

Phase 6 Land Use Update Sewer Service Area, Municipal Separate Storm Sewer System, and the Combined Sewer Overflow

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**February 21, 2017
Wastewater Treatment Workgroup Call
Annapolis, Maryland**

Overview

- **Sewer Service Area (SSA) vs. Septic Systems**
 - Background
 - Local Data
 - Updates
 - Examples
- **Municipal Separate Storm Sewer System (MS4)**
- **Combined Sewer Overflow (CSO)**

Mapping Sewer Service Areas using Weight-of-Evidence Approach

2013 Census Places,
Winchester, VA

All lands within Census Place will be considered served by sewer.

Key Issues with Phase 5.3.2

- **Underestimation**
 - Expansion of infrastructure → Population Growth and Sprawl
- **Overestimation**
 - Coarse Resolution of old data
 - Assumption of development → Sewer
- **Connectivity**
- **Different GIS formatting and methodologies**
 - Spatial Gaps
 - Spatial scale of layers (e.g., parcels, Census blocks, tracts, transportation corridors, etc.)

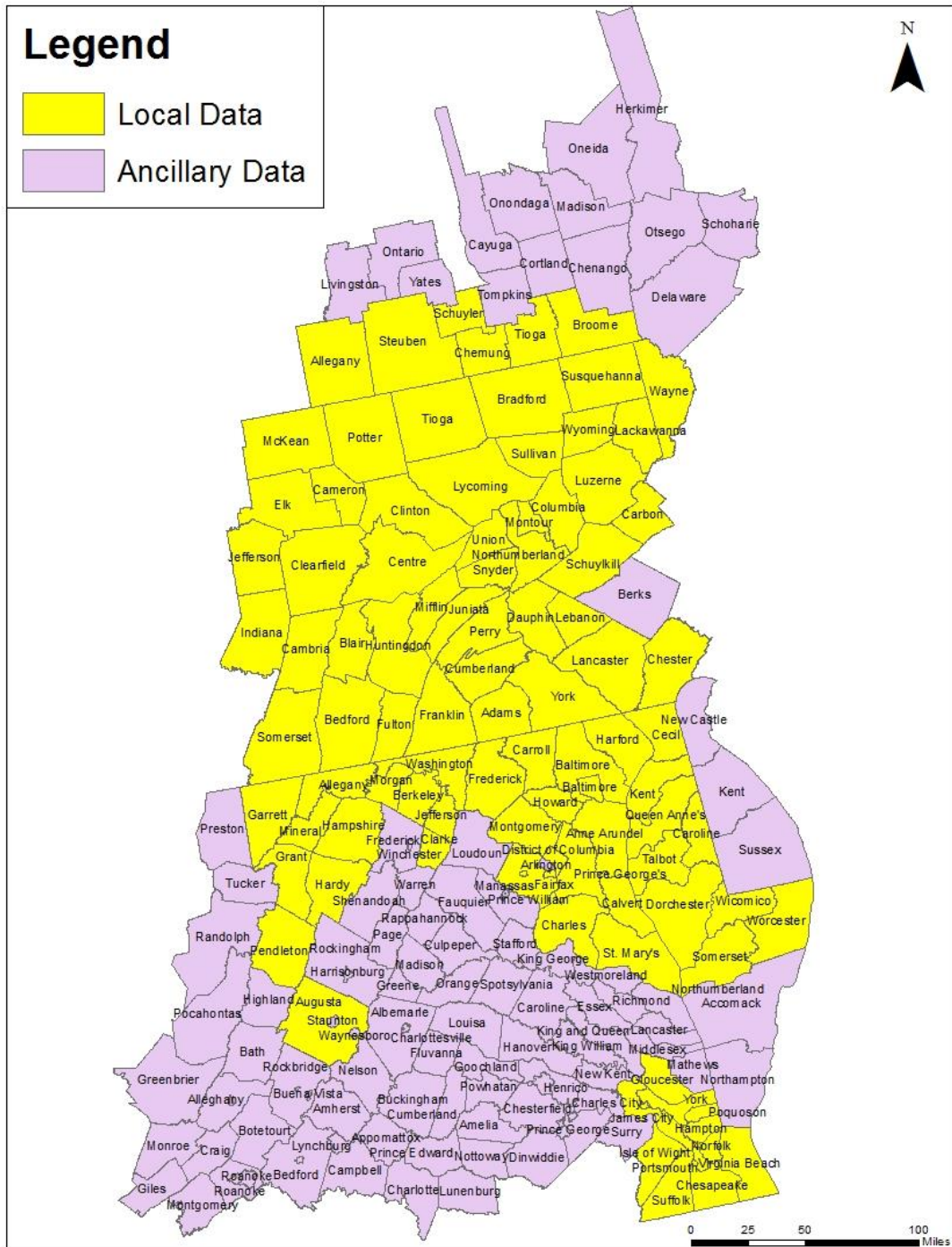
Improvements

- Existing Local Data and SSA layers
- Phase 6
 - Added new state and local data
 - Added improved state and local data
 - Used parcel and/or Census block data to address spatial gaps (e.g., roadways)
- Septic Areas → areas that fall outside of the SSA layer
- Localities without SSA GIS data
 - Weight-of-Evidence Approach

Legend

 Local Data

 Ancillary Data



SEWER SERVICE AREA

Frederick Co., MD

CBP Phase	
Blue	Old (Phase 5.3.2)
Red	Agreement
Yellow	New (Phase 6)

CARROLL
HOWARD
MONTGOMERY

Frederick Co., MD

CBP Phase	
Purple	Old (Phase 5.3.2)
Orange	Agreement
Yellow	New (Phase 6)

CARROLL

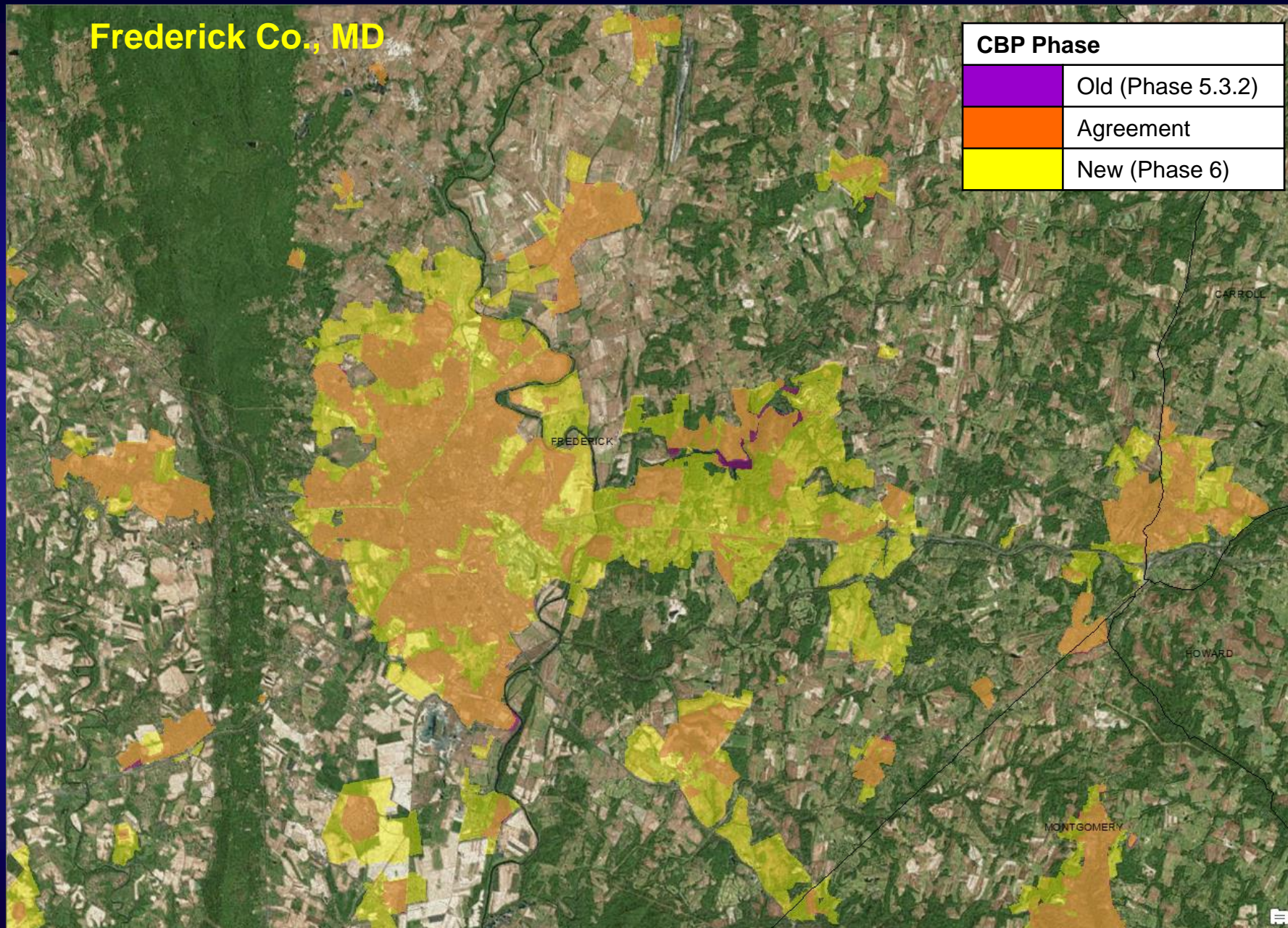
FREDERICK

HOWARD

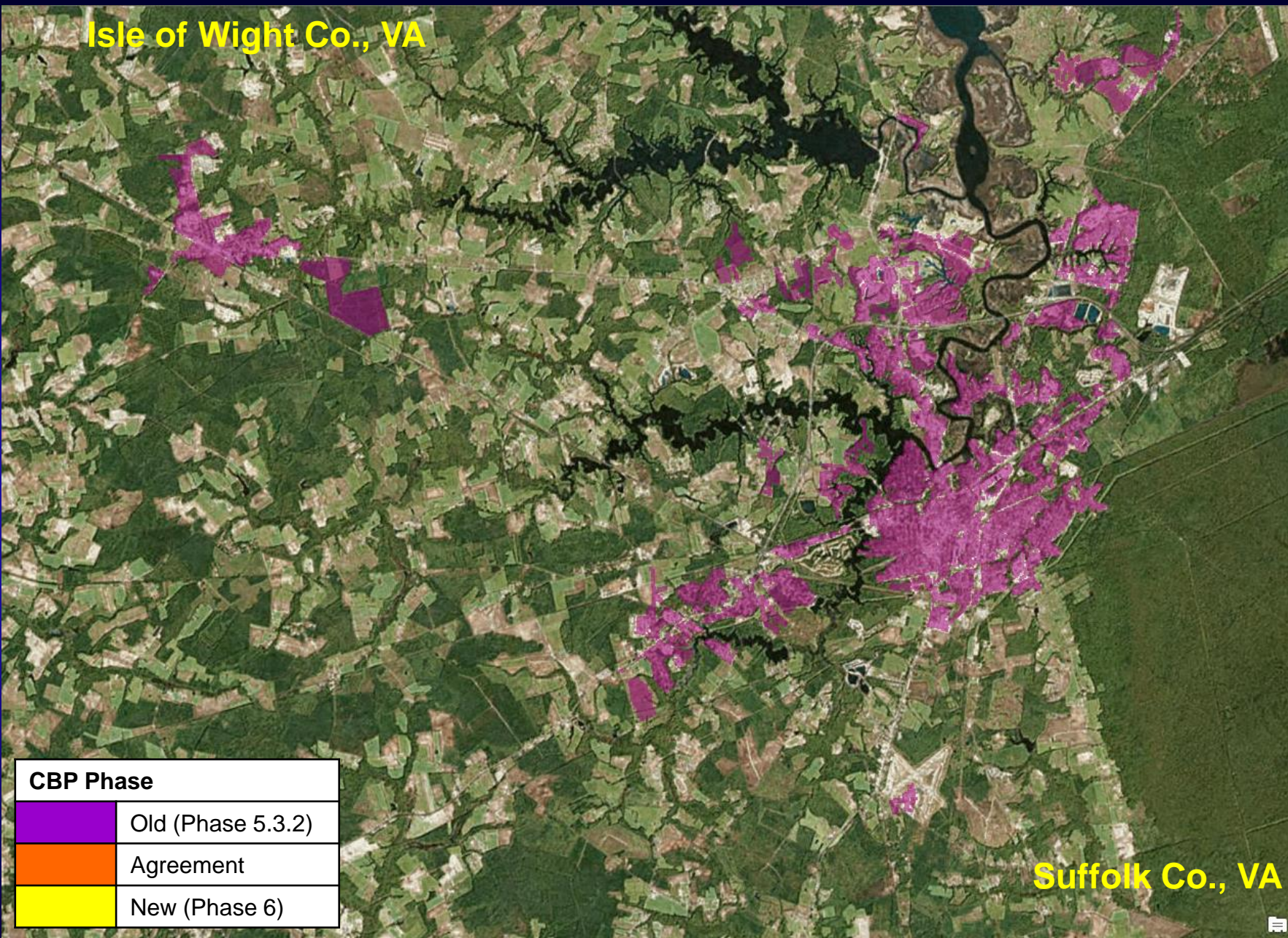
MONTGOMERY

Frederick Co., MD

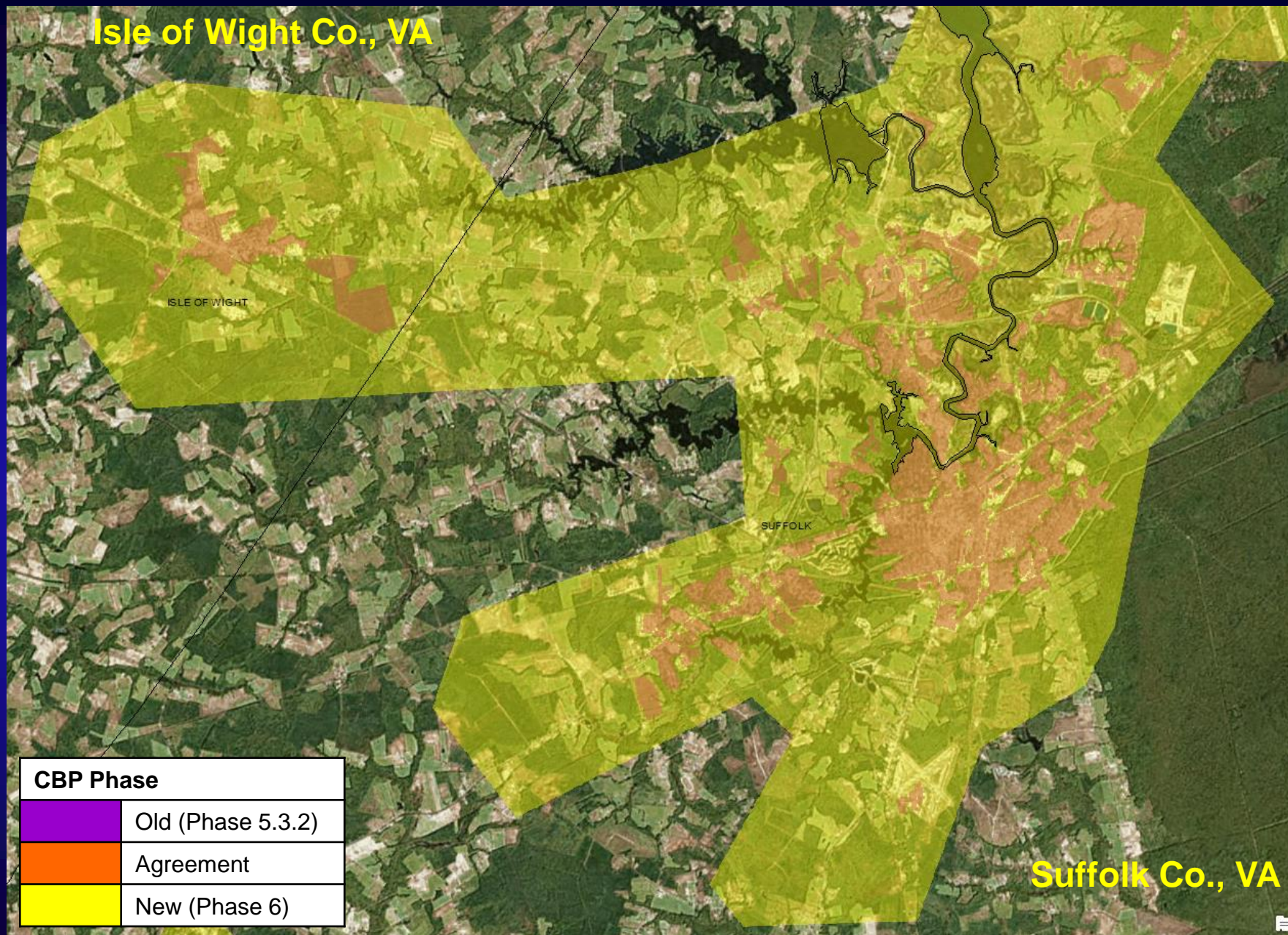
CBP Phase	
	Old (Phase 5.3.2)
	Agreement
	New (Phase 6)

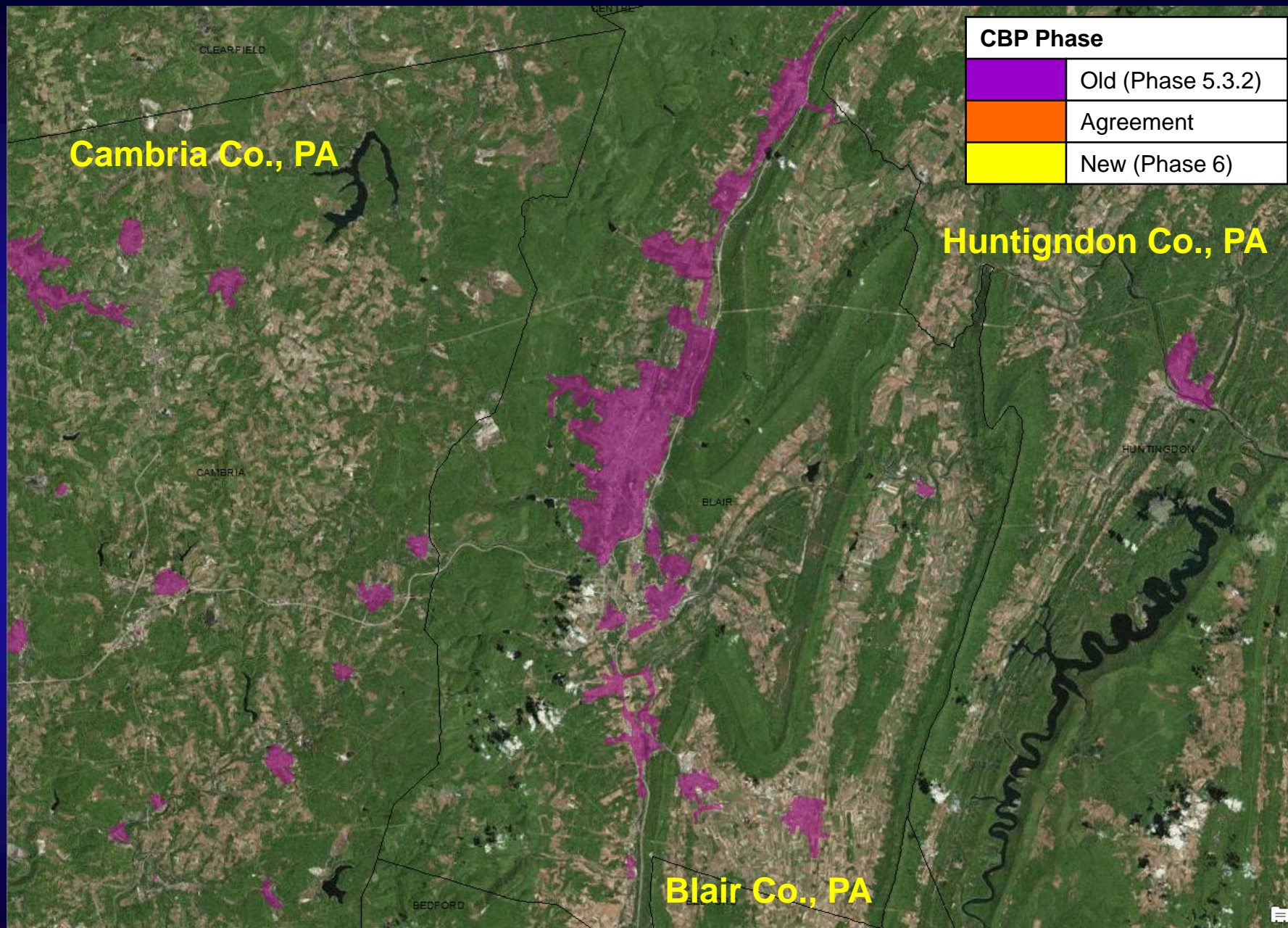


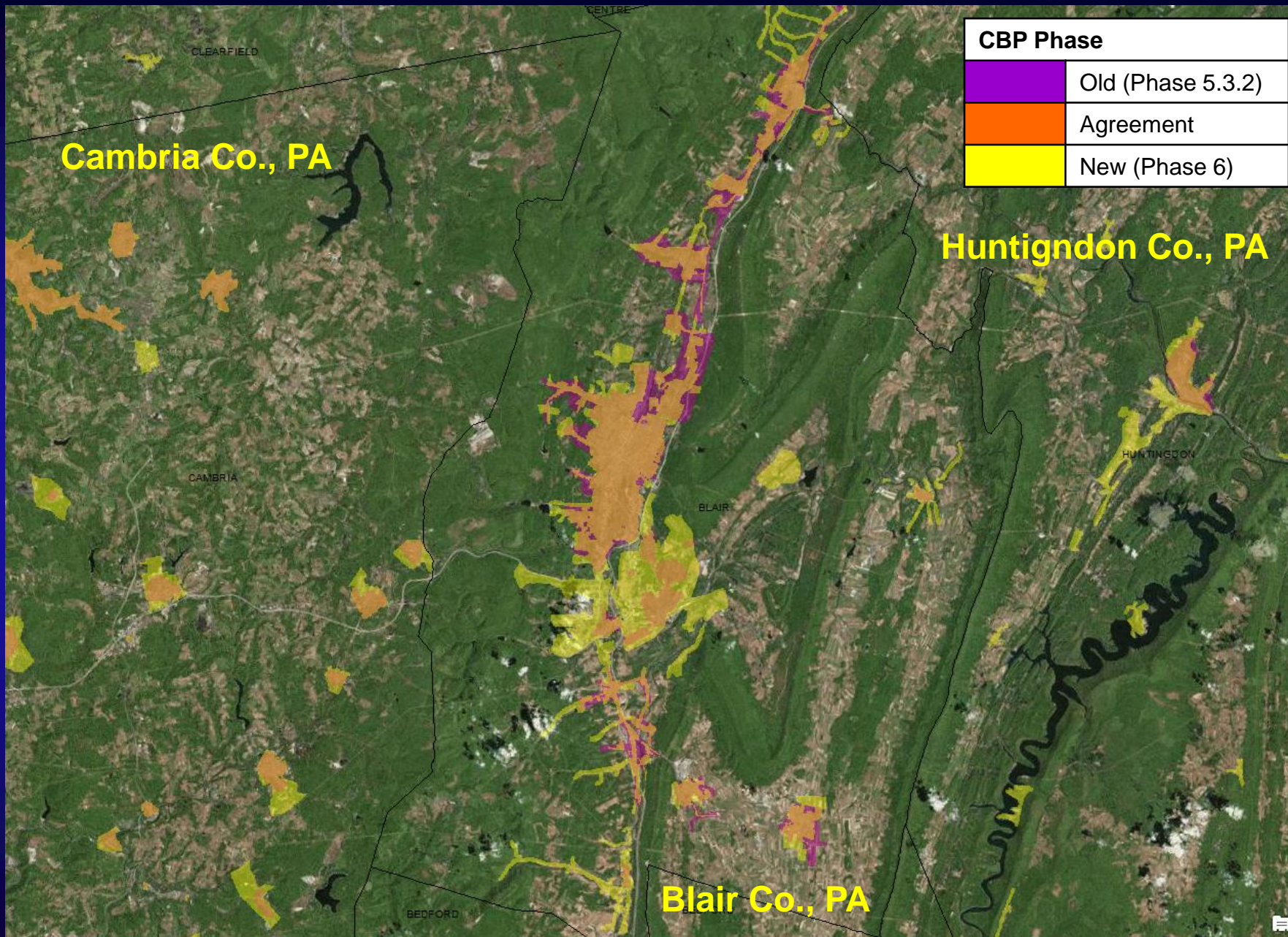
Isle of Wight Co., VA



Isle of Wight Co., VA

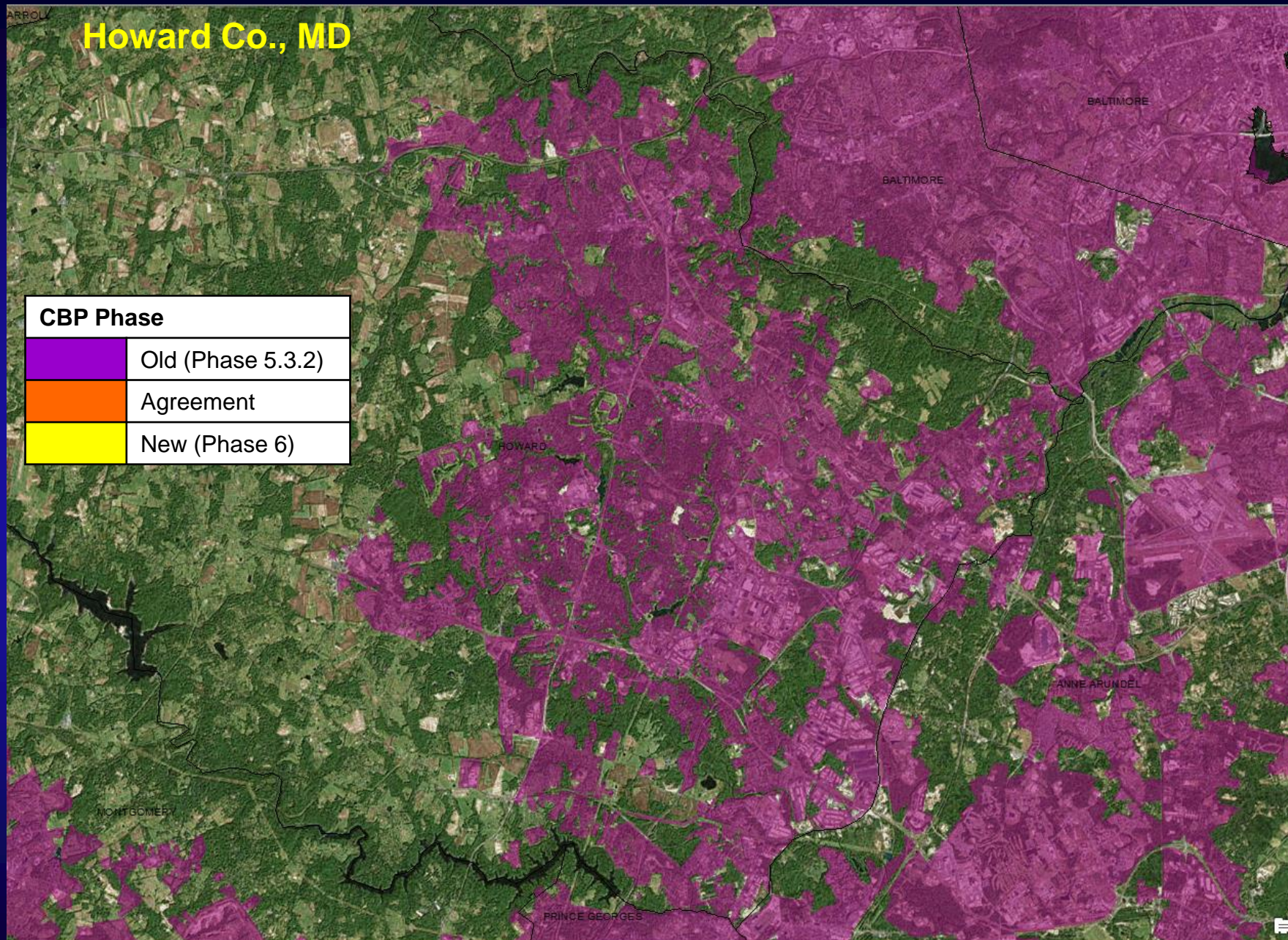




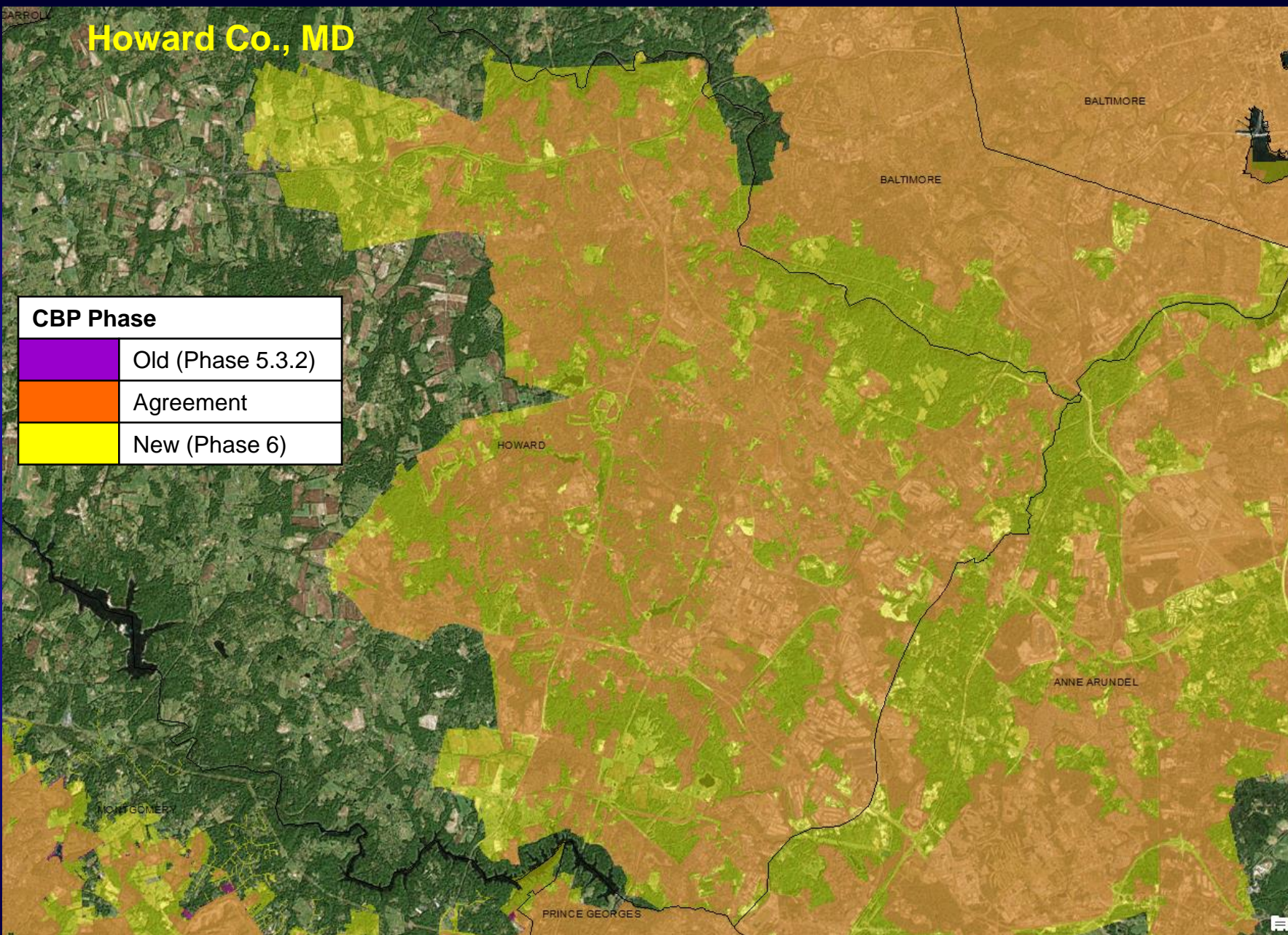


Howard Co., MD

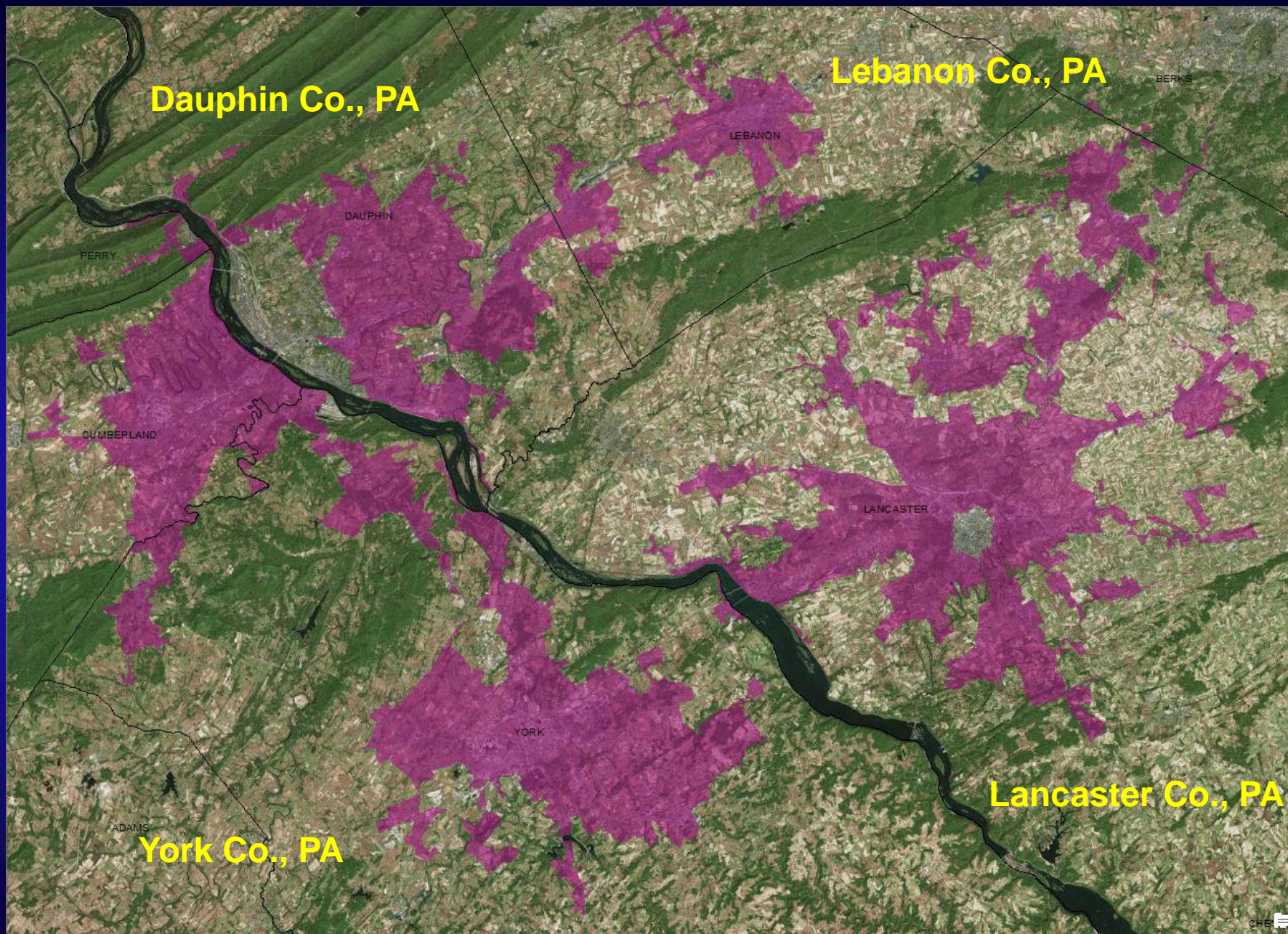
CBP Phase	
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	Agreement
	New (Phase 6)

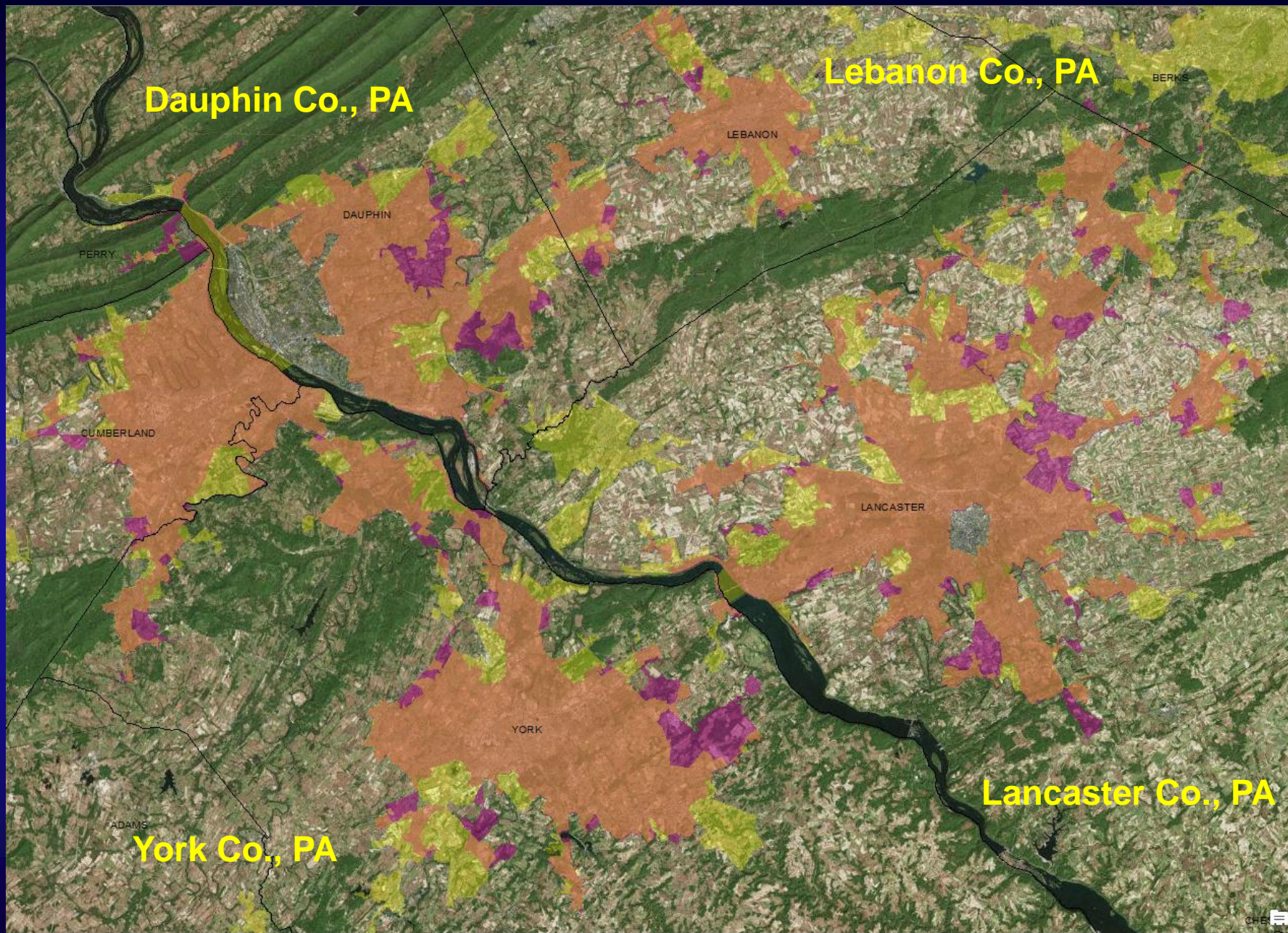





Howard Co., MD

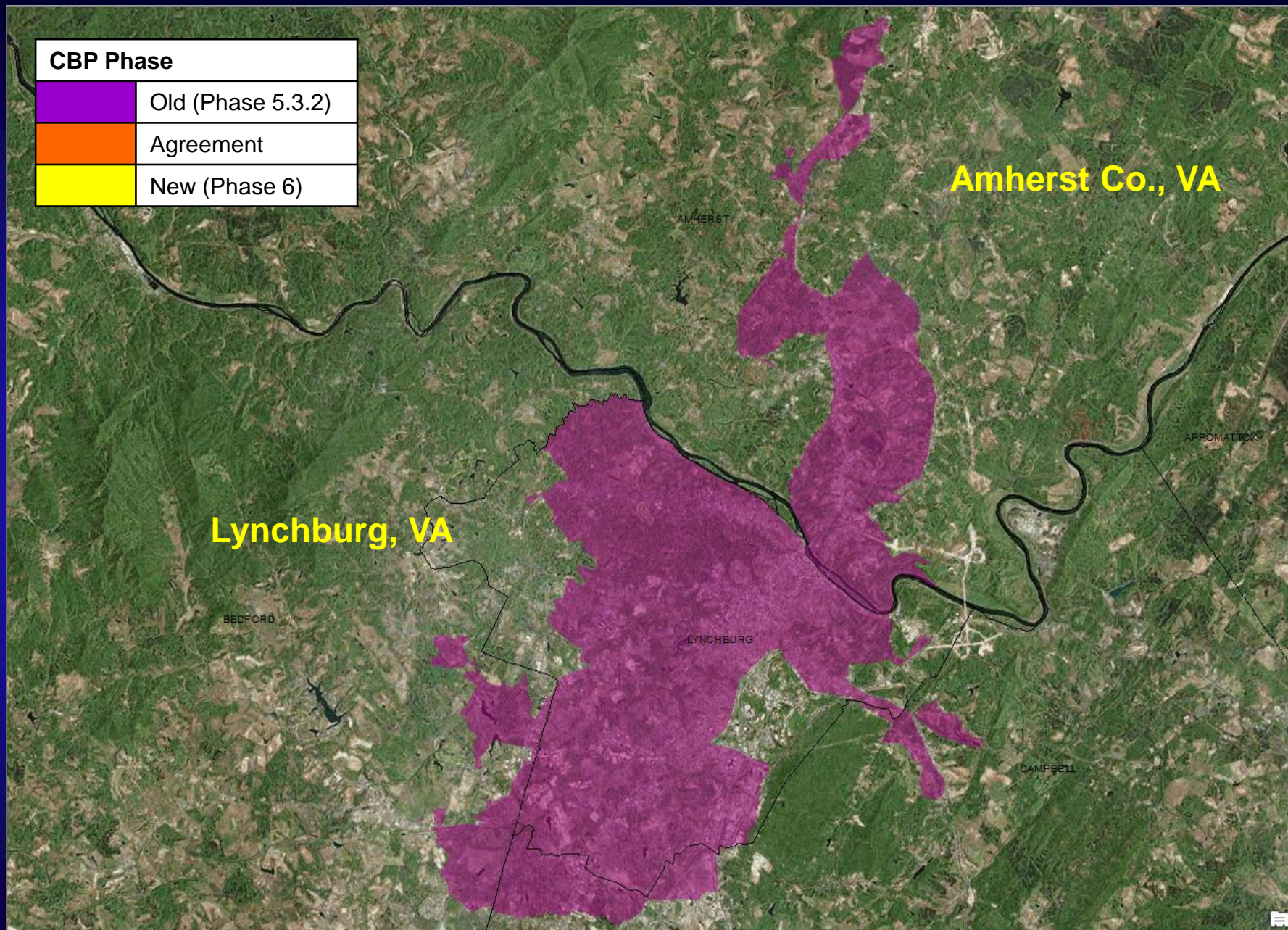





MS4

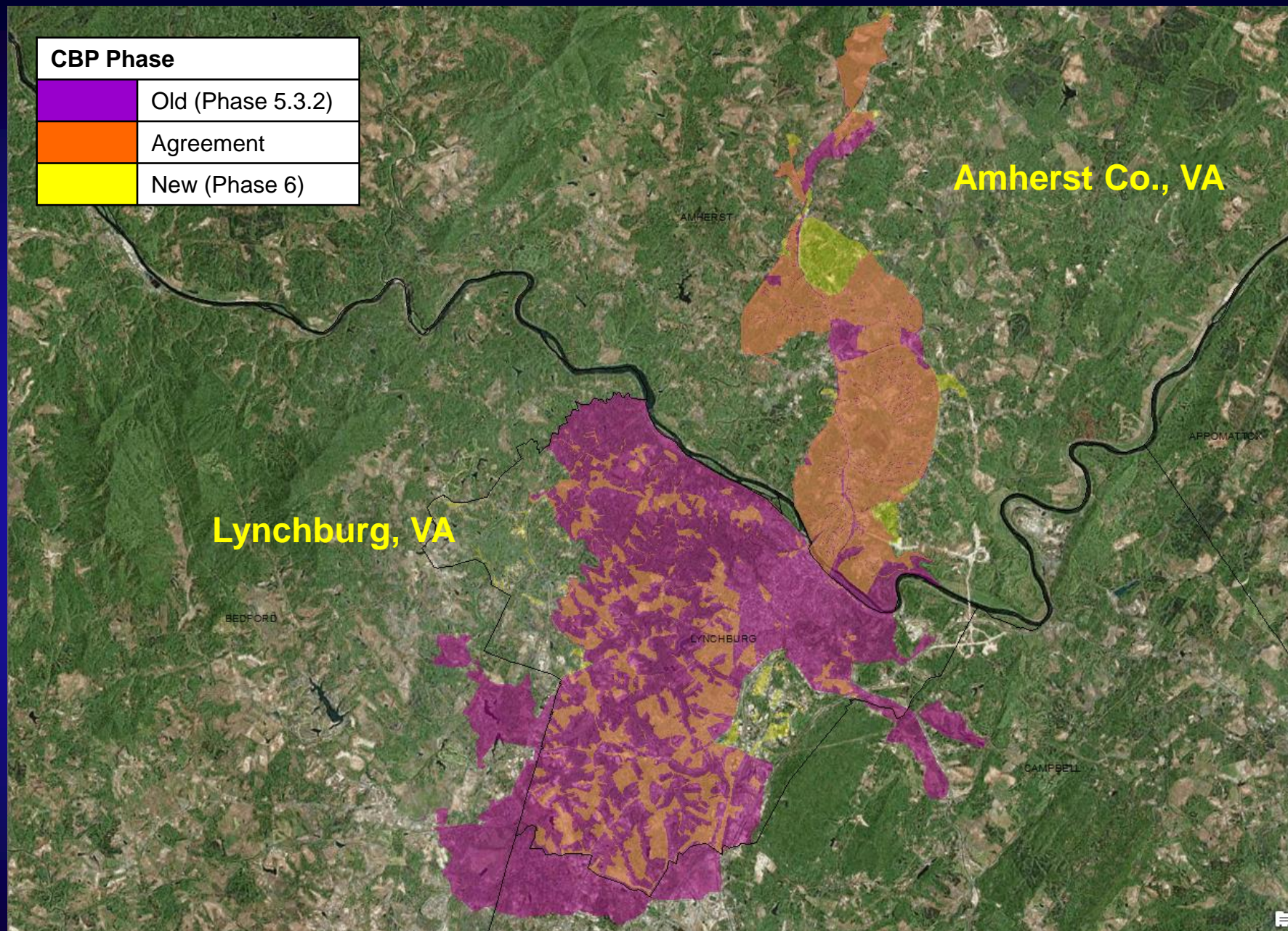




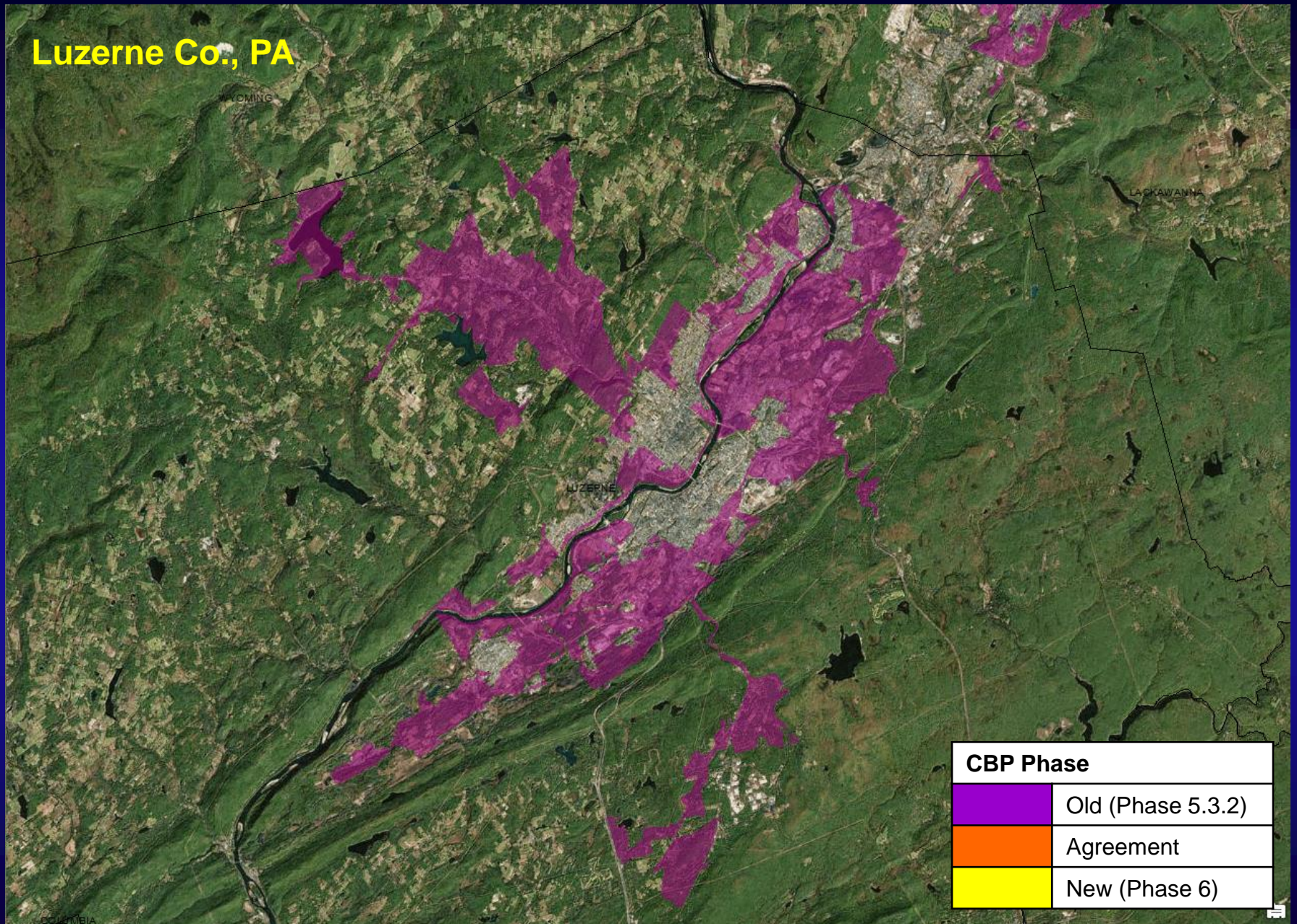
CBP Phase	
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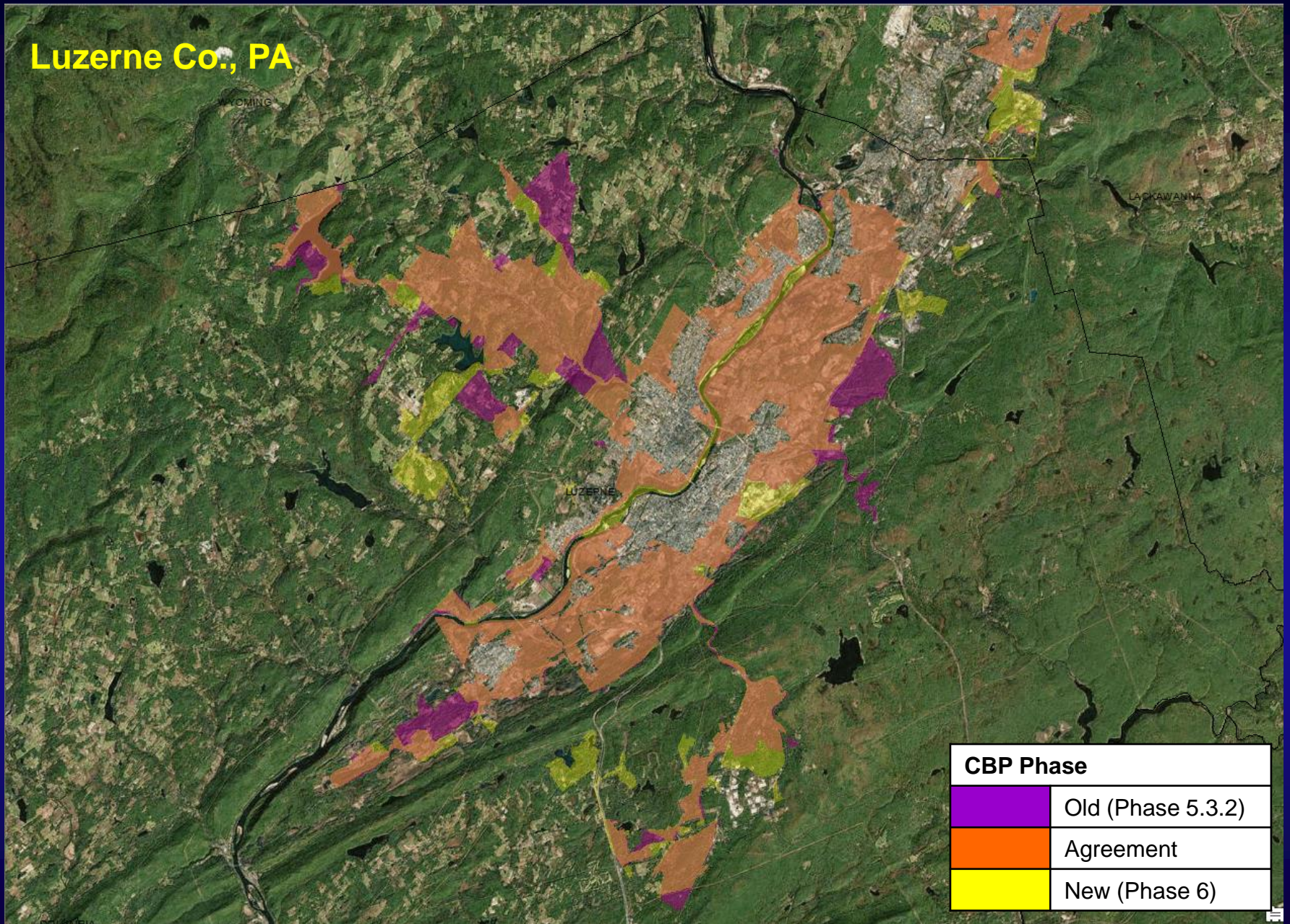
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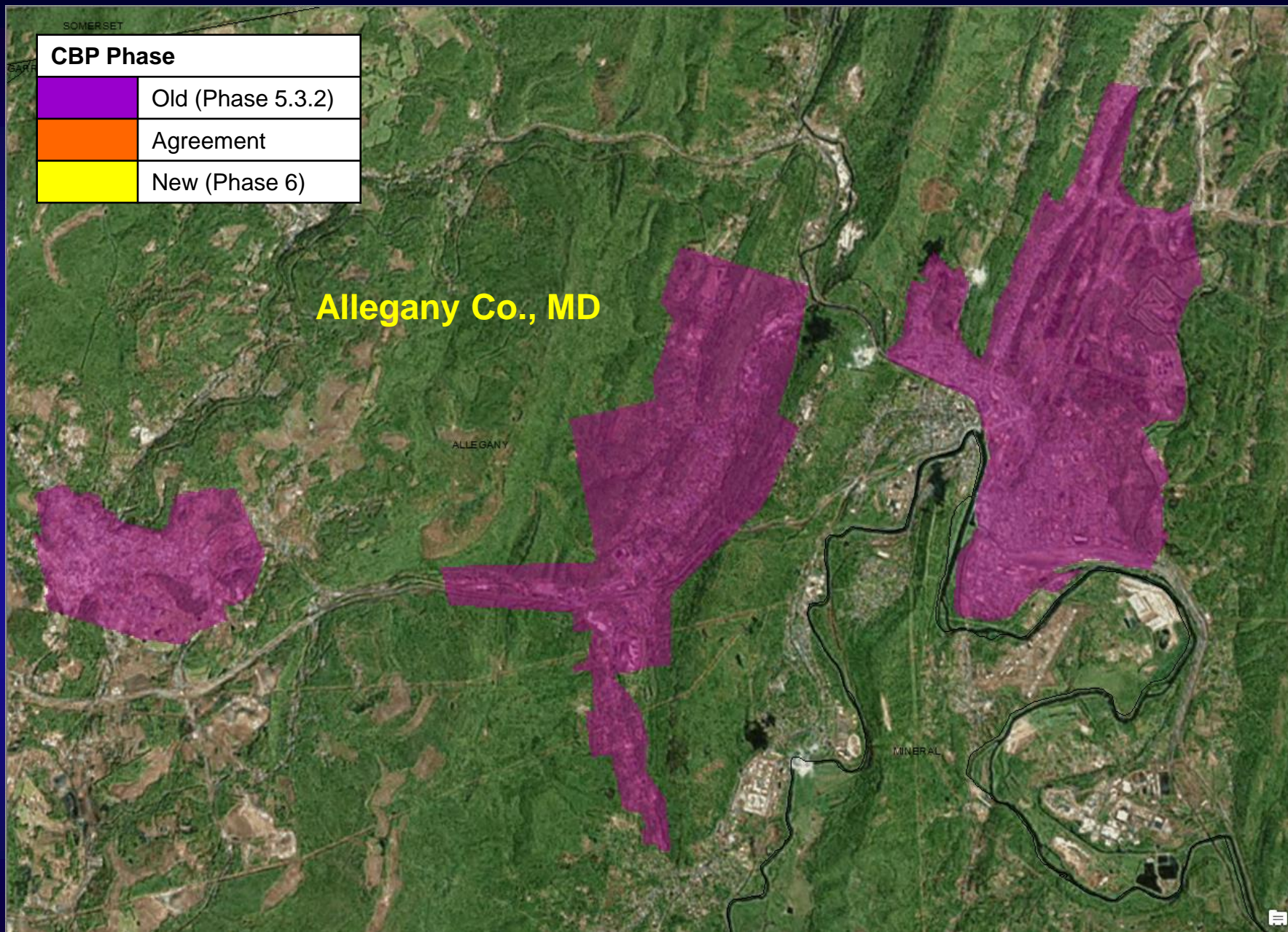
Luzerne Co., PA

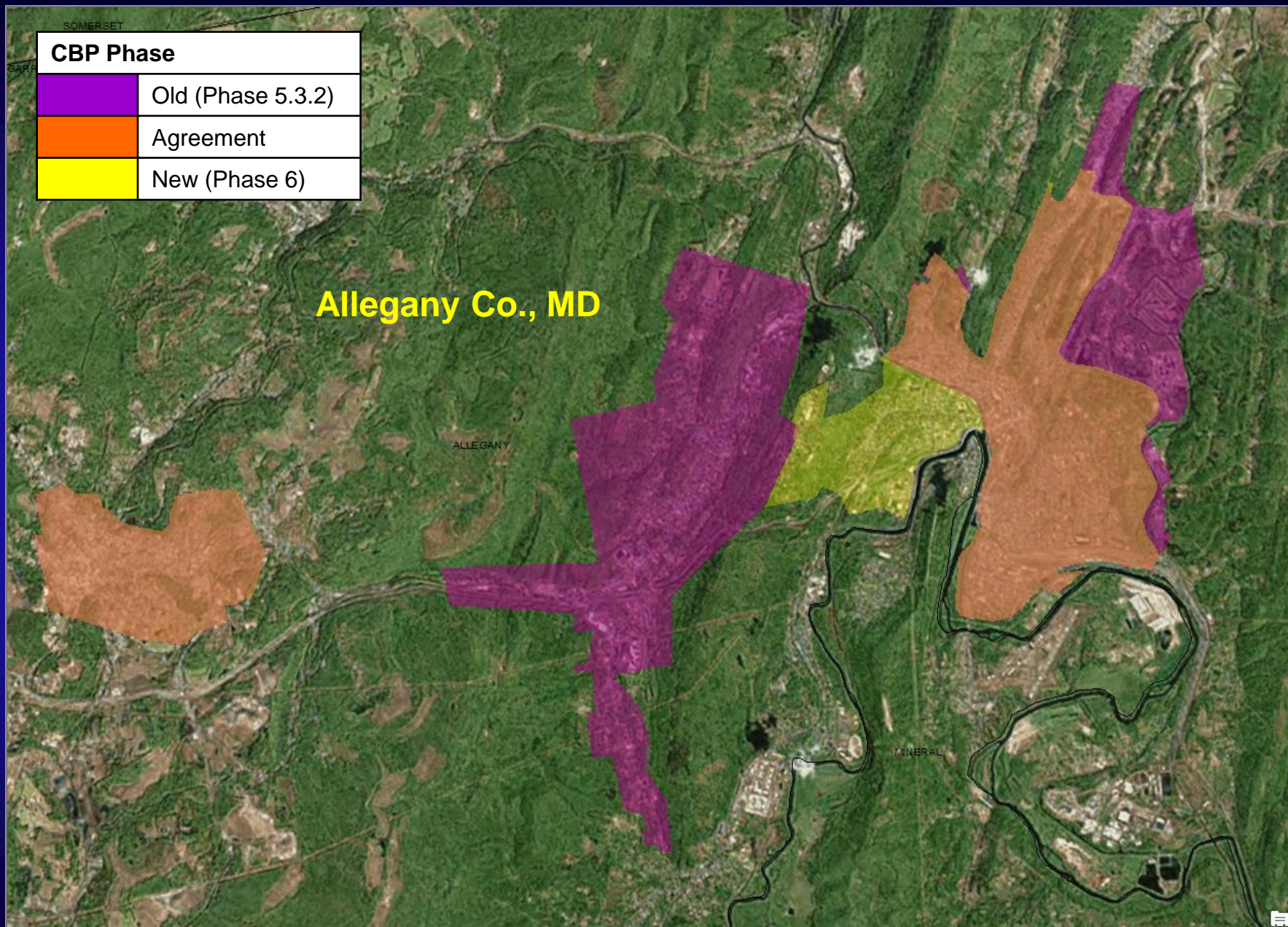


Luzerne Co., PA

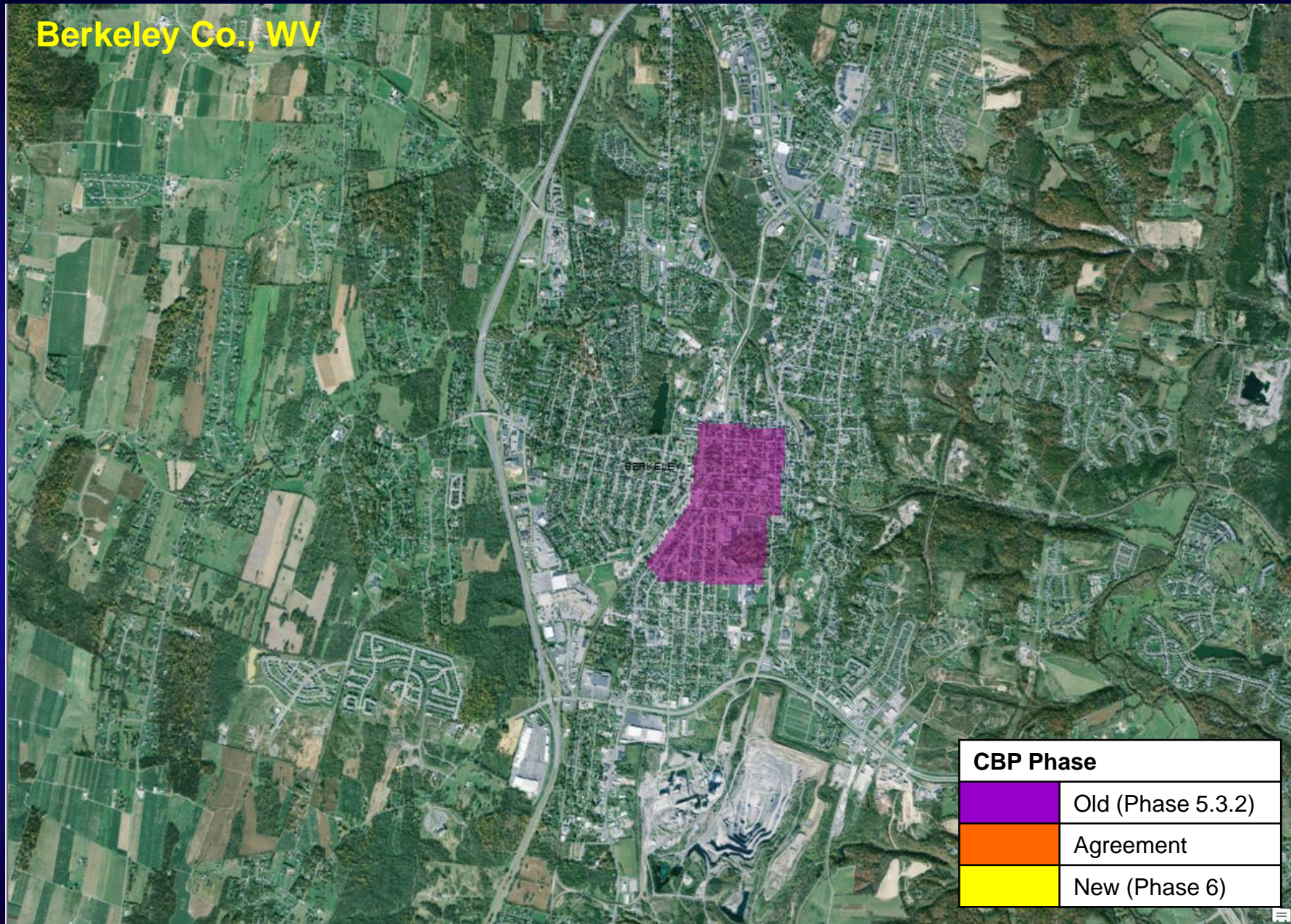


CSO

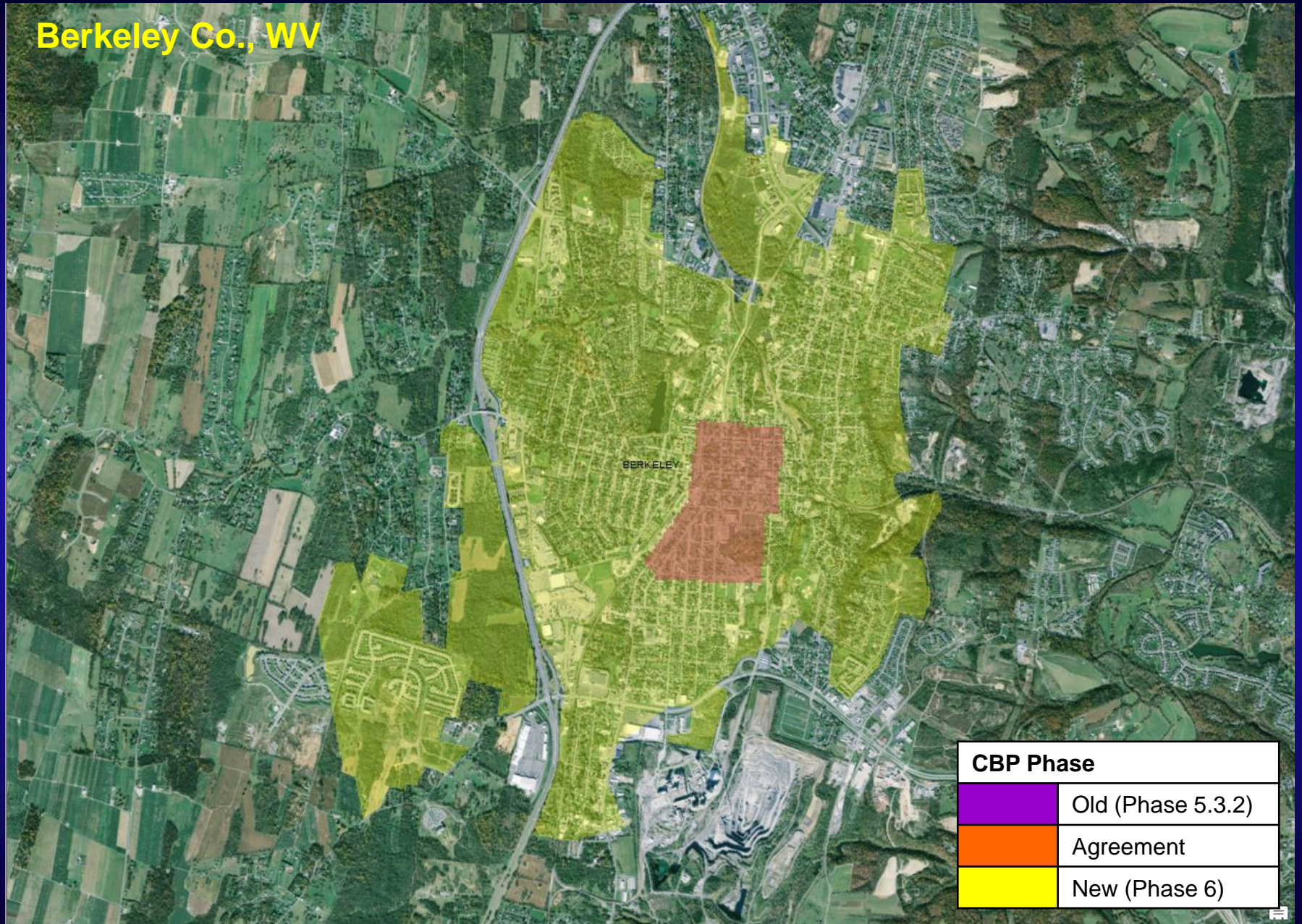




Berkeley Co., WV



Berkeley Co., WV



Summary

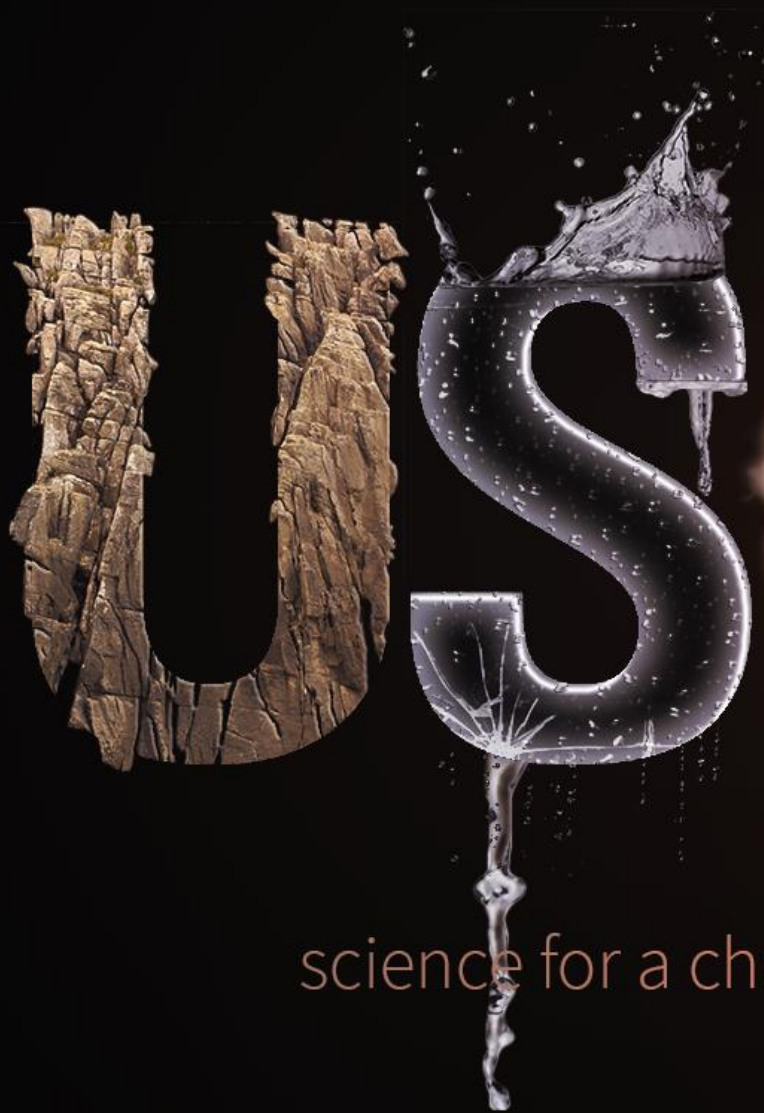
- **Improvements**

- Added new local data
- Preserved Weight-of-Evidence Approach for localities without state or local data
- Removed spatial gaps

- **Next Steps**

- Updates to SSA will be accepted every 2 years in line with 2 year milestones

Questions?



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Sewer vs. Septic

Basically, same methods as used in Phase 5.3.2

Updated inputs:

- **Sewer service areas expanded based on weight of evidence approach**
- **% of population growth due to migration**
(was 2000-2010, now 2004-2014)
- **Maximum % Growth on Sewer**
(was based on Development from 1984 – 2006, now Development from 2001 – 2011)
- **Ratio of Single-detached to total housing units**
(was based on ACS 2008-2012, now based on ACS 2009-2013)