



HOW RIPARIAN FOREST BUFFERS HELP MEET OTHER CHESAPEAKE BAY GOALS

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The background of the slide is a photograph of a forest with many thin, white-barked trees, likely aspens or birches, standing closely together. The image is slightly blurred, giving a sense of depth. A dark green horizontal bar is positioned at the top of the slide, and a lighter green horizontal bar is positioned below it, both spanning the width of the slide.

FOREST BUFFER OUTCOME

- Continually increase capacity throughout the watershed
- Restore 900 miles per year
- Conserve existing buffers until at least 70 percent of riparian areas are forested



FACTORS WE CAN'T CONTROL

- **Fluctuation in commodity crop prices**
- **Inter-generational transfer of ag lands**
- **Loss of agricultural lands**
- **Congressional authority for Farm Bill**

HIGH PRIORITY FACTORS

- Insufficient emphasis
- Insufficient technical assistance
- Interagency coordination
- Lackluster incentives
- Unused federal funds (lack of 20% match)
- Inflexible federal programs
- Outreach to landowners
- Understanding lack of re-enrollment
- Lack of information for landowners & assistance providers
- Unsatisfactory survival rate of buffer plantings
- Complicated process (application/implementation)
- Targeting areas where most effective
- Need for permanent protection

CURRENT EFFORTS & GAPS

Chesapeake Riparian Forest Buffer Initiative

- USDA, EPA and Alliance for the Chesapeake Bay
- Spring 2014 – Kicked off Task Force process
- Many partners engaged in each state
- Needs/Actions summarized in Buffer Management Strategy and Workplan:

http://www.chesapeakebay.net/managementstrategies/strategy/forest_buffer

RIPARIAN FOREST BENEFITS

- Clean water
- Habitat (aquatic and terrestrial)
- All the co-benefits that trees provide including air quality, cooling, carbon sequestration, etc
- Need to review the science? See recorded webinar by Bern Sweeney:
<https://usfs.adobeconnect.com/p1uc3sf8jj5>



RIPARIAN FOREST BUFFERS AND WATER QUALITY

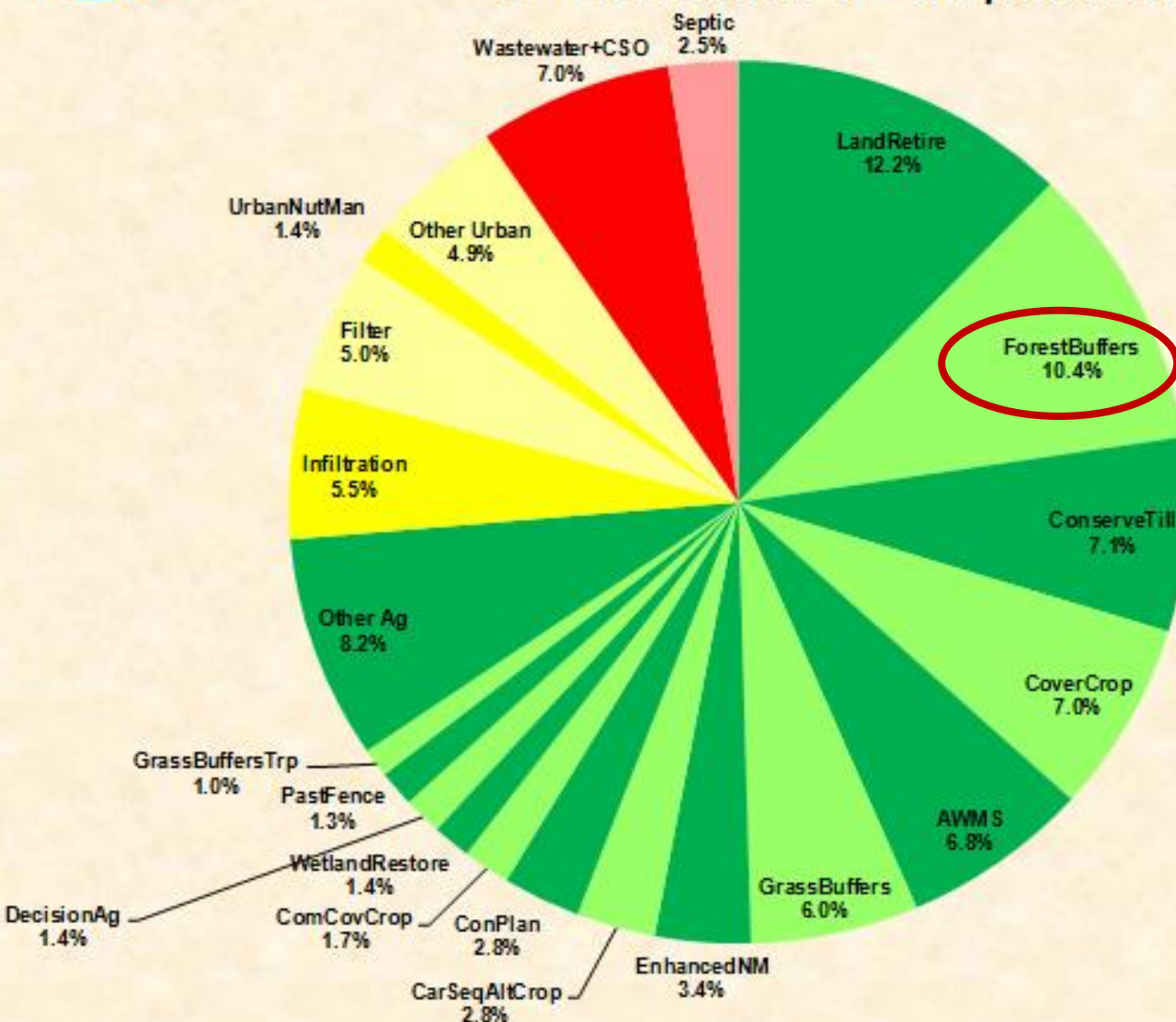
- Riparian forest buffers among most effective practices to reduce nitrogen, phosphorus, and sediment
- Credited in Chesapeake Bay Program models as “Forest Buffers on Fenced Pasture Corridor” and “Forest Buffers”
- Converts agriculture or urban land uses to forest land use
- Also reduces upland pollution
 - Each acre of “Forest Buffer” reduces nitrogen from 4 upland acres in agriculture

STATES RELYING ON PAST AND FUTURE ACRES



Nitrogen Relative Load Reductions

CB Watershed – as percent

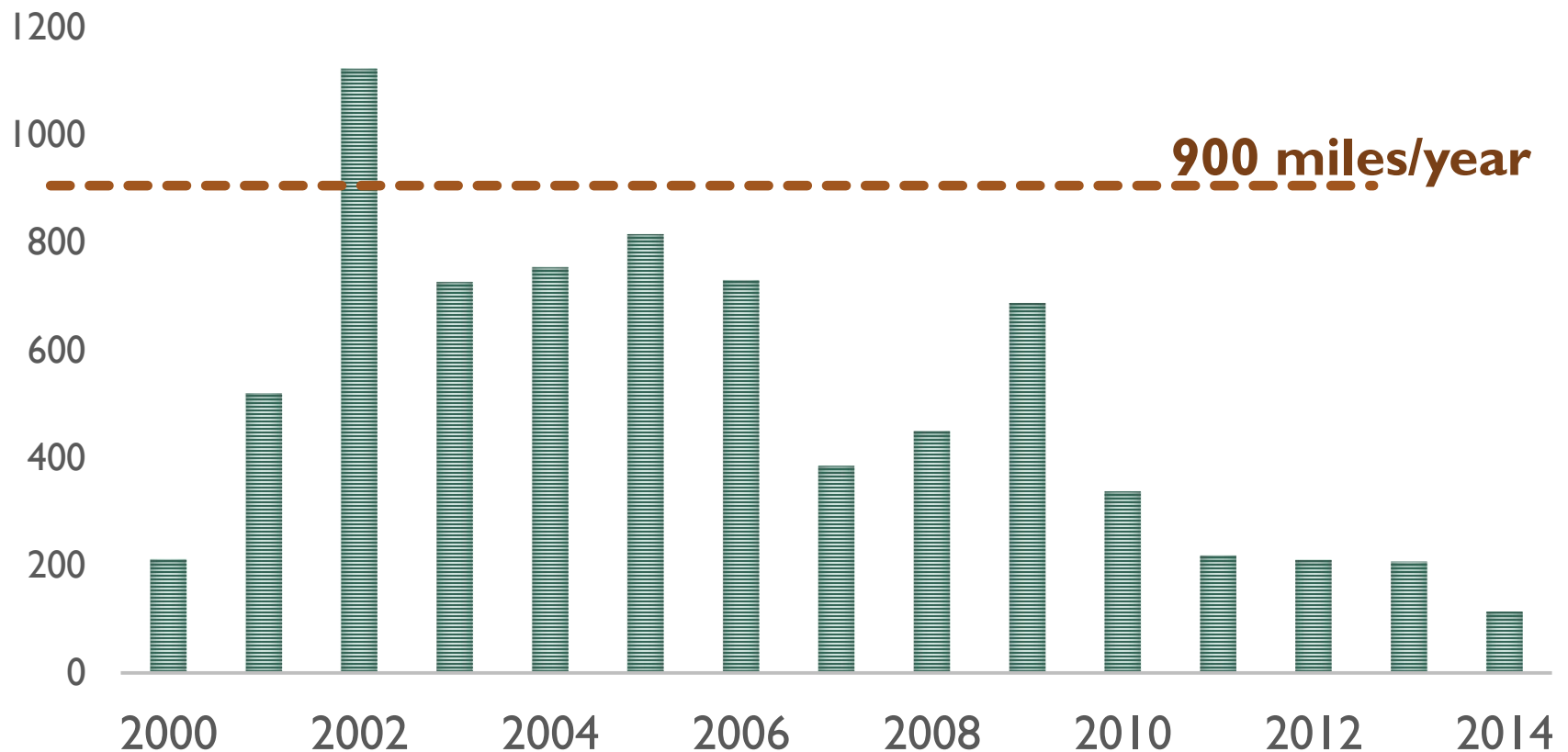


Forest Buffers rank second of all nonpoint source BMPs needed to meet TMDL targets for N according to state WIPs

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

PAST PROGRESS

Miles of Riparian Forest Buffers Planted as Reported by Bay States



Data source: Miles of new riparian forest buffer reported by states to the CBP Forestry Workgroup

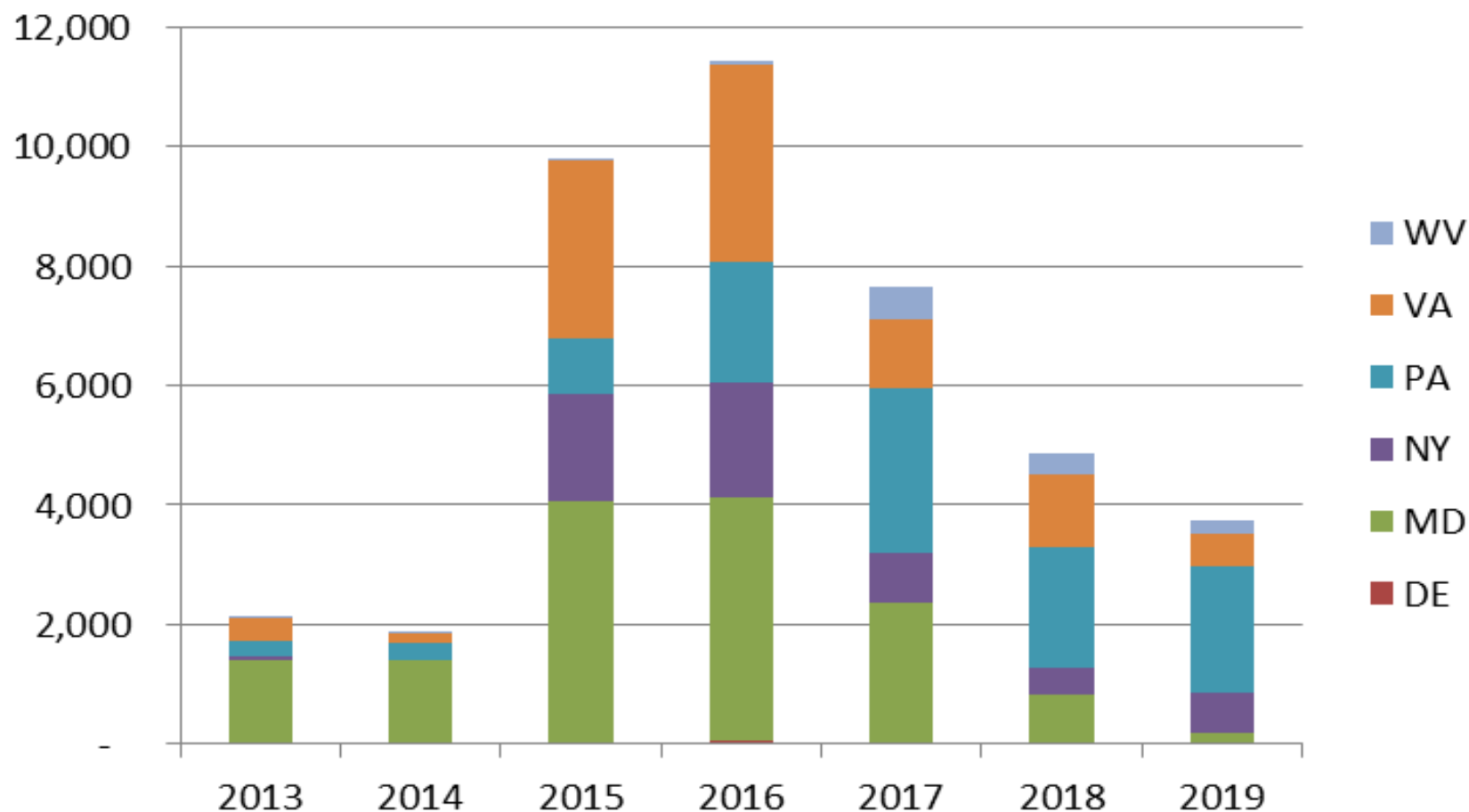
FOREST BUFFER PROGRESS TOWARD TMDL/WIP TARGETS

| | Total <u>New Acres</u> Needed 2015-2025 | Acres/year needed | 2015 CP-22 new acres | Expired in 2015 (not re-enrolled) |
|---------------|---|----------------------|-------------------------|--------------------------------------|
| Delaware | 4,527 | 453 | 0 | 14 |
| Maryland | 1,126 | 113 | 122 | 2,693 |
| New York | 5,376 | 538 | 42 | 1,557 |
| Pennsylvania | 100,277 | 10,028 | 207 | 589 |
| Virginia | 79,586 | 7,959 | 212 | 1,269 |
| West Virginia | 2,787 | 279 | 68 | 28 |
| TOTAL | 193,679 | 19,368 | 651 | 6,150 |

19,368 acres/year = 1,598 miles/year of 100ft wide buffers

EXPIRING CONTRACTS

CP-22 ACRES EXPIRING 2013-2019



Data Source: USDA Farm Services Agency

SUMMARY

- ✓ RFBs are critical
- ✓ Effort should be commensurate with its importance in state Watershed Implementation Plans
- ✓ Need clear commitment and supportive ground-level operations
- ✓ Eliminate barriers to implementation – act on recommendations in Management Strategy

