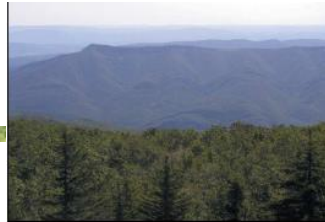




Chesapeake Bay Agroforestry Update

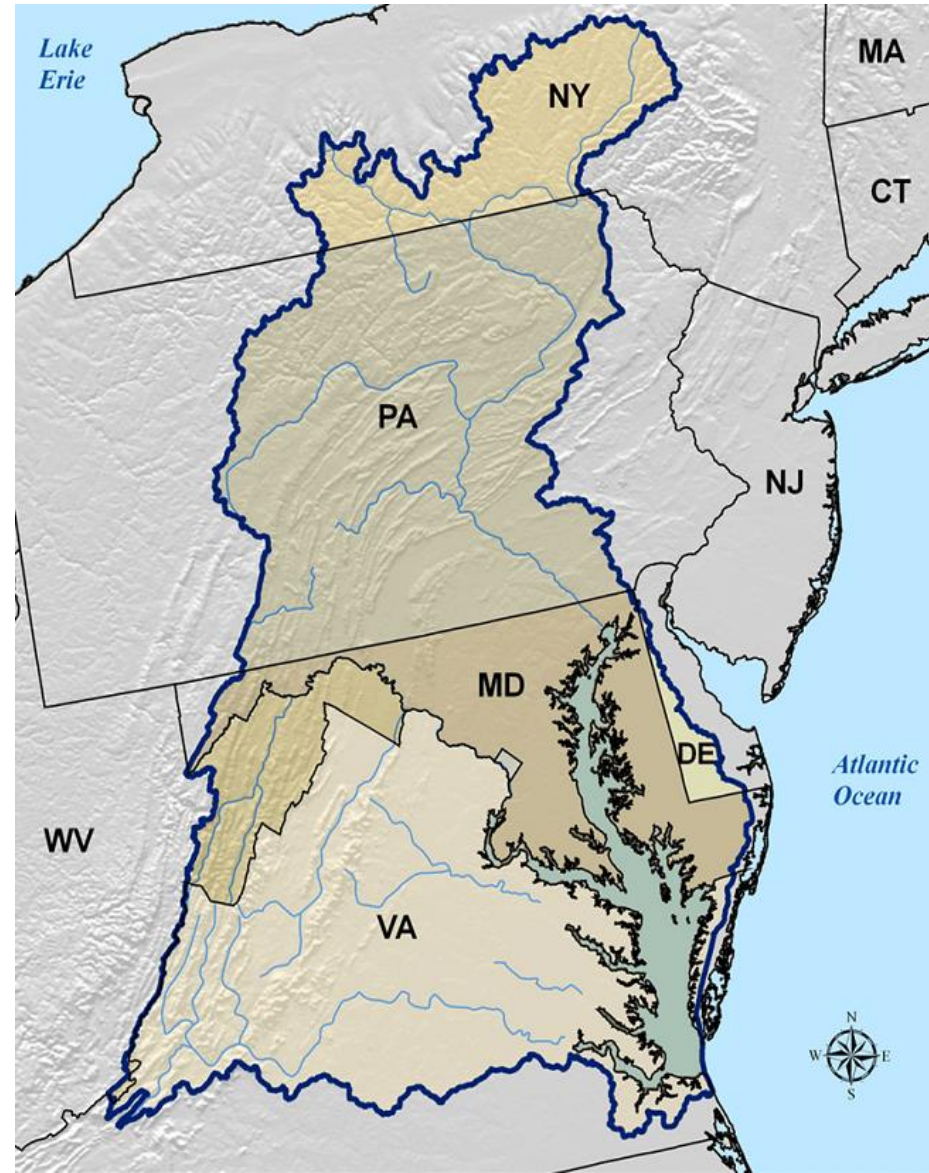
May 7, 2014

Sally Claggett, Julie Mawhorter, US Forest Service
Northeast Area State & Private Forestry, Chesapeake Bay Program



Chesapeake Bay Watershed

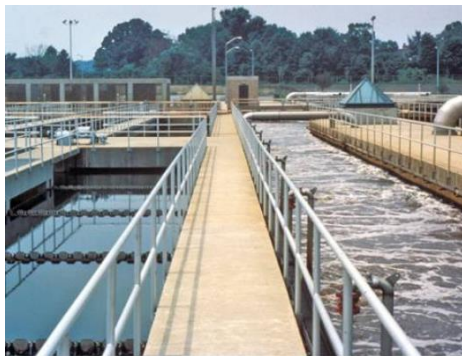
- Nation's largest estuary
- 44 million acres
- 18 million people
- 30-Year restoration partnership



Too many nutrients...



Algal blooms, dead zones
Impacts blue crabs, oysters, etc.



What guides our work

- Chesapeake Executive Council Agreements
 - State goals for Riparian Forest Buffers, Forest Conservation, Urban Tree Canopy
 - NEW Chesapeake Bay Agreement – to be signed 2014
- Chesapeake Forestry Workgroup
 - Lead on forestry goals/collaboration since 1991
- 2010 Chesapeake Bay TMDL = Pollution Diet
 - State Watershed Implementation Plans (WIPs)
- 2010 Chesapeake Executive Order Strategy
 - 2012 Forest Restoration Strategy, Agroforestry Team

2010 Executive Order Strategy

Executive Order 13508

Strategy for
Protecting and Restoring
the Chesapeake Bay
Watershed
May 12, 2010

Source: Adam Jones/Wikimedia Library

Developed by the Federal Leadership Committee for the Chesapeake Bay

USDA

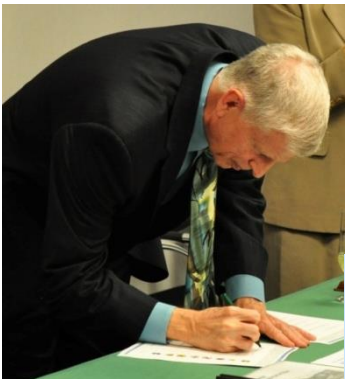
The cover features a blue header with text and a collage of images: a boat on water, a crowd of people on a beach, a river flowing through a forest, and a man showing a fish to a child. At the bottom, it displays the text 'Developed by the Federal Leadership Committee for the Chesapeake Bay' and several logos including the USDA logo and various state and federal seals.

Habitat Action:


“By 2012, USDA will work with Dept. of Interior and other entities to develop a Chesapeake Bay watershed strategy to maximize forest restoration in priority areas...”

2012 Forest Restoration Strategy


- 5 teams with over 60 fed, state, ngo representatives
- Restoring forest cover in priority areas
 - Wildlife habitat
 - Urban/community
 - Agroforestry ***
 - Mine lands
 - Brownfields



**CHESAPEAKE
FOREST RESTORATION
STRATEGY**



USDA December 2012
United States Department of Agriculture
Forest Service
Northeastern Area State and Private Forestry
Newtown Square, PA
www.na.fs.fed.us



Chesapeake Bay Program
A Watershed Partnership

Signing Ceremony with Forest Service Chief and State Foresters
Strategy team received 2 Chief's Partnership Award in 2013 (NRCS/FS)

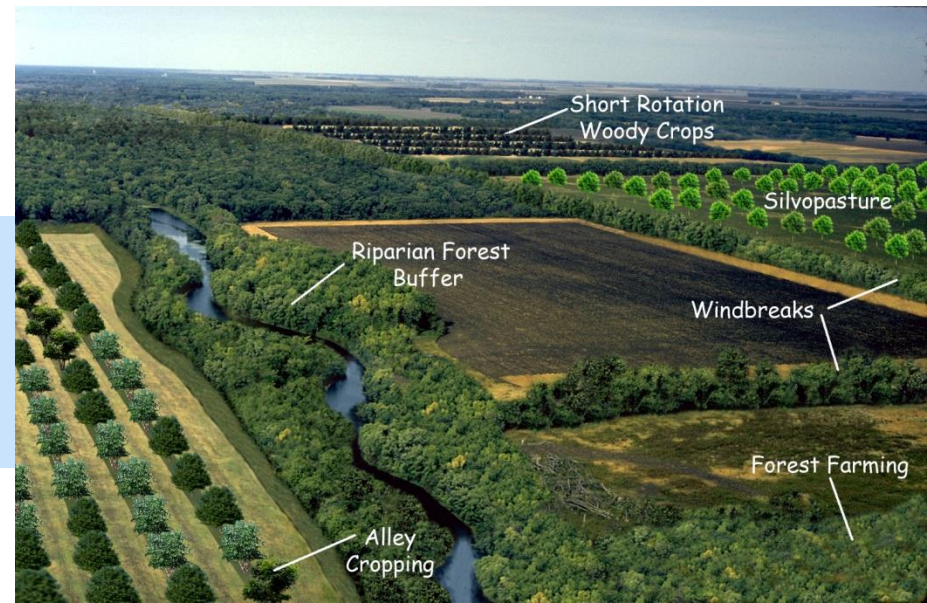
AGROFORESTRY - WHY

Agroforestry is the intentional mixing of trees and shrubs into crop and animal production systems to create environmental, economic and social benefits:

- Provide protection for valuable topsoil, livestock, crops, wildlife
- Increase productivity of agricultural and horticultural crops
- Reduce inputs of energy and chemicals
- Improve water quality
- Diversify local economies

➤ 9 million acres of agricultural land in Bay watershed

➤ 4.2 million acres of woodlots on farms



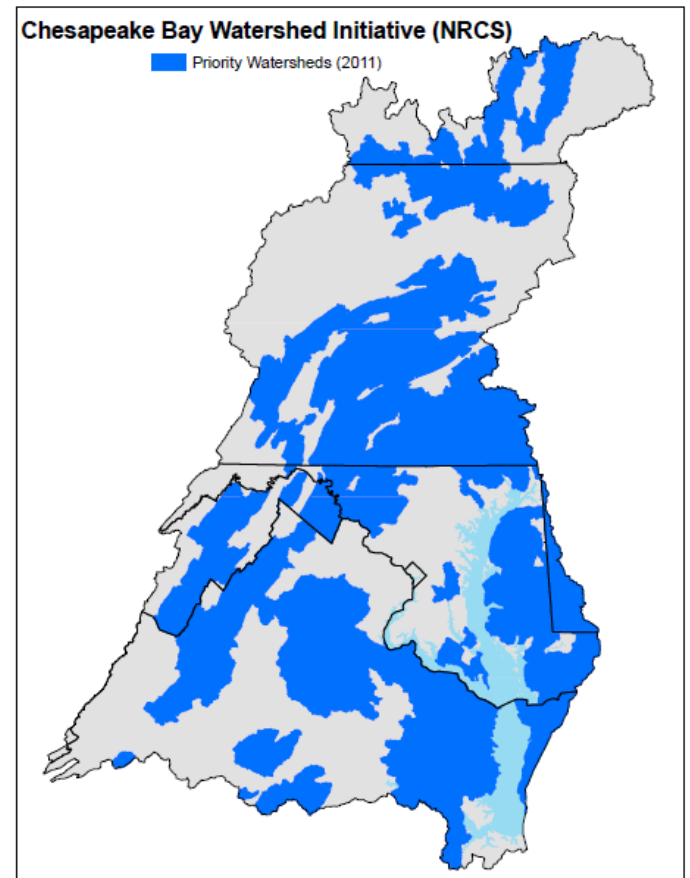
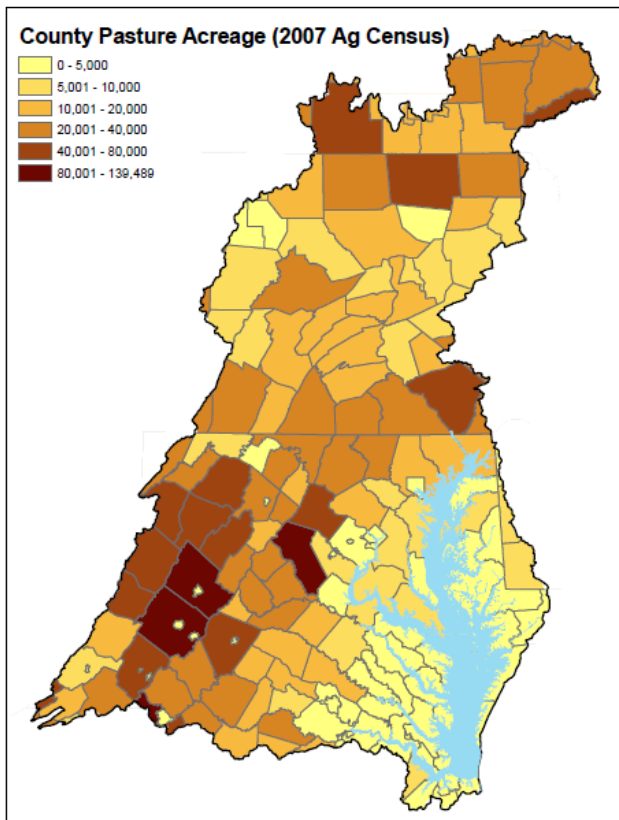
AGROFORESTRY PRACTICES

- Riparian Forest Buffers
- Windbreaks/Shelterbelts
- Alley Cropping
- Silvopasture
- Forest Farming



AGROFORESTRY - WHERE

- Target to areas with greatest need and opportunity
 - High pollutant loading – NRCS Priority watersheds



AGROFORESTRY - HOW

- NRCS/FSA Cost Share Programs
- Need for more awareness: examples of how Pennsylvania partners have promoted agroforestry through:
 - Demonstration sites
 - Trainings for field staff
 - Incorporate into NRCS Tech Guidance



AGROFORESTRY - ACTIONS

- Work with NRCS State Technical Committees in the Bay states to **promote agroforestry practices through Farm Bill programs**
- Establish **Agroforestry demonstrations areas** by finding early adopters with working farms and forests so that others may be able to see the conservation and economic benefits. Pursue USDA **Conservation Innovation Grants** and other funding sources to establish these sites

AGROFORESTRY - ACTIONS

- Agroforestry is a relatively new concept. **Train-the-trainers workshops** targeting resource professionals in the watershed is a first step toward reaching watershed landowners. Subsequent workshops can introduce Agroforestry practices to landowners.
- Establish **Agroforestry demonstrations areas** by finding early adopters with working farms and forests so that others may be able to see the conservation and economic benefits. Pursue USDA **Conservation Innovation Grants** and other funding sources to establish these sites

AGROFORESTRY - ACTIONS

- Work with the NRCS Ecological Sciences staffs in the Bay states to **get all 5 Agroforestry practices included in the Field Office Technical Guide and Farm Bill programs.**
- Explore a **Bay Branding campaign** for agroforestry products similar to Edible Chesapeake but focused specifically on foods and products developed from businesses committed to sustaining working forests within the Bay area.

Agroforestry – Next Steps

- This meeting!!!
- Chart a path forward for collaboration on key priorities

Riparian Forest Buffer Update

Forest Buffer Goals in the Bay...

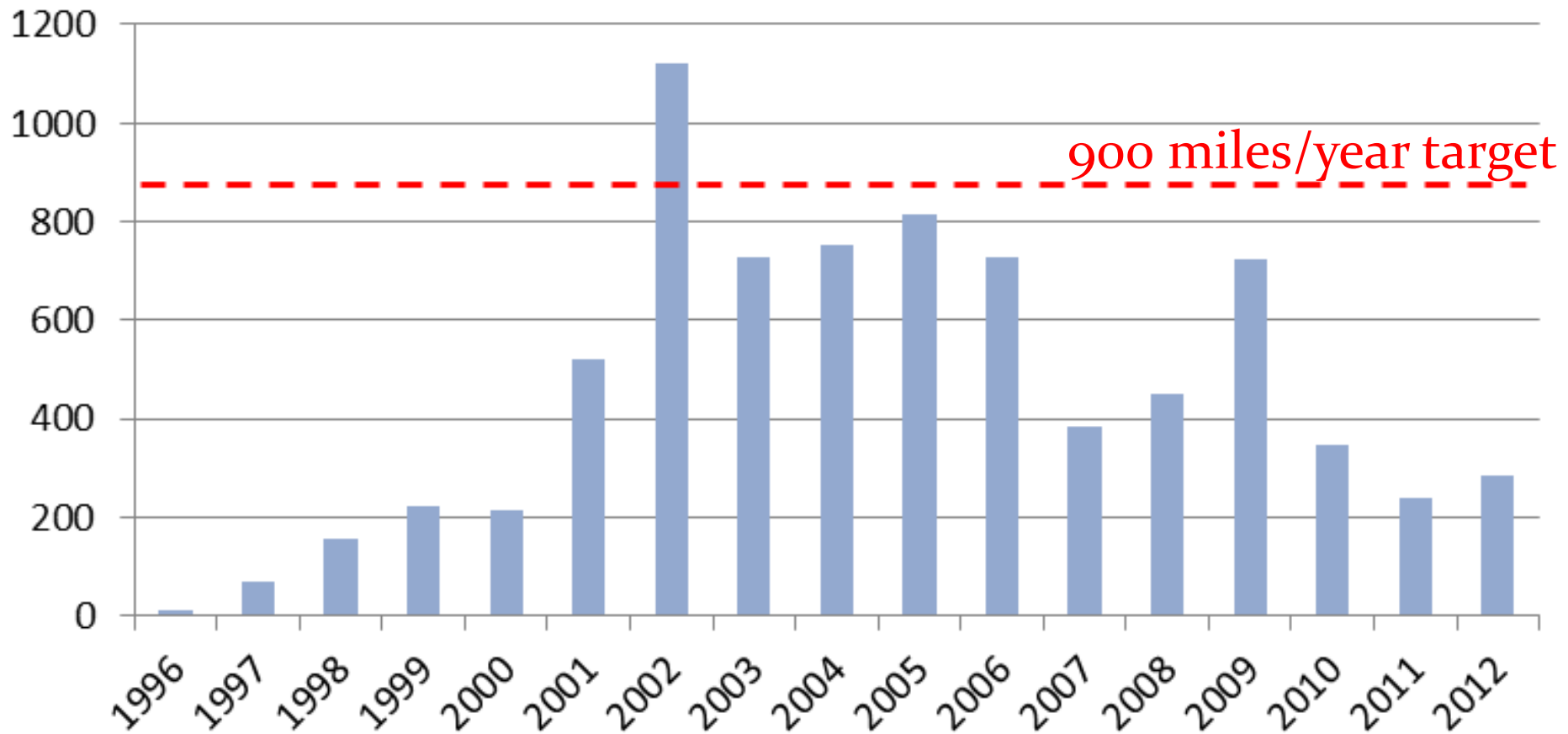
- Chesapeake Executive Council Directives – states commit to forest buffer goals in 1996, 2003, 2007
- Current goal - restore forest buffers at rate of 900 miles per year, Bay-wide
- CB Executive Order Strategy 2010 – USDA commits to support Forest Buffer Outcome (900 miles/year)

See 2013 Chesapeake Bay Forest Buffer Status Paper –
“Buffering the Bay” Accessible at:

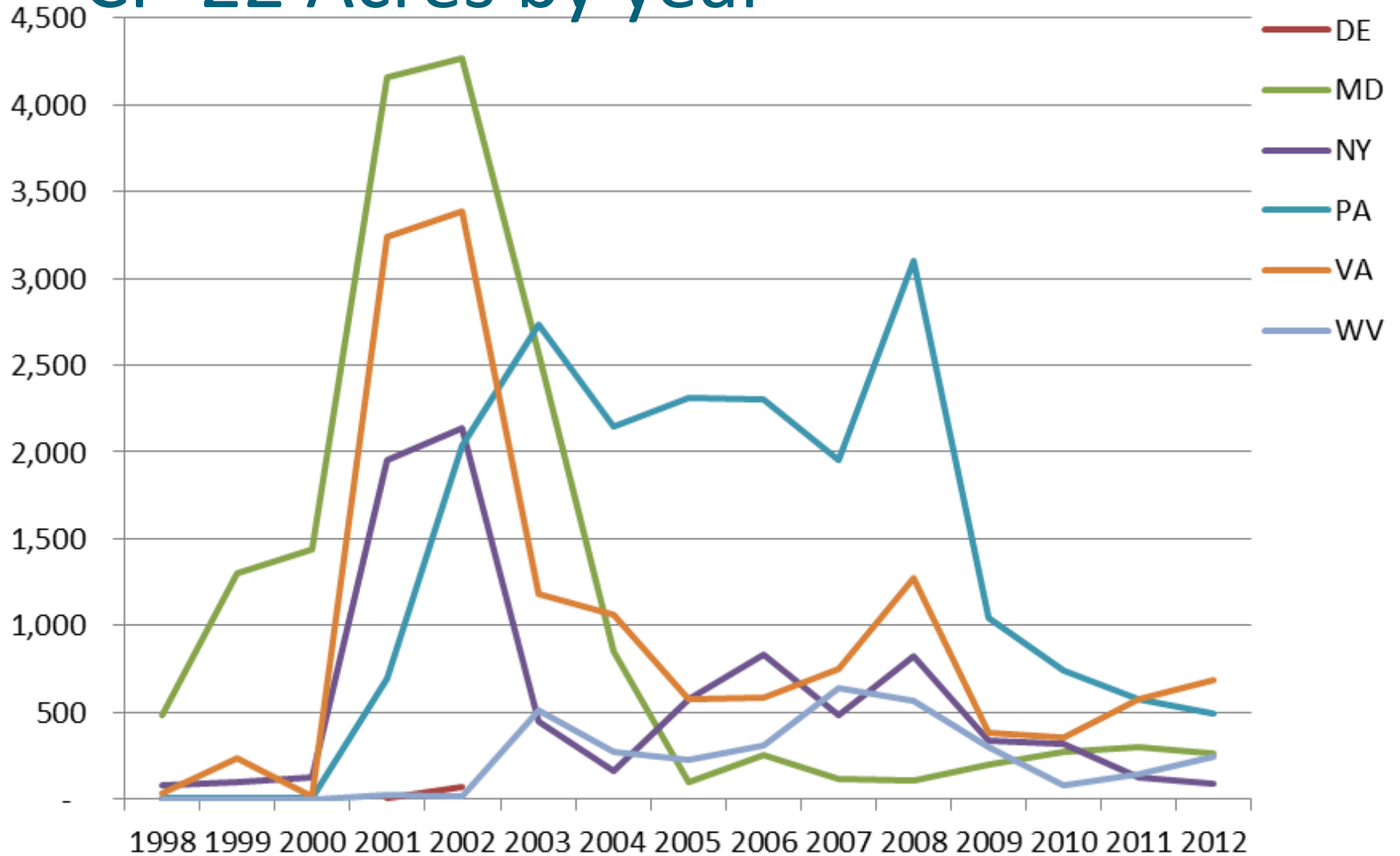
<http://www.chesapeakebay.net/S=0/calendar/event/21542/>

Past Progress – Miles Reported by States

Miles of Riparian Forest Buffers Planted in Chesapeake Bay Watershed, 1996-2012



CP-22 Acres by year

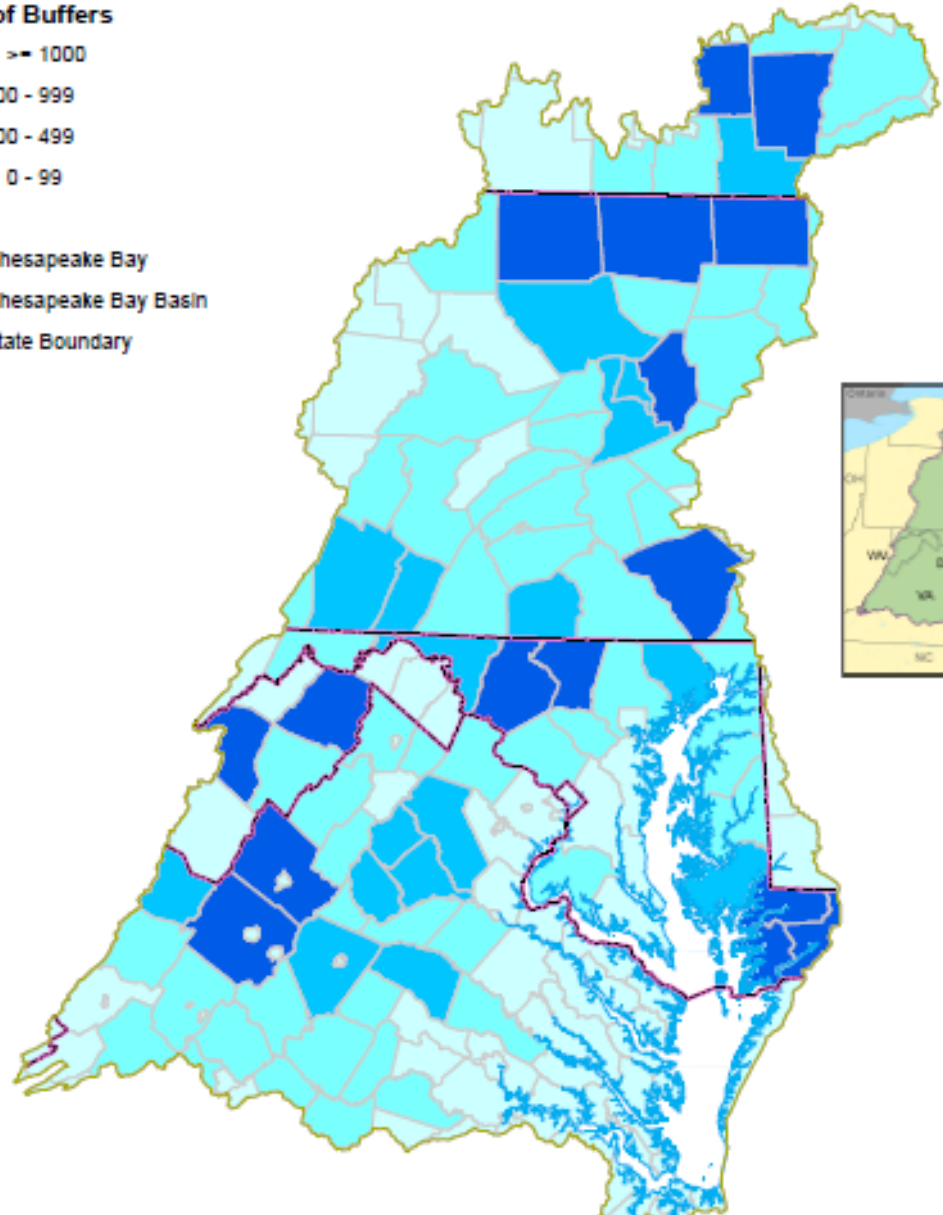
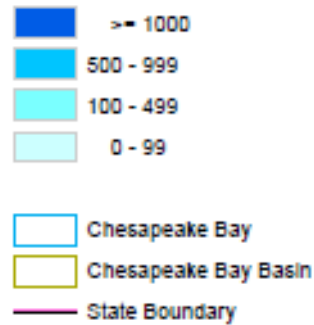


Acres of Forest Buffers Restored Through CRP/CREP in the Chesapeake Bay Basin, by County (1998-2012)



* 25% of the counties achieved 75% of the buffer acres restored

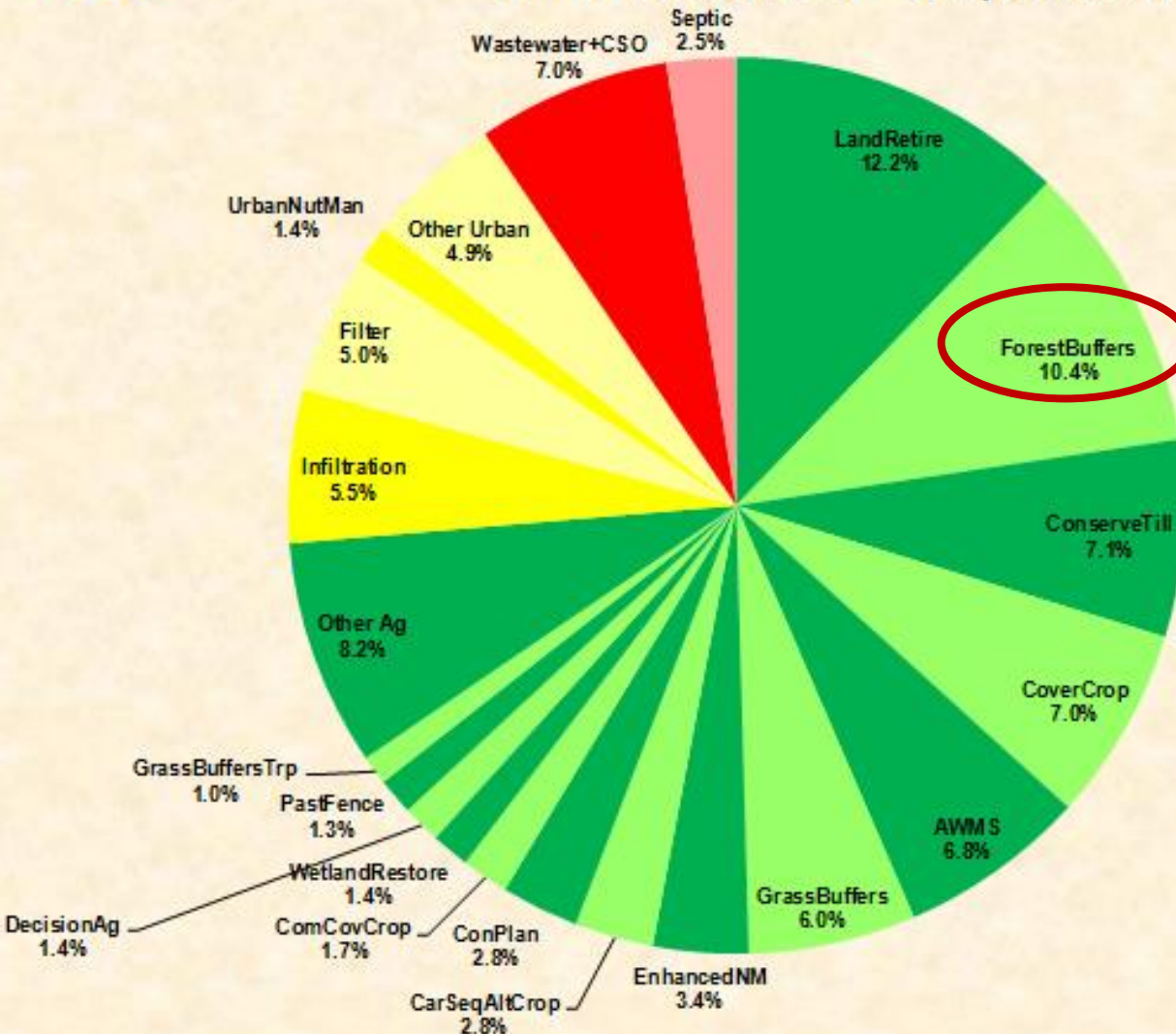
Acres of Buffers



States relying on past and future acres

Nitrogen Relative Load Reductions

CB Watershed – as percent



Forest Buffers rank second of all nonpoint source BMPs needed to meet TMDL targets.

- Includes both past CP-22 acres and planned 2013-2025

Each slice represents the percent of the total load reduction attributable to planned implementation levels for that BMP.

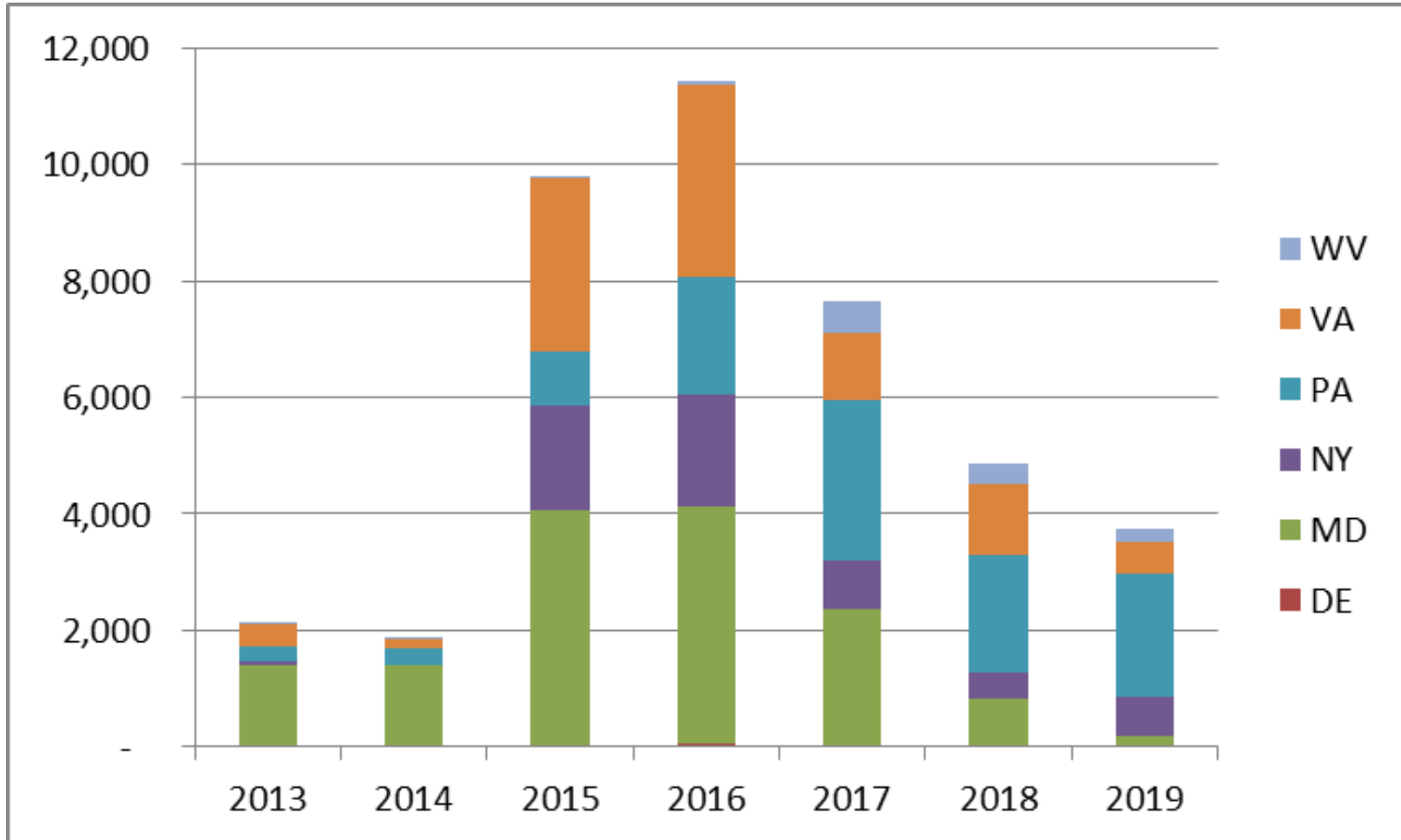
TMDL/WIP targets for forest buffers

	Total <u>New</u> <u>Acres</u> Needed 2012-2025	Acres/year needed	2012 CP-22 acres
Delaware	4790	370	0
Maryland	1190	90	264
New York	6180	475	91
Pennsylvania	89,630	6895	493
Virginia	80,820	6215	683
West Virginia	3250	250	249
TOTAL	185,860	14,295	1780

14295 acres/year = 1191 miles/year of 100 ft wide buffers

Emerging Issue: Expiring Contracts

CP-22 Acres expiring 2013-2019



Data Source: USDA Farm Services Agency

Challenges to Progress

- Declining state and federal budgets
- Shortage of “boots on the ground” for outreach and technical assistance
- High commodity crop prices
- Expiration of CREP contracts
- Landowner concerns
- Maintenance/post-planting care

Riparian Buffer – Next Steps in 2014

- Leadership Summit (aiming for June 2014)
 - NRCS, FSA, USFS, States
- State-level Task Forces