



FEMA

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

Village of Johnson City
Broome County, NY

February 23, 2017



Agenda

- Introductions
- Review of LAMP and LLPT Meeting #1
- Discuss Results of First Pass Analysis
- Discuss Finalization of LAMP study methods for Phase 2 Analysis
- LAMP Path Forward

Introductions & Contact Information

■ FEMA Project Monitor

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■ Outreach Leads

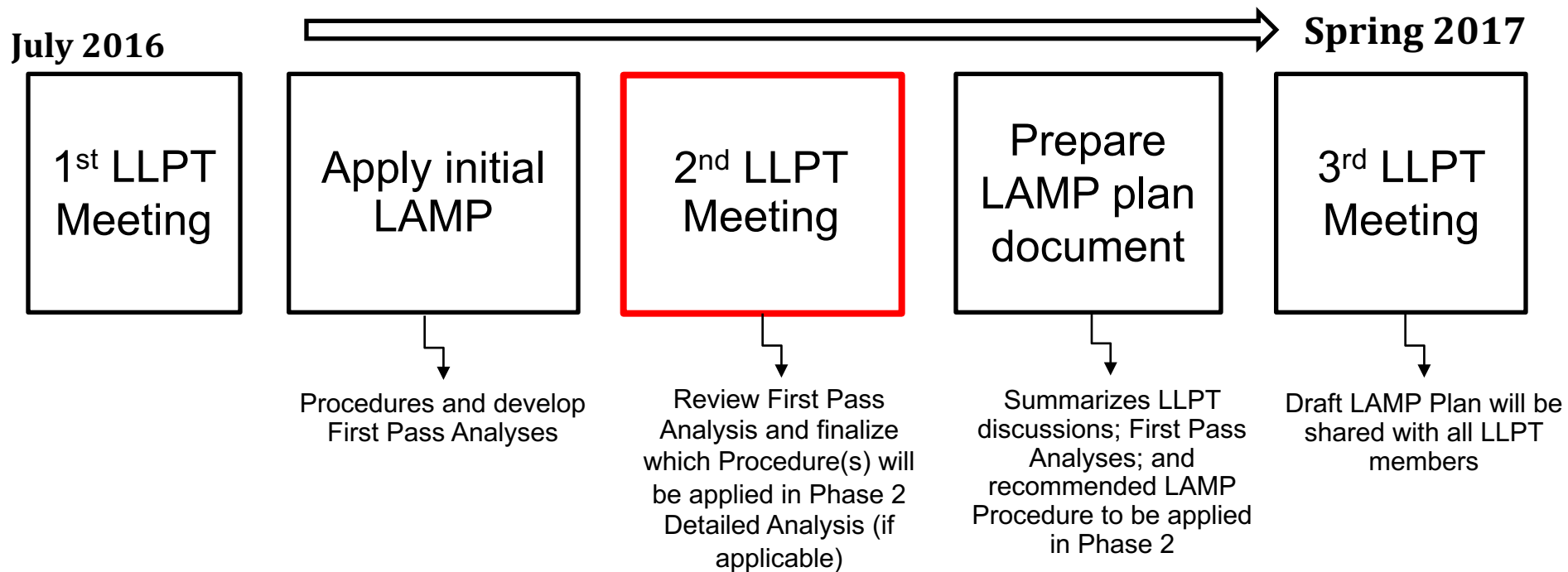
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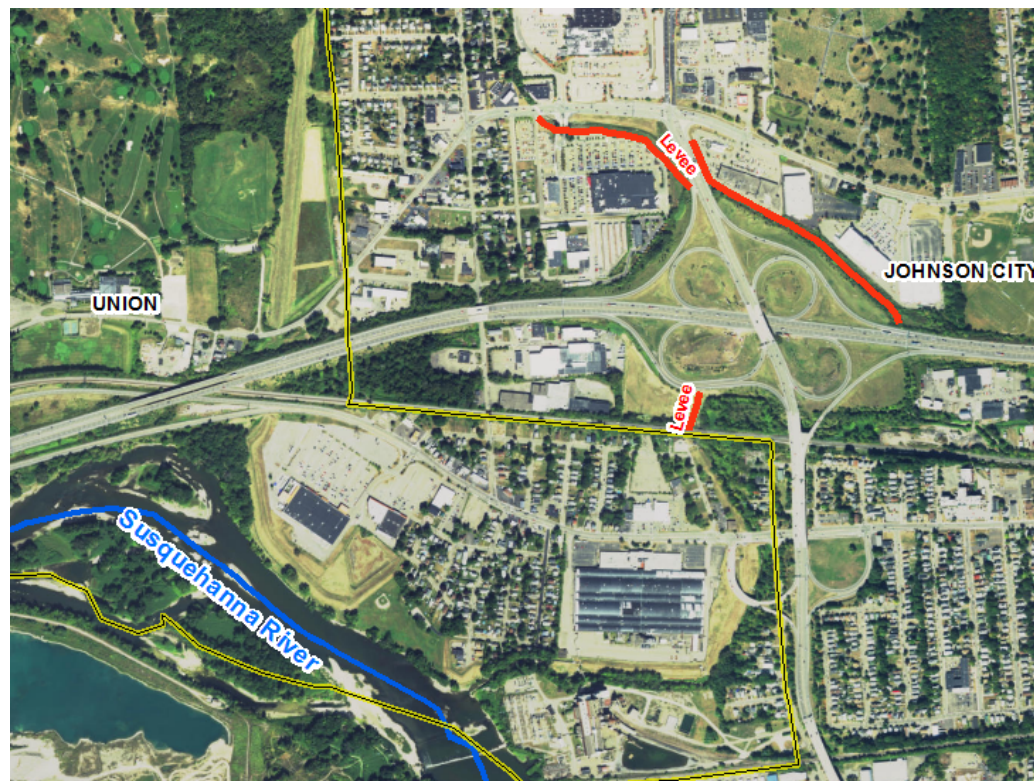
LAMP Path Forward

■ LAMP PHASE 1



Review of LLPT Meeting #1

- Discussion on the Levee Analysis and Mapping Procedure (LAMP) and Objectives
- Overview of the Levee System
- Outlined First Pass Analysis Methodology: Natural Valley
- Established a preliminary timetable



Application of LAMP to Levees in the Village of Johnson City

■ LAMP Procedures:

- **Natural Valley Procedure (Applicable)***
- **Structural Based Inundation Procedure (Potentially Applicable)****
 - Levee does not have known vulnerabilities or history of breaching
- **Overtopping Procedure (Potentially Applicable) ****
 - BFEs are above top of levee / floodwall, but can be managed
- **Freeboard Deficient Procedure (Potentially Applicable)****
 - Will require documentation that levee meets 44CFR§65.10 except for freeboard
- **Sound Reach Procedure (Not Applicable)****

Will require documentation that levee meets 44CFR§65.10

 - * - No cost to community
 - ** - Potential additional cost to community

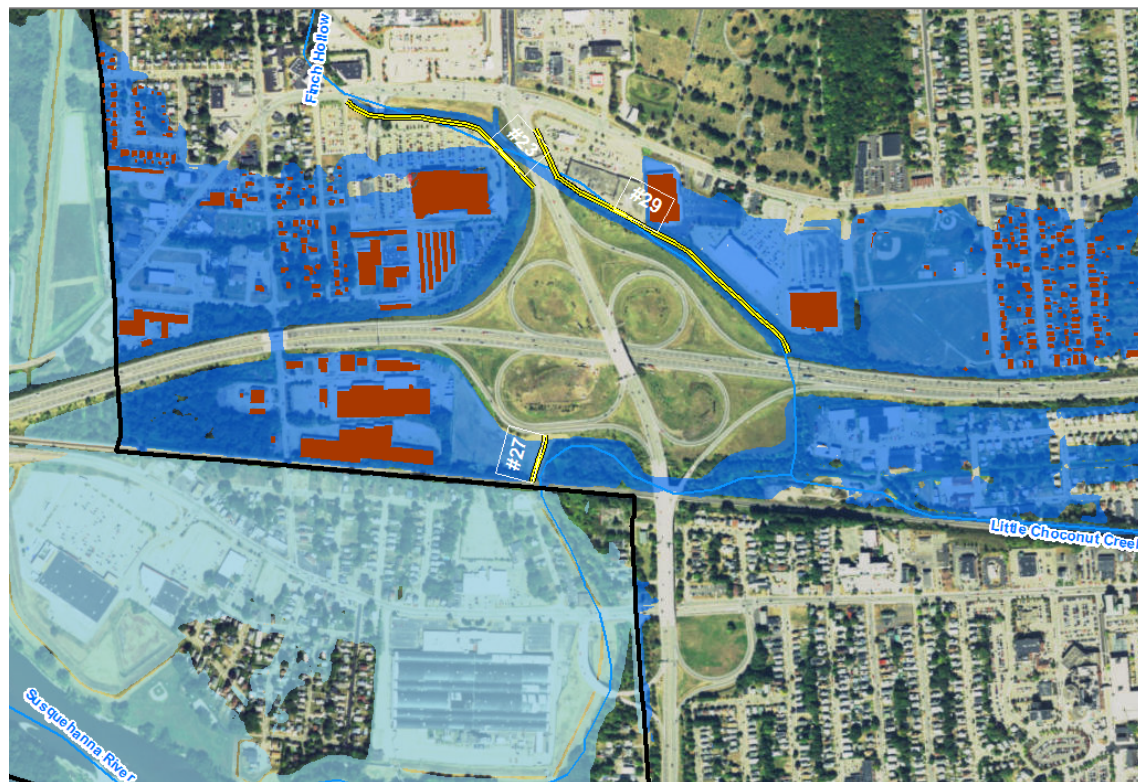
First Pass Results Natural Valley Analysis

Hydrology

- Updated Gage Analysis (Including T.S. Lee)
- 3.59% increase in Susquehanna Flow

Hydraulics

- HEC-RAS 1D Steady State Model
- Approximately 320 Structures impacted

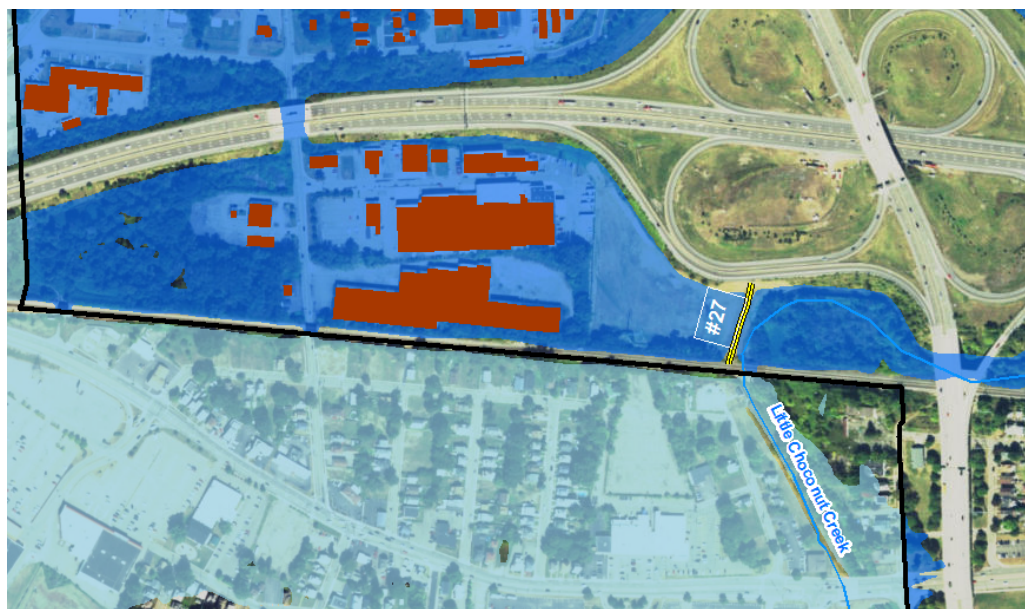


First Pass Results Natural Valley Analysis



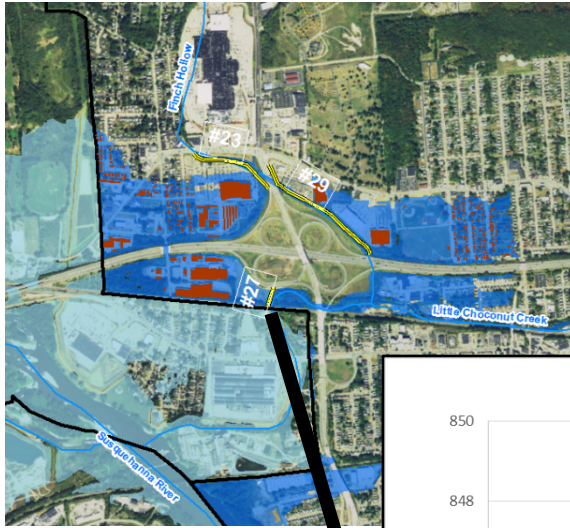
- Approximate Number Structures impacted:
 - #27– 13

Levee System Components: Natural Valley Levee #27(Susquehanna River)

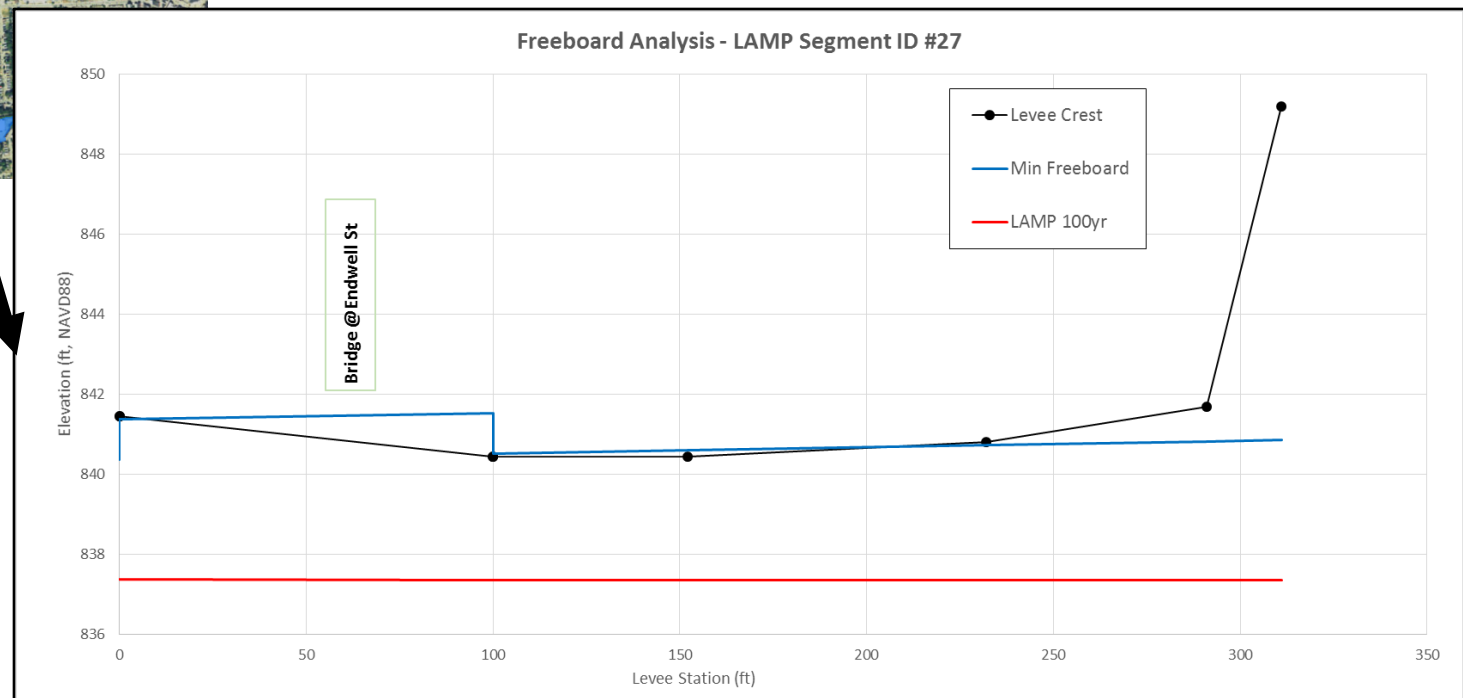


First Pass Results

Free Board Analysis



Reach #27



First Pass Results Natural Valley Analysis



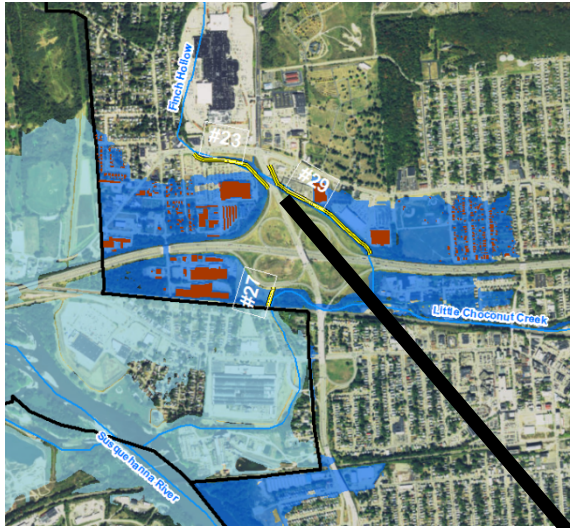
- Approximate Number Structures impacted:
 - #29 – 183
(not in the USACE NLD)

Levee System Components: Natural Valley Levee Reach #29 (Susquehanna River)

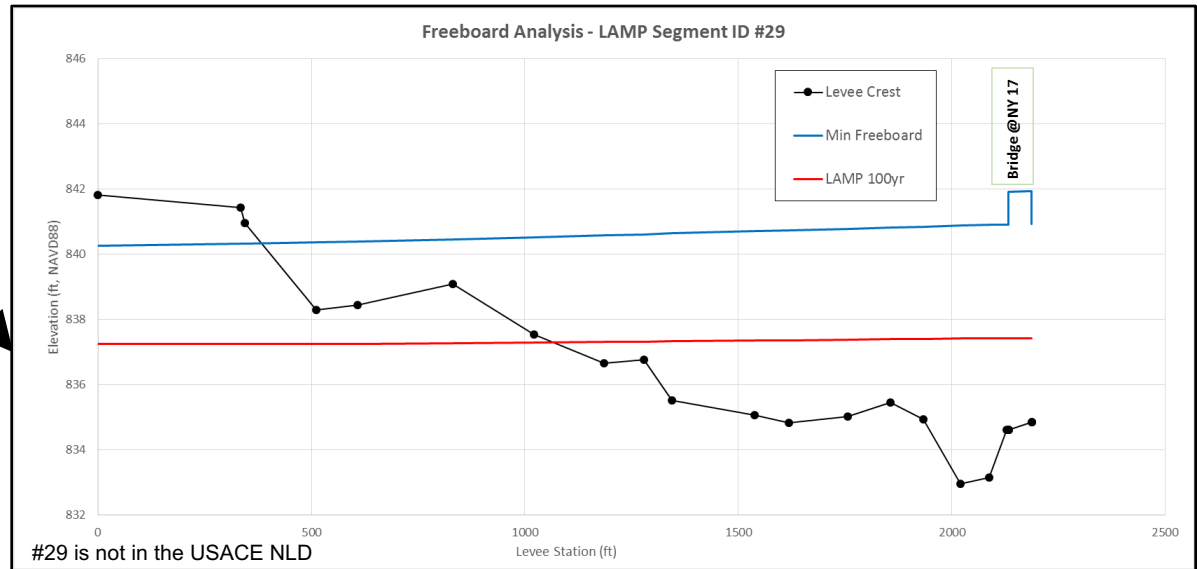


First Pass Results

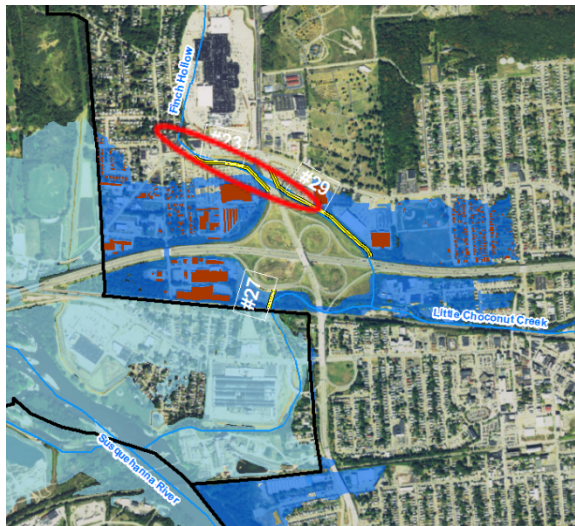
Free Board Analysis



Reach #29

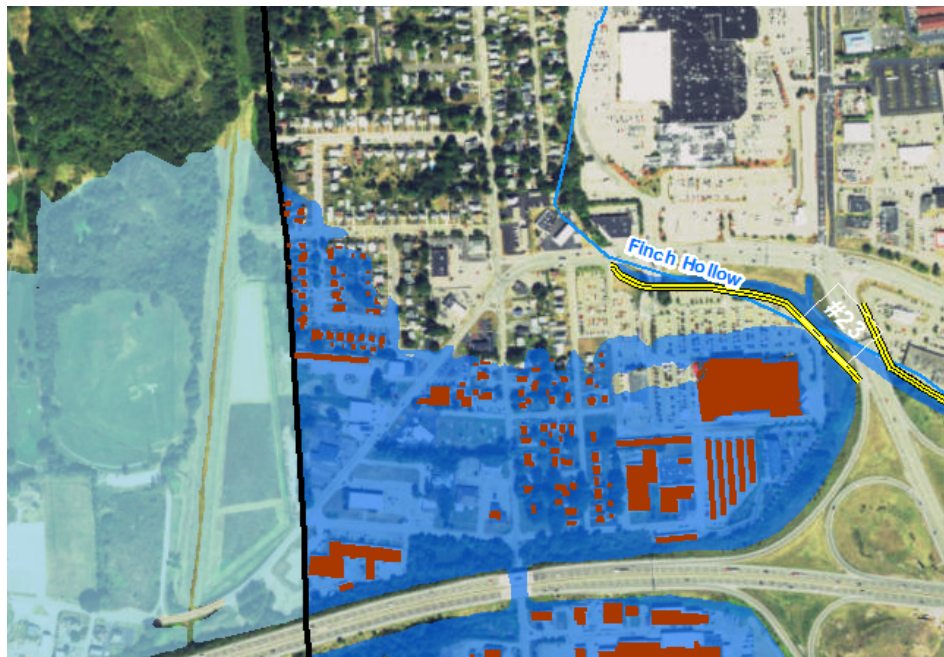


First Pass Results Natural Valley Analysis



- Approximate Number Structures impacted:
 - #23 – 124

Levee System Components: Natural Valley Levee Reach #23 (Susquehanna River)

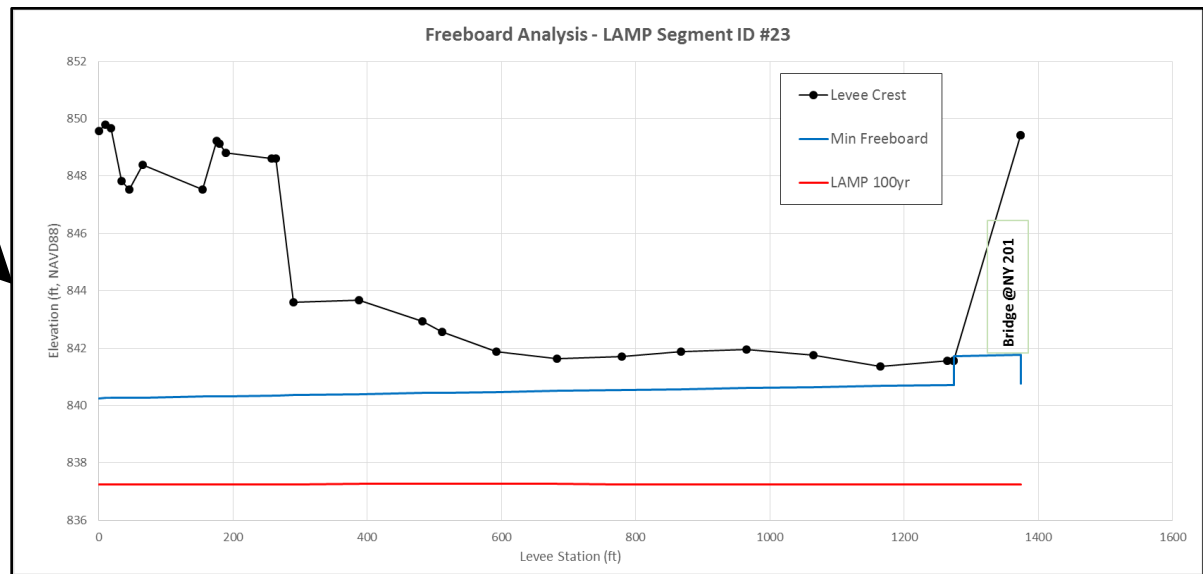


First Pass Results

Free Board Analysis



Reach #23

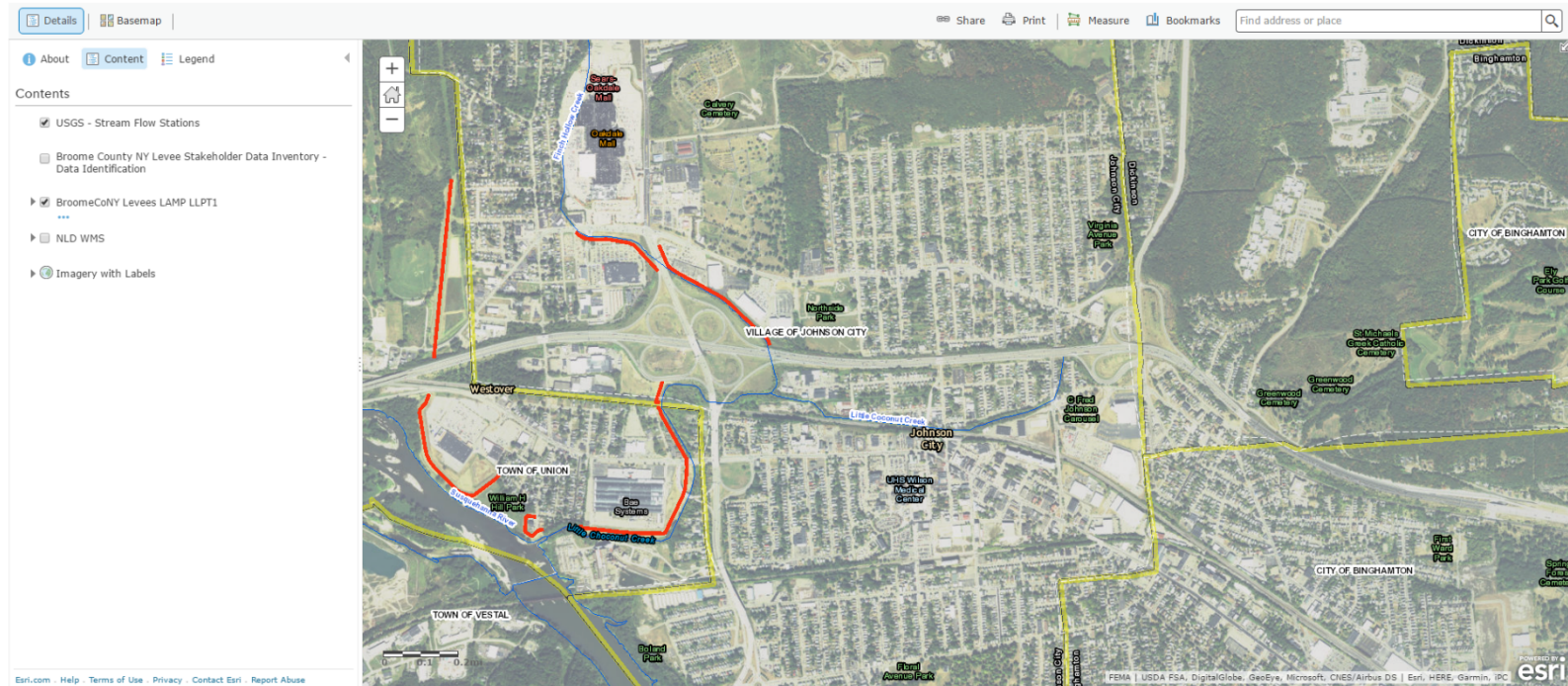


Local Levee System

Access LAMP Data Here: <http://arcg.is/2hXqGBB>

ArcGIS ▼ FEMA Region 2 Levees - Broome County, NY

Modify Map Sign In



Data Requirements

	Natural Valley *	Structural-Based Inundation **	Overtopping Approach**	Freeboard Deficient **	Sound Reach**
Elevation Information for the Levee Crest	-	Required	Required	Required	Required
Operations and Maintenance Plan	-	Recommended	Required	Required	Required
Structural Design Requirements	-	Recommended	Required	Required	Required
Inspection Reports	-	Recommended	Required	Required	Required
Evaluation of Overtopping Erosion Potential	-	-	Required	-	-
BFE Less than Levee Crest	-	-	-	Required	Required
BFE + Freeboard Less than Levee Crest	-	-	-	-	Required

* - No cost to community

** - Potential additional cost to community

LAMP: Current Step

■ LAMP – Current step in Phase 1

1st LLPT Meeting

Apply initial LAMP Procedures and develop First Pass Analyses

2nd LLPT Meeting
Review First Pass Analysis and finalize which Procedure(s) will be applied in future Phase 2 Detailed Analysis (if applicable)

Prepare a LAMP Plan document that summarizes LLPT discussions; First Pass Analyses; and recommended LAMP Procedure to be applied in Phase 2

3rd LLPT Meeting
Draft LAMP Plan will be shared with all LLPT members

Finalize LAMP Plan.
Share Final LAMP Plan with all LLPT members

July 2016

Spring 2017

LAMP: Next Steps

■ LAMP – Final Steps in Phase 1

1st LLPT Meeting

Apply initial LAMP Procedures and develop First Pass Analyses

2nd LLPT Meeting

Review First Pass Analysis and finalize which Procedure(s) will be applied in future Phase 2 Detailed Analysis (if applicable)

Prepare a LAMP Plan document summarizing LLPT discussions; First Pass Analyses; and recommended LAMP Procedure to be applied in Phase 2

3rd LLPT Meeting Technical/ Summary

Draft LAMP Plan will be shared with all LLPT members

Finalize LAMP Plan.

Share Final LAMP Plan with all LLPT members

July 2016

Spring 2017



FEMA

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