WEST PITTSTON BOROUGH

FEASIBILITY STUDY
FOR A NON-FEDERAL FLOOD DAMAGE REDUCTION PROJECT
PUBLIC MEETING

June 12, 2019

WELCOME

ELLEN QUINN, PRESIDENT
WEST PITTSTON BOROUGH COUNCIL

STUDY TEAM

West Pittston Borough

Project Manager–Brozena Consulting Services

Consultants

Borton Lawson
ENGINEERING | ARCHITECTURE

Reilly ASSOCIATES SINCE 1930

Agency Partners

WYOMING VALLEY FLOOD RISK MANAGEMENT PROJECT

PENNDOT

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

U.S. DEPARTMENT OF HOMELAND SECURITY

FEMA

PENNSYLVANIA FISH & BOAT COMMISSION

SRBC
SUSQUEHANNA RIVER BASIN COMMISSION
NY ■ PA ■ MD ■ USA

Tropical Storm Lee

SEPTEMBER 2011

FLOOD IMPACTS:

Residences	880
Businesses	26
Churches	4
Other Public Buildings	4

DAMAGES: $97.9 MILLION

Recovery Planning Process

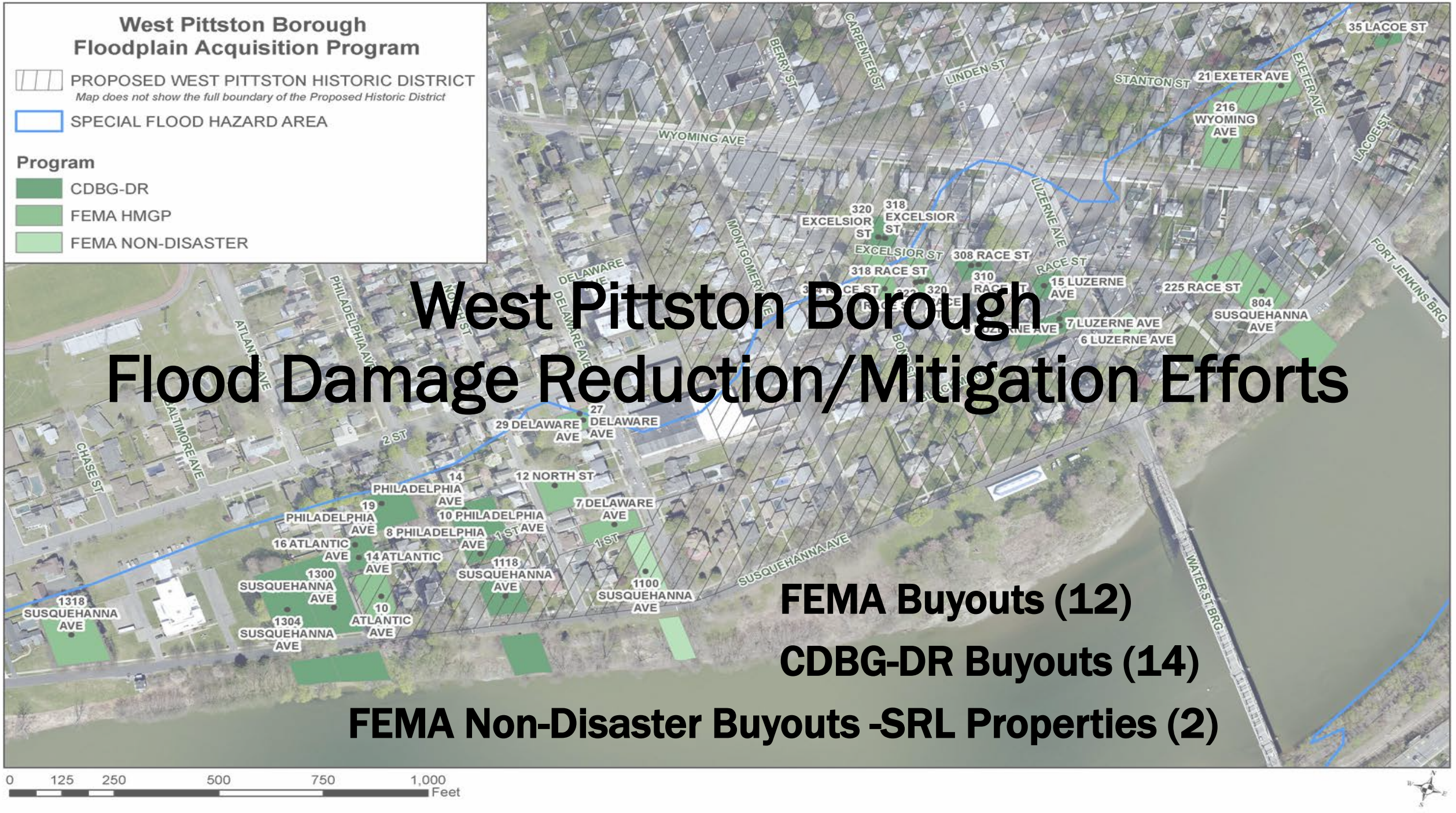
- Natural and Cultural Resources
- Housing
- Business Development
- Outreach and Communication
- **SAFETY**
- Infrastructure

Blossoming Better Than Ever

Long-Term Community Recovery Plan

June 2012

WEST PITTSTON


West Pittston Borough
Floodplain Acquisition Program
PROPOSED WEST PITTSTON HISTORIC DISTRICT
Map does not show the full boundary of the Proposed Historic District
SPECIAL FLOOD HAZARD AREA
Program
CDBG-DR
FEMA HMGP
FEMA NON-DISASTER
West Pittston Borough
Flood Damage Reduction/Mitigation Efforts
FEMA Buyouts (12)
CDBG-DR Buyouts (14)
FEMA Non-Disaster Buyouts -SRL Properties (2)
0 125 250 500 750 1,000
Feet

West Pittston Borough
Flood Damage Reduction/Mitigation Efforts

US Army Corps of Engineers

205 Study, March 2017

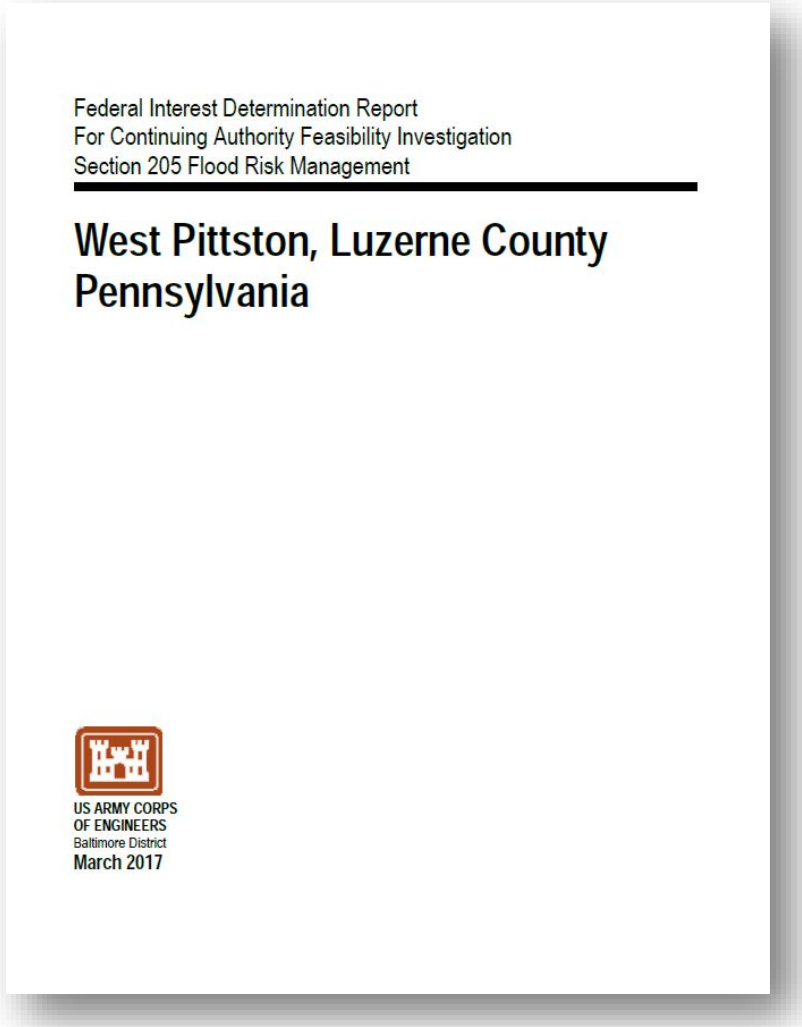
Findings:

Estimated Project Cost (2016 Dollars)

- $51 Million
- Benefit To Cost Ratio = 0.37

Recommendation

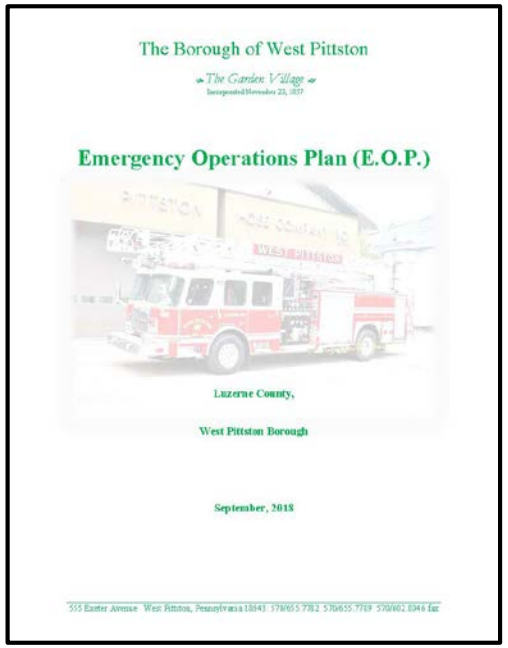
- Insufficient benefits to warrant federal interest.
  Baltimore District recommends termination of study.



West Pittston Borough
Flood Damage Reduction/Mitigation Efforts

Borough Projects

- CodeRED®
- Armory taken over by PA Fish and Boat Commission
- New Emergency Operations Plan
- FEMA Community Assistance Visit (CAV)
- Adopted New Flood Plain Ordinance


The Borough of West Pittston

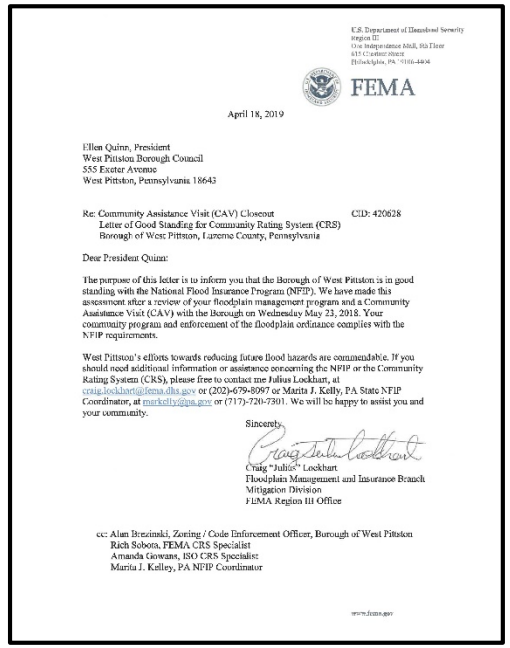
The Garden Village

Emergency Operations Plan (E.O.P.)

Luzerne County,

West Pittston Borough

September, 2018


U.S. Department of Homeland Security
Region III
One Independence Mall, 6th Floor
615 Chestnut Street
Philadelphia, PA 19106-4404

FEMA

April 18, 2019

Ellen Quinn, President
West Pittston Borough Council
555 Exeter Avenue
West Pittston, Pennsylvania 18643

Re: Community Assistance Visit (CAV) Closeout CID: 420628
Letter of Good Standing for Community Rating System (CRS)
Borough of West Pittston, Luzerne County, Pennsylvania

Dear President Quinn:

The purpose of this letter is to inform you that the Borough of West Pittston is in good standing with the National Flood Insurance Program (NFIP). We have made this assessment after a review of your floodplain management program and a Community Assistance Visit (CAV) with the Borough on Wednesday May 23, 2018. Your community program and enforcement of the floodplain ordinance complies with the NFIP requirements.

West Pittston's efforts towards reducing future flood hazards are commendable. If you should need additional information or assistance concerning the NFIP or the Community Rating System (CRS), please free to contact me Julius Lockhart, at craig.lockhart@fema.dhs.gov or (202)-679-8097 or Marita J. Kelly, PA State NFIP Coordinator, at markelly@pa.gov or (717)-720-7301. We will be happy to assist you and your community.

Sincerely,

Craig "Julius" Lockhart
Floodplain Management and Insurance Branch
Mitigation Division
FEMA Region III Office

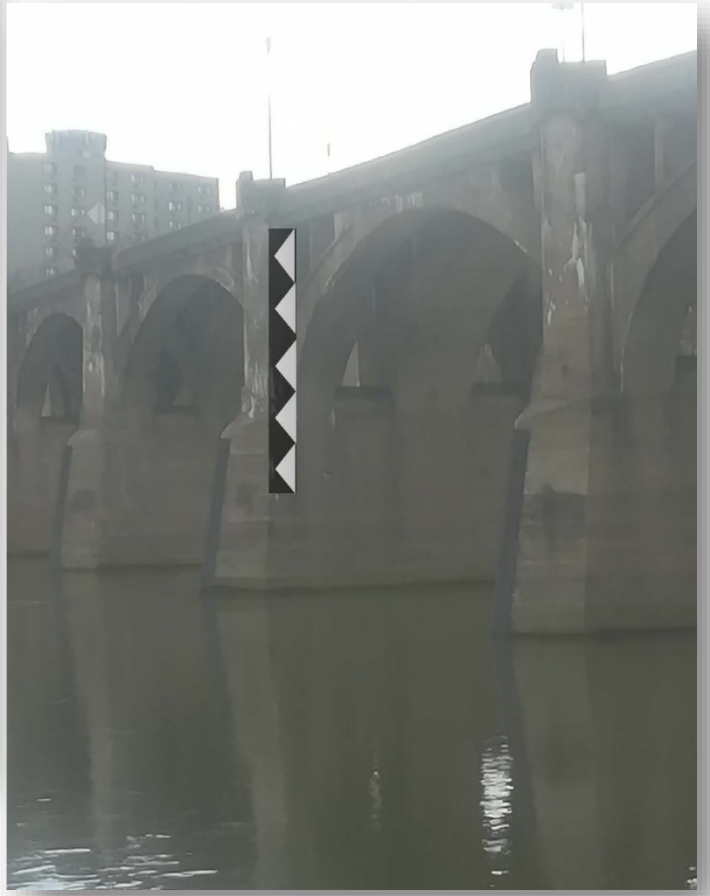
cc: Alan Brezinski, Zoning / Code Enforcement Officer, Borough of West Pittston
Rich Sobota, FEMA CRS Specialist
Amanda Gowans, ISO CRS Specialist
Marita J. Kelley, PA NFIP Coordinator

www.fema.gov

West Pittston Borough
Flood Damage Reduction/Mitigation Efforts

Luzerne County Flood Protection Authority (LCFPA) Projects

- Radar River Gage/Staff Gage
- Community Rating System (CRS) Program
- Inventory of Flood Plain Properties/Development of Flood Damage Reduction Strategies
- Elevation of Repetitive Loss (RL) and Severe Repetitive Loss (SRL) Properties

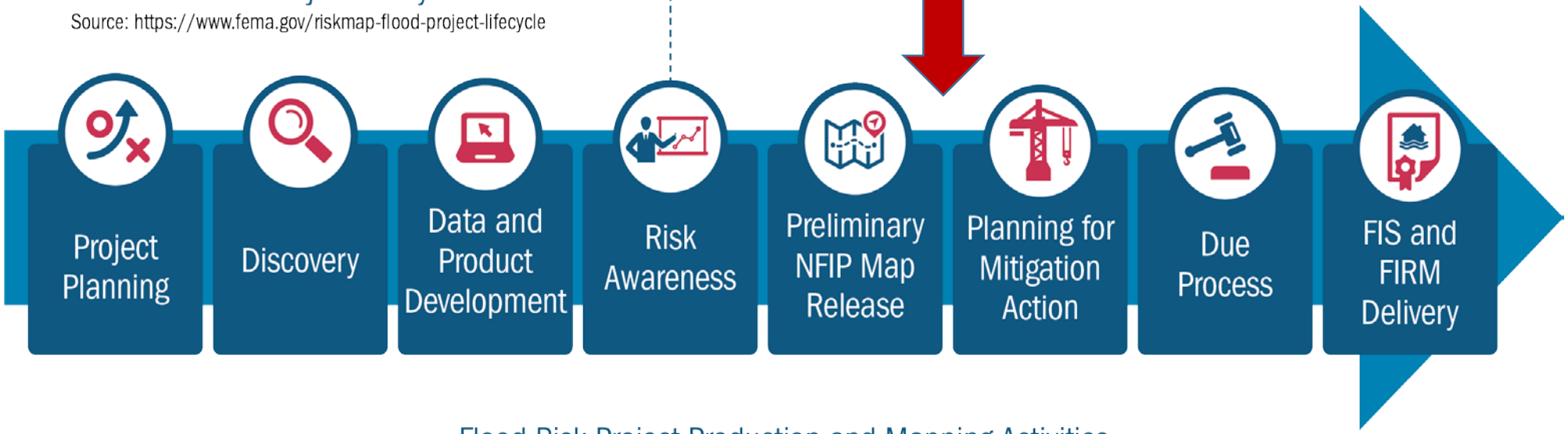


Flood Insurance Rate Map Update

RiskMAP Project Lifecycle

Source: https://www.fema.gov/riskmap-flood-project-lifecycle

Scheduled for Summer 2019

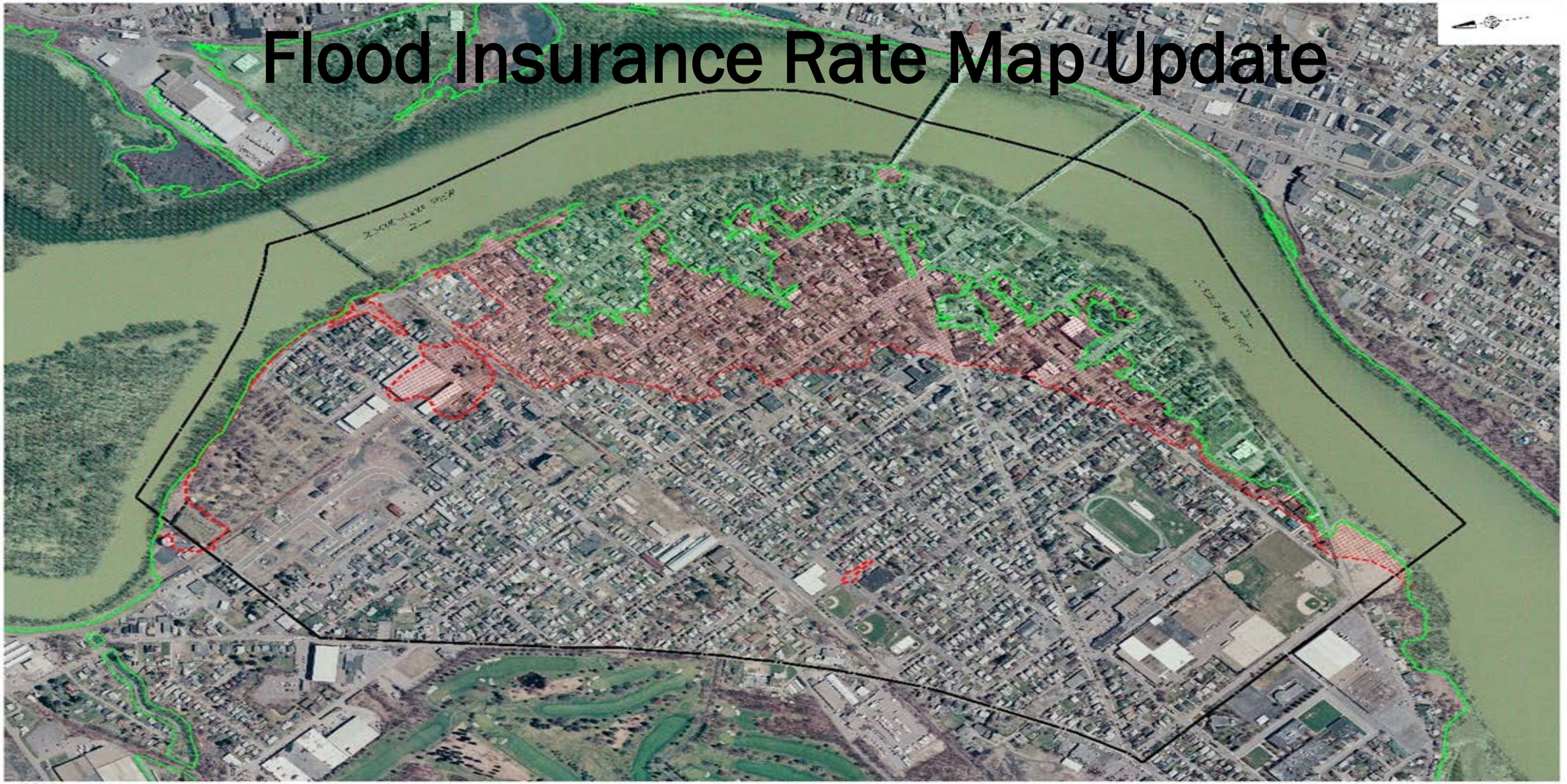


Spring 2020 (Proposed)

Flood Risk Project Production and Mapping Activities

Souce: Fema Guidance for Stakeholder Engagement, Project Planning Phase (Nov 2015)

Flood Insurance Rate Map Update



FLOOD PLAIN MANAGEMENT DATA
EFFECTIVE FEMA FLOOD INSURANCE
STUDY INFORMATION

Reilly

1 OF 1

Bloomsburg, PA Levee Project

Non-Federal Project

Timeline:

- Design/Bidding 18 months
- Construction 18 months
- **Total Timeline: 3 years**

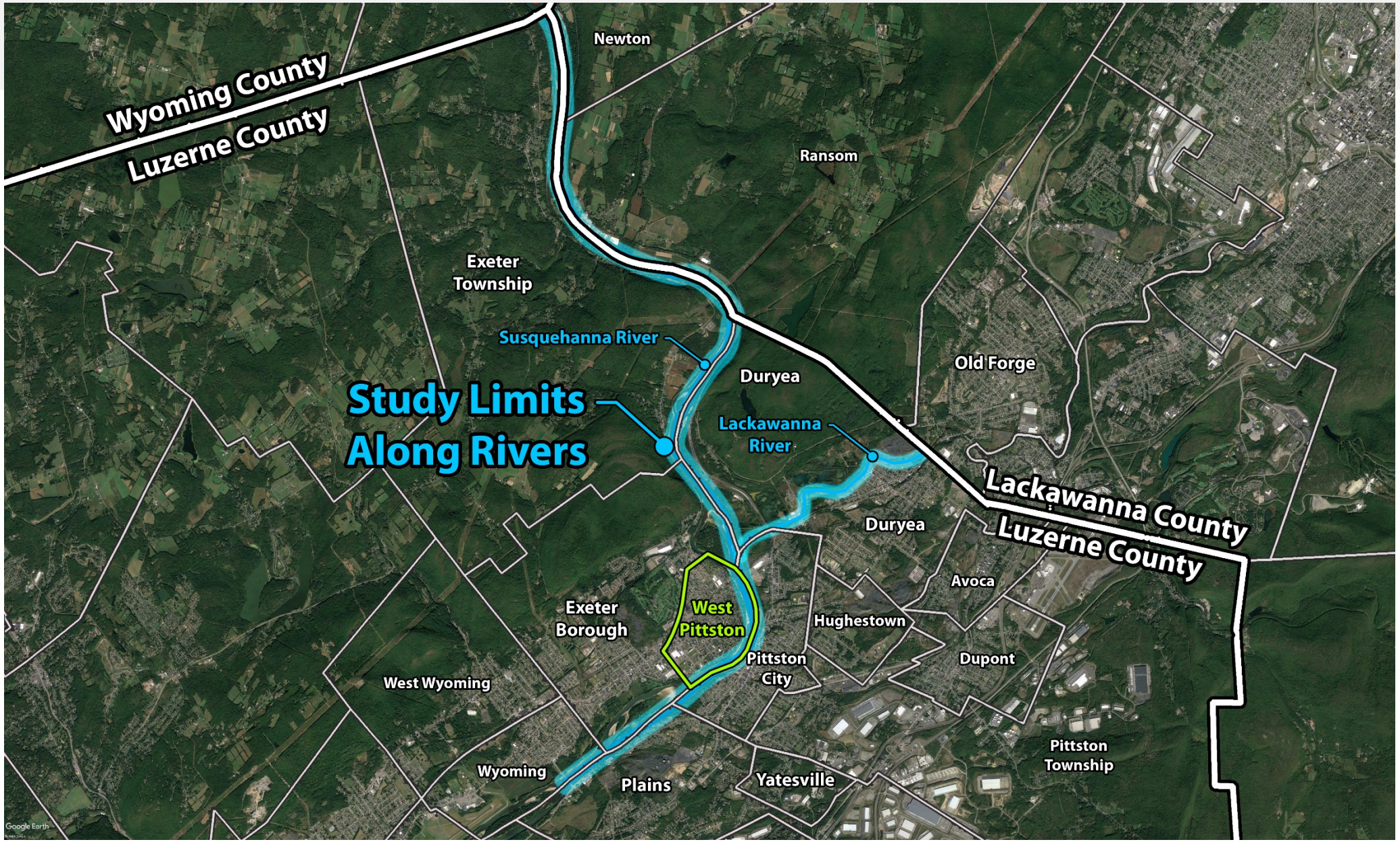
Construction Cost:

- **$25,000,000**

West Pittston Study

- Luzerne County Office of Community Development
  - CDBG-DR Planning Grant $225,000
- Study Area
- Evaluate Alternatives To Reduce Flood Risk, Structural and Non-Structural
- Minimum 2 alternatives - Base Flood Elevation & Reoccurrence of Tropical Storm Lee
- Structural Alternatives Must Meet NFIP Requirements
- Study Duration – 6 months
- Public Outreach
  - Project Website
  - Email Questions
- Draft Study Public Meeting #2 – Late Summer 2019

Study Area


Wyoming County
Luzerne County
Newton
Ransom
Exeter Township
Susquehanna River
Duryea
Old Forge
Study Limits Along Rivers
Lackawanna River
Lackawanna County
Luzerne County
Duryea
Avoca
Exeter Borough
West Pittston
Hughestown
Pittston City
Dupont
West Wyoming
Pittston Township
Wyoming
Plains
Yatesville
Google Earth

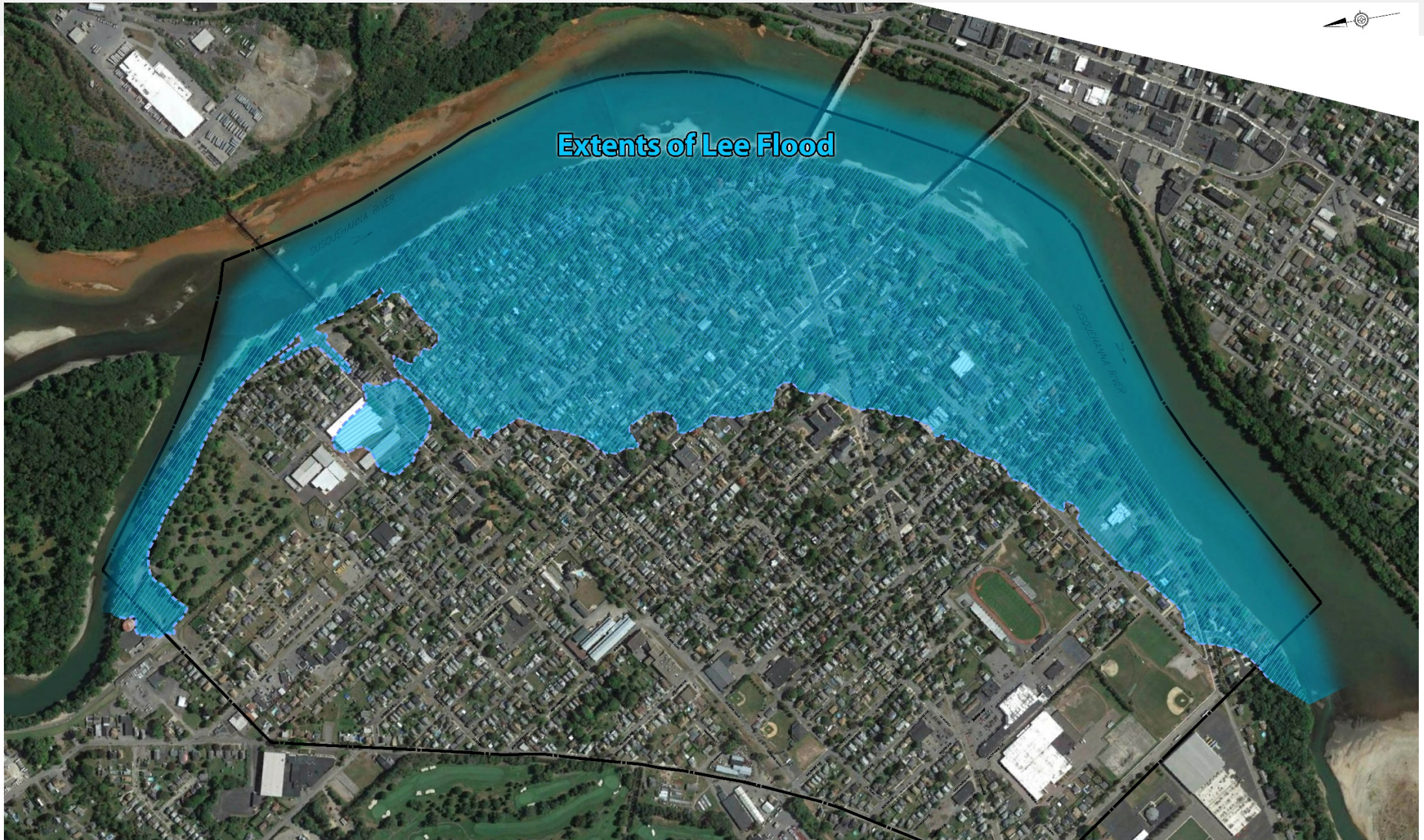
Scope of Study

- Inventory Existing Conditions and Forecasted Conditions
- Gather community input on possible solutions
- Formulate Alternative Plans
- Refine Goals, Objectives and Constraints
- Evaluate Alternatives
- Public Outreach
- Recommend Plan

Study Data Acquired

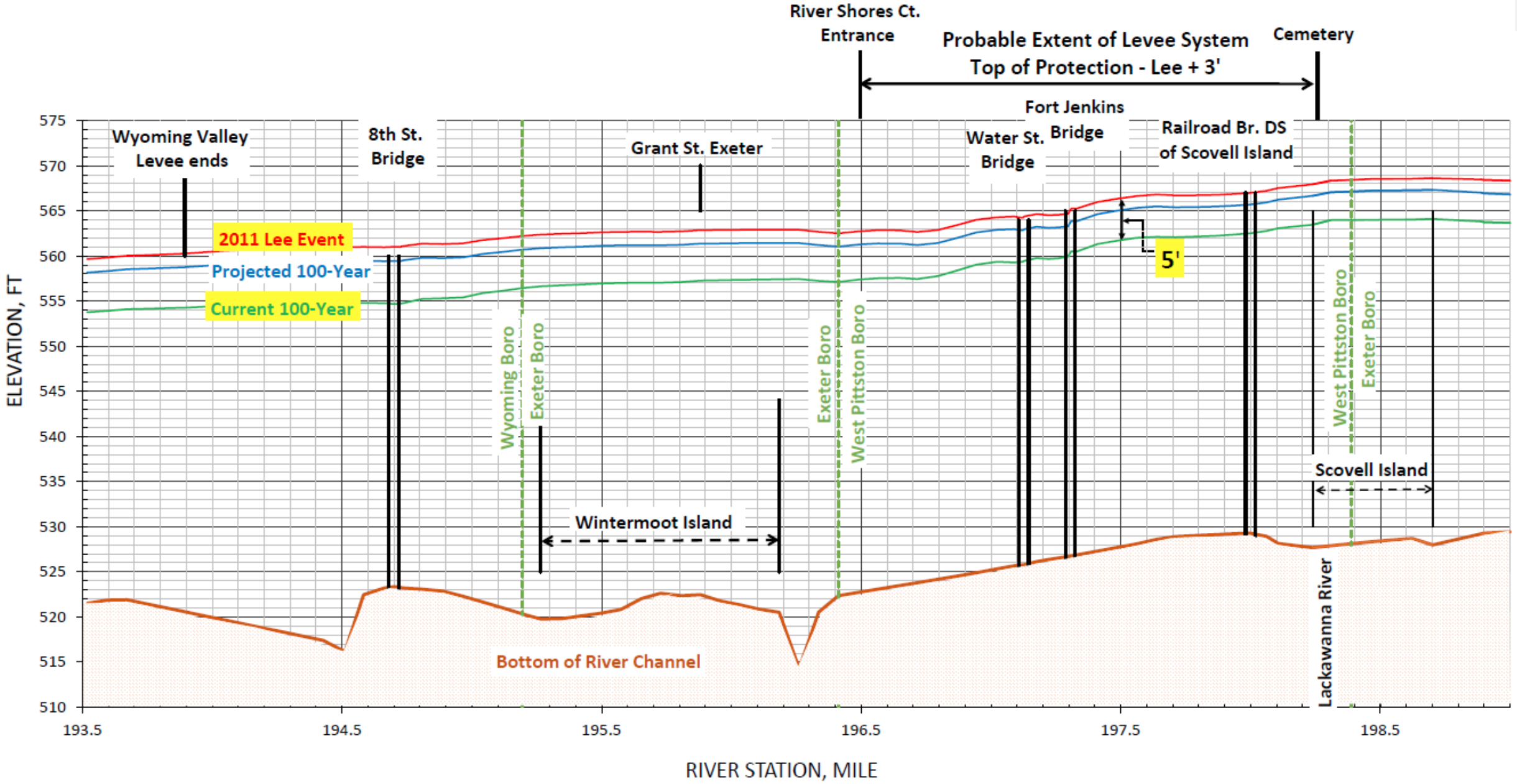
- Past Studies
- 2011 High Water Marks
- Eighth Street Bridge Plans
- FEMA Flood Models and Profiles
- Utilities Impact on Possible Alignment
- Storm & Sanitary Sewers
- Environmental Constraints
- Historical Mining Records
- Cost Data

Extent of Storm Lee Flooding



Susquehanna Water Surface Elevations

Current 100-Year Event, Projected100-Year Event with Storm Lee (2011 - Record Flood)



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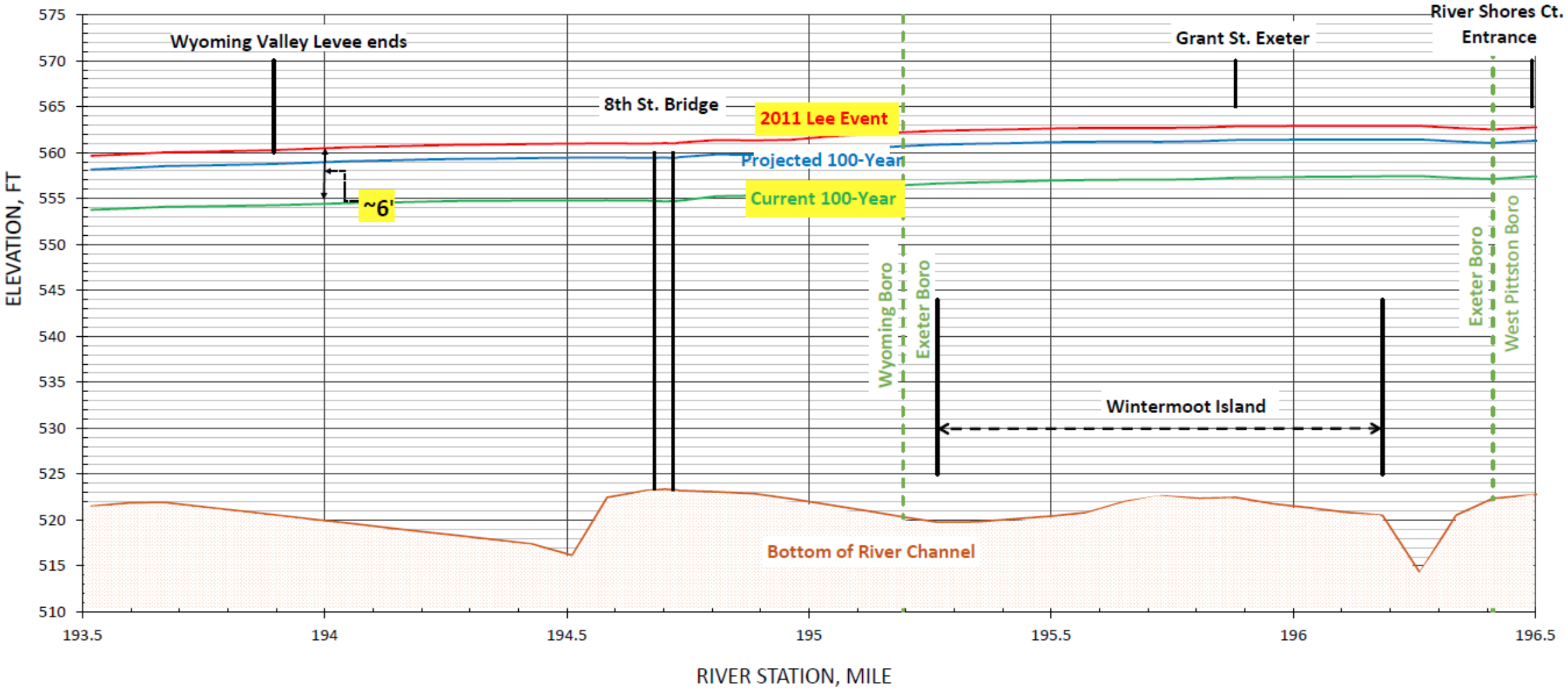

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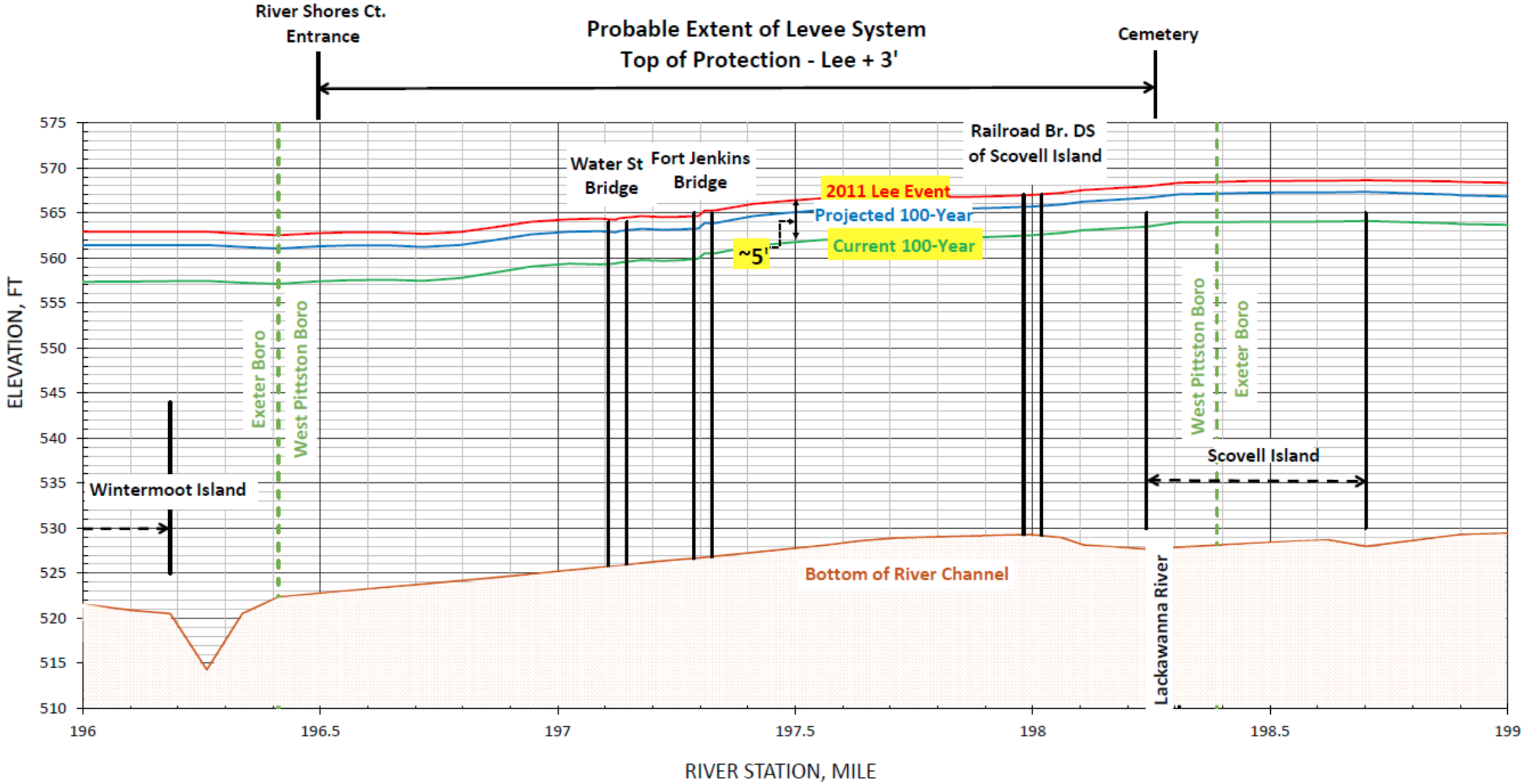


Probable Limits & Heights of Levee

System Options To Be Considered

- No Build
- Evacuate Floodplain – 900 Structures

  >$130 Million
- Dredging – Will Be Evaluated
- Island Removal – Will Be Evaluated
- Bladder – Will Be Evaluated
- Levees/Walls – Will Be Evaluated

General System Considerations

- Meet FEMA & National Flood Insurance Program Requirements
- Meet Funding Agency Requirements
- Minimizes:
  - Environmental Impacts
  - Property Takes
  - Induced Flooding
- Considers:
  - Bridge Options
  - Sewer Utility Upgrades
  - Channel Improvements
  - Funding & Construction
  - Community Input/Priorities
  - Riverbank Tree Removal
  - Riverfront Enhancement

Impact of Utilities/Sewers

- Utilities – Water, gas, communications lines crossing levee alignment Significant cost to incorporate into system
- Storm and Sanitary sewers crossing levee alignment - need to be consolidated to minimize cost of control structures
- Sanitary Authority force mains crossing potential levee alignment

Mining/Bridges

- Mining - Knox Mine Disaster Occurred Just Downstream of Study Area. Evaluate potential Impact of Shallow Mines on System Options

- Eighth Street Bridge – Recent FEMA study included new bridge. Evaluate Impact of New Bridge During 2011 Event

- Fort Jenkins/Water Street Bridges – Not Hydraulically Efficient
  Work with PennDOT to Plan for Replacement with More Efficient Waterway Opening

Engineering Issues

- Establish Top of Protection Elevation
- Type of Structural System- Wall, Earthen Levee
- Consolidate Utility/Sewer Crossings for Cost Effective System
- Replace Bridges with More Efficient Structures
- Increase Channel Efficiency (Island Removal Etc.)
- System Cost / Phasing

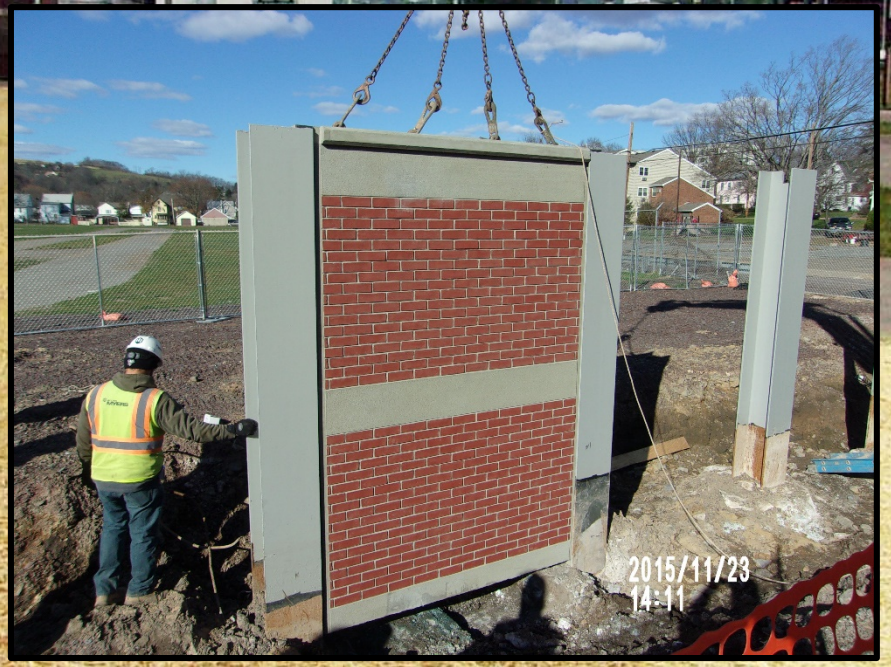
Possible System Components

- Levees/Walls/Combination of Both
- Stormwater Pump Stations
- Relocation of WVSA Sanitary Pump Station
- Roadway Closure Structures at Bridges
- Sewer/Utility Control Structures
- Roadway Adjustments
- Up and Downstream Mitigation

Earth Levee – 15 Feet High

Earth Levee with Wall – 11 Feet High

H-Pile Wall (Brick Veneer Finish) – 8 Feet High



MSE Wall (Mechanically Stabilized Earth) – 10 Feet High

Typical Pump Station

Roadway Closures

Content of Final Report

- Recommended Plan
- Permitting Requirements
- Detailed Cost
- Community Impacts
- Planning Opportunities for Complimentary Projects
- Induced Flooding / Mitigation
- Project Features / Renderings
- Schedule for Design / Construction
- Funding Options

FOR MORE PROJECT INFO....

Project Webpage

www.westpittstonboro.com/2019FloodStudy

Send Questions/Comments

leveestudy.westpittstonboro@comcast.net

Thank You!

Questions?