



Report from the Riparian Forest Buffer Action Team

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Through the Chesapeake Bay Watershed Agreement, the Chesapeake Bay Partners have committed to...



Vital Habitats Goal

Riparian Forest Buffer Outcome: *Restore 900 miles per year of riparian forest buffer and conserve existing buffers until at least 70 percent of riparian areas throughout the watershed are forested.*

The Value of Riparian Forest Buffers



Nutrient Uptake
and retention—
40-60% N reduction

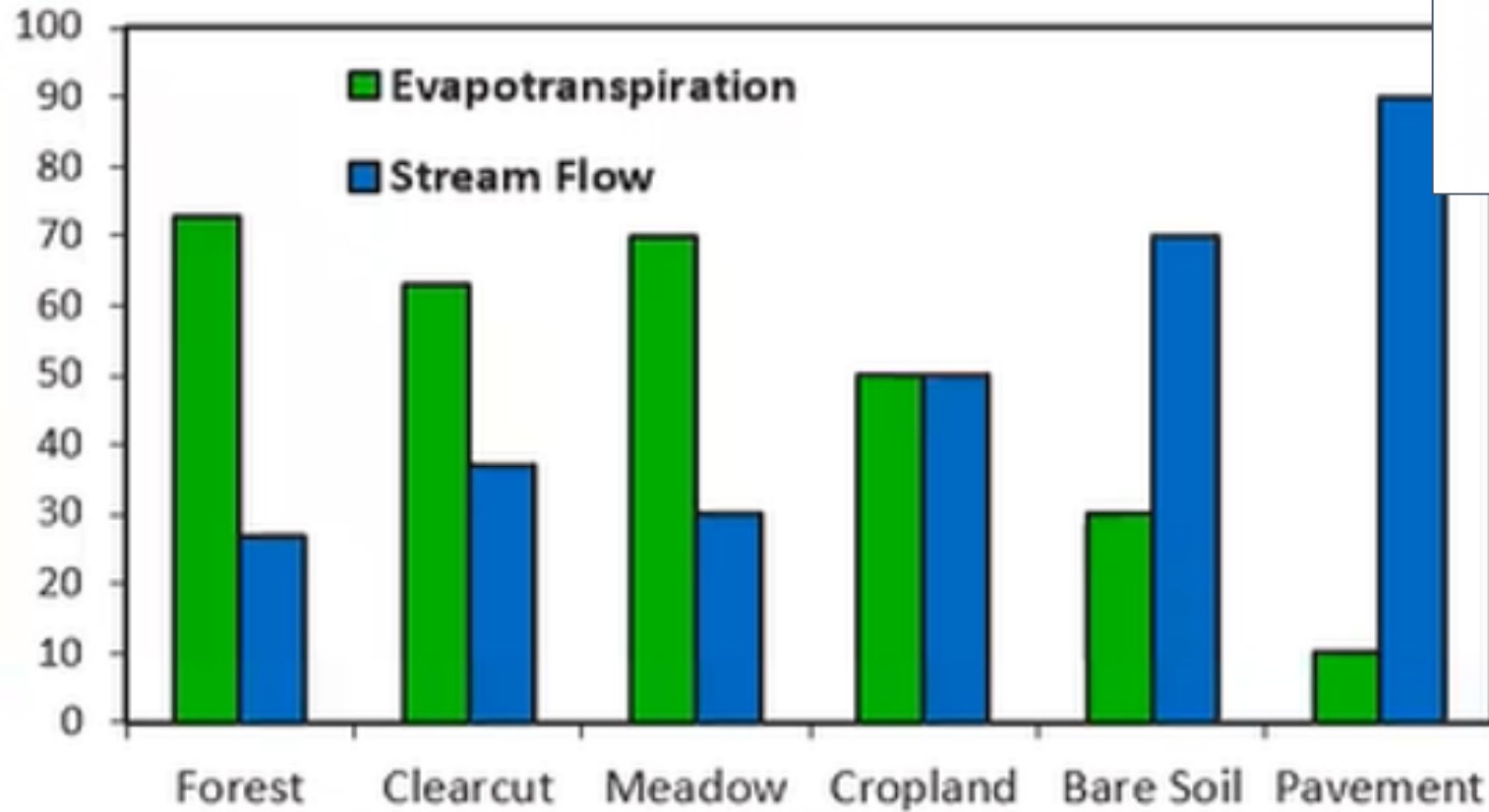
Canopy and Shade—
6-15° C cooler

Leaves and wood— food
for macroinvertebrates

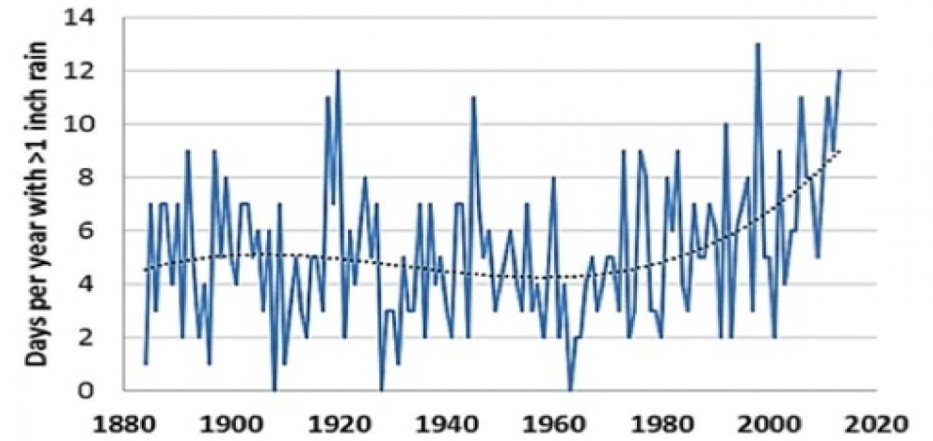
Filtering Runoff—
sediment reduction- 90%;
increase infiltration-- 10-40%

Fish and Wildlife Habitat—
aquatic and terrestrial

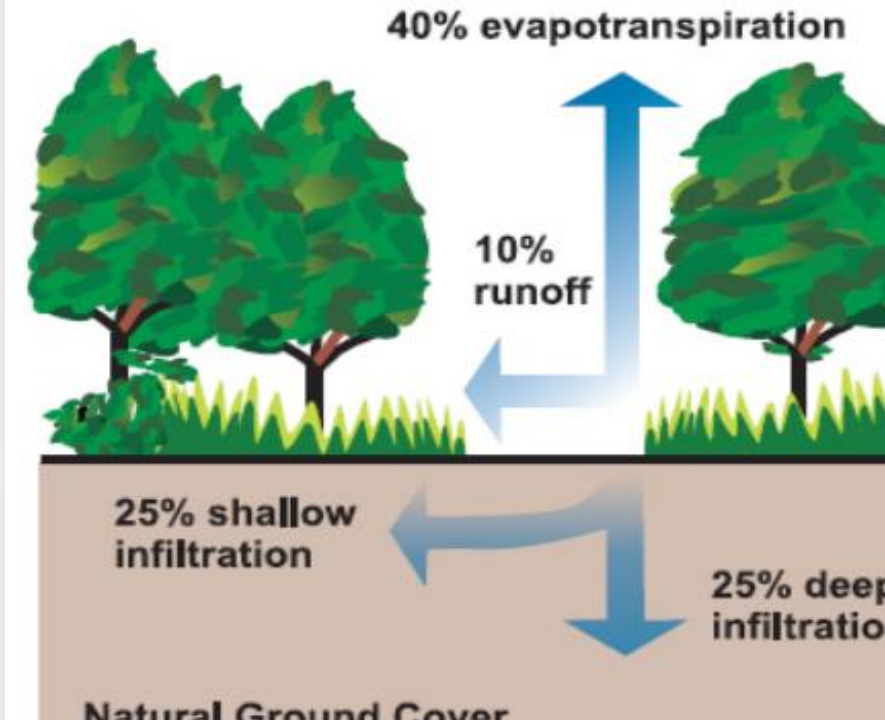
Forest Hydrology Important



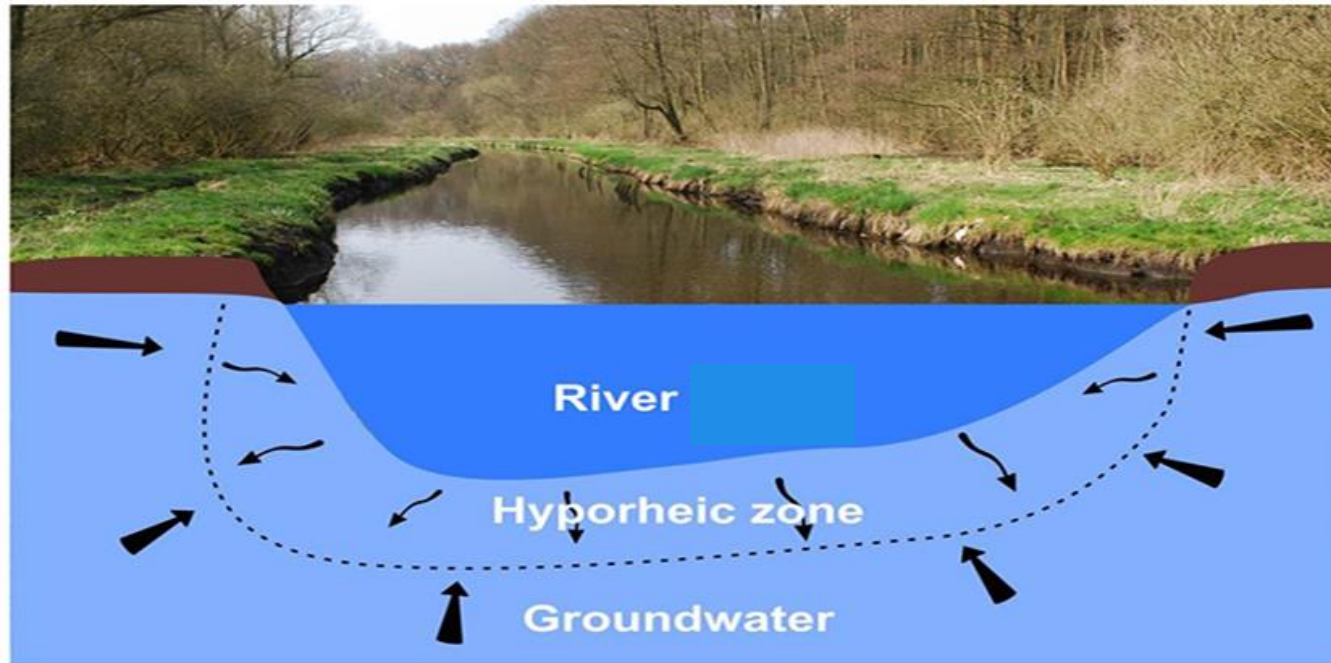
Increasing Precipitation



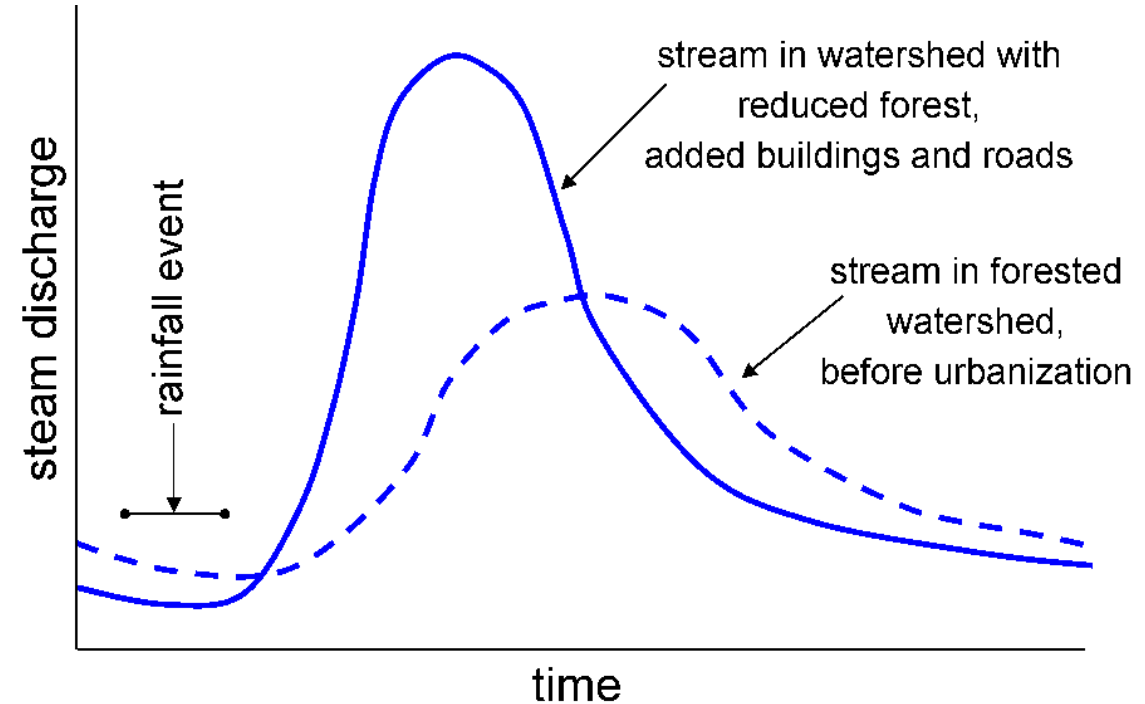
Number of days per year with greater than 1" of precipitation (BTV station)



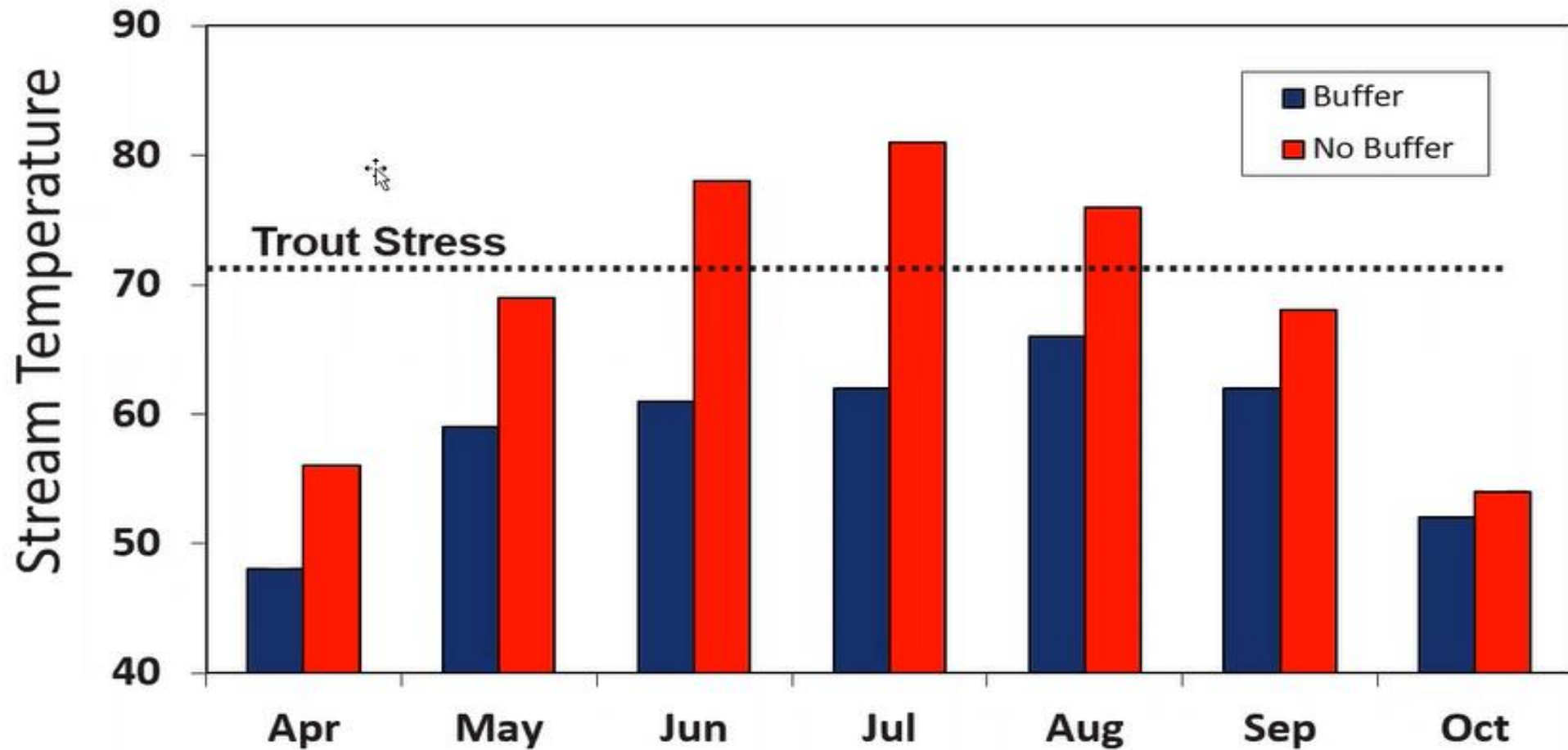
Active Riparian (hyporheic) Zone



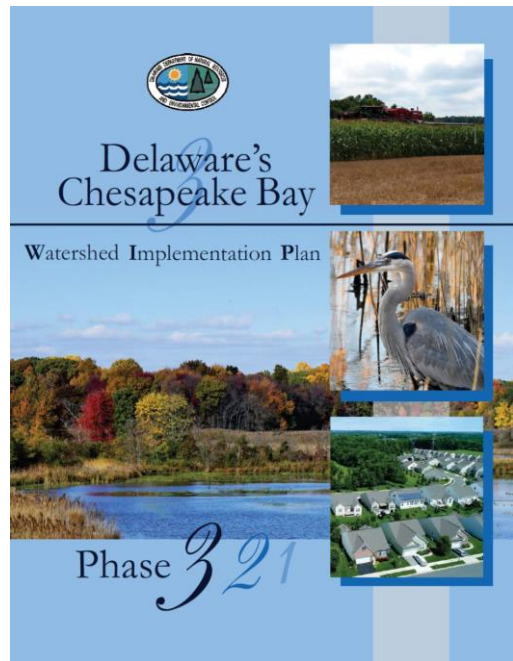
Hydrograph of stream showing reduced flooding in forested watersheds



Forest Buffers and Stream Temperature



WATERSHED IMPLEMENTATION PLANS ON RIPARIAN FOREST BUFFERS



Maryland's Phase III Watershed Implementation Plan to Restore Chesapeake Bay by 2025

Final Document | August 23, 2019



Center Photo: Blackwater Wildlife Refuge in late autumn (2017), courtesy of Matthew Rowe



West Virginia's
Phase 3 Watershed Implementation Plan for the
Chesapeake Bay Total Maximum Daily Load

2019

WV Final Phase 3 Chesapeake Bay Watershed Implementation Plan 8/23/2019 1 of 84

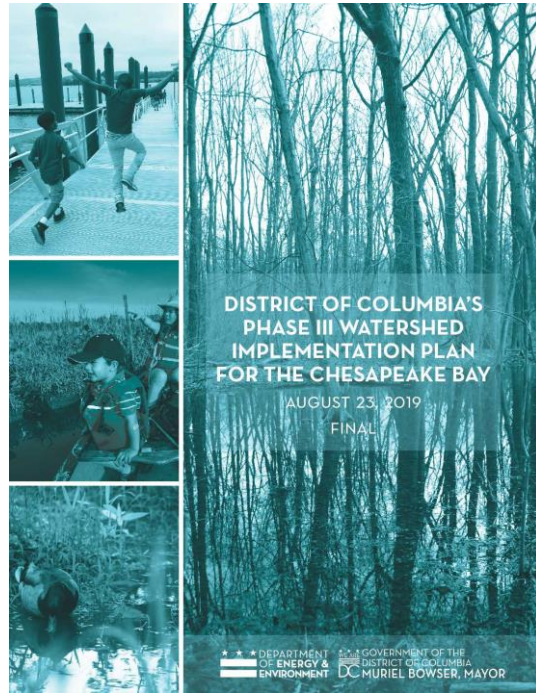
Commonwealth of Virginia Chesapeake Bay TMDL Phase III Watershed Implementation Plan



August 23, 2019

Ralph Northam, Governor
Commonwealth of Virginia

Matthew Strickler,
Secretary of Natural Resource



FINAL PHASE III WATERSHED IMPLEMENTATION PLAN

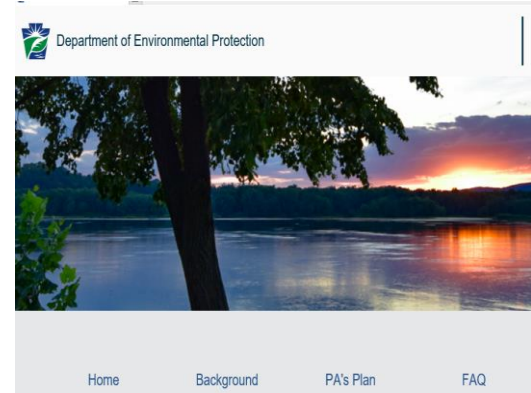
New York Chemung and Susquehanna River Basins

August 23, 2019

DIVISION OF WATER
BUREAU OF WATERSHED RESOURCE MANAGEMENT

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DEP > Businesses > Water > Pennsylvania's Chesapeake Bay Program Office > PA's Phase 3 WIP
PA's Plan

PA's Phase 3 WIP Pennsylvania's Final Phase 3 Watershed Implementation Plan

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- Riparian forest buffer implementation in the Chesapeake Bay Watershed has long been heralded as a priority practice due to cost effectiveness and efficient, as well as co-benefits. However, implementation has always lagged due to numerous challenges, including these big ones that can be addressed by CBP:
 - 1) Inadequate technical assistance (farmers not asked if they would be willing to do this practice)
 - 2) Confusing programs, intensive paperwork, and delayed pay-back
 - 3) Issues conducting post-planting maintenance (3-5 years)
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- Renewed focus on forest buffers has driven innovation solutions in several jurisdictions, increasing recent implementation rates. Moving beyond the innovation stage, it's now time to scale-up and get the sort of restoration called for in the WIPs. New funding sources/options are needed to keep this momentum going.
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- A New Buffer Program for the Bay Needs to Be:
 - Complimentary of and additive to (*not* duplicative of or competitive with) CREP, additional existing USDA programs, and other competitive funding sources.
 - Easy-to-access and utilize, unrestrictive
 - Quick to get on-the-ground
 - Inclusive of the following integral components of a holistic approach:
 - Technical Assistance
 - Site Prep
 - Planting
 - Sheltering/Protection
 - Maintenance Funding and Planning
 - Leveraging of existing programs (CBF K10, Arbor Day Foundation, Turkey Hill, NFWF, etc.)

Itemize need for TA (could be leveraged by Implementation \$10,000,000/year) \$2 m from USDA, 2 m from EPA, \$4 m state 1 m local/private.

Have Implementation \$\$\$\$\$\$

Creative smaller projects add capacity POC (like CCC) mostly on state land

Sec mentioned to Dunn to strategize when implementation grant is received, add capacity (TA)

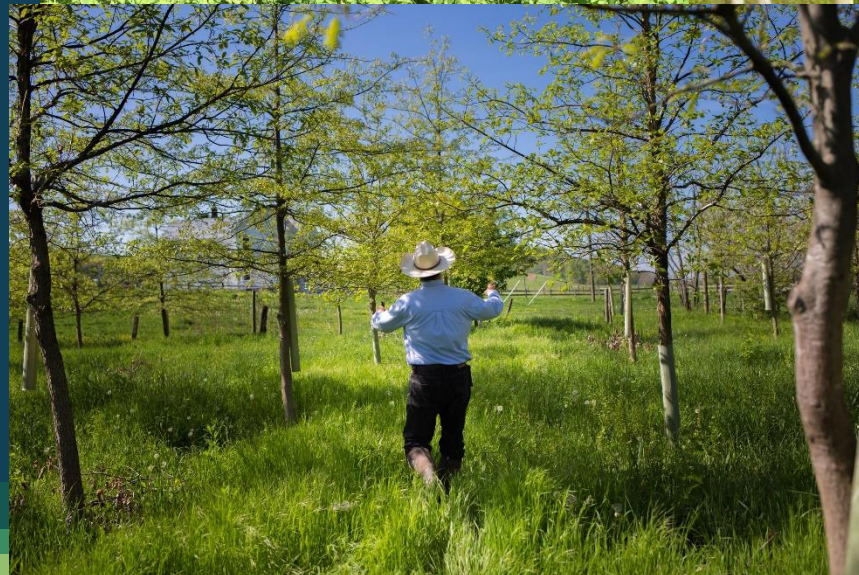
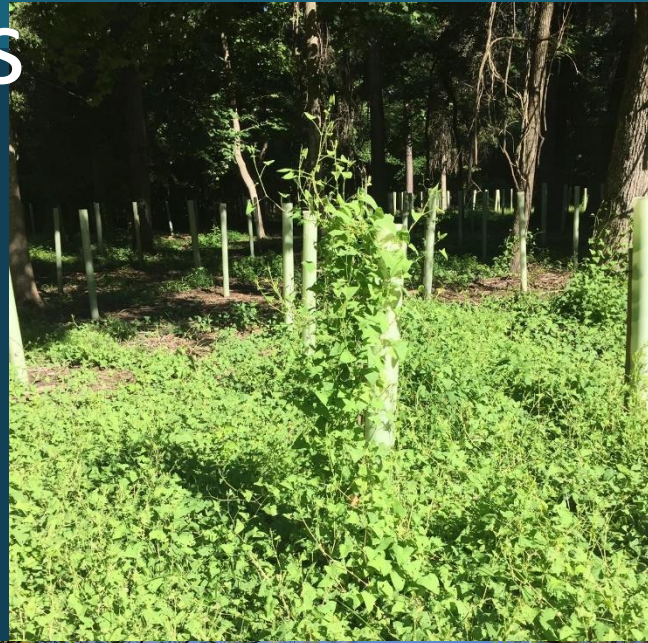
Build it piece by piece

Need more capacity to add to existing programs

- For example Each state got \$2 million as leverage every year for 5 years. On top of what is already happening
- Folks commit resources to effort
- What percent of goal are we contributing to
- Crews, \$4-5000/acre 30000 acres includes everything except fencing 200 trees with shelters, \$150 million----- 1000 acres CREP, 200 acres CBP,
- 4 counties have their numbers in WIP and state (each one \$10-100,000,000)
- We need to keep trying to add and innovate (compound) don't do same thing.
- Allocate a portion of funding to Buffer. What other practices provide this level of benefit??? How to best provide funding. Does it have to be trad NFWF? Or maybe can go to the Program that meets specific parameters. Simple application/agreement. Simpler than RFP. Need a buffer bank.
- If project is shovel-ready, can access the funding.
- PA could probably do a million.
- Right now ICQ planting and maintenance rolled up together but could be separate.
- PA: Could also use seasonal staff, or some combination
- Another concept to incorporate– Investing to spawn innovation. We might not have all answers now. E.g., DCNR first provided a mechanism to grant process but it wasn't efficient. Then they used NFWF to use flexible approach. But not sole answer. Next challenge to overcome is capacity. More partners.
- Gap-filler for CREP is from Lydia. == other jurisdictions are demoing
- Could be state-centered but have same organizing principals.

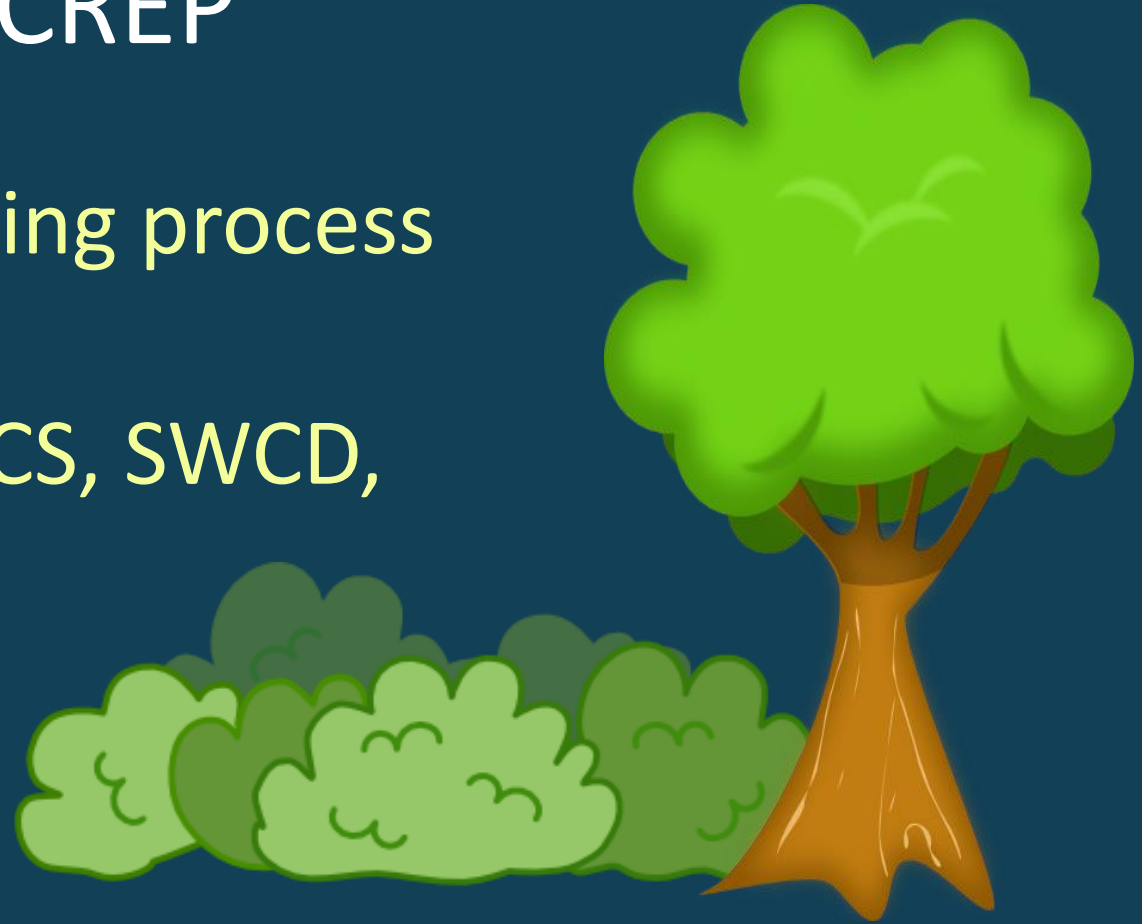
Operational Challenges For Establishing RFB

- 1) Difficult to establish
- 2) Unclear and competing priorities
- 3) Existing programs are tedious/confusing
- 4) Need to scale-up (existing programs and beyond)



Operational Challenges for CREP

- 1) Inconsistent, sometimes confusing process
- 2) Maintenance
- 3) Technical Service Providers (NRCS, SWCD, State, NGOs, etc), have heavy workloads, inefficiencies, and may not promote RFBs.



Opportunities and Ideas

- Status Quo-- where we have been the past ~15 years (reliance on CREP, volunteer programs, ad hoc grants)
- We have new ideas, and new innovations that work
- Individual jurisdictions could continue to experiment with innovation and make it work locally BUT
- We need to **scale up** to the watershed level to be most effective
- The concept of on-demand, flexible program funding is a big step forward that's received a lot of support from jurisdictions...



Opportunities and Ideas for PSC Action

--What can be done regionally

PSC takes leadership actions, works to improve TA, CREP

Is it time for a Chesapeake Bay Riparian Forest Buffer Program?

- a. Simple, cost-share, flexible funding approach
- b. Efficient, on-demand-delivery of TA services and funding to municipalities and landowners
- c. Consistent funding, restoration economies of scale