# The Nature Conservancy



Protecting nature. Preserving life.®

Date: November 15, 2012

Prepared For Fertilizer Institute Round Table

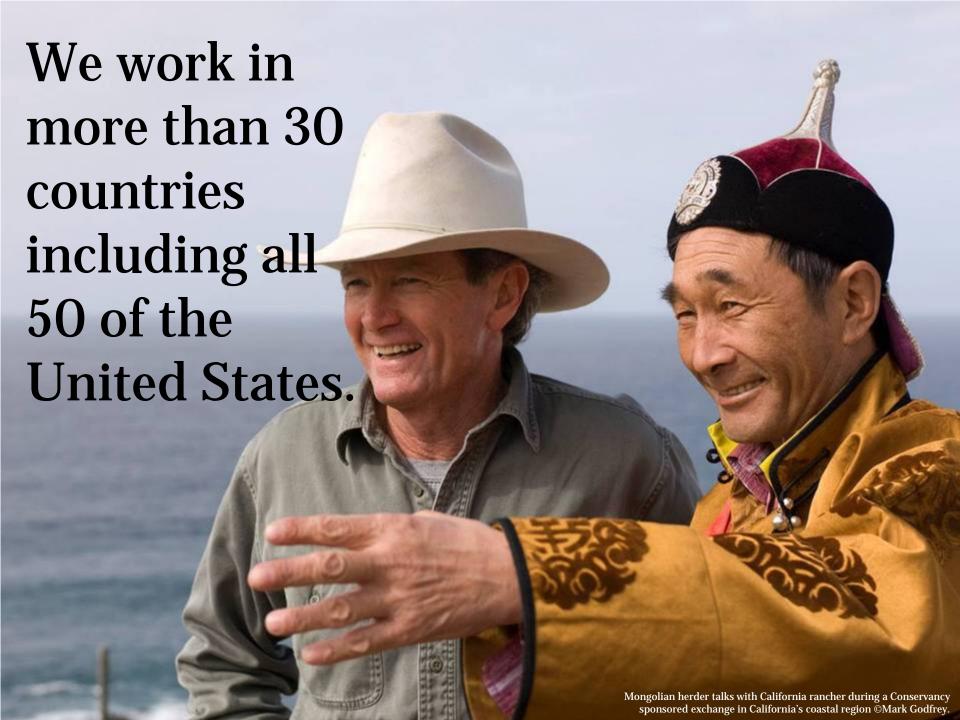
Presented By Amy Jacobs

© Erika Nortemai















#### Chesapeake Bay Priorities



• Healthy waters are protected

• Efforts to reduce nutrients and sediments into the Bay are effective and efficient

Restore and protect oyster reefs at large scales

#### Chesapeake Bay TMDL

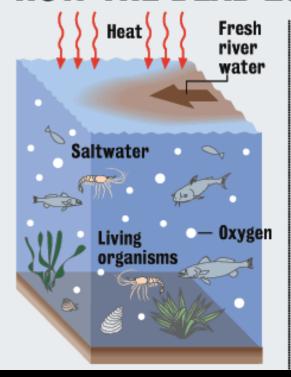


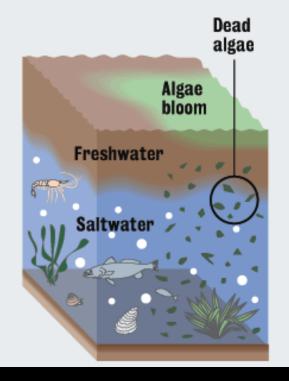
- Total Maximum Daily Load the maximum amount of a pollutant that can be allowed to enter a water body without violating water quality standards (WQS).
- Court Settlement 1998: Chesapeake Bay TMDLs must be completed by December 2010
- Agreement by Executive Council in 2000 to clean up Bay to meet WQS or implement a TMDL by 2010.
- EPA led a watershed-wide TMDL Development Process
- Region is entire Bay drainage up to and including NY,
   WV, DE, in addition to PA, VA, DC and MD.

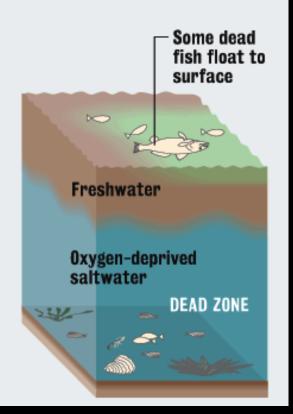
#### Dead Zones



#### **HOW THE DEAD ZONE FORMS**







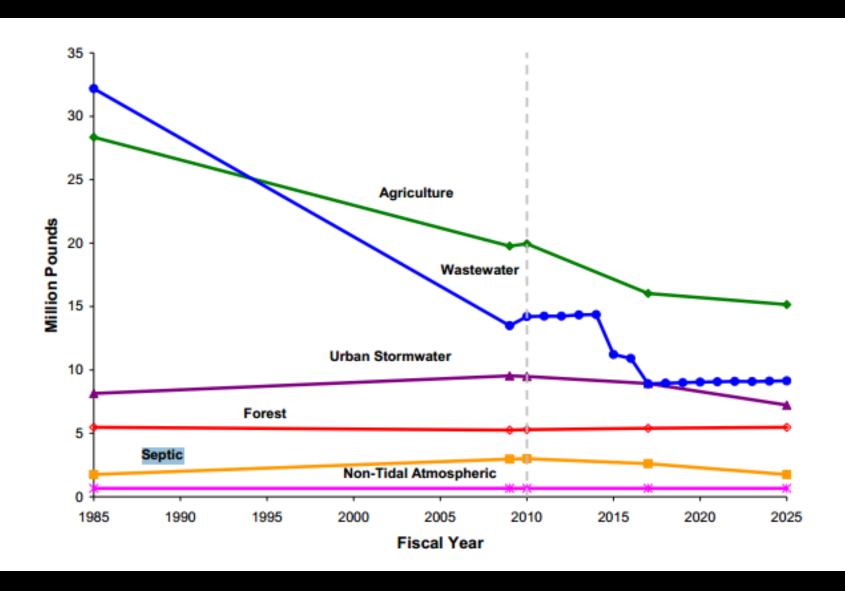
# Impact to People and Economy





### Nitrogen Reductions Past and Future, Maryland

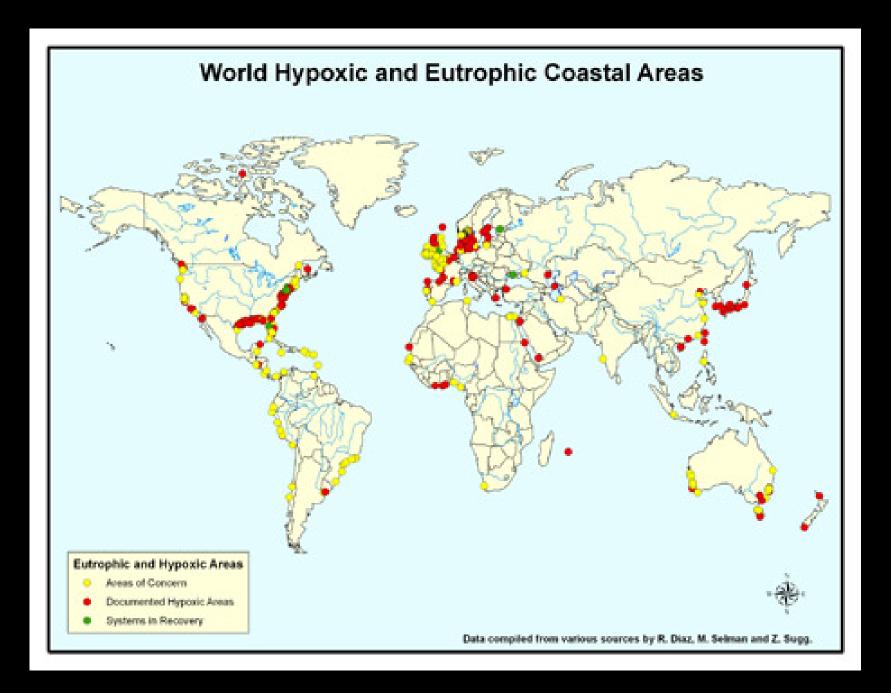




### Additional Reductions Needed in the Face of:



- Increasing demand for food to meet population growth
- Sustaining the viability of producers
- Consumer expectations for safe food and sustainable practices



#### Conflict or Challenge?





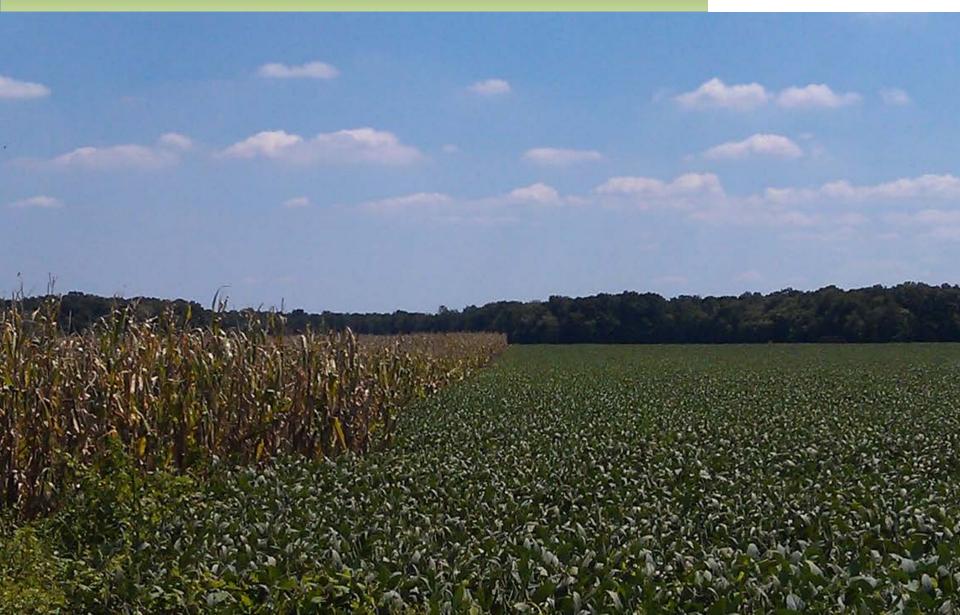
#### **Options Forward**



- Fight any changes to the status quo
- Increase government regulation
- Collaborative/ industry led progress that demonstrates environmental outcomes with agricultural progress

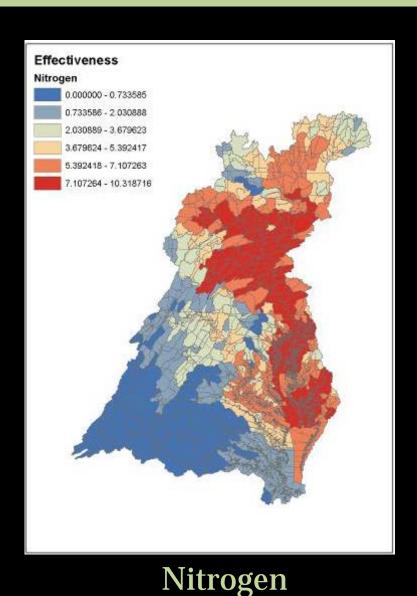
# Solutions: <a href="Performance-Based">Performance-Based</a> Outcomes

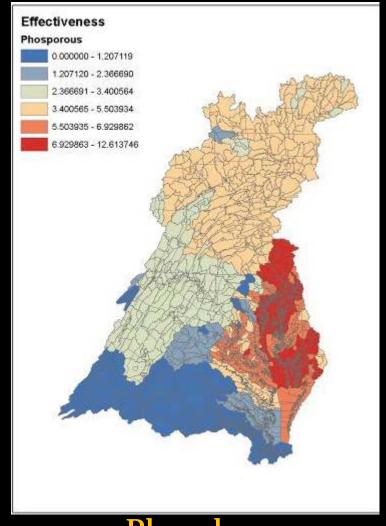




## Solutions: <a href="Performance-Based">Performance-Based</a> Outcomes







Phosphorus

#### Solutions: Performance-Based Outcomes





#### Solutions:

#### Performance-Based Outcomes

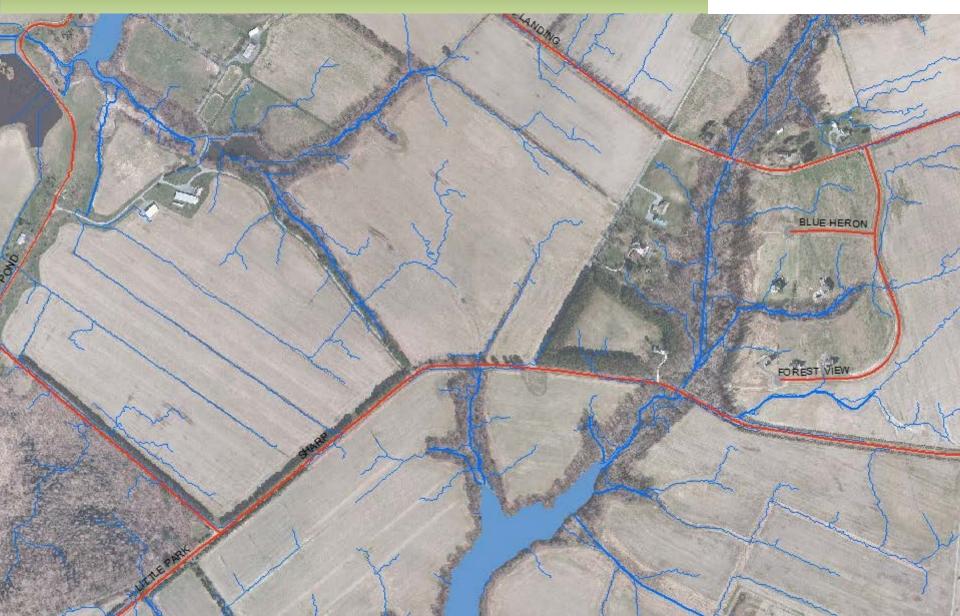




#### Solutions:

#### Performance-Based Outcomes

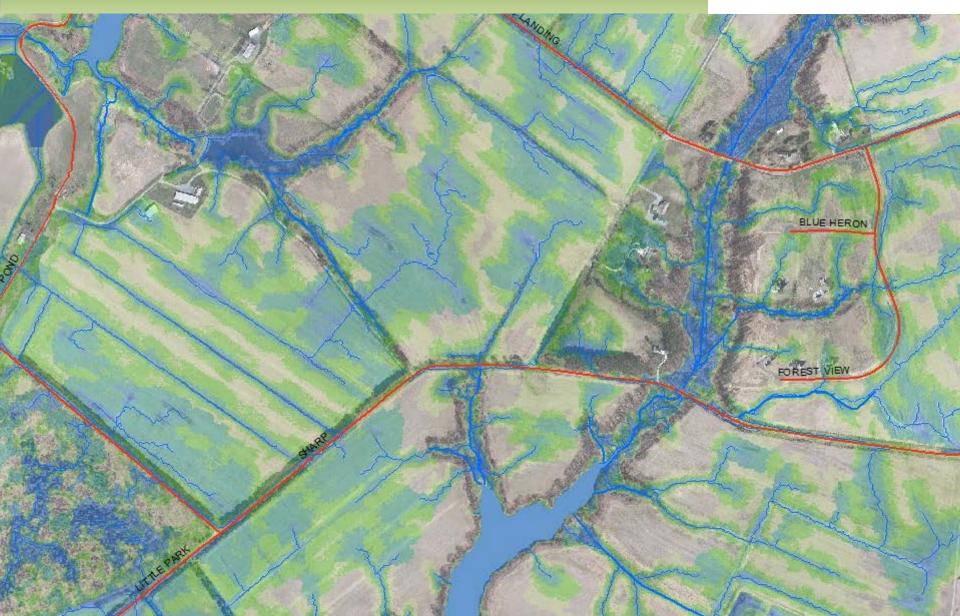




#### Solutions:

#### Performance-Based Outcomes





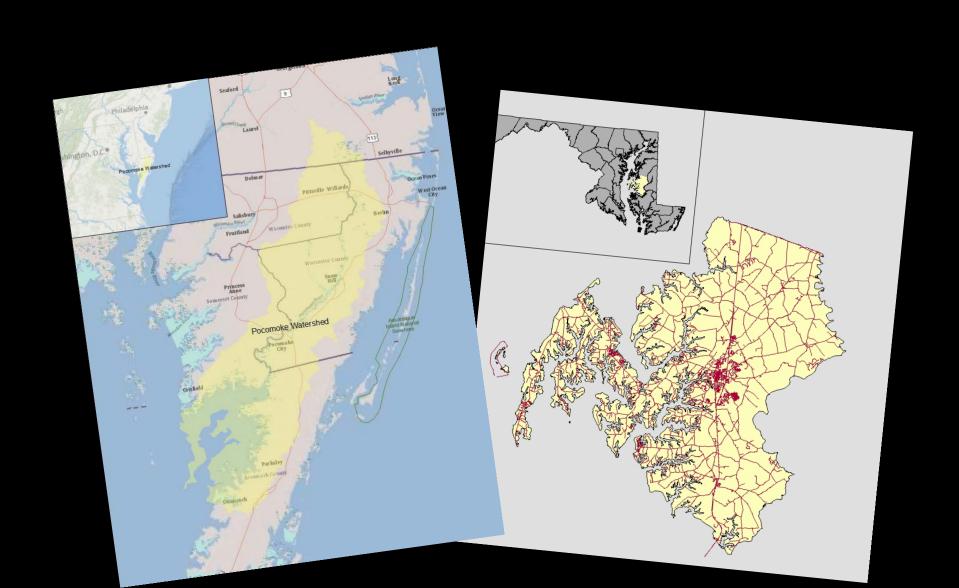
# Solutions: Performance-Based Outcomes





#### Demonstrating Efficient and Effective Nutrient and Sediment Reduction: Pocomoke River Watershed and Talbot County, MD





### Solutions: Increasing Production And Environmental Sustainability























AGRICULTURAL & LIFE SCIENCES



Bayer CropScience





















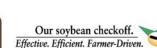
























National Association of Wheat Growers











conserving natural resources for our future

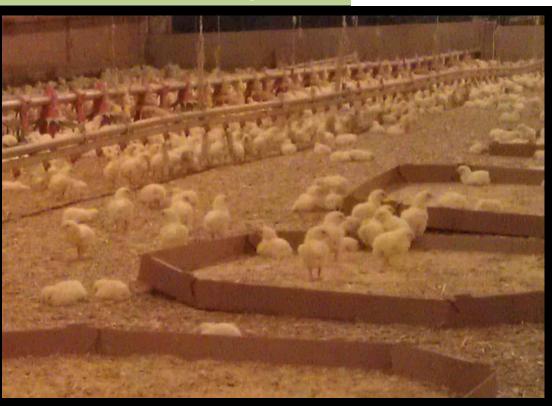




### Solutions: Increasing Production And Environmental Sustainability







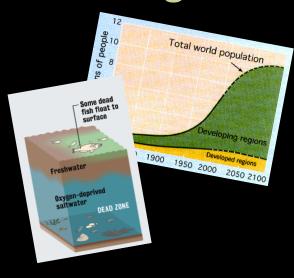


# Solutions: Improve Fertilizer Technology





#### Challenge



Best Option Forward



Collaborative Industry Led Progress

#### **Solutions**



Performance-based outcomes
Demonstrating Real Progress



Practices with environmental and economic outcomes



Improved Fertilizer Technology

