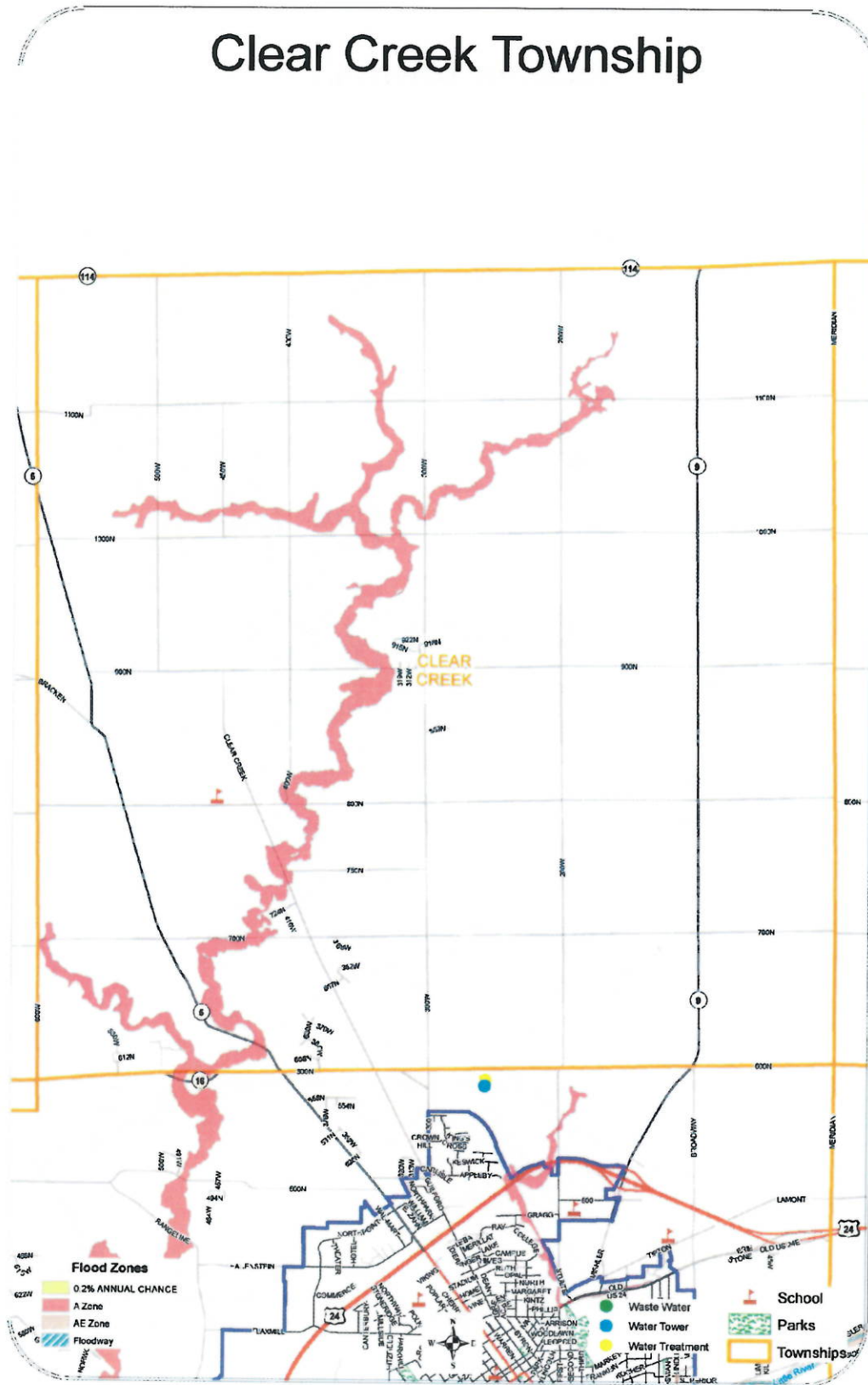


## D.2 WARREN TOWNSHIP FEMA FLOOD MAP

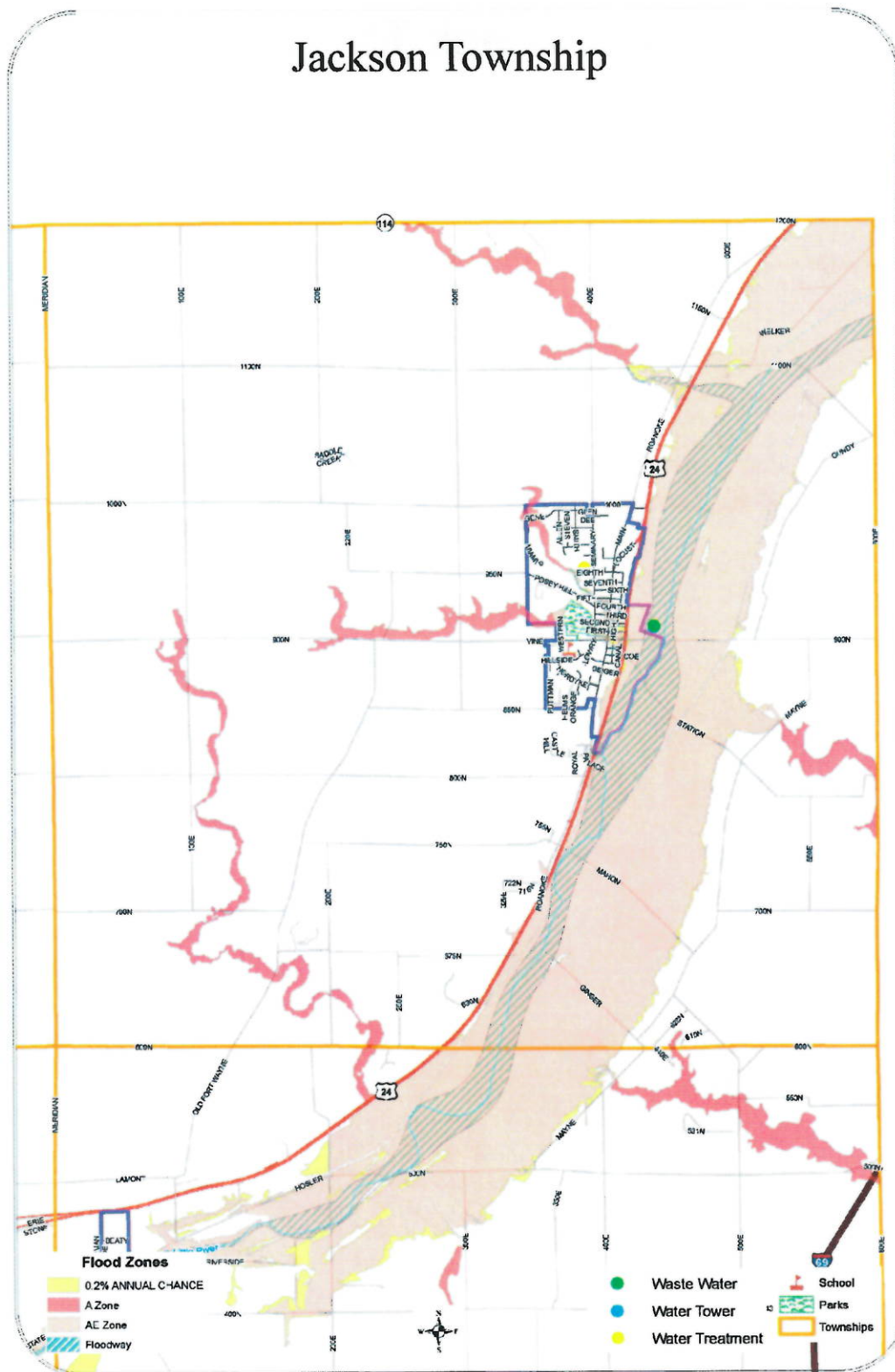




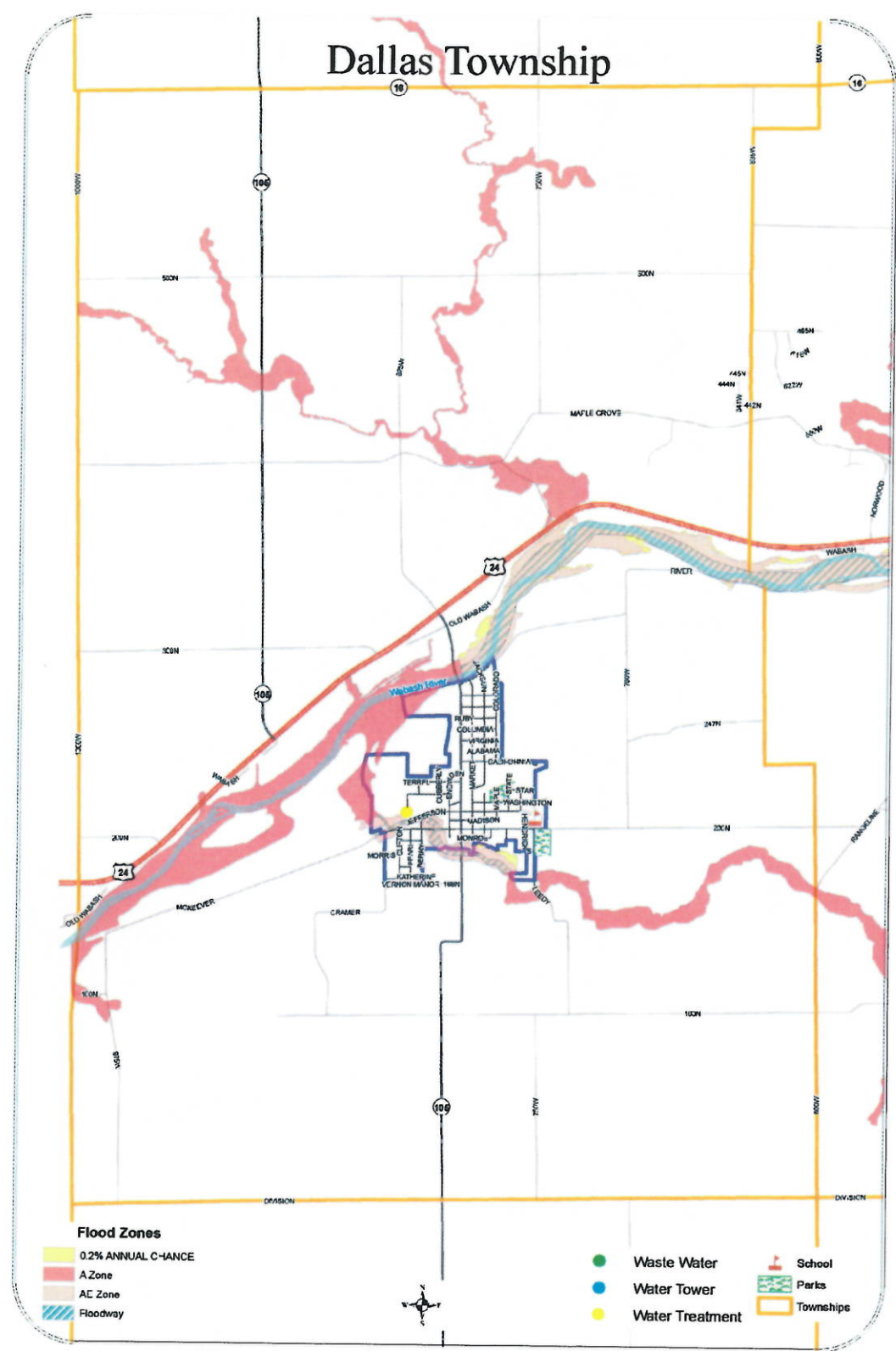
D.3 CLEAR CREEK TOWNSHIP FEMA FLOOD MAP



## D.4 JACKSON TOWNSHIP FEMA FLOOD MAP

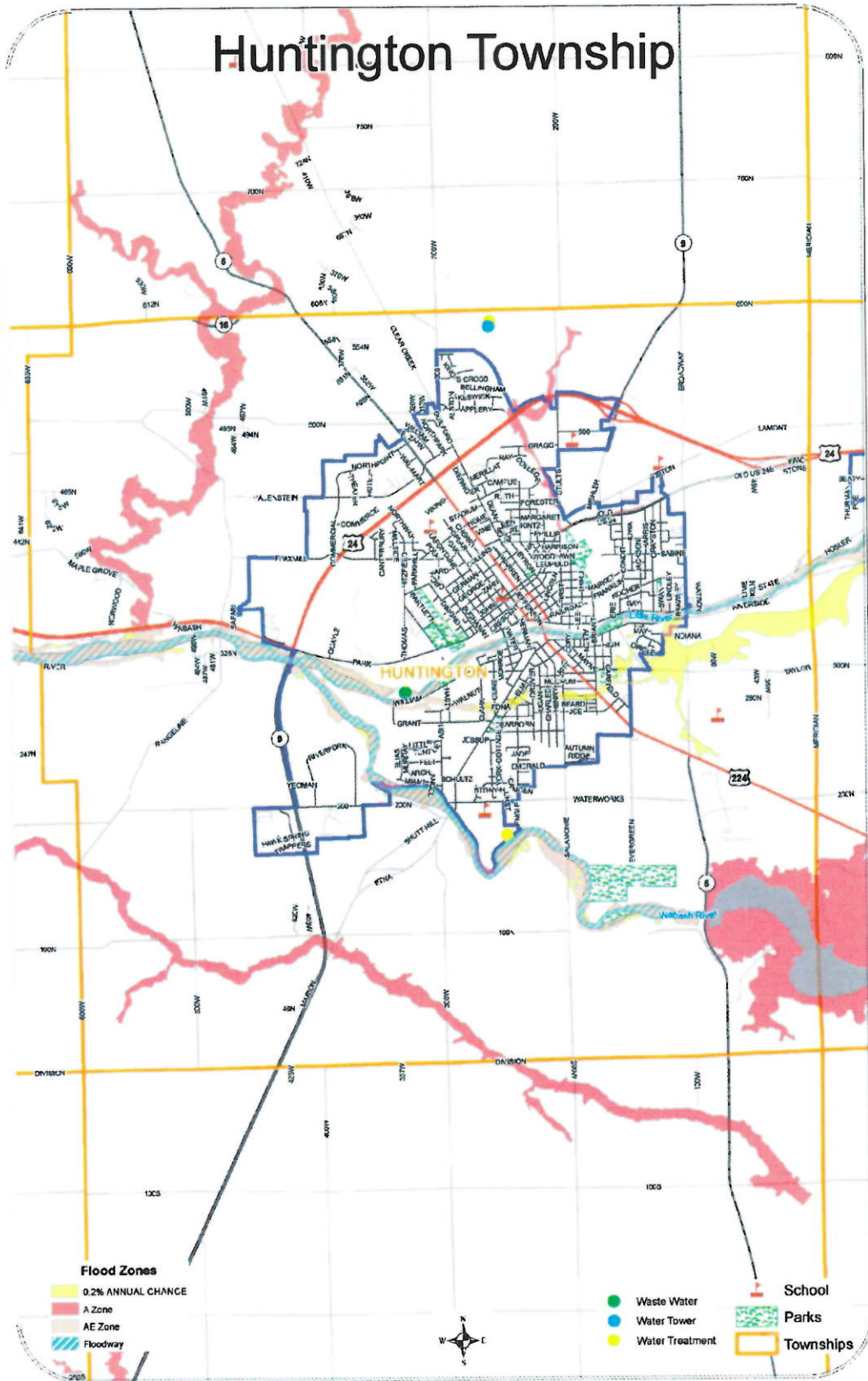


D.5 DALLAS TOWNSHIP FEMA FLOOD MAP

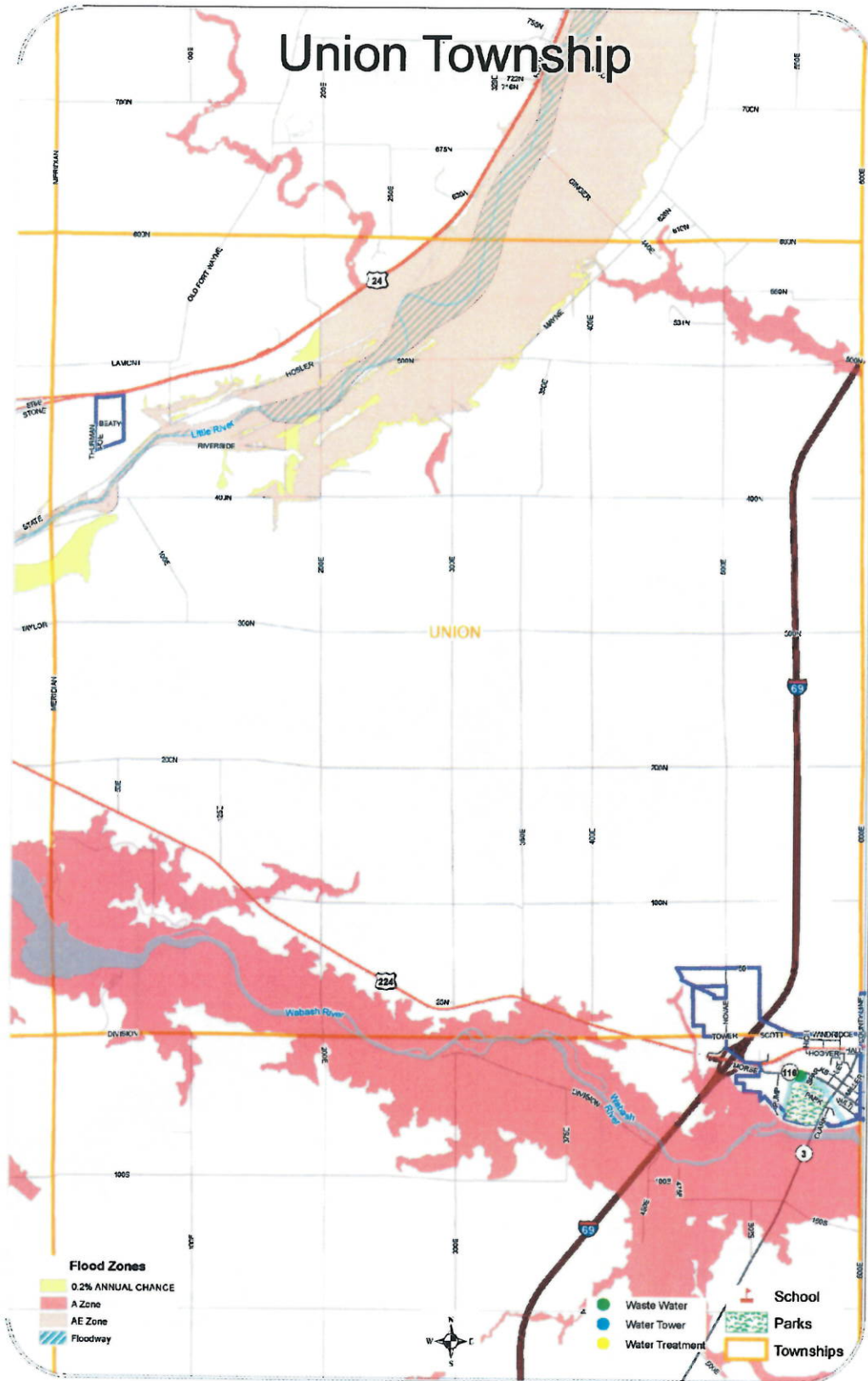




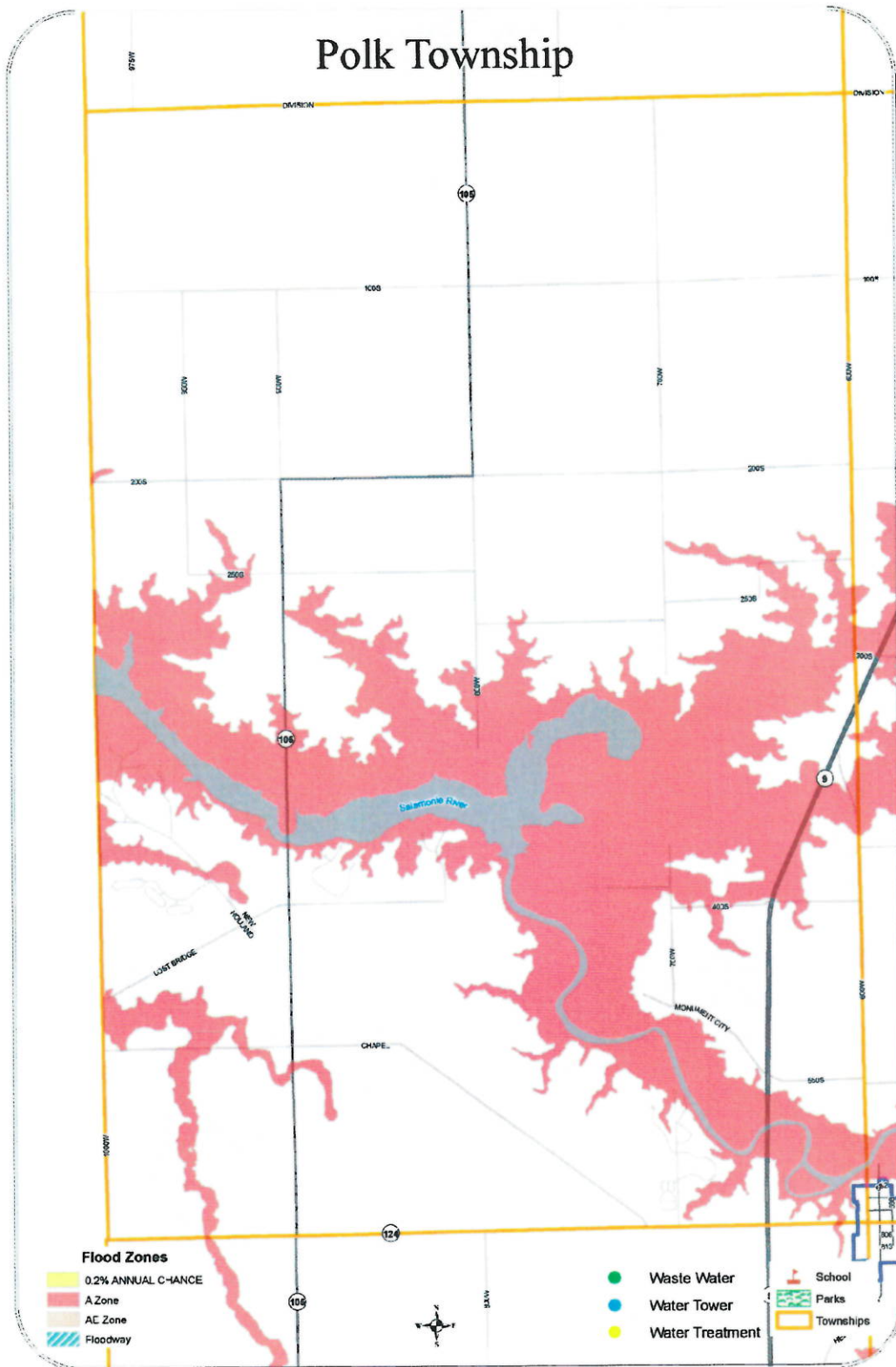
D.6 HUNTINGTON TOWNSHIP FEMA FLOOD MAP



D.7 UNION TOWNSHIP FEMA FLOOD MAP



## D.8 POLK TOWNSHIP FEMA FLOOD MAP





**Lancaster Township**

**Flood Zones**

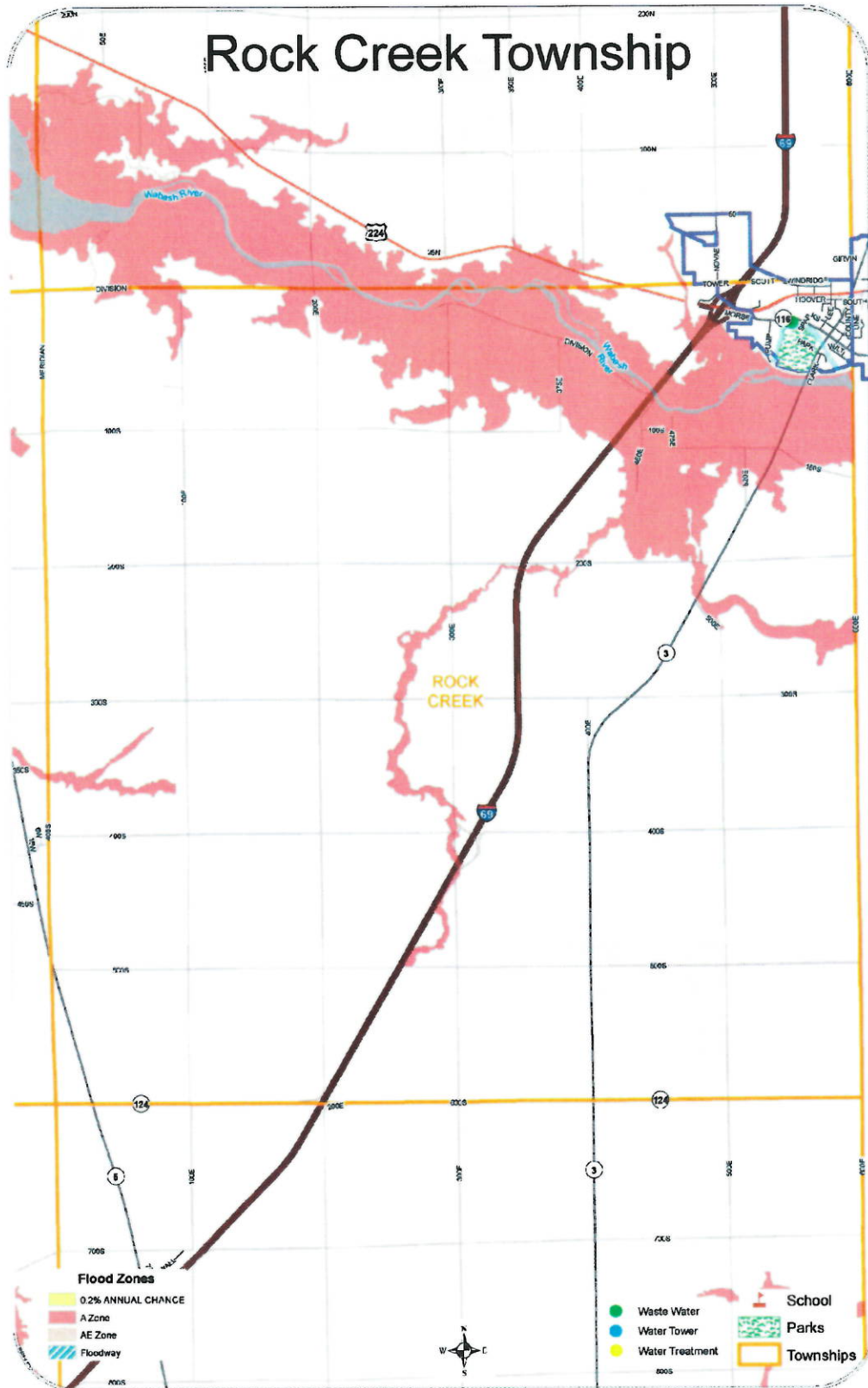
- 0.2% ANNUAL CHANCE
- A Zone
- AE Zone
- Floodway

**Legend:**

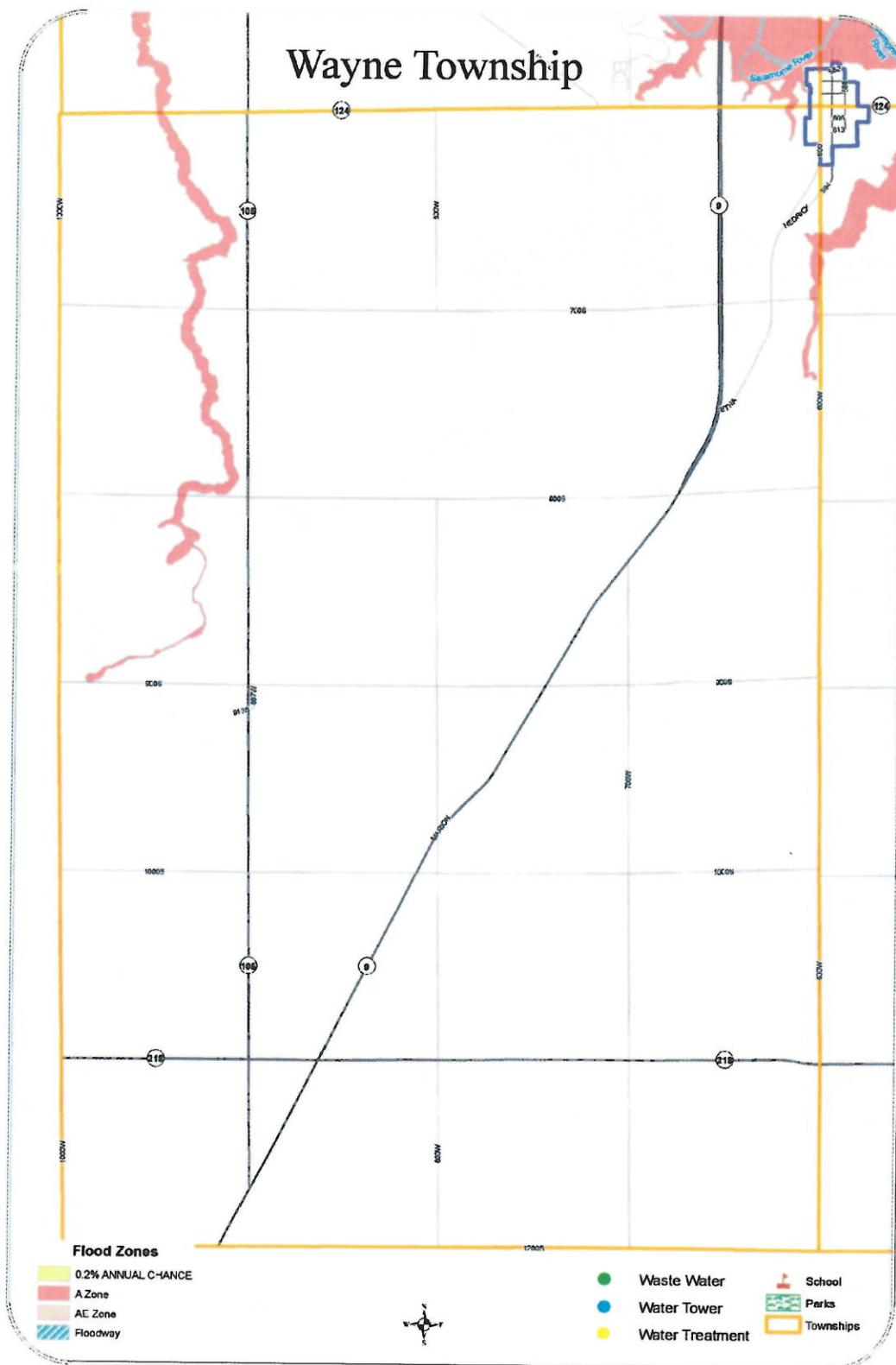
- Waste Water
- Water Tower
- Water Treatment
- School
- Parks
- Townships

The map displays Lancaster Township with various flood zones highlighted in red and pink. Major roads are shown as black lines with route numbers. A legend in the bottom left corner defines the flood zones: 0.2% ANNUAL CHANCE (yellow), A Zone (red), AE Zone (pink), and Floodway (blue hatched). A legend in the bottom right corner identifies symbols for Waste Water (green circle), Water Tower (blue circle), Water Treatment (yellow circle), School (red building), Parks (green area), and Townships (orange outline). The map also shows a north arrow and a scale bar.

D.10 ROCK CREEK TOWNSHIP FEMA FLOOD MAP

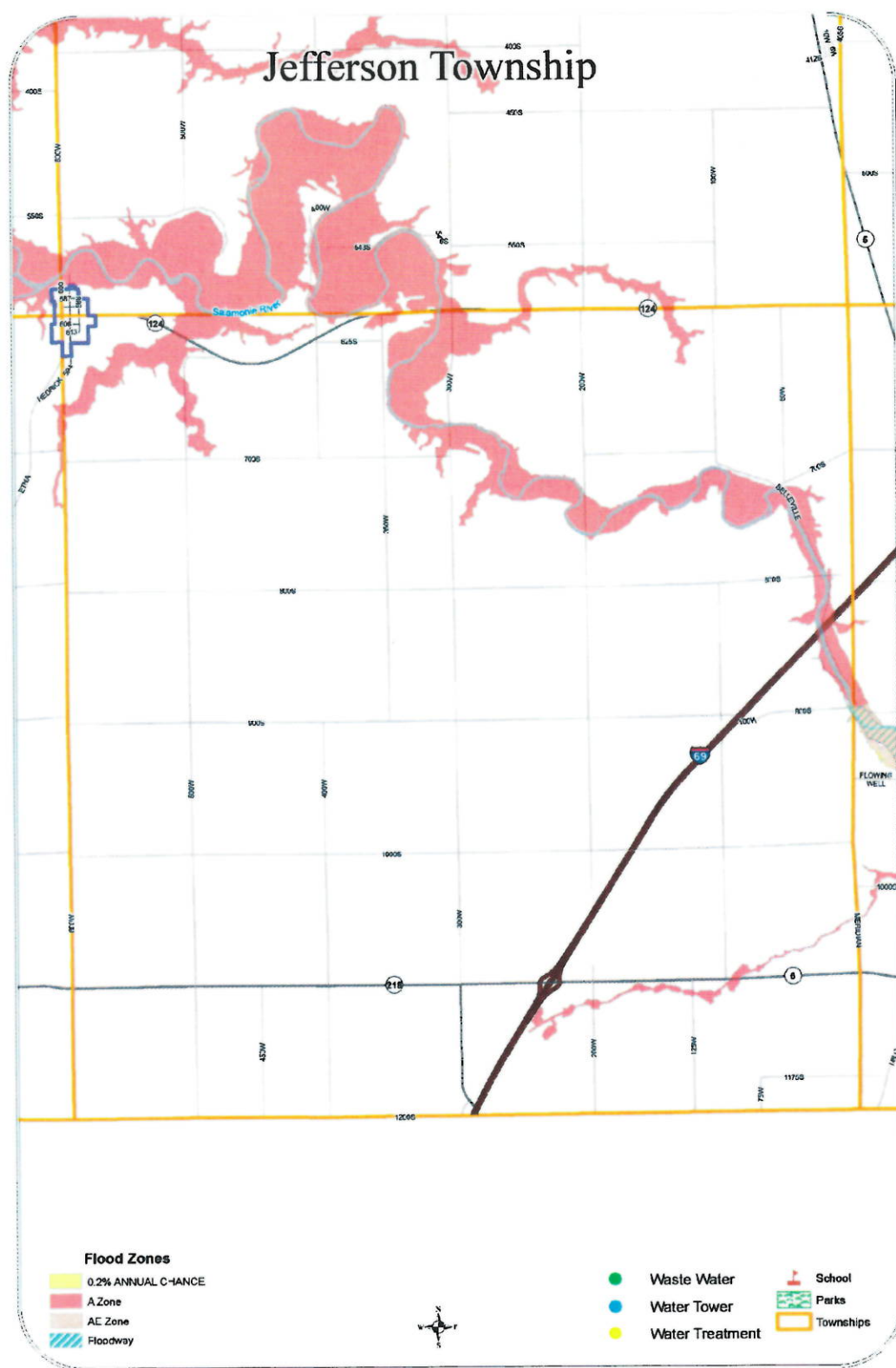


D.11 WAYNE TOWNSHIP FEMA FLOOD MAP

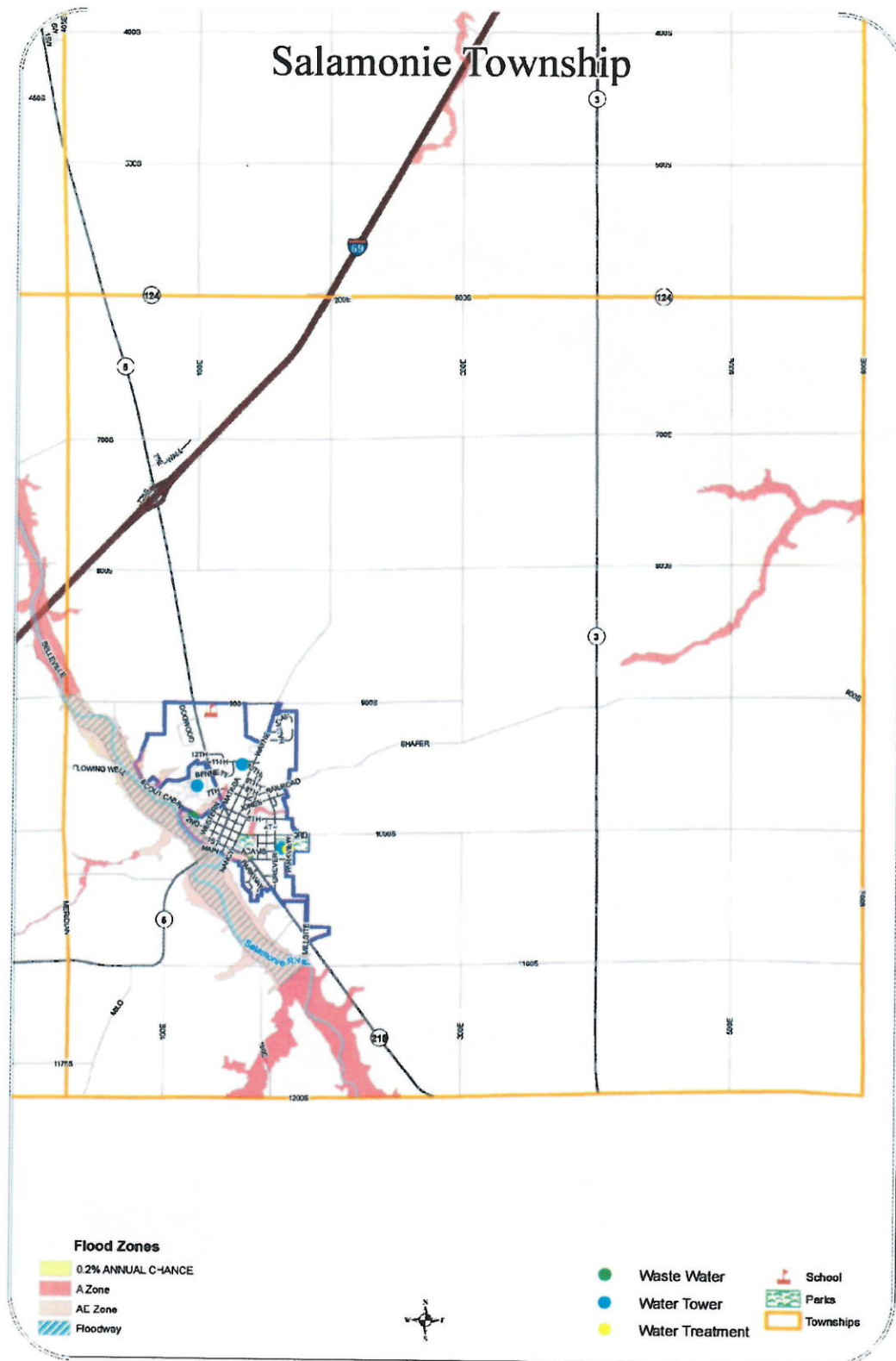




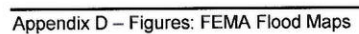
## D.12 JEFFERSON TOWNSHIP FEMA FLOOD MAP



D.13 SALAMONIE TOWNSHIP FEMA FLOOD MAP

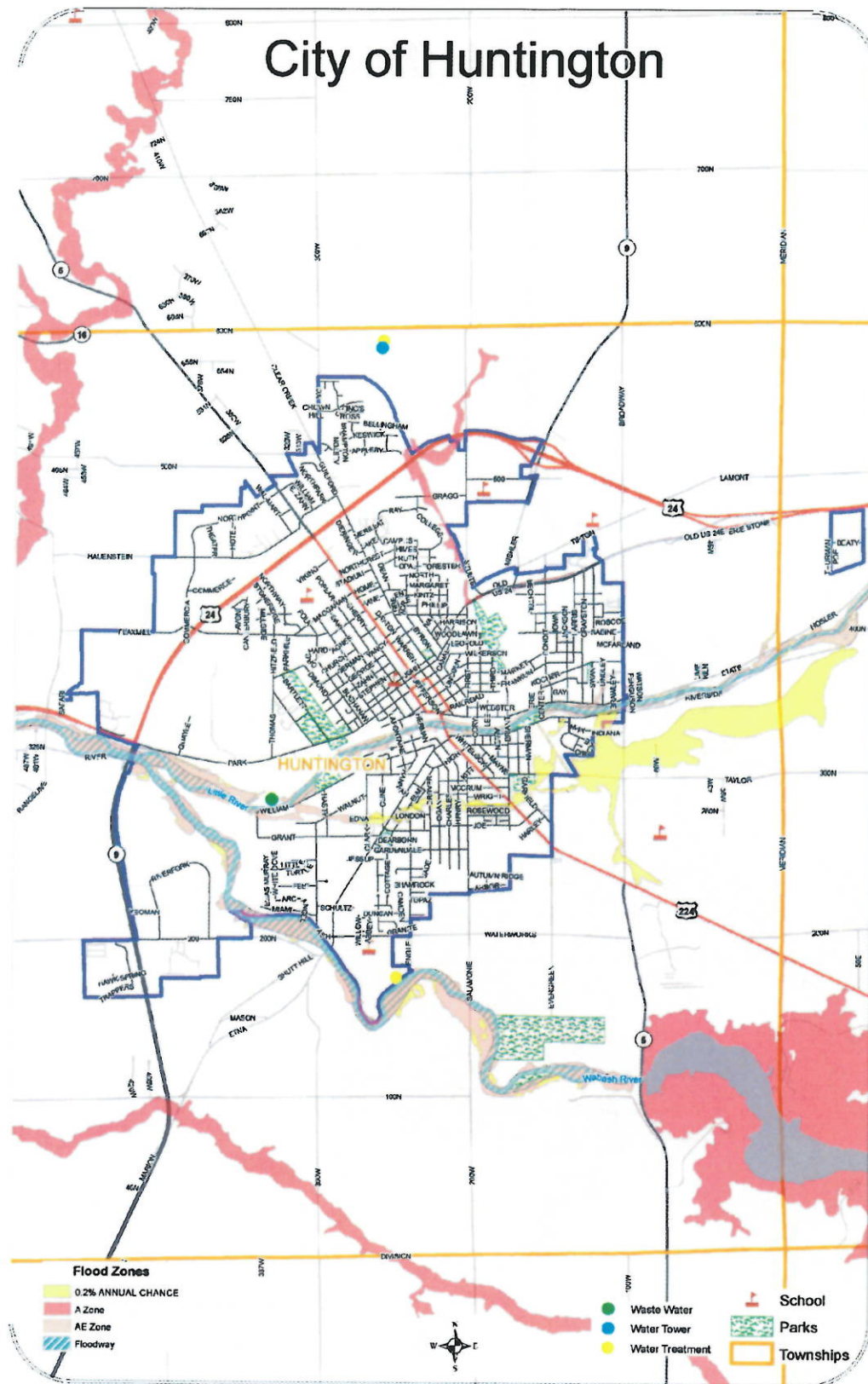


Andrews

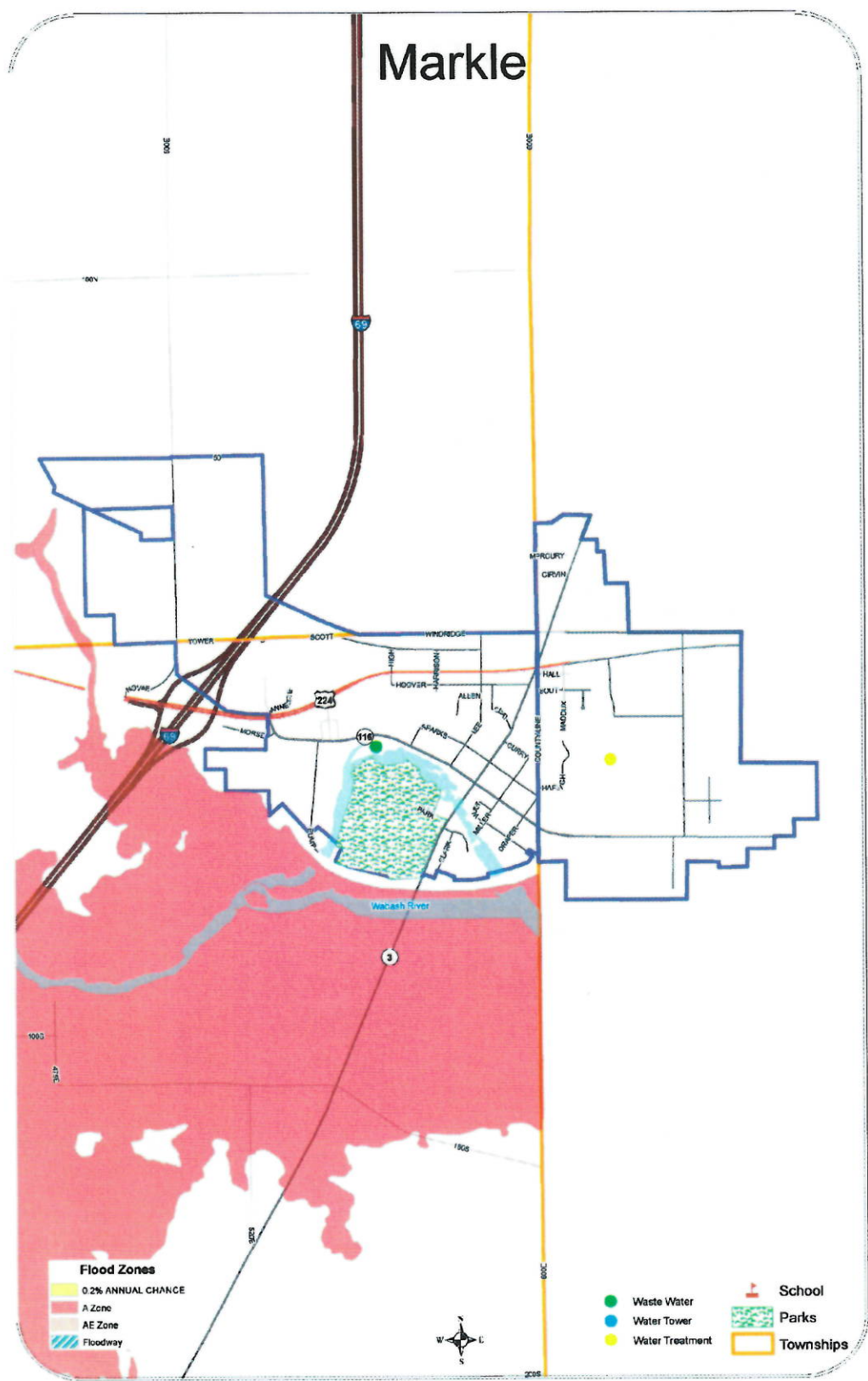




## D.15 HUNTINGTON FEMA FLOOD MAP



D.16 MARKLE FEMA FLOOD MAP



## D.17 MOUNT ETNA FLOOD MAP





[illegible]

D.19 WARREN FEMA FLOOD MAP

