



COALITION
FOR
SMART
GROWTH

Making Progress.
Good for Everyone.

**THE CHESAPEAKE BAY
AND LANCASTER COUNTY**

MAKING THE CONNECTION

SMART GROWTH SUMMIT 2010

KEYNOTE SPONSOR



the Trust
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THE CHOICES BEFORE US

A LEGACY AND PATH FORWARD FOR THE CHESAPEAKE BAY AND ITS WATERSHED

Senator Mike Brubaker

Jane Thomas/IAN

Lancaster County Coalition for Smart Growth
October 28, 2010

“Choice” (n):

The act of choosing

(Merriam-Webster)

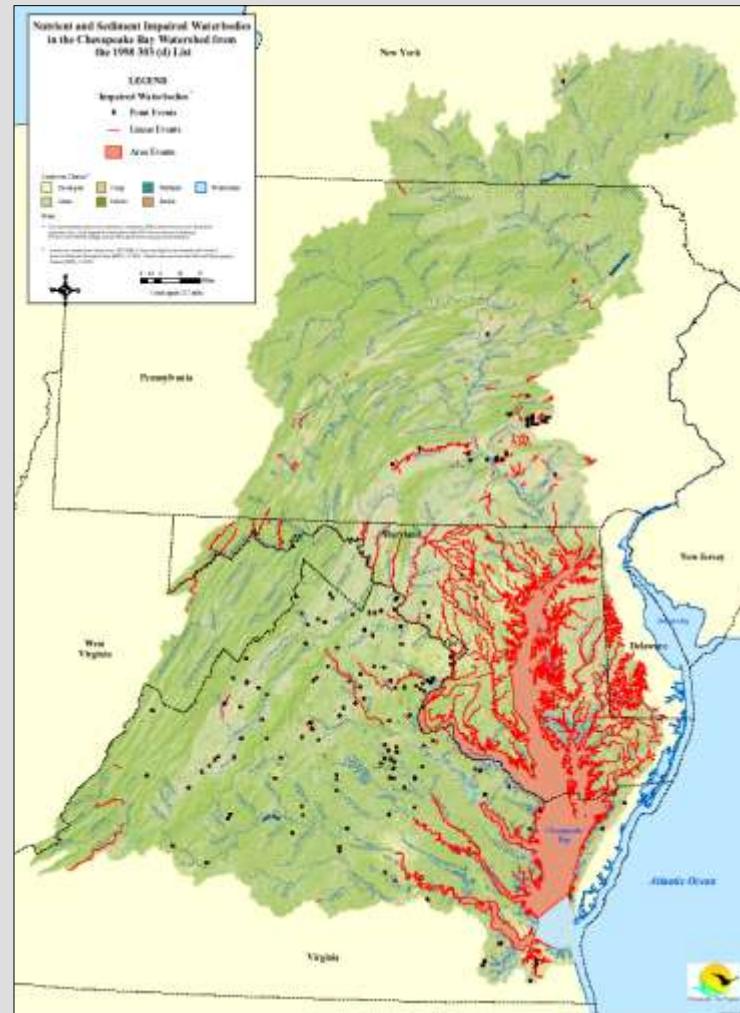
*“heaven and earth never agreed better to frame a place for
man's habitation...”*

Captain
John Smith
-1612



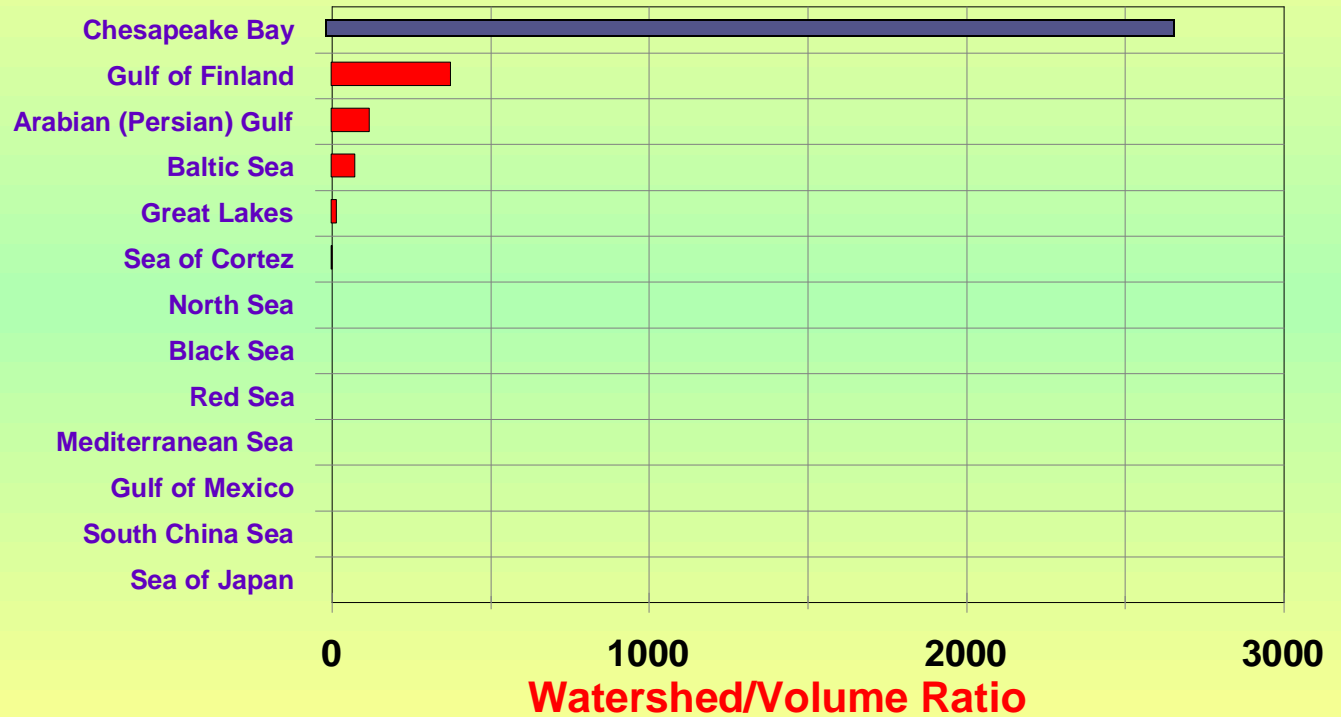
Today's Bay is impaired

90% of the Bay does not meet water quality standards

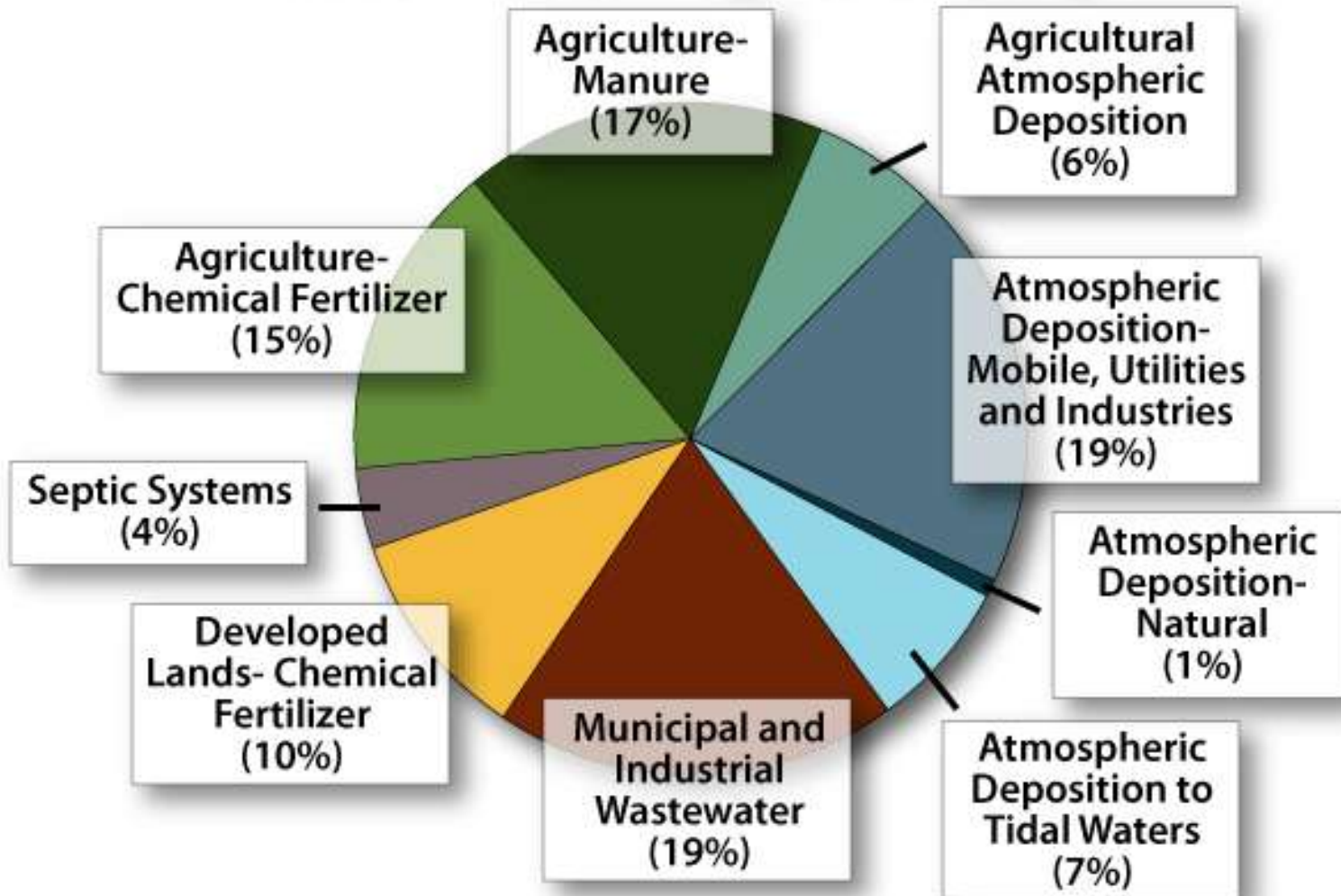


Land use matters

Largest
land to
water
ratio on
earth

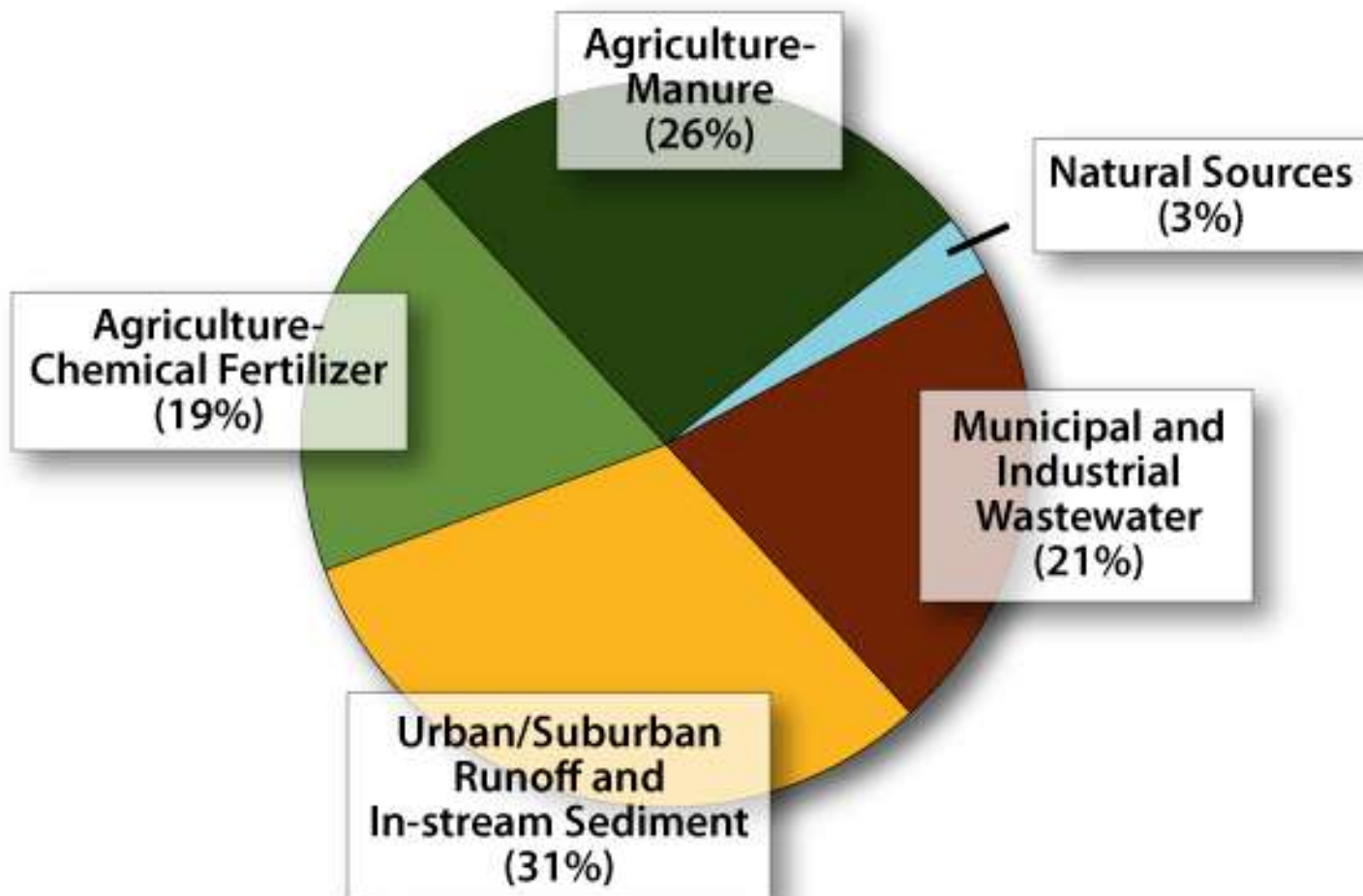


Sources of Nitrogen to the Bay



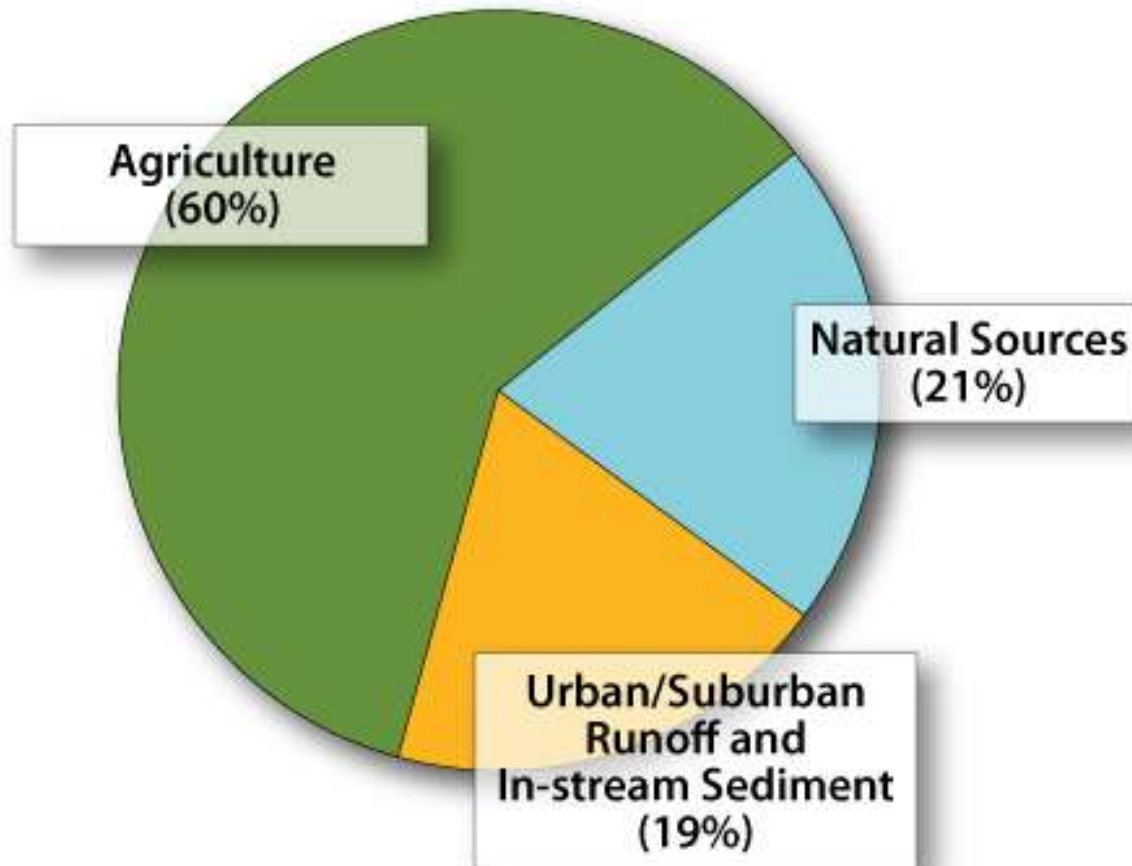
Note: Does not include loads from the ocean or tidal shoreline erosion. Wastewater loads are based on measured discharges; other loads are based on an average-hydrology year using the Chesapeake Bay Program Watershed Model Phase 4.3 (Chesapeake Bay Program Office, 2009). Values do not add up to 100% due to rounding.

Sources of Phosphorus to the Bay



Note: Does not include loads from the ocean or tidal shoreline erosion. Wastewater loads are based on measured discharges; other loads are based on an average-hydrology year using the Chesapeake Bay Program Watershed Model Phase 4.3 (Chesapeake Bay Program Office, 2009).

Sources of Sediment to the Bay



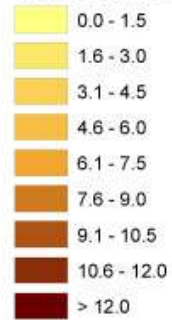
Note: Does not include loads from the ocean or tidal shoreline erosion. Loads are based on an average-hydrology year using the Chesapeake Bay Program Watershed Model Phase 4.3 (Chesapeake Bay Program Office, 2009).

All Sources of Total Nitrogen

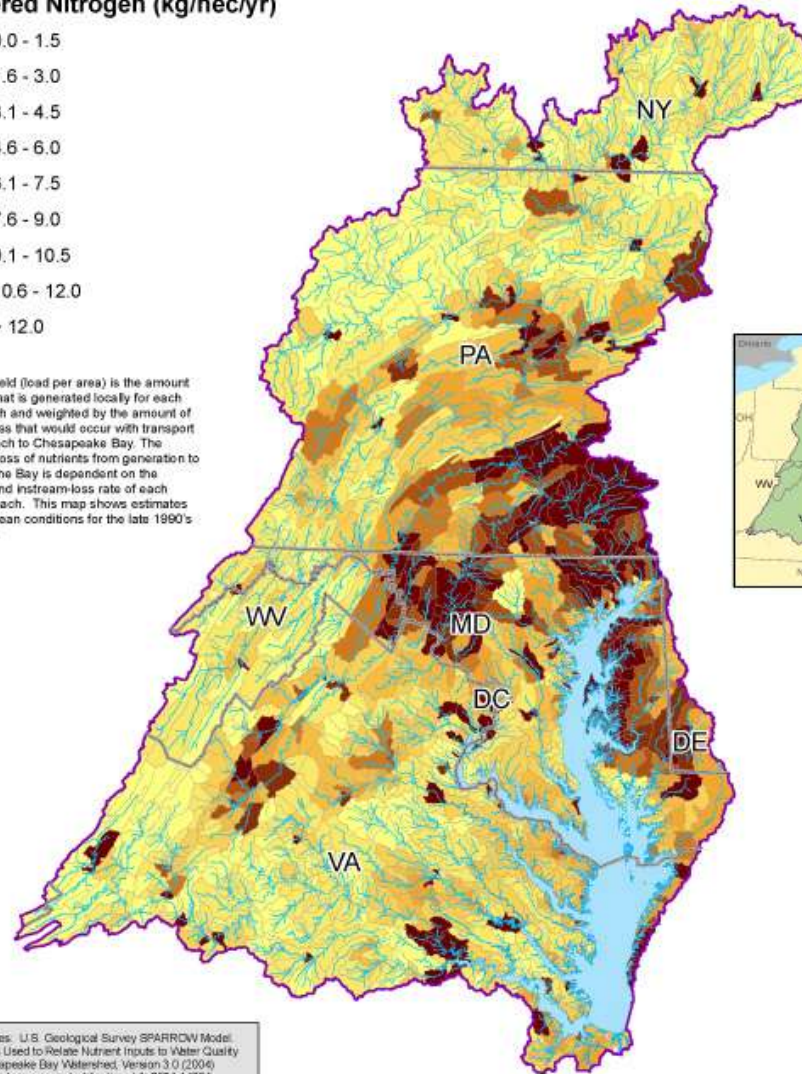
Delivered Yield to the Chesapeake Bay



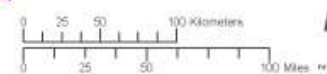
Delivered Nitrogen (kg/hect/yr)



Delivered yield (load per area) is the amount of nutrient that is generated locally for each stream reach and weighted by the amount of in-stream loss that would occur with transport from the reach to Chesapeake Bay. The cumulative loss of nutrients from generation to delivery to the Bay is dependent on the traveltime and in-stream loss rate of each individual reach. This map shows estimates based on mean conditions for the late 1990's time period.



Data Sources: U.S. Geological Survey SPARROW Model; Digital Data Used to Relate Nutrient Inputs to Water Quality in the Chesapeake Bay Watershed, Version 3.0 (2004) (<http://md.water.usgs.gov/publications/04-2004-1433/>)
For more information, visit www.chesapeakebay.net
Disclaimer: www.chesapeakebay.net/farmsofuse.htm

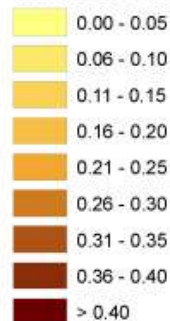


All Sources of Total Phosphorus

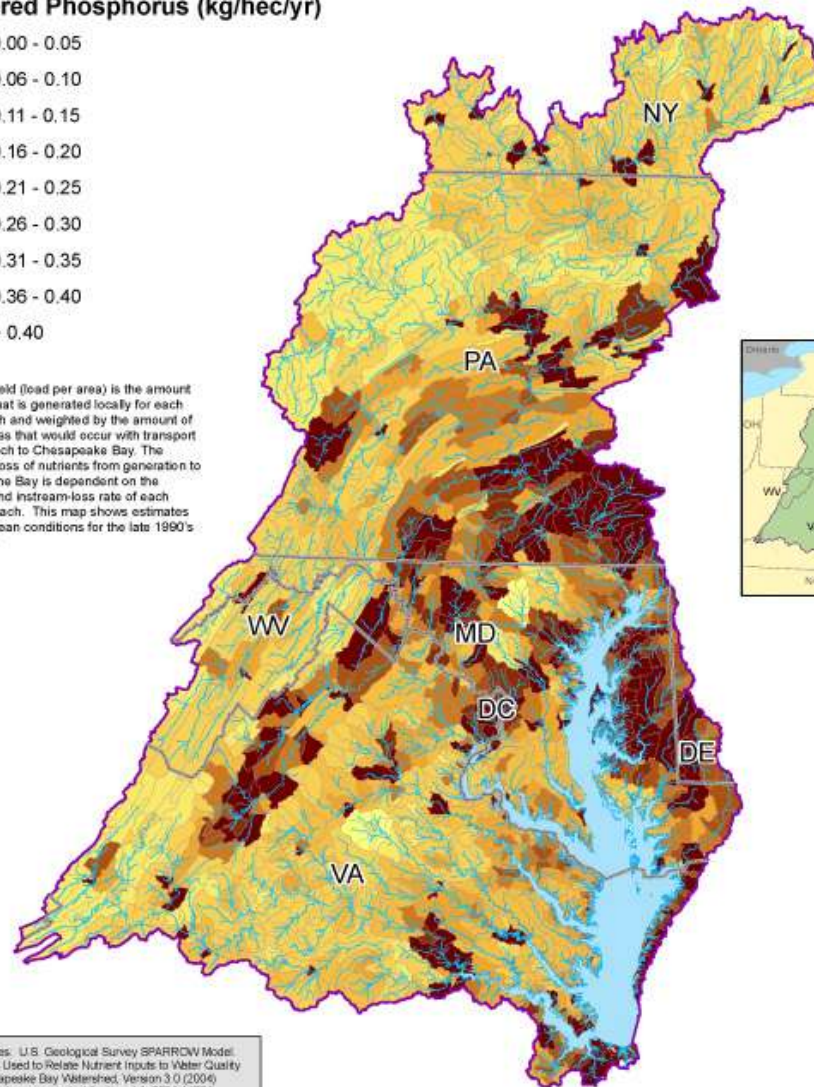
Delivered Yield to the Chesapeake Bay



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Lancaster County is:

- a. Part of the problem
- b. Part of the solution

What does the solution look like?

What does the solution look like?

- The solution includes the entire community, working together
 - Lancaster County Chesapeake Bay Task Force
 - Lancaster County Clean Water Consortium
 - Attention to water quality in forums such as today's Summit

What does the solution look like?

- Credit for previous good work
- New science and technology
- Market-based projects with multiple benefits
(i.e. nutrient trading, manure to energy)
- Minimize and offset new sources of pollution
- Local governments will be more involved than ever

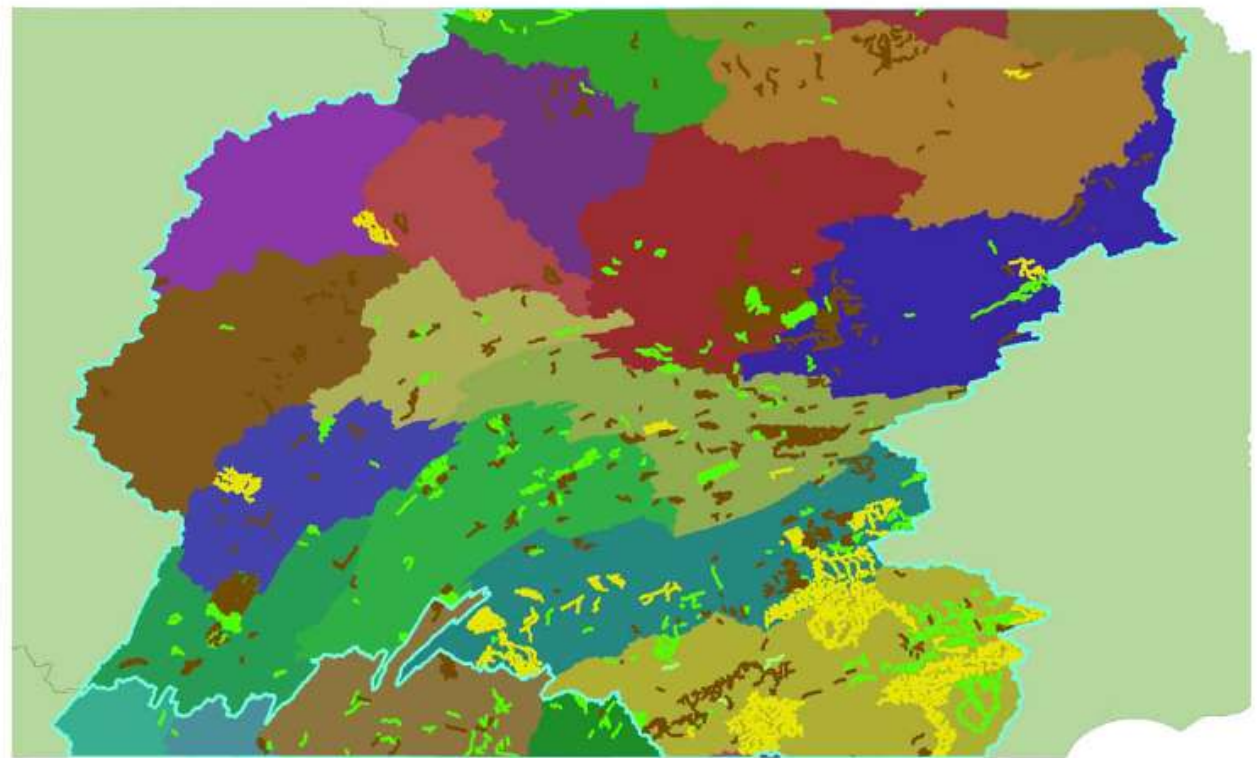
What does the solution look like?

Exercise personal responsibility

- Reduce energy consumption
- Reduce fuel consumption
- Maintain your septic system
- Compost
- Minimize stormwater runoff
- Plant trees and native plants
- Fertilize judiciously

PA waters are also impaired

A pound
for the
Bay is a
pound for
PA



PA DEP, 2007



≈2,900 miles
requiring TMDLs



Jane Hawkey/IAN

Questions?