Chesapeake Bay Program
Science. Restoration. Partnership.

Riparian Forest Buffers

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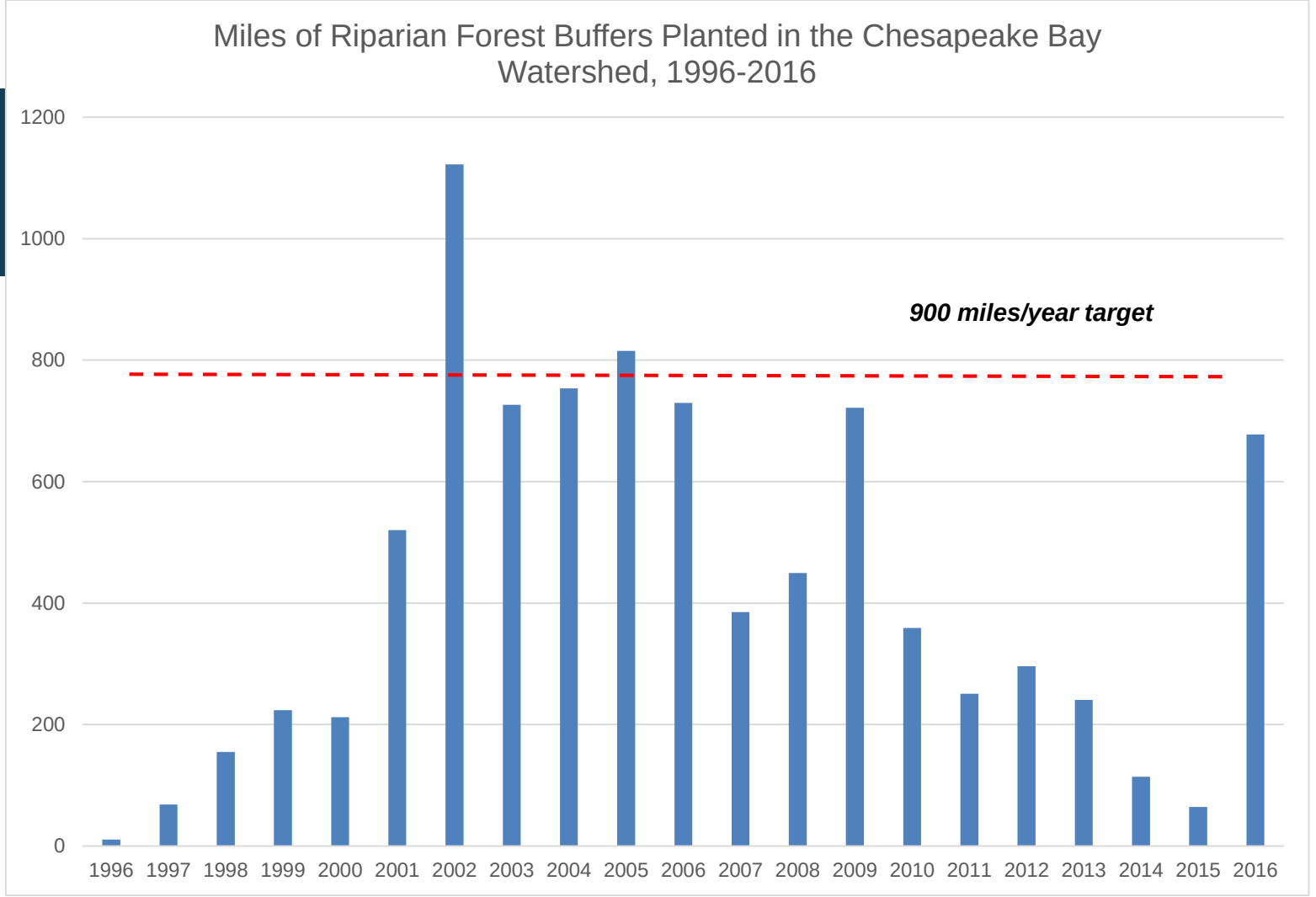
Through the Chesapeake Bay Watershed Agreement*, the Chesapeake Bay Program has committed to…*

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.

Why Is Restoration of Forested Riparian Buffers So Important?

- For a watershed that was originally 95% forested, forest buffers are essential for maintaining ecological functions over time.
- In fact, the goals for forest buffers in the Phase II WIPs exceed the Outcome goal.
- While Phase III WIPs may be more realistic, forest buffers will still be needed in large numbers to restore Bay water quality.


Miles of Riparian Forest Buffers Planted in the Chesapeake Bay Watershed, 1996-2016
1200
1000
800
600
400
200
0
900 miles/year target
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016

What Has Been Done to Meet the RFB Outcome Goal?

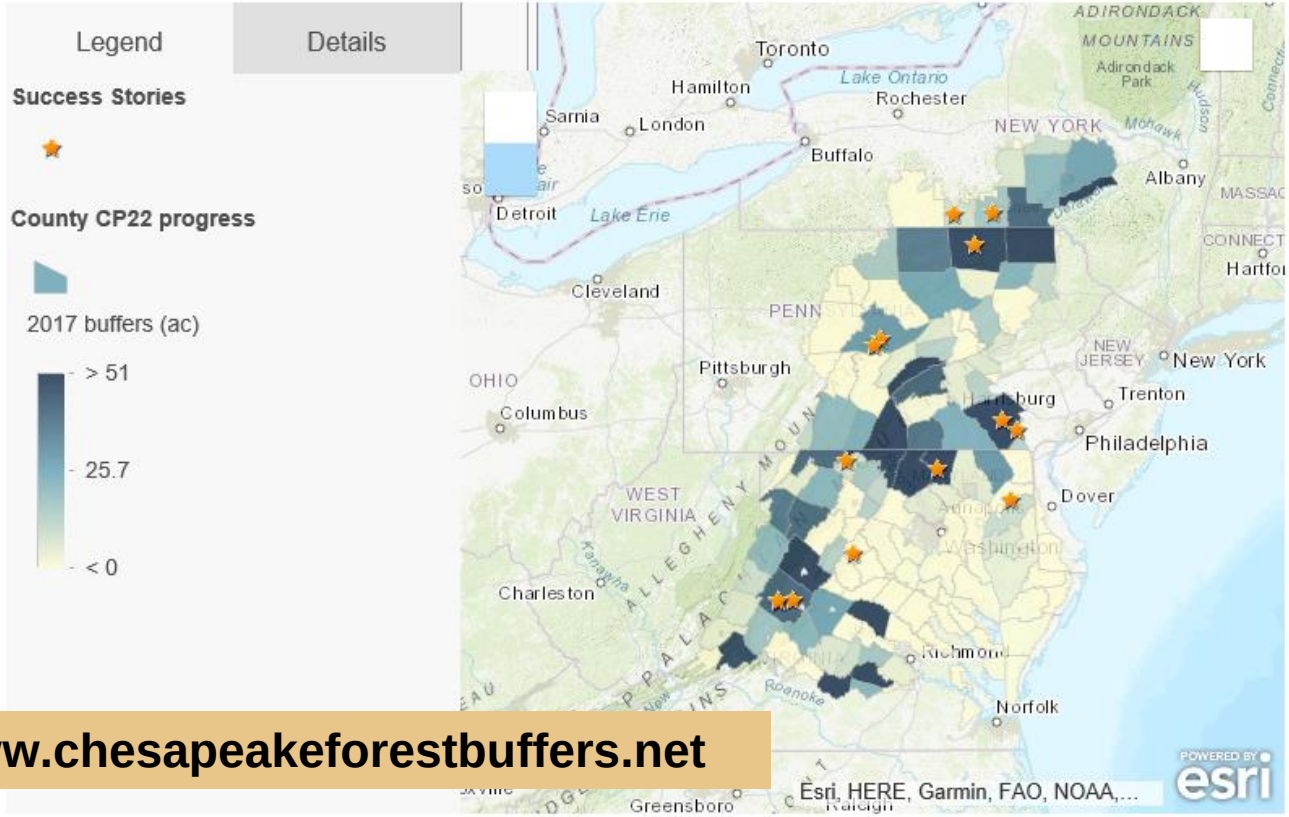
CREP brings $$ (75% federal match) and the USDA Farm Service Agency has increased its support to Bay states since 2015, BUT its complicated.

Riparian areas have competing uses, RFBs difficult to sell and specialists are required. BUT NRCS has other farm programs to administer, and doesn't give priority to CREP contracts.

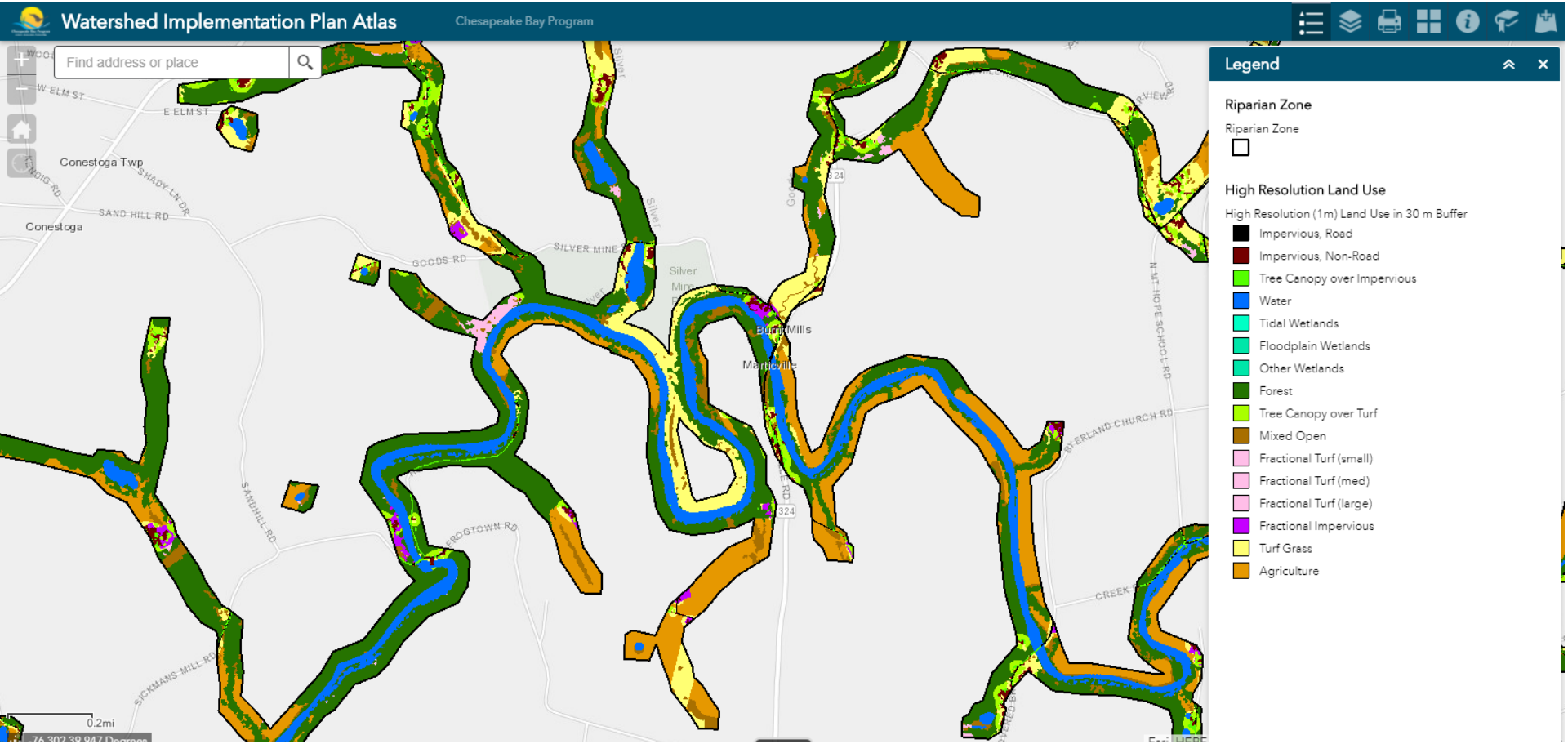
CREP contracts have begun to expire, and there is an added workload for re-enrollment + verification of buffer status for the Bay Program.

Riparian Forest Buffer Progress in the Chesapeake Bay Watershed

Find out 2017's new acres of forest buffers in your county to date and learn about forest buffer initiative success stories from across the watershed.



www.chesapeakeforestbuffers.net


Watershed Implementation Plan Atlas
Chesapeake Bay Program
Find address or place
Legend
Riparian Zone
Riparian Zone
Riparian Zone
High Resolution Land Use
High Resolution (1m) Land Use in 30 m Buffer
Impervious, Road
Impervious, Non-Road
Tree Canopy over Impervious
Water
Tidal Wetlands
Floodplain Wetlands
Other Wetlands
Forest
Tree Canopy over Turf
Mixed Open
Fractional Turf (small)
Fractional Turf (med)
Fractional Turf (large)
Fractional Impervious
Turf Grass
Agriculture
Conestoga Twp
Conestoga
Silver Mine
Burnt Mills
Martinville
W ELM ST
E ELM ST
SAND HILL RD
GOODS RD
SILVER MINE
SANDHILL RD
FROGTOWN RD
SICKMANS MILL RD
BYERLAND CHURCH RD
0.2mi

New Analyses by ARS/PennState shows Buffer By-pass (aka concentrated flow): Need for improved whole farm planning.

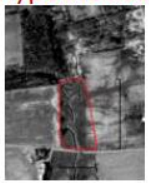
Site 2, Hydrology and Waters Quality Highlights

Catchment Analysis (Carlington Wallace)

Concentrated flowpaths reduced the potential contributing area to the buffer by ***32%*** (18.4 ha – 12.4 ha).

SWAT Watershed Modeling (Tamie Veith)

Without CREP (hypothetical)		With CP22 (reality)	
N	P, kg/ha	N	P, kg/ha
20	6.7	14	5.0



30% 25%

Ag Buffer Builder Analysis (Erik Hagan)

As designed, CP22 buffer achieves *70%* of potential trapping efficiency of sediment. Approx. ***32%*** of buffer accounted for ***49%*** of total sediment removal.

Other Needs for Partnership Focus

- Conservation of buffers
- Need for new programs (non-CREP) including non-agricultural lands
- Better maintenance programs/direction
- More Technical Assistance
- Verification timing should align with re-enrollment visits

What We Want

Stronger State Leadership

- Expedite CREP processing
- Develop non-CREP options
- Consistent funding for permanent staffing
- Encourage management

Institutionalize RFB as part of whole farm planning

- Prioritize conservation of RFBs
- Improve partner access to info
- Better understand partner priorities
- Increase TSPs

Align timing of Re-enrollment and Verfication