WQGIT Decisions & Current Zoning Scenario

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CBP Land Use Workgroup Meeting
October 4, 2017

U.S. Department of the Interior
U.S. Geological Survey

WQGIT Decisions (9/26/17)

1. Use the CBLCM and MD Land Use Model to establish growth projections, with the opportunity to provide data or alternative modeling approaches in future years.

2. Use 2025 growth projections to account for growth in the Phase III WIPs.

3. Update the growth projections every 2 years with the best available data to inform the development of the two-year milestones.

USGS

Chesapeake Bay FY'18 Scenarios

"Historical Trends": previous patterns of growth replicated into the future (complete)

"Current Zoning": growth focused towards local areas zoned to accommodate it (November 15th).

"Utopia": aggressive land conservation, accelerated infill/redevelopment, protection of wetlands, riparian forest buffers, and floodplains, and up-zoning urban and down-zoning rural areas, avoiding growth in areas subject to sea-level rise and storm surge (January 15th).

*Additional considerations: avoiding development on soils that don't perc and in built-out parcels.

USGS

Chesapeake Bay Land Change Model
"Current Zoning" Scenario

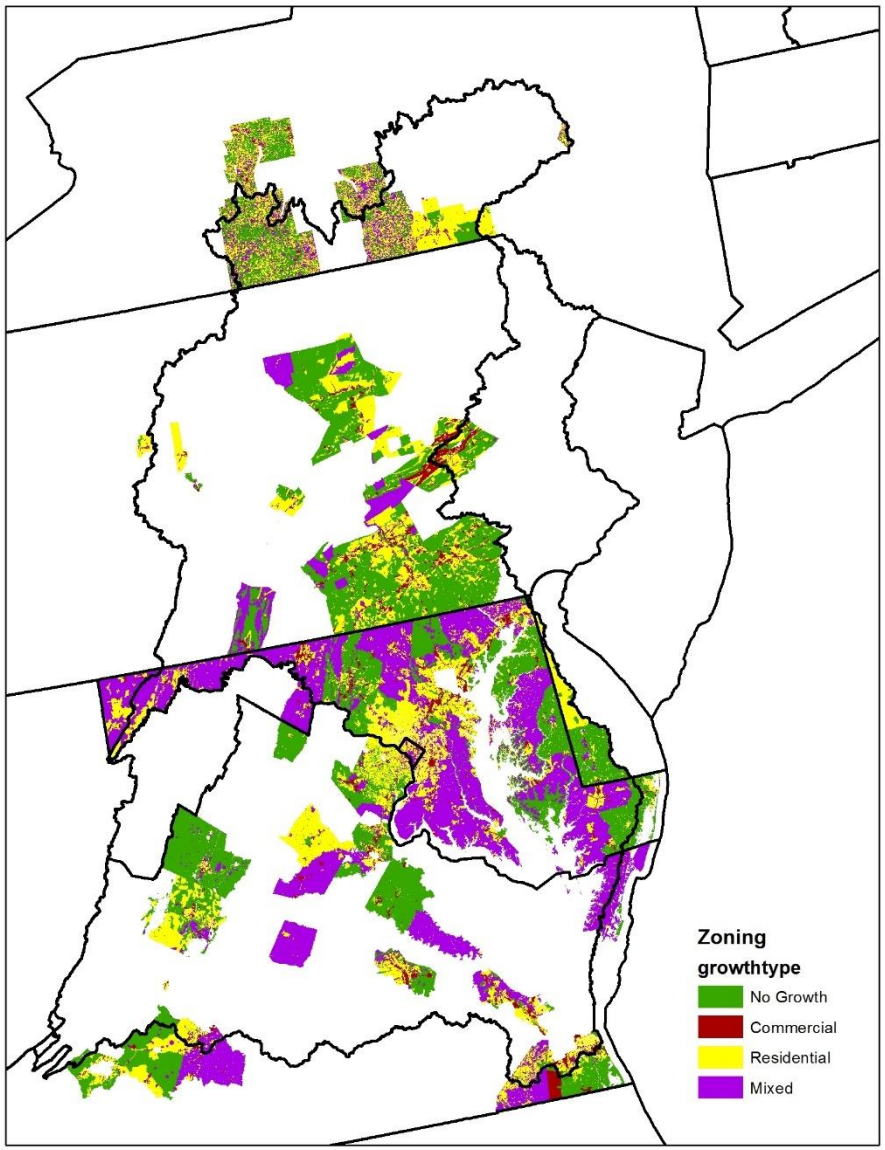
- Incorporates national data from PADUS, NAVTEQ, US Census Bureau, Bureau of Labor Statistics, Bureau of Economic Analysis, Multi-Resolution Land Characteristics Consortium.
- Incorporates local data (parcels, land use, and zoning).
- Incorporates CBP's high-res developed land uses and protected lands.
- Simulates infill/redevelopment by county.
- Simulates residential and commercial development in five year increments at 30m resolution with parameterization at the state and county levels.
- Results summarized by NHDv1, NHDv2, HUC12, Municipalities/Tracts, and Phase 6 model units.

USGS

Chesapeake Bay Land Change Model
"Current Zoning" Scenario

Generalization of Local Zoning:

- No growth (conservation)
- Residential
- Commercial
- Mixed



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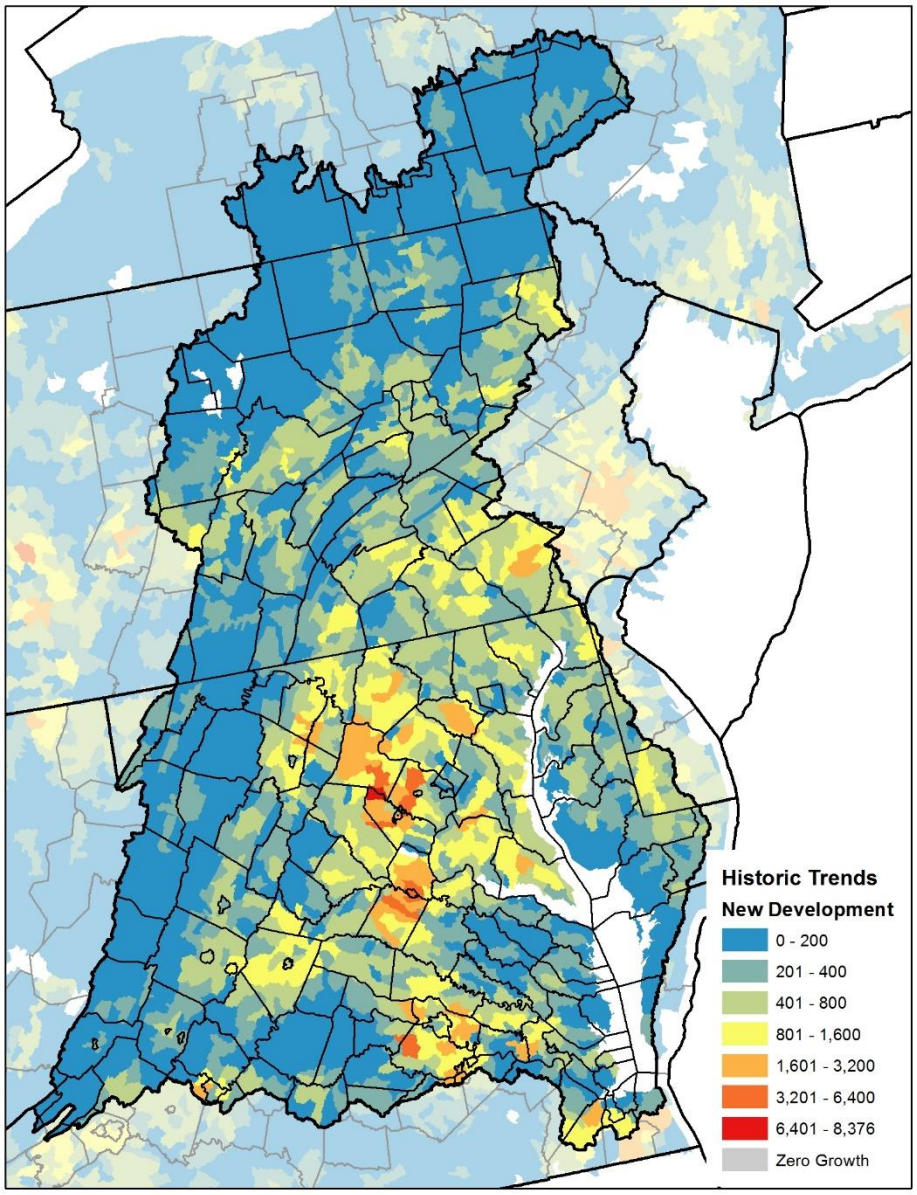
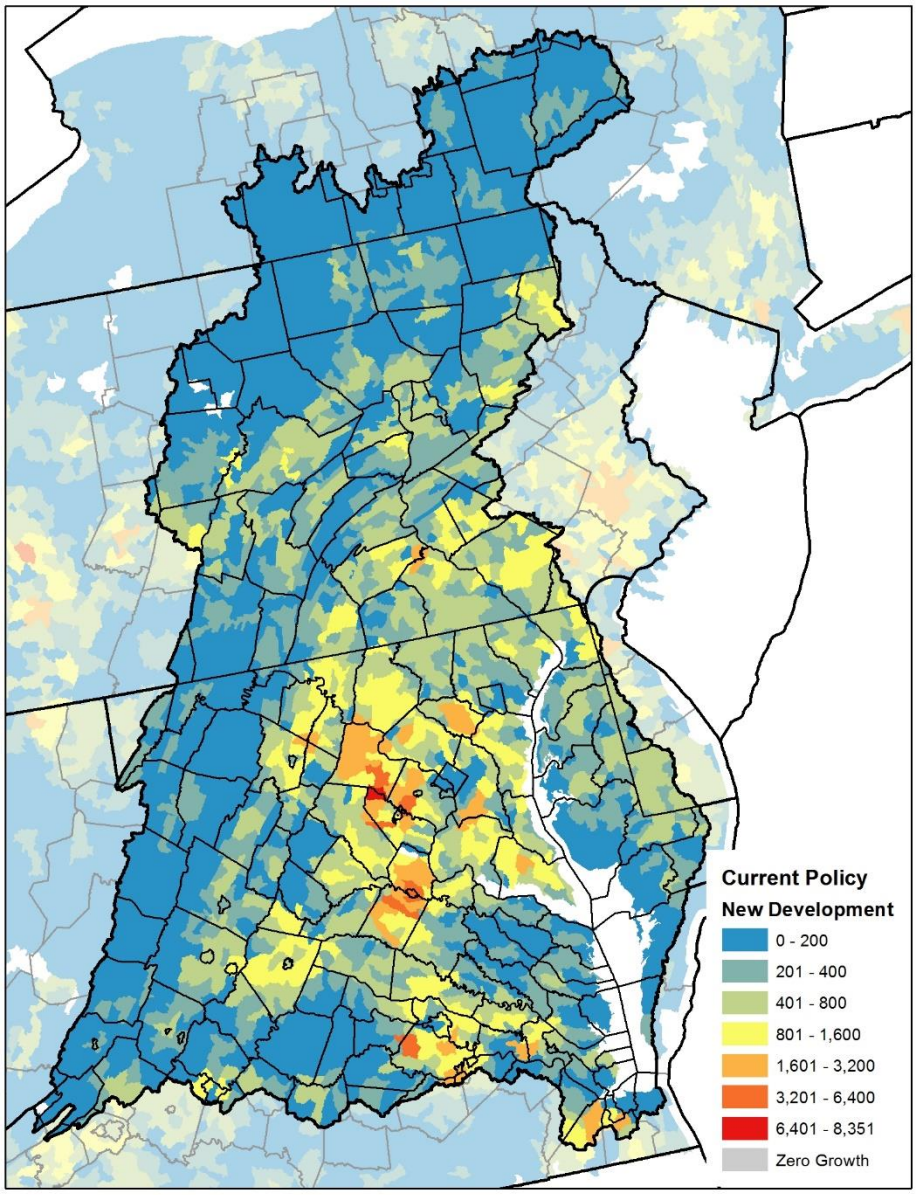
“Historical Trends”

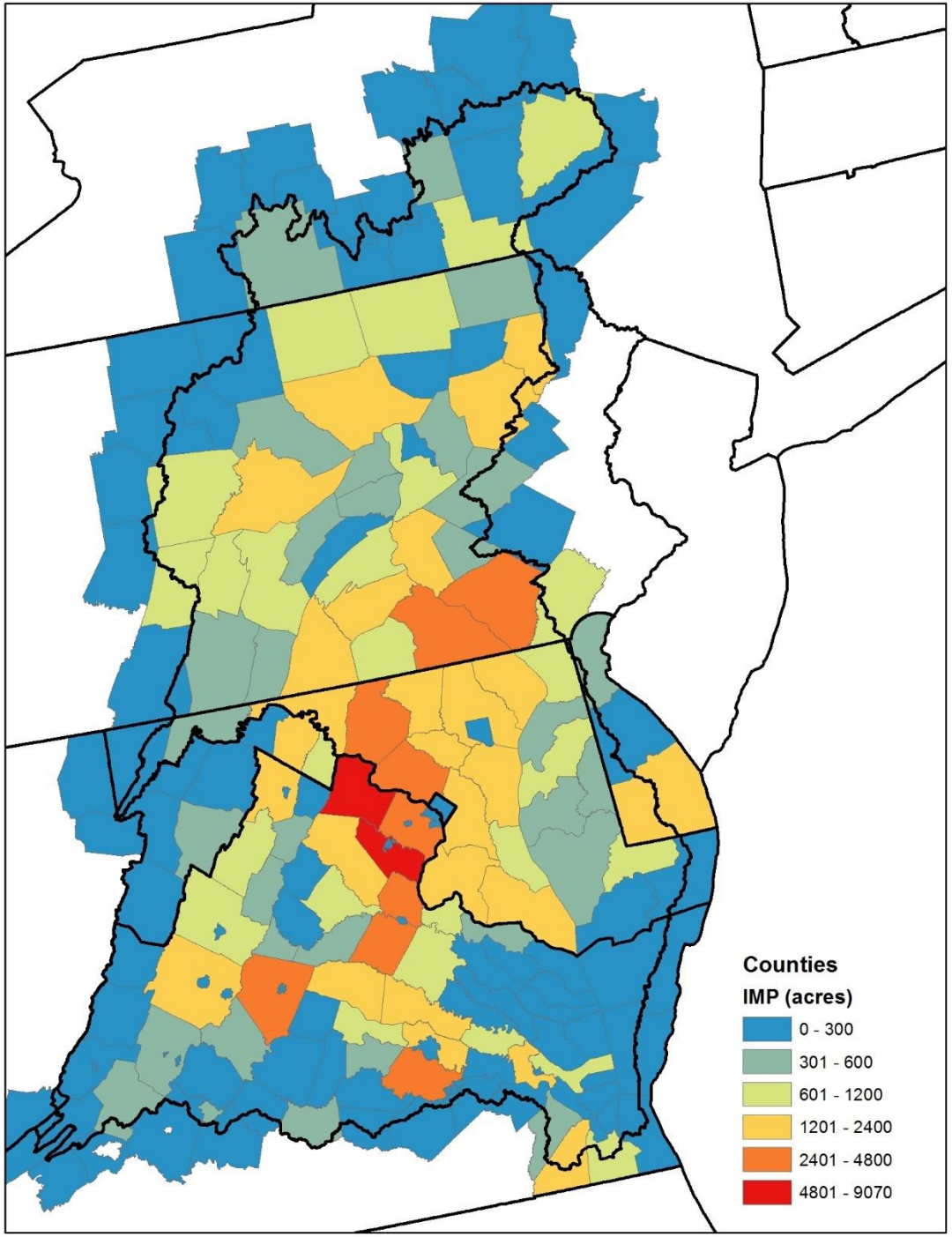


“Current Zoning”



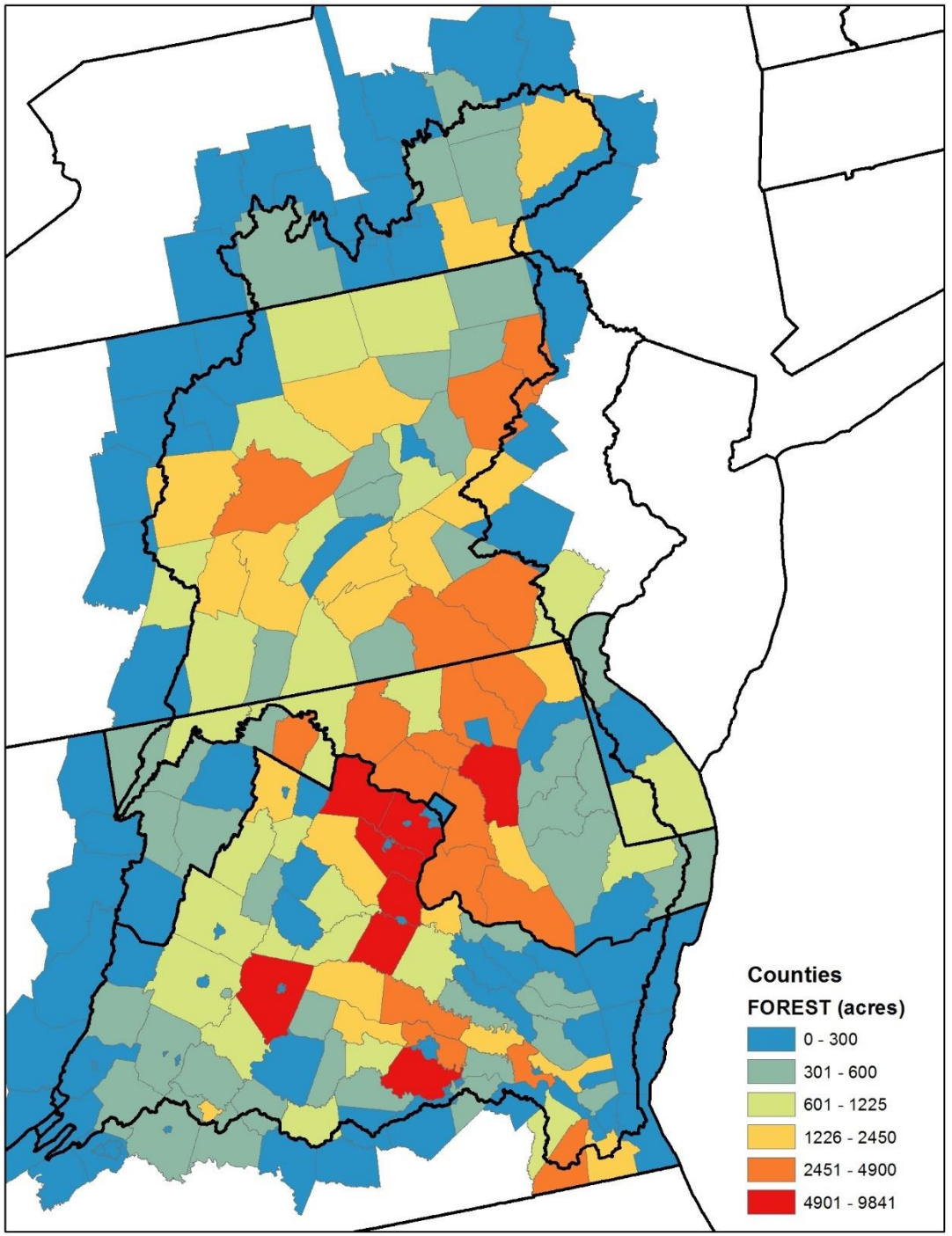
USGS

Forecasted Growth in Impervious Surfaces (2013 – 2025) "Current Zoning"



USGS

Forecasted Conversion of Forests (2013 – 2025) "Current Zoning"



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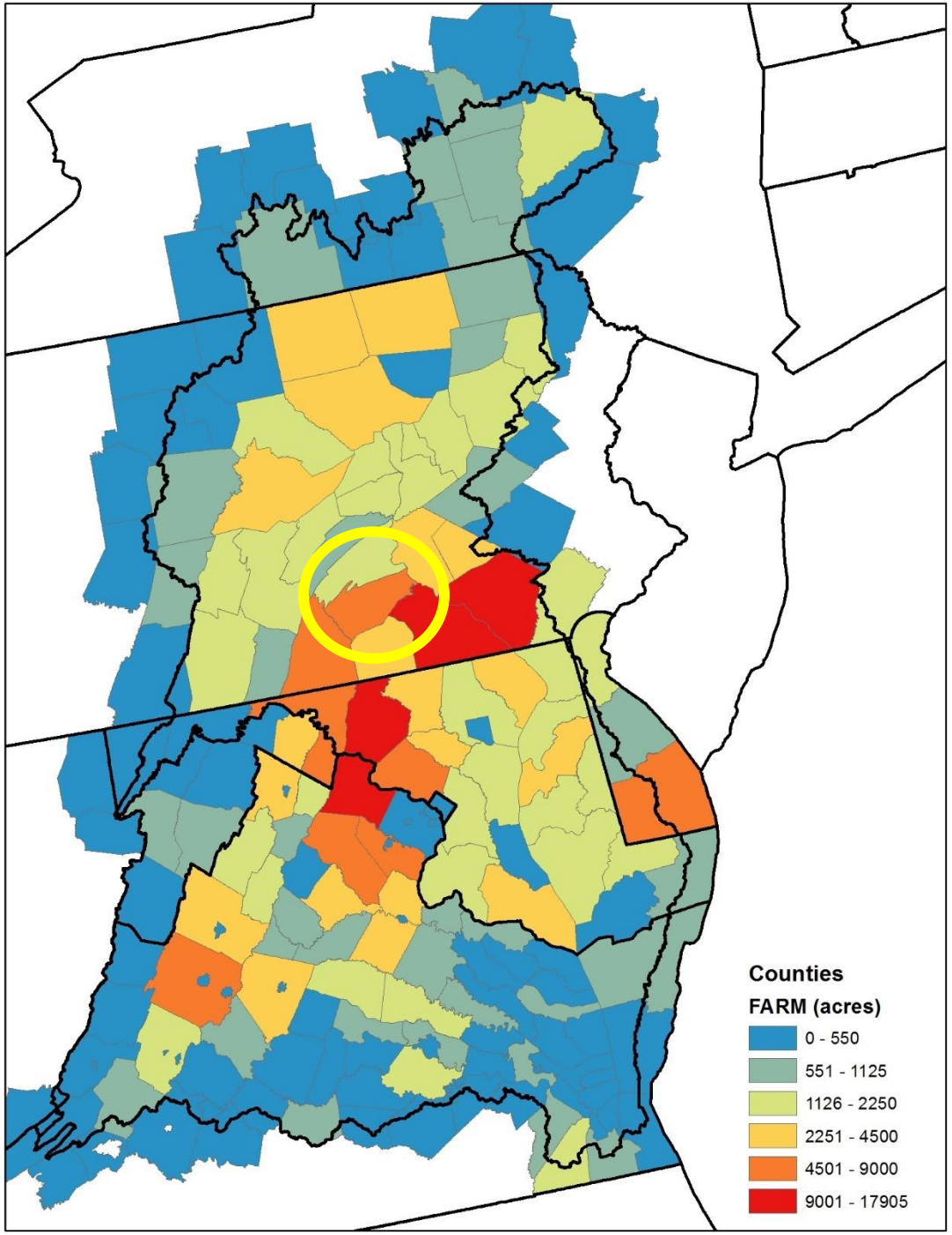
Forecasted Conversion of Farmland (2013 – 2025) "Current Zoning"



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Scenario Timeline

October 18th:
Disseminate "Current Zoning" scenario to LUWG, USWG, and WWTWG members.

November 1st:
LUWG meeting (jurisdictional comments on "Current Zoning" scenario due).

November 15th:
Final "Current Zoning" scenario delivered to Phase 6 watershed model

December 6th:
LUWG meeting- Draft "Utopian" scenario presented.

December 20th:
Comments due on "Utopian" scenario.

January 15th:
Final "Utopian" scenario delivered to Phase 6 watershed model.

USGS