



Proud Sponsor of MSGIC since 2013

Michael S. Scott, PhD, GISP
Director, Eastern Shore Regional GIS Cooperative

Eastern Shore Regional GIS Cooperative

- Launched in January 2004
- Partnership between



- Not an actual cooperative!

Mission of the ESRGC

- To build GIS capabilities and find ways to partner with governments and businesses, particularly on the Eastern Shore
- Full service provider of GIS technology with a goal of client self-sufficiency
- Non-profit org carrying out Salisbury University's service mission
- Workforce training and investment

Current/Recent Projects

- Damage Assessment of Buildings after Hurricane Sandy
 - Partner: New Light Technologies, Inc
- GIS-enabled Geodashboard Initiatives
 - Partners: ShoreTransit, Caroline County, MD DBED, etc
- Creation of a Statewide Elevation Data Server
 - Partner: MD Geographic Information Office
- Analysis of Asset Vulnerability to Flooding
 - Partners: MD SHA and Stantec



After the Storm: Students Take the Lead in Sandy Damage Assessment

By Arthur Lembo, Ph.D.

*Associate Professor, Geography and Geosciences Department
And SU's Eastern Shore Regional GIS Cooperative Technical Director*

Before



After



Superstorm Sandy was the second most destructive hurricane in United States history – striking the eastern seaboard in late October 2012 – causing an estimated \$70 billion in damages. In the wake of Sandy's devastation, agencies from around the country engaged in relief and recovery efforts. Efforts by first responders were critical to provide life-saving activities for those immediately affected by the storm: rescuing people stranded in their homes and giving medical attention to those injured during the storm. Secondary responders worked tirelessly to bring the areas back to a more civilized state by restoring utility services, securing damaged structures, and providing food, water and shelter.

As these efforts were underway, I coordinated a team of some 50 Salisbury University geography students, training in

of New York, New Jersey and Connecticut. They labeled damage to homes and buildings on grids using a four-level classification provided by the Federal Emergency Management Agency (FEMA). They also compared photographs to determine how high water levels rose.

Their data was immediately shared with ImageCat, Inc., an international risk- and disaster-management company contracted by New Light Technologies, Inc. of Washington, D.C., to support FEMA's effort. ImageCat compiles the data with other teams' to help provide the federal government with an overall damage assessment. This damage assessment was used by FEMA to determine areas that required immediate assistance and also to provide a rapid estimate for potential recovery costs.

SU GIS Students Are Respected as Professionals Within Their Discipline

SU students were the largest contingent

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Caroline County Emergency Services Dashboard

Add Filter

Filter Type

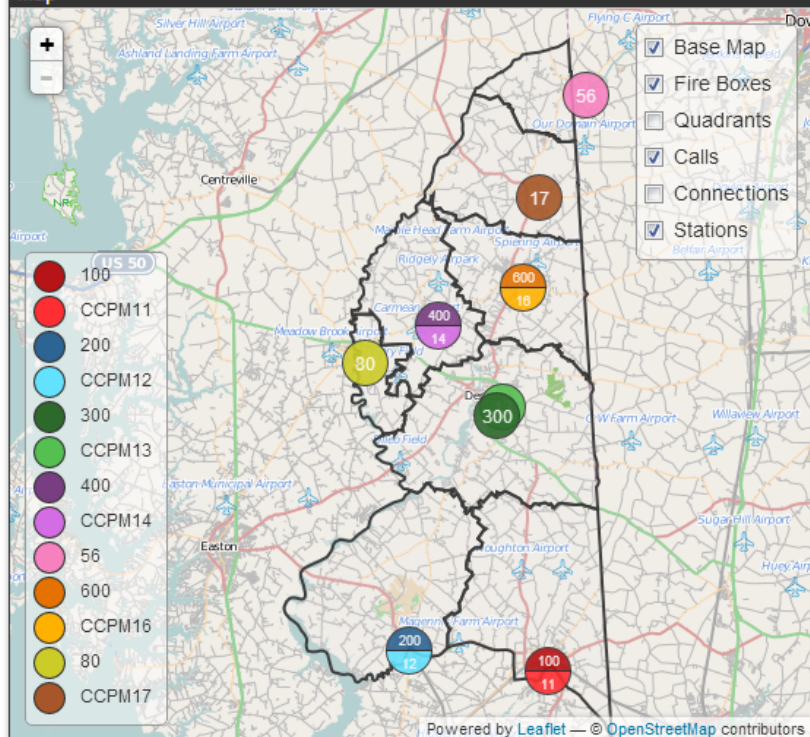
Filter

Apply

Clear

Save

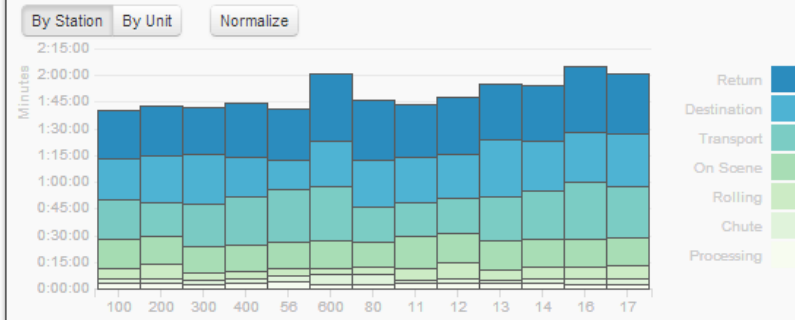
Map



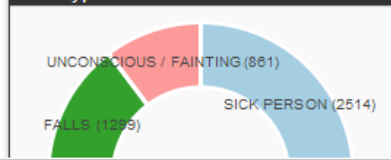
Percent of Calls Under Benchmark

By Station		By Unit		Benchmark 1		Benchmark 2	
Station	Calls Received	Calls Responded	Processing (1:30)	Chute (2:30)	Rolling (8:00)	Scene (12:00)	
100	2391	1220	30% -2%	65% +5%	79% +11%	63% +6%	
200	1635	1033	28% -4%	67% +7%	45% -23%	35% -22%	
300	2257	1835	35% +3%	64% +4%	86% +18%	84% +27%	
400	605	181	28% -4%	52% -8%	88% +20%	72% +15%	
56	493	224	33% +1%	59% -1%	90% +22%	47% -10%	

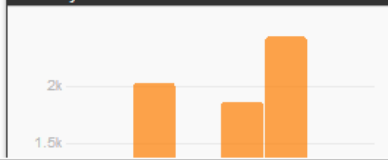
Average Response Times



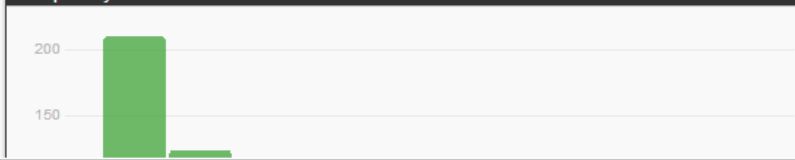
Call Types



Priority Levels



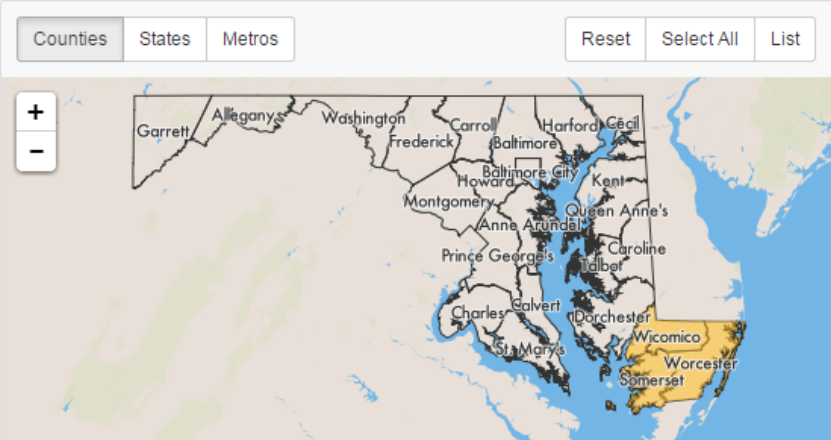
Frequently Visited Destinations



MARYLAND DATA Explorer

See How Maryland Compares
States ■ Metros ■ Counties

MARYLAND OF OPPORTUNITY.



Compare Maryland's 24 major jurisdictions on a variety of economic and demographic factors, or create county groups for regional comparison.

Each area of the State offers unique advantages, from natural resources and transportation infrastructure to workforce skills and availability.

Choose a set of statistics:

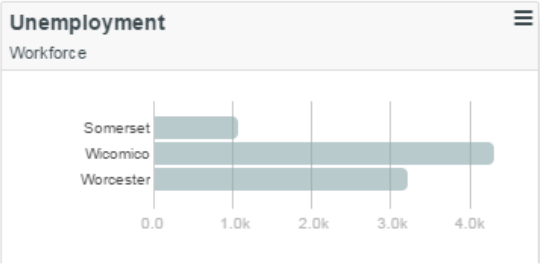
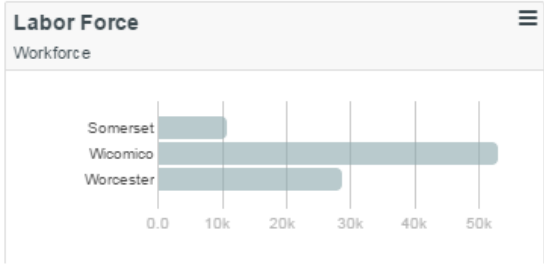
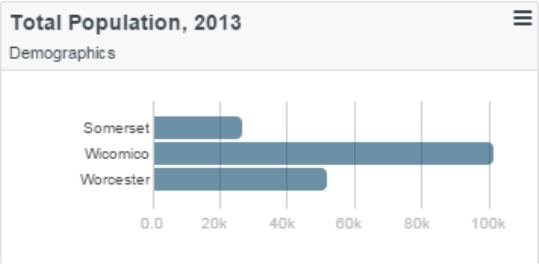
- Overview Demographics Education Taxes Geography
- Transportation Quality of Life Workforce

Maryland ranks second among the states in the percentage of professional and technical workers in the workforce.

Chart Tools

View Table Download All

▼ ▲ ↕

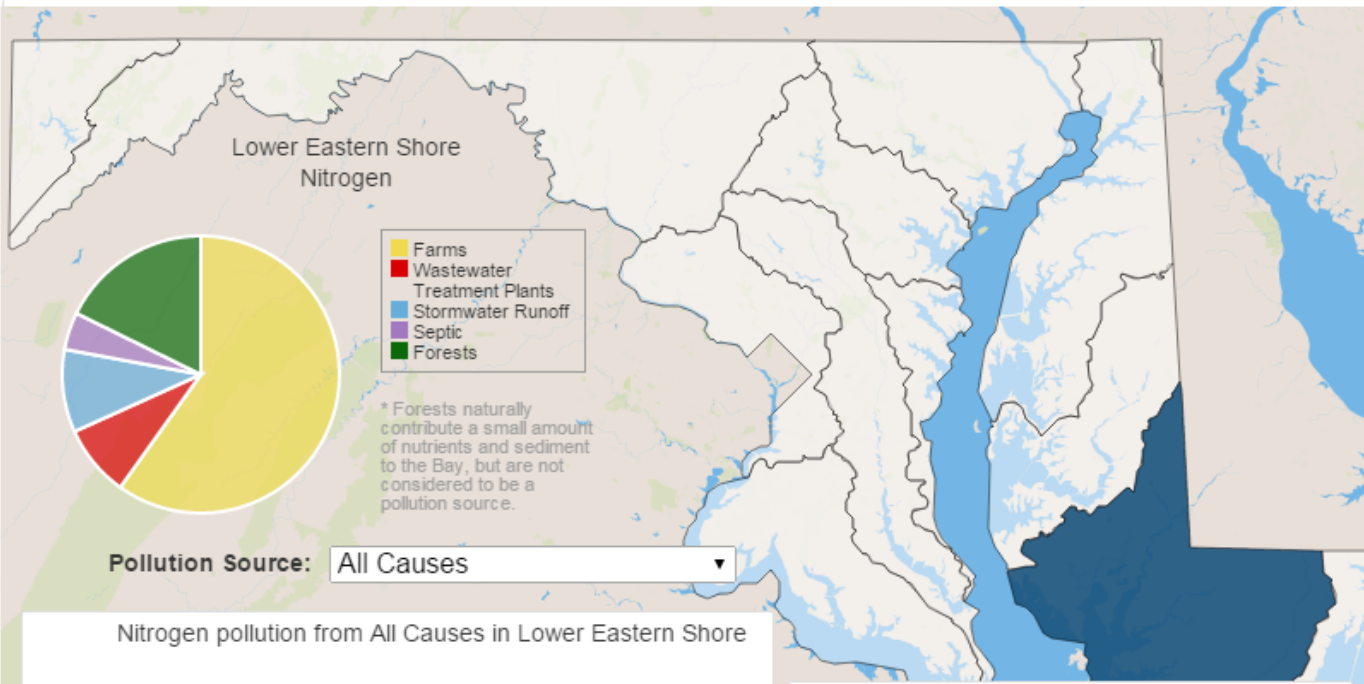


Causes of Chesapeake Bay Pollution

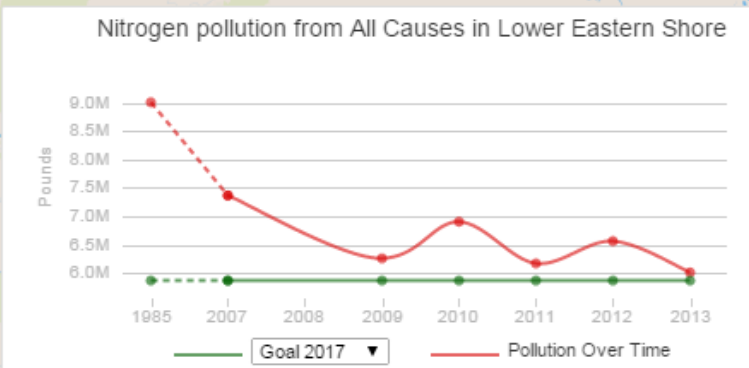
Click map to select a basin.
Click [here](#) for statewide data.

☒ Nitrogen
 ☐ Phosphorus
 ☐ Sediment

Tributary Basins ▾



Pollution Source: All Causes ▾



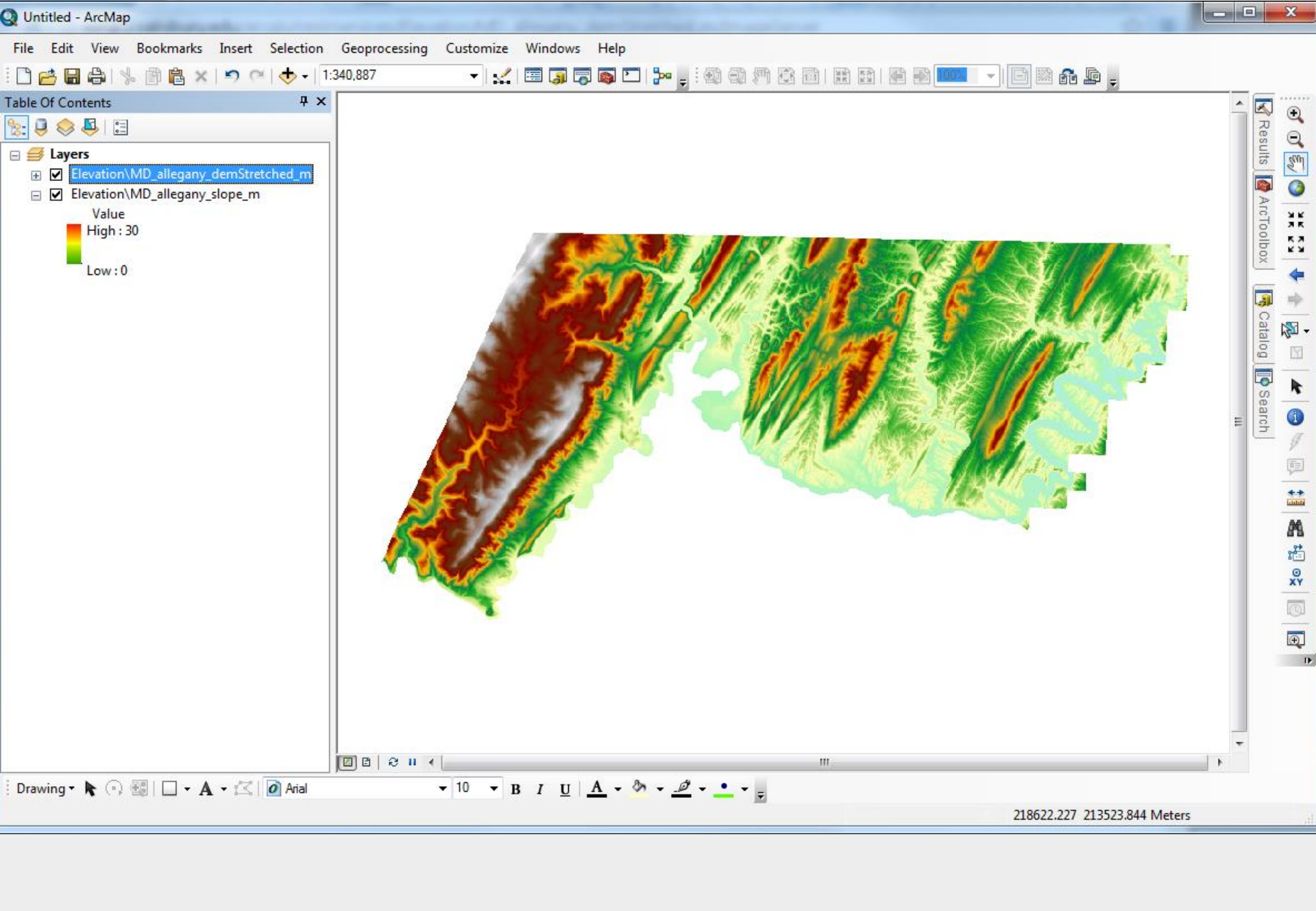
Nitrogen: The 1985 scenario is from EPA CBP Phase 5.3.2 using 1985 atmospheric reduction strategies. Atmospheric reduction strategies projected to be in place by 2025 would have reduced Maryland's 1985 statewide nitrogen load by 4.8 million lbs/yr. This reduction is due to actions both within Maryland and in the larger Chesapeake Bay airshed. Changes in pollution over time are the result of a combination of reduction in atmospheric deposition, reduction due to management practices, and change due to new development.

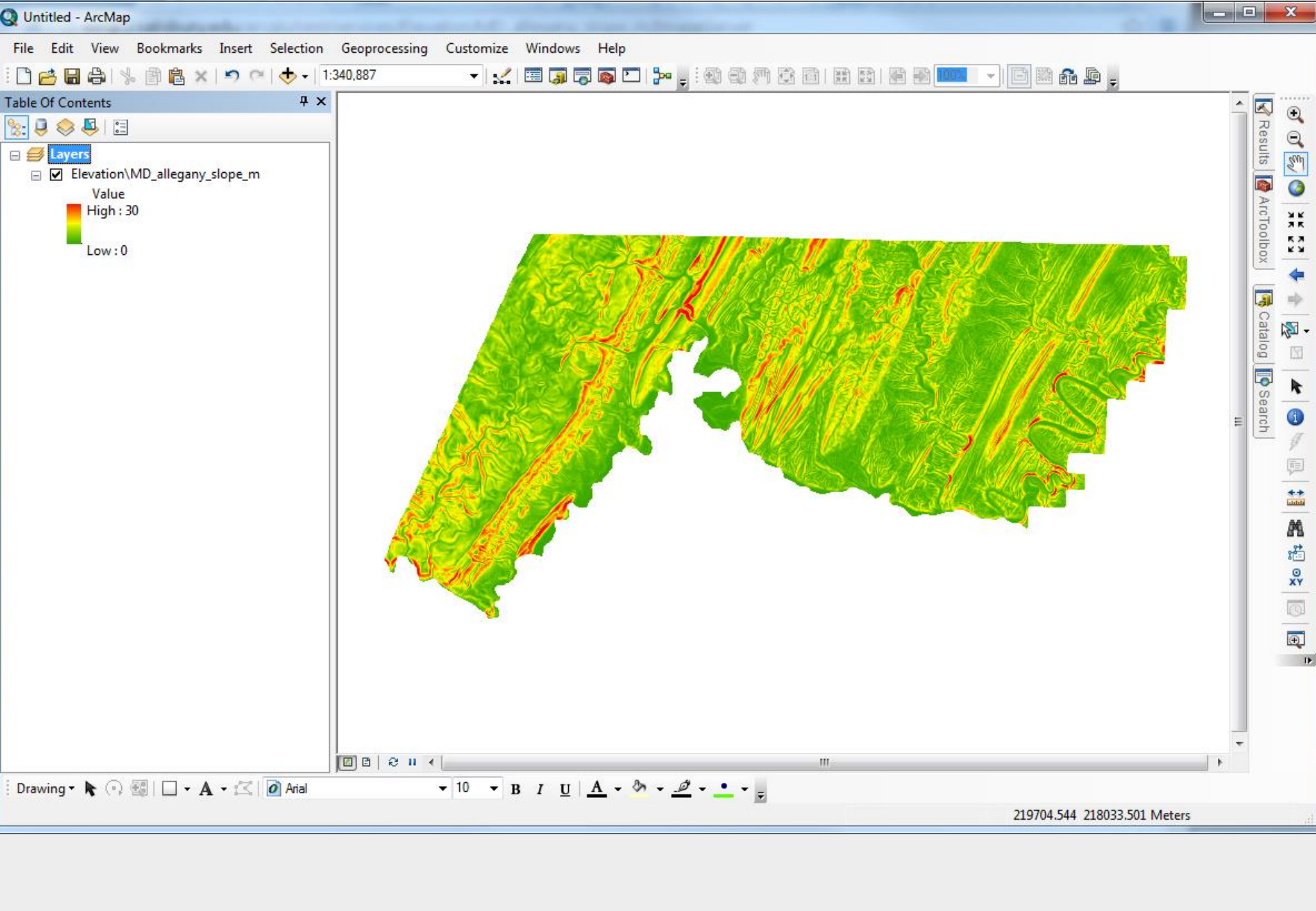
Note that the 2017 goal represents 60% progress toward achieving the 2025 goal

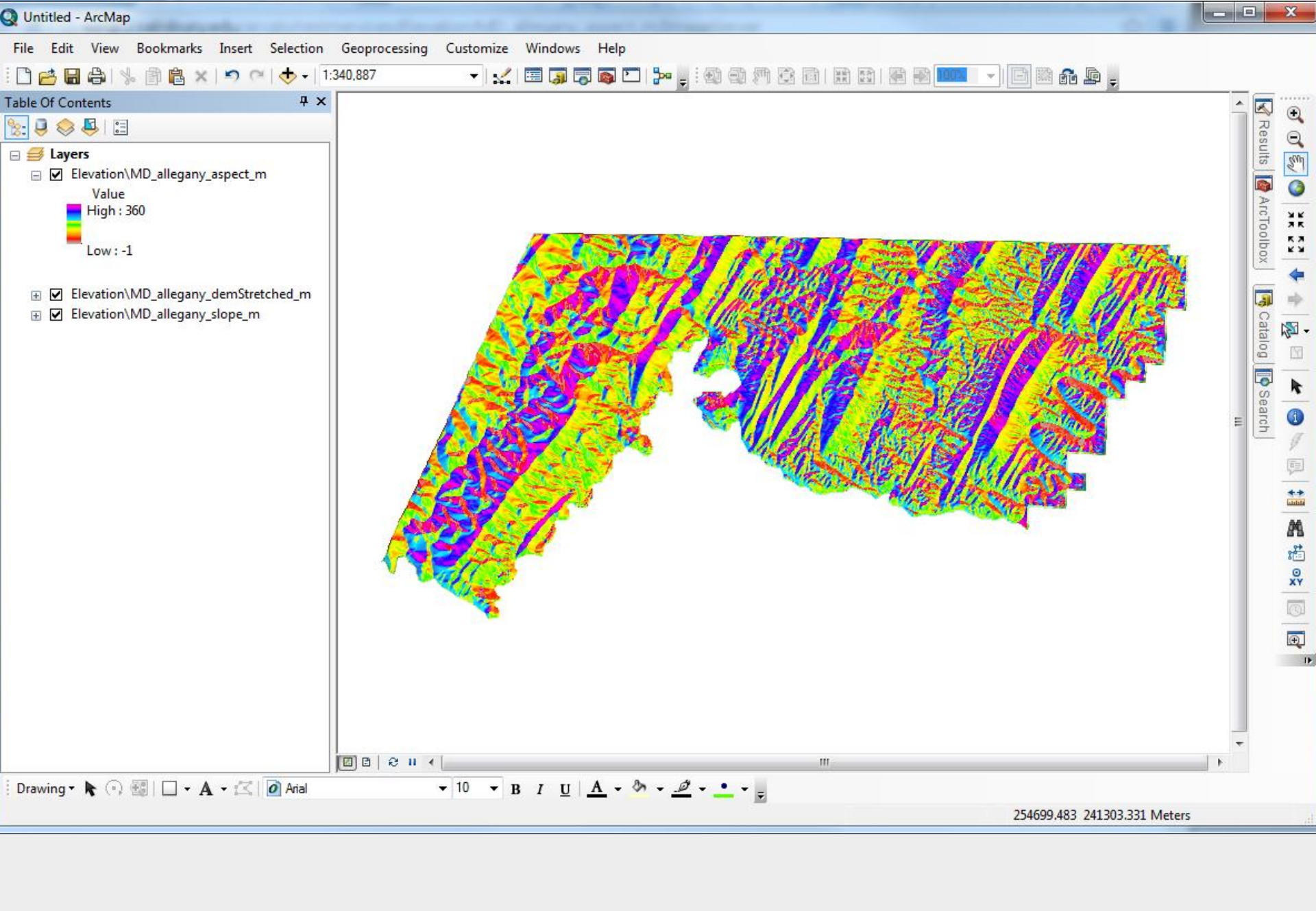
Data source: EPA Phase 5.3.2 Watershed Model

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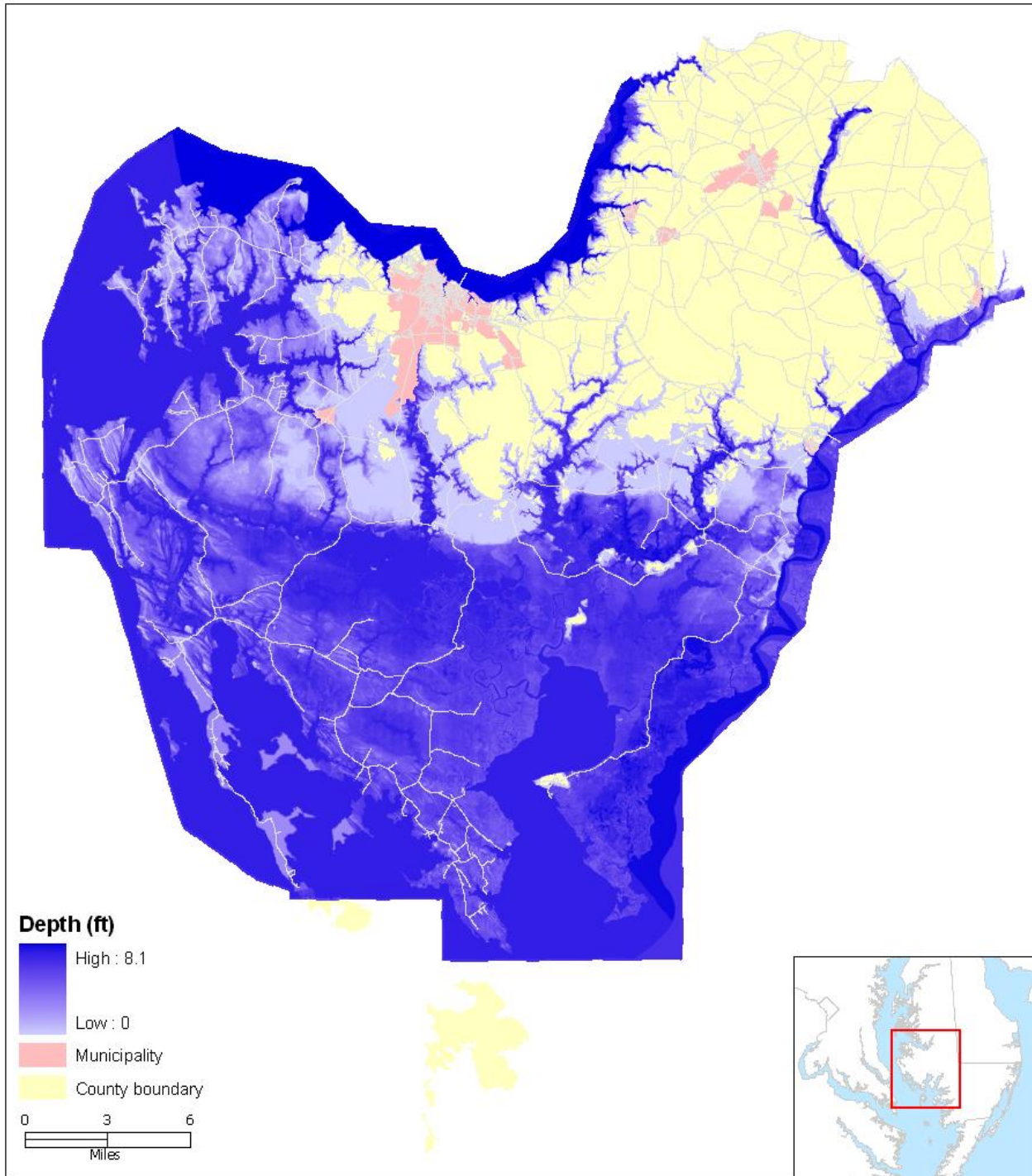






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- Layers**
- ☐ centroid_for_poly
 - ☒ build_in_fp
 - ☒ sby_buildings
 - ☐ hazus_100_sby_nowater4
 - ☐ hazus_100_sby2
 - ☐ sby_water
 - ☐ wicomico_sheets_all
 - ☒ parcel_final
 - ☐ corplim_poly
 - ☒ depth100
 - Value
 - High : 5.30686
 - Low : 0
 - ☒ parcels_in_fp
 - ☐ AH42.tif
 - ☐ AF47.tif
 - ☐ AF48.tif

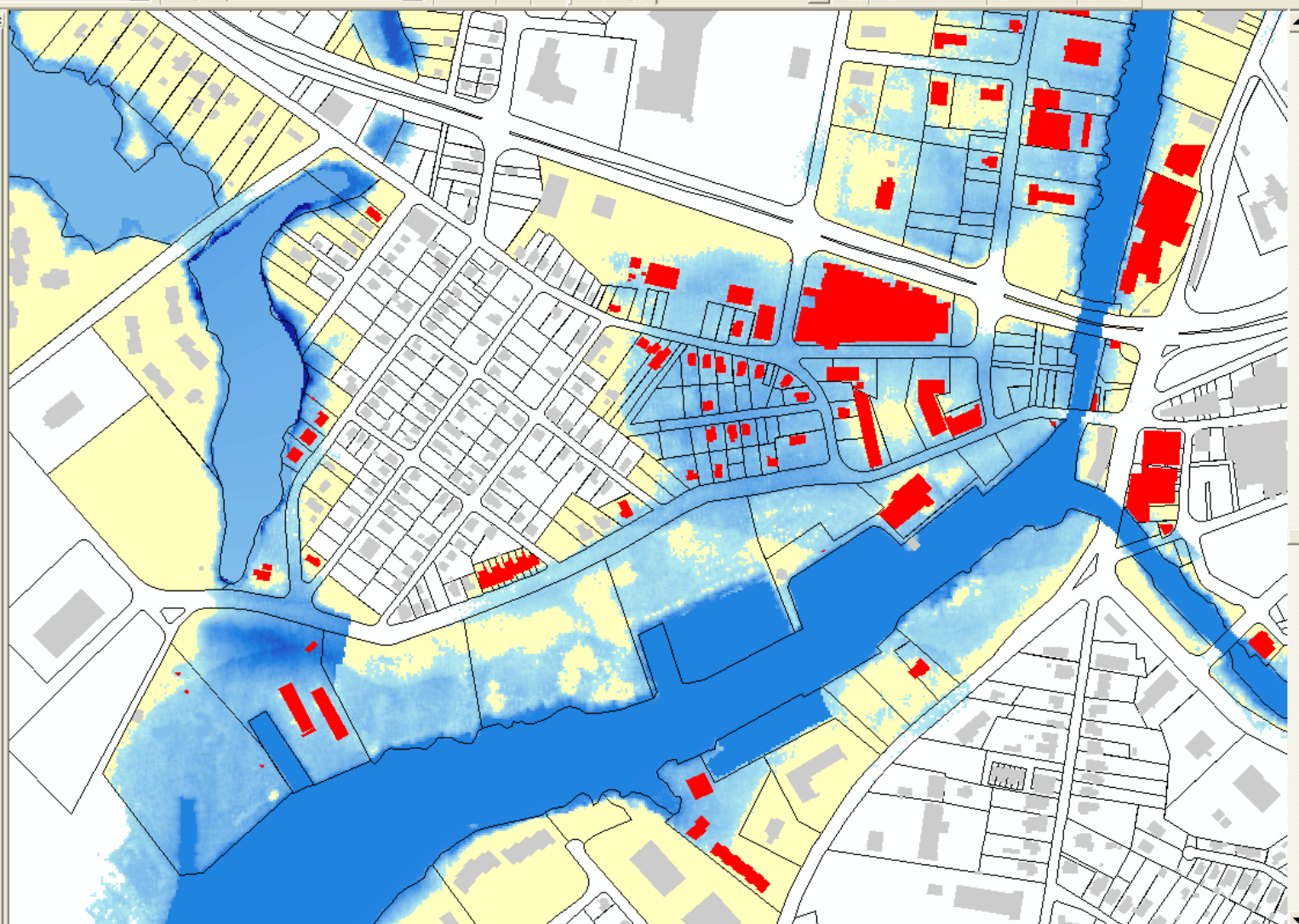
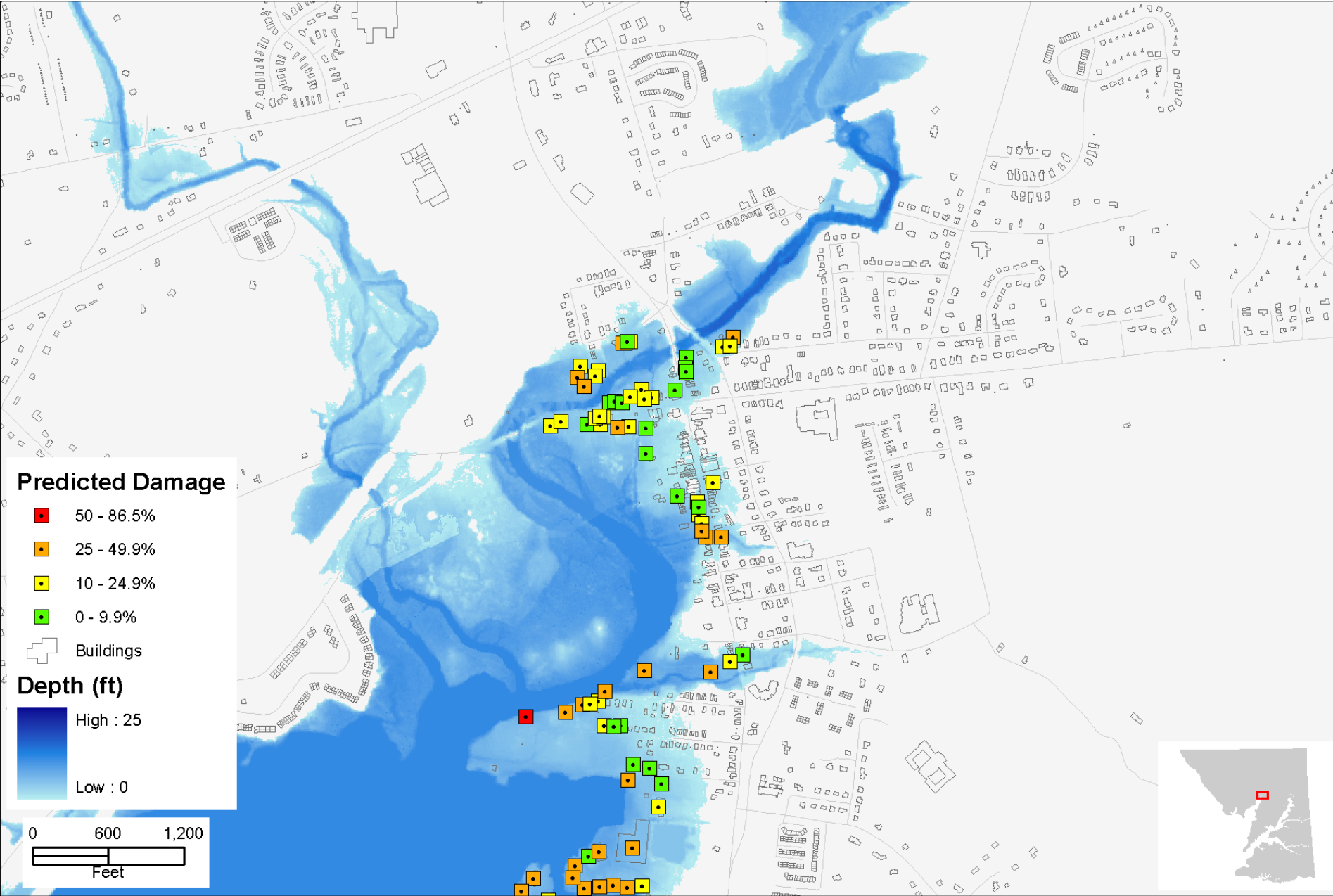
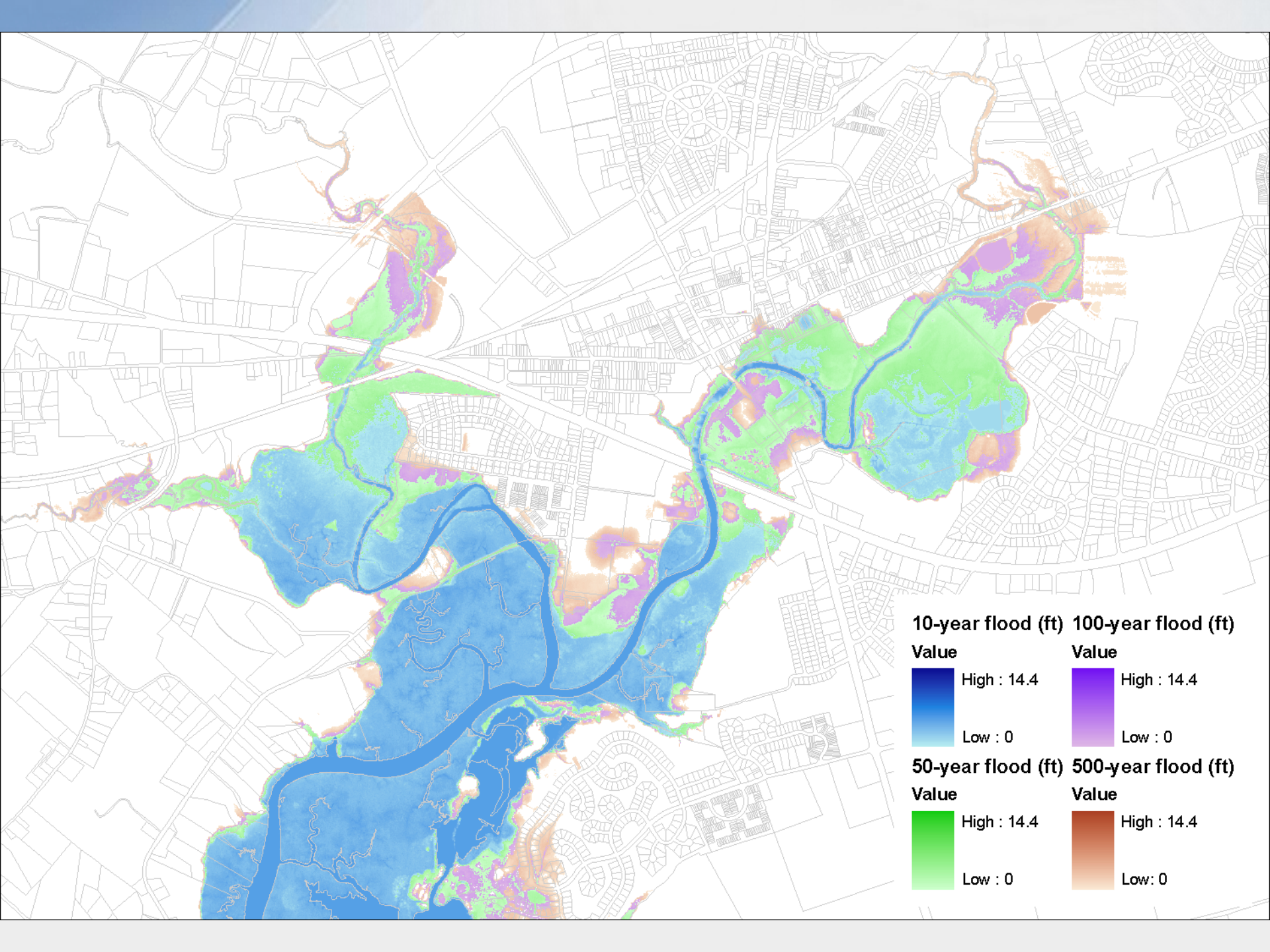


Figure 2.14 Potential flooding and building damage in the Town of North East





We would love to partner with you!

- Contact: esrgc@salisbury.edu or 410-677-5390

