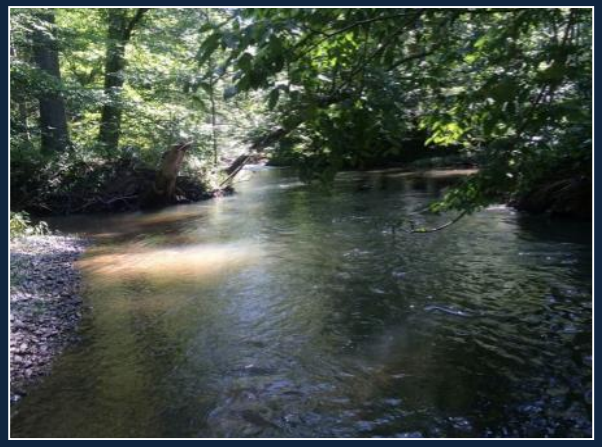








New Partnerships, New Successes-

Regional Conservation Partnerships

Southern MD Conservation Alliance

How we Formed

Why we began to discuss the formation of an RCP

Who inspired us

How we formed

Our mission and vision

Why we began to discuss the formation of an RCP

- It seemed like we were losing the battle to suburban sprawl
- There was no messaging coordination-no one was listening to us
- We needed to scale up to address bigger issues

Who inspired us

- Heart of Maryland
- Forever Maryland and its webinars
  - Bill Labich, Large Landscape Conservation
  - Dan Murphy – Fish and Wildlife, Delmarva

    Conservation Partnership

How we formed

- John Turgeon, Director of the Maryland Environmental Trust, and I developed a list of potential members and co-chaired a series of meetings
  - Why form an RCP?
  - How?
  - Under what terms?

  Then we drafted mission statement, vision, goals, charter etcetera

Our mission and vision

Mission: The Southern Maryland Conservation Alliance is a network of partners who work to conserve and restore Southern Maryland's landscapes, waterways, and shorelines that are special to its people, fundamental to its economy, reflected in its culture, and vital for its native fish, wildlife, and plants, on which we rely.

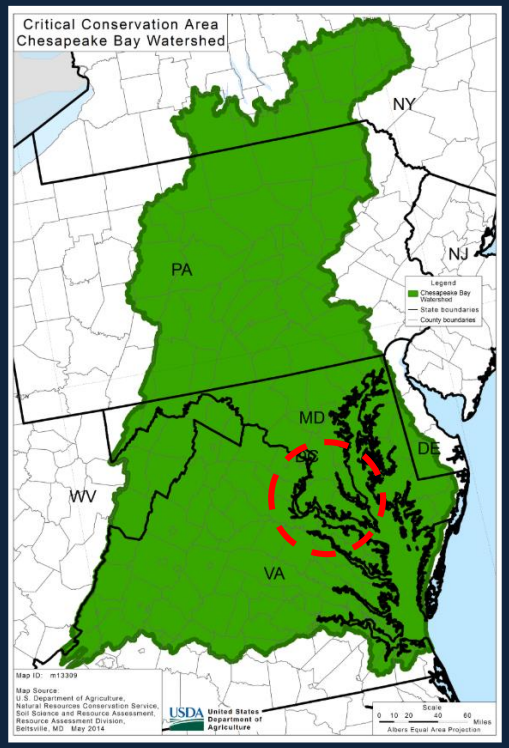
Vision: The Alliance envisions Southern Maryland as a place where native fish, wildlife and plants thrive, and the fabric of healthy natural and working lands and waters enrich communities of those who live, work, and play here. Our culture and history are remembered and told, and our rich forestlands, fruitful farmlands, and resilient shorelines sustain present and future generations.

Members

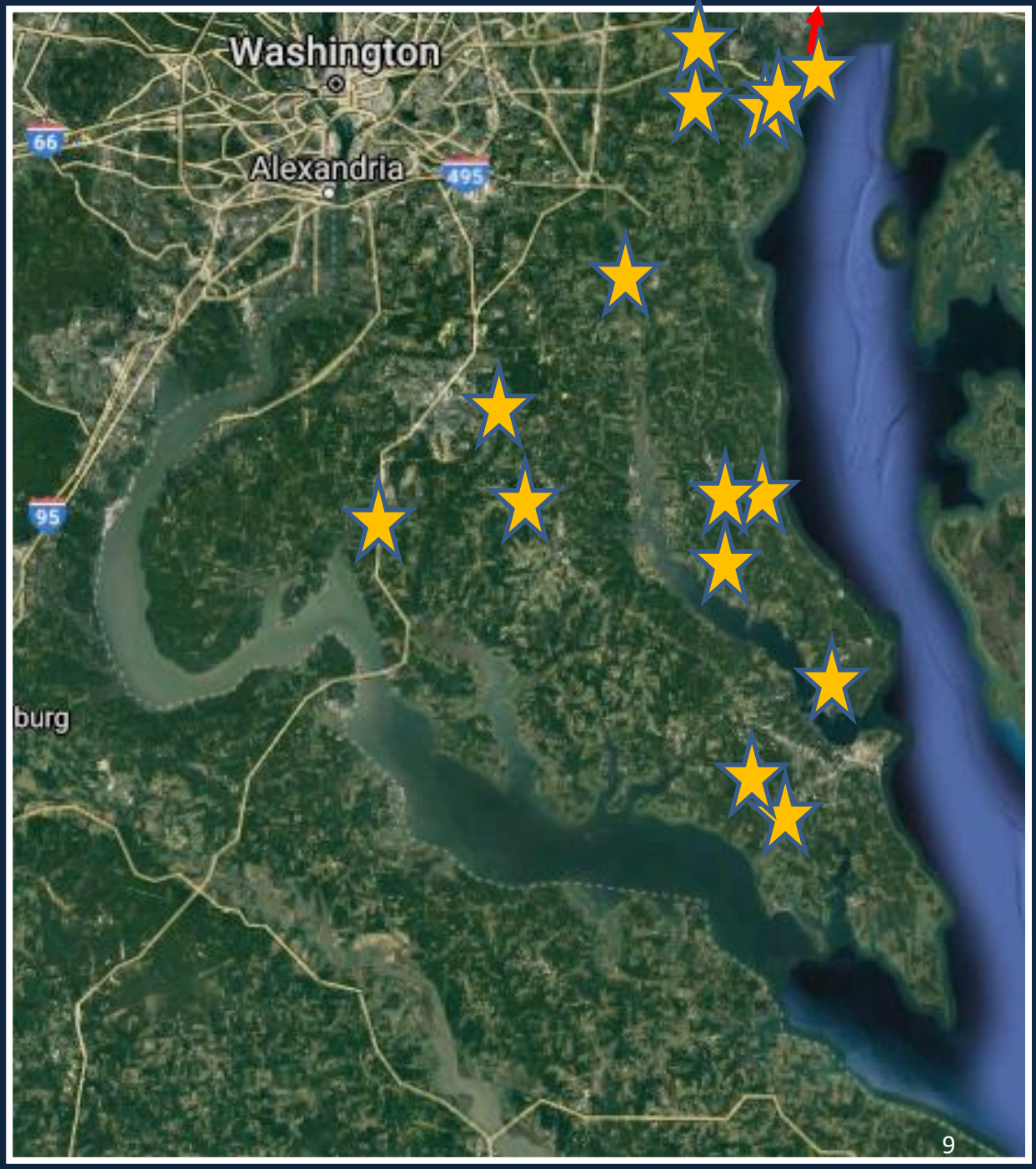
- American Chestnut Land Trust -- SMCA Coordinator
- Maryland Environmental Trust
- US Fish and Wildlife Service (Chesapeake Regional Office)
- Forever Maryland Foundation
- Calvert Nature Society
- Patuxent Tidewater Land Trust
- Scenic Rivers Land Trust
- Conservancy for Charles County
- Cove Point Natural Heritage Trust
- Prince George's County Soils Conservation District
- Southern Maryland Resource Conservation and Development
- Alliance for the Chesapeake Bay
- Calvert Farmland Trust
- Black Swamp Creek Land Trust
- Southern Maryland Heritage Area Consortium

The Launch!

Southern Md Resource Conservation Partnership



Epicenter of the tidal portion of the Chesapeake Bay



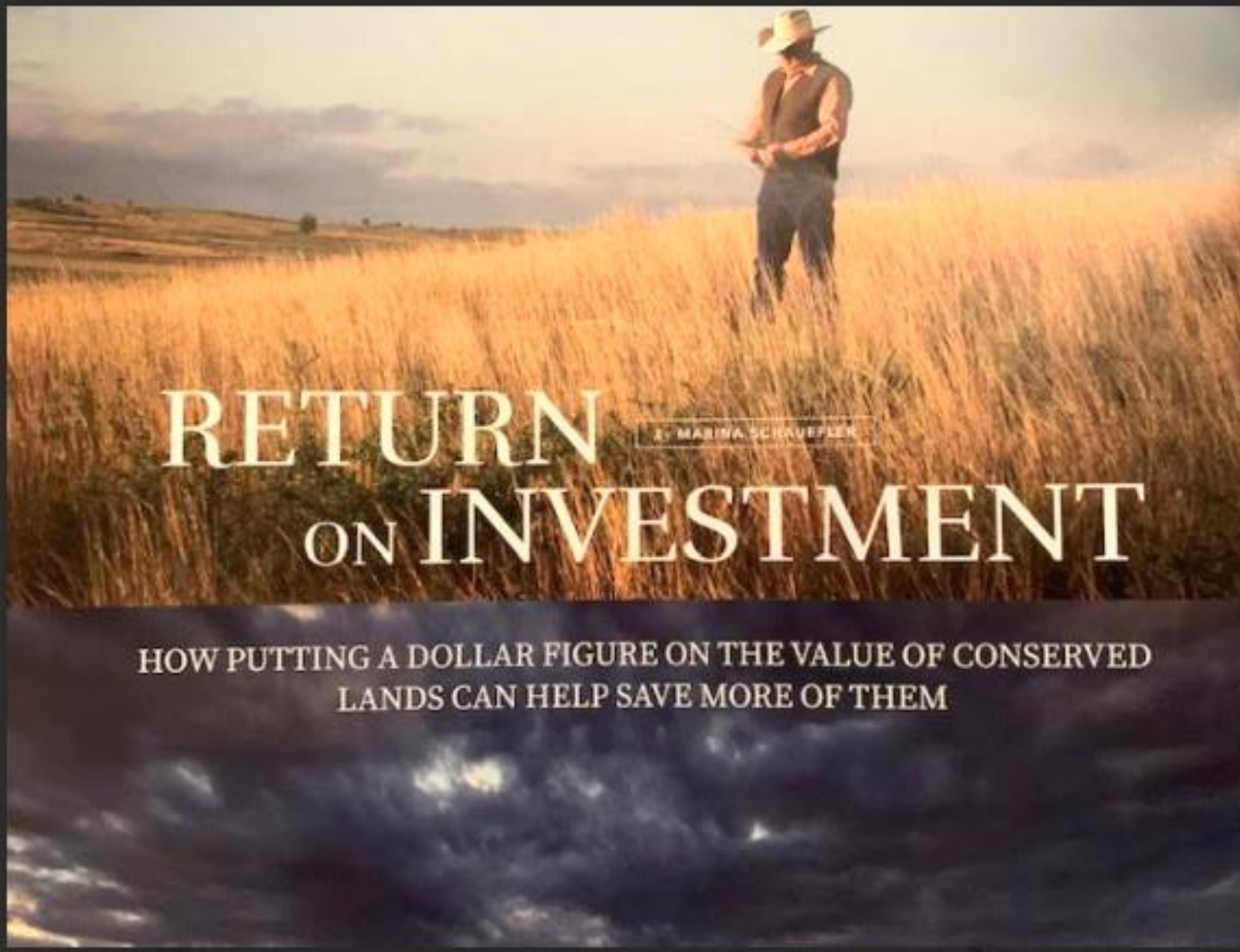
Chesapeake Bay Restoration

Annapolis, facing a growing crisis, is already one of cities most susceptible to flooding in the U.S.

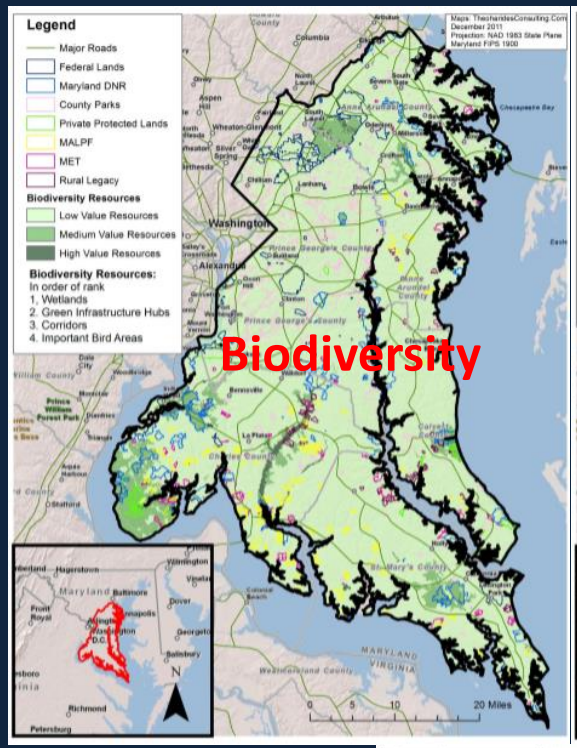

Blackwater National Refuge
GHOST FOREST

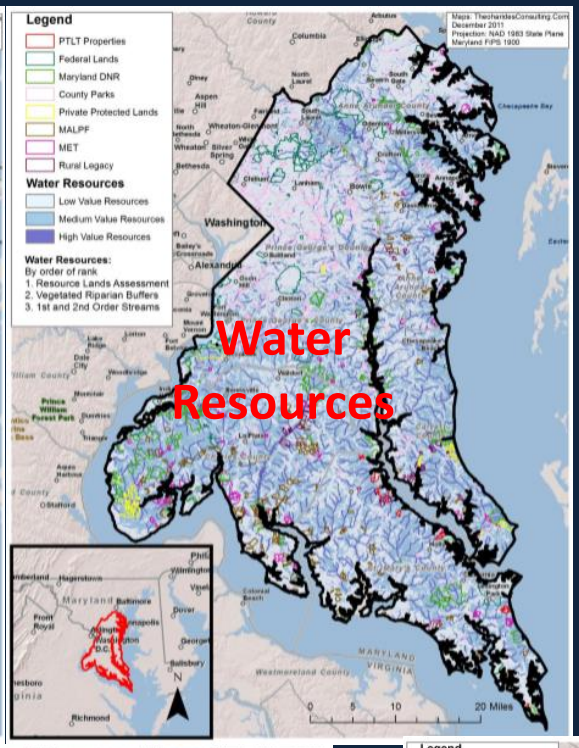

Think
Globally
Act
Locally

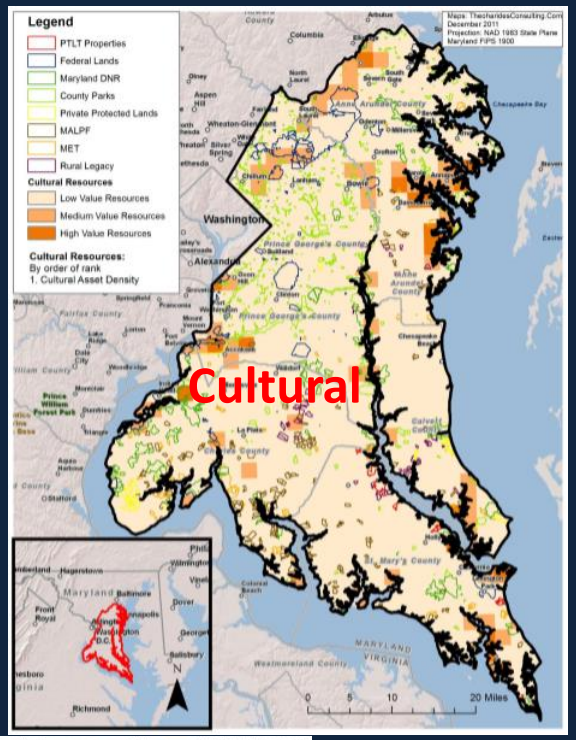
For Environment, Economy, Quality of Life

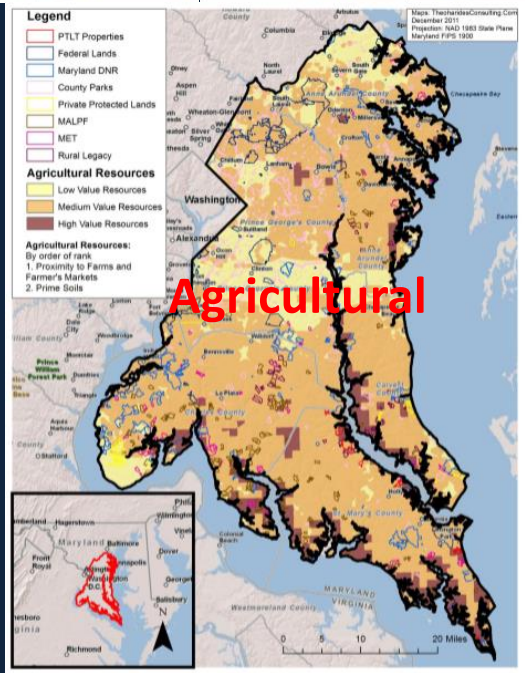


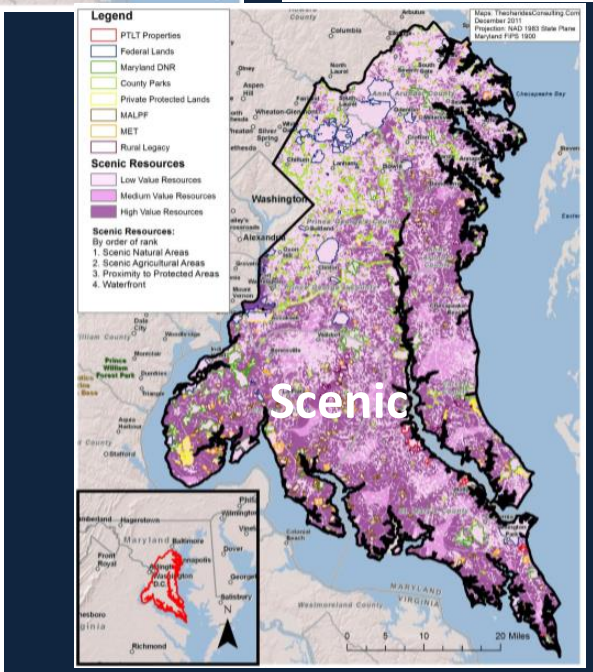
LTA *Saving Land*, Fall 2021


Legend
Major Roads
Federal Lands
Maryland DNR
County Parks
Private Protected Lands
MALPF
MET
Rural Legacy
Biodiversity Resources
Low Value Resources
Medium Value Resources
High Value Resources
Biodiversity Resources:
In order of rank
1. Wetlands
2. Green Infrastructure Hubs
3. Corridors
4. Important Bird Areas
Biodiversity
Washington
Richmond
MARYLAND
VIRGINIA
20 Miles


Legend
PTLT Properties
Federal Lands
Maryland DNR
County Parks
Private Protected Lands
MALPF
MET
Rural Legacy
Water Resources
Low Value Resources
Medium Value Resources
High Value Resources
Water Resources:
By order of rank
1. Resource Lands Assessment
2. Vegetated Riparian Buffers
3. 1st and 2nd Order Streams
Water Resources
Washington
Richmond
MARYLAND
VIRGINIA
20 Miles


Legend
PTLT Properties
Federal Lands
Maryland DNR
County Parks
Private Protected Lands
MALPF
MET
Rural Legacy
Cultural Resources
Low Value Resources
Medium Value Resources
High Value Resources
Cultural Resources:
By order of rank
1. Cultural Asset Density
Cultural
Washington
Richmond
MARYLAND
VIRGINIA
20 Miles


Legend
PTLT Properties
Federal Lands
Maryland DNR
County Parks
Private Protected Lands
MALPF
MET
Rural Legacy
Agricultural Resources
Low Value Resources
Medium Value Resources
High Value Resources
Agricultural Resources:
By order of rank
1. Proximity to Farms and Farmer's Markets
2. Prime Soils
Agricultural
Washington
Richmond
MARYLAND
VIRGINIA
20 Miles


Legend
PTLT Properties
Federal Lands
Maryland DNR
County Parks
Private Protected Lands
MALPF
MET
Rural Legacy
Scenic Resources
Low Value Resources
Medium Value Resources
High Value Resources
Scenic Resources:
By order of rank
1. Scenic Natural Areas
2. Scenic Agricultural Areas
3. Proximity to Protected Areas
4. Waterfront
Scenic
Washington
Richmond
MARYLAND
VIRGINIA
20 Miles

Economic Value

- According to a 2018 BEACON report, regional resource based industries contributed over $3.2 billion to the state economy, including $153 million in Agriculture, $584.9 million in forestry, $49.8 million in seafood and aquaculture, and $931.9 million in support industries, such as wineries, breweries, and processed foods.

But what is the value of nature itself?

There is an app for that!

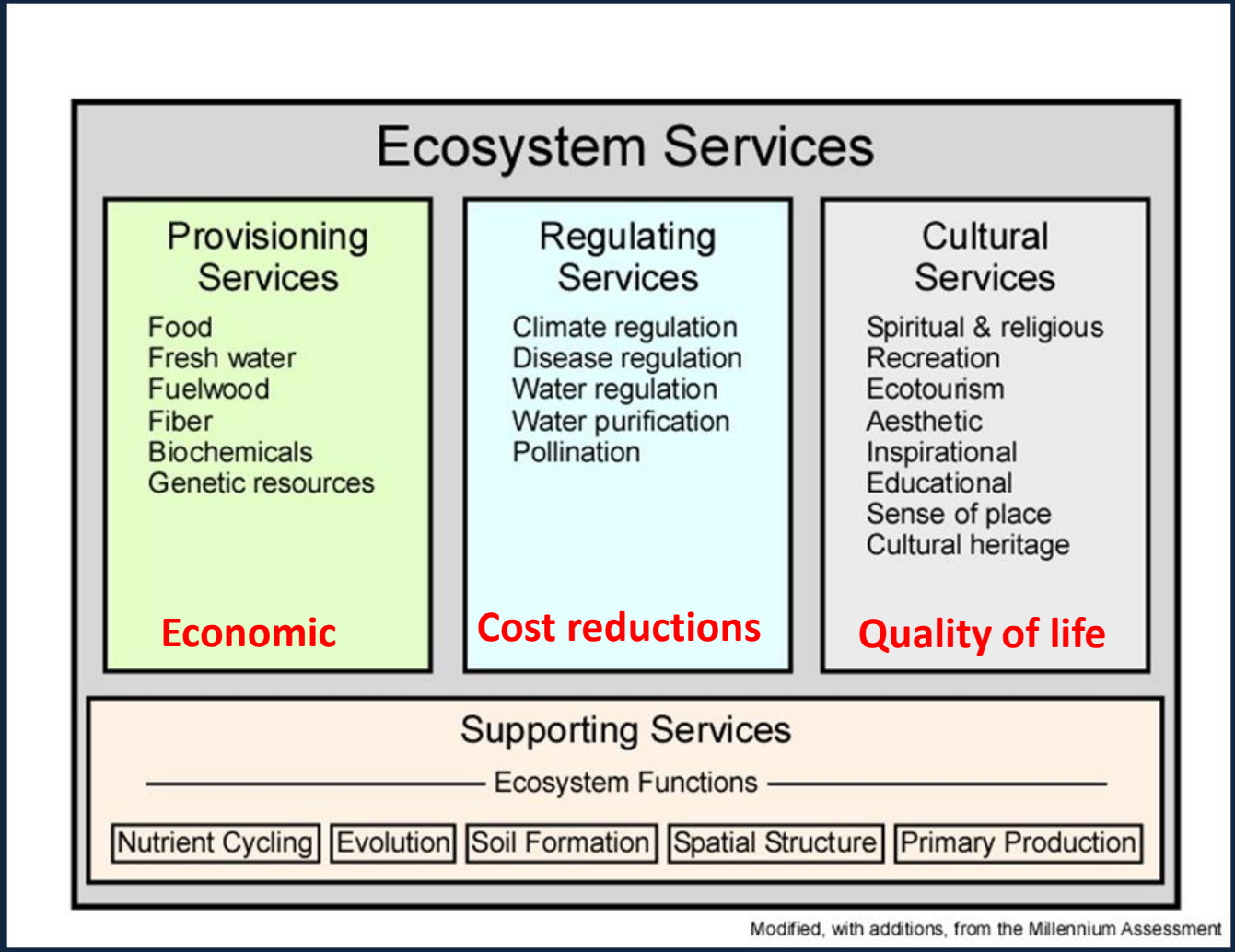
Accounting for the value of Ecosystem Services

Presentation to the Calvert County Environmental Commission
Prince Frederick, MD 1/30/2017

Elliott Campbell, PhD
Director, Center for Economic and Social Science
Maryland Department of Natural Resources

Ecosystem Services

"Benefits gained by people from the environment"



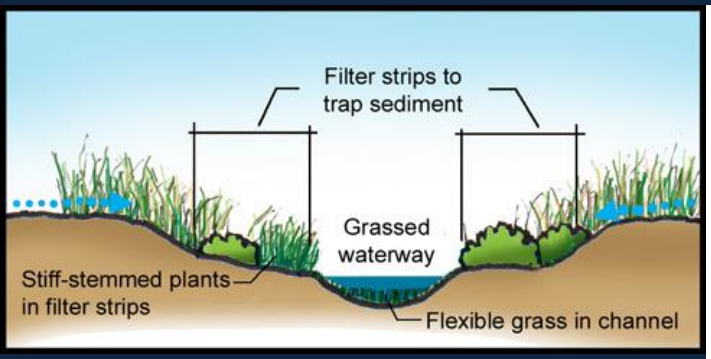
As classified by the Millennium Ecosystem Assessment (MEA 2005)

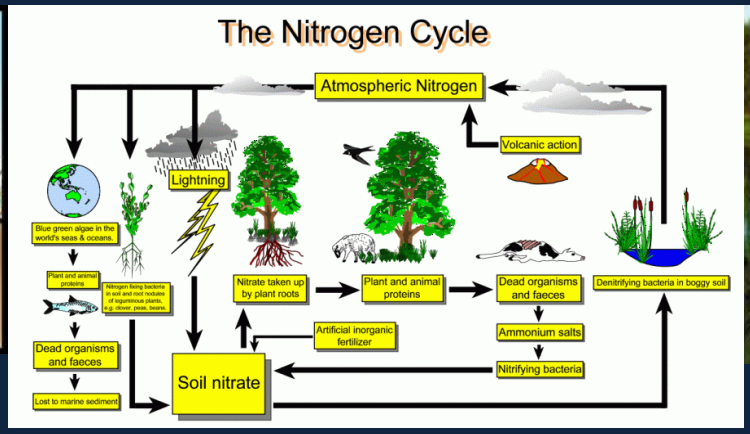
Accounting for Maryland's Ecosystem Services (AMES)

- **Use established models from USGS, USFS, DNR, US EPA for quantity of the ecosystem service** (mt of carbon, kg of N, etc.)

- Assigns a dollar value to individual ecosystem services using the "eco-price" methodology (Campbell, in press)
- Ecosystem services currently considered across the landscape of Maryland include
  - **Air Quality improvement**
  - **Carbon sequestration**
  - **Groundwater recharge**
  - **Nutrient Uptake**
  - **Wildlife habitat and biodiversity**
  - **Stormwater mitigation**
- Not presented here- services specific to coastal wetlands and the Chesapeake Bay

Nutrient Uptake





- *ES across the landscape:* Forests and wetlands in watersheds with high amounts of urban or agricultural land-uses receive and take-up higher quantities of nutrients

- *Eco-Price:* Avg. cost to remove nutrients using best management practices and price on nutrient trading markets. Averages $8.36 per lbs nitrogen or phosphorus

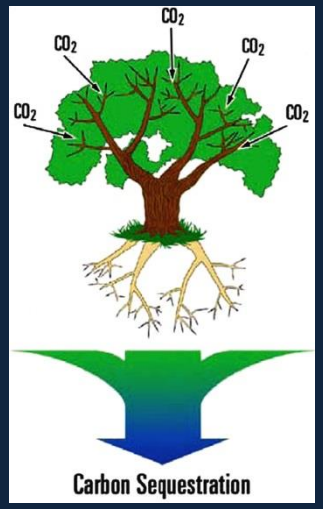
Biodiversity/Wildlife Habitat

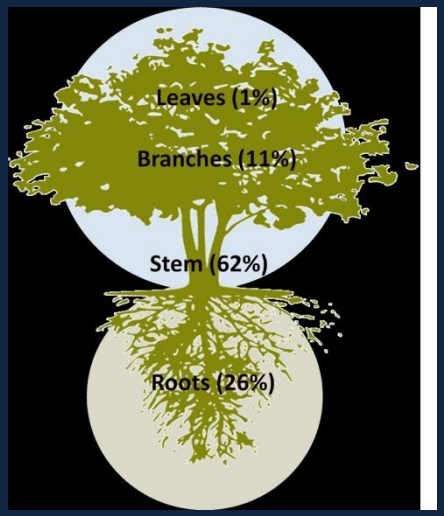


- *ES across the landscape:* We looked at the size of habitat, degree of connection to other habitats, and presence of rare species or habitats

- *Eco-price:* Cost to preserve natural land (i.e. Ducks Unlimited, Conservation Fund, habitat banking) annualized over 15 years, period that tax benefit can be spread. Averages $1023 per acre of natural land.

Carbon Sequestration

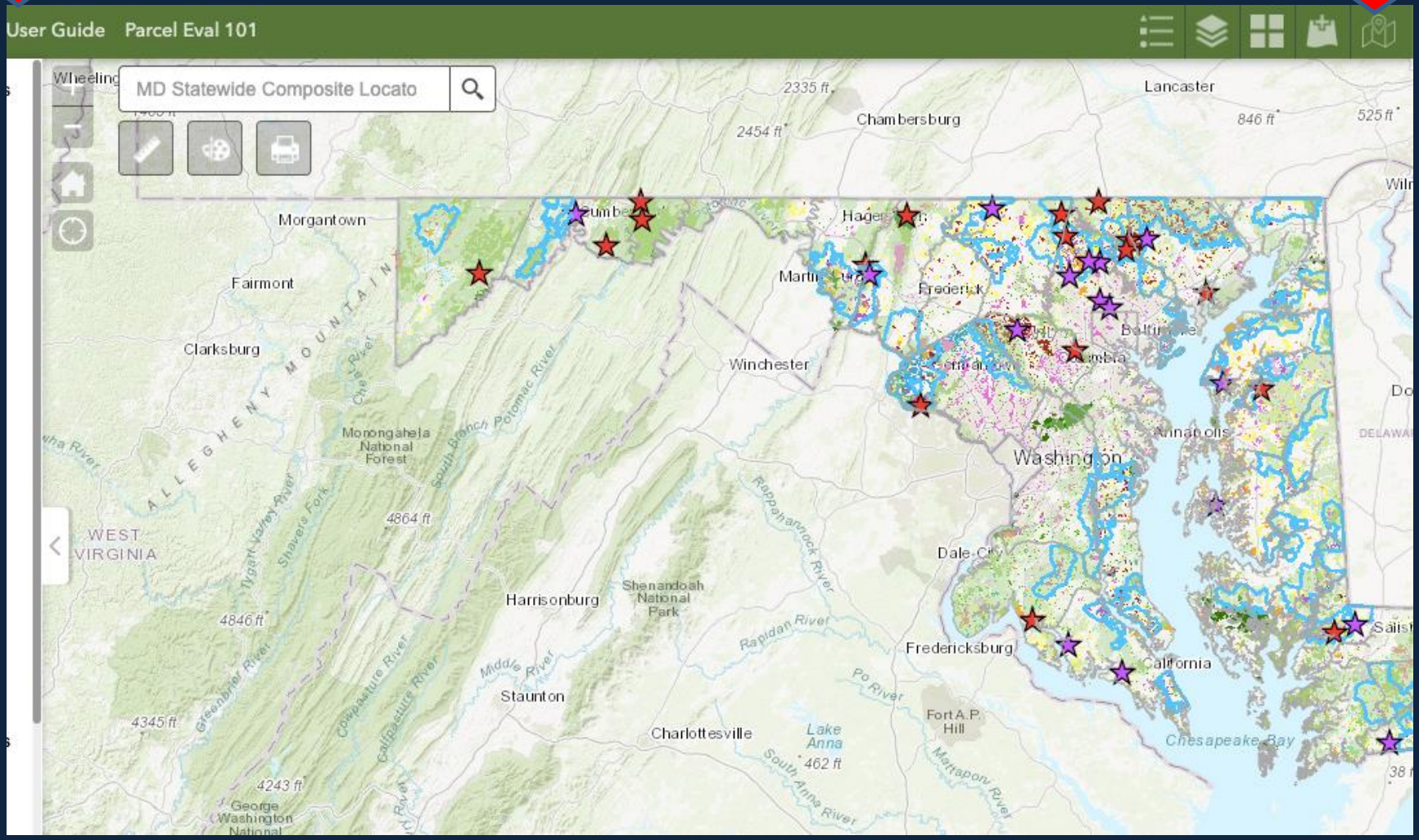


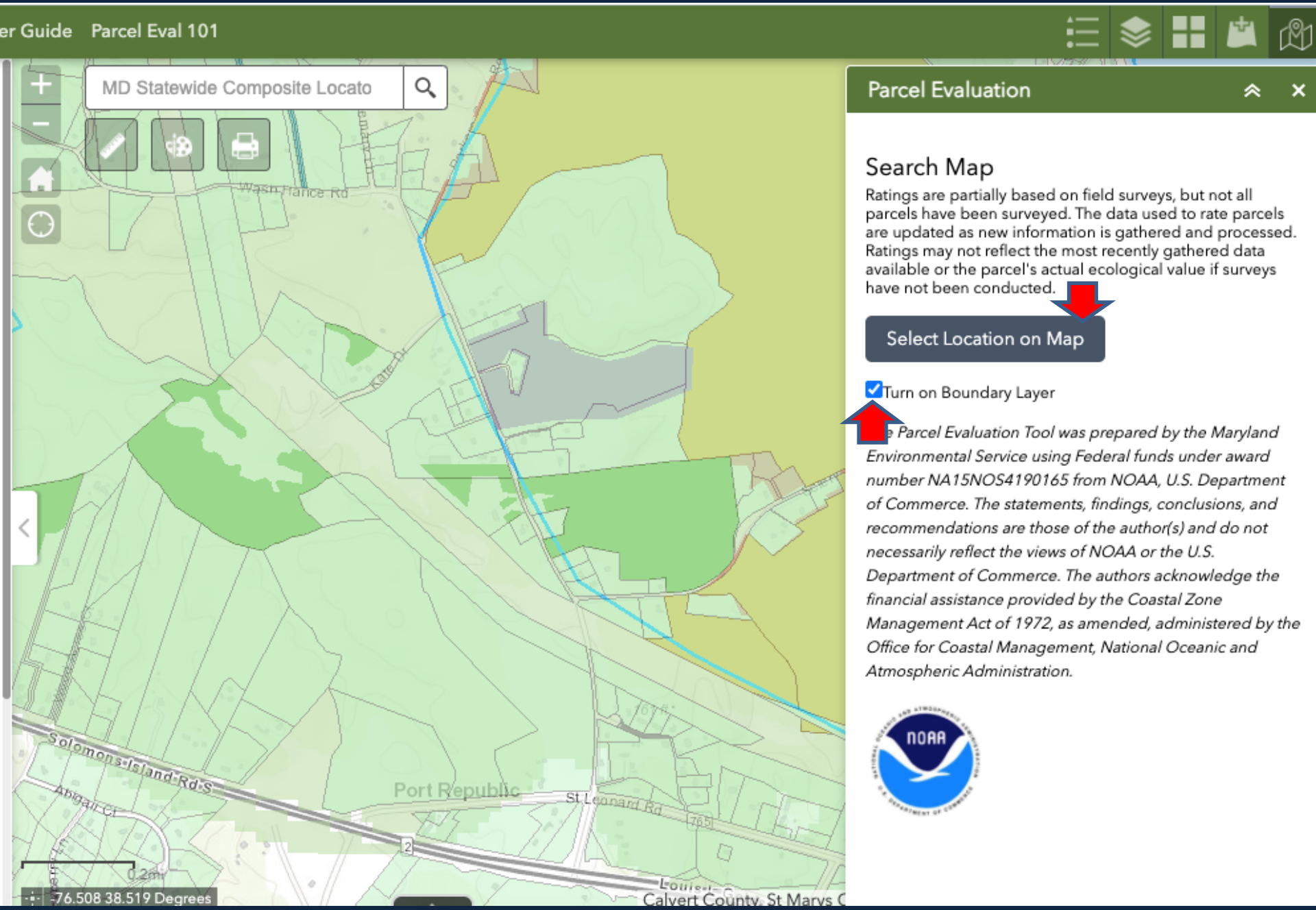


- *ES across the landscape:* Certain ecosystems (coastal wetlands, deciduous forests) sequester larger amounts of carbon than others (shrublands, coniferous forests)

- *Eco-Prices:* the Social Cost of Carbon (estimate of the costs of climate change), Regional Greenhouse Gas Initiative (RGGI) market price, cost to comply with Clean Power Plan. Averages $77 per mt of carbon

https://geodata.md.gov/greenprint/




er Guide
Parcel Eval 101
MD Statewide Composite Locato
Parcel Evaluation
Search Map
Ratings are partially based on field surveys, but not all parcels have been surveyed. The data used to rate parcels are updated as new information is gathered and processed. Ratings may not reflect the most recently gathered data available or the parcel's actual ecological value if surveys have not been conducted.
Select Location on Map
Turn on Boundary Layer
Parcel Evaluation Tool was prepared by the Maryland Environmental Service using Federal funds under award number NA15NOS4190165 from NOAA, U.S. Department of Commerce. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of NOAA or the U.S. Department of Commerce. The authors acknowledge the financial assistance provided by the Coastal Zone Management Act of 1972, as amended, administered by the Office for Coastal Management, National Oceanic and Atmospheric Administration.
NOAA
Port Republic
St Leonard Rd
Solomons Island Rd S
Abigail Ct
Wash Parlance Rd
Kate Ct
0.2mi
-76.508 38.519 Degrees
Calvert County, St Marys C

$199,815 per year in Ecosystem Values

$2,561 per acre

Ecosystem Service Name *(and biophysical unit)(range)*	Annual Parcel-Level Values*		Annual Per-Acre Values**	
	Biophysical	Economic	Biophysical	Economic
Air Pollution Removal: Carbon Monoxide (CO) *(kg per year)(0-1.35 kg per acre per year)*	113.51	$3.04	1.31	$0.04
Air Pollution Removal: Nitrogen Dioxide(NO_2) *(kg per year)(0- 9.01 kg per acre per year)*	485.91	$20.92	5.60	$0.24
Air Pollution Removal: Sulfur Dioxide(SO_2) *(kg per year)(0- 6.67 kg per acre per year)*	213.81	$2.19	2.47	$0.03
Air Pollution Removal: Ozone (O_3) *(kg per year)(0-34.35 kg per acre per year)*	2202.18	$528.82	25.39	$6.10
Air Pollution Removal: Particulate Matter(PM_{10}) *(kg per year)(0-8.34 kg per acre per year)*	590.27		6.81	
Air Pollution Removal: Particulate Matter($PM_{2.5}$) *(kg per year)(0-1.80 kg per acre per year)*	83.70	$691.84	0.96	$7.98
Carbon Sequestration *(mT per year)(0-4 mt per acre per year)*	64.72	$9,011.59	0.75	$103.90
Groundwater Recharge *(m3per year)(445 - 1236 m3 per acre per year)*	5869.42	$31,604.00	67.67	$364.38
Nitrogen Uptake Potential Index *(1 = low to 3 = high)**	0.00	$3,020.00	No Data	$34.82
Stormwater Mitigation Potential Index *(1 = low to 5 = high)**	2.29	$71,063.00	No Data	$819.32
Wildlife Habitat and Biodiversity Potential Index *(0 = low to 100 = high)**	97.74	$106,169.00	No Data	$1,224.08
Surface Water Protection	No Data	$0.00	No Data	$0.00
Total Annual Economic Value	No Data		No Data	$2,561.73

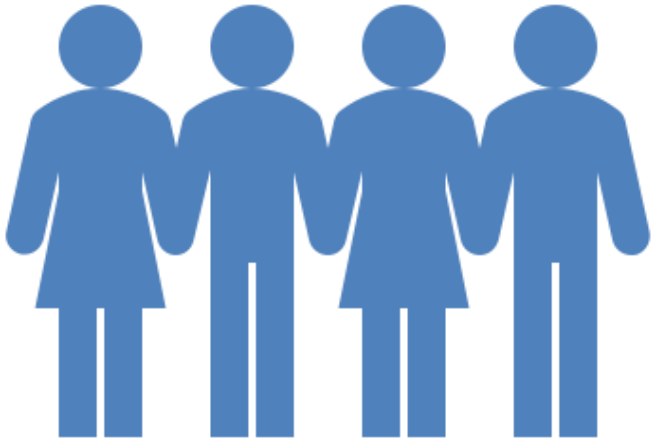
Next Steps Forward

-Strengthen the Alliance with affiliate groups in advocating for actions which will strengthen the economy and protect our ecosystems.
-Develop messaging so that the general public can understand why our work is so important
-Map areas of focus for each land trust

Measure the consequences of sprawl

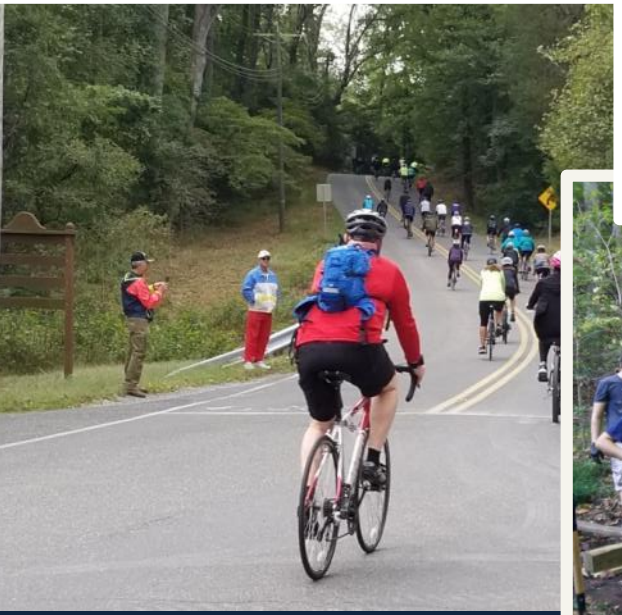
- Increased impervious surfaces
- Loss of viable ecosystems
- Loss of farmland and the potential for a viable local food system

Building public support for conservation



Building capacity

Connecting People to Land & Water



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American Chestnut Land Trust
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gbowen@acltweb.org