Chesapeake Bay Riparian Forest Buffer Initiative

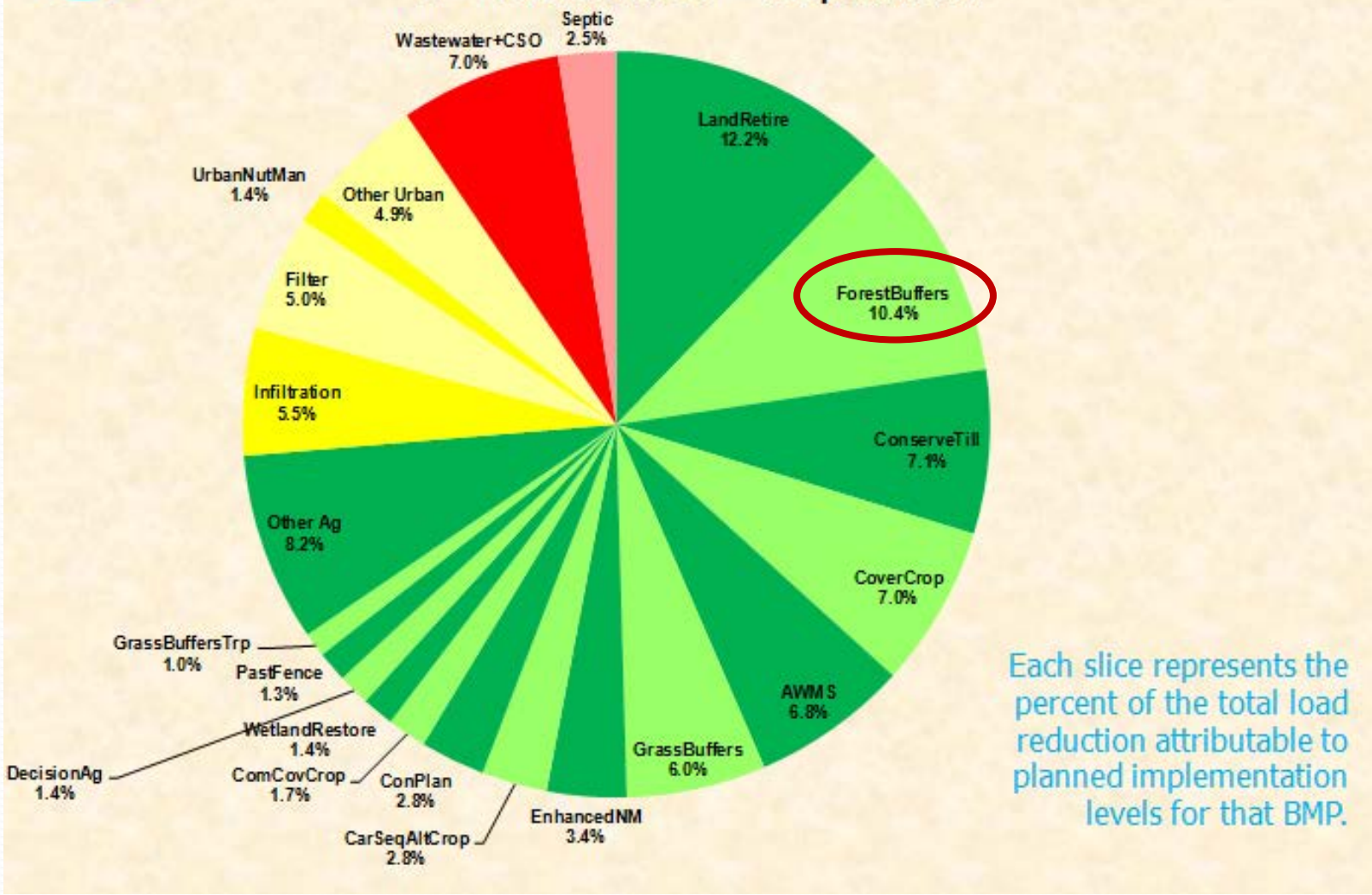
USDA Efforts to Accelerate Implementation

Chesapeake Bay –
Riparian Forest Buffer Initiative

- 2014
  - Leadership summit – USDA pledges $5M
  - Virginia State Task Force (STF) – 20+ partners
- 2015
  - VA STF outcomes and funding request submitted
  - Updates to state policy & technical guidance
- 2016
  - Chesapeake Bay CREP Agreement amended

Nitrogen Relative Load Reductions

CB Watershed – as percent

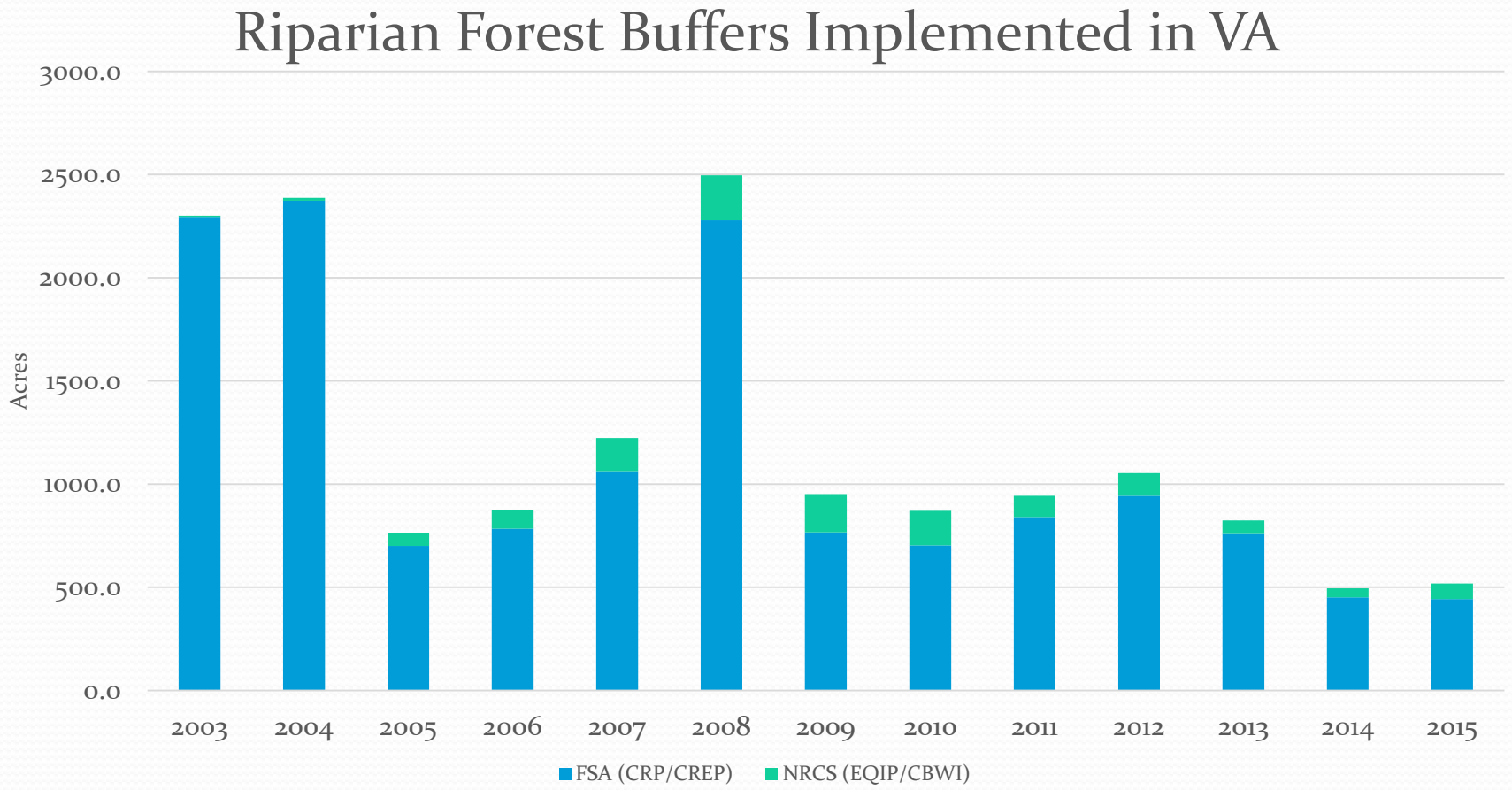


Data Source: Chesapeake Bay Program Modeling Team (Sweeney)

USDA Farm Bill Programs

- FSA – Conservation Reserve Enhancement Program (CREP)
  - Offshoot of CRP
  - Partnership program
  - Financial & technical assistance
- NRCS – Environmental Quality Incentive Program (EQIP)

USDA Farm Bill Programs



Key Considerations

1) Program Leadership
2) Guidance Policies
3) Incentives (federal/state/private)
4) Technical Assistance Delivery
5) Outreach and Maintenance
6) Compliance and Re-enrollment

Program Policies and Incentives

- Boost financial assistance
  - Increased cost-share caps ~10%
  - Updated cropland SRR – 2015
  - VA DCR increased c/s for CP-22 from 25% to 50% - 7/1/2015
- Require NRCS/DOF certification for cost-share
- PIP distributed after establishment verified
- Crack down on noncompliance
  - Use GIS imagery for compliance spotchecks
  - Bi-annual review of contracts

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Technical Recommendations

- Greater flexibility
  - Species selection/stocking rate
- Review planting 'prescriptions'
  - Bareroot seedling vs. 2 yo whip
- Address mowing/weed control
- Increase capacity for trained **technical assistance**
- Focus on permanent land use change to **retain** buffers
  - Closed canopy forest within 15 years

Factsheet 5

PENNSTATE

Vegetation Management
Department of Horticulture
College of Agricultural Sciences
http://vm.cas.psu.edu

Conservation Reserve Enhancement Program (CREP)
Technical Assistance Series

Weed Management in Riparian Forest Buffers

Riparian forest buffers (RFBs) provide improved water quality by reducing stream temperatures and supplying the food source for aquatic macroinvertebrates, fostering wider, slower streams with more biologically active streambed surface area, and creating a more diverse plant and soil community that effectively intercepts and utilizes suspended soil and nutrients coming from upland surface flow. RFBs also provide the foundation for diverse wildlife habitat. However, without effective weed control during establishment and ongoing maintenance early in the life of the planting, your RFB may never become a forest. It is not enough to plant the trees and 'let nature take its course'. The best habitat and ecological value comes from achieving canopy as soon as possible. To get to the forest, you need to 'farm' the trees.

This is especially true where RFBs are established in existing cool-season grass pastures or hay fields (the 'green desert').

Effective weed control reduces competition (increases tree growth), reduces cover for pests such as meadow voles, and makes it easier to properly inspect the trees and tree shelters.

Control Weeds Before Planting

The best time to begin your weed control program is the [illegible] before the RFB is planted (two would be even better). [illegible] in the fall prior to a spring

THE GRAPH ABOVE SHOWS AN ALL TOO FAMILIAR

scene of bobwhite quail [illegible]

[illegible] Sole and Pat Keyser

dwest regions of the
me the predominant
urf and erosion con-
lw-eaten U.S. There
s acres of tall fescue
provide poor quality
nd wildlife habitat.
l and cottontail rab-
bbiem and are inter-
their acreage.
e fescue is a poor
y competitive plant
it has been estab-
with a thick matted
ovement of wild-
'orm of tall fescue
th it. This creates

Evaluation of Tree Seedling Mortality and Protective Strategies in Riparian Forest Restoration

William S. Keeton

[illegible] density on herbivory

Photo courtesy Kentucky Division of Forestry

Hardwood Plantation Establishment in Old Fescue-Filled Pastures

by Vernon "Tad" Norris

Kentucky's landowners have planted many acres of hardwood trees in recent years, but statewide results have been disappointing. To ensure success, certain issues must be addressed well before any roots are covered. Hardwood planting often occurs in fescue fields, and planting in these abandoned pastures creates several challenges. The following recommendation provides one proven approach to deal with planting in these old fields.

Oftentimes when hardwoods are planted into fescue, the fescue winds up out competing the tree seedlings. The denser the fescue is, the worse it is. If you have fescue, try

inside of the plant, neither will the herbicide. We are thus limited to a cool-season spraying.

Go ahead and acquire your herbicide in January (this will give you almost enough time—if you're like me —to understand the label). You might also contact your forester, county Extension agent, or local progressive farmer to get any remaining questions answered. Simpler is better, and using more chemical than is recommended doesn't mean you will get better results.

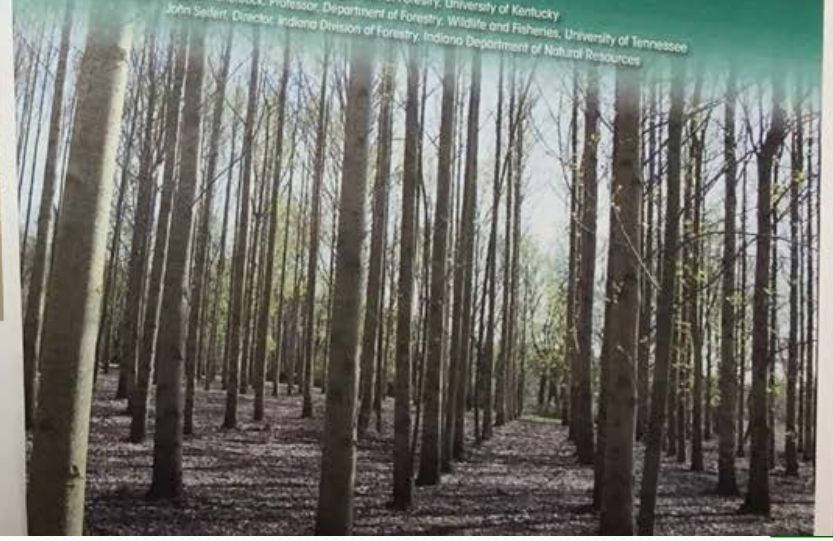
Start checking the area by mid-March. Look for

Professional Hardwood Notes
Technical information on hardwood silviculture for Foresters

Extension
PB1783

Site Preparation and Competition Control Guidelines for Hardwood Tree Plantings

Jeffrey W. Stringer, Professor, Department of Forestry, University of Kentucky
Wayne Clatterbuck, Professor, Department of Forestry, Wildlife and Fisheries, University of Tennessee
John Seifert, Director, Indiana Division of Forestry, Indiana Department of Natural Resources




08/04/2015

Technical Recommendations

DOF Tree Nursery – Crimora, VA – supplies quality trees for buffer plantings

Technical Guide
Section IV
391-VA-1

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

RIPARIAN FOREST BUFFER
(Ac.)

CODE 391

DEFINITION
An area predominantly trees and/or shrubs located adjacent to and up-gradient from watercourses or water bodies.

Dominant vegetation will consist of existing, naturally regenerated, or seeded/planted trees and shrubs suited to the soil and hydrology of the site and the intended

NRCS Natural Resources Conservation Service
HELPING PEOPLE HELP THE LAND
FSA
DCR Virginia Department of Conservation & Recreation
VIRGINIA DEPARTMENT OF FORESTRY

Virginia CREP Technical Program Guidance

The Conservation Reserve Enhancement Program (CREP) is a voluntary program that provides technical and financial assistance to eligible farmers and landowners to protect environmentally sensitive land, decrease erosion, restore wildlife habitat, and safeguard ground and surface water.

Program Overview
In Virginia, the CREP program is offered on a continuous basis for the Chesapeake Bay and Southern Rivers watersheds. Four different CREP practices are eligible for financial assistance to farmers and landowners to address a variety of purposes including soil, water, wildlife and related natural resource concerns on their lands.

- CP21 Filter Strips – Strips of grass used to trap sediment, fertilizers, pesticides, and other pollutants before they reach streams and lakes. Only eligible on cropland.
- CP22 Riparian Forest Buffer – Plantings of trees and shrubs that catch pollutants in both surface and ground water before those pollutants reach a water body. In addition, riparian forest buffers improve fish and wildlife habitat as a secondary consideration. Eligible on cropland and marginal pastureland.
- CP23 Wetland Restoration – Restoring natural hydrologic and vegetative conditions that remove sediment, filter runoff, provide groundwater recharge and storm water control as well as provide food, water and cover for a wide variety of wildlife. Only eligible on cropland.
- CP29 Wildlife Habitat Buffer – Plant native grass and shrub communities to enhance wildlife habitat, remove sediment, and filter nutrients, pesticides, and other pollutants from surface and subsurface flow. Eligible on marginal pastureland.

General Program and Practice Requirements

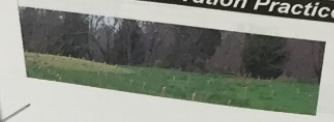
- Cropland is considered eligible if it meets the following criteria:
  - Producers have owned or operated the land for at least 12 months prior to application
  - Cropping history according to 2-CRP par. 151:
    - 4 of out 6 years between 2008-20013, *or*
    - 12-year rotation
  - Physically and legally capable of being planted in a normal manner
  - Marginal Pastureland is considered eligible if it is land that is not cropland or forestland and is capable of containing livestock.
- Buffers that exhibit the natural characteristics that are already in place are not eligible to be enrolled in CREP. For riparian forest buffers, "natural characteristics" means an area that already has approximately 30% canopy closure.

responsible for determining whether or not:

planting.

USDA NRCS
United States Department of Agriculture
Natural Resources Conservation Service

Riparian Forest Buffer
Virginia Conservation Practice Job Sheet 391



immediately adjacent and up-gradient of the buffer site.

Use the Virginia Technical Note Forestry #3, Tree and Shrub Establishment Guidelines and the Virginia Plant Establishment Guide located

USDA NRCS
United States Department of Agriculture
Natural Resources Conservation Service

Virginia Technical Note Forestry #3
"Tree and Shrub Establishment Guidelines"
October 2015

TREE AND SHRUB ESTABLISHMENT GUIDELINES

UCTION

trees and shrubs successfully takes careful planning and consideration. Not all trees be planted using the same methods. Special attention is needed for woody plant . The choice of what to plant depends on the purpose of the planting, the site and and the availability of the seed, seedlings, or cuttings. There are many factors to during and after tree and shrub planting which requires attention to several key ing proper species selection, seedling quality, proper planting technique, and erm control of competing vegetation. A successful establishment depends on ese factors.

RCS Plant Establishment Guide (PEG) at
usda.gov/treemenuFS.aspx for information about choosing and planting bs, plant characteristics, species selection, planting rates, dates for g methods, techniques and uses.

in the Soil Survey Interpretations – Woodland Suitability, for Individual Soil e Web Soil Survey:
ov.usda.gov/App/HomePage.htm

f Forestry and the Virginia Department of Game and
resters can provide species

Technical Recommendations

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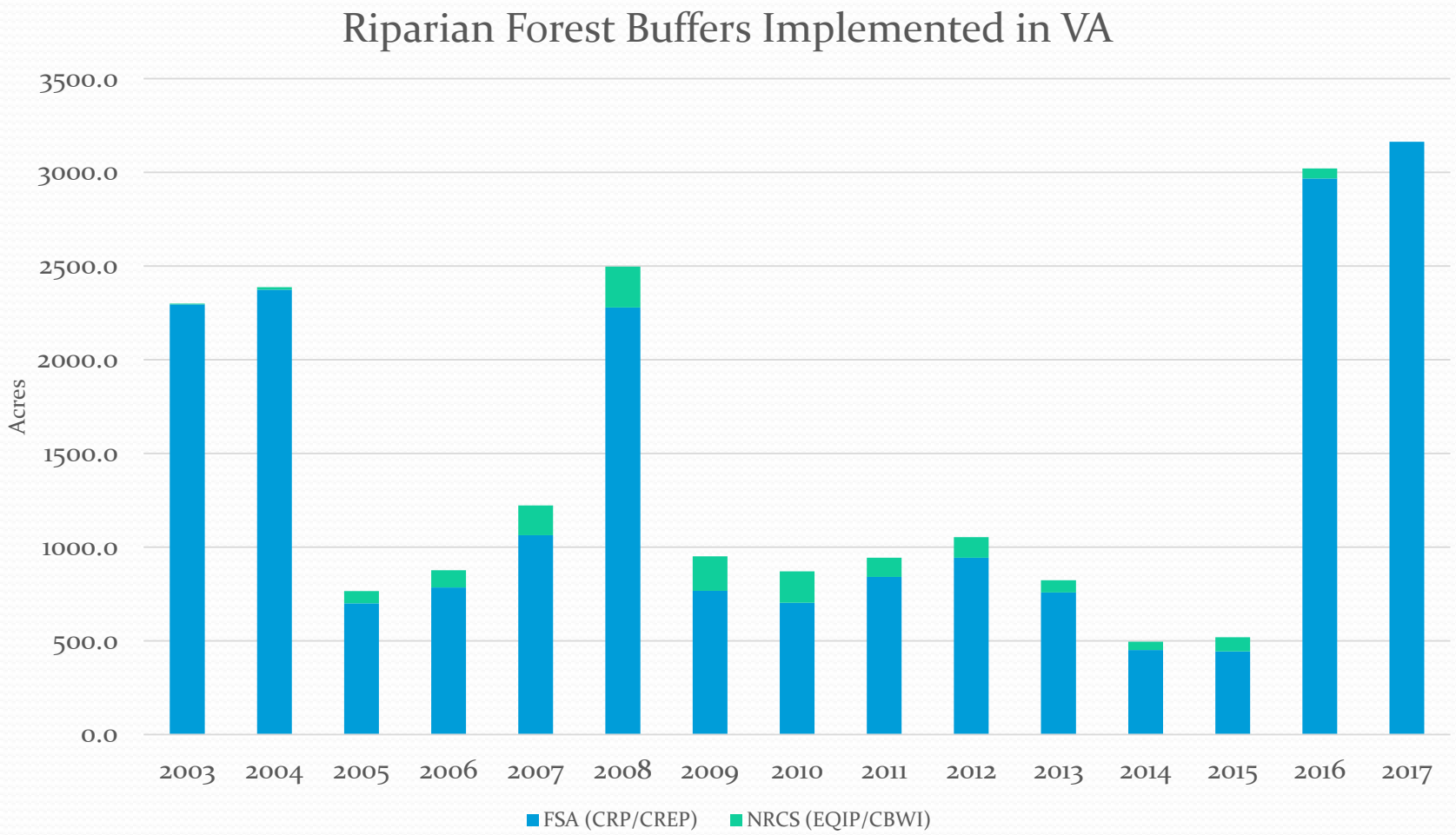
Outreach and Marketing

Bay Watershed RFB Specialists

Partner Coordination

- Joint Training
- Local Working Groups
- QA/QC field reviews
- Signage
- Networking Forum
- Landowner Workshops
- Contractor Workshops

USDA Farm Bill Programs



Chesapeake Bay Riparian Forest Buffer Initiative

CREP Chesapeake Bay Incentive Payment (CBIP)

USDA

Chesapeake Bay Incentive Payment

- $1M awarded to Virginia
- Financial assistance to CREP participants
- Distributed as an incentive payment
- ONLY within the Chesapeake Bay watershed
- ONLY for RFB (CP-22)
- New and re-enrolled CP-22 acres
- Tiered structure encourages wider RFBs

Chesapeake Bay Incentive Payment

Average Width of RFB	CBIP
35 feet	$100
36 feet – 50 feet	$150/acre
51 feet – 100 feet	$200/acre
101 feet – 300 feet	$300/acre

Chesapeake Bay Incentive Payment

Questions?