





FEMA

Levee Analysis and Mapping Procedures (LAMP) for Non-accredited Levees

Broome County, NY

(City of Binghamton, Village of Endicott, Village of Johnson City,
Village of Port Dickinson, Town of Union, Town of Vestal)

July 26, 2016

RiskMAP

Increasing Resilience Together



Agenda

- Introductions
- Flood Mapping in Broome County
- Purpose of Levee Analysis and Mapping Procedures (LAMP)
- Overview of Levee Impacted Areas
- Overview the LAMP process
- LAMP Path Forward
- Community Meetings

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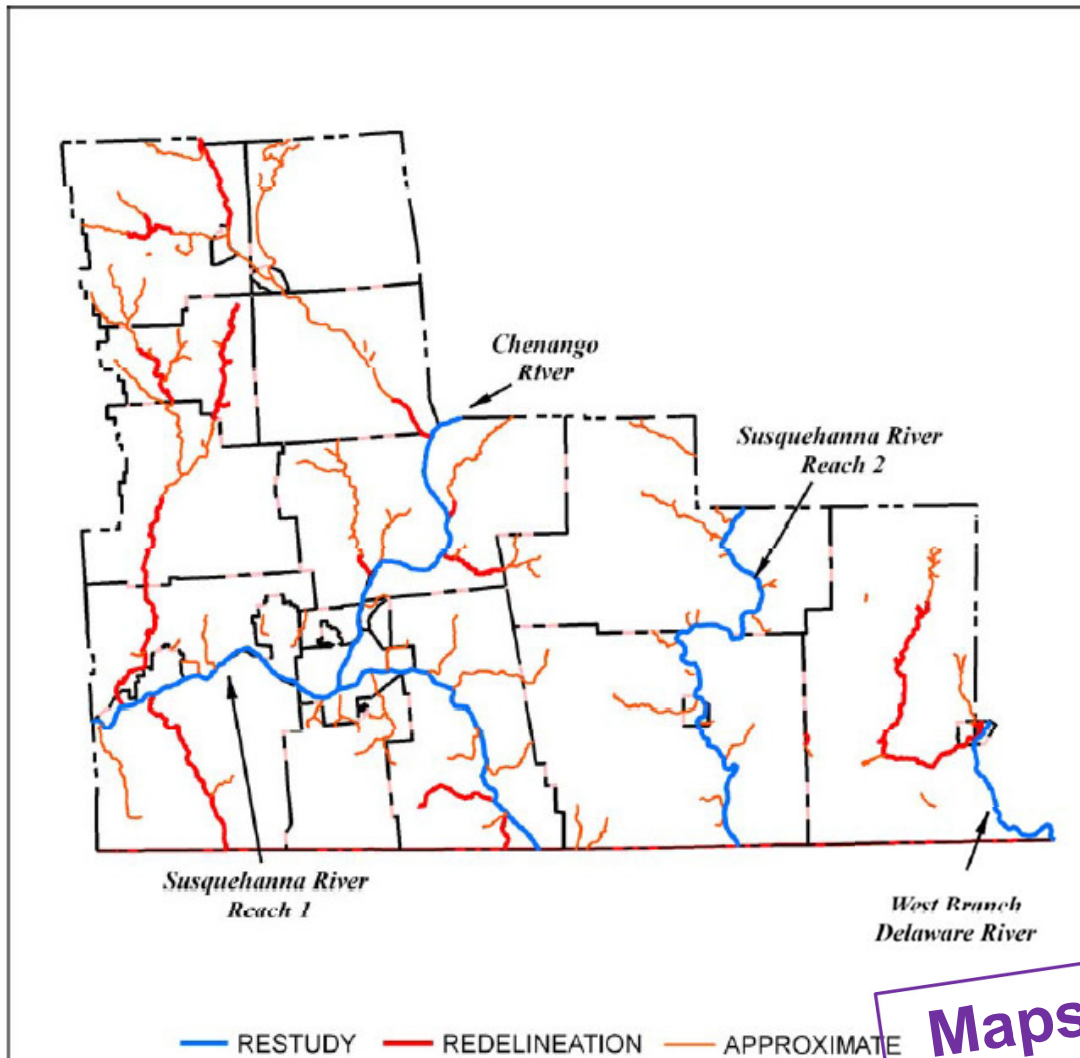
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Broome County Flood Mapping



Scope of Study, Broome County, New York

Preliminary Flood Insurance Rate Maps (FIRMs)

- Released 2/05/2010

Consultation Coordination Officer Meeting

- Held 3/16/2010

Public Open Houses

- Held 4/19/2010 & 4/22/2010

Maps put on hold due to levees

Preliminary FIRM Uses

Keystone Associates re-designed the building using Broome County's preliminary FIRMs in 2010 (because of NYSDEC)

- Raised the first floor 2' above the [NEW 1-percent-annual-chance flood BFE](#)
- Saved money and time after being hit by flooding during Hurricane Lee



Changes to the National Flood Insurance Program

NFIP Challenges

- Before Hurricane Sandy, NFIP was \$18 billion in debt to Treasury (\$16 billion from Katrina).
- Subsidized flood insurance rates do not adequately reflect actual flood risk.

July 2012: Biggert-Waters Flood Insurance Reform Act

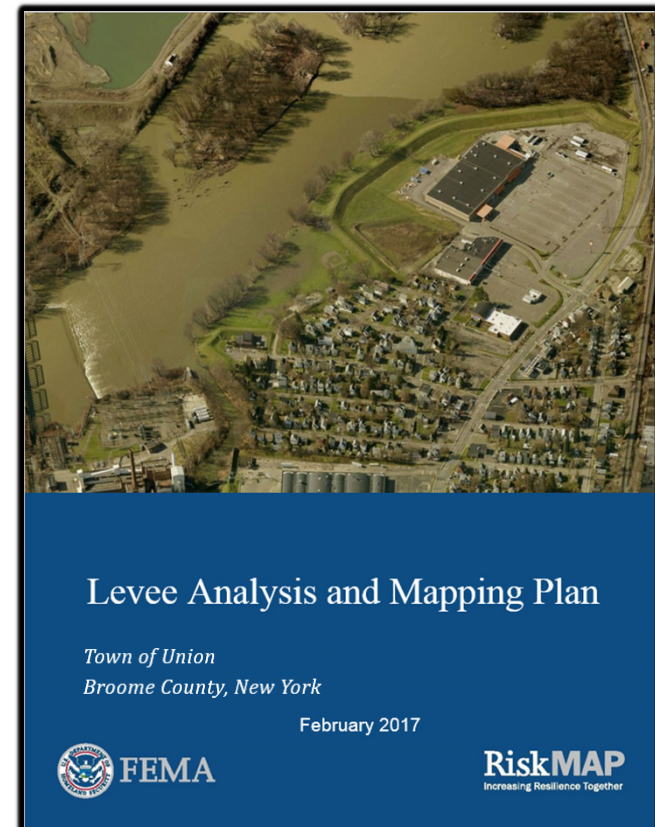
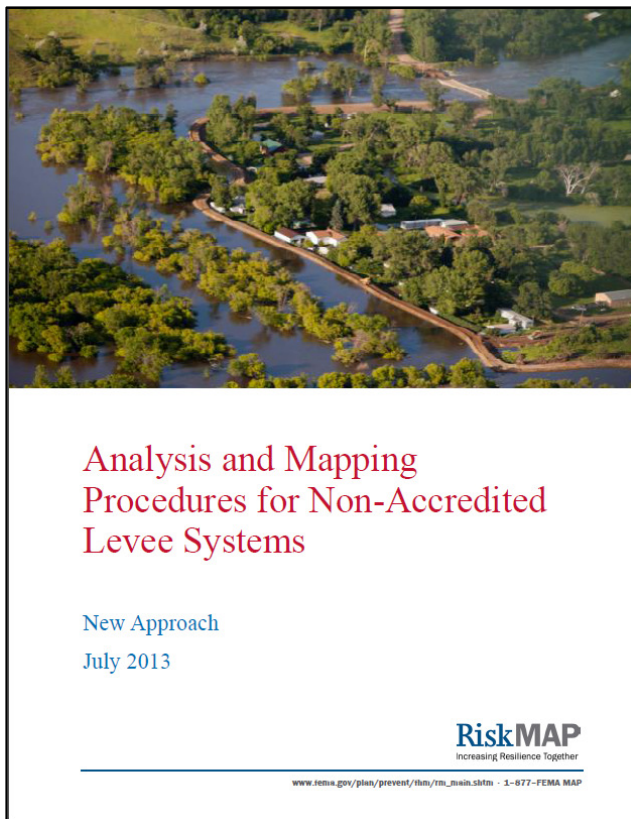
- Prohibits premium subsidies on new or lapsed policies.
- Phases out subsidies for all policies.
- Requires banks to enforce purchase requirements more vigorously.
- Analyzes affordability impacts by April 2013.

March 2014: Homeowner Flood Insurance Affordability Act

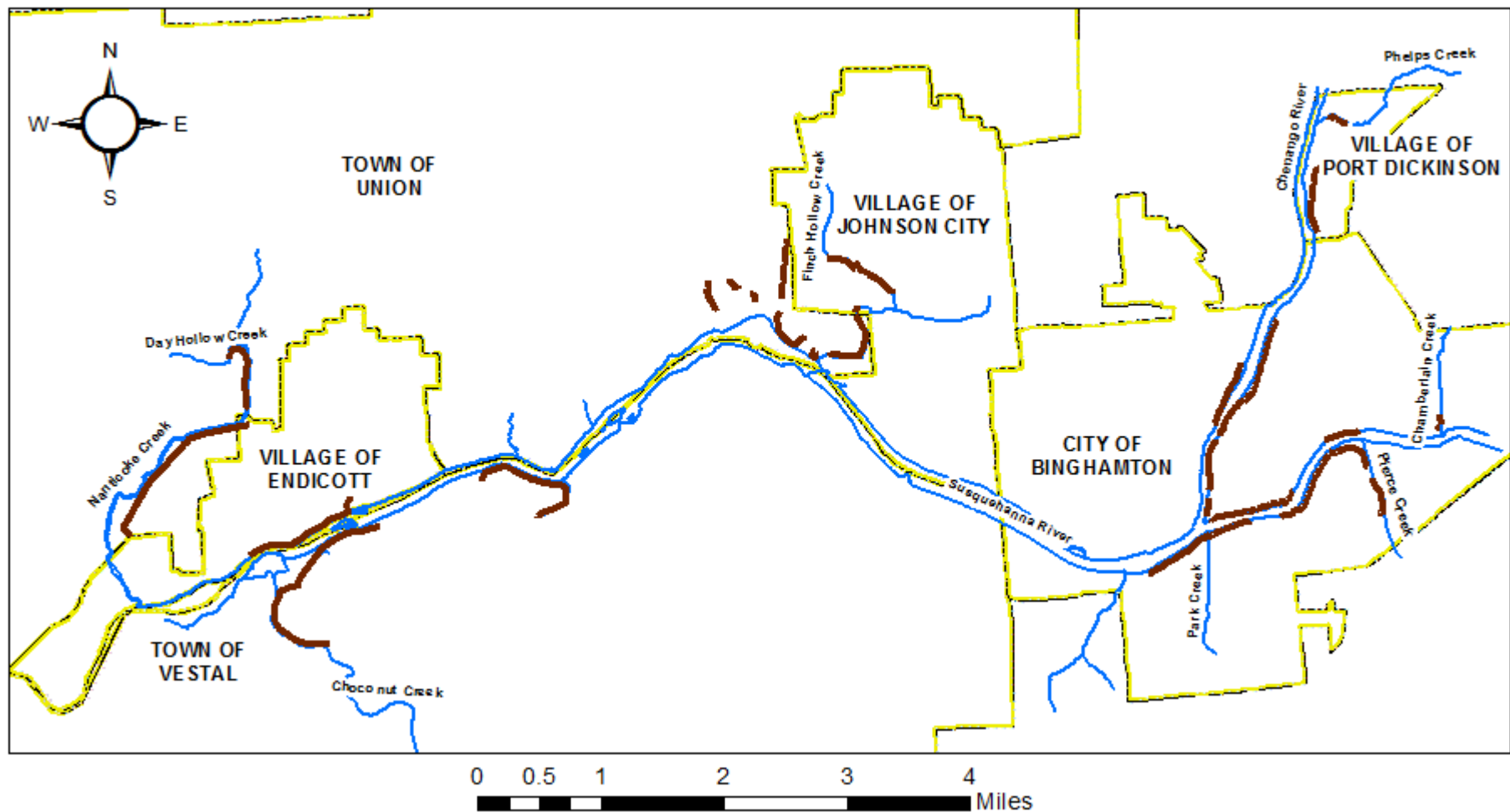
- Repeals triggers for new or lapsed policies.
- Caps rate increases at 18% annually (some exceptions).
- Enables newly mapped properties to purchase preferred risk rate for 1 year.
- Authorizes additional funds for affordability study.

Purpose of Meetings

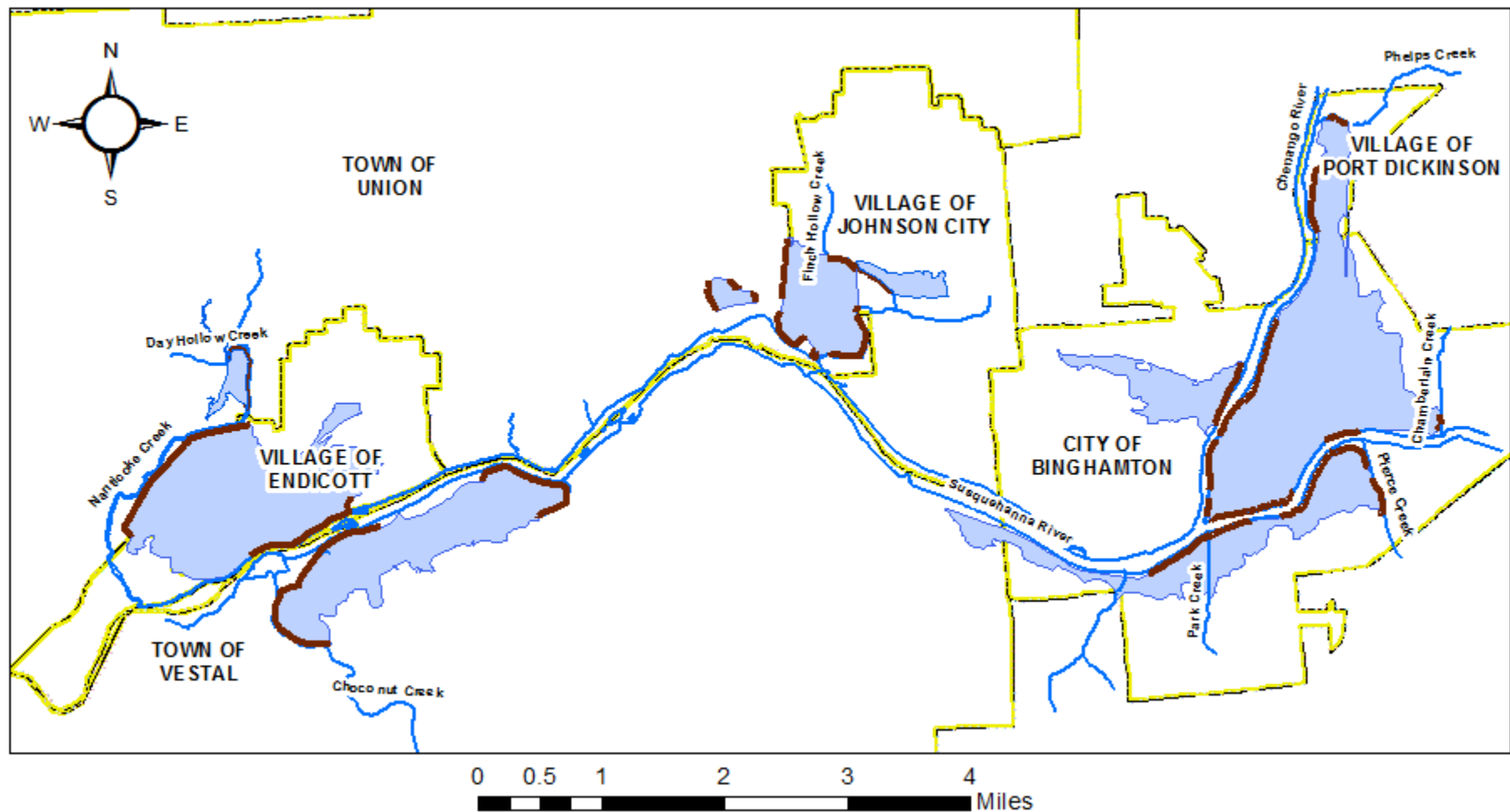
- The flood risks landward of the non-accredited levee system will be studied with FEMA's new approach to levee mapping - LAMP



Project Communities



Levee Impacted Areas



Levee Analysis and Mapping Procedure Approach (LAMP)

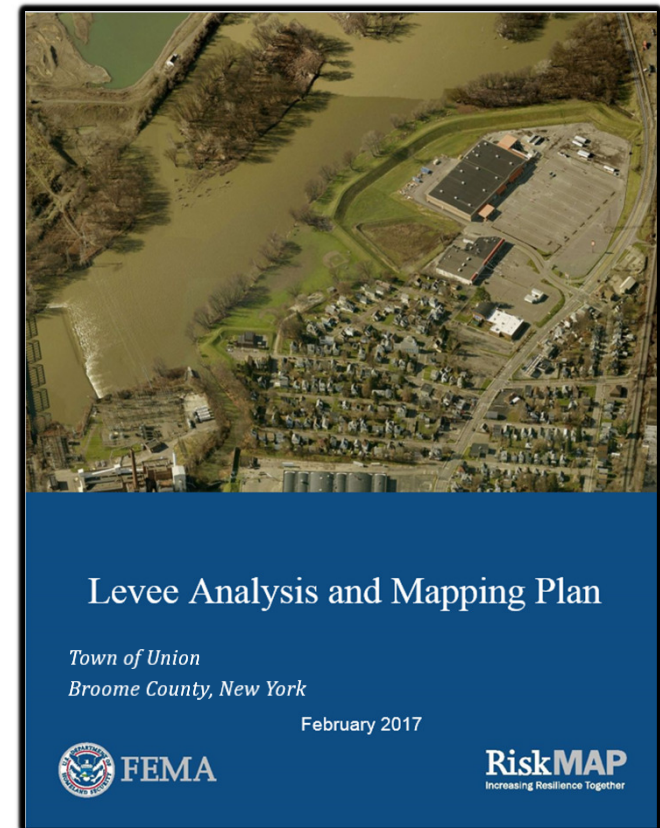


- FEMA's new approach to identifying flood risk landward of non-accredited levee systems
- A collaborative levee evaluation process that works with interactively with stakeholders
- A levee-specific study to analyze and determine updated Special Flood Hazard Areas landward of each non-accredited levee

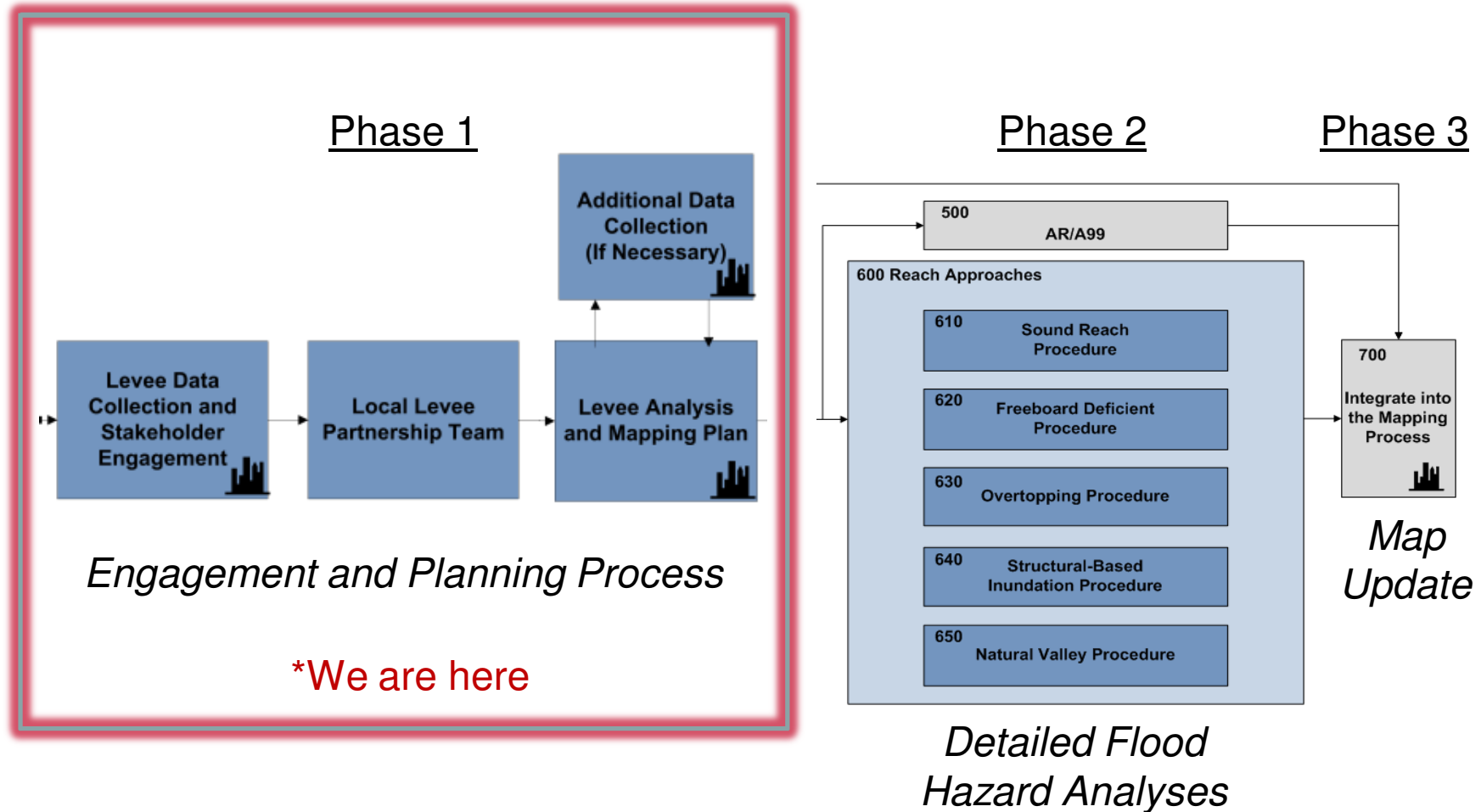
LAMP – Phase 1

■ Phase 1

- Establish a Local Levee Partnership Team (LLPT)
- Collect local levee data and related levee system information
- Perform an approximate-level flooding analysis (First Pass Analysis)
- Prepare Levee Analysis and Mapping Plan(s)



LAMP: Complete Picture

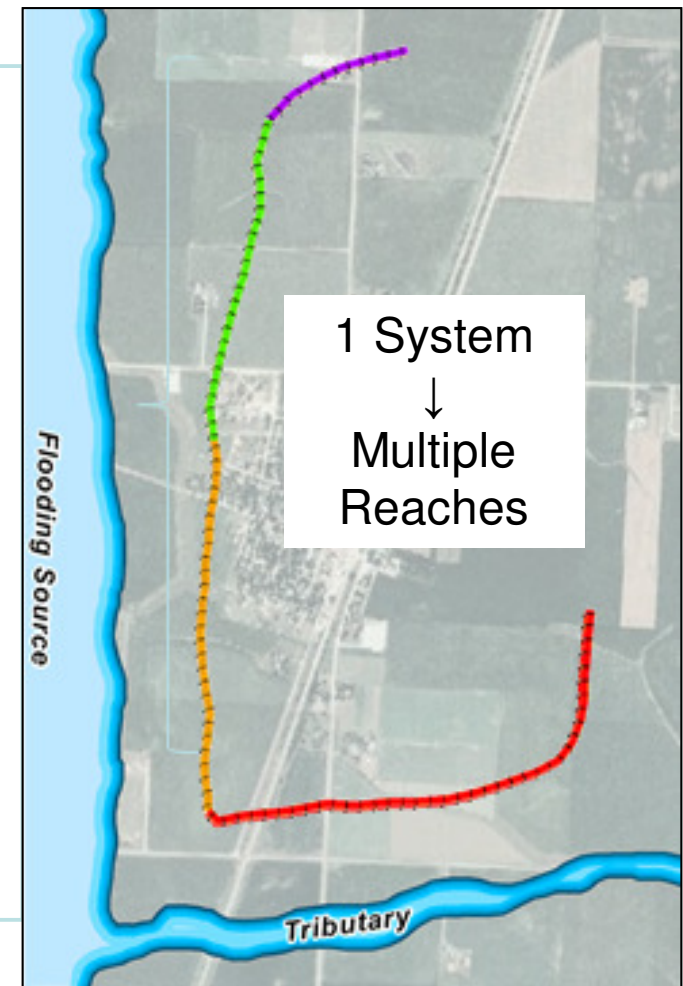


LAMP Analyses & Methodology

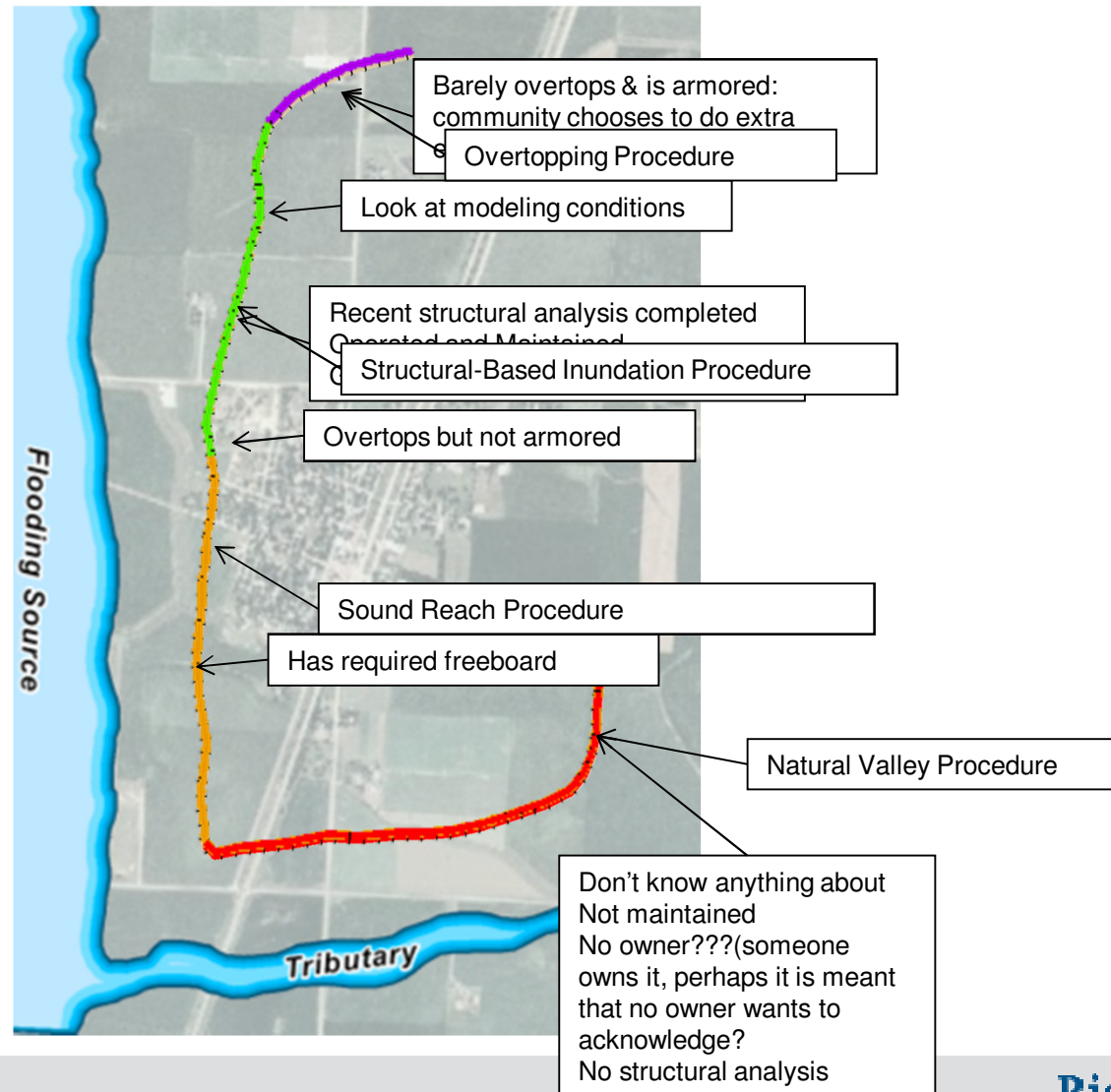
There are five procedures detailed in the LAMP Final Approach Document.

- **Natural Valley**
- **Structural-Based Inundation**
- **Overtopping**
- **Freeboard Deficient**
- **Sound Reach**

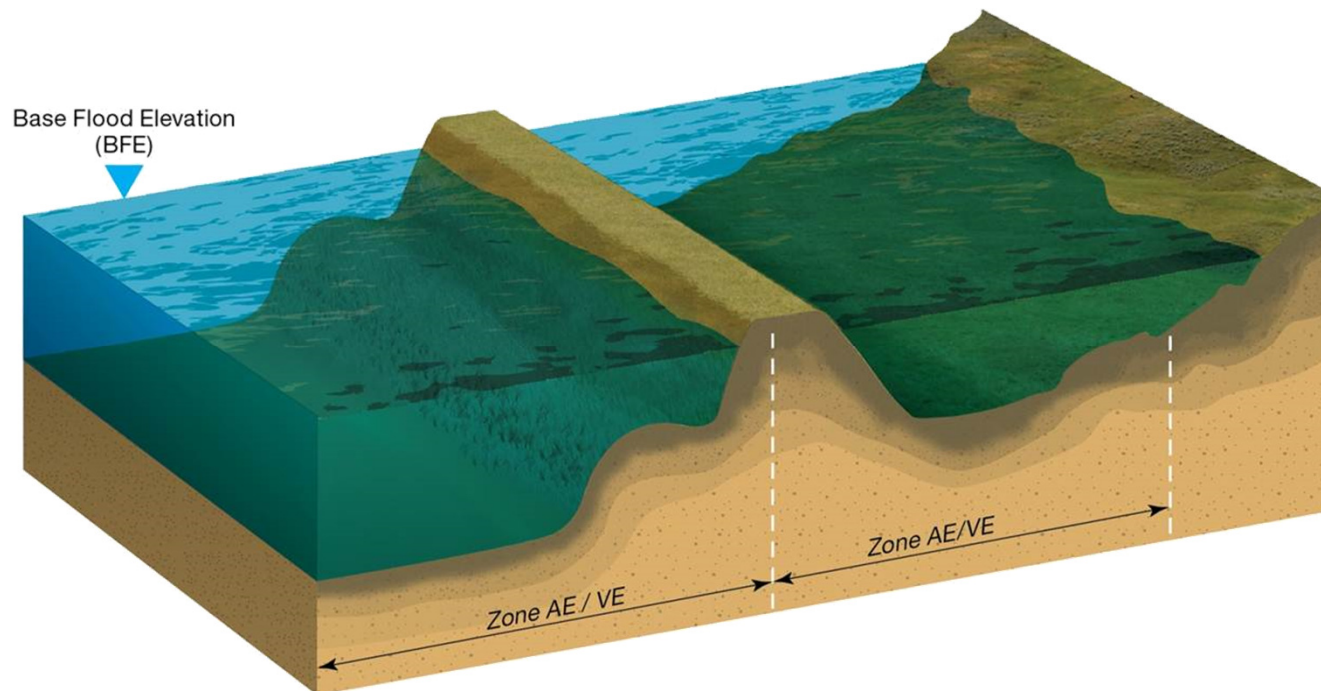
A levee system can be broken up into multiple reaches in order to analyze the flood risk in its vicinity.

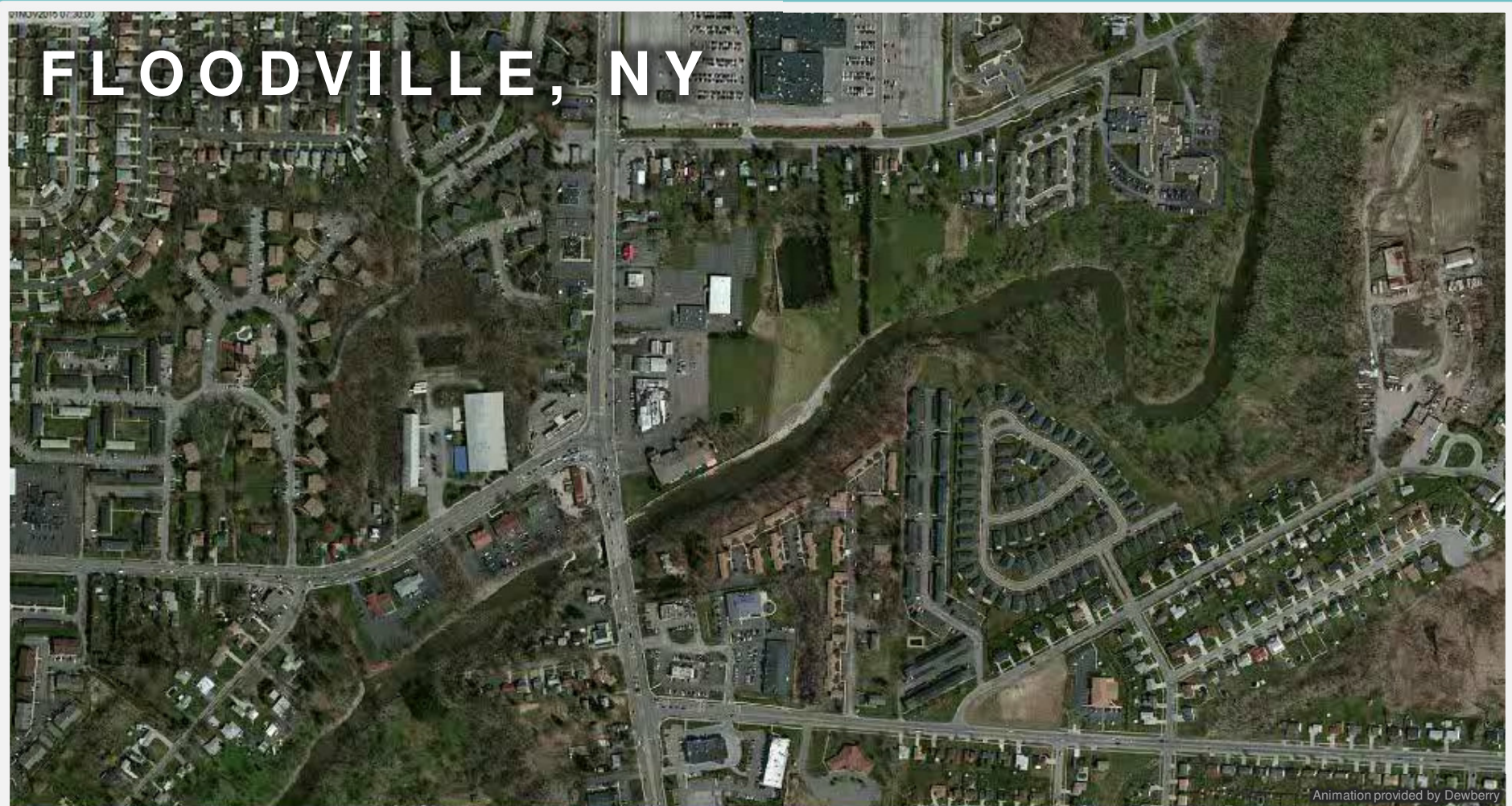


So... What's a Reach?



Natural Valley Procedure





Modeling the Special Flood Hazard Area (SFHA)



Modeling the Special Flood Hazard Area (SFHA)

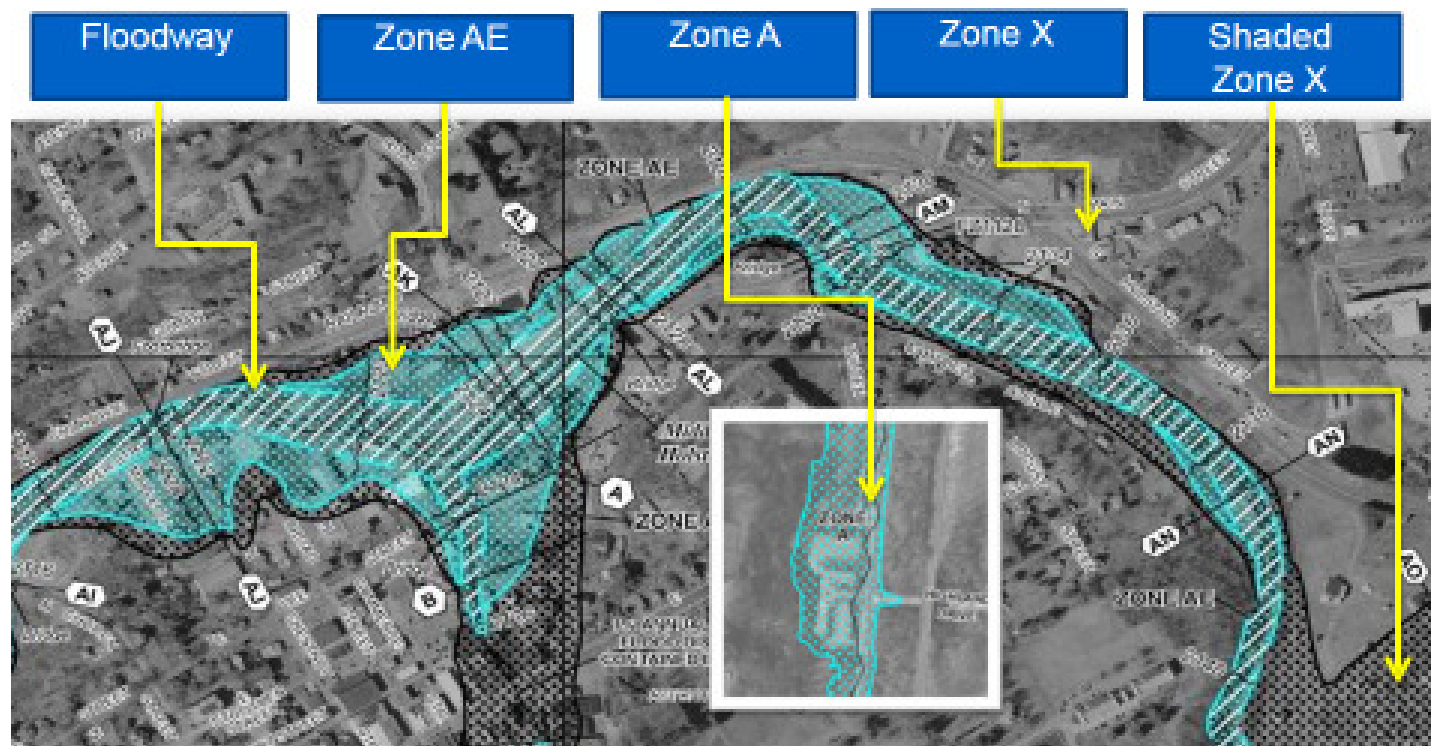
A Zones are “100-year floodplain” with a **1-percent-annual-chance of flood**

- Insurance is **required** if you have a federally backed mortgage or received federal disaster assistance
- Informs building code standards

Flood Zone Designations

Understanding the FIRM - Riverine

- Insurance implications and regulatory requirements



Zone D

- Defined as “undetermined, but possible, flood hazards”
- No federal mandatory purchase requirement
- Insurance rates are similar to a Zone A
 - Both have higher rates due to uncertainty than detail studied flood hazards such as AE or VE.
- See handout 44 CFR Section §60.3 for explanation of floodplain management criteria

Community Meetings: Local Levee Partnership Teams

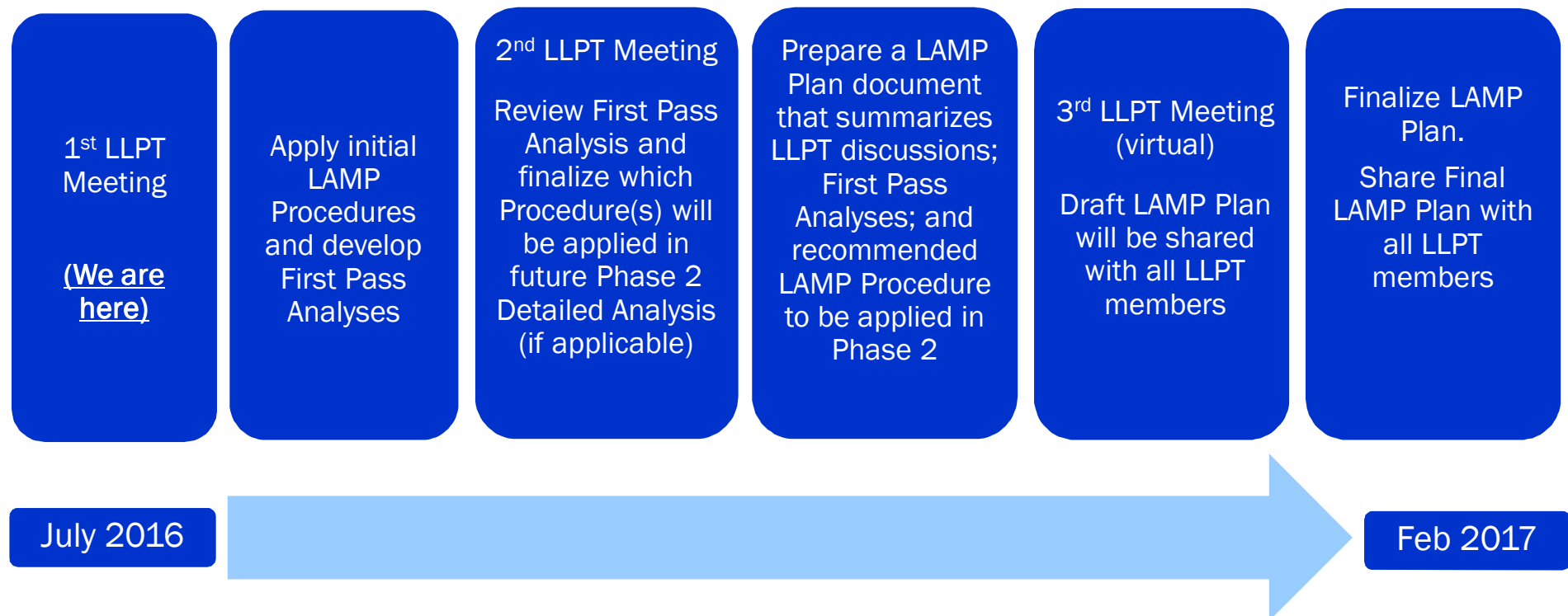
Local Levee Partnership Team (LLPT)

■ LLPT Meeting Objectives:

- Discuss information and data related to how the levee system will be analyzed and mapped
- Identify and evaluate unique conditions related to the levee system that may impact analysis and mapping
- Participate in the decision making process for the determination of levee system reaches, analyses, and mapping within allowable guidelines
- Develop reasonable schedules for Phase 2 and Phase 3

LAMP Path Forward

■ LAMP – Activity Timeline



Community Meeting Schedule

Tuesday, 7/26

Village of Johnson City

12:30-2:00 PM

Village Hall, 243 Main Street 2nd Floor Conference Room, Johnson City, NY, 13790

Town of Vestal

2:00-3:30 PM

Vestal Town Hall, 605 Vestal Parkway West, Vestal, NY, 13850

Village of Port Dickinson

3:30-5:00 PM

Village Hall, 786 Chenango Street, Binghamton, NY, 13901

Wednesday, 7/27

TENTATIVE Village of Endicott

9:30-11:00 AM

Location: **TBD**

Town of Union

11:00-12:30 PM

Town Hall, 3111 E. Main Street, Endwell, NY, 13760

City of Binghamton

2:00-3:30 PM

City Hall, Mayor's Conference Room, 4th Floor, 38 Hawley Street, Binghamton, NY, 13901



FEMA

*Know, plan for, mitigate against and communicate
about the risks in your community.*



**Department of
Environmental
Conservation**



Upper Susquehanna River Basin Comprehensive Flood Damage Reduction, NY



Identify flood damage reduction measures for the residents and businesses within the Upper Susquehanna River Basin, New York.