



November 6, 2025

Land Trust Roundtable

Easement Planning and
Landowner Engagement

Today's Goals



**Find ways that
MET's Easement
Program can help
land trusts**



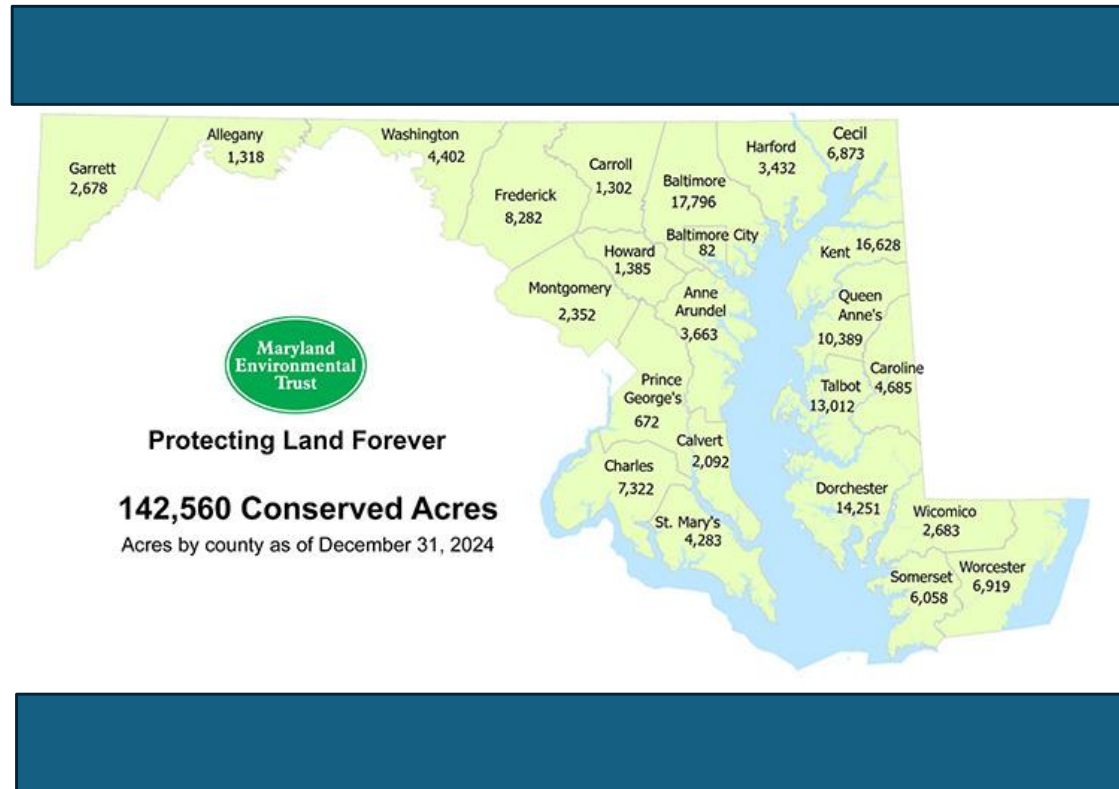
Discuss publicly
available tools used
for land
conservation



Apply data to
prioritize outreach
to strengthen
easement quality

Maryland Environmental Trust

- Established in 1967
- Mostly donated easements
- Variety of easement types: farmland, urban, habitat, education, historic
- Variety of LO: Private, Non-prof, Corps, federal, state and local govt



MET's Mission...

MET works with landowners, local communities, and ***land trusts*** to protect Maryland's most treasured landscapes and natural resources as a legacy for future generations



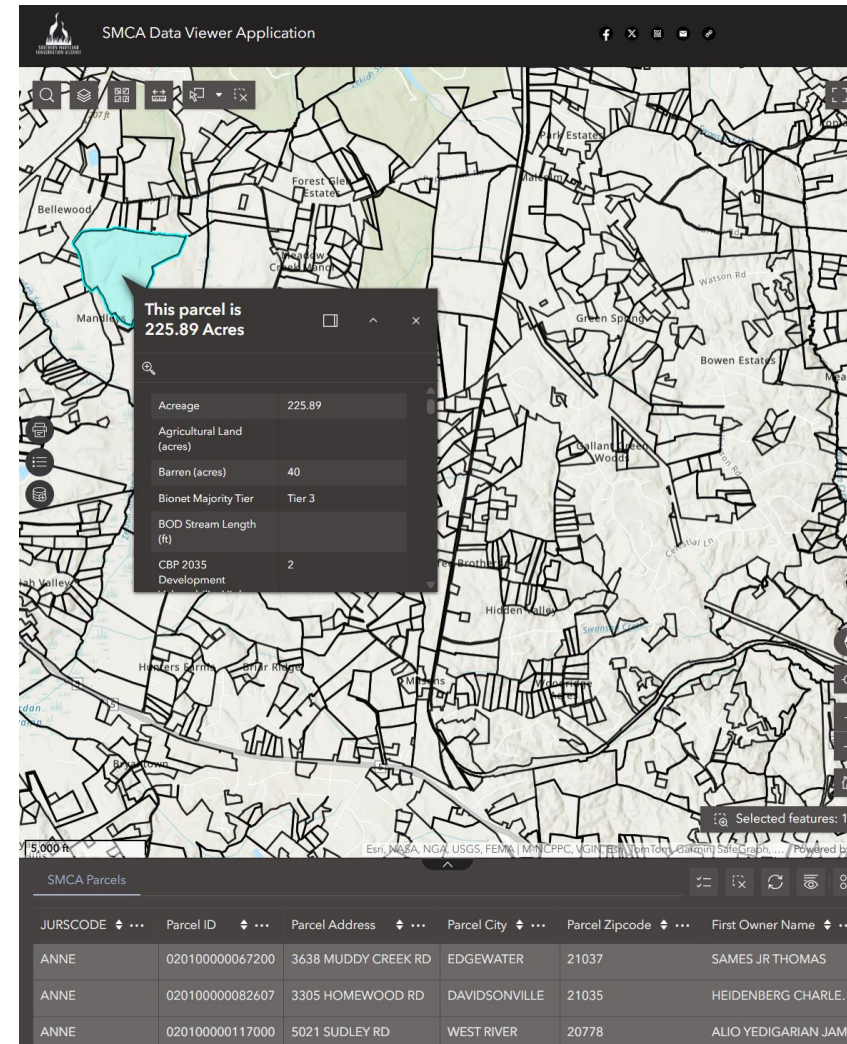
Presentation Outline

- ✓ **Intro**
- ✓ **Available Tools**
- ✓ **MET Intake Sheet**
- ✓ **Tool Demos**
- ✓ **Targeted Outreach**
- ✓ **Discussion**



Conservation Planning Tools

- **Significant growth**
 - Govt and NGO's
- **Weighted on spatial products**
 - General Assessments
 - Building out Exhibits
 - Empirical Evaluation
 - Conservation Planning
- **Range of user ability and applicability**



A Tool for Every Scenario

ArcPro or other GIS

- Layers are publicly accessible
- Cost money
- User expertise

Freeware

- R or Python (AI Enabled)
- Google Earth
- MERLIN & Parcel Eval Tool
- Free, fit any experience

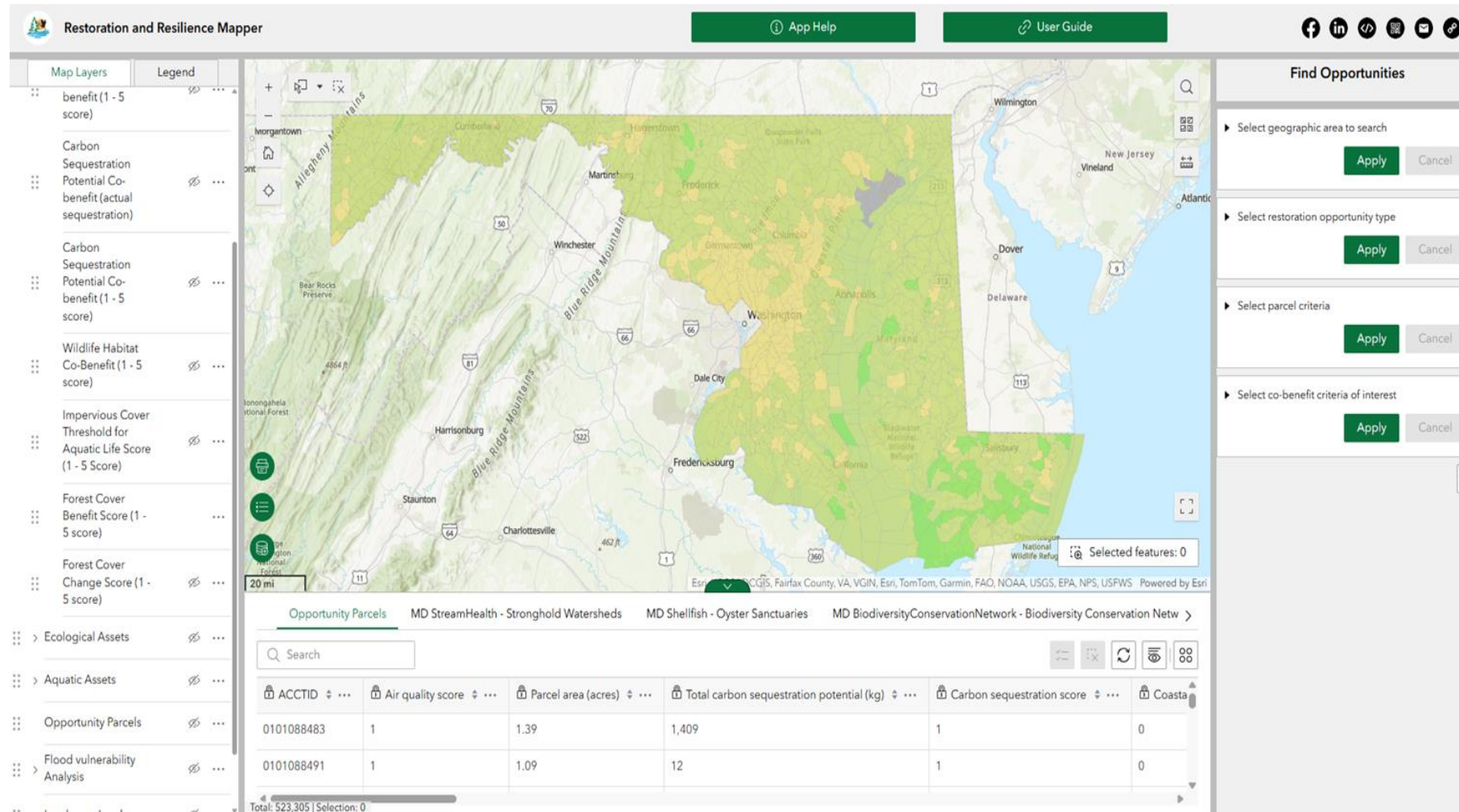


Maryland DNR Mapping Tools


- **Numerous Apps**
- **Easement Program Top 3**
 - Restoration and Resilience Mapper
 - Greenprint Parcel Evaluation Tool (PET)
 - MERLIN








Restoration & Resilience Mapper




Parcel Evaluation Tool

**GreenPrint**

User Guide Parcel Eval 101



The GreenPrint map displays Targeted Ecological Areas (TEAs), lands and watersheds of high ecological value that have been identified as conservation priorities by the Maryland Department of Natural Resources (DNR).

The Parcel Evaluation Tool  provides a Conservation Benefits and Ecosystem Service Assessment Report Card for every land parcel in Maryland. Ecosystem service value does not equate to a Fair Market appraisal. The Report Card values reflect many of the ecological priorities established for Stateside Program Open Space (POS). To provide feedback on the Parcel Evaluation Tool please email Kevin Coyne at kevin.coyne@maryland.gov.

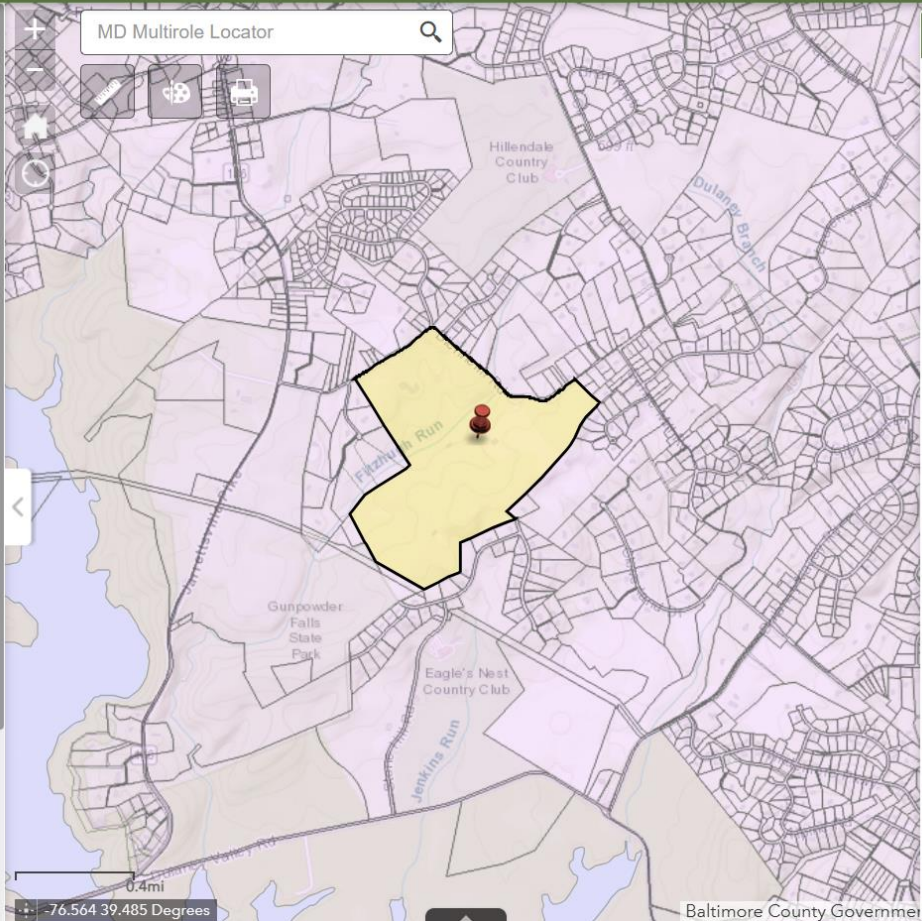
The GreenPrint map also displays information about four of Maryland's most active State operated land conservation programs:

- Program Open Space (POS) - Stateside,
- the Maryland Agricultural Land Preservation Foundation (MALPF),
- the Maryland Environmental Trust (MET),
- and the Rural Legacy Program.

GreenPrint offers a way to improve how these programs work together and assists in steering POS acquisitions to the TEAs. The TEAs were developed in 2008 and then updated in 2011. This maps shows the 2011 version of the TEAs. Therefore, some older acquisitions may not appear in the TEAs, even though they were acquired using the TEAs available at that time. The maps also display other protected land data for reference.

More details can be found at:
<http://greenprint.maryland.gov/faq/>
and

MD Multirole Locator



Parcel Evaluation









← Conservation Benefits Assessment

Parcel Analyzed

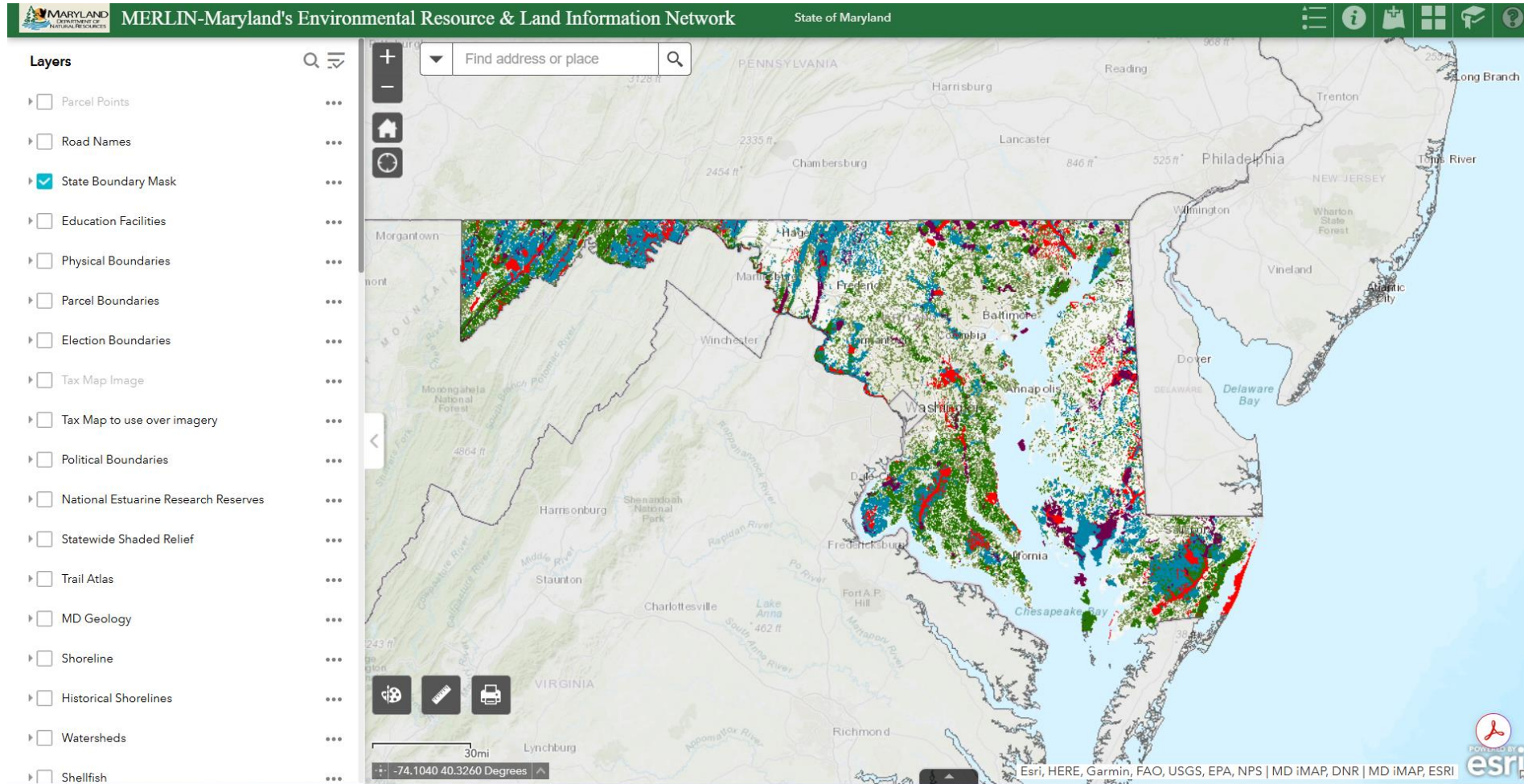
Account ID:04151501350570
Tax Map:0104
Parcel ID:0282
Parcel size:0.40 acres
Targeted Ecological Area: 0.00 acres

Print Report

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.

Benefits Rating	Ecosystem Services
Habitat Connectivity 	★★★★★
Rare Species & Wildlife Habitat 	★★★★★
Support of Aquatic Life 	★★★★★
Forests Important for Water Quality Protection 	★★★★★
Targeted Ecological Area 	NO
Coastal Community Resiliency 	★★★★★
Future Wetland Habitat 	★★★★★
Proximity to Protected Lands 	★★★★★

MERLIN

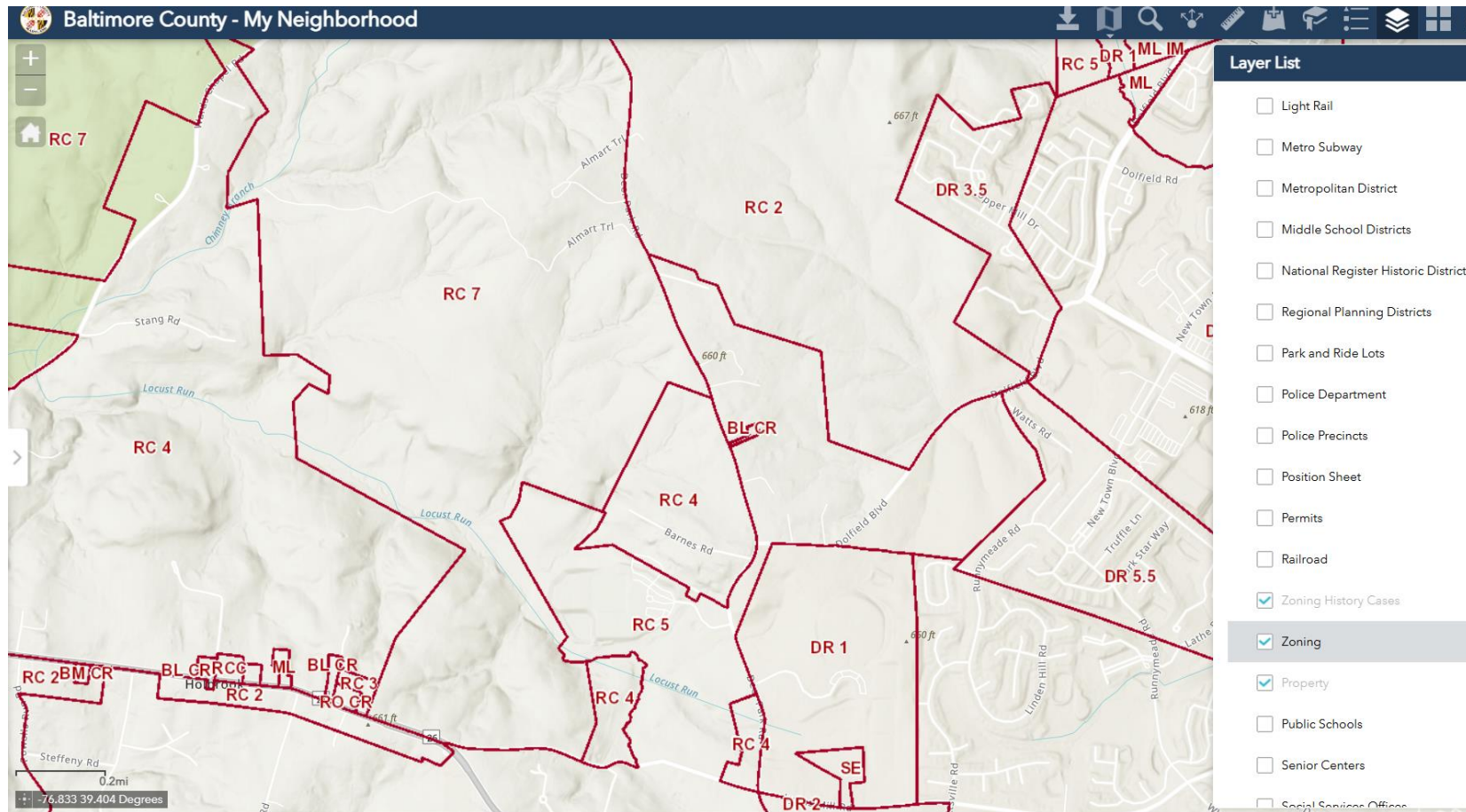


MERLIN VS PET

MERLIN vs Parcel Evaluation Tool

MERLIN Only	Common Features	PET Only
<ul style="list-style-type: none">• Wetlands• FIDS & SSPRA• Critical Area• MIHP and NRHP	<ul style="list-style-type: none">• Basic tools for calculations• Satellite Imagery & LiDAR• Focal Areas: TEA & Rural Legacy• SDAT• BioNet• Protected Lands	<ul style="list-style-type: none">• Blue Infrastructure• Stronghold Watershed

Other Spatial Resources: P & Z



Other Spatial Resources: LiDAR

Wetlands layer not accurate for streambeds

LiDAR has great resolution

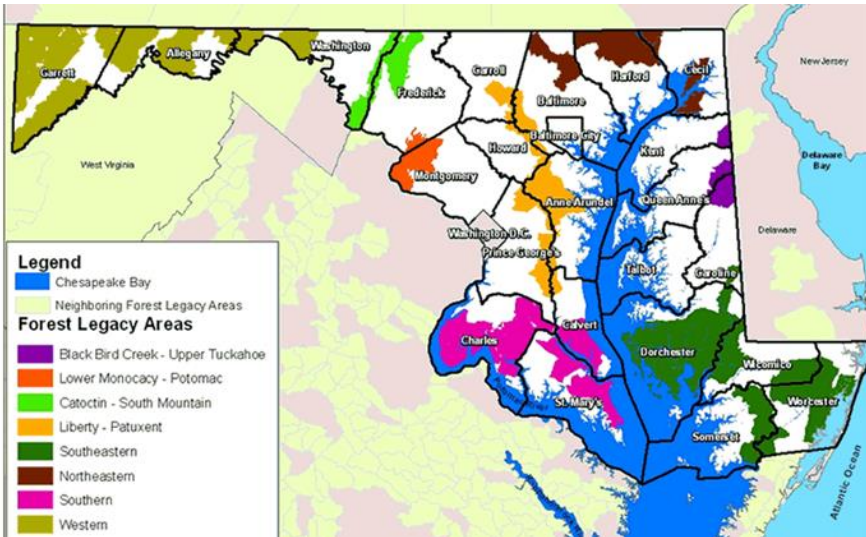
Generate line layer and buffer in GIS

More informative than Topo

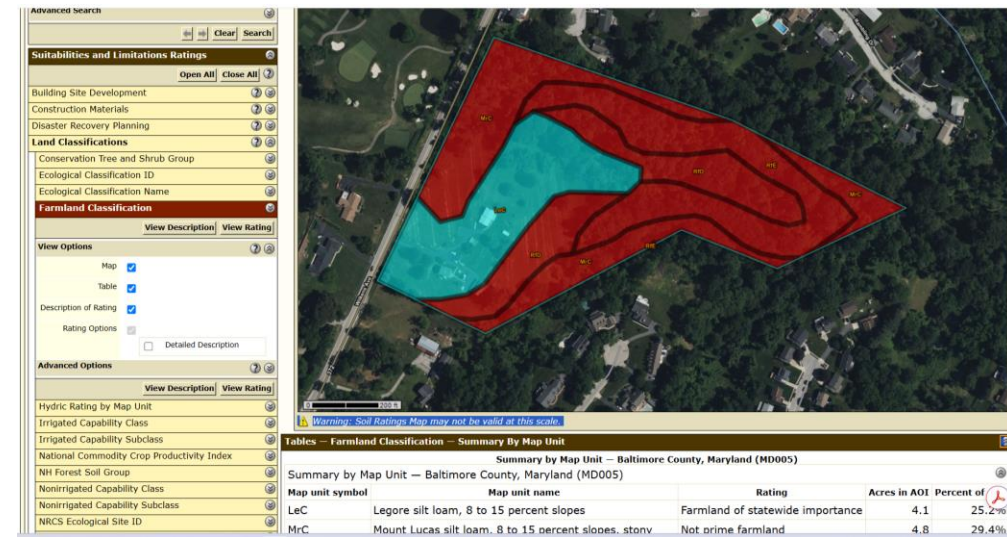
Can be added to ArcPro from PE Tool



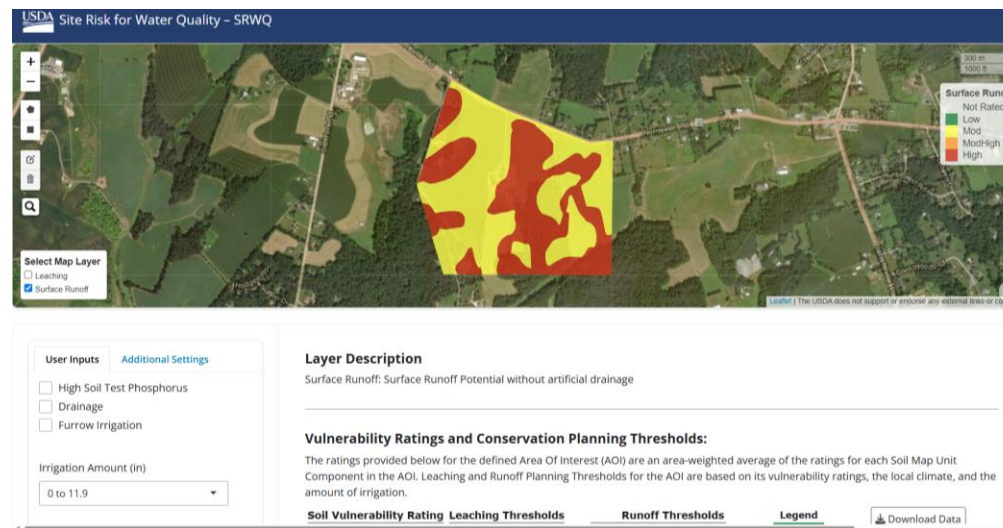
Other Spatial Resources: USDA



Forest Legacy Areas



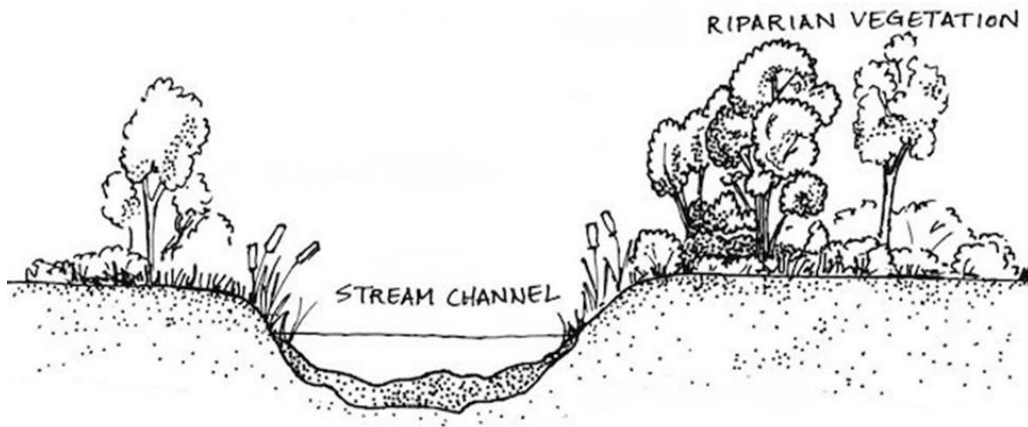
Web Soil Survey



Site Risk for Water Quality

Other Spatial Resources: USDA

- **AgBufferBuilder Tool**
 - Allows user to create buffer based on limiting inputs
 - Requires advanced ArcGIS user-knowledge



Other Spatial Resources: TNC



GEOSPATIAL CONSERVATION ATLAS



Resilient Land Mapping Tool
Conservation Dashboard
Connecting Canopies Equity Tool

Avoided Forest Conversion Tool
Resilient River Explorer
And more!

Spatial Resource Links

- MERLIN
 - <https://maryland.maps.arcgis.com/apps/webappviewer/index.html?id=434b195197364344a661da85c9bab3c9>
- Parcel Evaluation Tool
 - <https://geodata.md.gov/greenprint/>
- Resiliency and Restoration
 - <https://experience.arcgis.com/experience/56e79cd75fa64fcf8a4017fdce174e14/?draft=true>
- Web Soil Survey
 - <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>
- Site Risk for Water Quality
 - <https://dshub.usda.gov/srwq/>

Spatial Resource Links

- AgBufferBuilder Tool
 - <https://www.fs.usda.gov/nac/resources/tools/AgBufferBuilder.shtml>
- Forest Legacy Area
 - <https://www.arcgis.com/apps/dashboards/8f299852c28d4facb20c20200bbafc0a>
- TNC Dashboard
 - <https://www.maps.tnc.org/>
- Audubon Important Bird Areas
 - https://gis.audubon.org/portal/apps/sites/?_gl=1*cqhu4j*_gcl_au*NTg4MzY2Mzc3LjE3MzQwMjkwNTI.*_ga*Nzc3ODM1NzkwLjE3MzQwMjkwNTI.*_ga_X2XNL2MWTT*MTczODg2Mjc5Mi41LjEuMTczODg2NDMxNS42MC4wLjA.#/nas-hub-site/pages/data-review

Breaktime!

- Back in 10 min
- Next up: Demo



MET Intake Sheet

Previous intake sheet

- Difficult to replicate
- Aggregated criteria
- Offramps were not clear

New intake sheet

- Independently repeatable
- Transparent
- General focus on ecological value
- Provides offramps



MET Intake Scoring Criteria



Parcel Size and Dwelling Units



Public View Assessment



Ecological Scoring via Parcel Evaluation Tool



Historic Relevance



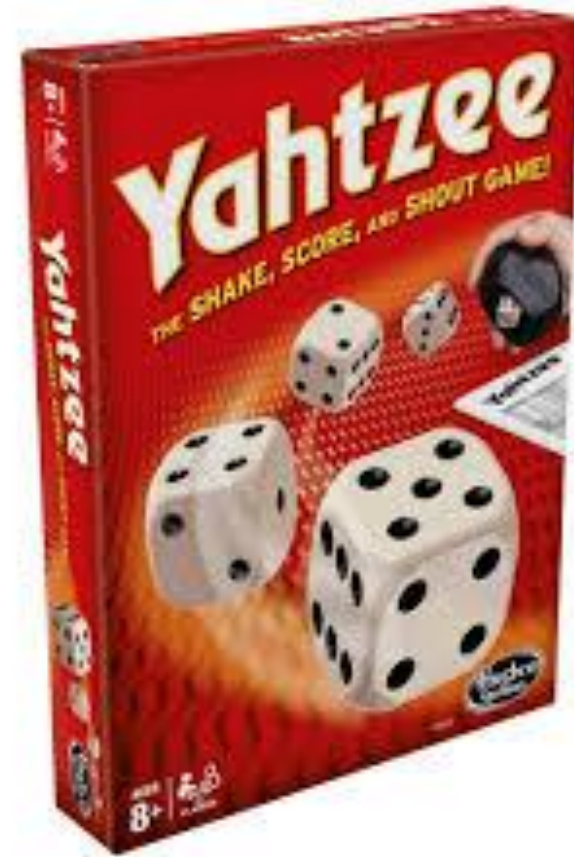
Bonus Points



Support (off ramp)



Good Project \geq 50 points



Open Space & Scenic View

Parcel Size and Dwelling Units

- Large rural and coheld-urban projects prioritized
- Lose points for dwelling units (DU) and smaller parcels

Scenic View

- Public Roadway
- Public Waterway
- 1pt per 100 feet (10pt max)

Criteria	Score
Eastern >50ac Western >75ac Coheld Urban	20
25-50/75ac	10
20-25ac/ 0 DU	0
20-25ac /1DU	-5
20-25ac >1DU	-10
10-20ac/0DU	-5
10-20ac/1DU	-10
10-20ac/ >1DU	-15
0-9ac/0DU	-10
0-9ac/1DU	-20
0-9ac/ >1DU	-25

Ecological Scoring Criteria

Parcel Evaluation Tool

1-5 pts		Habitat Connectivity
1-5 pts		Rare Species & Wildlife Habitat
1-5 pts		Support of Aquatic Life
1-5 pts		Forests for Water Quality
0 or 5pts		Targeted Ecological Area
1-5 pts		Coastal Community Resiliency
1-5 pts		Future Wetland Habitat
1-5 pts		Proximity to Protected Lands

Parcel Evaluation	
Account ID:2200000980	
Tax Map:	
Parcel ID:	
Parcel size:250.87 acres	
Targeted Ecological Area: 0.00 acres	
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.	
Benefits Rating	Ecosystem Services
Habitat Connectivity <i>i</i>	★★★★☆
Rare Species & Wildlife Habitat <i>i</i>	★★★☆☆
Support of Aquatic Life <i>i</i>	★★★★☆
Forests Important for Water Quality Protection <i>i</i>	★★★★☆
Targeted Ecological Area <i>i</i>	NO
Coastal Community Resiliency <i>i</i>	★★★★★
Future Wetland Habitat <i>i</i>	★★☆☆☆
Proximity to Protected Lands <i>i</i>	★★★★★

Other Scoring Criteria

Historic Value

0 or 10 pts | **Historic Planning Area**

Bonus Points

40 pts | **Unlimited Public Access**

10 pts | **Limited Public Access**

10 pts | **Important Bird Area**

10 pts | **Planning Area**

20 pts | **Coheld or Adds to Existing Easement**

Offramp

-100 pts | **No support from leadership**



MET Intake Sheet Demo

Two Scenarios:

1. Rural Carroll County
(Solely held)
2. Urban Baltimore
County (Co-held)

**Evaluate using MERLIN
and PET**



Other Tool Demos



Resilience and Restoration Mapper



SMCA Planning Tool



TNC Dashboard



Others?



Neighbor Space Tool

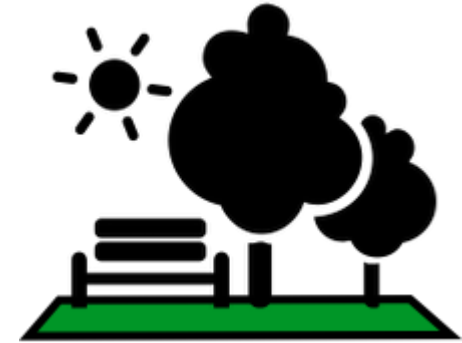
- **Built on three pillars of livability:**

- Environmental
- Social
- Economic

- **Applies pair-wise weights to each goal**



Most watersheds are impaired by sediment and or nutrients.



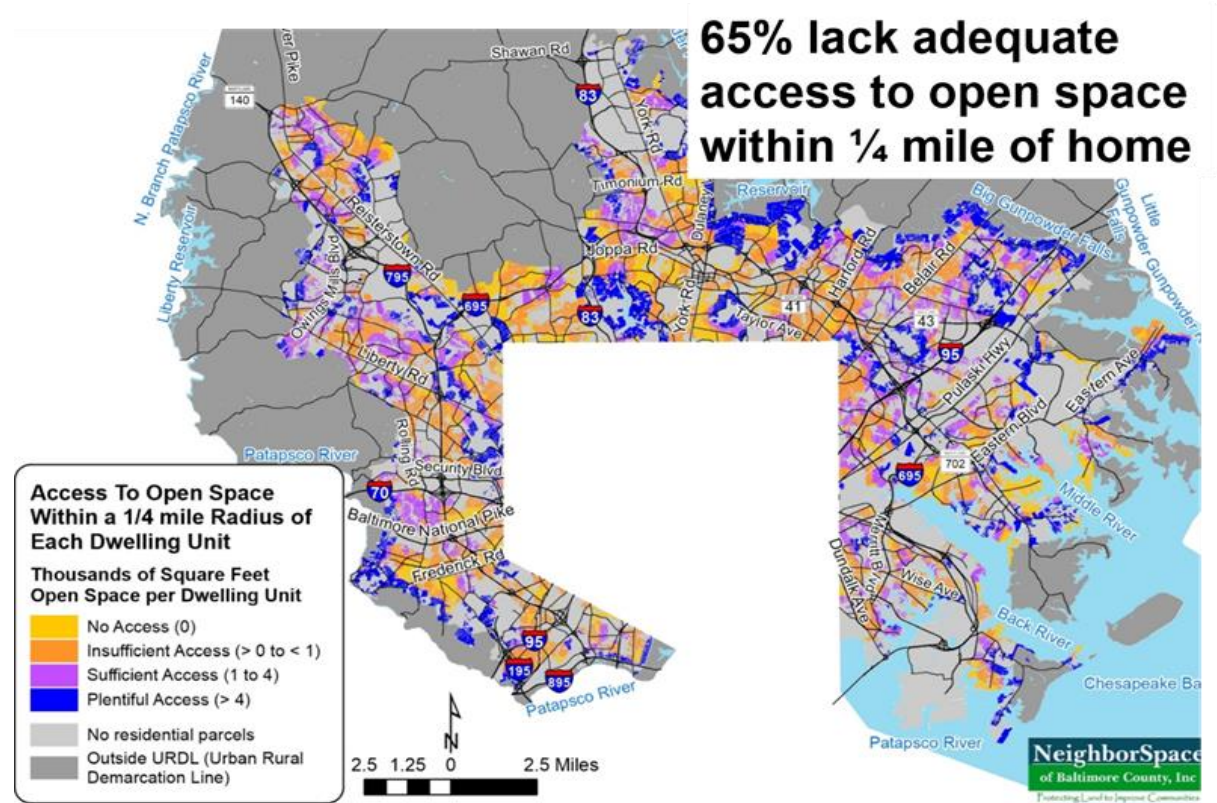
65% of residences lack access to open space within a 5-minute walk



Median home values lag behind other jurisdictions.

Neighbor Space Tool

- Identifies areas deficient of green space
- Provides a way to prioritize



Breaktime

- Back in 10min!
- Next up: Outreach



Anyone want more easements?

Acquisition

- **Passive**
 - Landowner comes to you
- **Active Outreach**
 - Mail
 - Workshops
- **Targeted ?**
 - What is the guide?



Goal Oriented Outreach



Take stock of what you have



Evaluate goals



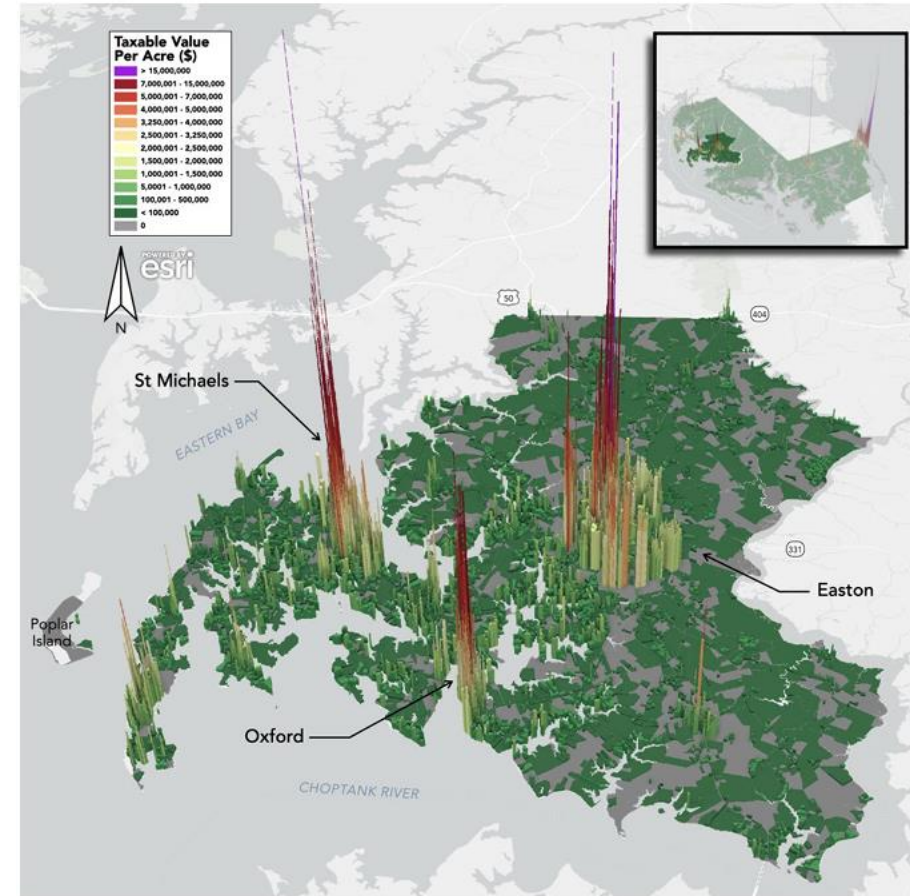
Create a plan



Conduct outreach



Evaluate effectiveness



Credit: Eastern Shore Land Conservancy

Baltimore County Example

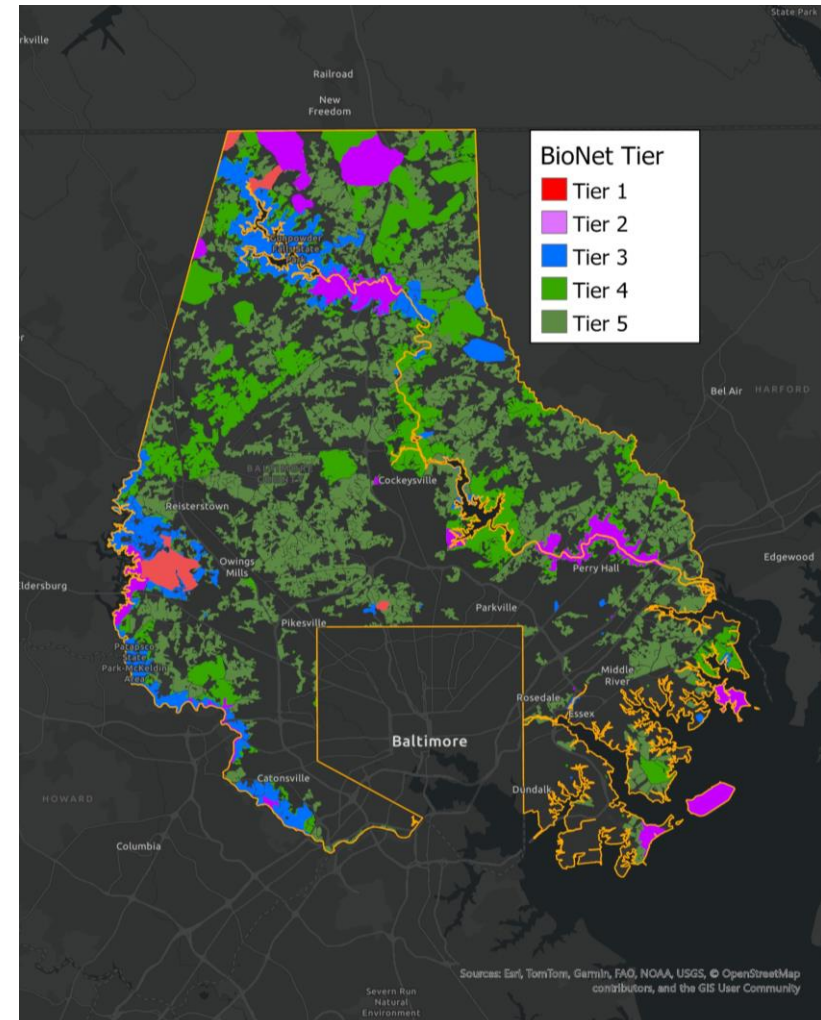
✓ Prioritize ecological value

- Tie BioNet to SDAT
- Generate descriptive stats
- Acres and sizes of unprotected BioNet parcels
- Assess goals

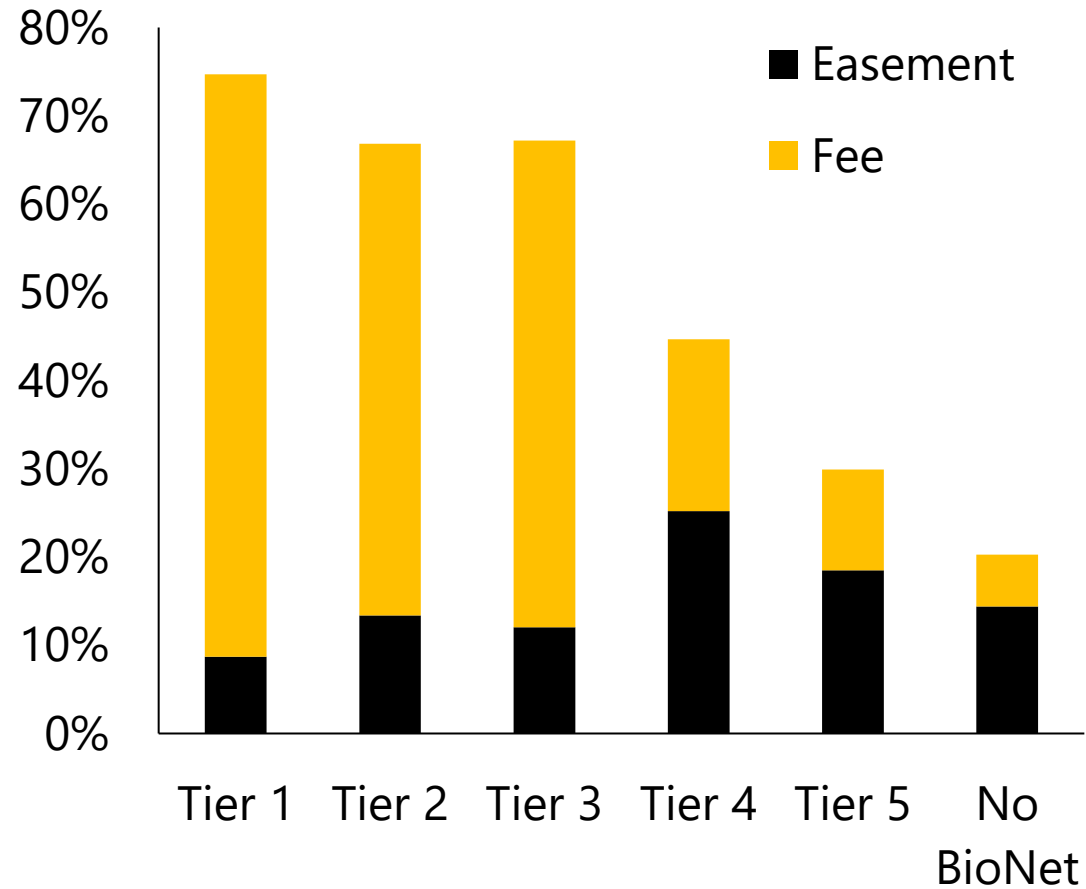
✓ Develop Approach

- Establish number of contacts
- Conduct outreach via mail

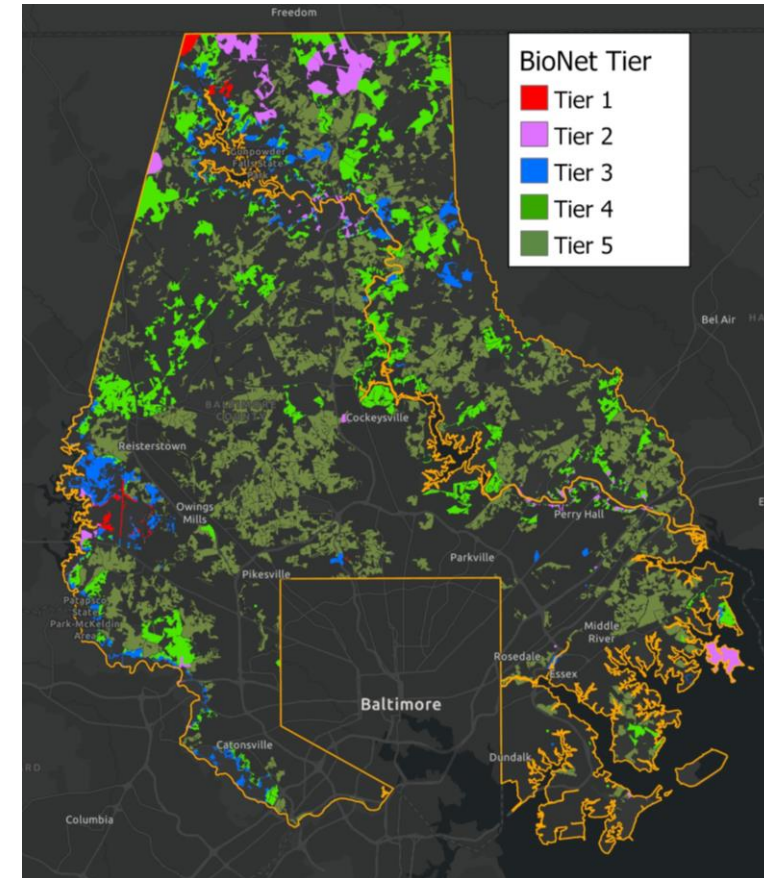
✓ Consider in concert with outreach event



Protected & Unprotected BioNet



Unprotected x BioNet



Parcel Size Count

- **Ideal:** > 50 acres
- **Large:** 25 – 50 acres
- **Medium:** 20 – 25 acres
- **Small:** 10 – 20 acres
- **Too Small:** < 10 acres

Size	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Ideal	0	6	14	51	70
Large	6	25	17	102	198
Medium	1	9	19	63	135
Small	12	46	77	270	565
Too Small	505	1,945	4,678	10,685	36,166

Parcel Size Acreage

- 100% of Ideal & Large
 - T4 = 61%
 - T5 = 44%
- 100% of Small – Ideal
 - T5 to 56%
- What do we do with <10-acre parcels?

Size	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Ideal		1,285	1,111	4,285	5,395
Large	223	829	548	3,503	6,586
Medium	25	206	420	1,398	3,006
Small	159	660	1,035	3,653	7,949
Too Small	500	2,669	3,890	13,272	37,462

Another Discussion...



Tier one BioNet parcel cluster



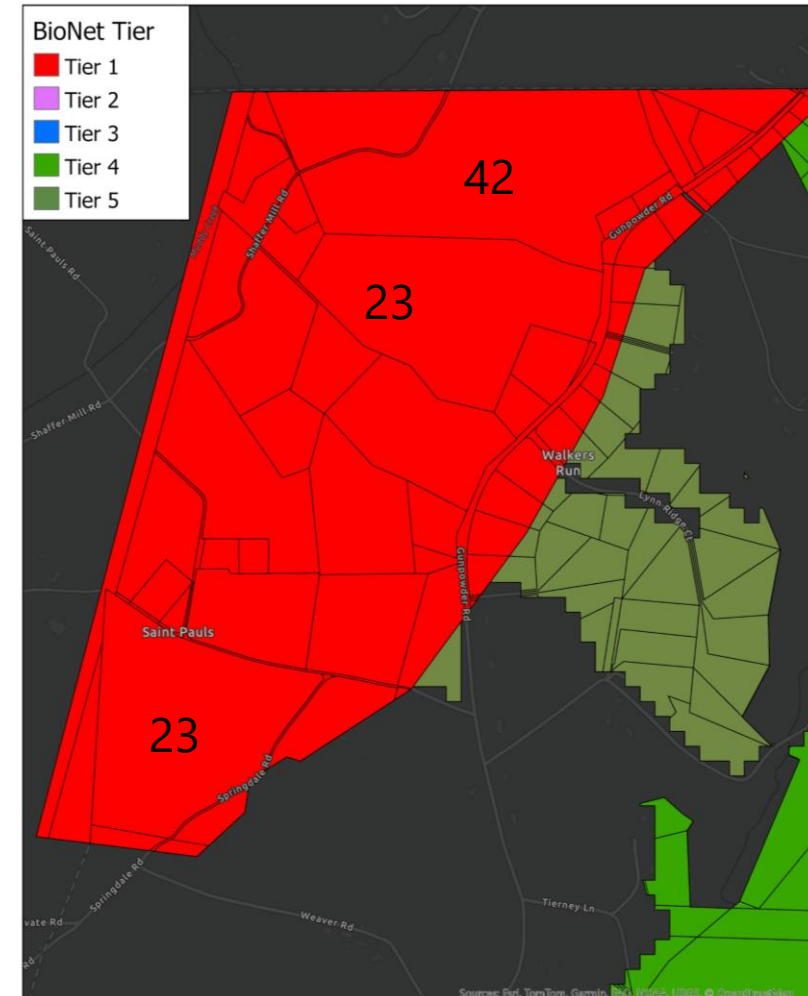
How do we conserve these?



Assess whether “this is working”



New program?



Outreach

Planting seeds for your network to grow

- Conduct outreach
 - 100 – 200 landowners (?)
- Include land trust partner
- Invite to upcoming seminar
- Gauge effectiveness

This land in your neighborhood is
PROTECTED FOREVER
with a conservation easement.



Thoughts?

- Thank you for your participation!

