

A photograph of a small stream flowing through a lush green forest. The stream is surrounded by dense vegetation, including tall grasses and young trees. Many of the young trees are protected by wooden stakes. The background shows a dense forest of mature trees under a blue sky with some clouds.

# PA DCNR's RIPARIAN FOREST BUFFER INITIATIVE



# PA 2-Year RFB Work Plan



## Leadership & Collaboration



## Funding & Resources



## Communication, Outreach & Technical Assistance



## Planning to Prioritize Efforts

# Leadership & Collaboration

## RFB Advisory Committee

- Purpose: share success, collaborate, and advise agencies
- Agencies, non-profits, ag-business, academia
- Topics: outreach, prioritization, multifunctional buffers, emerging science, & technology

[www.dcnr.pa.gov](http://www.dcnr.pa.gov)

Lancaster County Conservation District
Stroud Water Research Center
The Nature Conservancy
Brandywine Conservancy
Western Pennsylvania Conservancy
Chesapeake Bay Foundation
Alliance for Chesapeake Bay
Lancaster Farmland Trust
Foundation for PA Watersheds
Pennsylvania Association for Sustainable Agriculture
Upper Susquehanna Coalition
Pennsylvania Forestry Association
American Rivers
The Pennsylvania Horticultural Society
Natural Lands Trust
Chesapeake Conservancy
Farm Bureau
Penn Ag
Williams Forestry
Land Studies

# Funding and Resources

## DCNR Pilot Grant Program

- **Complement**, but not duplicate, **existing programs** – CREP, EQIP
- **Provide greater flexibility** in landowner eligibility, buffer designs, widths, plant species
- Offer **income-producing opportunities** through **multifunctional buffers**

[www.dcnr.pa.gov](http://www.dcnr.pa.gov)



# DCNR's RFB Grant Program: Eligible Applicants

- Municipality
- Councils of Governments
- Municipal Authorities
- Educational Organizations
- Non-profit Organizations

[Unpblog.com](http://Unpblog.com) / [Brand2global.com](http://Brand2global.com)



# DCNR's RFB Grant Program: Eligible Activities

- Landowner Outreach
- Buffer Design
- Site Preparation
- Buffer Installation
- Materials
- Post-Planting Establishment

**Minimum Buffer Width:  
15 feet**





# What Are Multifunctional Buffers?

Buffers that  
serve functions  
beyond conservation



Native nut trees  
and shrubs



Native fruit trees and shrubs



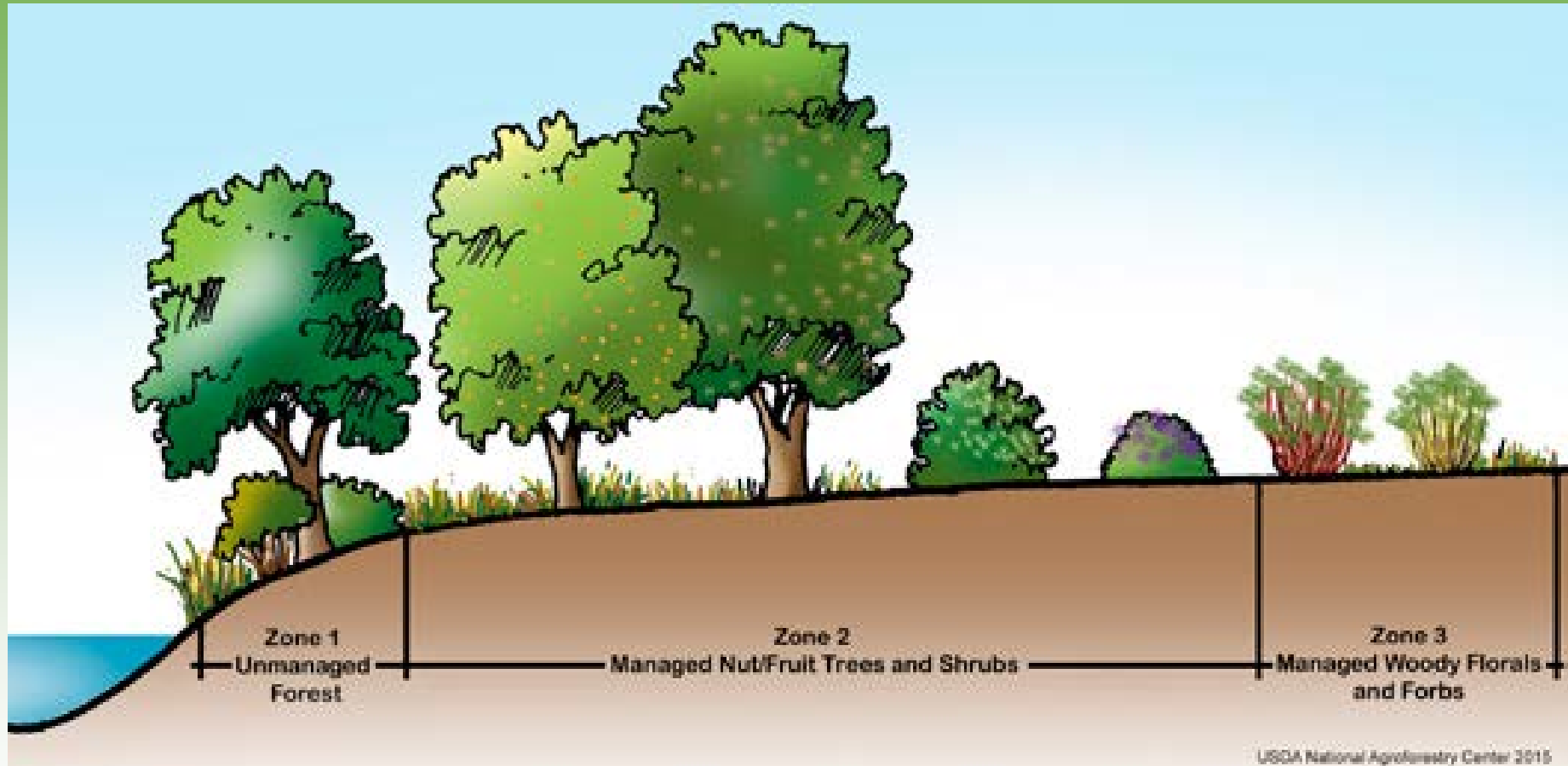
Woody Florals



Slide Source:  
Katie Trozzo, VA Tech

[www.dcnr.org](http://www.dcnr.org)

# Multi-Functional Buffer Concept





# Multifunctional Buffers Concept: *Making Stream Buffers Fruitful*



# DCNR's RFB Grant Program: Typical Funding & Timing

- Funded by Keystone Rivers Funding
- **Minimum grant amount:** \$50,000
- **Minimum TOTAL project cost:** \$100,000
- 50/50 **Match** Required



- **4 year** grant contract
  - **Current Round:** Open until April 12<sup>th</sup> @ 4pm.
  - **Grant Announcement:** late 2017
- [www.dcnr.pa.gov](http://www.dcnr.pa.gov)

# DCNR's RFB PILOT Grant Program

## Grantees

- Adams County Conservation District
- Allegheny County Conservation District
- Alliance for the Chesapeake Bay
- Blair County Conservation District
- Brandywine Conservancy
- Clearwater Conservancy
- Juniata County Conservation District
- Mifflin County Conservation District
- Natural Lands Trust
- Snyder County
- Stroud Water Research Center
- The Land Conservancy for Southern Chester County
- Wildlands Conservancy

### 2016 Pilot Round:

26 applications /  
\$2.3M request

13 awards  
\$790k funding  
~260 acres

[www.dcnr.pa.gov](http://www.dcnr.pa.gov)

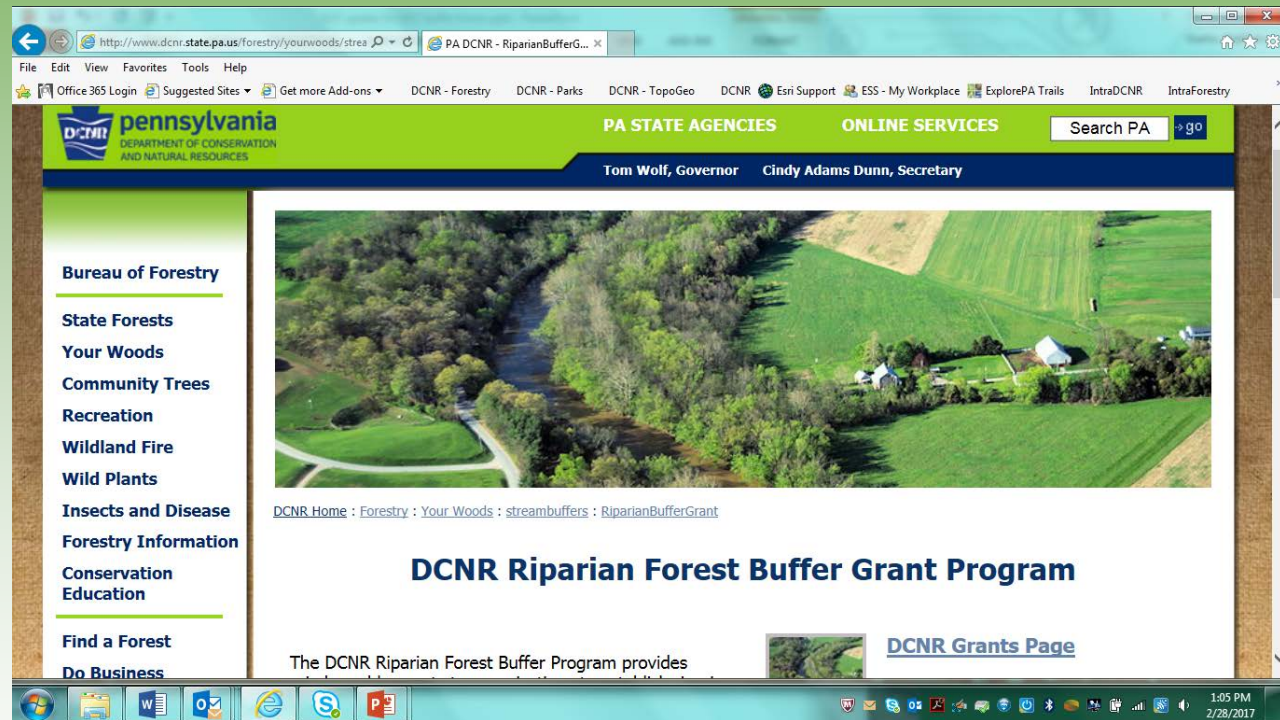


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# Communications, Outreach, and Technical Assistance

- Coordinator and two Watershed technicians
- “Buffer Summit” for existing staff
- Website and factsheets



# Planning to Prioritize

- Initial GIS analysis and collaboration with Chesapeake Conservancy
- 2 NFWF Grants
- Reporting and tracking struggles
- Social science and targeted marketing
  - “Prime Prospects” using GIS and consumer data analysis

# PA RFB Accomplishments

Year	Acres	
	Annual	Cumulative
2009	--	43,096
2010	1,129	44,225
2011	2,848	47,073
2012	948	48,021
2013	6,822	54,843
2014	3,616	58,459
2015	77	58,536
2016	6,955	65,491
2025	88,509	154,000



# Looking ahead

- Continue the grant program
  - \$2 million in Governor's budget
  - \$1 million from PennVest
- Continue the Advisory Committee
- Reconnect with USDA-NRCS and FSA
- Implement "Prime prospects"
- Outreach campaign
- Improve reporting and tracking
- GIT Multifunctional Buffer project

# Multi-Functional Buffer Concept: Forest Farming Example: Ramps



- Harvest --- April
- Planting bulbs --- Mid-March to early April
- Seeds --- August – September
- Bulbs up to \$15/lb
- Seeds \$6/50 seeds (\$47/oz)
- Also known as wild leeks

# Multi-Functional Buffer Concept: Forest Farming Example: Pawpaw



- Naturally more shade tolerant
- Best production in full sun
- Moist, rich soils
- Plant in spring
- Fruit production 5-7 yrs.
- Cultivars
- Value added products



# Multi-Functional Buffer Concept: Forest Farming Example: Black walnut



- May have existing trees on site
- Nuts 5-8 years after transplant
- 1,000 Canker disease
- Green hulls for tinctures
- In-shell prices \$9.25/lb
- Shelled retail \$12.00/lb
- Nut oil \$8.00/8 oz.
- Co-op opportunity

# Multi-Functional Buffer Concept: Forest Farming Example: Spicebush



- Shade tolerant
- Moist soils
- Culinary uses
  - Spices
  - Distilleries
  - Breweries
  - Teas



# Sample Income Potential

## *Elderberry & Woody Florals*

### *Elderberry*

- Berries: \$3/lb retail
- Juice: \$15-17/ 11oz jar
- Syrup: \$18/ 4oz jar retail
- Wine: \$10-13/bottle retail
- Cough drops: \$2.50/ 15 retail
- Concentrate: \$25 / 375ml
- Cuttings: \$1-2.50 each
- Plants: \$5.00 each

Source: *Farming the Woods* by Ken Mudge and Steve Gabriel  
USDA National Agroforestry Center  
University of Kentucky

[www.dcnr.pa.gov](http://www.dcnr.pa.gov)



#### Photos:

Fairfax County Public Schools  
continuumhealing.com  
Goodmorninggloucester.com  
gardensofgrowth.com



### *Woody Florals*

*(e.g. Redosier dogwood,  
pussy willow)*

- Cuttings: \$0.37-0.45/ stem  
(some species up to \$6/stem)
- Wreaths: \$45+ each retail



# Multi-Functional Buffer Concept: *Other Examples*



- Chokeberry
- Dogwoods
- Pussy willow
- Curly willow
- Witch hazel
- Blueberry (acidic sites)
- Crabapple
- Hydrangea
- Maple Syrup



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