

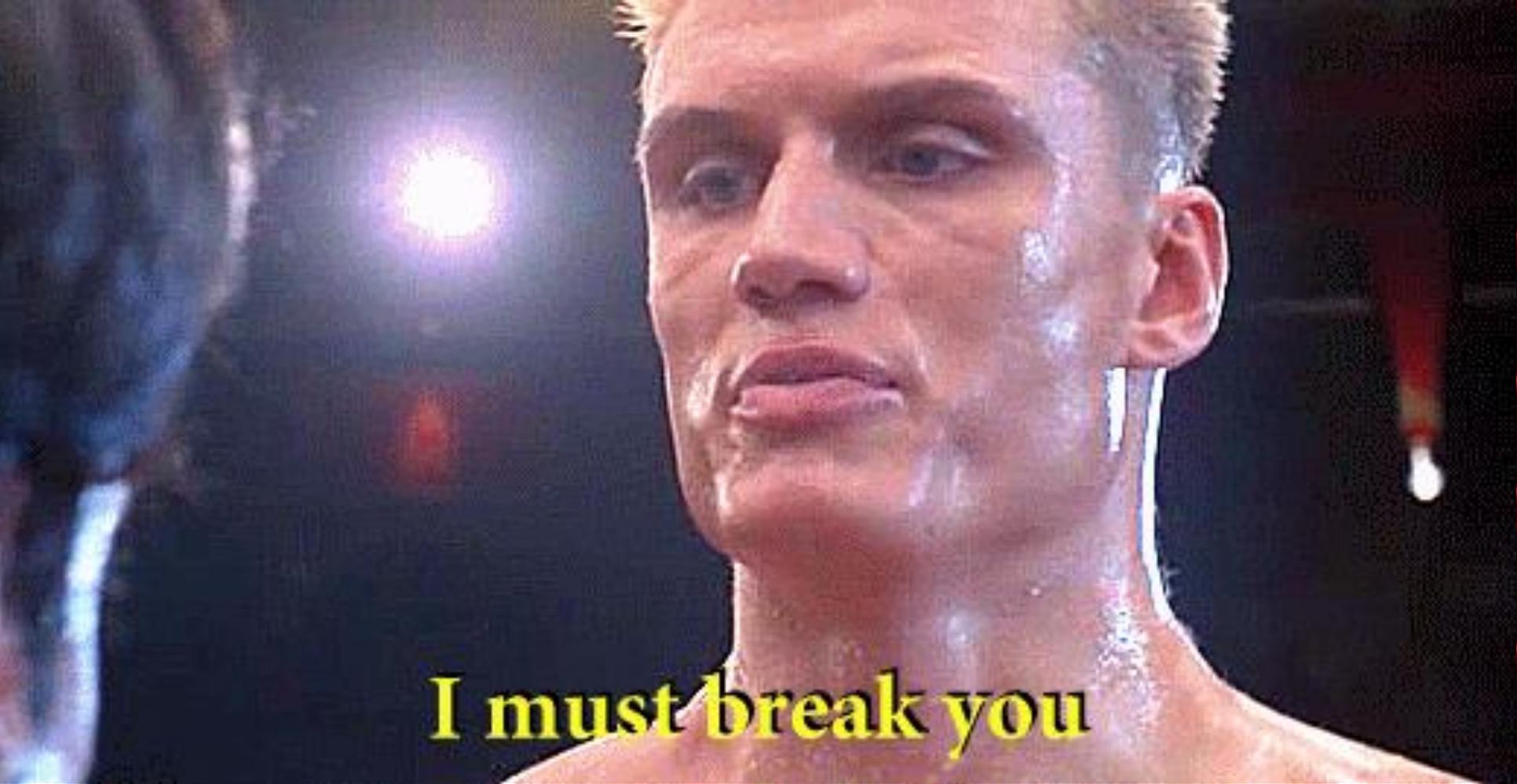
# The Greater Muncy Resiliency Plan

**MUNCY AREA,  
LYCOMING COUNTY,  
PENNSYLVANIA**

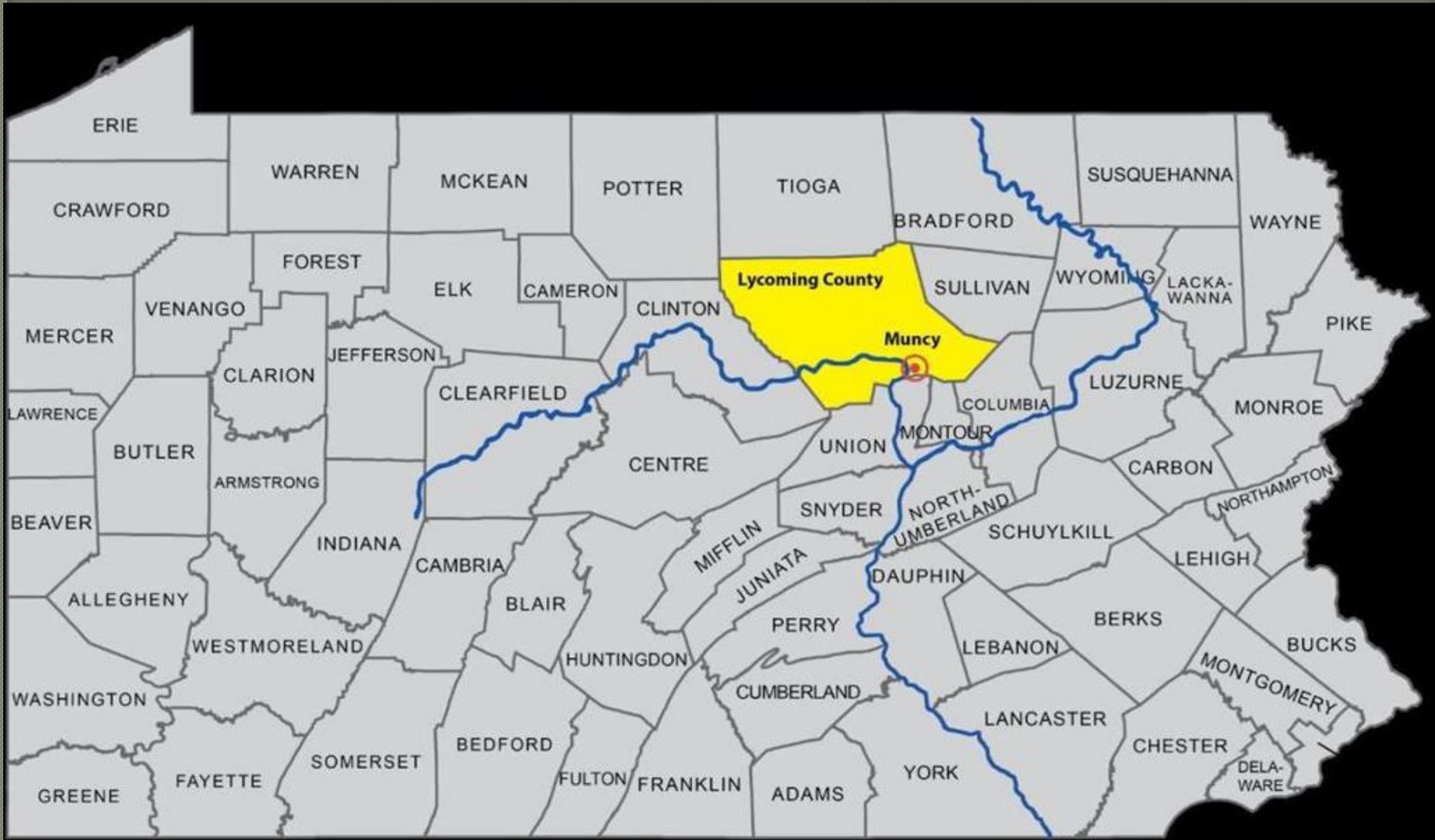
# Building Resilient States: Profiles in Action

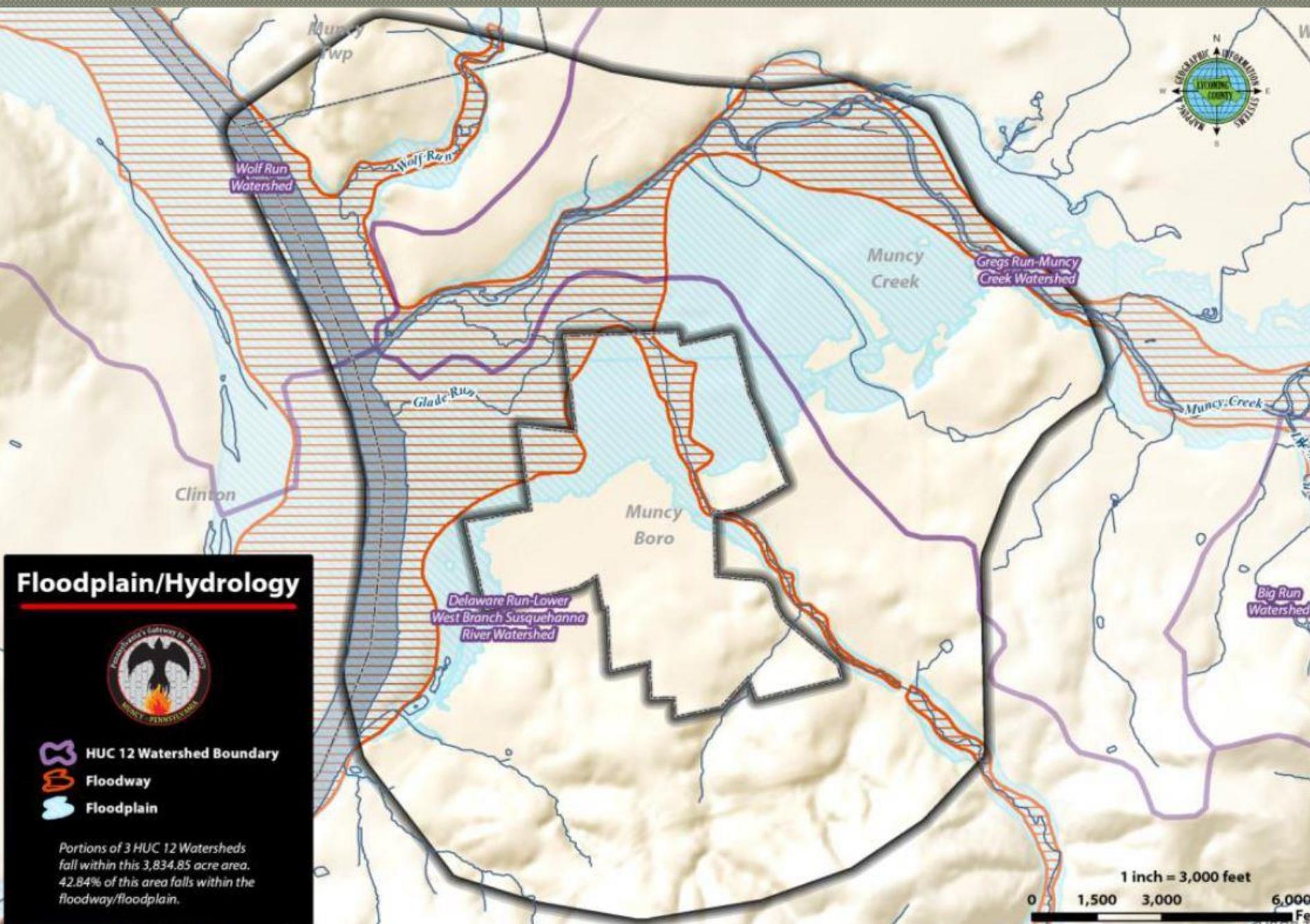
- ❖ Colorado
- ❖ Oregon
- ❖ Connecticut
- ❖ New HampshireOhio
- ❖ New York
- ❖ Florida
- ❖ North Carolina
- ❖ Louisiana
- ❖ Vermont
- ❖ California





**I must break you**



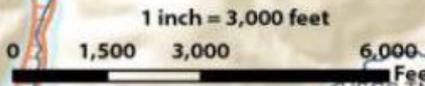


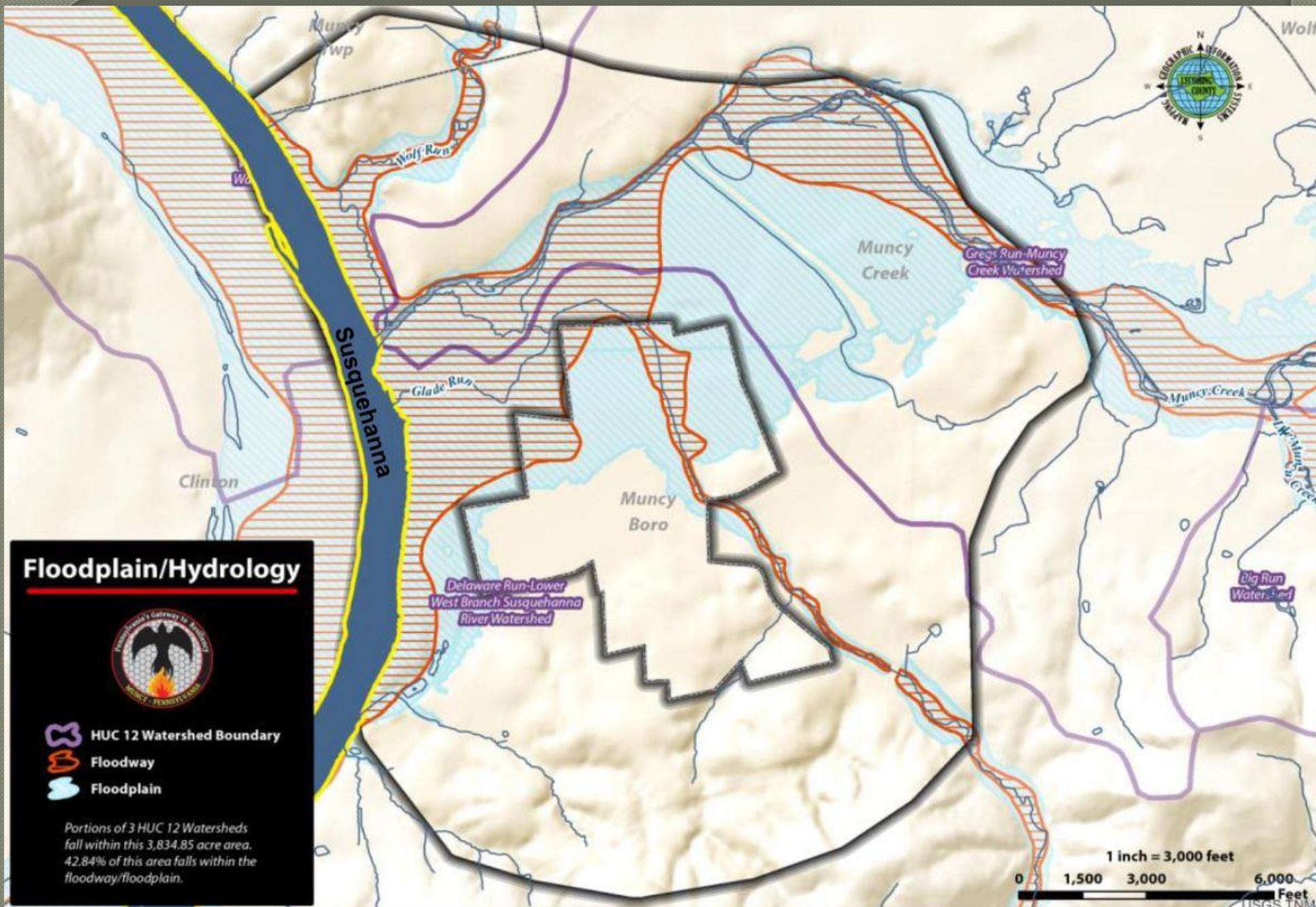
## Floodplain/Hydrology



-  HUC 12 Watershed Boundary
-  Floodway
-  Floodplain

Portions of 3 HUC 12 Watersheds fall within this 3,834.85 acre area. 42.84% of this area falls within the floodway/floodplain.





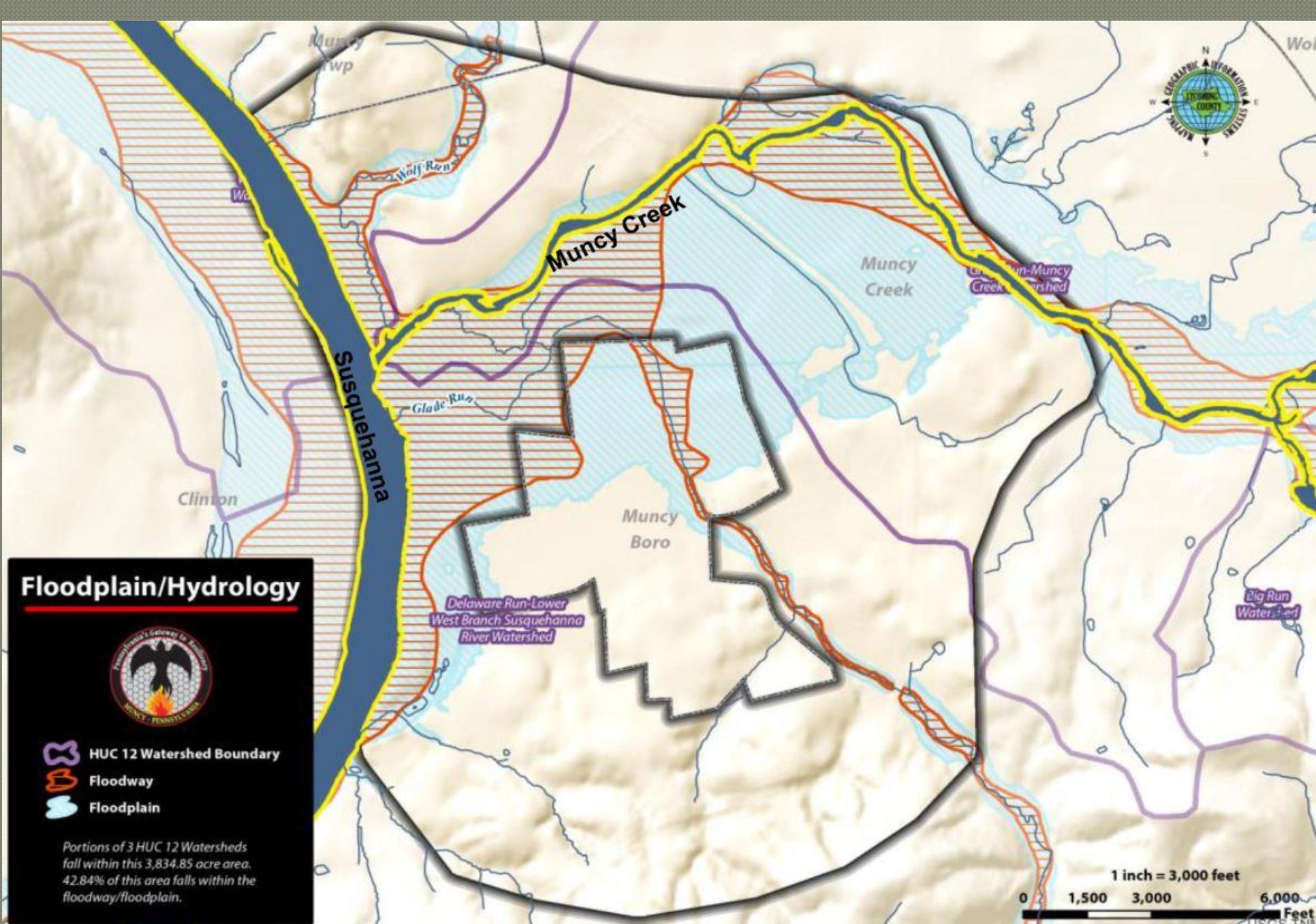
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1 inch = 3,000 feet  
 0 1,500 3,000 6,000 Feet

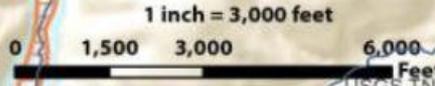


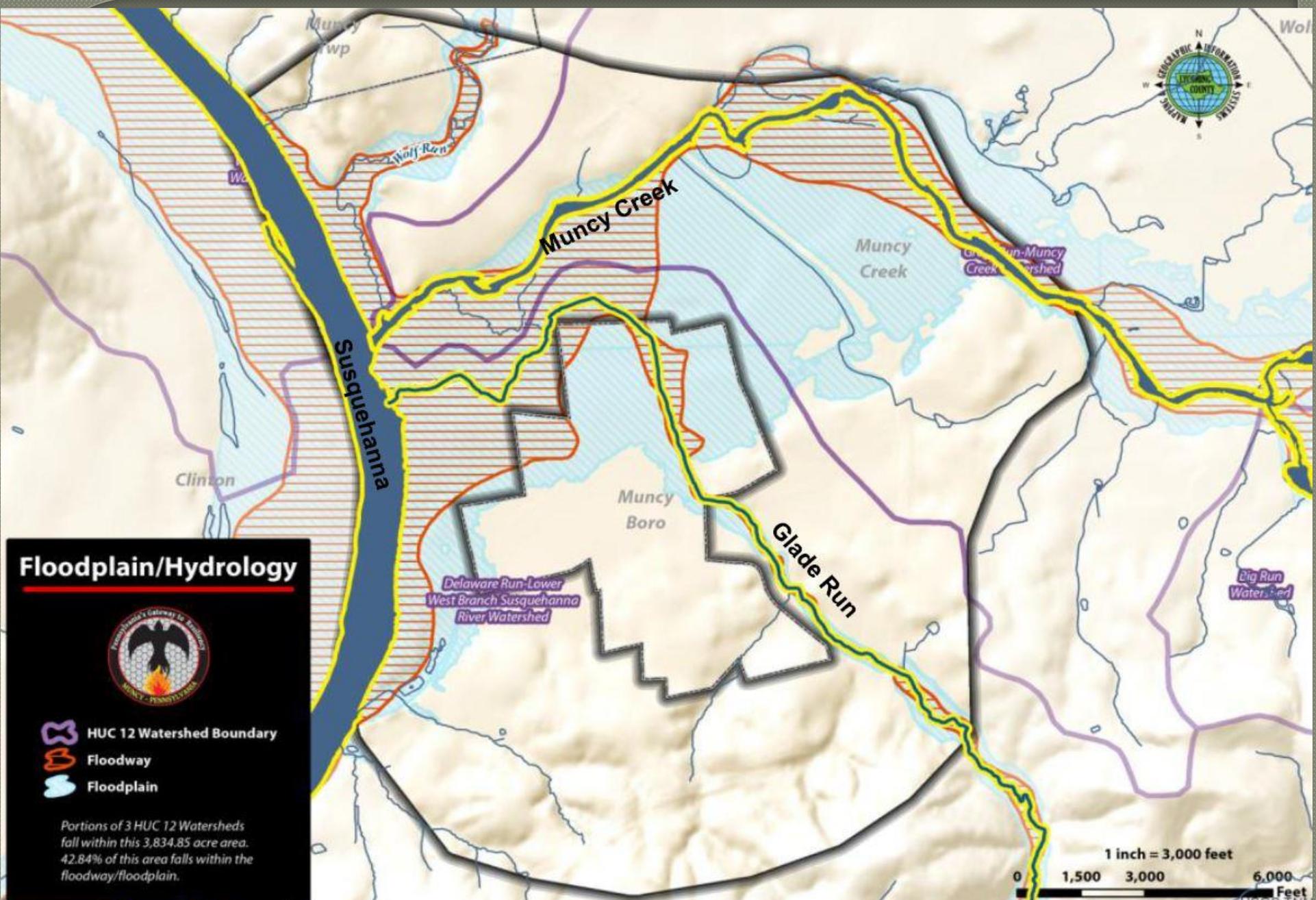
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Muncy Creek  
Susquehanna

Muncy Creek

Muncy Creek

Muncy Boro

Glade Run

Delaware Run-Lower West Branch Susquehanna River Watershed

Big Run Watershed

Clinton

W

Muncy  
wp

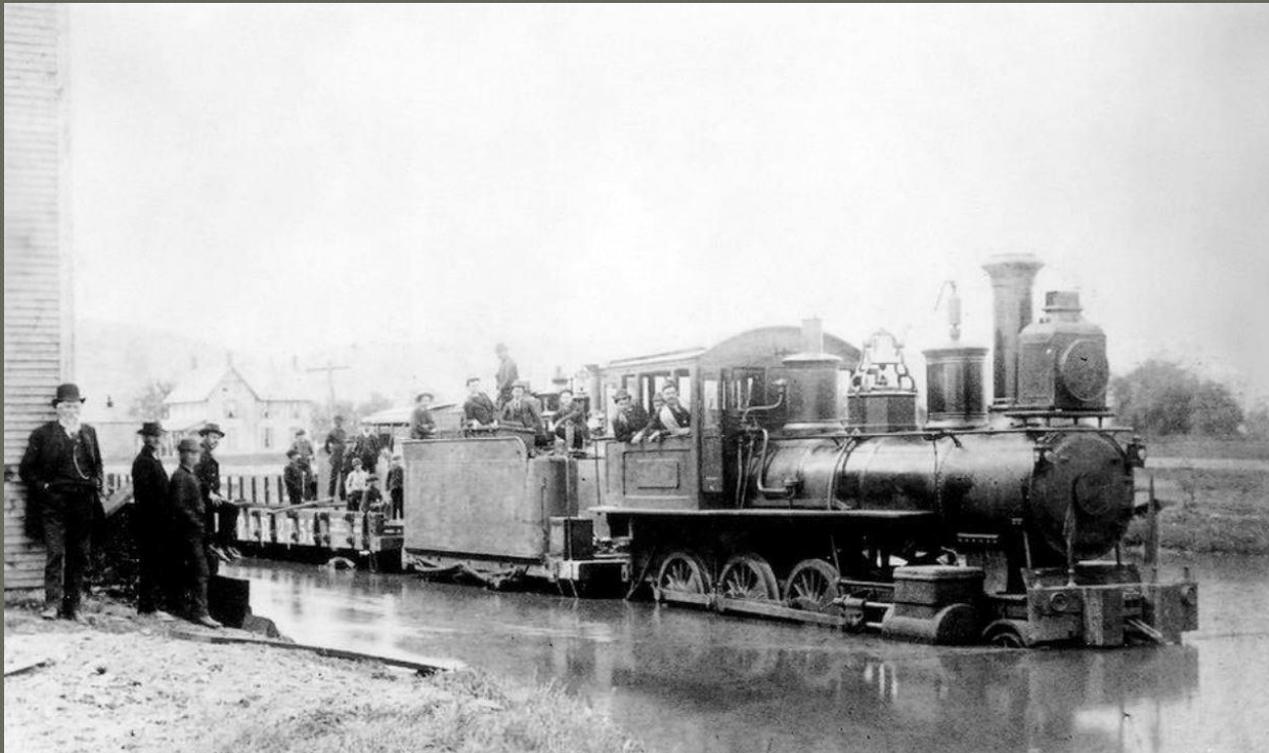
Wolf Run

Glade Run-Muncy Creek Watershed

Wol

**“Floods are acts of Nature; but flood losses are largely acts of man.”**

Dr. Gilbert White Father of Floodplain Management



1936



2011



# 2011

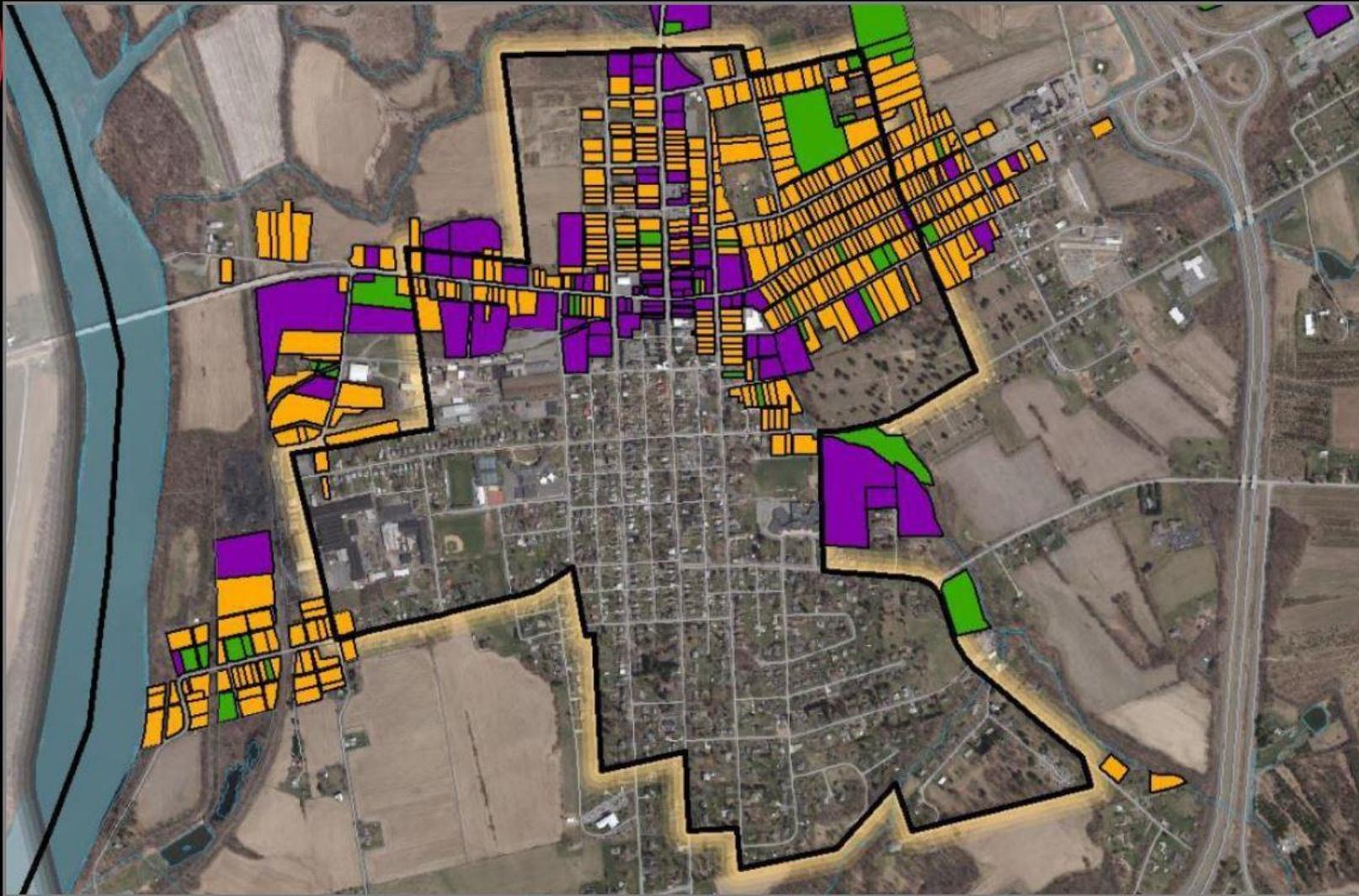


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● 41%

● Residential and Commercial Structures in  
Floodplain

# Commercial & Residential Structures in Floodplain



Res. No Basement



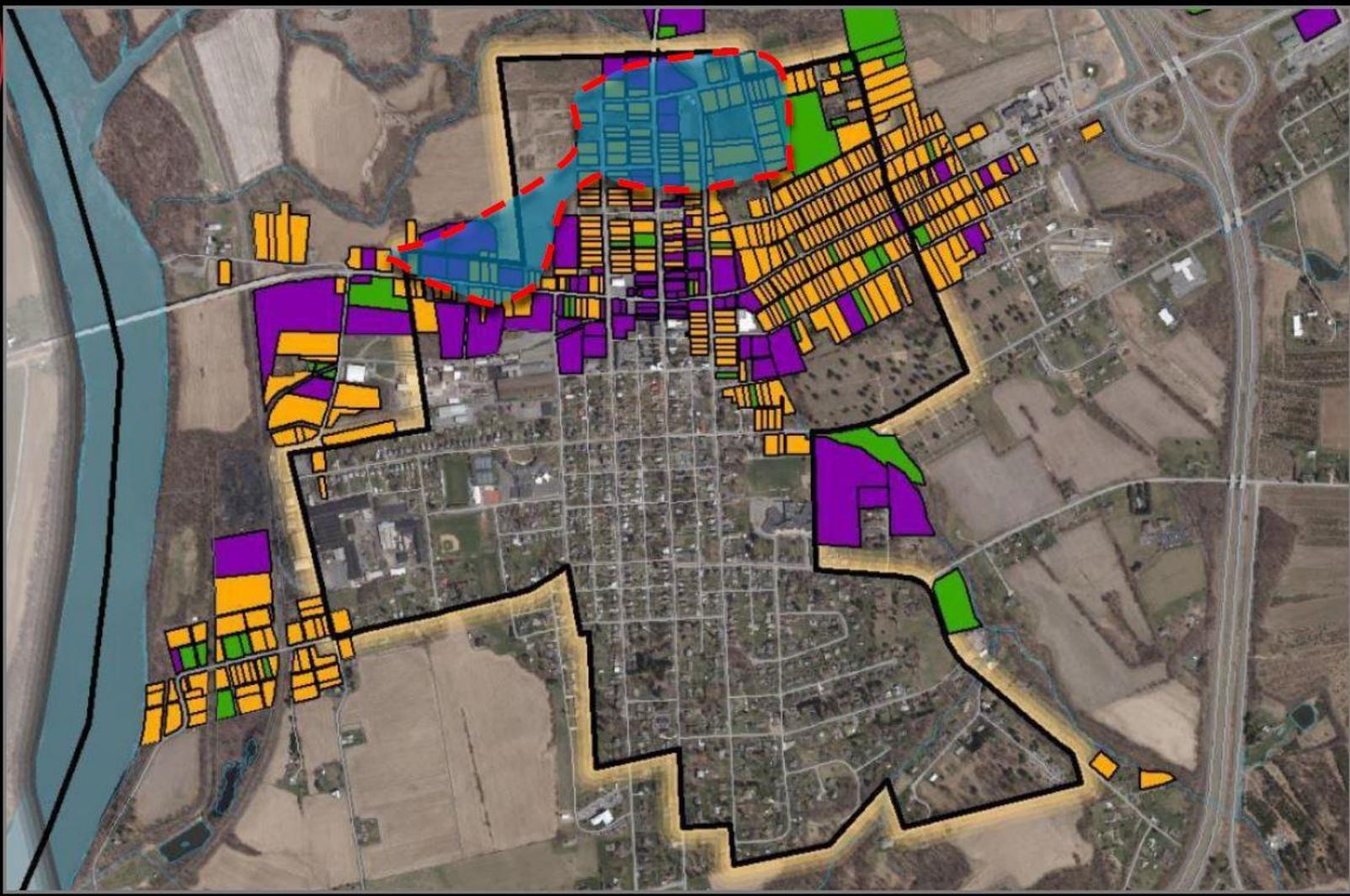
Res. w/Basement



Commercial



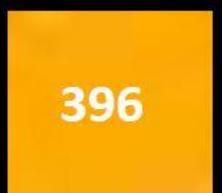
# Commercial & Residential Structures in Floodplain



Res. No Basement



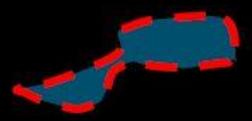
Res. w/Basement



Commercial



Repetitive Loss Area



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**40%**

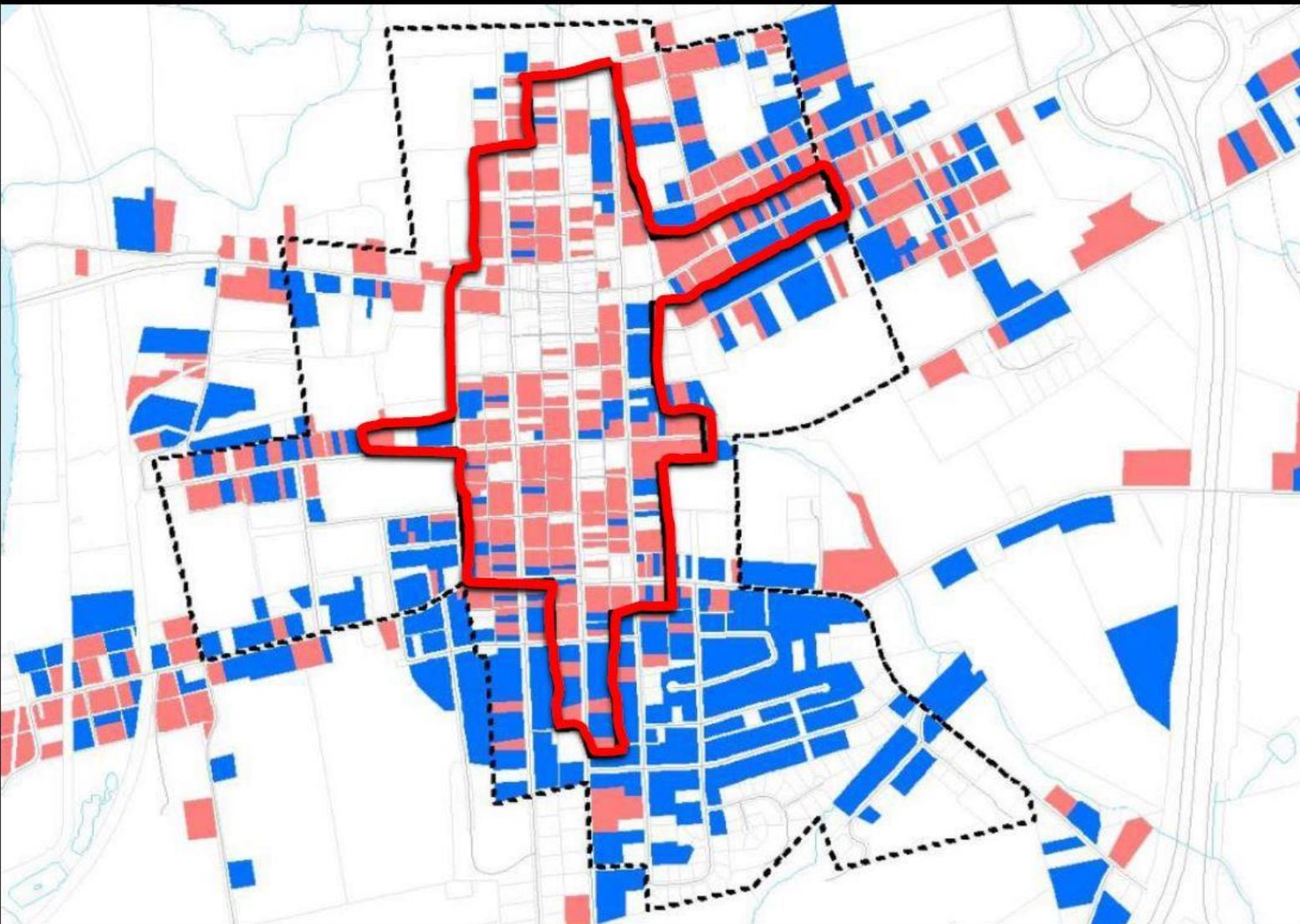
**Residences built  
prior to 1905**

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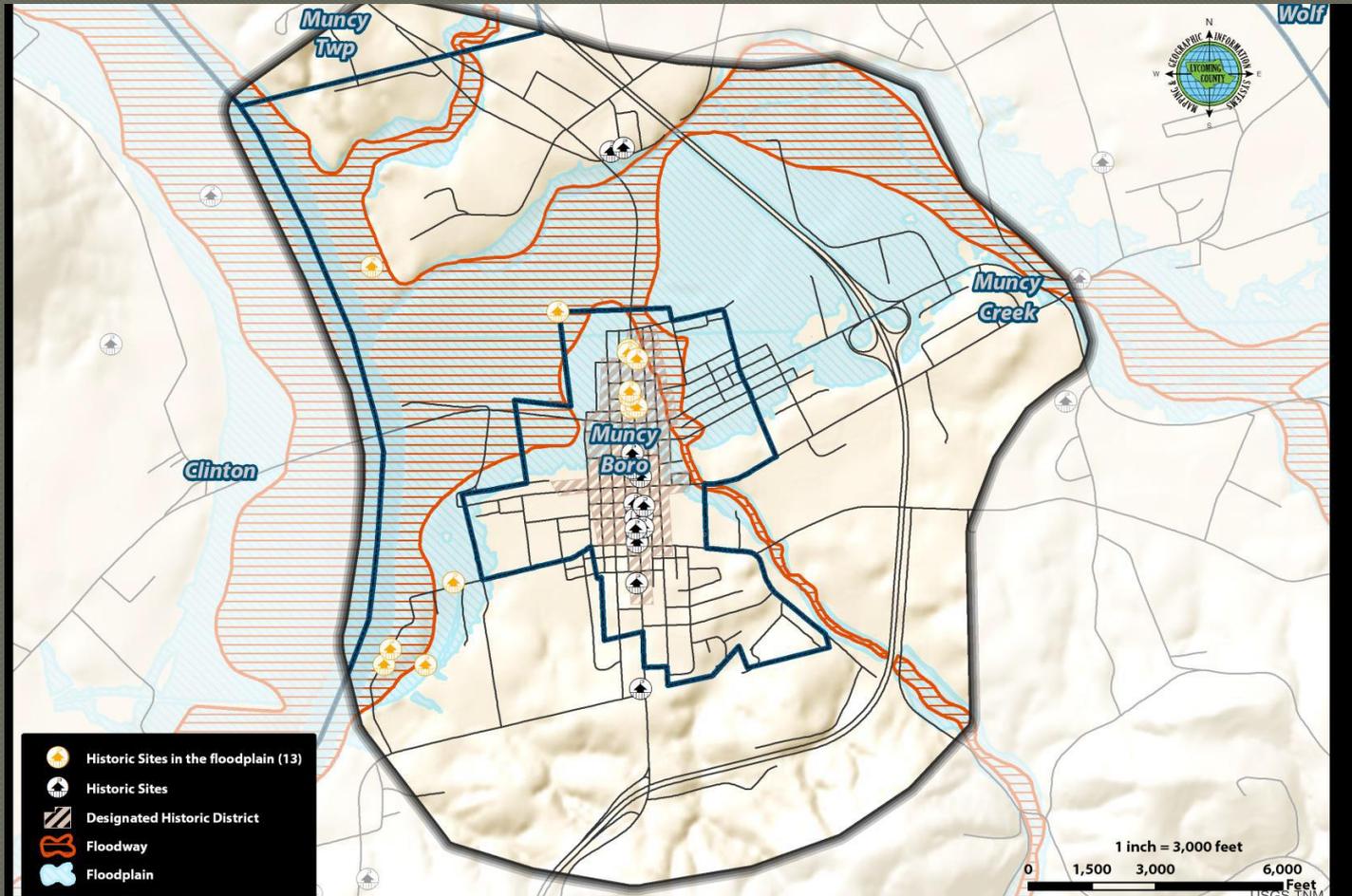
**80%**

**Residences built  
prior to 1980**

# Residential Structures – Year Built



# 13 Historic Sites in Floodplain



# Flooding Consequences

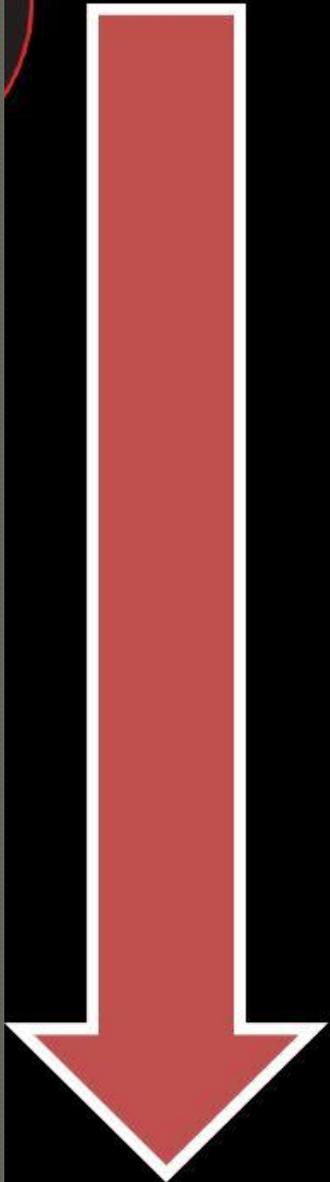
Home Value

Tax Base

Neighborhood Synergy

Insurance Affordability

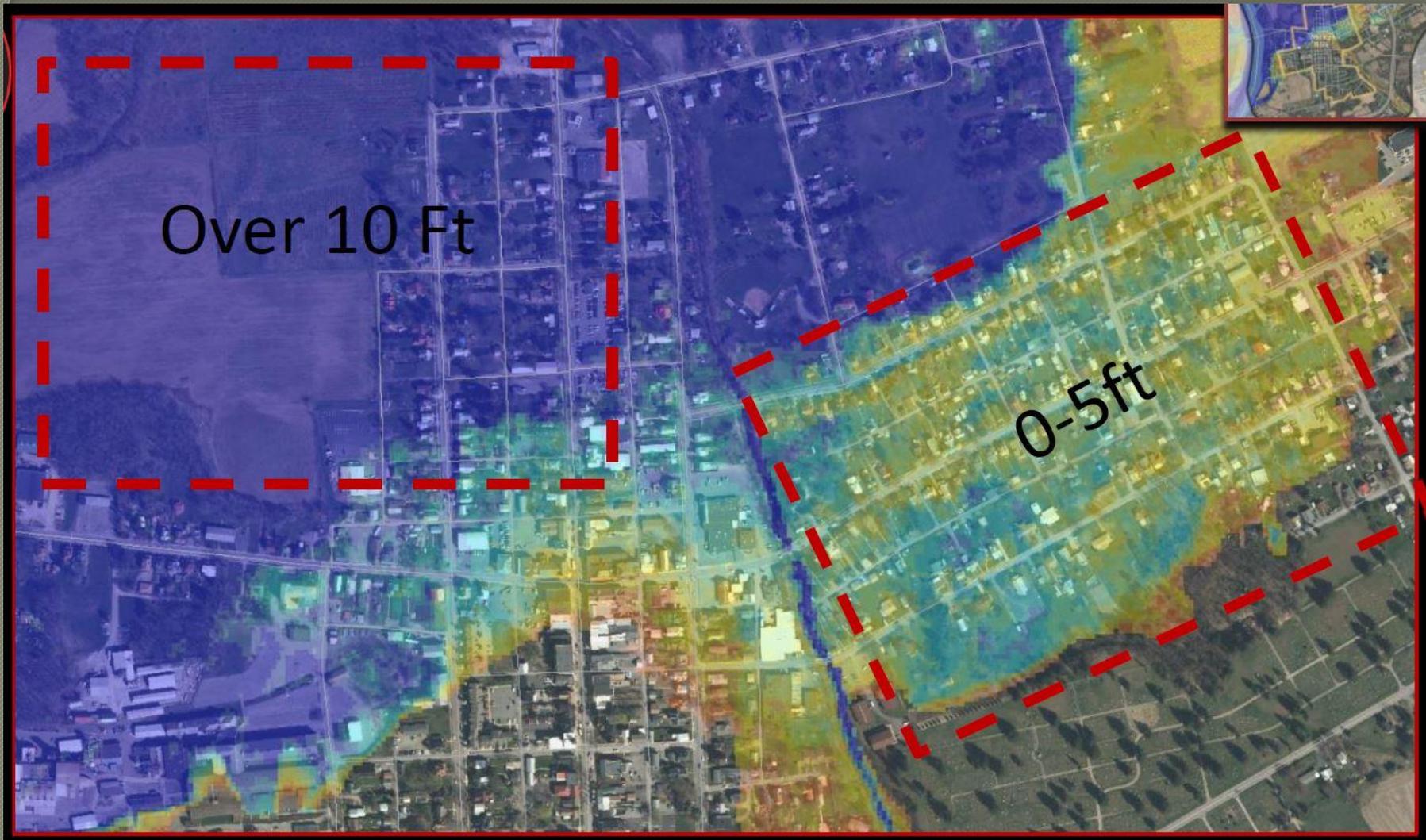
Health





Over 10 Ft

0-5ft



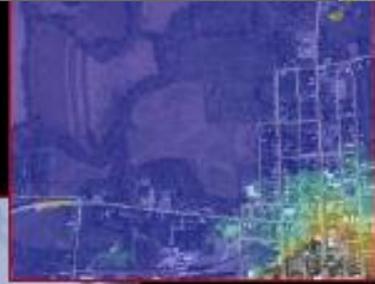
# Muncy Main Street



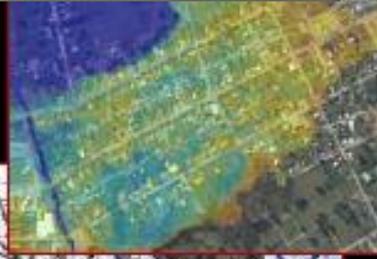
# Main Street, USA - Disney



# Deep Flooding



# Low Flooding



# Town Hall April 2017

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# Town Hall April 2018



# Local Advisory Committee



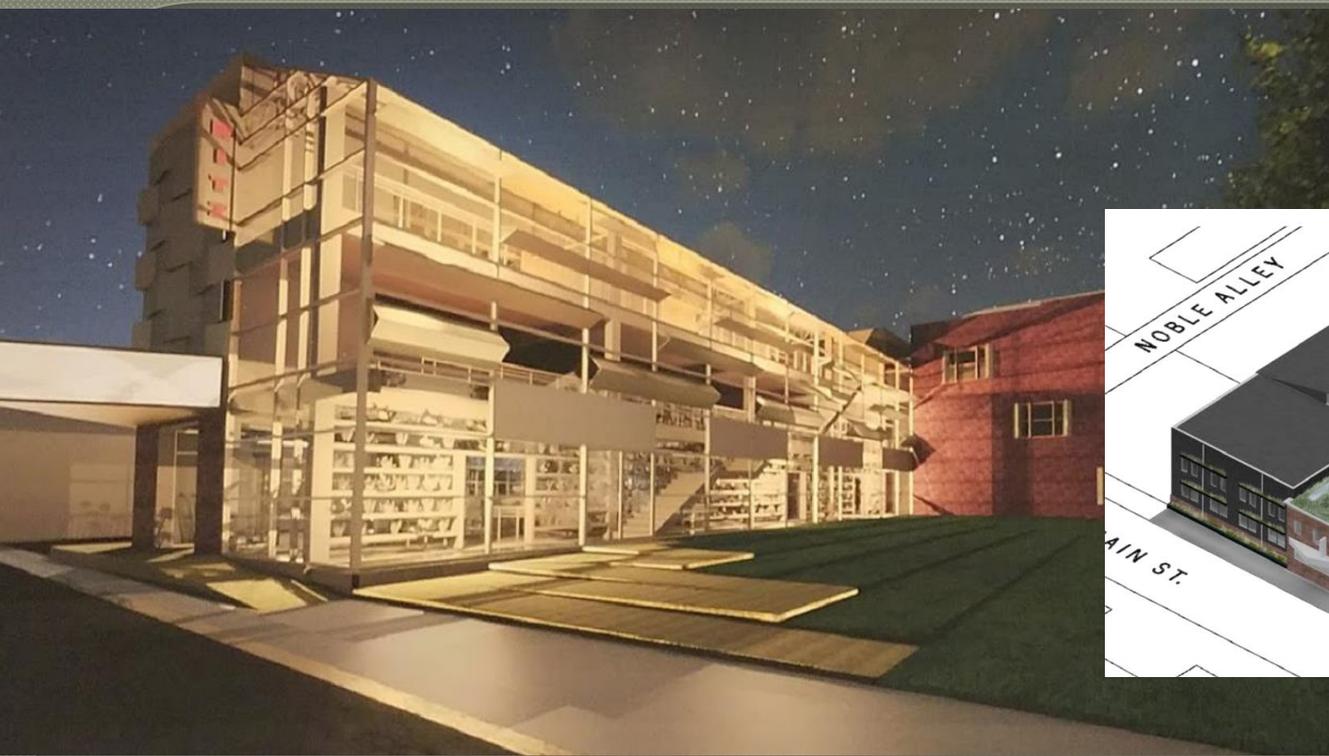
# Free Student Work

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# Project Gaps

Resiliency Boundary

Muncy Borough

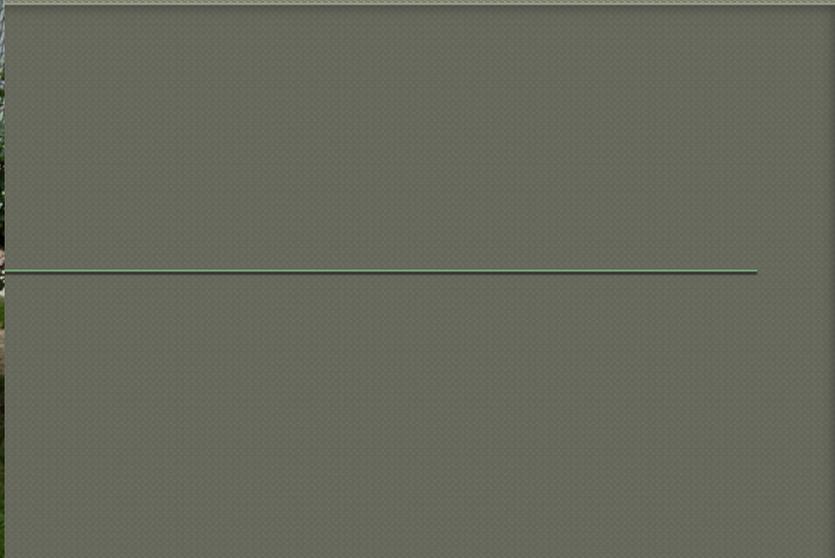
Muncy Creek Township

Project Type	
	Stomwater / Drainage
	Transportation
	Sanitary Sewer
	Water
	Green Space / Parks



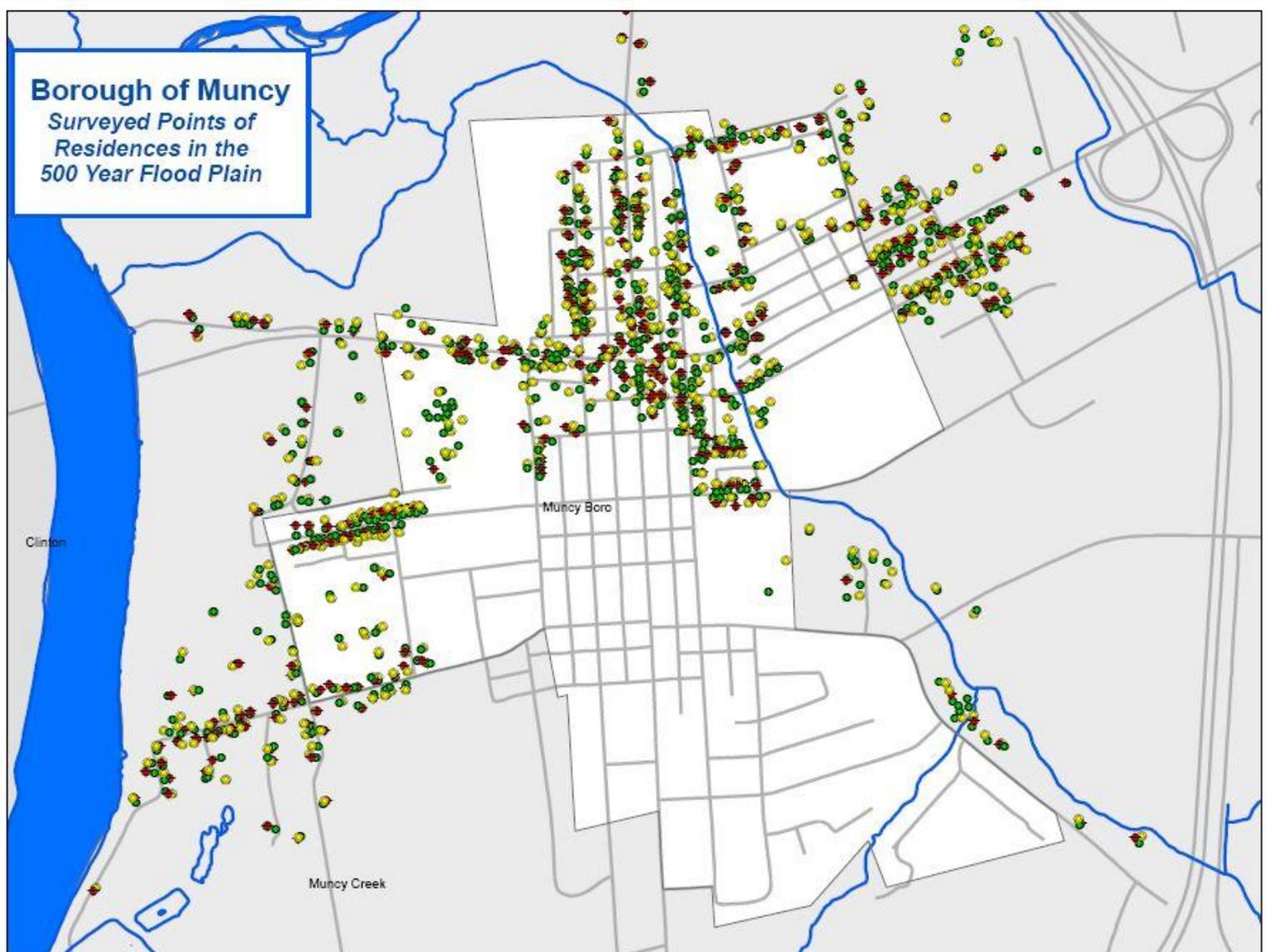
Esri, HERE, Garmin, © OpenStreetMap contributors, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



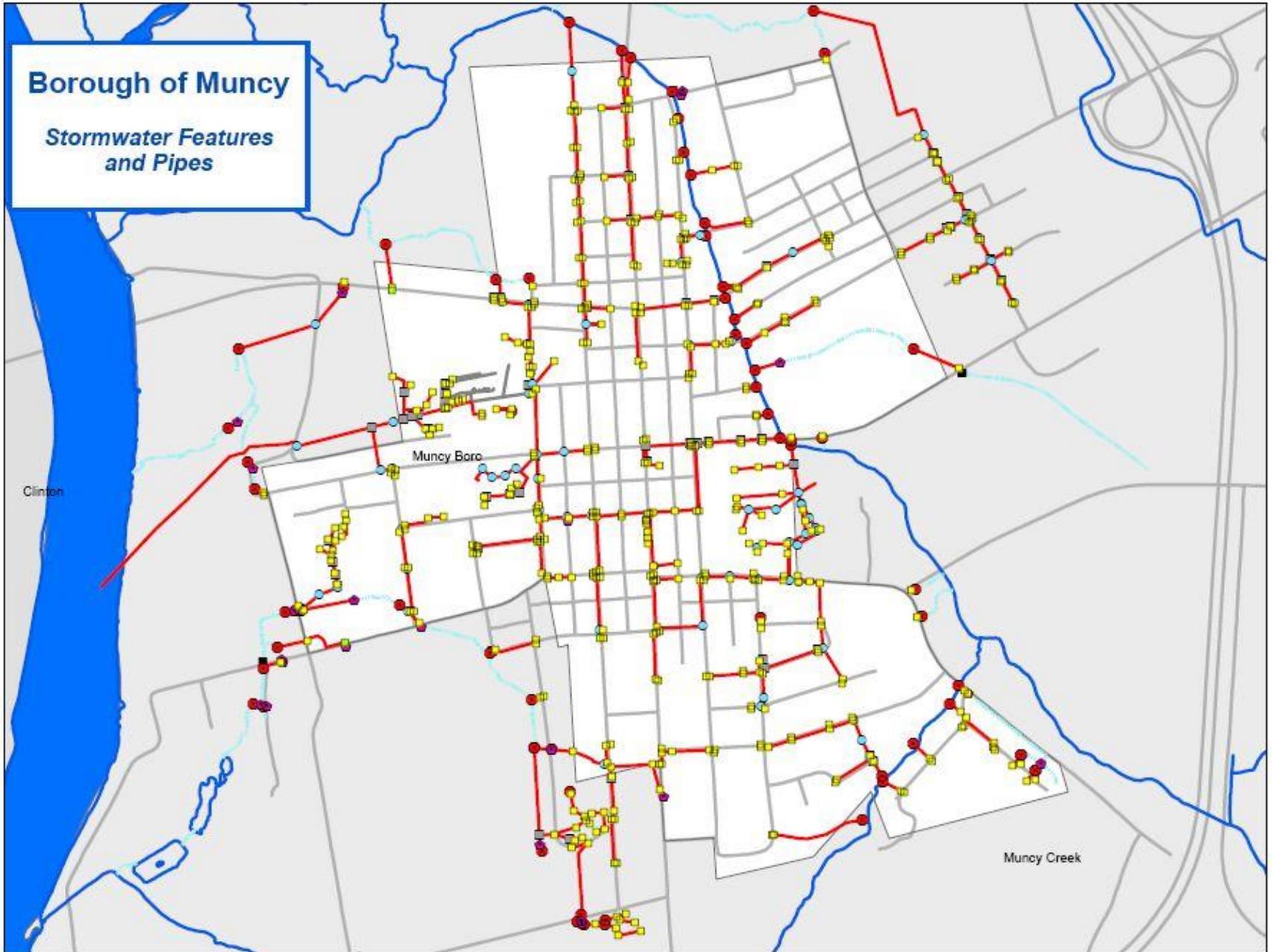


# FIELD SURVEYS

- Bridge Survey and Channel Survey
- Building Survey



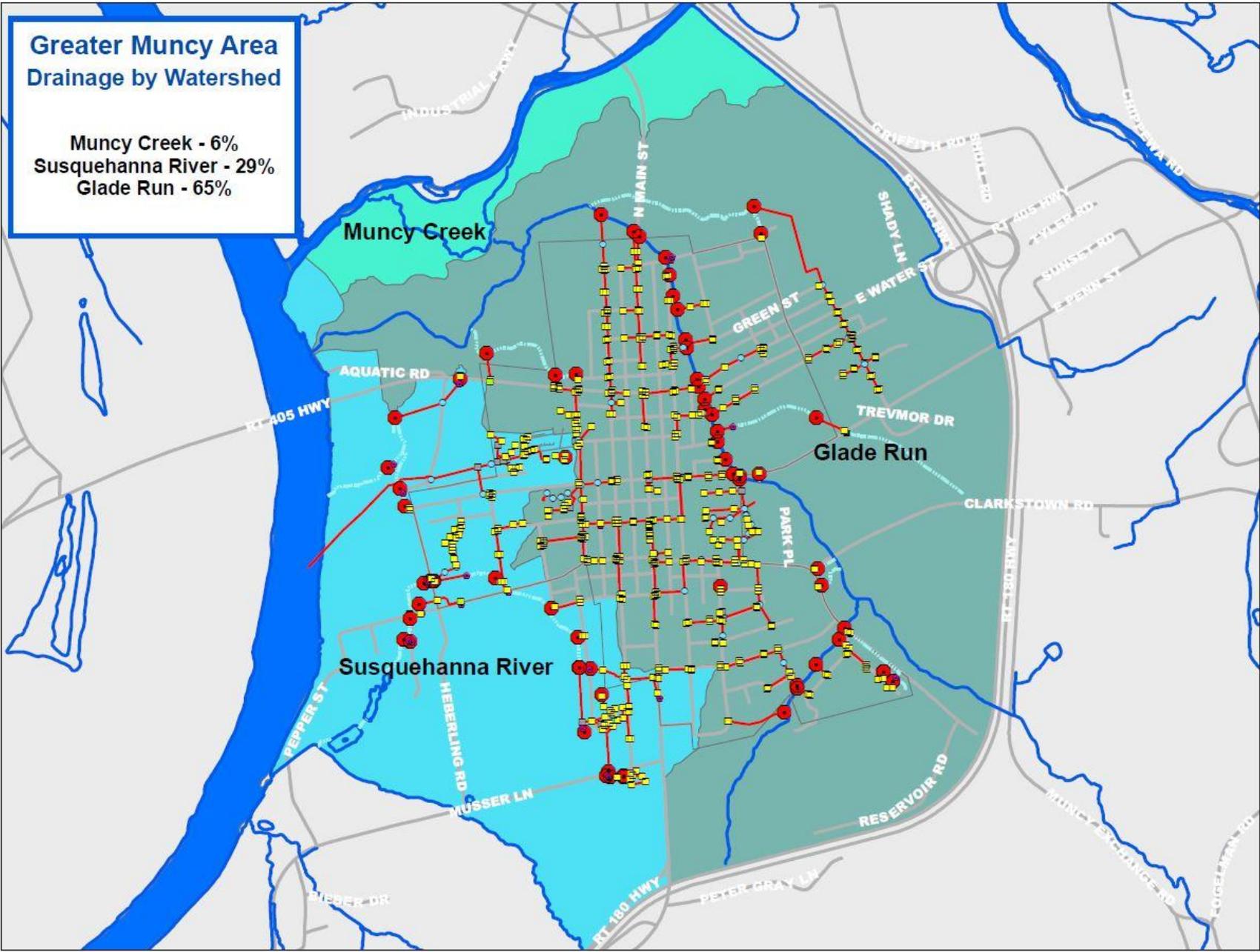
# Stormwater Infrastructure Survey



# Stormwater Infrastructure Survey

**Greater Muncy Area  
Drainage by Watershed**

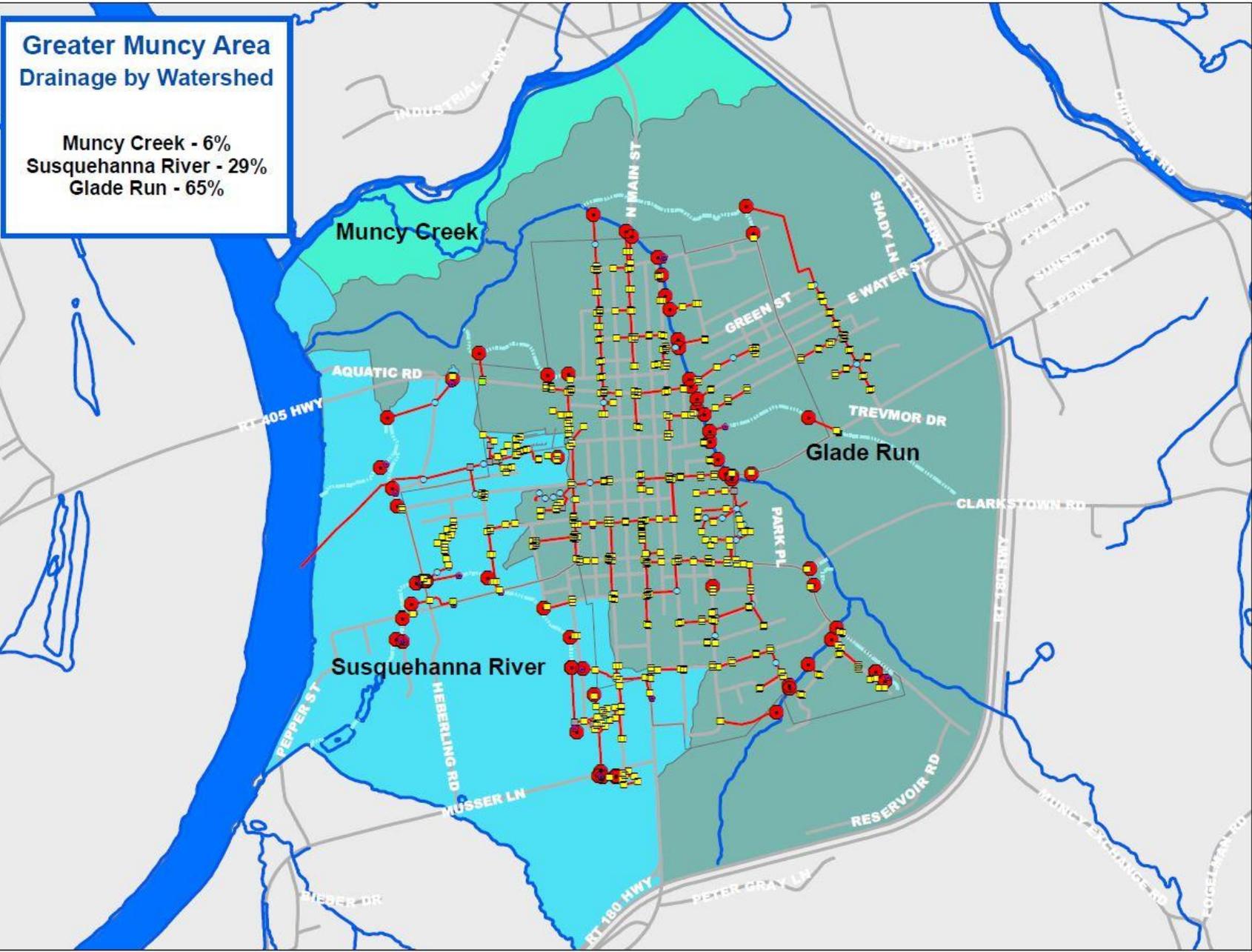
Muncy Creek - 6%  
Susquehanna River - 29%  
Glade Run - 65%



# Stormwater Infrastructure Survey

**Greater Muncy Area  
Drainage by Watershed**

Muncy Creek - 6%  
Susquehanna River - 29%  
Glade Run - 65%



# Resilience Goals

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- **Housing**: property acquisition, back-filling, elevations, neighborhood development
- **Economics**: marketing & tourism, with support industries (hotel, restaurant, etc.)
- **Infrastructure**: green infrastructure, infrastructure repairs/improvements
- **Health**: Improve quality of living through outdoor recreational activities
- **Cultural Resources**: preserve/protect historic structures
- **Natural Resources**: riparian/flood zone restoration, habitats, etc.

# Resilience Goals

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- Establish a cooperative framework of communication, awareness, and coordination
- Strategically return underutilized sites to productive/beneficial uses
- **Create downtown anchors, draws and improved synergies between businesses and uses**
- Strengthen sense of place and community cohesion through active public spaces, improved pedestrian amenities, and community gateways that reflect local values and community character
- **Provide high quality and reliable services and infrastructure that increase public safety, protect quality of life and encourage economic development**
- Enhance access to, functionality of, and connections between recreation assets
- **Reduce runoff and improve the management of stormwater** through a combination of traditional infrastructure, green infrastructure and policy solutions
- **Reduce public safety and financial risks associated with riverine flooding**

# Flooding and Stormwater

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- Downspouts running into the street
- Water ponding and freezing in winter
- **Water moves fast with no infiltration**
- Need to keep water away from foundations and direct it to hardscape
- Nowhere to take trimmings from shrubs, bushes, etc. – Need a mulch/compost site
- Glade run streambank instability
- Upstream improvements to Glade Run
- Move athletic fields to northern part of town and provide incentives for housing at current athletic fields
- Concerns about maintenance and cost-effectiveness of public green infrastructure
- Incentives for private green infrastructure

# Housing

- **Flood and flood insurance concerns**
- **Redevelop old buildings for housing** (e.g., Andritz)
- Difficult for some young families to be able to buy homes in the Borough
- •Expensive
  - Some have to wait a long time for a house to be available
- Many older people stay in their homes b/c there are no good options for them to move into locally. This makes the options more scarce for younger families.
- Need for senior housing (not just highrise)
- Accessibility improvements/Elevators would allow seniors to live in old buildings downtown
- Opportunity for mixed use housing downtown (apartments over commercial)
- Need additional options such as downtown apartments/studios and housing near open space
- Deterioration of housing in historic district

# Quality of Life – Economic Development

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- Sidewalks are missing, broken and too narrow
- People walk in the streets in Muncy
- **Need better placemaking elements** (lighting, planters, benches)
- Re-open the boat launch
- Need more events, a dedicated space for events and better communications
- People like the 4thFriday event and corvette show –want more!
- Outdoor concerts/movies
- Billboards/signs advertising events
- Need a community center
- Need more/better public and green spaces
- Bicycle and trail improvements
- Historic building improvements

# Patchwork Quilt Approach to Funding

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