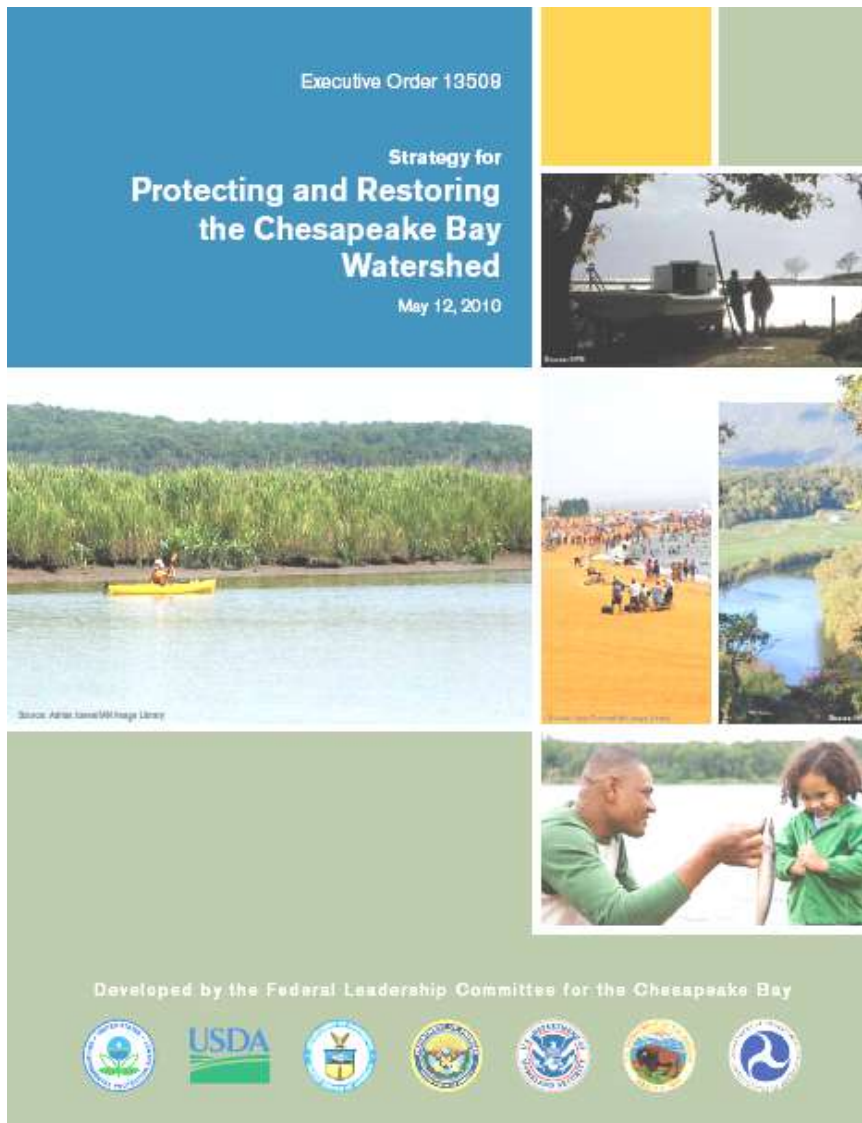


Chesapeake's Future Forests:

Crafting a Forest Restoration Strategy for the Bay Watershed





Goal: Recover Habitat

“By 2012, USDA will work with Dept. of Interior and other entities to develop a Chesapeake Bay watershed strategy to maximize forest restoration in priority areas...”

Priority areas =

Urban, green infrastructure, wildlife habitat, mine lands, brownfields, agroforestry

Forest Restoration Strategy Process Timeline

- May 2011 - Webinar with 65 federal, state, local and ngo participants to kick off Strategy development
- June-Dec 2011 - Strategy Teams form and hold calls to develop section content and outlines
- Jan 2012 – All teams webinar –input on Strategy outline
- **Apr 2012 – Complete draft Strategy and distribute for input**
- Summer 2012 – Complete final Strategy

Strategy Outline

- Introduction
- Wildlife
- Mine Lands
- Agroforestry
- Urban/Community
- Brownfields/Contaminated Sites
- Conclusion

Plus appendix with additional program information/resources

General Outline of Strategy Sections

Aim for ~5 page concise summary that covers:

- **Why** is this a priority for forest restoration?
- **Where** are these areas on the landscape?
- **How** – what programs and tools are available to help?
- **What actions** are needed to promote forest restoration in these areas? (will help guide Forestry Workgroup and partner priorities)

Strategy – Introduction Section

- Value of forests for the Bay - air, water, habitat, etc
- Loss of forest cover - need to conserve AND restore
- Build on past progress — riparian buffer restoration and urban tree canopy programs
- Target forest restoration in priority areas to achieve TMDL and Executive Order goals

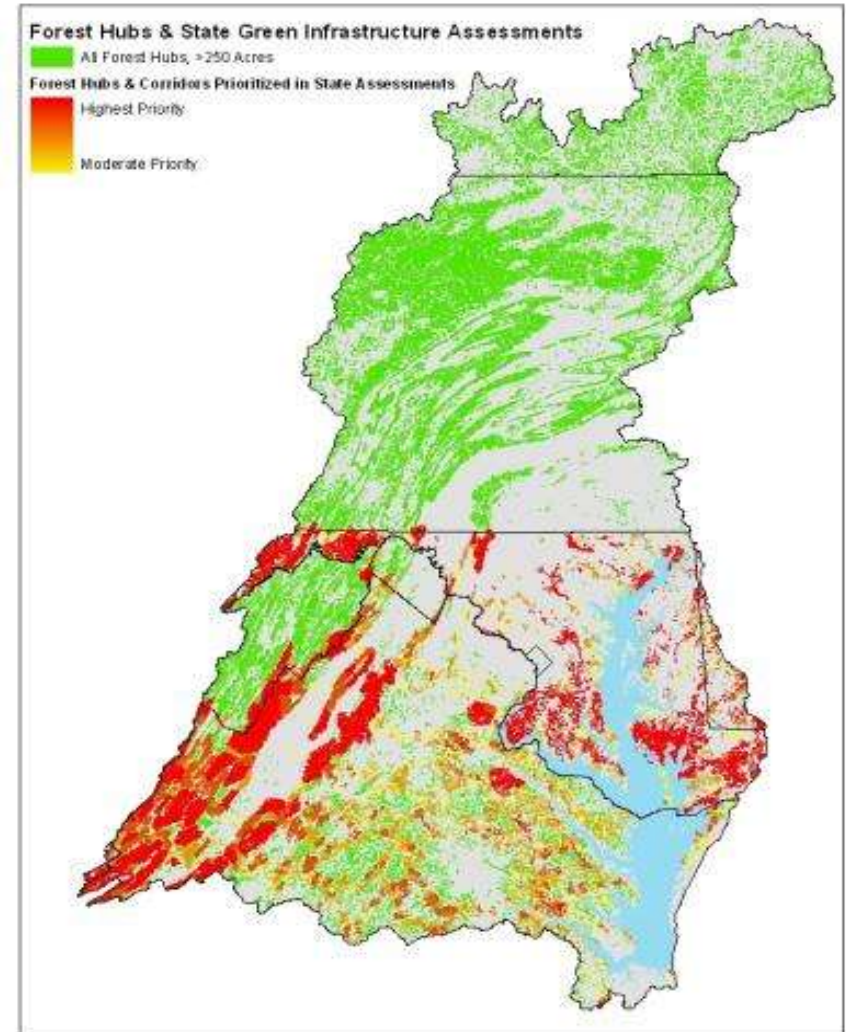


WILDLIFE HABITAT

Green Infrastructure

- Target restoration to expand network of forest hubs and corridors

VA, MD and DE have complete, prioritized Green Infrastructure assessments; other states are developing these



WILDLIFE HABITAT

Riparian Buffers

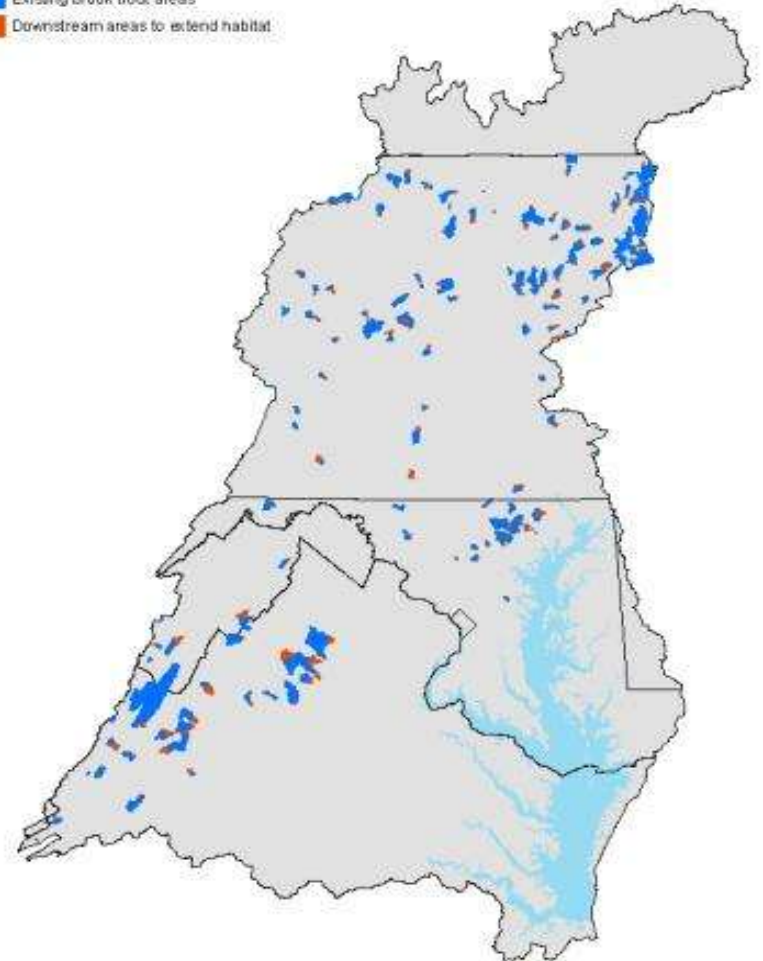
Brook trout example

- Severely reduced across east; an important indicator species and target in Exec Order
- Riparian forests greatly improve habitat

Map: Mark Hudy, USFS

Areas to Target Reforestation for Brook Trout (<70% riparian forest cover)

- Existing brook trout areas
- Downstream areas to extend habitat



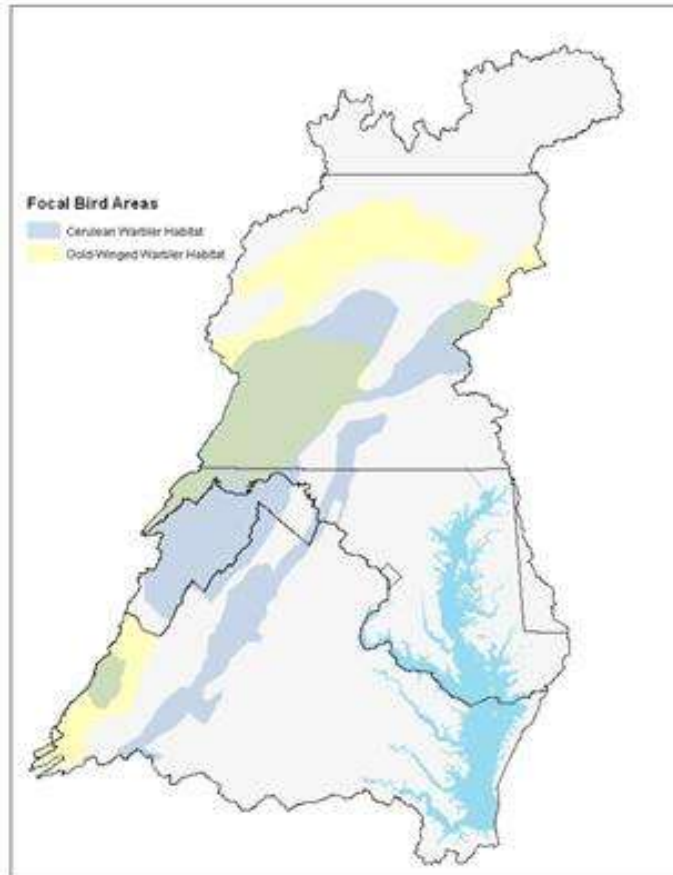
MINE LANDS

- Coal mine lands exist in high value Appalachian forest habitat, headwaters of Chesapeake Bay
- Post SMCRA reclamation has been predominantly grass, with high soil compaction and limited regeneration of trees
- Opportunities for reforestation on different types of sites: Abandoned Mine Lands, historic permitted/post SMCRA, active mining sites

Note: Not recommending reforestation of ALL mine lands – some provide important grassland habitat, or ag production

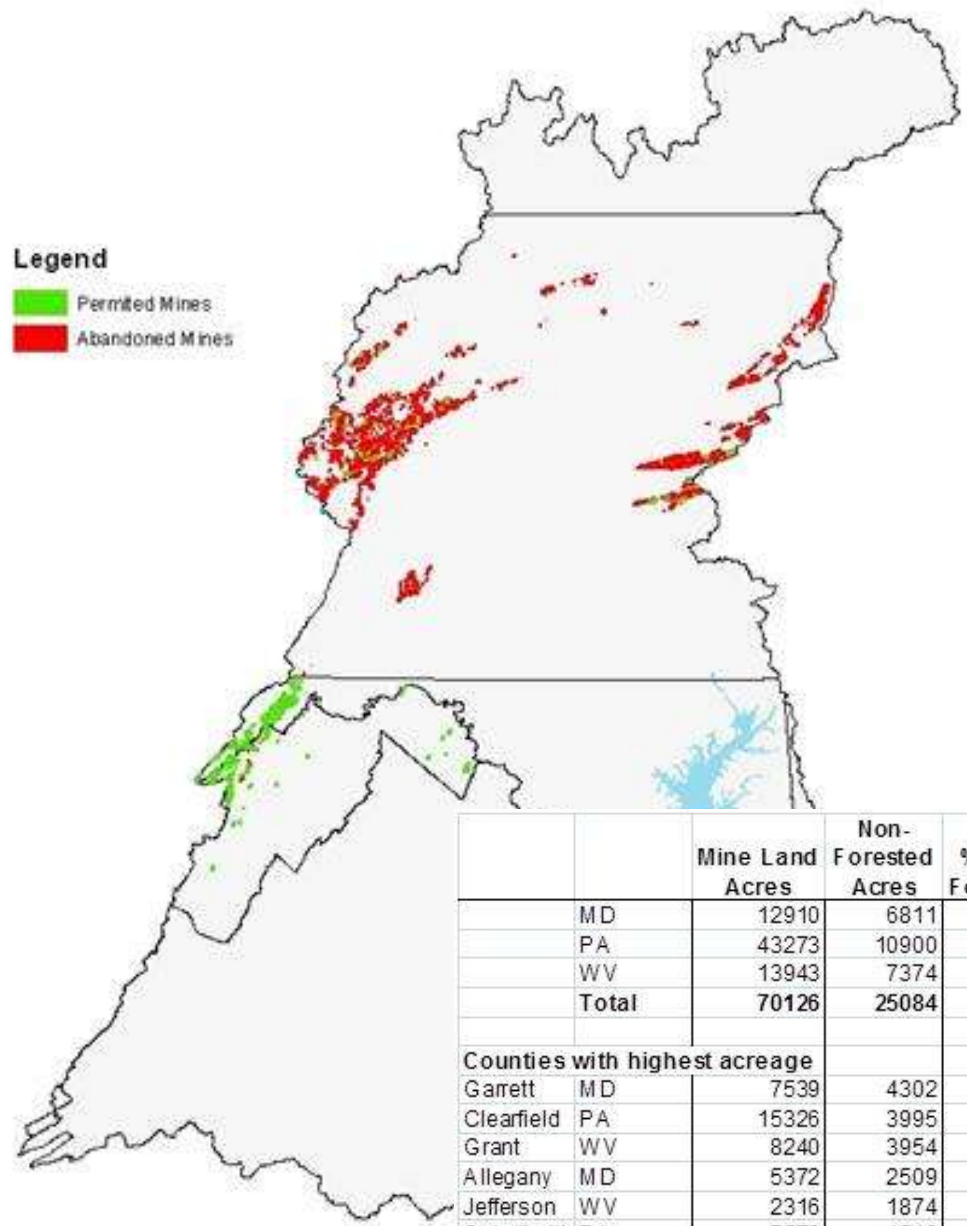


MINE LANDS



Legend

- Permitted Mines
- Abandoned Mines



		Mine Land Acres	Non-Forested Acres	% Non-Forested
	MD	12910	6811	53%
	PA	43273	10900	25%
	WV	13943	7374	53%
	Total	70126	25084	36%
Counties with highest acreage				
Garrett	MD	7539	4302	57%
Clearfield	PA	15326	3995	26%
Grant	WV	8240	3954	48%
Allegany	MD	5372	2509	47%
Jefferson	WV	2316	1874	81%
Schulky ill	PA	7572	1516	20%
Luzerne	PA	2283	915	40%
Mineral	WV	2119	910	43%
Dauphin	PA	992	853	86%

MINE LANDS - HOW

- Appalachian Regional Reforestation Initiative (ARRI) — provides strong science, technical guidance, and partnership strategies for reforesting mine lands
- Possible Funding Sources —
 - Fed/state cost share (EQIP, WHIP, etc)
 - EPA Brownfields, 319 grants; OSM Abandoned Mine Lands
 - Private — foundations, utility companies seeking carbon credits
- Critical role of watershed/community groups to identify reforestation sites, seek grants, and plant trees (e.g. OSM VISTA Appalachian Coal Country Teams)

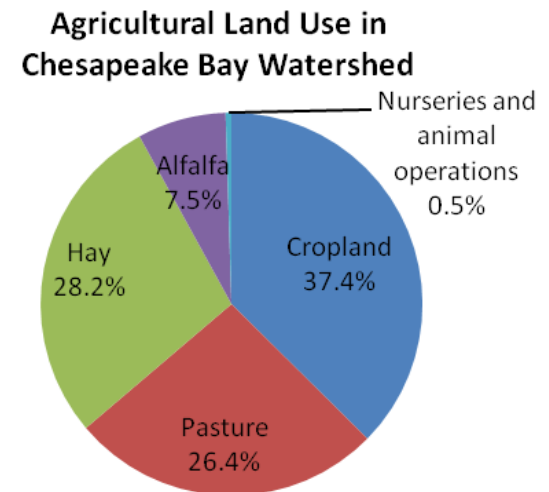
AGROFORESTRY

Agroforestry is the intentional mixing of trees and shrubs into crop and animal production systems to create

environmental, economic and social benefits

(USDA Agroforestry Strategic Framework)

9 million acres of agricultural land in Bay watershed + 4.2 million acres of woodlots on farms



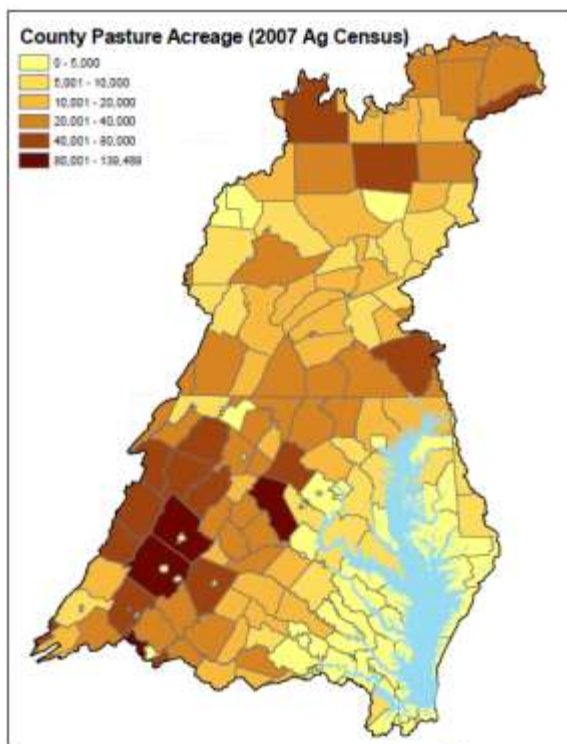
AGROFORESTRY

- Riparian Forest Buffers
- Windbreaks/Shelterbelts
- Alley Cropping
- Silvopasture
- Forest Farming
- Short rotation woody crops



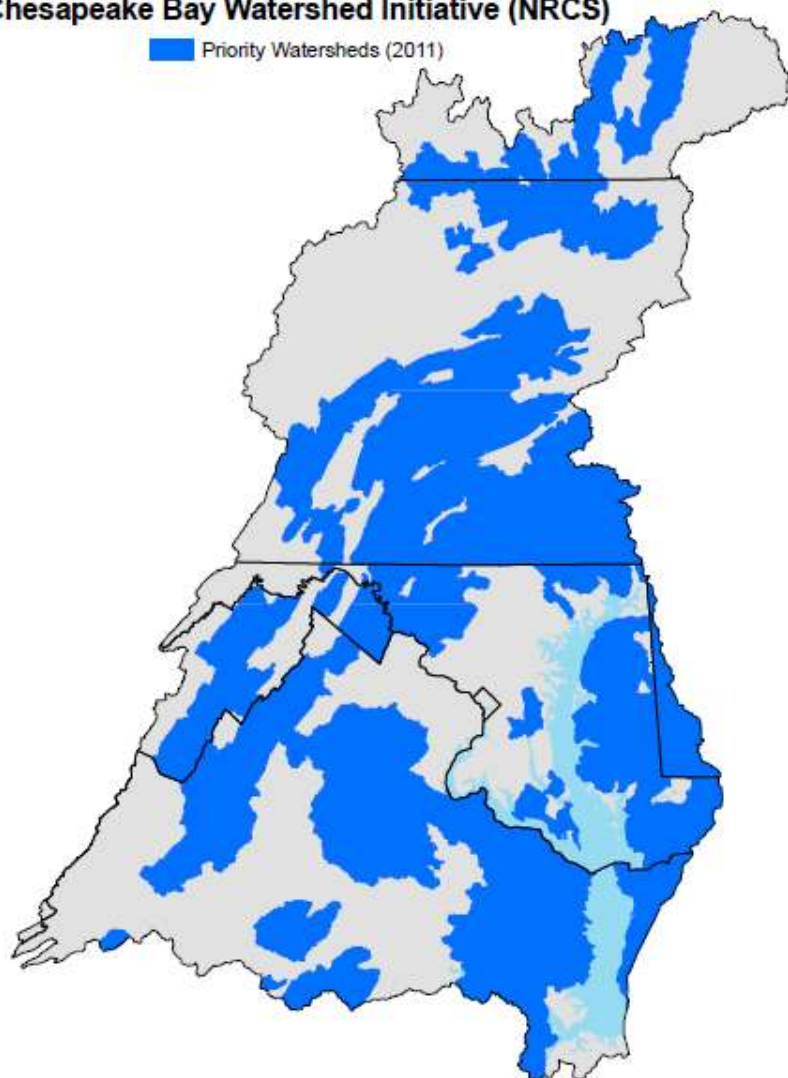
AGROFORESTRY - WHERE

- NRCS Priority Watersheds
 - High pollutant loading
 - Use buffer targeting tools



Chesapeake Bay Watershed Initiative (NRCS)

Priority Watersheds (2011)



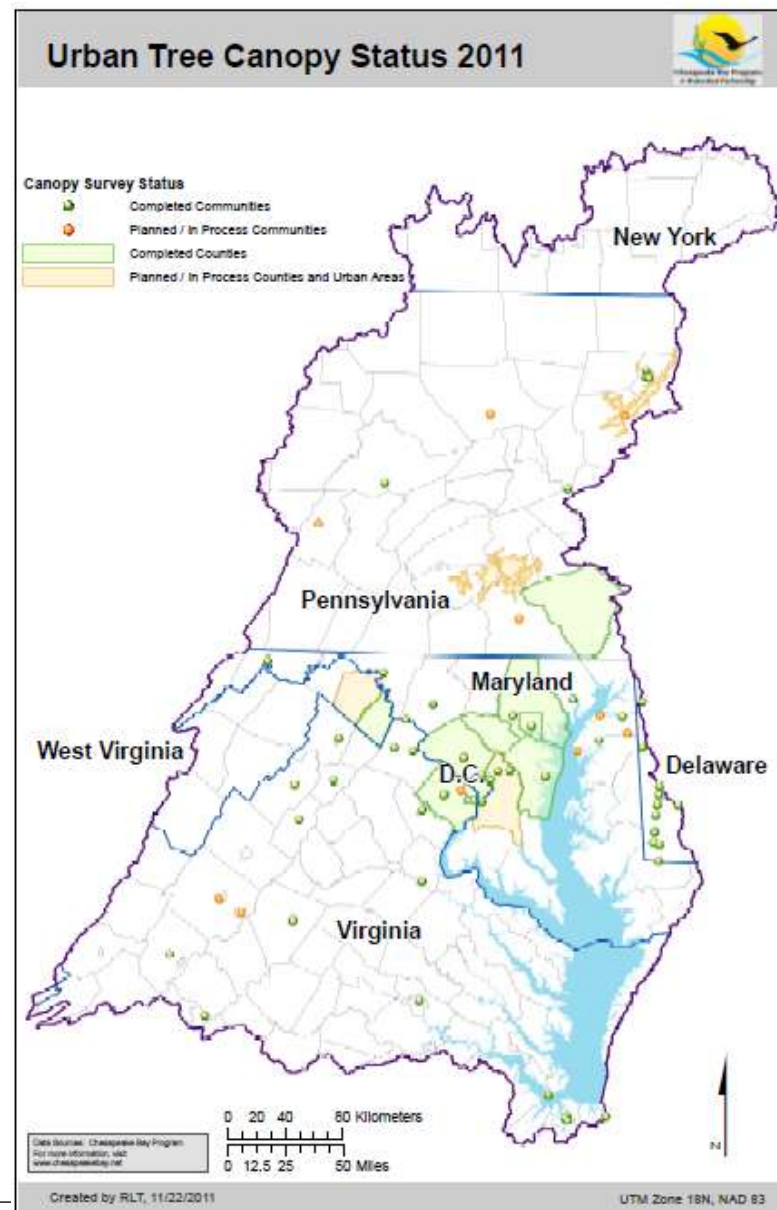
Urban/Community Forests

Urban Tree Canopy Assessments

- 57 cities and 7 counties have completed assessments
- More in process
- 25 cities/counties have set draft or final UTC % goals



Air Quality – Non-Attainment Areas, 8 Hour Ozone



URBAN AND COMMUNITY - HOW

- UTC assessment → goal setting → implementation process (can be simple or complex)
- Local measures to maintain/preserve existing canopy and to expand canopy through well-designed tree planting programs
- Tie to MS4/TMDL/Air SIP and local goals
- Tools/programs available to help: examples federal (iTree), state programs (PA Treevitalize), ngo (CB Trust), refer to list of program resources

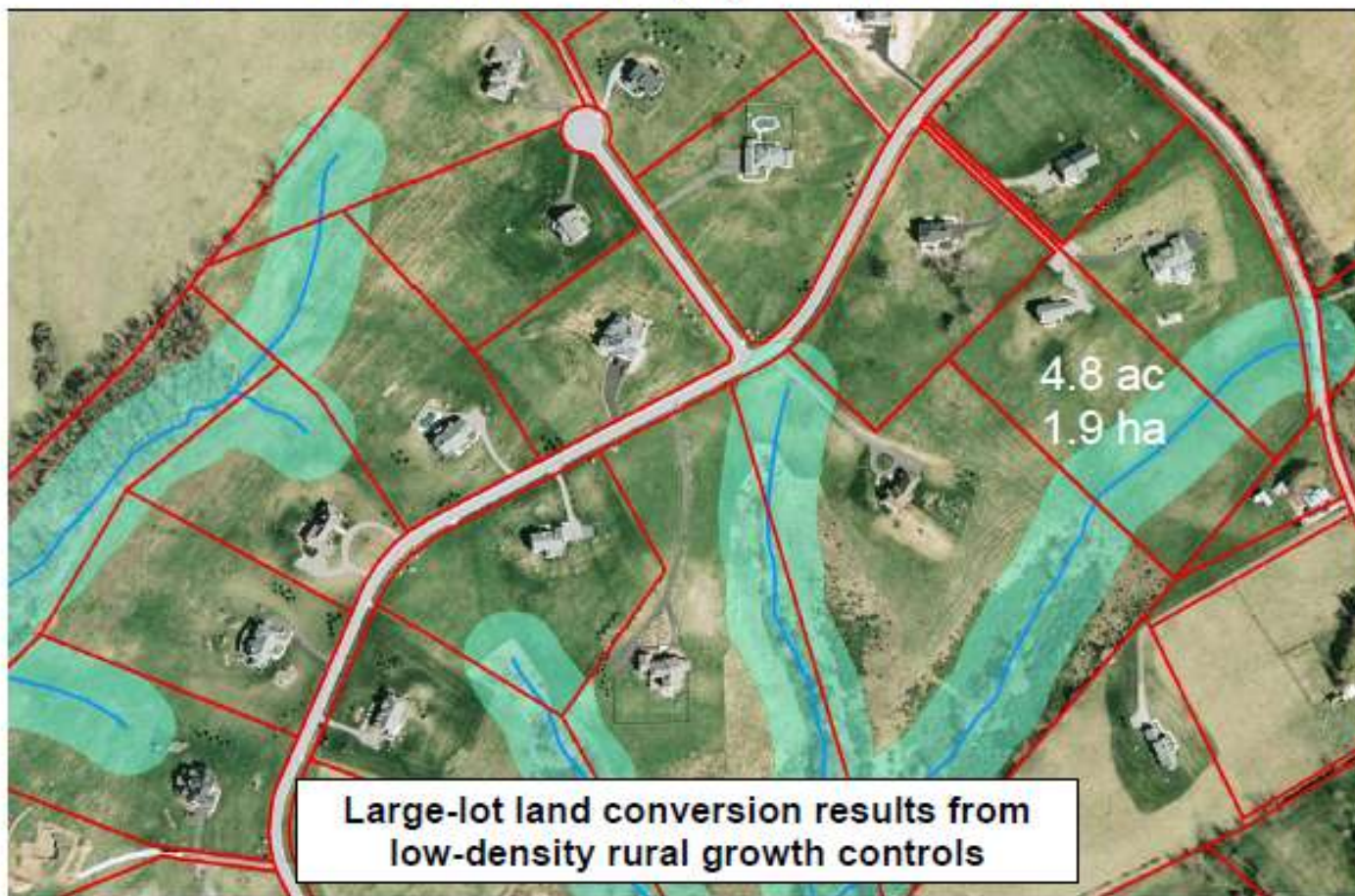
Turf to Trees

Rural Residential Reforestation in Baltimore County

CASE STUDY - SIDEBAR

- County offers tree planting on large lots in exchange for landowner commitment

“I didn’t want all of this land, it just came with the house.”

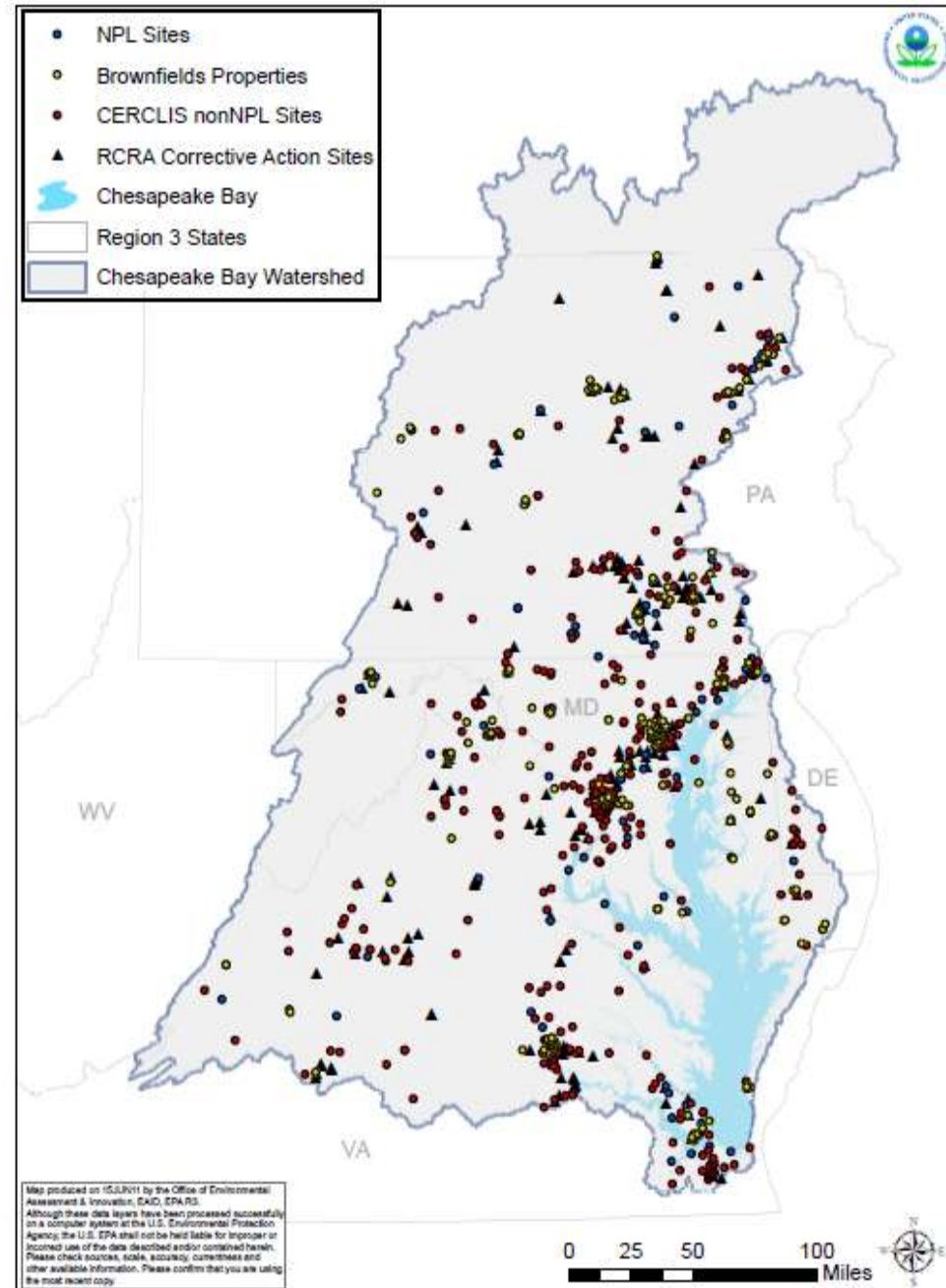


Large-lot land conversion results from
low-density rural growth controls

Brownfields

WHERE

- Every site can benefit from tree planting whether small parcels or large scale
- Sites along waterways or in green infrastructure network could be targeted

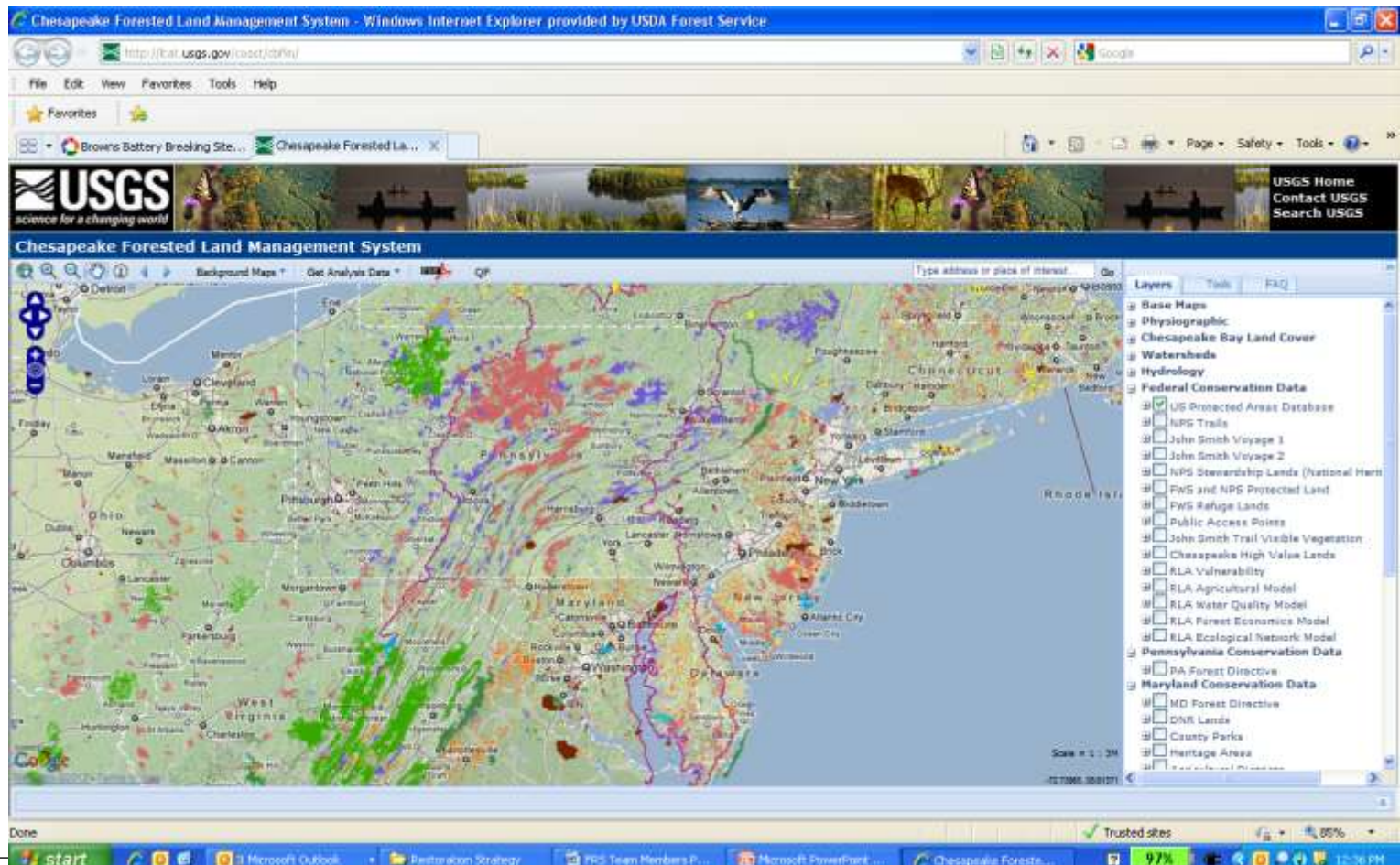


BROWNFIELDS - HOW

- Programs — EPA reuse/revitalization, Greener Clean-up Goals, Trustee NRD efforts
- Make technical guidance and tools available to support reforestation of contaminated sites
- Connect to urban tree canopy initiatives and green infrastructure priorities
- Educate/partner with key groups

Conclusion

- Targeting overlapping priorities – COAST Forest Mapping tool will be revised with Strategy GIS layers



Draft Actions for each Section

- See document posted

Brainstorm/Discussion

In the next year, how can we start to get other partners engaged and invested in implementing the Strategy?

- state agencies? (ours and others)
- federal agencies?
- nongovernmental organizations?
- local governments?