

# ***MAPPING OF VULNERABLE ROADS***

identifying flash flood prone infrastructure in the NRV



# ***CITIZENS RELY ON VULNERABLE ROADWAYS***

- Encourage drivers to avoid areas already flooded
- 6" reaches the bottom of most cars
  - Loss of control
  - Stalling out
- 12" floats many vehicles
- 24" carries away most vehicles
  - Including SUVs and pick-ups

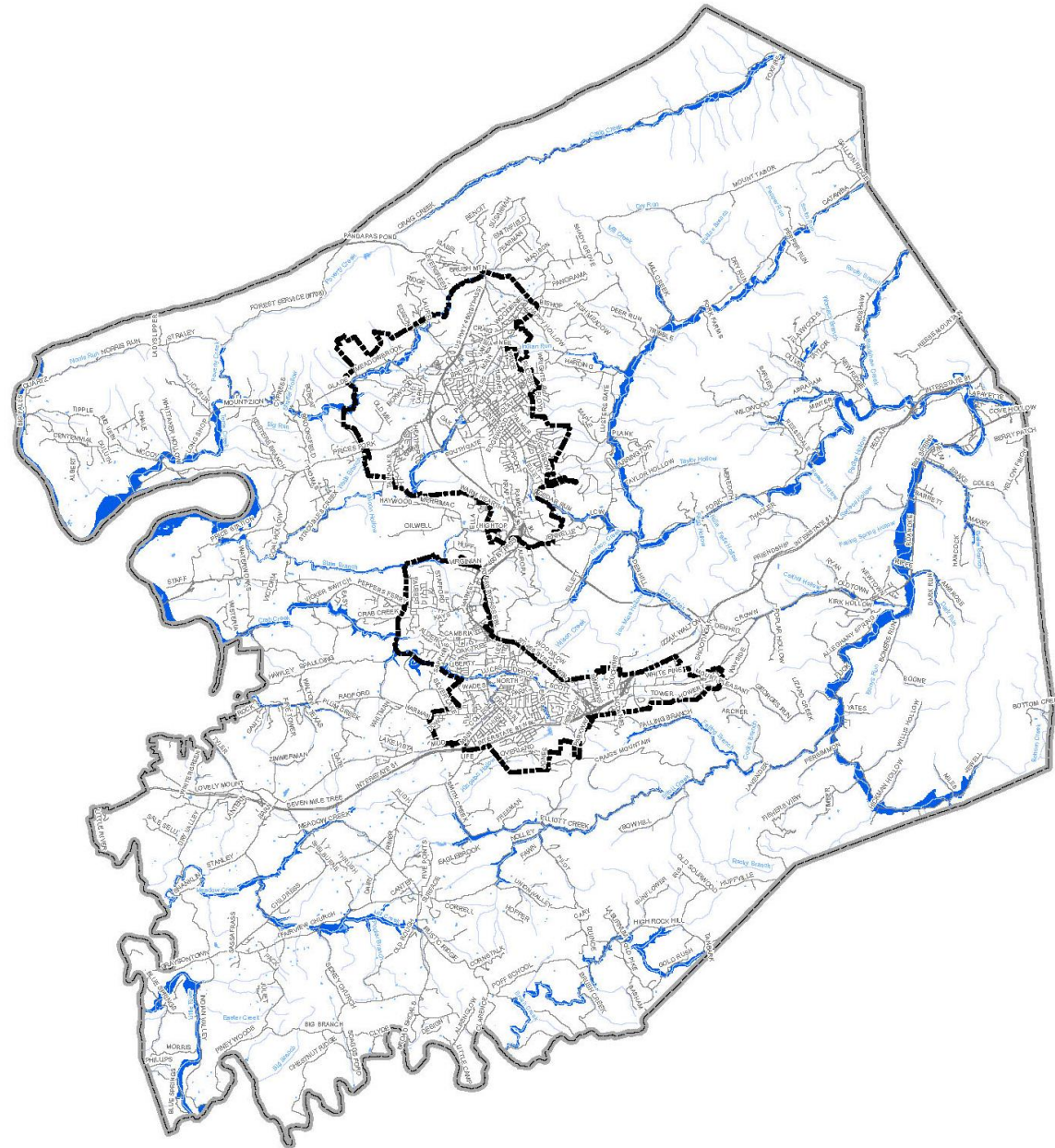


# ***NEW RIVER VALLEY PROJECT GOALS***

- Partnership with VDEM
- Coordination with VDOT
- Identify infrastructure in 100-year floodplain and flash flood prone areas:
  - Roadways
  - Bridges
  - Driveways and culverts
- Target education outreach towards region's most vulnerable citizens
- Purchase and install permanent signage



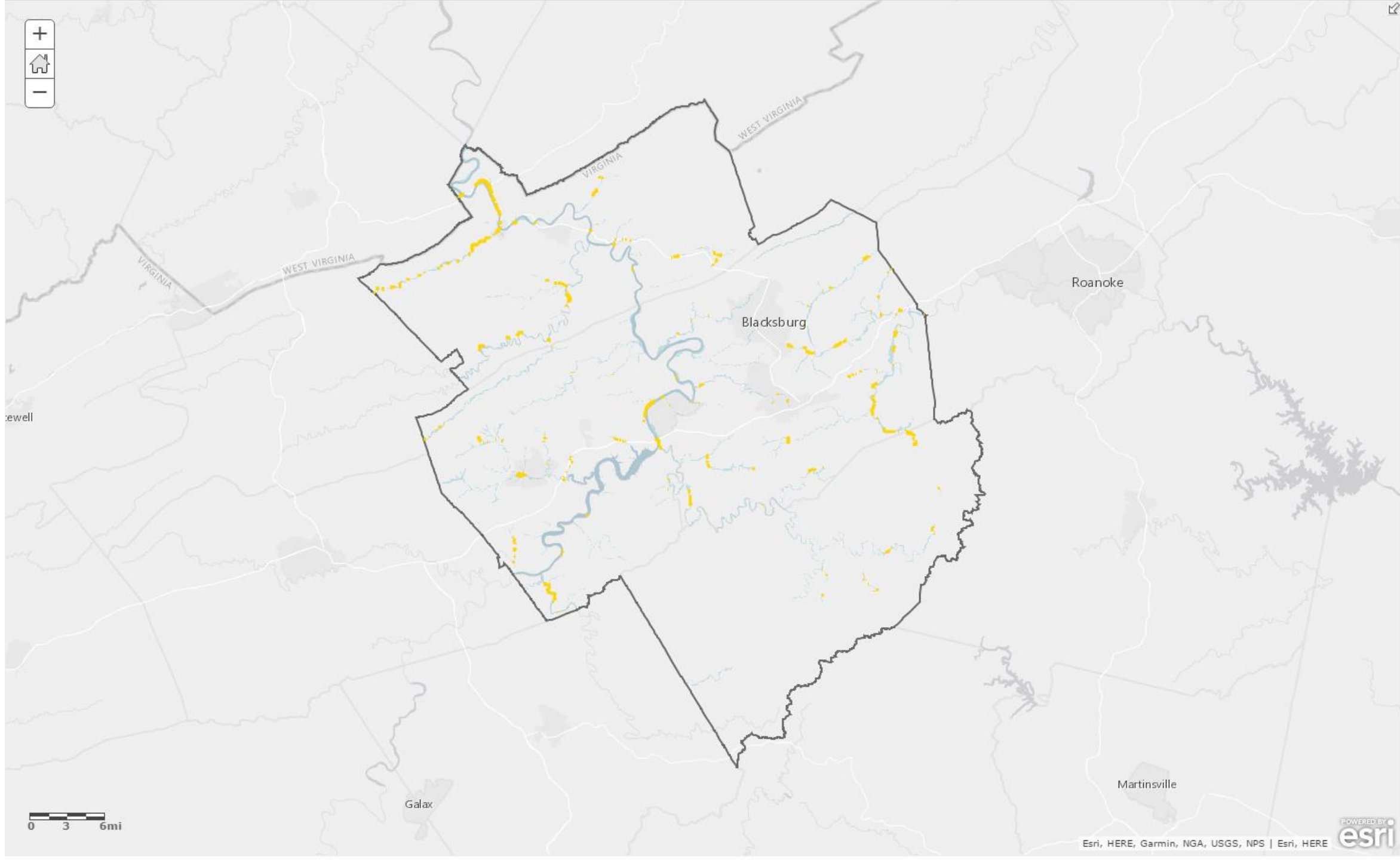
# IDENTIFYING INFRASTRUCTURE



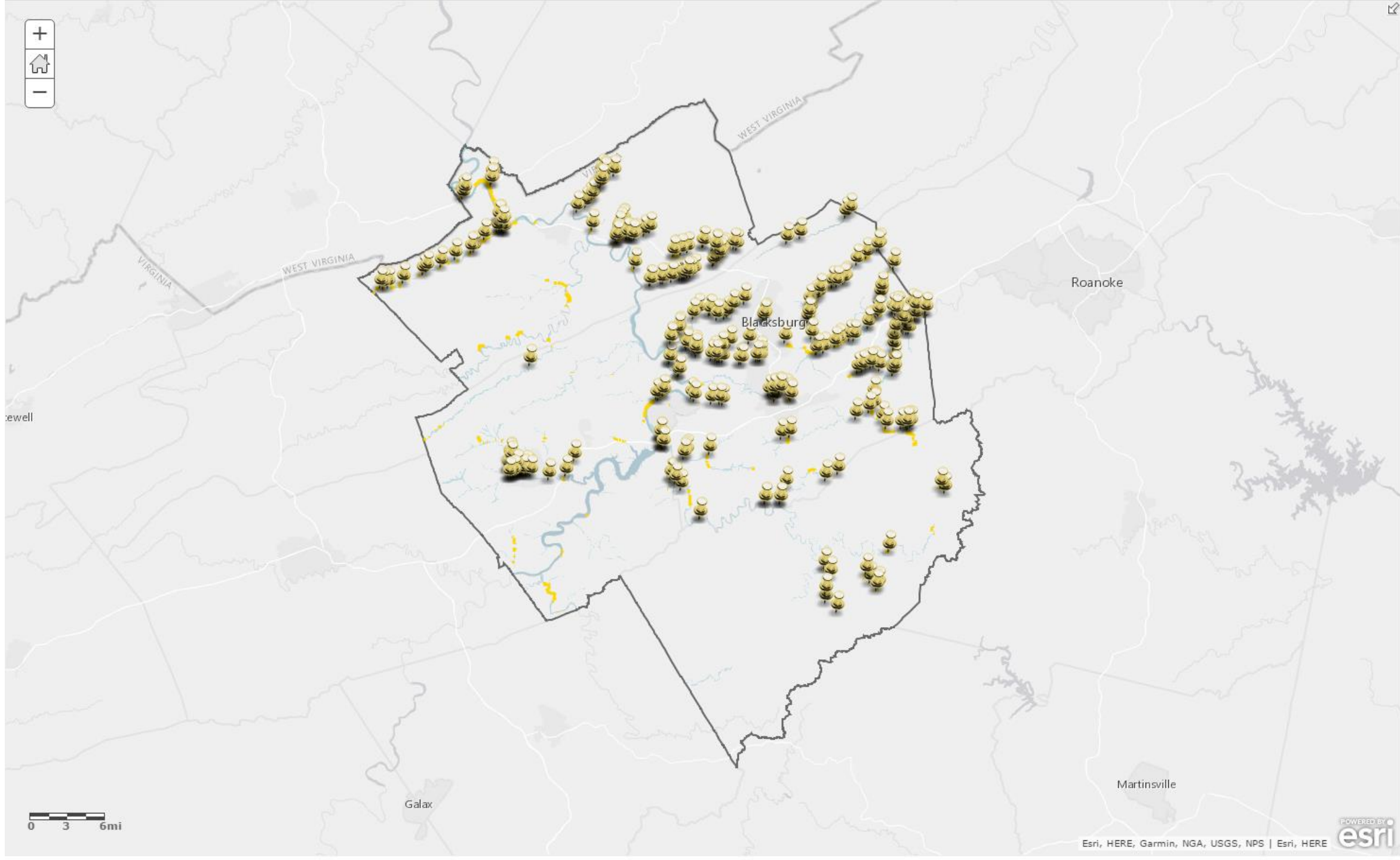
0 1 2 4 Miles



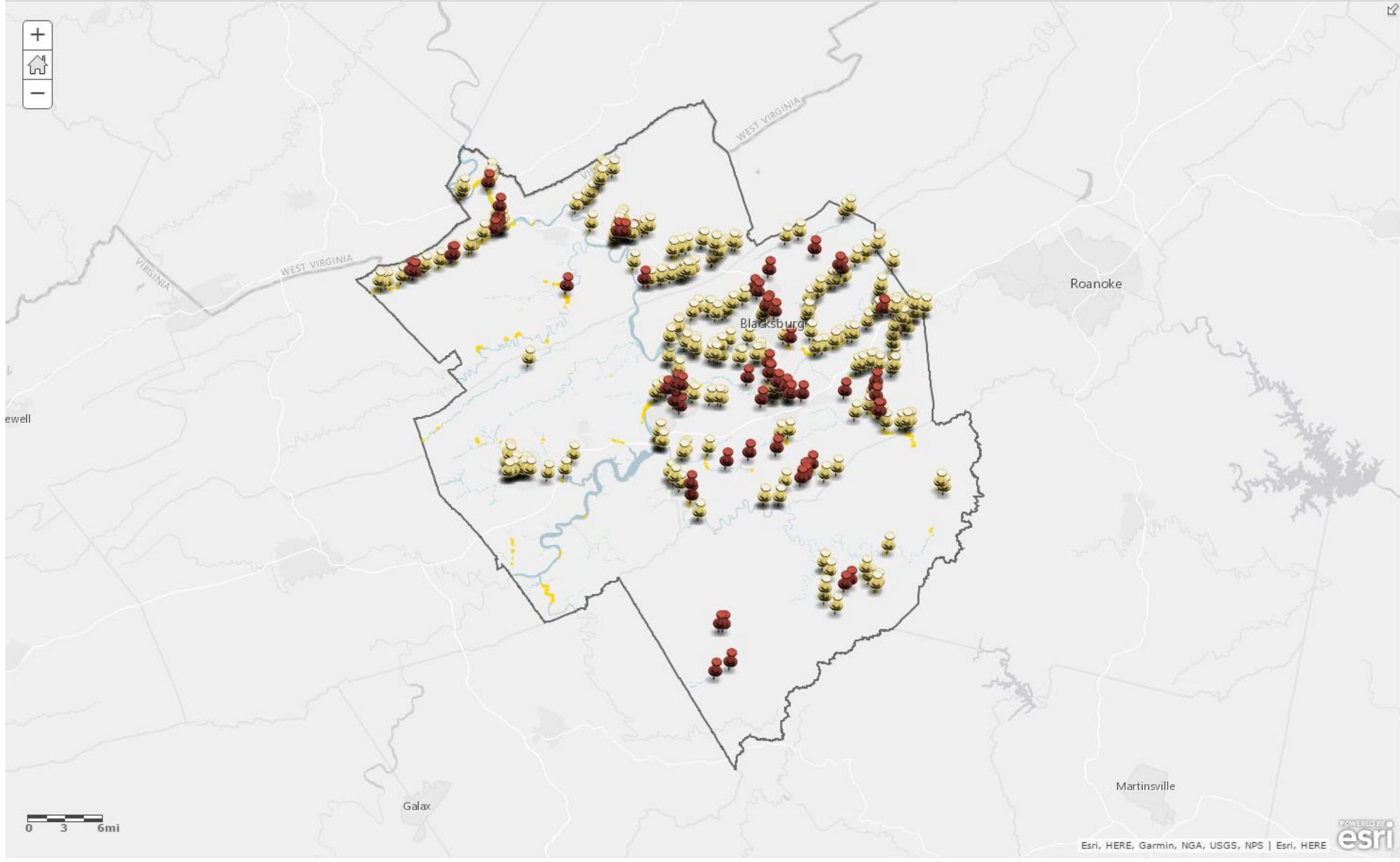
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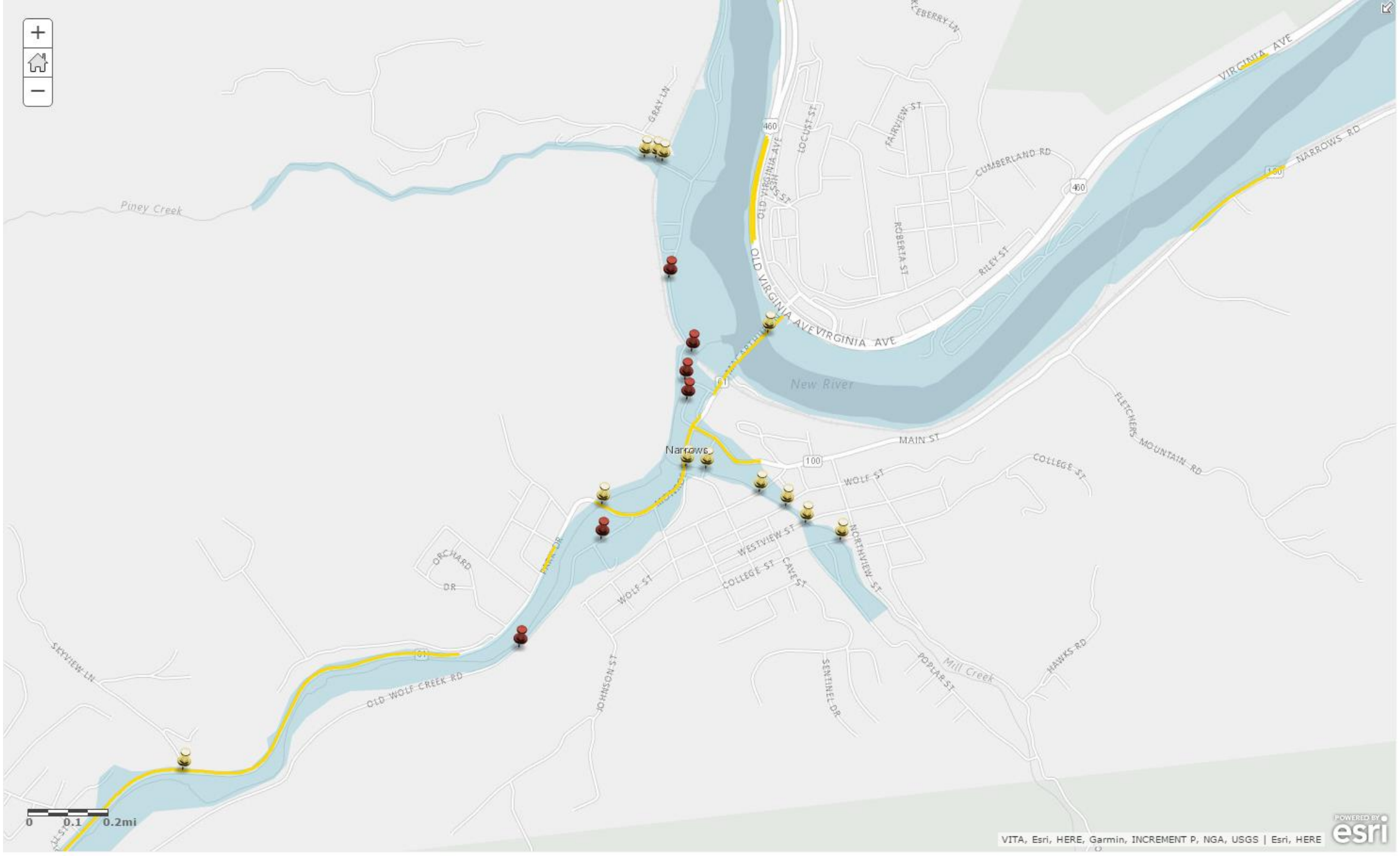
# IDENTIFYING INFRASTRUCTURE - DATA



# IDENTIFYING INFRASTRUCTURE - 1-ON-1

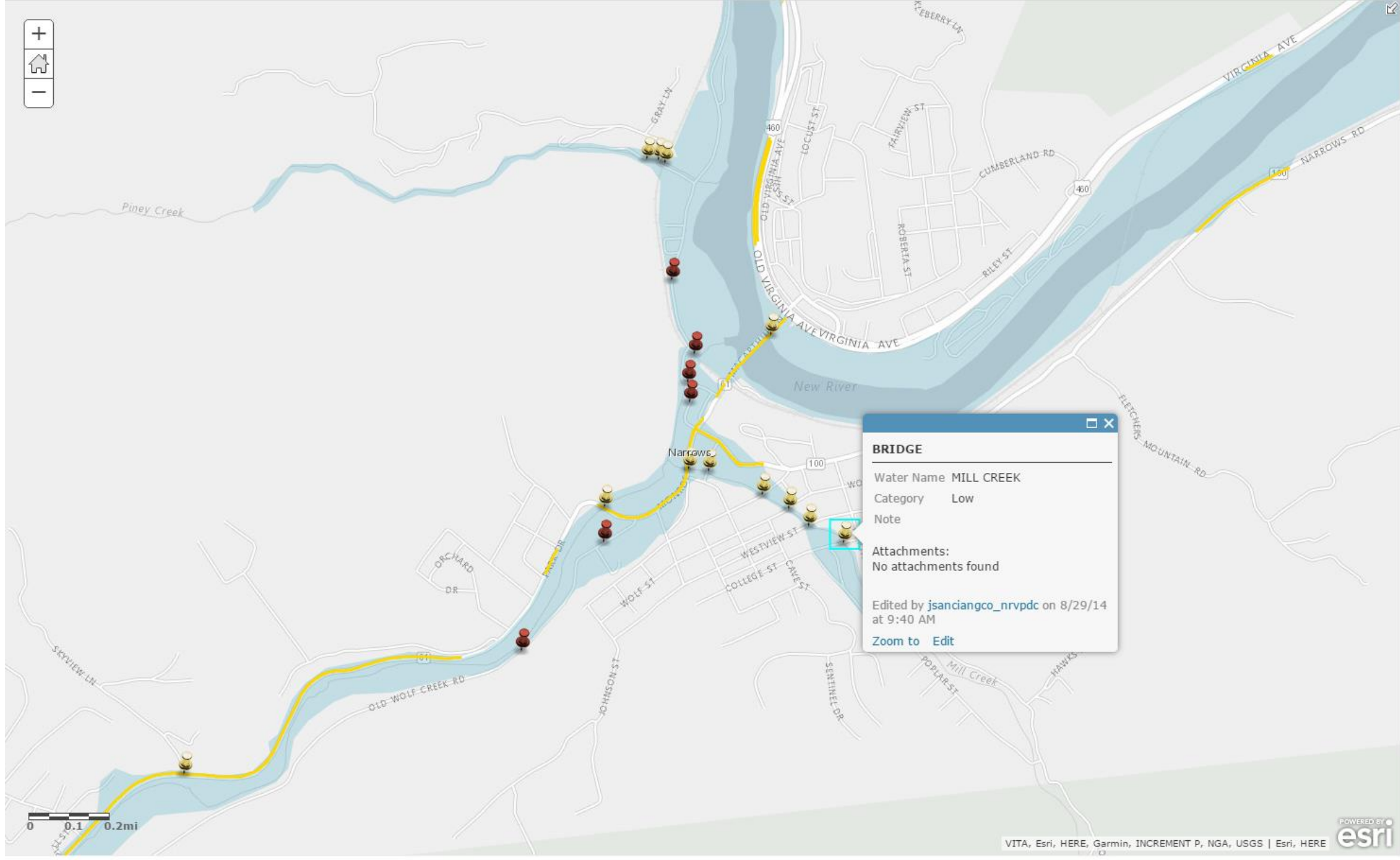


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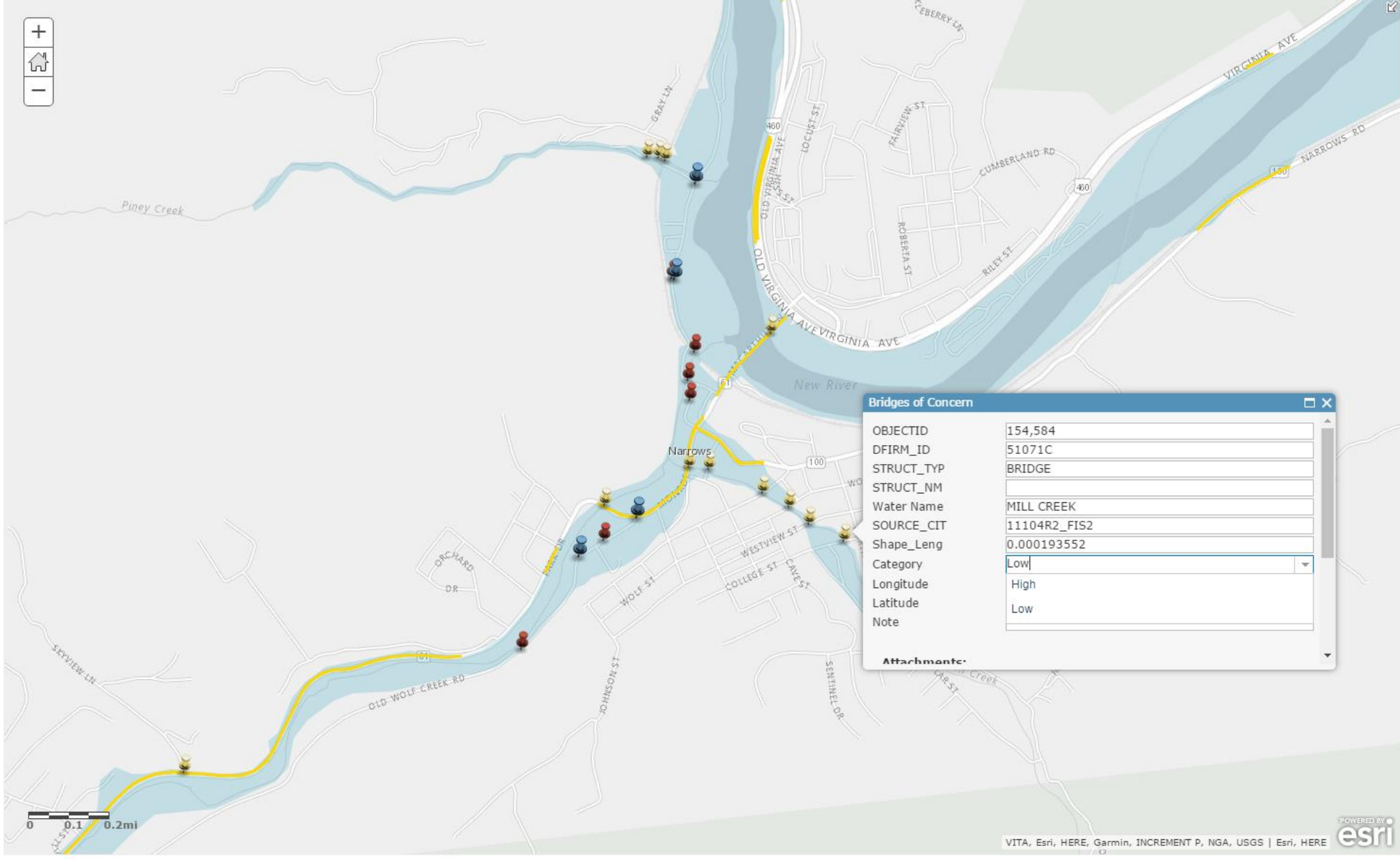




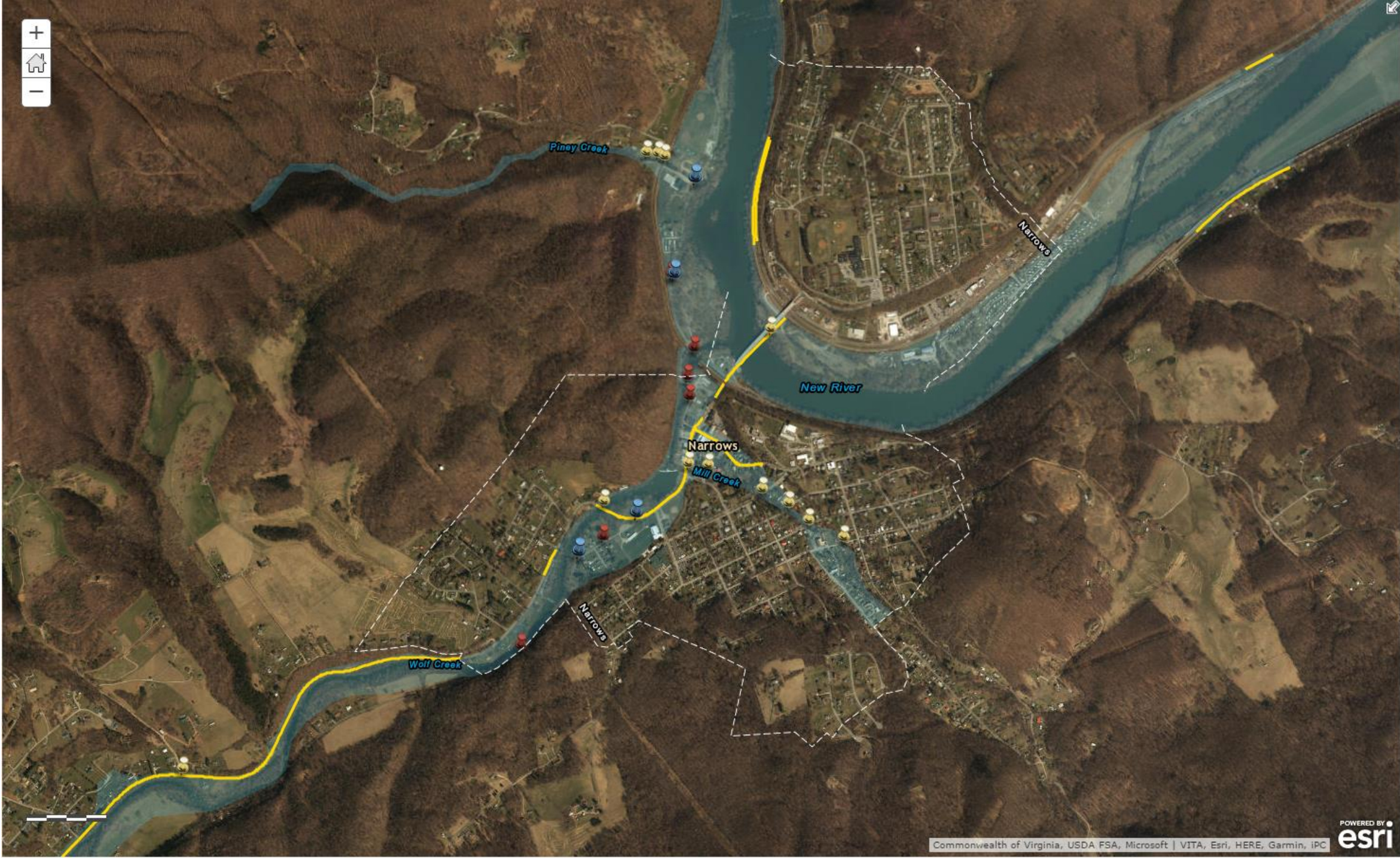
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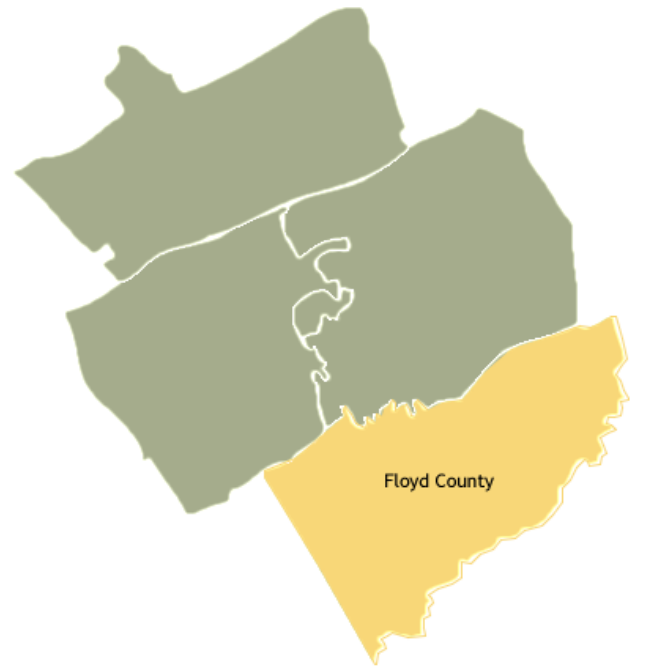
# IDENTIFYING INFRASTRUCTURE - 1-ON-1



# IDENTIFYING INFRASTRUCTURE - 1-ON-1



# INTERACTIVE MAPPING TOOL

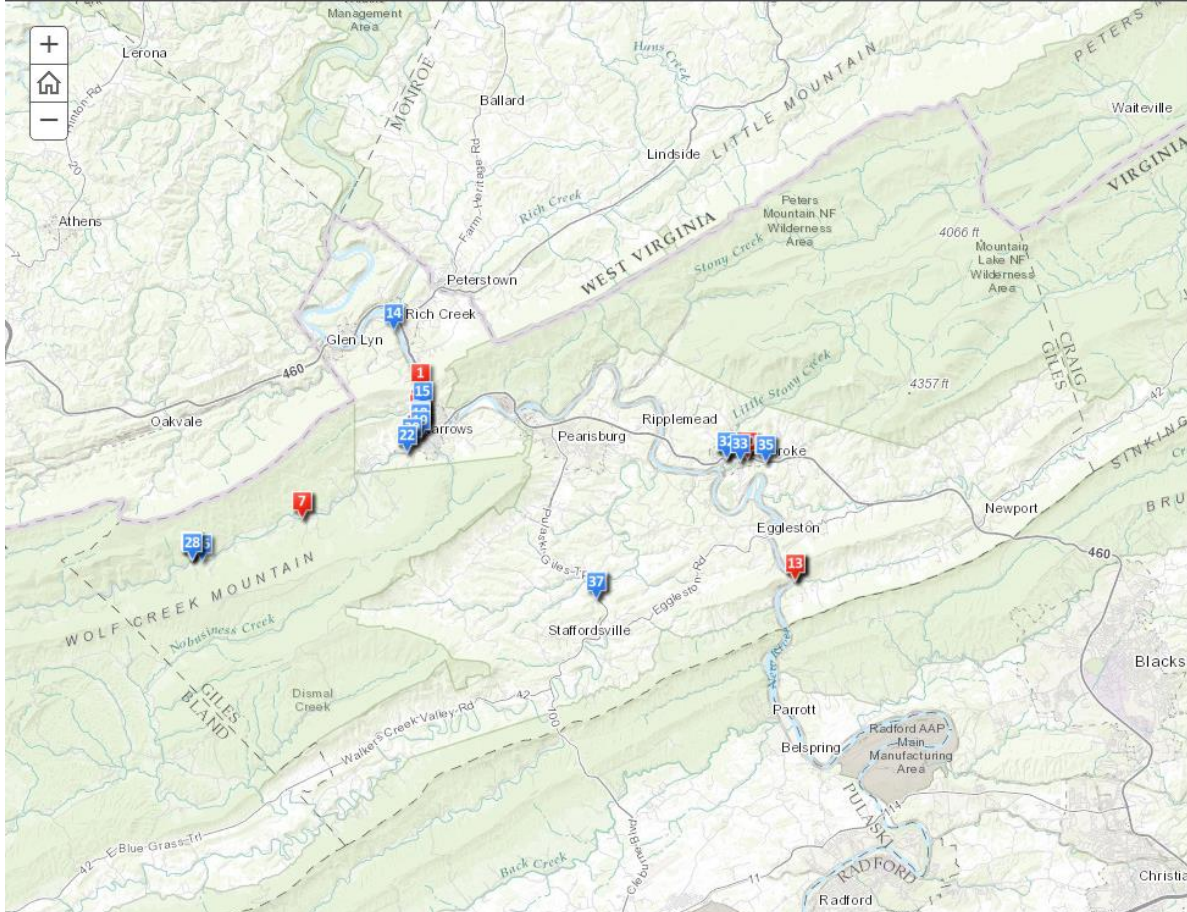


*Click on the map to explore the conditions of the identified locations for each counties.*

# INTERACTIVE MAPPING TOOL

## NEW RIVER VALLEY FLOOD PRONE LOCATION TOOL

Giles County, Virginia



### Legend

-  Frequent Flood Area
-  Priority Mitigation Area

### Project Overview

The Virginia Department of Emergency Management partnered with the communities of the New River Valley to identify and map flood prone locations throughout the region. While several roadway segments and bridges are located within the 100-year floodplain, this map identifies the locations that are prone to flooding more frequently.



Route 649 (Lurich Rd)  
Giles Co



Route 649 (Lurich Rd)  
Narrows, Giles Co



Route 649 (Lurich Rd)  
Narrows, Giles Co



Route 61 (Main St)  
Narrows, Giles Co



Route 61 (Main St)  
Narrows, Giles Co



Route 61 (Wolf Creek Rd)  
Giles Co



Route 61 (Wolf Creek Rd)  
Giles Co



Route 1404 (Castle Rock Rd)  
Pembroke, Giles Co



Route 460  
Pembroke, Giles Co



Route 460  
Pembroke, Giles Co



Route 625 (Goodwins Ferry Rd)


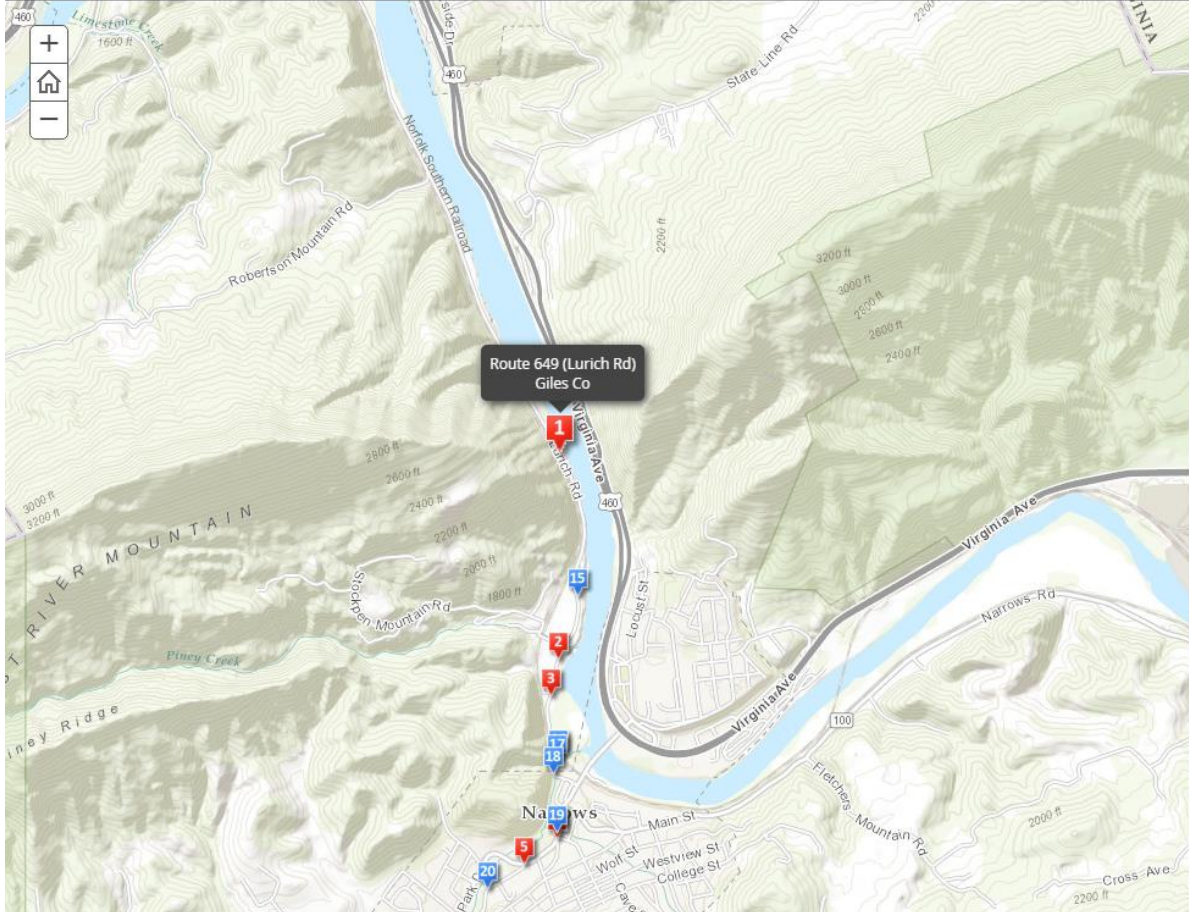


Route 625 (Goodwins Rd)

# INTERACTIVE MAPPING TOOL


## NEW RIVER VALLEY FLOOD PRONE LOCATION TOOL

Giles County, Virginia



Route 649 (Lurich Rd)  
Giles Co

Location: Boat ramp in Rte 649  
Description: New River flood zone  
[View full report](#)



Thumbnail Number	Location
1	Route 649 (Lurich Rd) Giles Co
2	Route 649 (Lurich Rd) Narrows, Giles Co
3	Route 649 (Lurich Rd) Narrows, Giles Co
4	Route 61 (Main St) Narrows, Giles Co
5	Route 61 (Main St) Narrows, Giles Co
6	Route 61 (Wolf Creek Rd) Giles Co
7	Route 61 (Wolf Creek Rd) Giles Co
8	Route 1404 (Castle Rock Rd) Pembroke, Giles Co
9	Route 460 Pembroke, Giles Co
10	Route 460 Pembroke, Giles Co
11	Route 625 (Goodwins Ferry Rd)
12	Route 625 (Goodwins Rd)

# INTERACTIVE MAPPING TOOL

## New River Valley Flash Flood Mapping Project Site Inspection Form

Route: 649 (Lurich Rd)  
Nearest Intersection: Route 61/649  
Jurisdiction: Giles Co

- Roadway Segment
- Bridge



Location: Rte 649 near railroad crossing  
Date: 3-Dec-14  
Description: New River flood zone



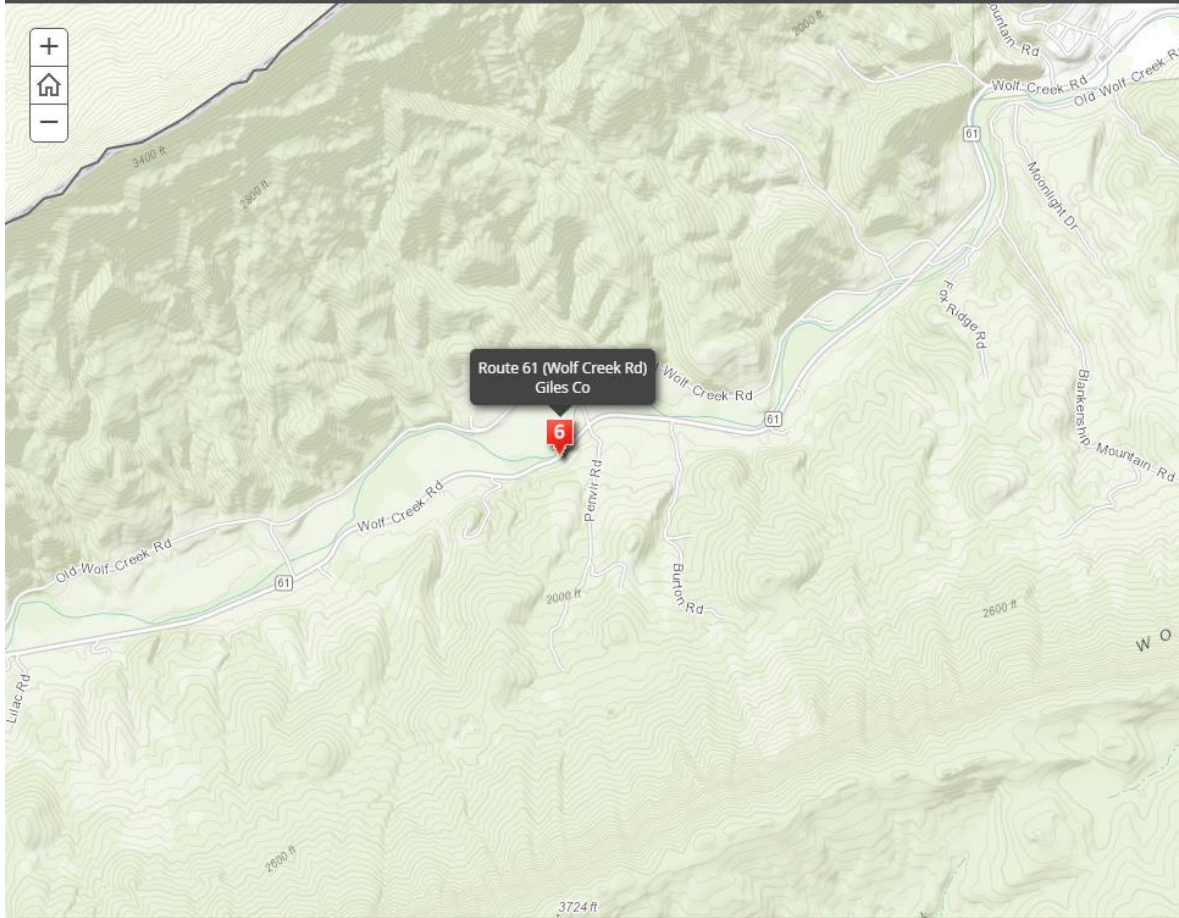
Location: Boat ramp in Rte 649  
Date: 3-Dec-14  
Description: New River flood zone



# INTERACTIVE MAPPING TOOL

## NEW RIVER VALLEY FLOOD PRONE LOCATION TOOL

Giles County, Virginia



March 2010 Flooding

Route 61 (Wolf Creek Rd)  
Giles Co

Location: Rte 61/Wolf Creek WB  
Description: Wolf Creek flood zone  
[View full report](#)



Route 649 (Lurich Rd)  
Giles Co



Route 649 (Lurich Rd)  
Narrows, Giles Co



Route 649 (Lurich Rd)  
Narrows, Giles Co



Route 61 (Main St)  
Narrows, Giles Co



Route 61 (Main St)  
Narrows, Giles Co



Route 61 (Wolf Creek Rd)  
Giles Co



Route 61 (Wolf Creek Rd)  
Giles Co



Route 1404 (Castle Rock Rd)  
Pembroke, Giles Co



Route 460  
Pembroke, Giles Co



Route 460  
Pembroke, Giles Co



Route 625 (Goodwins Ferry Rd)



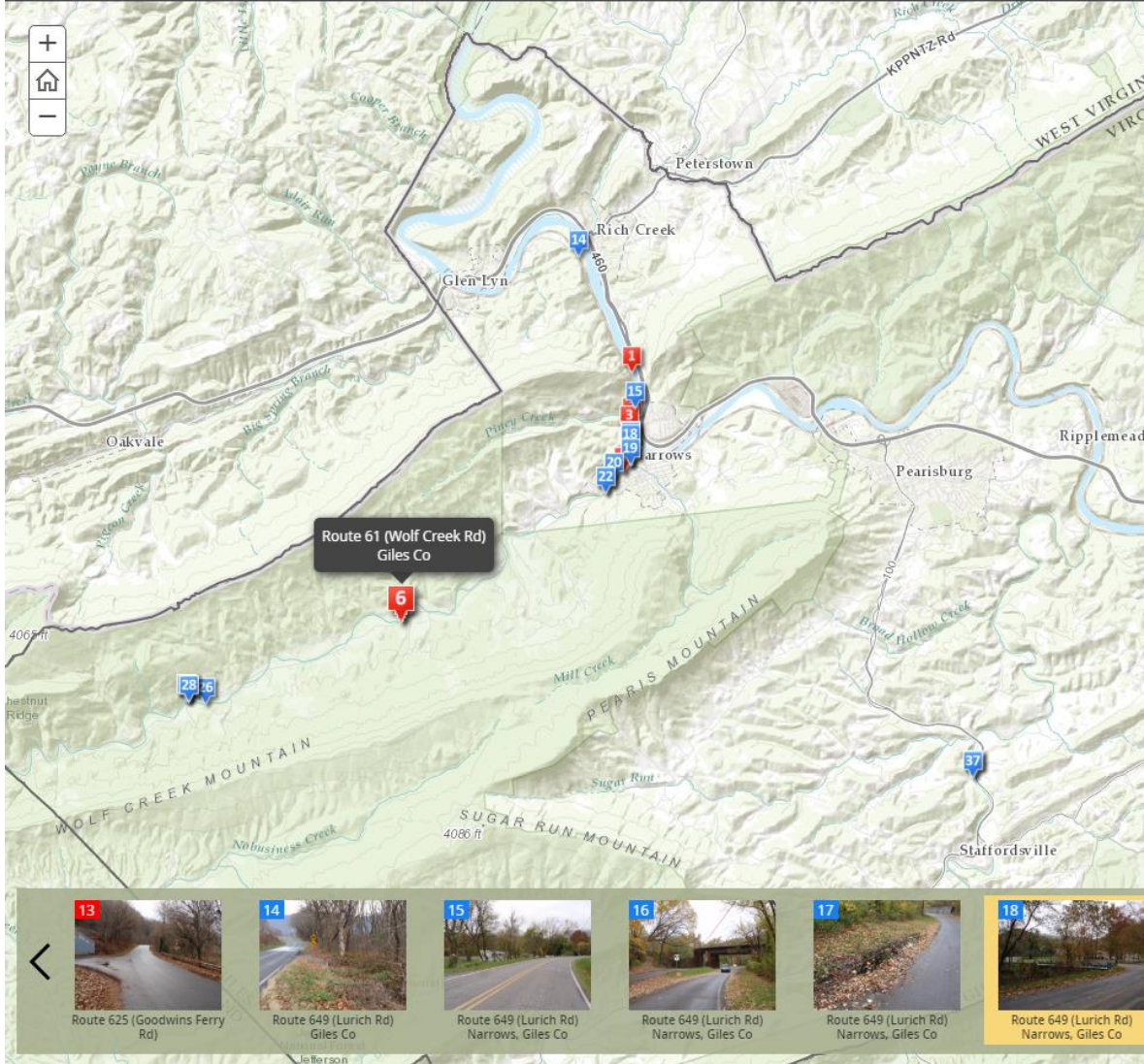
Route 625 (Goodwins Rd)



# INTERACTIVE MAPPING TOOL

## NEW RIVER VALLEY FLOOD PRONE LOCATION TOOL

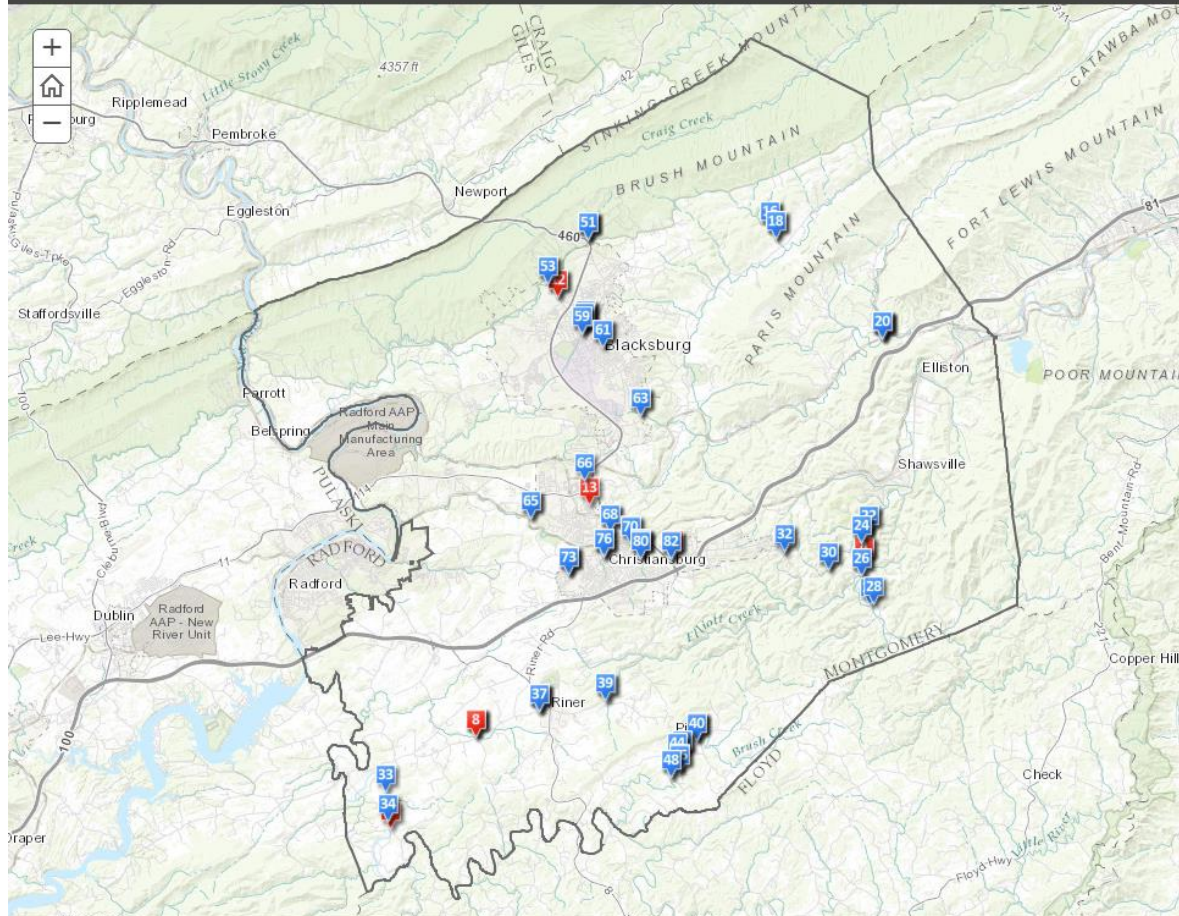
Giles County, Virginia



# INTERACTIVE MAPPING TOOL

## NEW RIVER VALLEY FLOOD PRONE LOCATION TOOL

Montgomery County, Virginia



- Legend**
-  Frequent Flood Area
  -  Priority Mitigation Area

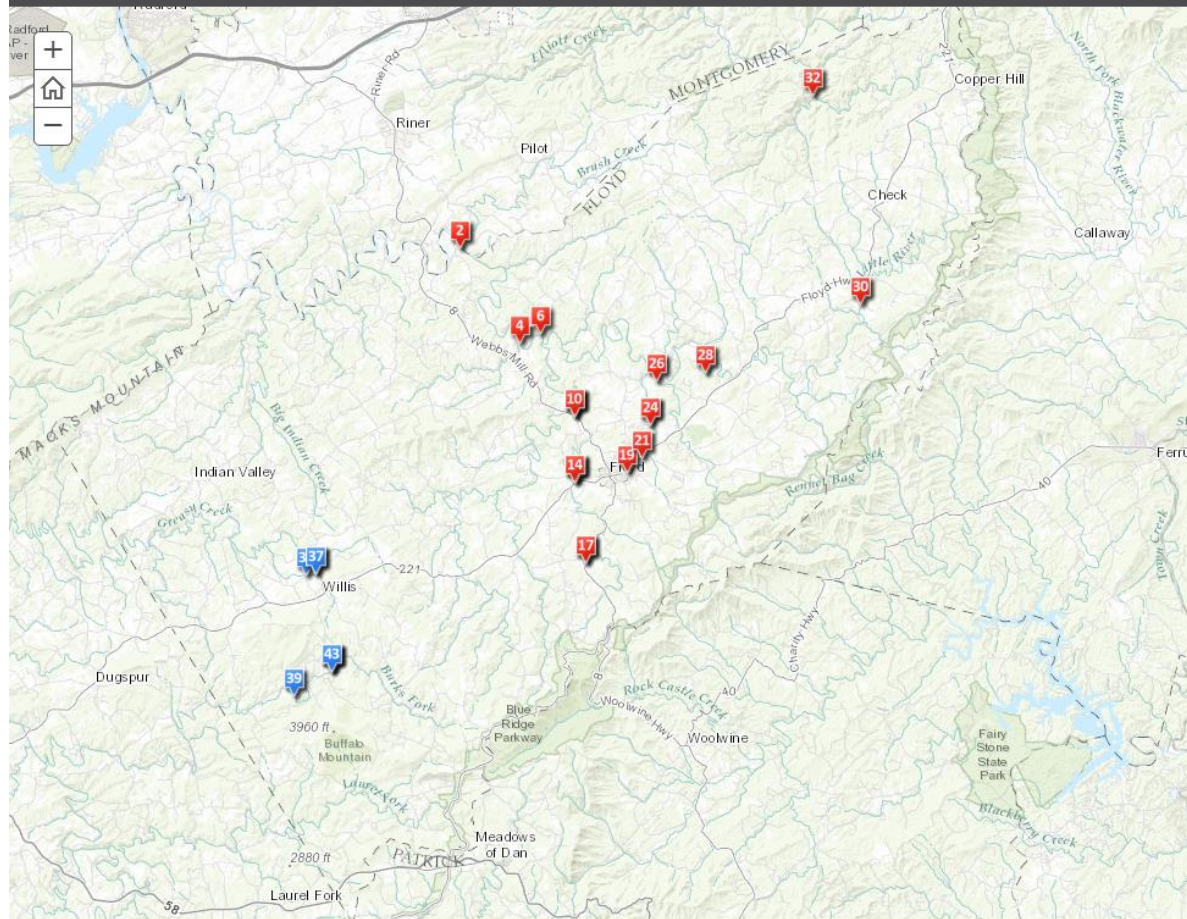
**Project Overview**  
The Virginia Department of Emergency Management partnered with the communities of the New River Valley to identify and map flood prone locations throughout the region. While several roadway segments and bridges are located within the 100-year floodplain, this map identifies the locations that are prone to flooding more frequently.





# INTERACTIVE MAPPING TOOL

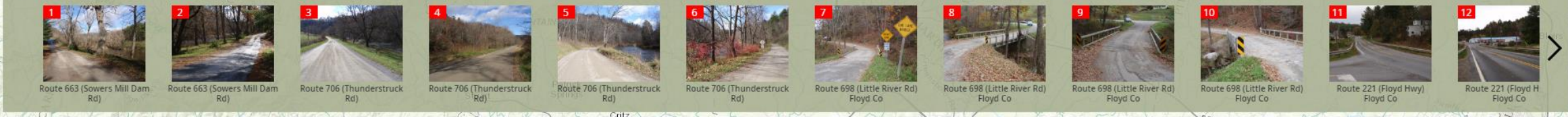
## NEW RIVER VALLEY FLOOD PRONE LOCATION TOOL

Floyd County, Virginia



- Legend**
-  Frequent Flood Area
  -  Priority Mitigation Area

**Project Overview**  
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# INTERACTIVE MAPPING TOOL

## NEW RIVER VALLEY FLOOD PRONE LOCATION TOOL

City of Radford, Virginia

**Legend**

- Frequent Flood Area
- Priority Mitigation Area

**Project Overview**  
The Virginia Department of Emergency Management partnered with the communities of the New River Valley to identify and map flood prone locations throughout the region. While several roadway segments and bridges are located within the 100-year floodplain, this map identifies the locations that are prone to flooding more frequently.

**WHEN FLOODED  
TURN AROUND  
DON'T  
DROWN**

- New River Dr  
City of Radford
- New River Dr  
City of Radford
- New River Dr  
City of Radford
- New River Dr  
City of Radford
- New River Dr  
City of Radford
- New River Dr  
City of Radford
- New River Dr  
City of Radford
- Second Ave Ext  
City of Radford
- Second Ave Ext  
City of Radford
- Second Ave Ext  
City of Radford
- Route 4659 (Park Rd)  
City of Radford
- Route 4659 (Park Rd)  
City of Radford

# ***MITIGATION COORDINATION***

## VDEM

- permanent signage
- 30 signs
- turn around – don't drown
- education & outreach

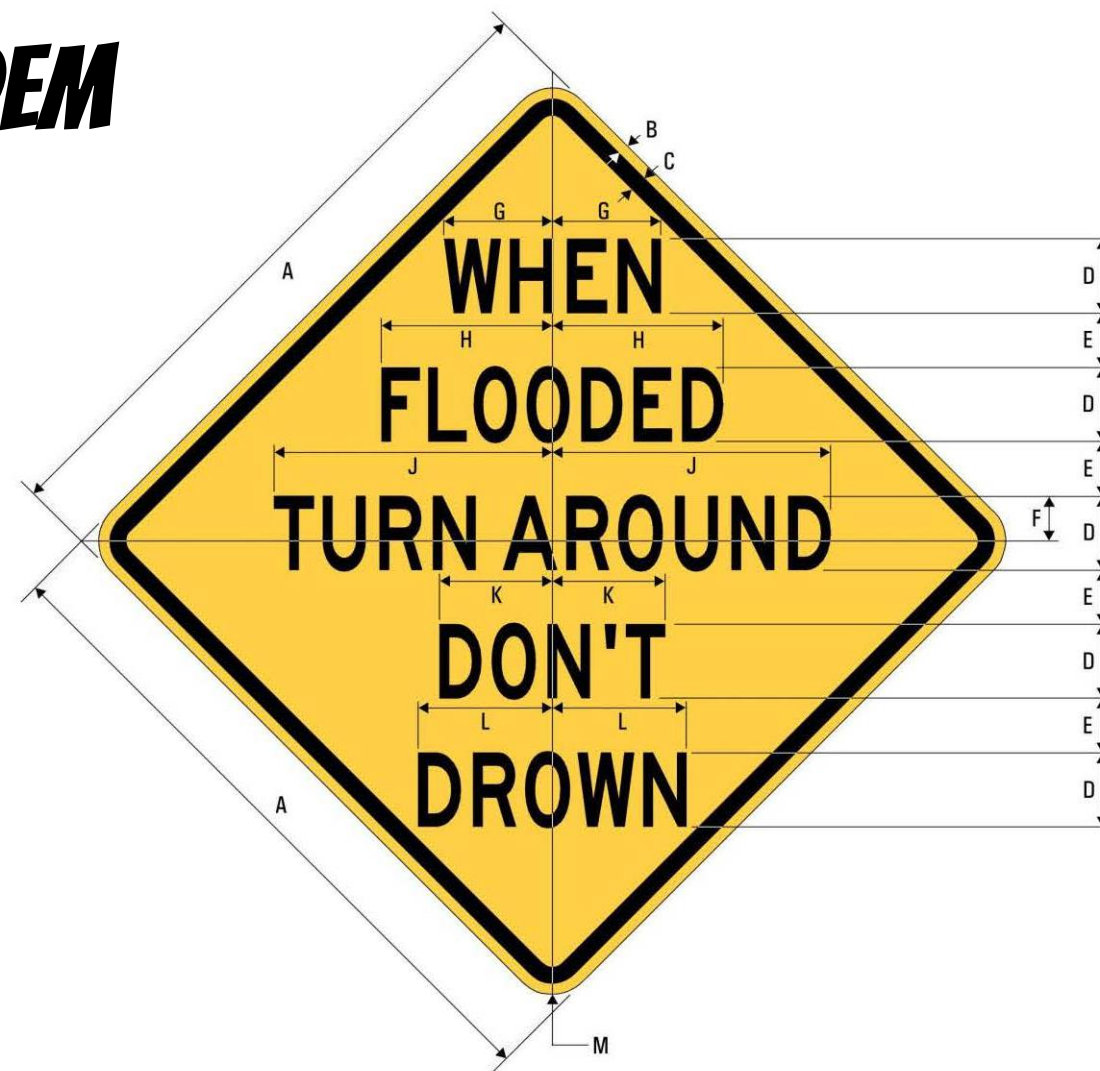
## VDOT

- temporary signage
- 10 signs
- manual on uniform traffic control devices
- communication of frequent conditions



# ***MITIGATION COORDINATION - VDEM***

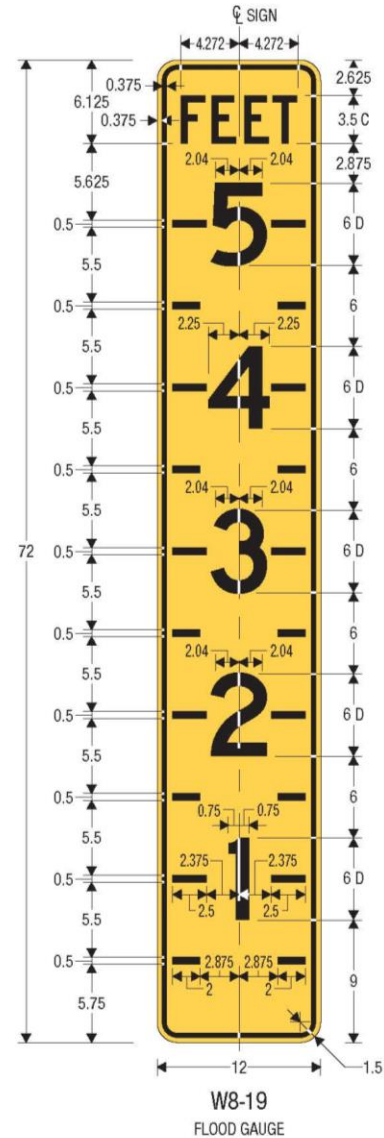
- afford higher number of signs
- temporary mitigation wasn't eligible
- encouraged communities to purchase additional signage



WHEN FLOODED TURN AROUND DON'T DROWN

# MITIGATION COORDINATION - VDOT

- sign compromise was more expensive
- encouraged temporary mitigation
- encouraged communities to contact for permanent signage



# ***SUMMARY***

- identified roadways and bridges (>20' long)
- <http://nrvrc.org/floodmaps/>
- VDOT: permanent mitigation target recommended = two or more events/year
- VDEM: identified need for temporary mitigation tools for emergency managers
- VDOT is open to purchasing and installing signs on a case-by-case basis





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identifying flash flood prone infrastructure in the NRV

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February 2, 2017 – Hazard Mitigation Plan Update

