James River Round Table

Thursday October 25, 2018

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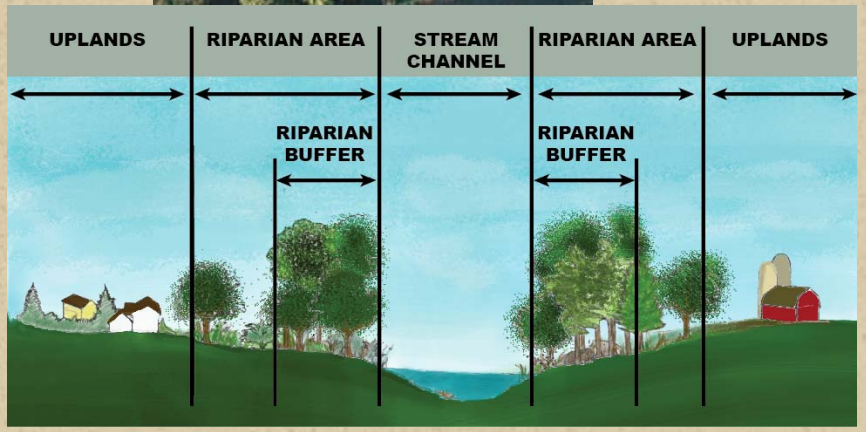
Riparian Forester, Mountain Valley Work Area

About me!

- Graduated from Duke University's Nicolas School of the Environment in 2017
- Have been with DOF since October 2017
- Background in Forest Resource Management and Wetlands Ecology
- Work area covers – Augusta, Highland, Alleghany, Rockbridge, and Bath Counties
- Focus on forest establishment in degraded, riparian agricultural areas

What's a riparian buffer?



- Vegetated area adjacent to a stream which helps protect the stream from the impacts of upland use

How are buffers beneficial?

- Provide shade
- Trap sediment, nutrients, pollutants
- Provide habitat
- Increase filtration
- Reduce erosion and stabilize streambanks

Why are buffers important?

Table 5-2 Statewide NPS Pollutant Loads – Post BMP Reduction

	Agricultural Class	Urban Class	Forestry Class
Total VA Land Area *#	5,616,464	2,411,465	16,889,216
%of VA Land *	22.2	9.5	66.7
Total Nitrogen **	31.3	10.3	3.6
%of all NPS N ^	68.6	22.5	7.9
Total Phosphorous **	4.8	0.7	0.6
% of all NPS P ^	75.5	10.9	9.4
Total Sediment **	2,089.2	.13	1,357
% of all NPS S ^	50.3	3.1	32.8

* Units are acres.
\# Does not include 388,964 acres of nonforested wetlands and barren land (see Table 5-1).
^ Includes loads from barren and extraction.
** Units are millions of Kg/year.

BMP, TMDL, WIP?

What does it all mean?

- The Chesapeake Bay (and certain subwatersheds) is on a pollution diet (TMDL)
- Each state designs a plan of action to cut back on the pollution (the WIP)
- In order to implement the WIP, governments, landowners and everyone in between need to follow certain Best Management Practices (BMPs)

Buffer Costshare Programs

- Conservation Reserve Enhancement Program (CREP) - FSA
- Environmental Quality Incentives Program (EQIP) - NRCS
- SL-6/FR-3 - SWCD
- Virginia Conservation Assistance Program (VCAP) – SWCD
- State and local conservation programs

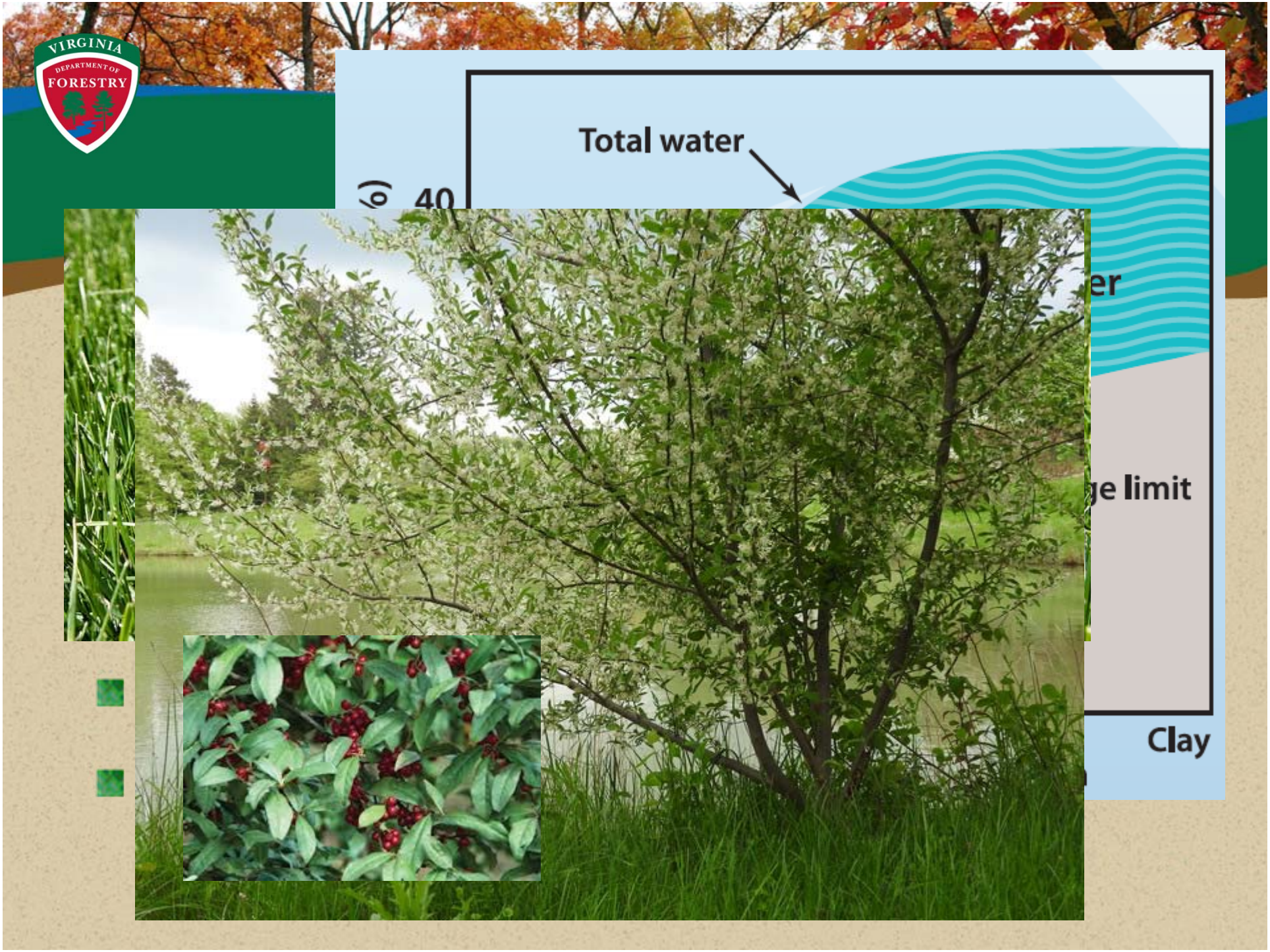
Buffer establishment: An inexact science

Things we know:

- Species selection
- Maintenance is key

Grey areas:

- Site prep
- Planting density
- Competition control
- Regional differences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gardens with wings

QUESTIONS

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