



Accelerating Land Protection for Water Quality

New Approaches & Funding

Chesapeake Bay Watershed Land Trust Assessment

CHESAPEAKE BAY WATERSHED LAND TRUST ASSESSMENT:
ACCELERATING LAND CONSERVATION TO PROTECT
AND IMPROVE WATER QUALITY



REPORT FOR THE CHESAPEAKE BAY FUNDERS NETWORK
AND THE LAND TRUST ALLIANCE

DECEMBER 2015

Prepared By Long Haul Conservation Advisors, Mary McBryde

Find It Here

[http://www.landtrustalliance.org/
what-we-do/our-regional-
programs/northeast/chesapeake
-bay-assessment](http://www.landtrustalliance.org/what-we-do/our-regional-programs/northeast/chesapeake-bay-assessment)

Findings

- You are impacting water quality!
- Work evolving to meet broader goals
- Science-based decision making growing
- Rethinking how to pay for land protection
- Connecting more dots

Chesapeake Bay Land & Water Initiative

- Partnership: CBFN & the Land Trust Alliance
- Integrated design: partnerships, science, policy, community engagement, high level capacity building
- Sustained, targeted approach & near term results
- Launch 2016 – First Phase through 2020



Chesapeake Bay Land & Water Initiative

\$1.3 Million Grant Program

- Support diverse partners & collaborations
- Accelerate land protection & stewardship with high impact
- Advance science to increase effectiveness
- Build greater public support

Public Policy-Communications

- Federal, regional, state & local
- Increase the “clout” of permanent land protection
- Support campaigns for public funding
- Secure credit for conservation in the CB TMDL
- Advance the “new math” of ecosystem services

Initiative Vision

Focus on high capacity partners, high leverage strategies and near term opportunities to accelerate land protection programs that best preserve or enhance water quality in the Chesapeake Bay region.

Crediting Conservation 101

2013 Chesapeake Bay Program Report

- Four policy changes recommended – two are underway
- EPA TMDL seeks pollution reduction not pollution avoidance
- No credit to localities for land protection to meet water quality targets
- New math & technology can now make this case!

What's Needed to Get Credit

- Change how land use and population is forecast under TMDL – 2010 vs 2025 baseline
- Allow local governments to use conservation to offset future pollution loads from development
- Land trusts & partners support this change at local and regional level

Policy Change Options

1. Perpetual BMP “credit multiplier”
2. Premium Credit for Targeted Conserved Lands
3. Crediting Conservation in Offset Calculations
4. 2025 Land Use Baseline



Policy Change Option 4

2025 Land Use Baseline

- + Acknowledges growth impacts
- + Creates direct incentive to conserve
- + Supports higher density

Requires geographic specificity and growth projection for 2025

Demonstrating the Value and Building a Policy Framework to Retain Forestland in the Chesapeake Bay Watershed

**Healthy Watersheds Forest/TMDL
Project**

Virginia United Land Trust (VAuLT) Conference

Greg Evans, Virginia Department of Forestry

April 28, 2016

Phase I: Findings

- Forestland retention improves water quality and healthy watershed values
 - nearly 3M pounds of pollution could be avoided
- A range of potential offsets are possible depending on investment made early in forestland retention
- Costs associated with BMPs needed to comply with stormwater regulations can be reduced, while maximizing the ecosystem services provided by forests

Phase I: Economic Findings

\$125 Million in possible future offset savings among the four localities and one city in the Pilot Study Area compared to the current EPA TMDL Model 2025 Projections

Phase II Goal: Engagement

PA and VA, work with local governments and citizens to:

- ✓ Integrate value of forestland retention in the design and planning of new development
- ✓ Build effective standards and guidance
- ✓ Meet both development and water quality needs for localities
- ✓ Integrate aesthetics and quality of life values
- ✓ Build consensus on incentives and drivers to land use decisions
- ✓ Make rural and urban connections

For further information:

Greg Evans, Virginia Department of Forestry
gregory.evans@dof.virginia.gov

James Davis-Martin, Virginia Department of
Environmental Quality

James.Davis-Martin@deq.virginia.gov

Tim Ware, George Washington Regional Commission
ware@gwregion.org

Eldon James, Rappahannock River Basin Commission
ejames7@earthlink.net

Mark Bryer, The Nature Conservancy
mbryer@tnc.org



New Approaches

Laura Sanford
Eastern Shore Land Conservancy

Kate Patton
Lower Shore Land Trust

Stewardship and BMPs

- Protected lands and water quality
- Protected lands offer perfect setting for BMPs
- How can we as a land trust offer BMP advice to landowners
- Accounting for Growth and Nutrient Trading



Trainings

1. NRCS – Technical Service Provider Training
 - 4 Days staff time – Basic and Follow-up classes
2. NRCS – Equivalents Training
 - 2 Days staff time
3. Maryland Department of Agriculture – Agricultural Nutrient Management Plan Writer
 - 3 Days direct staff time (course and test), study time, \$245 each
4. Maryland Nutrient Trading Online Training
 - 1 Day staff time



Training Information

NRCS – Technical Service Provider Training

- <http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/technical/tsp/>
- NRCS – Equivalent Training
- http://www.nrcs.usda.gov/wps/portal/nrcs/detail/mn/technical/ecoscience/nutrient/?cid=nrcs142p2_023692

Maryland Department of Agriculture – Agricultural Nutrient Management Plan Writer

- <https://extension.umd.edu/anmp>

Maryland Nutrient Trading Online Training

- <http://www.mdnutrienttrading.com/>



Benefits

- Educated staff = Educated landowners
- Project income opportunities
- Bridging the enviro-ag gap
- Familiarity with available programs
- Familiarity with “systems”



Cambridge Gateways

Local Government Buy-In

City of Cambridge
307 Gay Street
Cambridge, Maryland 21613

EXECUTIVE DEPARTMENT

TELEPHONE (410) 228-4000
MD RELAY (VTTY) 711 OR 1-800-735-2226

Resolution 12-006

A Resolution In Support Of The Cambridge Gateways Project

- WHEREAS,** Cambridge is a vibrant city, complete with a growing downtown and beautiful historic neighborhoods; and
- WHEREAS,** many of our places to eat, shop, play, and live are not easily visible from Route 50; and
- WHEREAS,** travelers on Route 50 often miss out on everything our town has to offer, because they do not feel invited to explore our city.

THEREFORE, BE IT RESOLVED THAT:

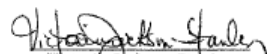
The Commissioners hereby express their support the Cambridge Gateways Project, designed to redesign and beautify the major entryways into town.

The Commissioners hereby express their sincere gratitude to the many community members, students, professional designers, and other volunteers who are contributing their time to making Cambridge an even more beautiful place.

WITNESS MY HAND AND SEAL THIS 9th DAY OF APRIL 2012.

ATTEST:


Edwin C. Kinnamon
Clerk-Treasurer


Victoria Jackson-Stanley
Mayor



Cambridge Gateways

Collaboration

ACKNOWLEDGEMENTS

CITY COUNCIL

Victoria Jackson-Stanley, Mayor
Jackie Vickers, First Ward Commissioner
Donald Sydnor, Second Ward Commissioner
Octavene Saunders, Third Ward Commissioner
Gage Thomas, Fourth Ward Commissioner
Robert Hanson, Fifth Ward Commissioner

CITY OF CAMBRIDGE STAFF

Anne Roane, City Planner
Natalie Chabot, Economic Development Director
Oden Wheeler, Public Works Director
Edwin Kinnamon, City Clerk and Treasurer
George Hyde, City Engineer
Brent Jett, Engineer
Scott Shores, GIS Specialist

TOWN STEWARD ADVISORY COMMITTEE

Tim Crosby, AIA, Delmarva Rural Laboratory
Amanda Fenstermaker, Dorchester County Tourism
Robert Hanson, Cambridge City Council
Adrian Holmes, AlphaGenesis Community Development
Frank Narr, Sailwinds Park Inc.
Brian Roche, Choptank Heritage Trail
Mari Stanley, Cambridge Main Street



WITH PROJECT SUPPORT FROM



STUDENT DESIGN ASSISTANCE

University of Maryland College Park
Maryland Institute College of Art
University of Minnesota
Portland State University
Syracuse University

Cambridge Gateways

Community Input



Cambridge Gateways

Water Quality

“The green improvements to both Maryland Avenue and the greyfield properties could both help address the water quality issues and help achieve the goals of the Urban Watershed Implementation Plan (WIPs) for Dorchester County.” — The Cambridge Gateways Report



Cambridge Gateways

Lasting Relationships

- Cannery Park Acquisition
- Phillips Packing District
- References for other communities
 - Carter in Centreville
 - Marydel Park Plans
 - Freemont Street in St. Michael's



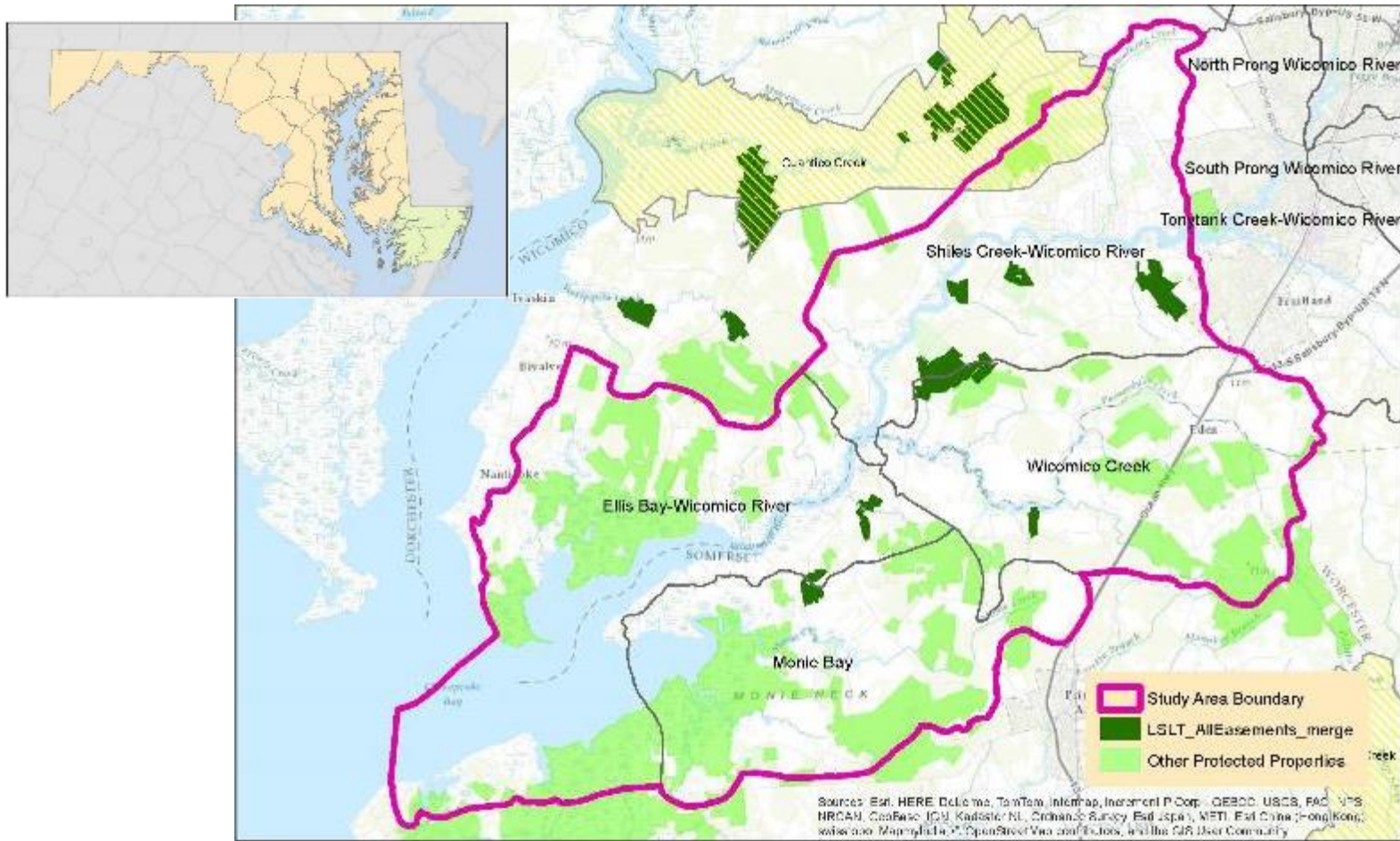


SCIENCE-BASED DECISION MAKING - NEW DESKTOP TOOL TO IDENTIFY HIGH PRIORITY PROJECTS ON THE WICOMICO RIVER



WICOMICO CONSERVATION AND RESILIENCY PLAN

- Partnership among LSLT and watershed specialists, Ridge to Reefs and Lori Lilly Environmental Solutions
- The plan completes the full Wicomico Watershed Management Plan, ongoing in phases since 2012
- Upper watershed action plans focus more on restoration in more urban areas and this project focused more on protection and conservation of valuable ecological resources in the lower four subwatersheds: Wicomico Creek, Shiles Creek, Monie Bay and Ellis Bay
- The work was funded through a Watershed Assistance Grant from the Chesapeake Bay Trust



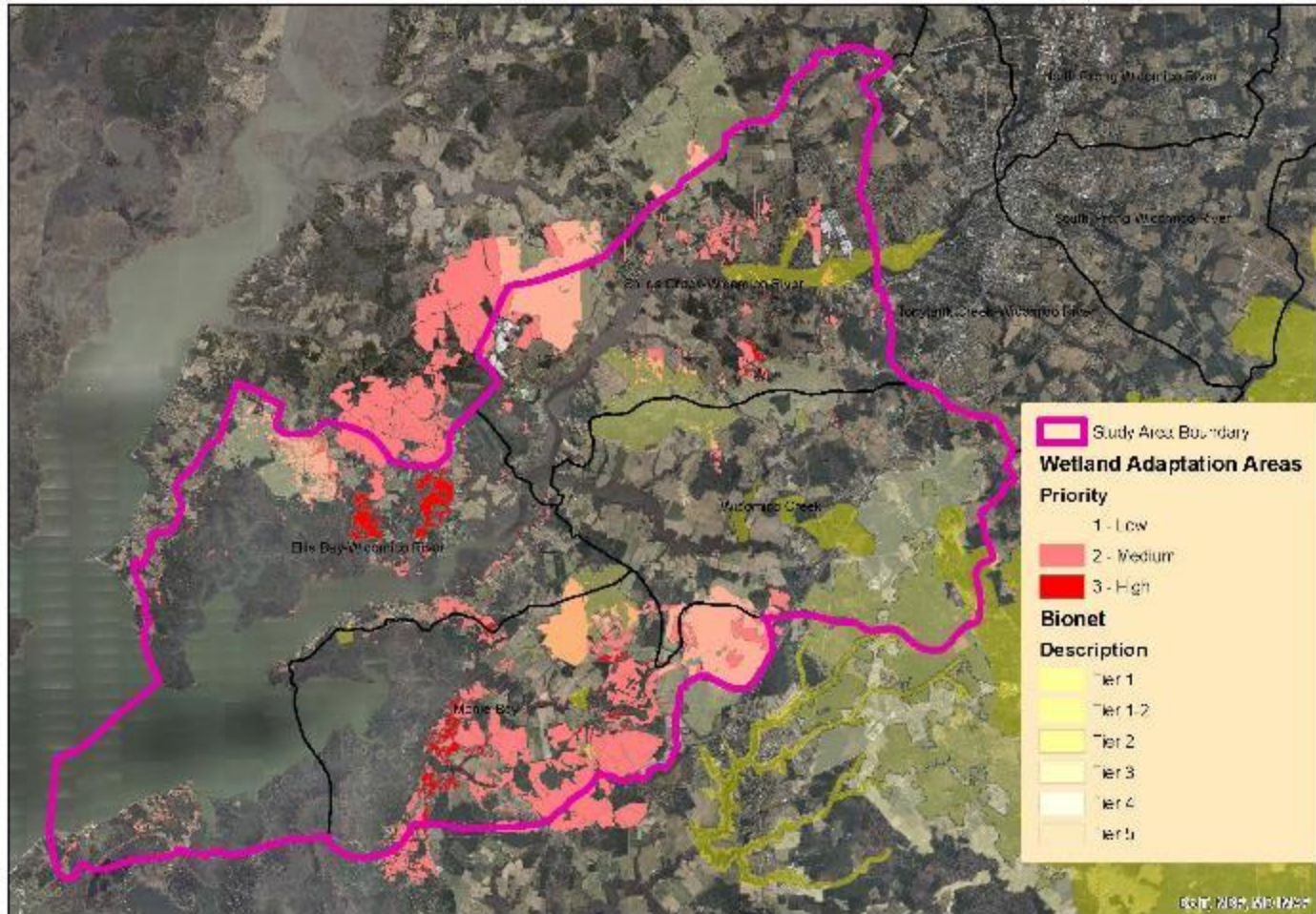
Lower Wicomico Watershed - Conservation & Resiliency Planning

Map prepared by the Lower Shore Land Trust

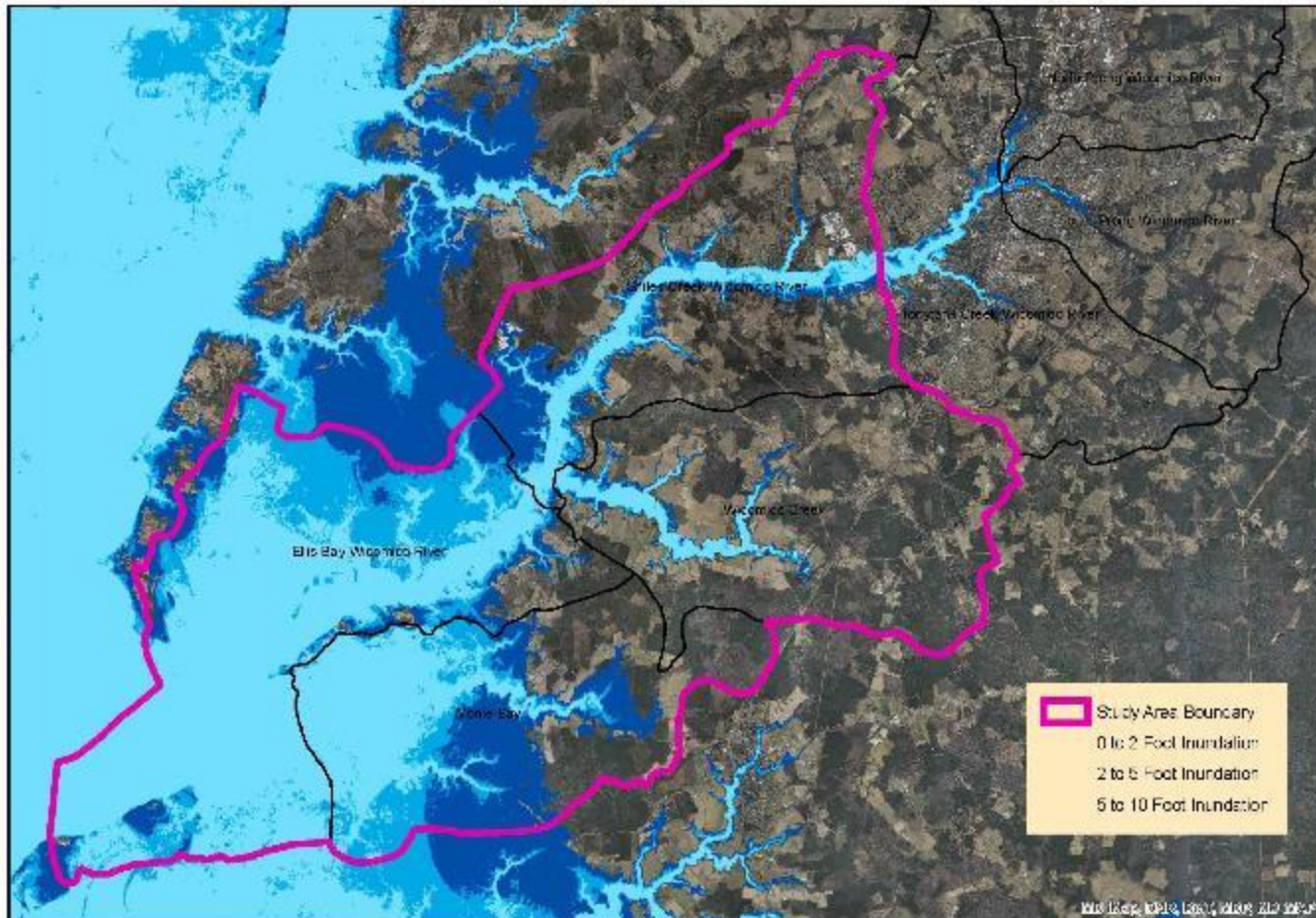
GEOGRAPHIC INFORMATION SYSTEM (GIS) DESKTOP ASSESSMENT AND ANALYSIS

- Select Criteria for Prioritization
- Water Quality
 - Identifies Collections sites
 - Assessed data for pollution targets
- Resiliency
 - Select best available models and analysis – DNRs Wetland Adaptation Areas (WAA) a combination of EPA’s Sea Level Affecting Marshes Model (SLAMM v5) & National Oceanographic Atmospheric Administration (NOAA) Coastal Services Center Marsh Migration Model
- Incorporated Conservation Criteria
 - MD DNR BioNet

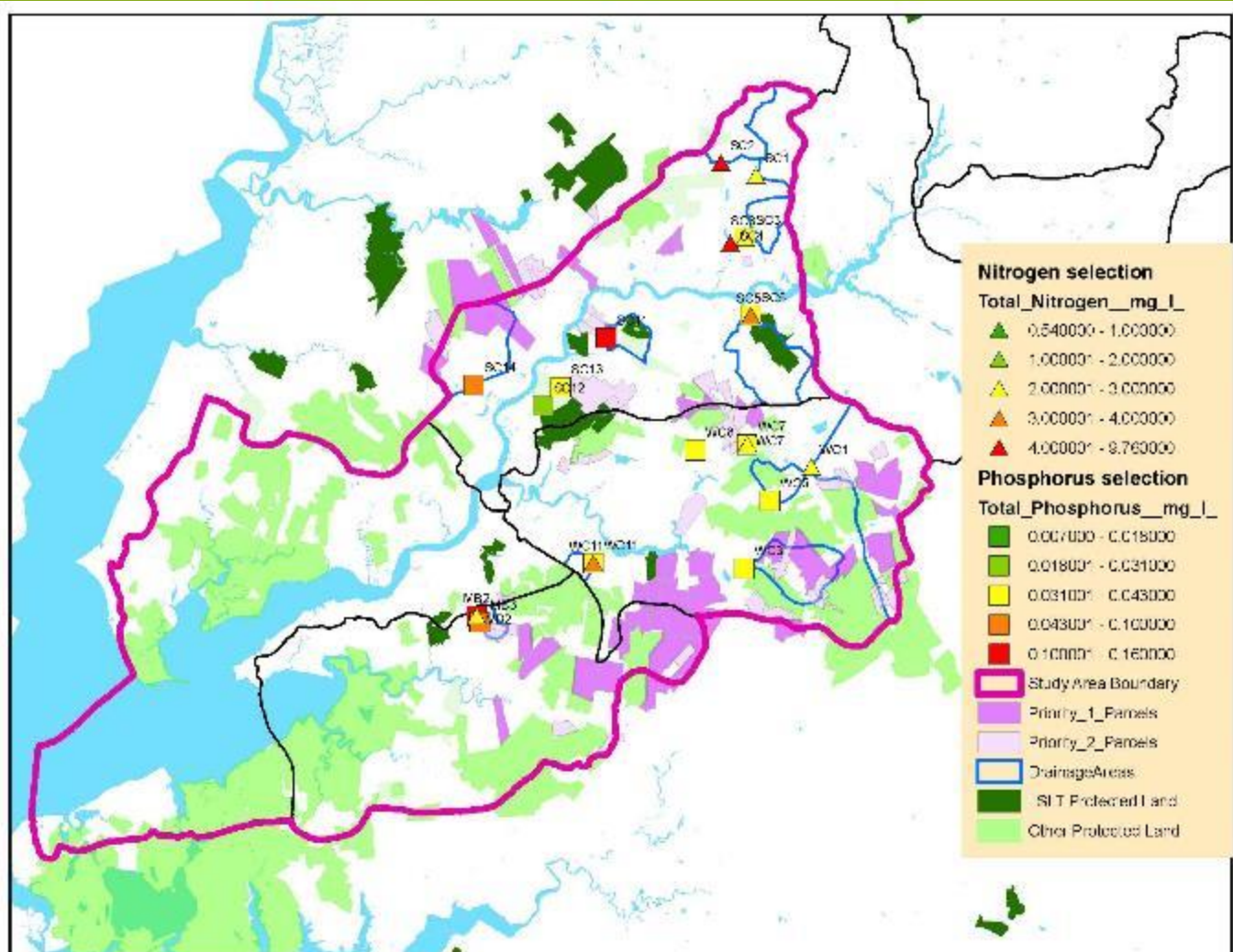




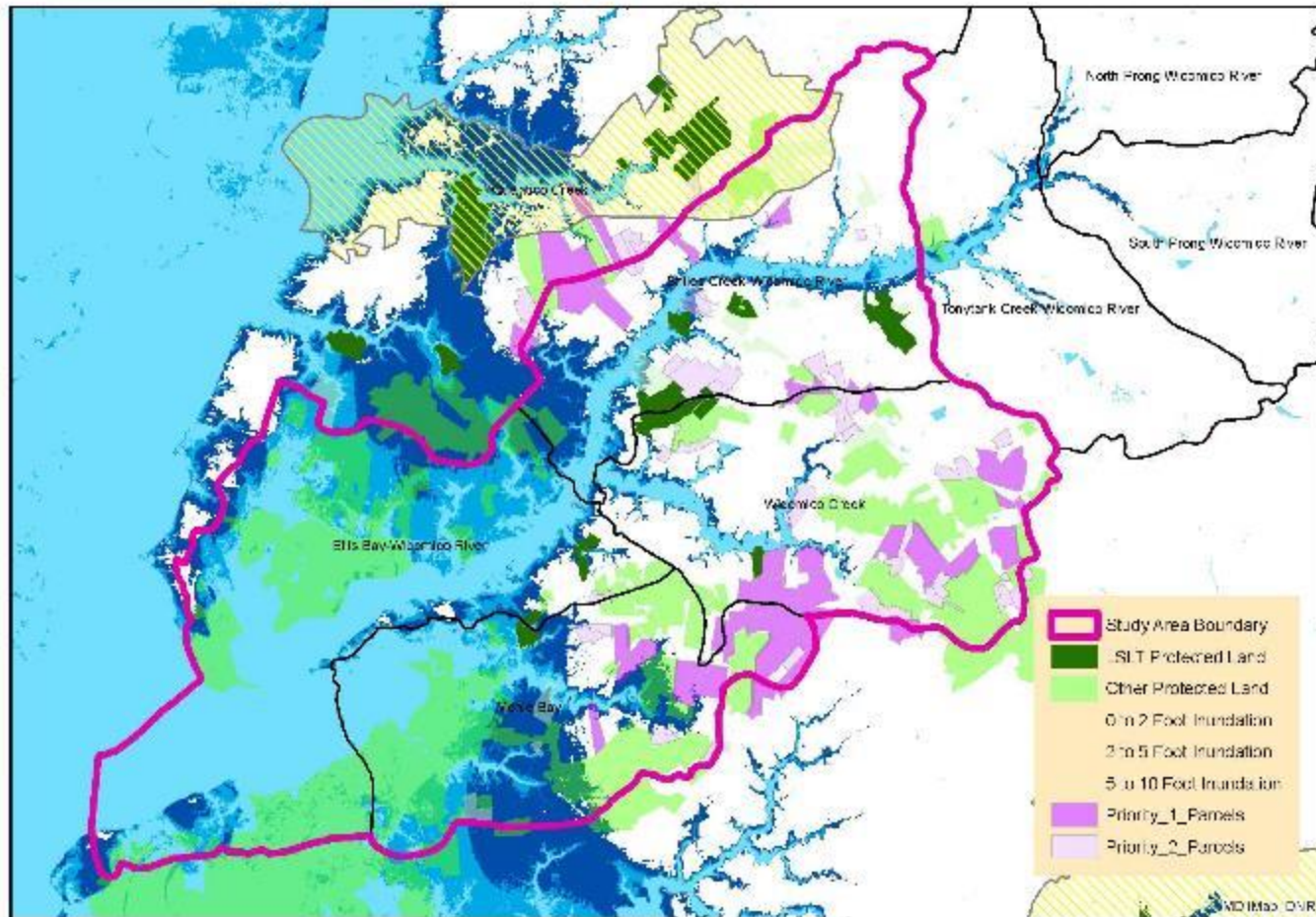
Lower Wicomico Watershed - Wetland Adaptation Areas + BioNet



Lower Wicomico Watershed - SLR Vulnerability



Lower Wicomico Watershed - Elevated Nutrient Sites & Drainage Areas



Lower Wicomico Watershed - Conservation Targets Priority 1 & 2

OUTREACH

- Conservation Roundtable
 - University of MD Extension
 - Natural Resource Conservation Service (NRCS)
 - Farm Service Agency (FSA)
 - Soil Conservation District (SCD)
 - Foresters
 - County Planners
 - NGO partners
- Educational workshops based on targeting
 - Land protection options
 - Resiliency
 - Septic & Baywise Landscaping



NEXT STEPS

- Address the two water quality Areas of Concern
- Continue landowner outreach efforts
- Implement restoration projects
- Continue watershed resiliency outreach and education
- Begin planning key adaptation measures
- Replicate throughout service area

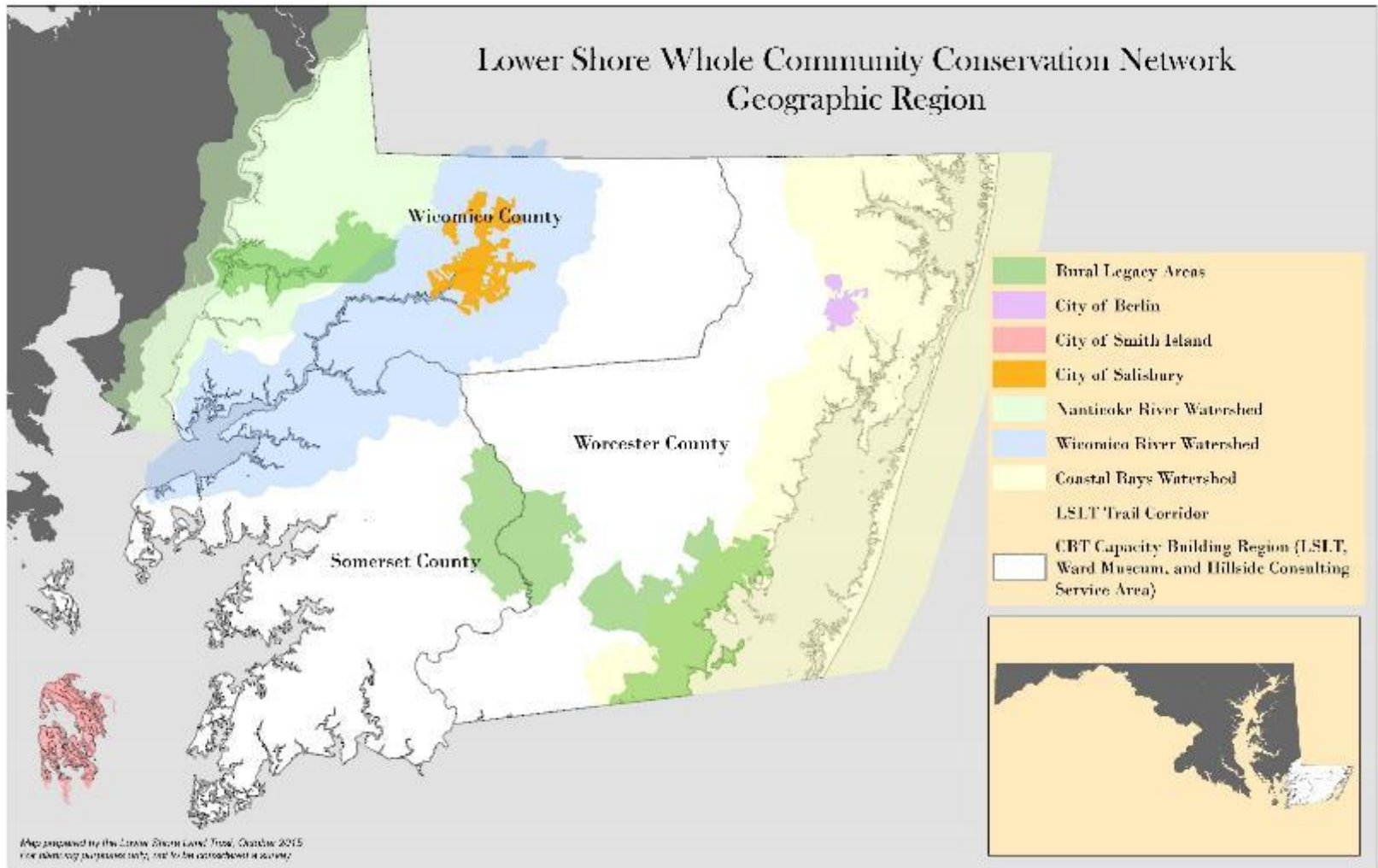




COMMUNITY-BASED CONSERVATION

THE CAMPAIGN TO BUILD SUPPORT FOR LAND PROTECTION ACROSS MANY SECTORS IN WICOMICO,
SOMERSET & WORCESTER COUNTIES

Lower Shore Whole Community Conservation Network Geographic Region



PULLING IT ALL TOGETHER...



...a plan anchored in science and infused with the cultural and natural heritage of our region for broad community support – just like a great Bouillabaisse!

RESOURCES

- [Lower Wicomico Watershed Conservation and Resiliency Planning Final Report](#)
- [Conservation Tool Box](#)
- [Wicomico Adaptation and Resiliency Planning Map](#)

