

Healthy Landscapes Goal Team Steering Committee

GOAL: Conserve, protect, restore and enhance landscapes of ecological, economic, recreational and cultural value to improve water quality, provide habitat for wildlife and increase resilience.

Healthy Landscapes

Claire Jantz, PA-DCNR
Ken Hyer, USGS
Peter Claggett, USGS

Forestry

Anne Hairston-Strang,
MD-DNR
Nanci Sonti, USFS
Katie Brownson, USFS

Adaptation

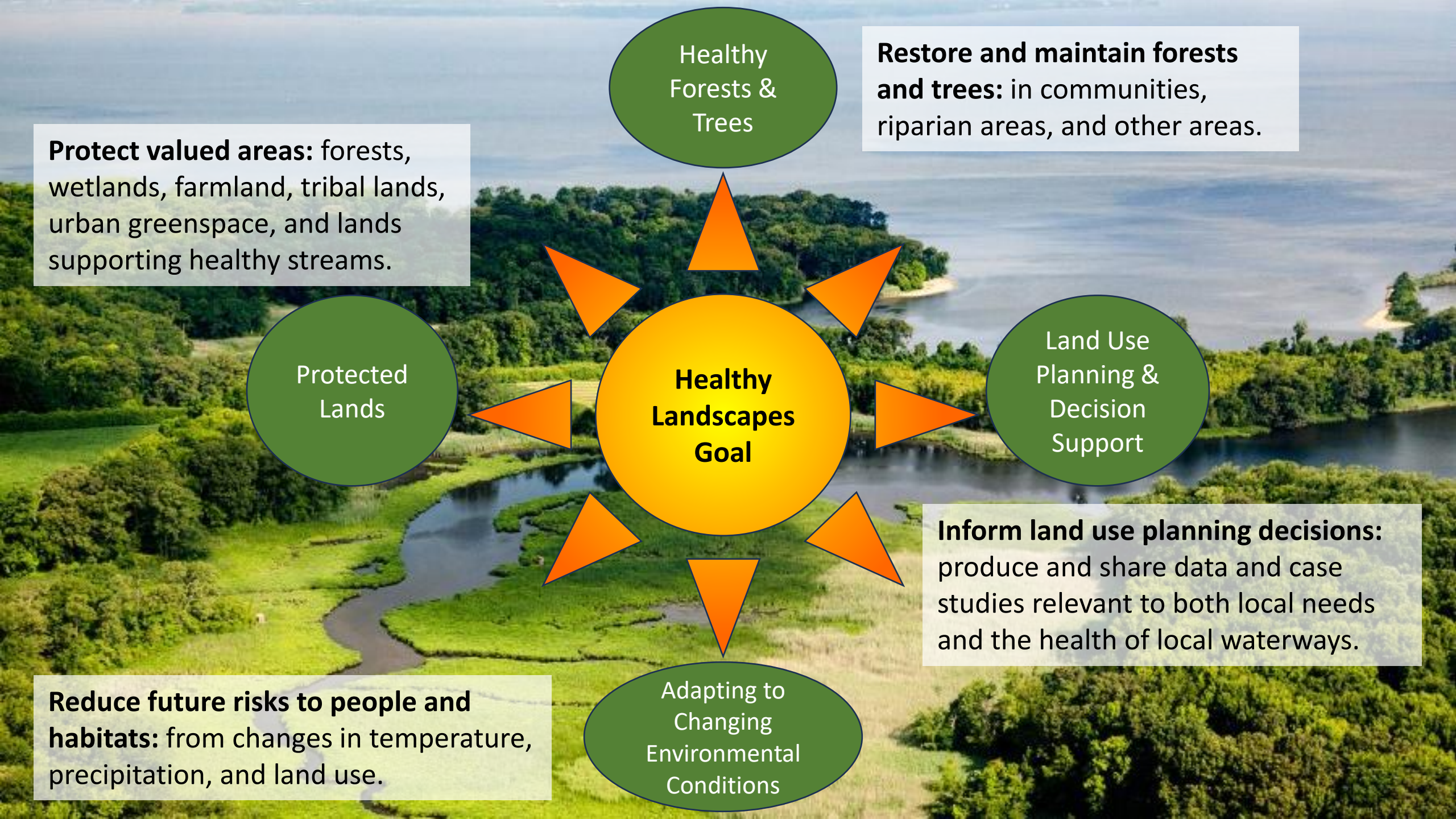
Natalie Snider, MD-DNR
Ben McFarlane, HRPDC
Julie Reichert-Nguyen, NOAA

Land Use

Debbie Herr Cornwell, MDP
Rosa Hance, Choose Clean Water
Jackie Pickford, USGS

Protected Lands

Jeff Lerner, EPA
Sophie Waterman, USGS



Healthy
Forests &
Trees

Restore and maintain forests and trees: in communities, riparian areas, and other areas.

Protect valued areas: forests, wetlands, farmland, tribal lands, urban greenspace, and lands supporting healthy streams.

Protected
Lands

**Healthy
Landscapes
Goal**

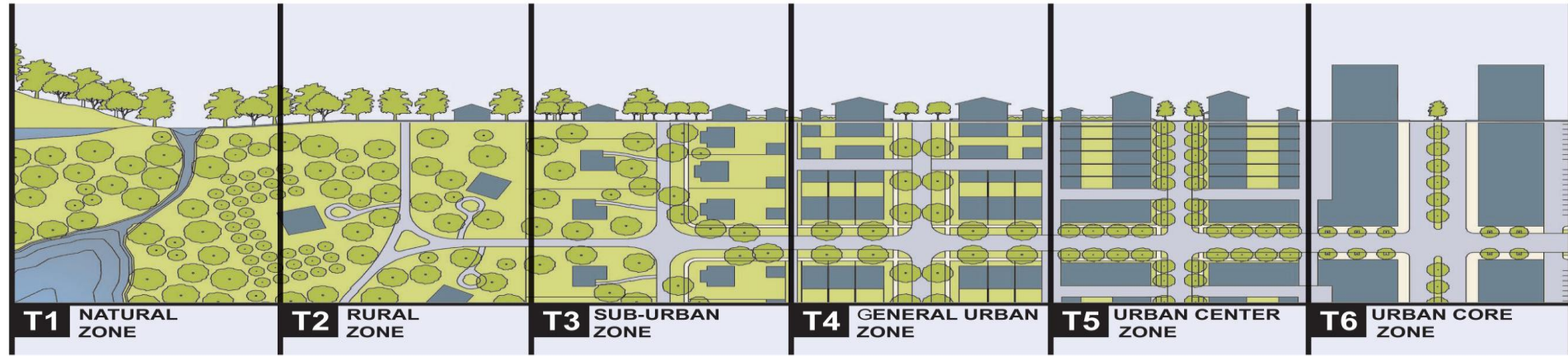
Land Use
Planning &
Decision
Support

Inform land use planning decisions: produce and share data and case studies relevant to both local needs and the health of local waterways.

Reduce future risks to people and habitats: from changes in temperature, precipitation, and land use.

Adapting to
Changing
Environmental
Conditions

Complementary Nature of Our Outcomes



Planning

Very-low density zoning
 Conservation zoning
 Park planning
 Recreation trails

Infill/redevelopment
 Cluster housing

Walkability
 Transit-oriented development
 Redevelopment
 Mixed use

Resiliency

Living shorelines
 Floodplain connectivity
 Wind turbines, solar farms
 Silviculture

Low-impact development
 Soil amendments
 Natural/native landscaping
 Connected greenways
 Community and distributed solar

Green roofs
 Pervious pavement
 Detention vaults
 Solar roofs
 Street trees

Conservation

Working farms and forests
 Source-water protection
 Wildlife habitat protection and connectivity

Floodplain and wetland protection
 Community parks and recreation areas
 Trail networks

Greenspace conservation
 Trail networks

Forests

Conservation of forest habitats
 Conservation of working lands
 Sustainable forest management
 Riparian forest buffers

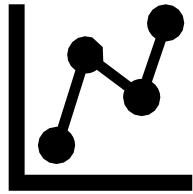
Street trees
 Riparian forest buffers
 Reforestation of plantable areas
 Controlling pests, disease, and invasives

Street trees
 Controlling pests, disease, and invasives

* Image from the Center for Applied Transect Studies (https://transect.org/rural_img.html)

What is the Land Use Decision Support (LUDS) Outcome?

Developing and delivering relevant land use information to support local planning and decision-making.



Develop the data

Actionable land use information

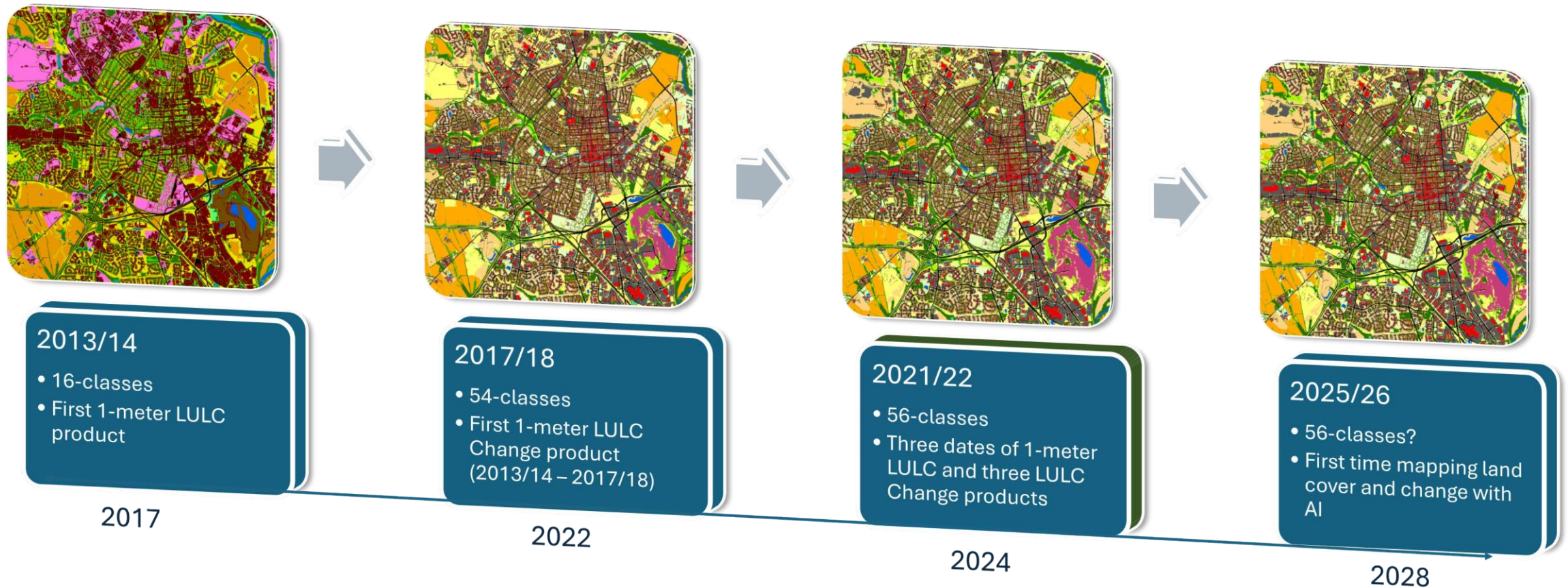
Deliver the data

Support planning & decision-making

Document the impact

Collect and communicate use cases

Mapping Land Use/Land Cover (LULC)

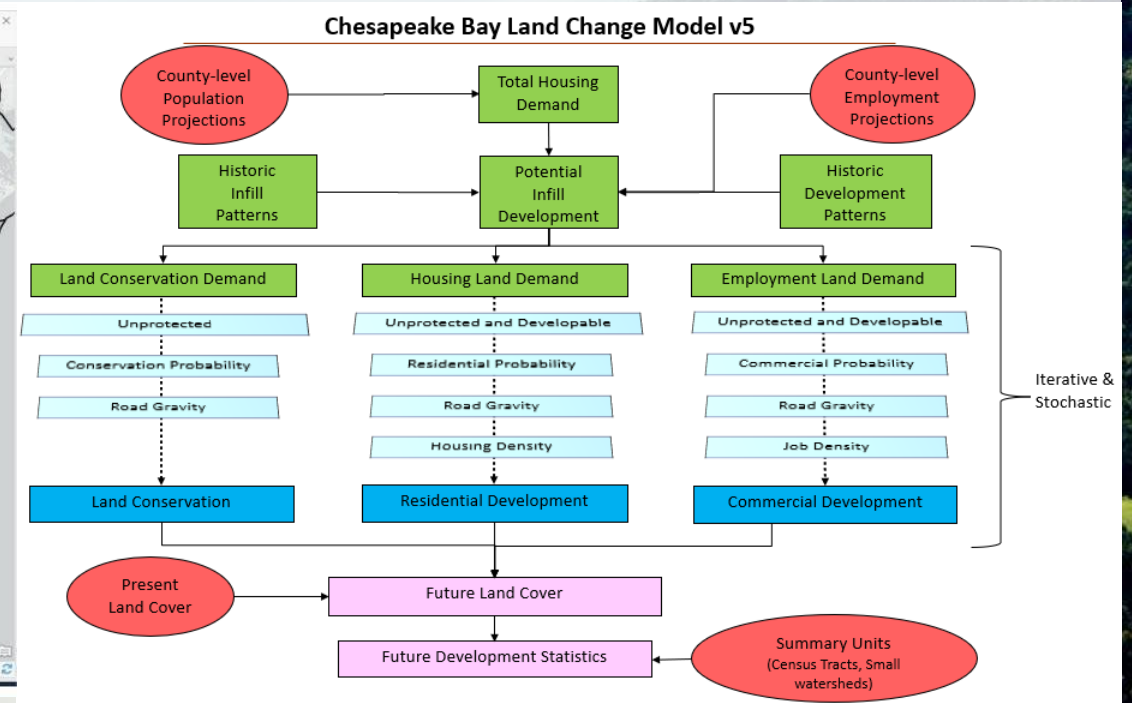
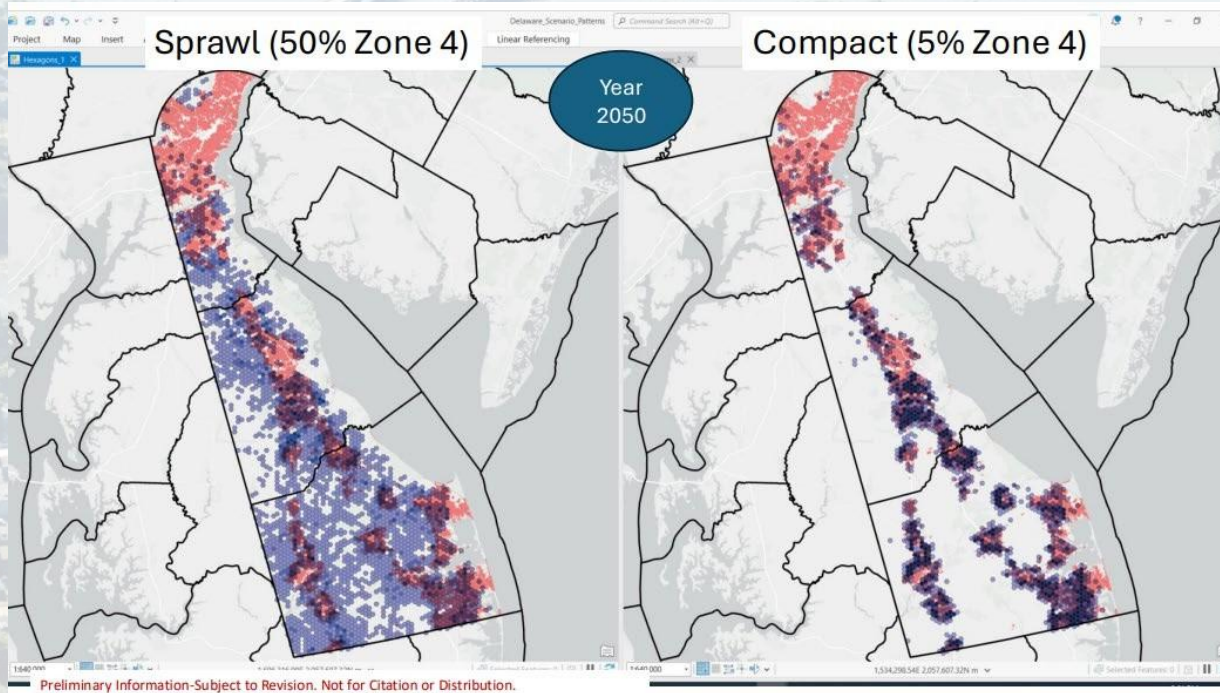


Land Use/Land Cover Monitoring

With each newly mapped year, the previous year(s) are remapped using the same methods for consistent change detection

Modeling future land use and development

Slide credit: Peter Claggett, USGS



Other relevant data s projects

Hyper-resolution hydrography (2025)

Chesapeake Bay Hyper-Resolution Hydrography Database


View

Dates
Start Date : 2008
End Date : 2021
Publication Date : 2025-05-23

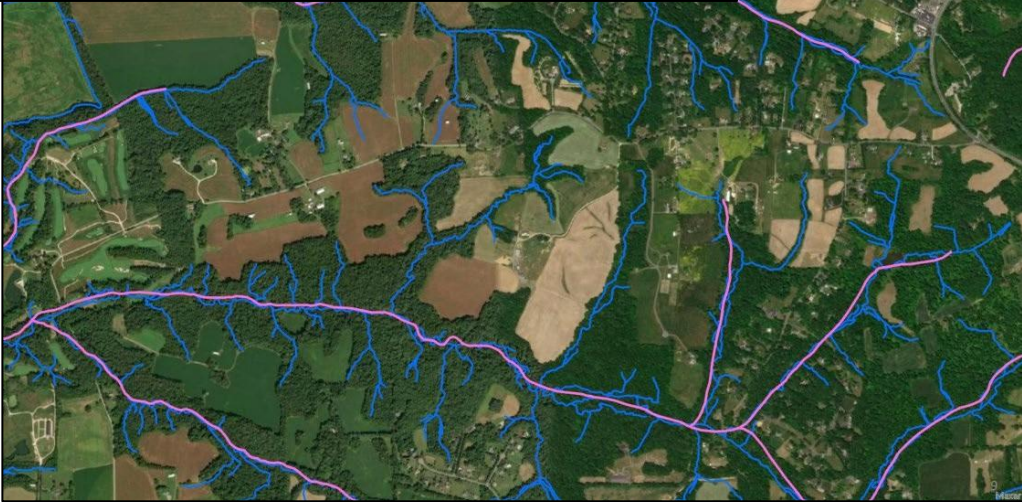
Citation
Baker, M., Saavedra, D., Cang, X., and Ahmed, L., 2025, Chesapeake Bay Hyper-resolution Hydrography Database: U.S. Geological Survey data release, <https://doi.org/10.5066/P1GRAPEX>.

Summary
The Chesapeake Bay Hyper-Resolution Hydrography Database is intended to facilitate analysis of the landscape in the Chesapeake Bay watershed through identification of headwater and other low-order streams or drainage features (e.g. ditches) that, to date, may be absent from existing hydrography data products. A full description of the methodology and accuracy assessment is provided in the accompanying report titled: *Hydrography Mapping Supporting Modelling and Targeted Conservation: Project Overview and Lessons Learned (Project Overview and*

Map »



Spatial Services
ScienceBase WMS : <https://www.sciencebase.gov/catalog>



0 scale)

Use case survey (ongoing)

Chesapeake Bay 1-meter Land Use/Land Cover Dataset: Use Cases

We are looking to capture information about how these data layers are being used. This information is helpful for:

1. advocating for continued funding of the data production
2. reflections on which classes bear more or less importance for stakeholders
3. communicating about future releases and changes to the data layers

What is your name?

Your answer

What is your contact e-mail?

Your answer

Shifting priorities of the Land Use Workgroup



Technical Study on Changes in Forest Cover and Tree Canopy in Maryland
November 2022



SENATE BILL 526

M1 3le1713
CF HD 723

By: Senators Elfreth, Guzzone, Gile, M. Washington, West, and Zucker
Introduced and read first time: February 3, 2023
Assigned to: Education, Energy, and the Environment
Committee Report: Favorable with amendments
Senate action: Adopted
Read second time: March 19, 2023



Mapping/Modeling-Focused

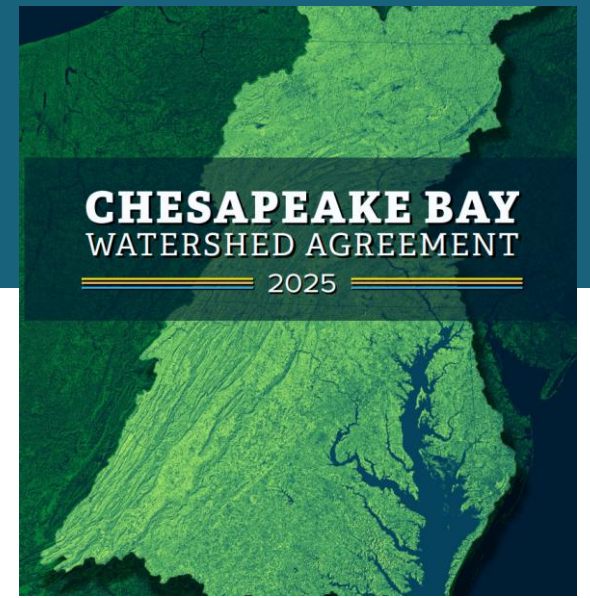
Emphasis on providing technical expertise on the development of the high-resolution land use/land cover data and other land use related products.

shifting towards

Communication/Applications-Focused

Emphasis on applications C communication of the high-resolution land use/land cover data and other land use related products.

New Healthy Forests and Trees Outcome



Conserve, manage and restore forests and tree cover to maximize benefits for water quality, habitat and people throughout the watershed, with a particular focus on riparian areas and communities.

TARGETS

Tree Canopy: Conserve tree canopy within communities by reducing the rate of loss of existing canopy and planting and maintaining 45,000 acres of community trees by 2040 to achieve a net gain in canopy over the long term.

Forest Buffers: Conserve riparian forest by reducing the rate of loss of existing buffers and planting and maintaining 7,500 acres of forest buffers annually to achieve no less than 71.5% riparian forest cover by 2040 and 75% riparian forest cover over the long term.

Forest Conservation: Achieve a net gain in forests over the long-term by reducing the rate of forest conversion to other land uses by 33%, permanently protecting a total of 9 million acres of forested land, and planting, maintaining and managing 202,000 acres of new forests by 2040.

Forestry Workgroup Priorities



Riparian Forest Buffers

Accelerating riparian forest buffer planting and maintenance

Developing and expanding flexible and effective buffer programs

Increasing capacity for restoration

Community Tree Canopy

Supporting local governments to understand and conserve existing canopy

Accelerating community tree planting and maintenance

Forest Conservation

Increasing the permanent protection of forested lands

Accelerating upland reforestation

Supporting additional forest management needed to ensure resilience

What is the Protected Lands Outcome?

Protect water quality, enhance biodiversity, support sustainable livelihoods, bolster local economies, honor cultural heritage, and protect the mission and resilience of military installations.

By 2040, permanently protect at least an **additional 2 million acres** of land above the 2025 baseline of 9.3 million acres. The 2 million acres will include the below targets

Riparian Forests

Wetlands
(including
migration
corridors)

Natural areas
supporting
healthy streams

Agricultural
Lands

Tribal Homelands

Urban and
Community
Greenspace

Upcoming/Ongoing Projects

Attributing Date of Establishment within the Protected Lands Indicator

Clarify and standardize how establishment dates are assigned across jurisdictions.
Improve consistency to strengthen data quality and comparability.
Support more accurate tracking of long-term conservation progress

Defining & Identifying Targets for the Protected Lands Outcome

Riparian forests
Wetlands, including migration corridors
Natural areas that support healthy stream systems
Agricultural lands
Tribal homelands
Urban and community greenspace

Understanding Jurisdictional Priorities

Reviewing Jurisdictional plans (SCORPs, Forest Action Plans, Wildlife Action Plans, etc.)
Examining state priority areas (GIS exercise)
Understanding funding options
Understanding jurisdictional goals within the context of the 2025 Bay Agreement

Priorities



Set **clear conservation targets** (forests, wetlands, streams, agricultural lands, tribal homelands, greenspace)



Provide **high-quality watershed-wide conservation data** and analysis.



Identify funding mechanisms that can help support conservation efforts and capacity in the Chesapeake Bay Watershed



Ensure conservation strategies are **locally relevant** by aligning actions with community needs, priorities, and on-the-ground conditions (e.g., Source Water Protection)

ACEC Outcome

Increase the capacity for pursuing solutions, including those that are nature-based, to improve planning and responses to changing conditions while balancing long-term resiliency of watershed communities, economies, and ecosystems.

Focuses on place-based, capacity-building of nature-based solutions for additive resilience benefit

TARGETS

- By 2040, support at least seven sub-watershed areas with knowledge-sharing and technical assistance to identify adaptation options with a preference for nature-based solutions. These solutions include restoration and protection projects that will help address risks to people, infrastructure and habitats from changes in temperature, precipitation and landscapes.
- By 2040, inform and lead to an increase in the implementation of the identified adaptation options that prioritize and integrate nature-based solutions in the above sub-watershed areas.

Adaptation Initiatives



Marsh Adaptation

- Collaborative identification of marsh restoration and protection opportunities
- Consideration of sea level rise and social vulnerability

Nature-based Solutions (NbS)

- Support partner NbS project proposals for resilience funding
- Support NbS performance research for changing environmental conditions

Community Resilience

- Support partner projects that identify best practices for community engaged adaptation
- Integrate social vulnerability metrics


Next Steps



Strategic Planning

- Recruit membership (~May-Dec 2026)
- Complete strategic networking technical assistance and identify collaborative opportunities with Healthy Landscapes and other workgroups (~May-Jun 2026)
- Outreach to jurisdictions to collect information on adaptation priorities (~Jun-Dec 2026)
- Work on ACEC components of Healthy Landscapes Management Strategy and workplan (due Spring 2027)

Keeping the Momentum on the Work

- NbS STAC Synthesis Project 2nd monitoring indicator and metrics charrette (Jun 2026)
 - Disseminate Choptank marsh adaptation report & develop communication materials (~Jun-Sep 2026)
 - Work with Envision the Choptank partners to evaluate a workgroup framework for supporting tidal and nontidal subwatershed activities (~Oct-Dec 2026)
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