Growth Trends in Low Density Development and Septic Systems

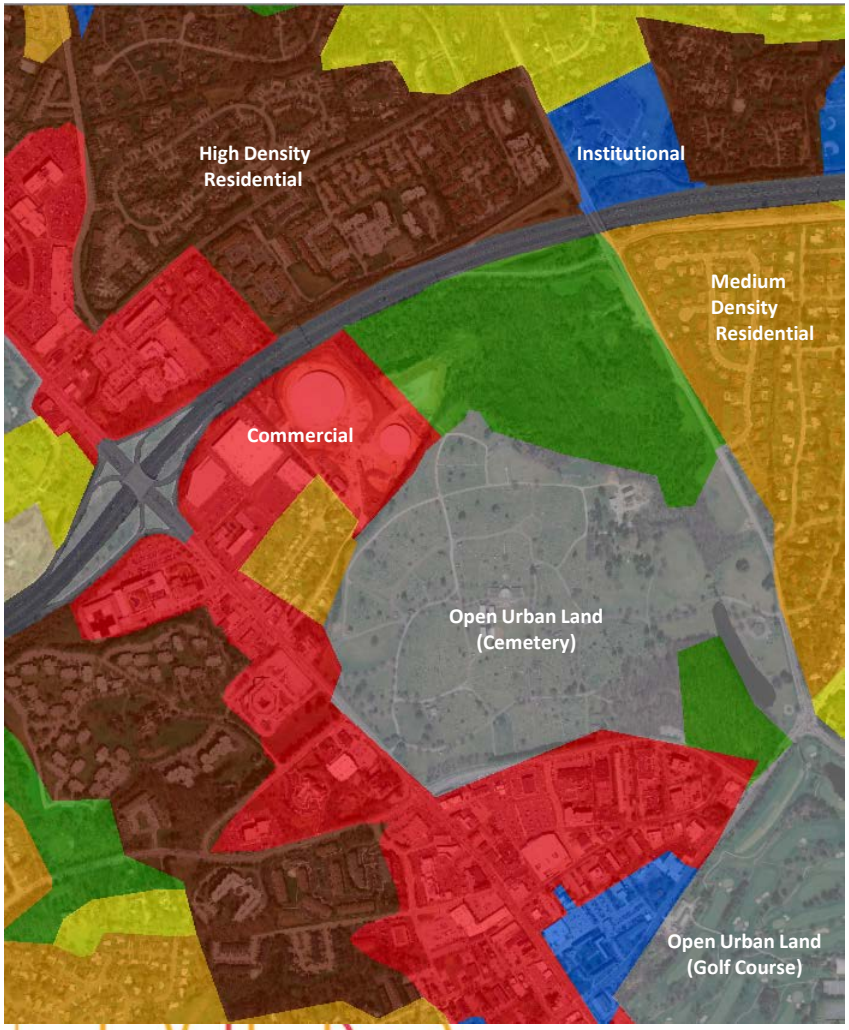
Maryland Department of Planning
Stephanie Martins
June 17, 2013

http://www.planning.maryland.gov/

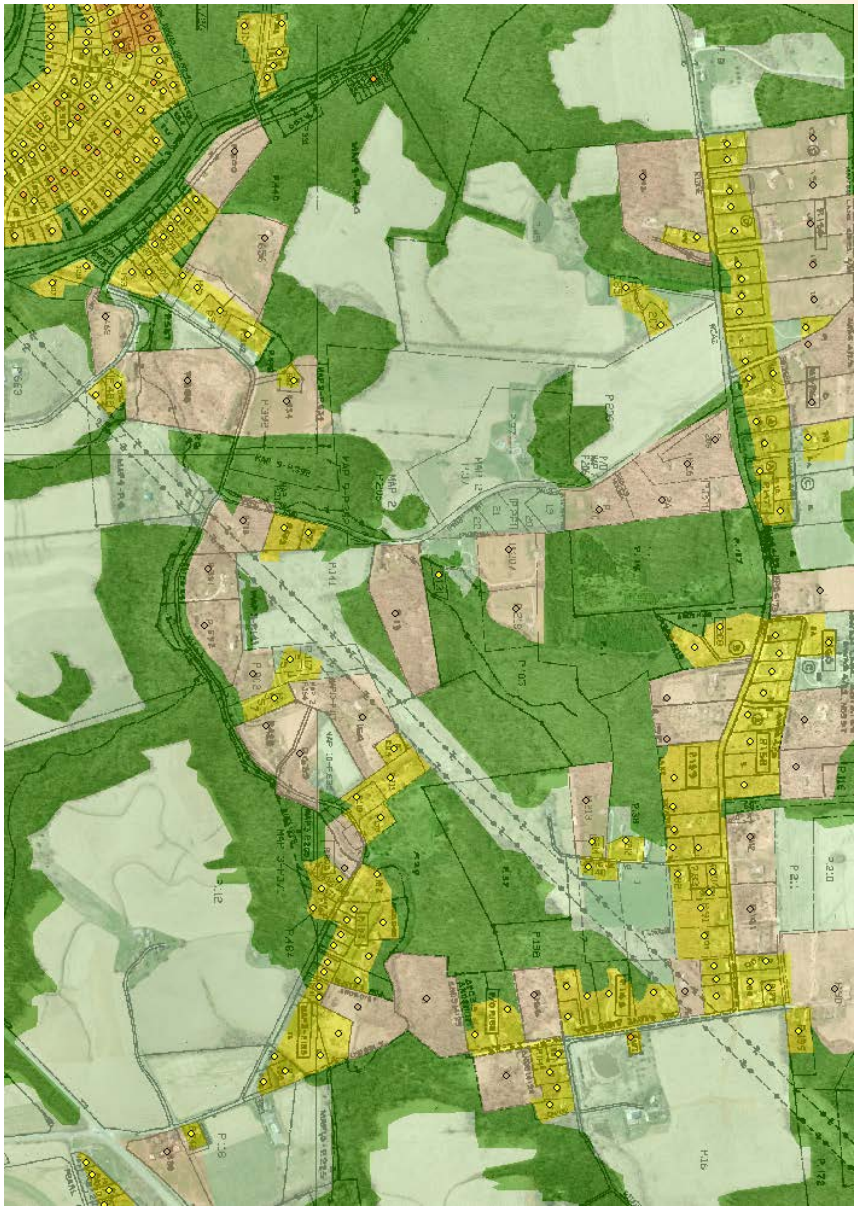
LAND USE/LAND COVER

- First mapped statewide in 1973
- Most recent update in 2010
- Focuses on tracking new development over time.
- 2 categories for low density residential development:
  - Low Density Residential – 0.5 acre - 5 acres
  - Very Low Density Residential - 5 acres - 20 acres

Land Use Types



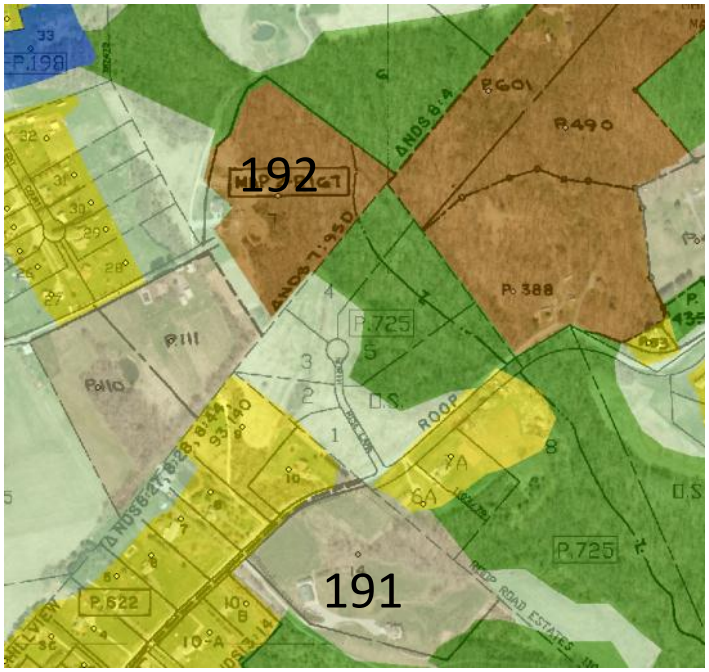
Parcel Queries



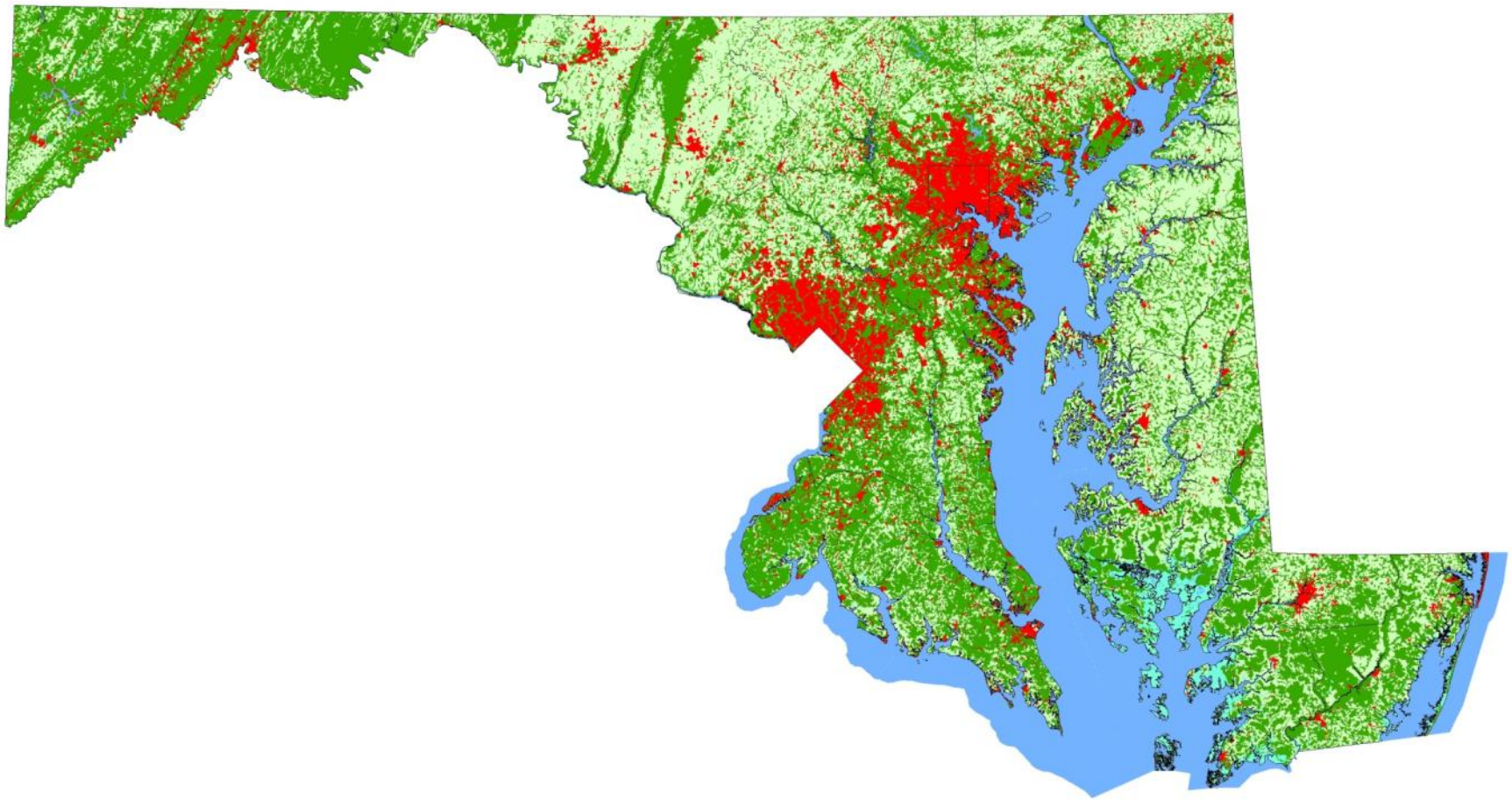
MAPPING RULES

- Very Low Density Residential

  - 191 if > 50% agriculture/open land
  - 192 if > 50% of the parcel is forested



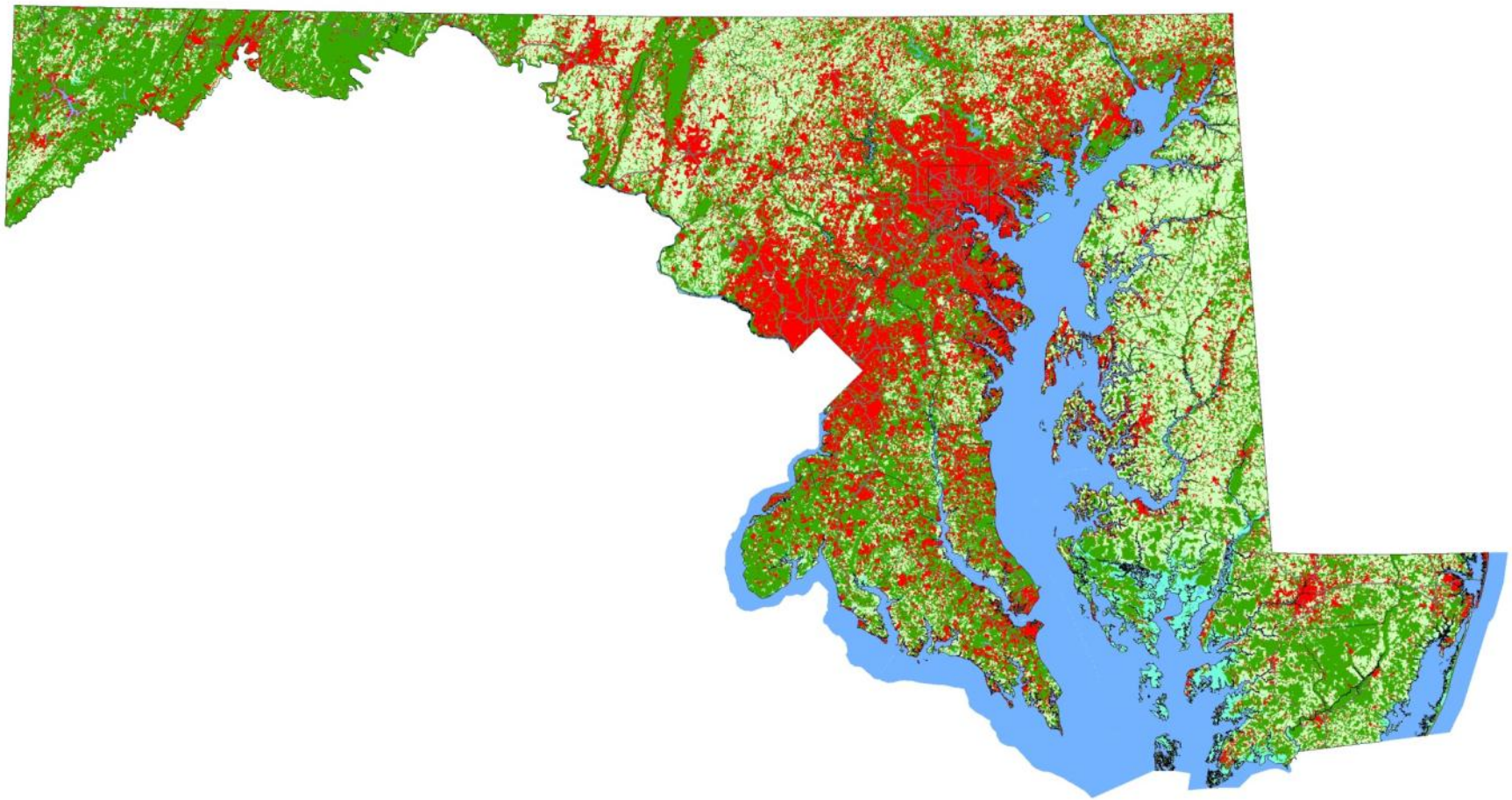
LAND USE TRENDS



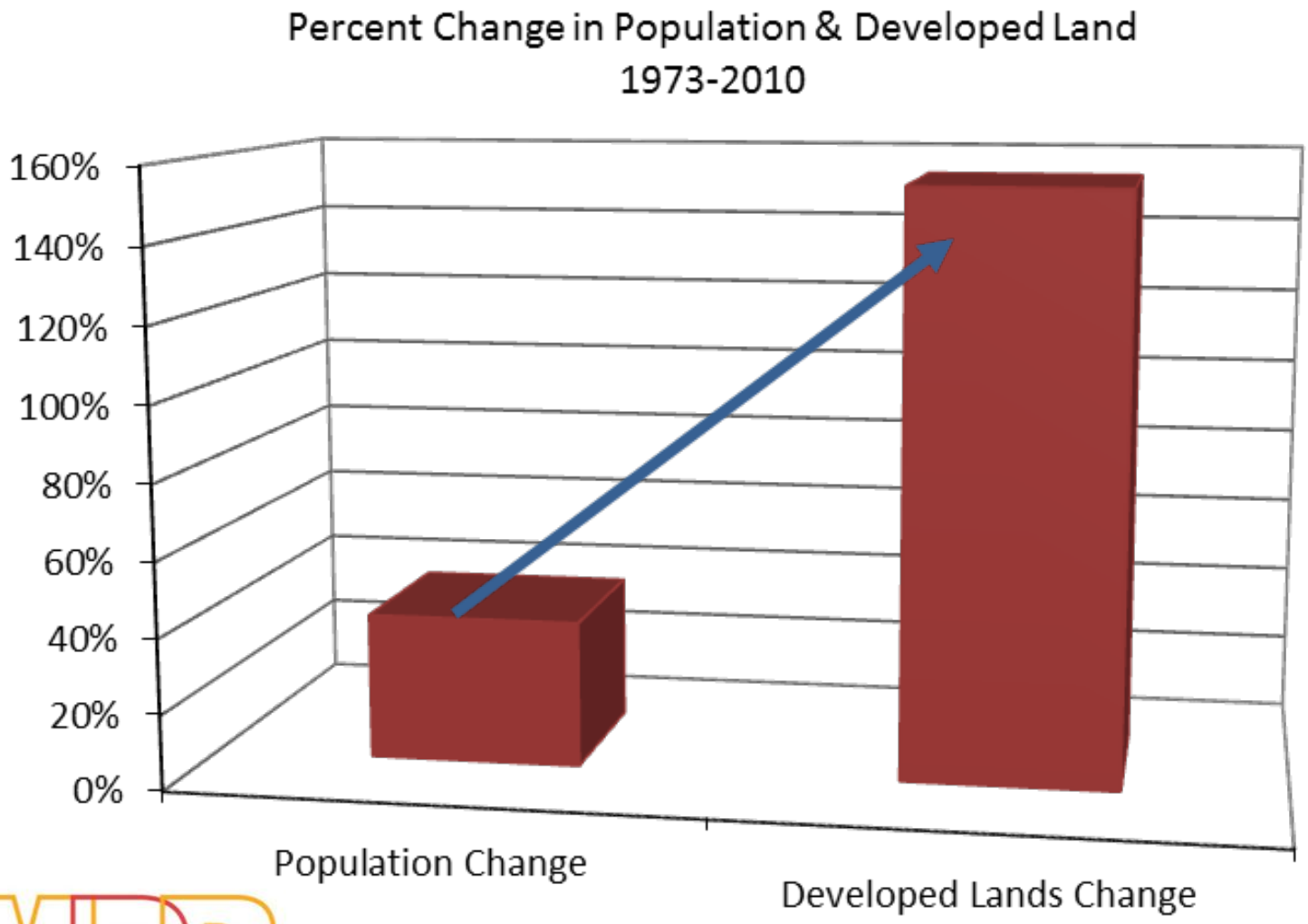
State of Maryland
1973 Land Use/ Land Cover

Maryland Department of Planning
Land Use Planning and Analysis Division
Map Created April 2011

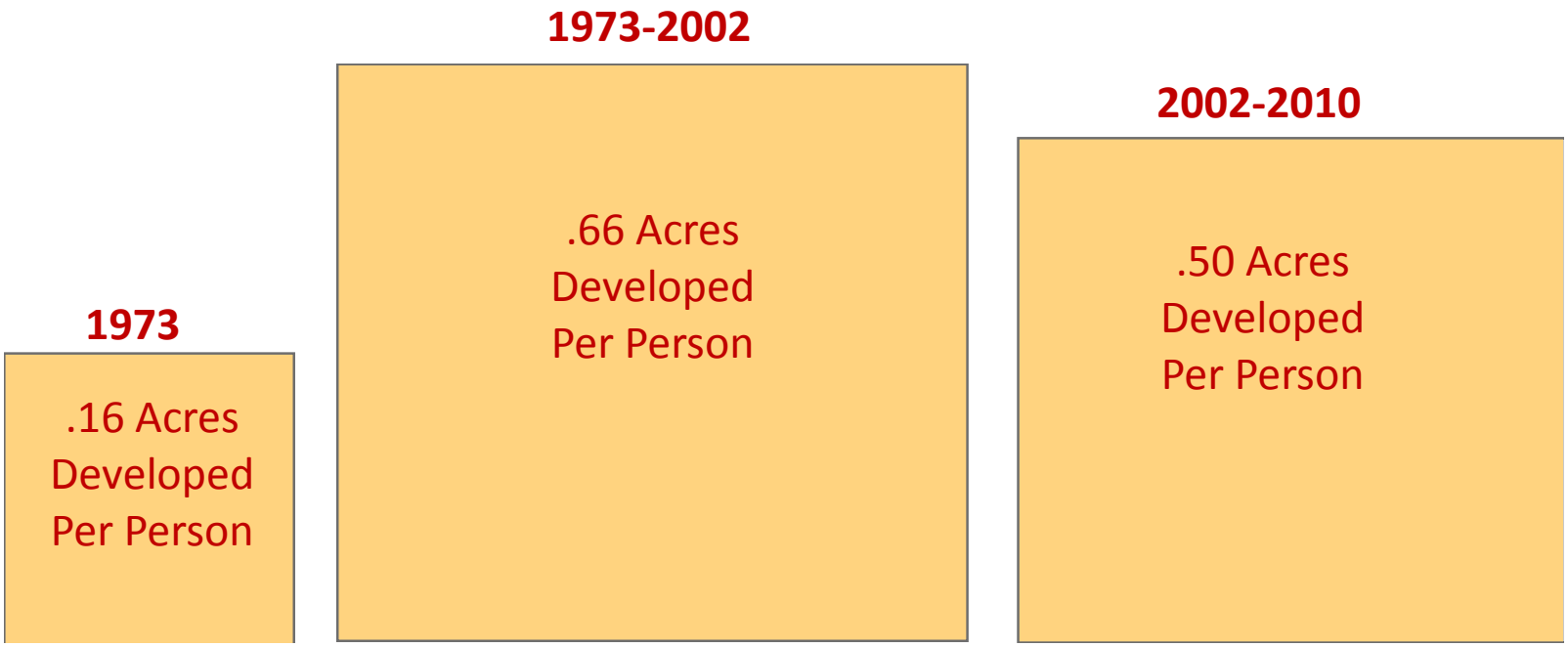
0 12.5 25 50 Miles


Developed
Agriculture
Forest
Wetlands
Water
Barren Land
Transportation
State of Maryland
2010 Land Use/ Land Cover
Maryland Department of Planning
Land Use Planning and Analysis Division
Map Created April 2011
0
12.5
25
50 Miles

THE RATE OF DEVELOPMENT IN MARYLAND CONTINUES TO OUTPACE POPULATION GROWTH.



THE NUMBER OF DEVELOPED ACRES PER PERSON HAS INCREASED BY MORE THAN 80 PERCENT SINCE 1973.



LARGE LOT DEVELOPMENT CONTINUES TO DOMINATE OUR LANDSCAPE, COMPRISING MORE THAN HALF OF DEVELOPED LANDS.

Large lot development has consumed 879,000 acres, roughly half of the total developed land while only accommodating 15 percent of the State's total housing units. This is equivalent to the combined land area of Anne Arundel, Baltimore and Howard counties. Needs to be better incorporated into 2017 model revision.

DEVELOPMENT ON SEPTIC SYSTEMS

- Parcel database
  - Maryland has a statewide parcel database that includes tax assessment information
  - Developed parcels can be selected from that database and related to sewer data
- Local Sewer Service maps
  - Locals share sewer service area data/maps
  - All improved parcels outside of “Existing Sewer Service” are assumed to be on septics
- MDP estimates that, as of 2010, there are approximately 400,000 septic systems in Maryland.

ASSUMPTIONS/CAVEATS

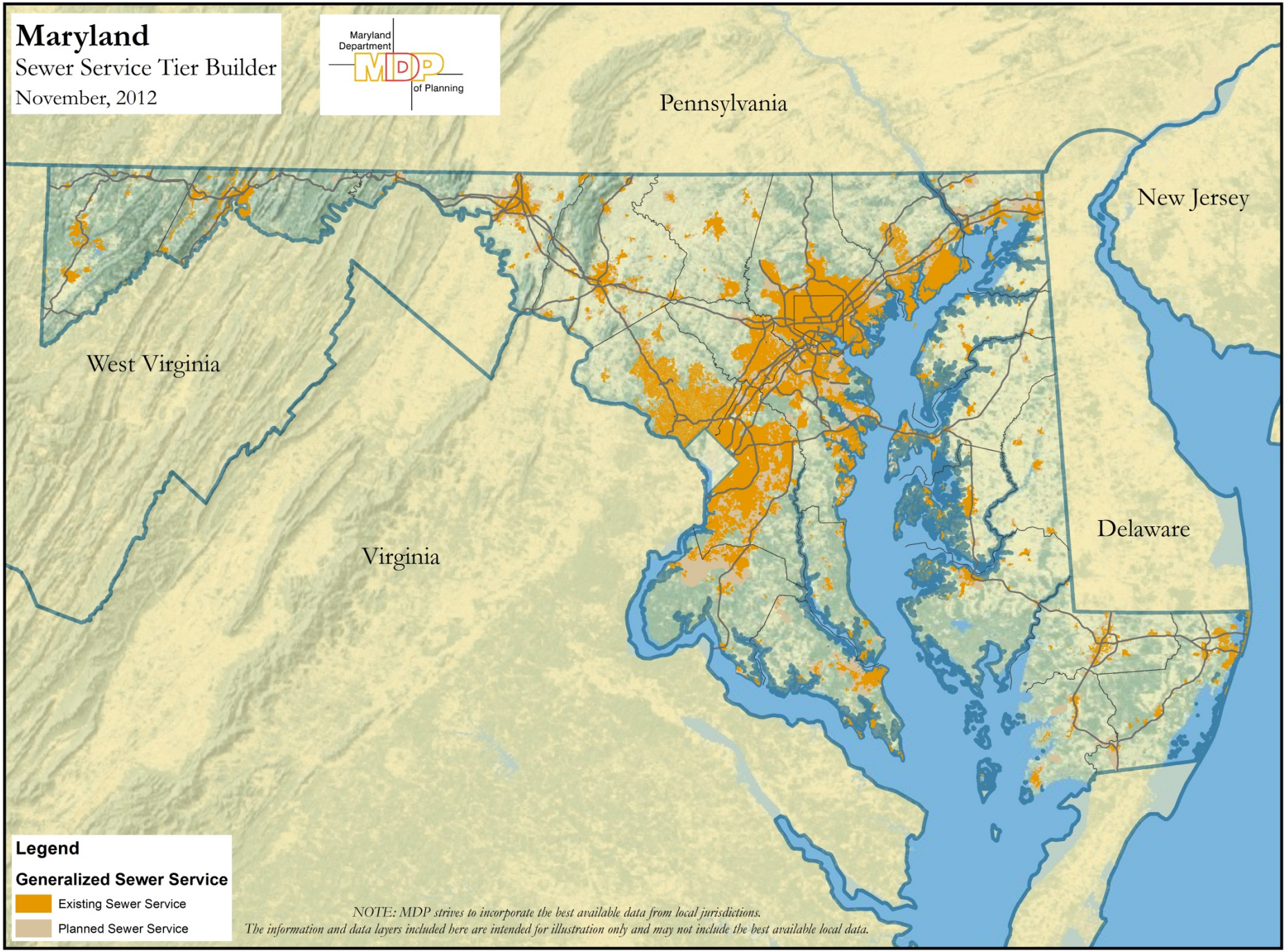
- Dependent on periodic updates to sewer service area maps from counties.
- Septic numbers vetted with many counties.
- Unable to capture multiple septics on a single parcel.
- Does not capture existing septic systems within S1 areas.

Maryland

Sewer Service Tier Builder

November, 2012

Maryland Department of Planning

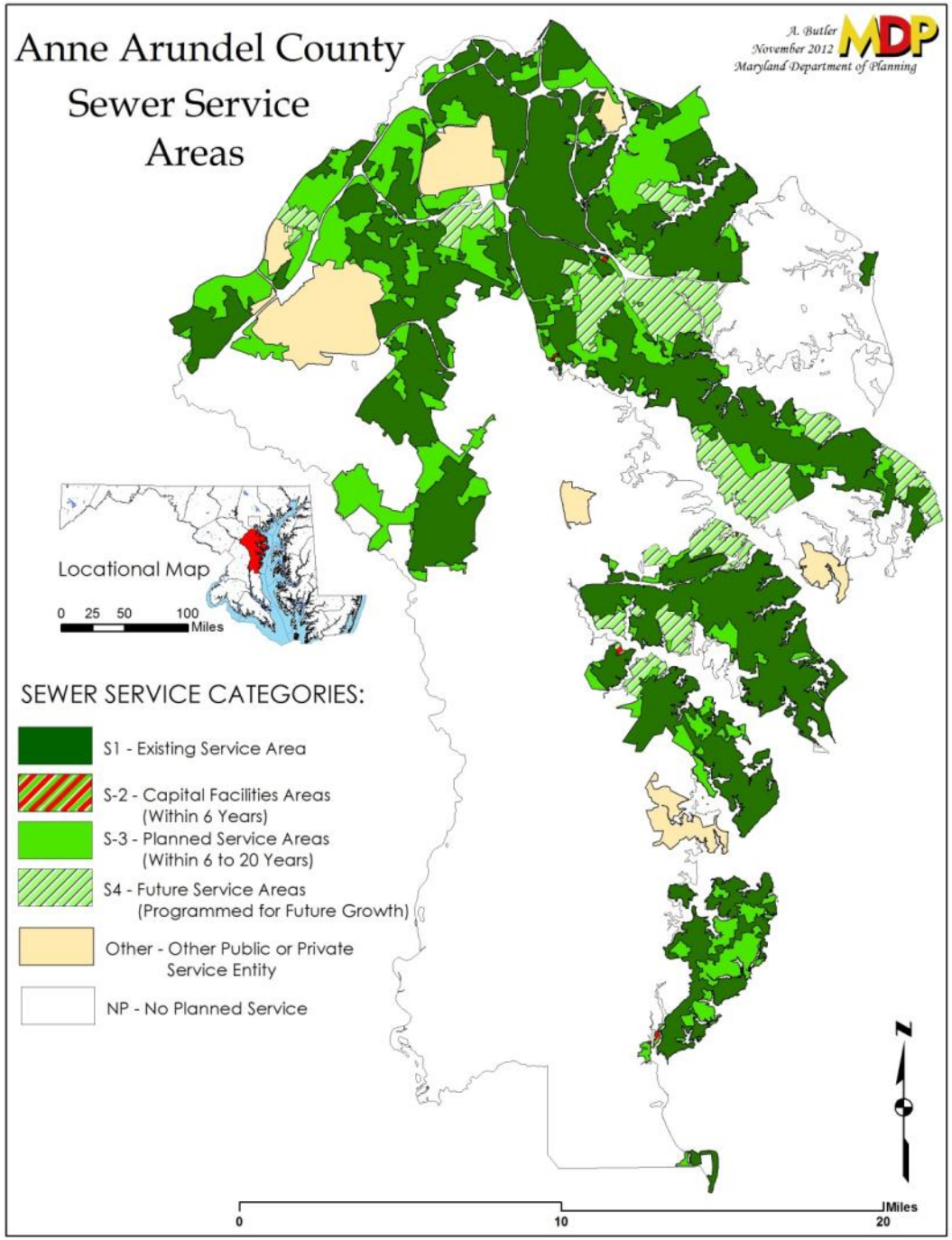


Legend

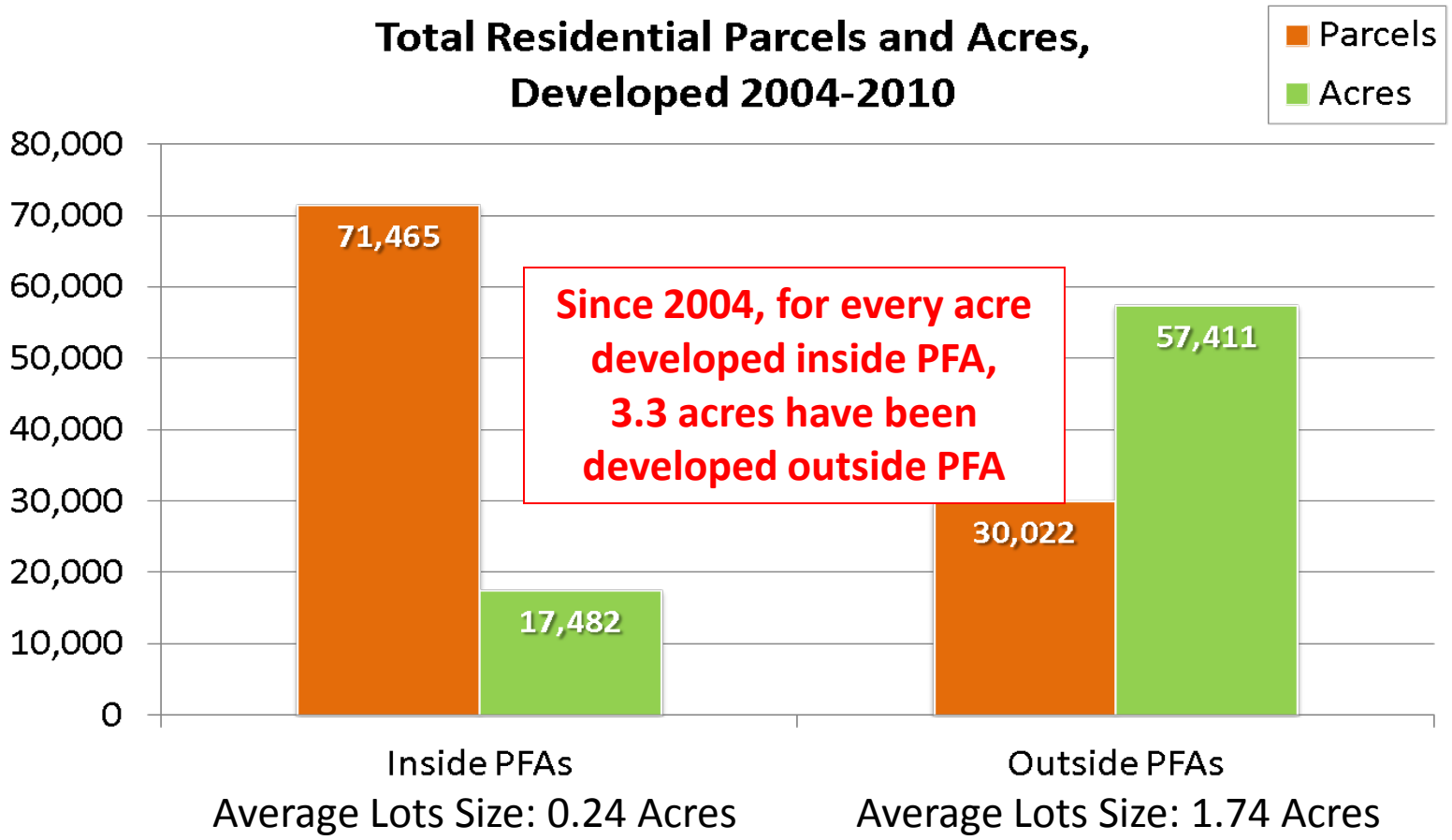
Generalized Sewer Service

- Existing Sewer Service
- Planned Sewer Service

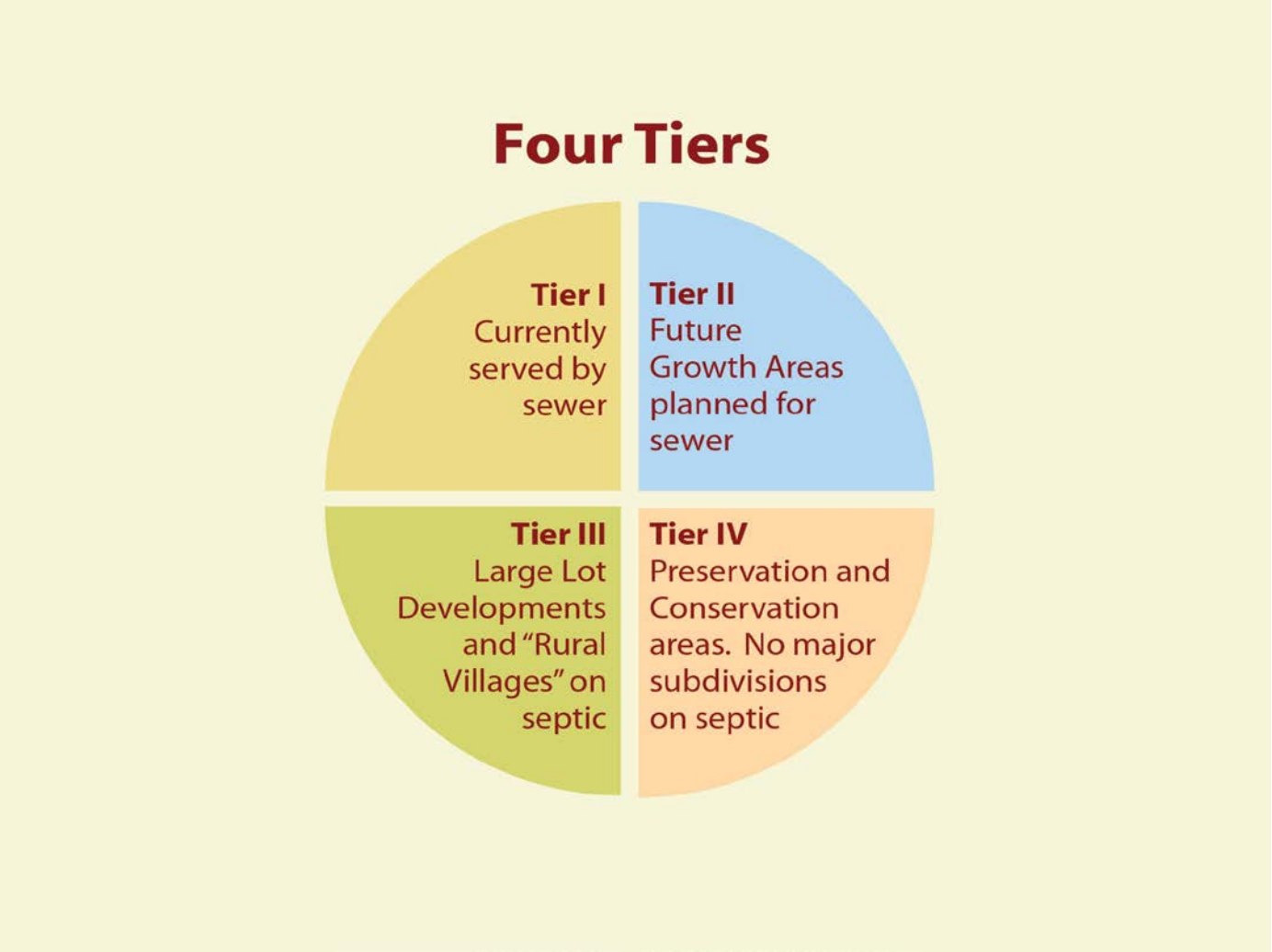
NOTE: MDP strives to incorporate the best available data from local jurisdictions. The information and data layers included here are intended for illustration only and may not include the best available local data.


Anne Arundel County
Sewer Service
Areas
A. Butler
November 2012
Maryland Department of Planning
MDP
Locational Map
0 25 50 100
Miles
SEWER SERVICE CATEGORIES:
S1 - Existing Service Area
S-2 - Capital Facilities Areas
(Within 6 Years)
S-3 - Planned Service Areas
(Within 6 to 20 Years)
S4 - Future Service Areas
(Programmed for Future Growth)
Other - Other Public or Private
Service Entity
NP - No Planned Service
N
0
10
20
Miles

MARYLAND RESIDENTIAL GROWTH TRENDS



SB 236


Four Tiers
Tier I
Currently served by sewer
Tier II
Future Growth Areas planned for sewer
Tier III
Large Lot Developments and "Rural Villages" on septic
Tier IV
Preservation and Conservation areas. No major subdivisions on septic

Need for Septics Law

- Septic systems have a disproportionate impact on our water quality; a house on a septic system causes six to ten times the pollution to the Bay as a house on public sewer.
- Septic development consumes eight times the amount of land per new household on average than development within sewered areas.
- Septic pollution continuing to increase, while other sources decreasing.
- Approximately 400,000 existing septic systems in Maryland, with the potential for a lot more.

SB 236 – Septics Law Impacts on Development

- The law applies only to residential development.

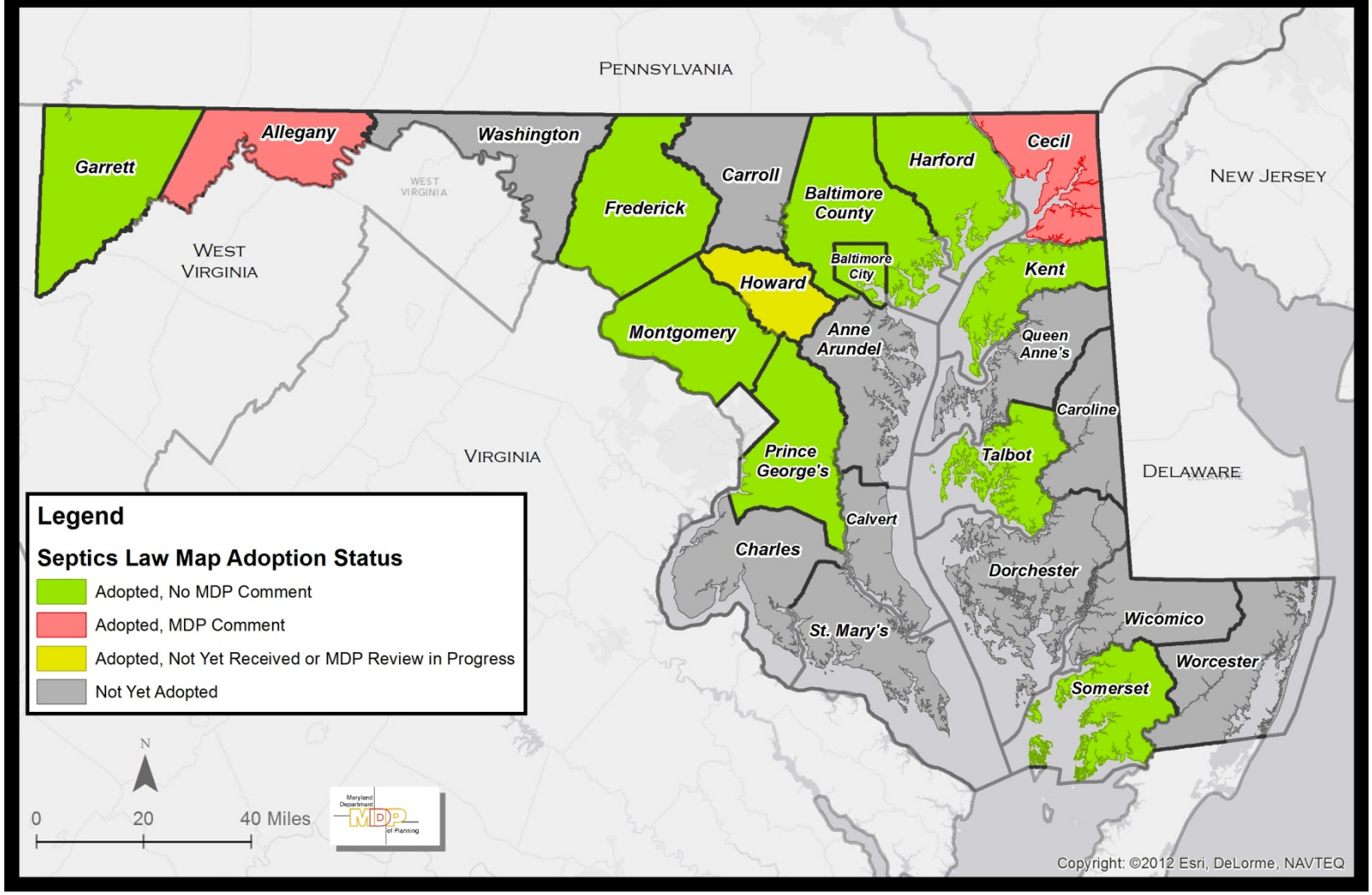
Beginning December 31, 2012 ;

- If Tiers are not adopted, no residential major subdivisions outside of sewered areas

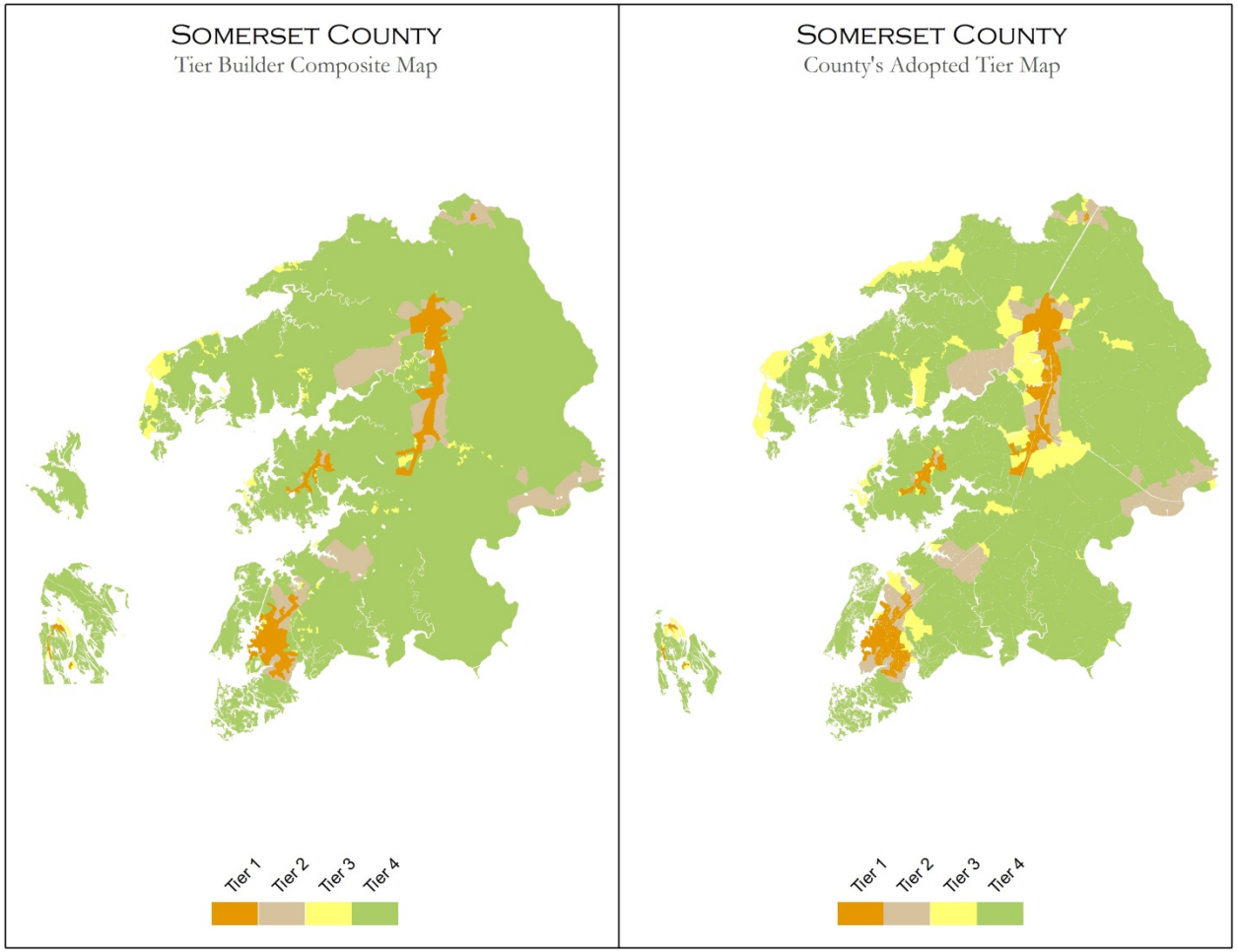
- If Tiers adopted, for new residential subdivisions:
  - Tier I - public sewerage
  - Tier II - public sewerage; septic systems shall be viewed as interim
  - Tier III - septic systems
  - Tier IV - no major subdivisions w/o exemption

Sustainable Growth & Agricultural Preservation Act of 2012 Implementation

County Tier Map Adoption Status (as of June 13, 2013)

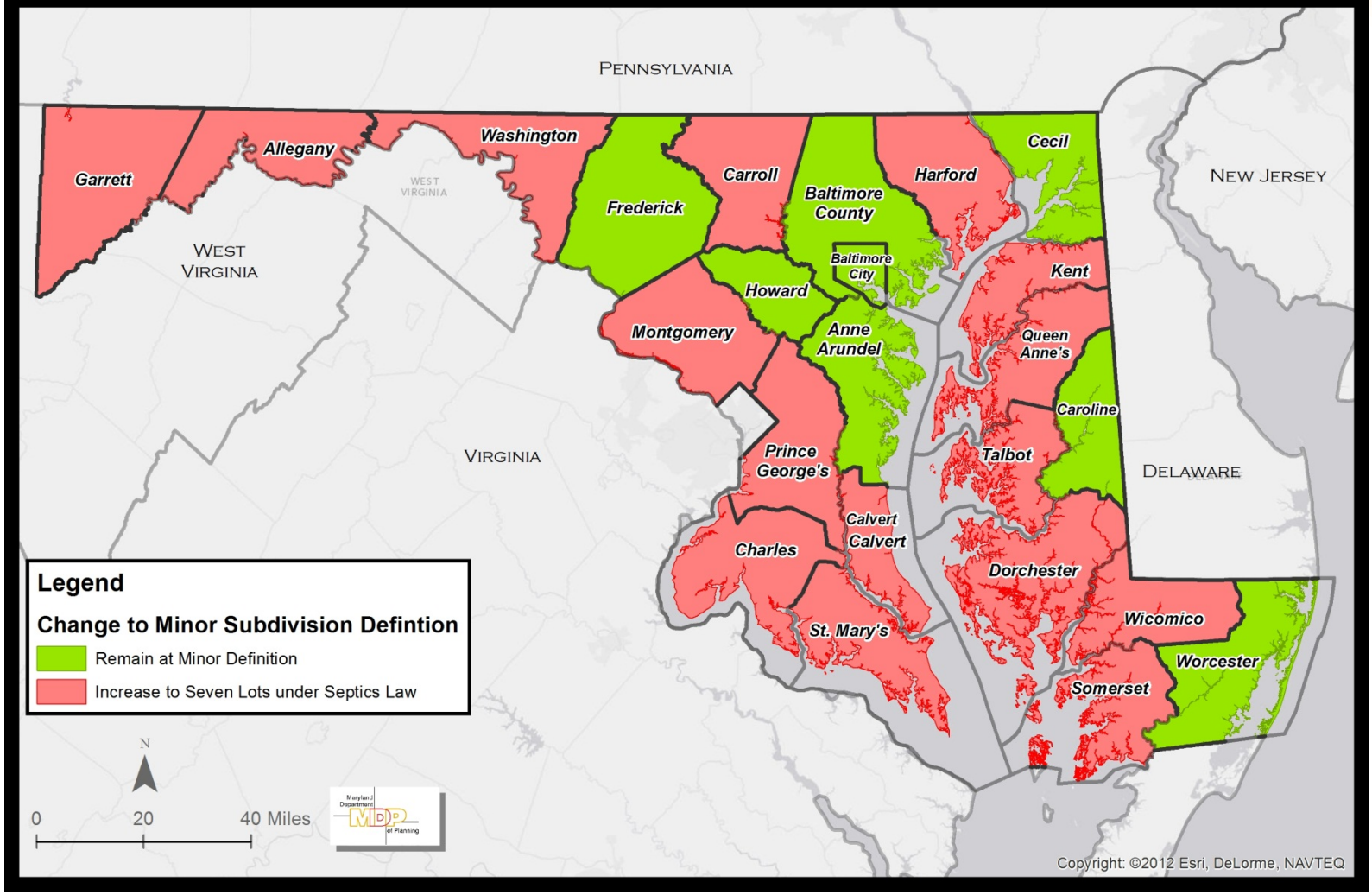


SOMERSET COUNTY: COMPARISON TO COMPOSITE MAP



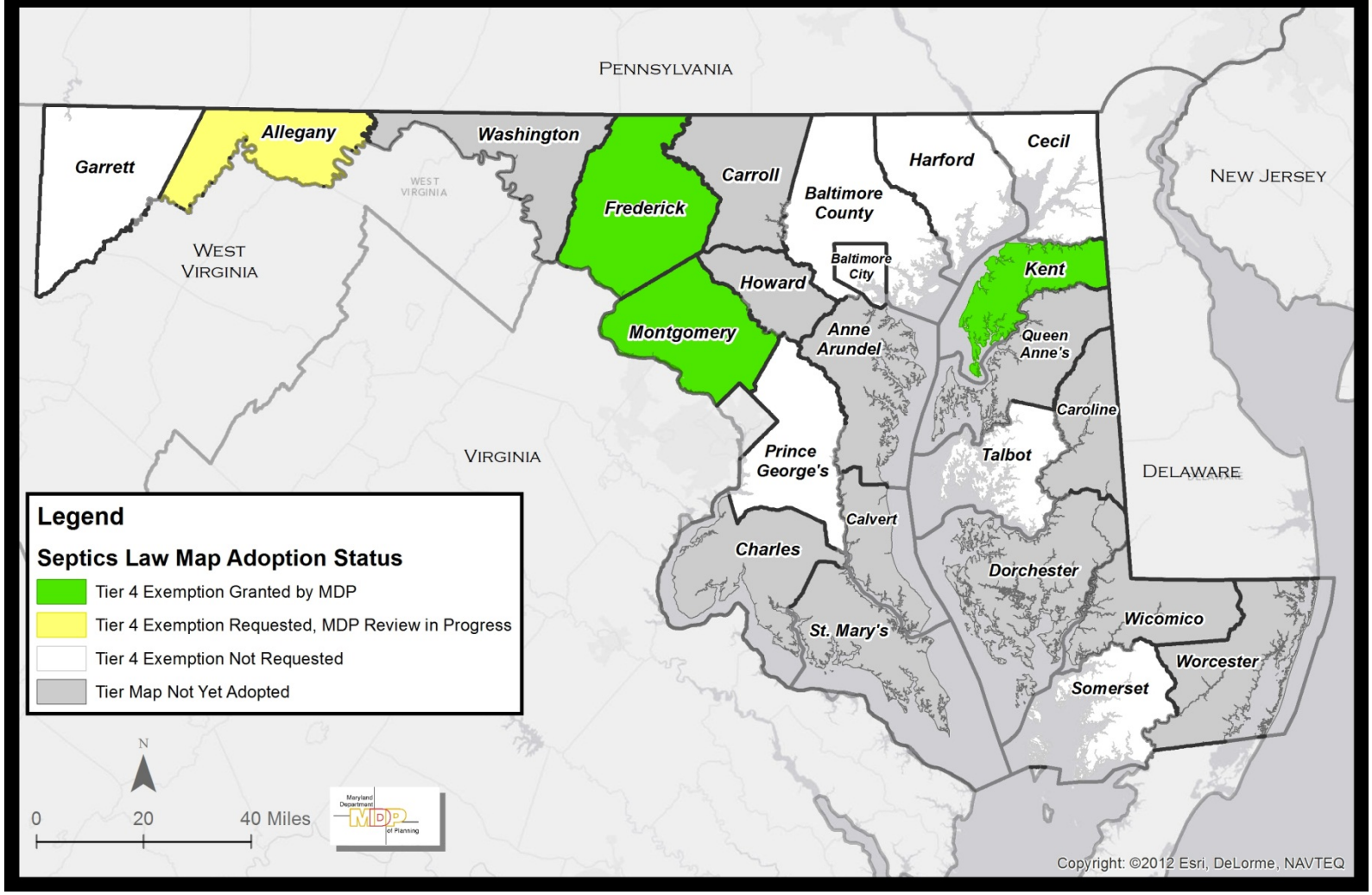
Sustainable Growth & Agricultural Preservation Act of 2012 Implementation

Minor Subdivision Definition Changes



Sustainable Growth & Agricultural Preservation Act of 2012 Implementation

County Tier 4 Exemption Status (as of June 13, 2013)



BENEFITS OF SB236

- **Over the next 25 years:**
  - **Prevent 50,000 new septic systems**
  - **Stop as much as 1.1 million pounds of nitrogen pollution from being pumped into surface water by 2035**
  - **Prevent the loss of at least 100,000 acres of forest and farmland**
- **Even more benefits over the longer term**

QUESTIONS?