



Chesapeake Bay Program
Science. Restoration. Partnership.

July 30, 2026

Land Use Planning and Decision Support: Management Strategy Draft

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Healthy Landscapes Goal Team Meeting

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

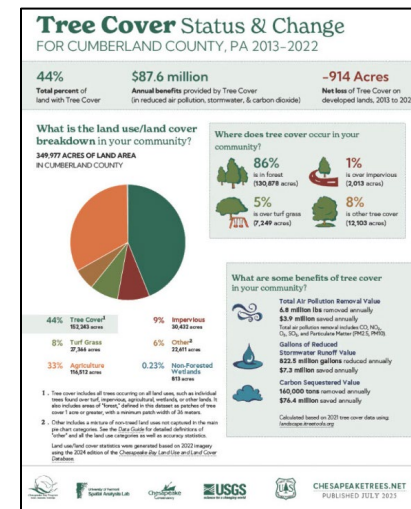


Baseline & Current Condition

What do things look like right now?

Baseline & Current Condition

- Unprecedented detail on landscape change: 1-meter high-resolution land use/land cover data for three (soon to be four) dates in time
- LUWG influence on land-use decisions is uncertain
- Despite communication successes like Tree Canopy Fact Sheets, LUWG lacks a sustained strategy to reliably deliver data to local decision-makers



Department of Legislative Services Maryland General Assembly 2023 Session	
HB 723	
FISCAL AND POLICY NOTE Third Reader - Revised (Delegate Love, et al.)	
House Bill 723 Environment and Transportation	Education, Energy, and the Environment
Natural Resources – Forest Preservation and Retention	
This bill modifies State law relating to forest preservation and retention by (1) modifying the State's policy to encourage the retention and sustainable management of forest lands; (2) making various changes under the Forest Conservation Act (FCA); and (3) requiring the Department of Natural Resources (DNR) to establish a workgroup to evaluate and recommend incentives for private landowners to conserve forest. The bill's provisions predominantly take effect July 1, 2024, though certain provisions, identified below, take effect July 1, 2023.	
Fiscal Summary	
State Effect: Pay-as-you-go (PAYGO) general fund expenditures may increase and special fund revenues are potentially affected, beginning as early as FY 2025, as discussed below.	
Local Effect: Local government capital expenditures similarly may increase and local government revenues are potentially affected, beginning as early as FY 2025, as discussed below.	
Small Business Effect: Meaningful.	
Analysis	
Bill Summary: <i>State's Policy to Encourage the Retention and Sustainable Management of Forest Lands</i> The bill modifies the State's policy to encourage the retention and sustainable management of forest lands by replacing the outcome of achieving no net loss of forest with the	



Measuring Progress & Indicators

How might we measure progress towards this outcome?

Monitoring Progress & Indicators

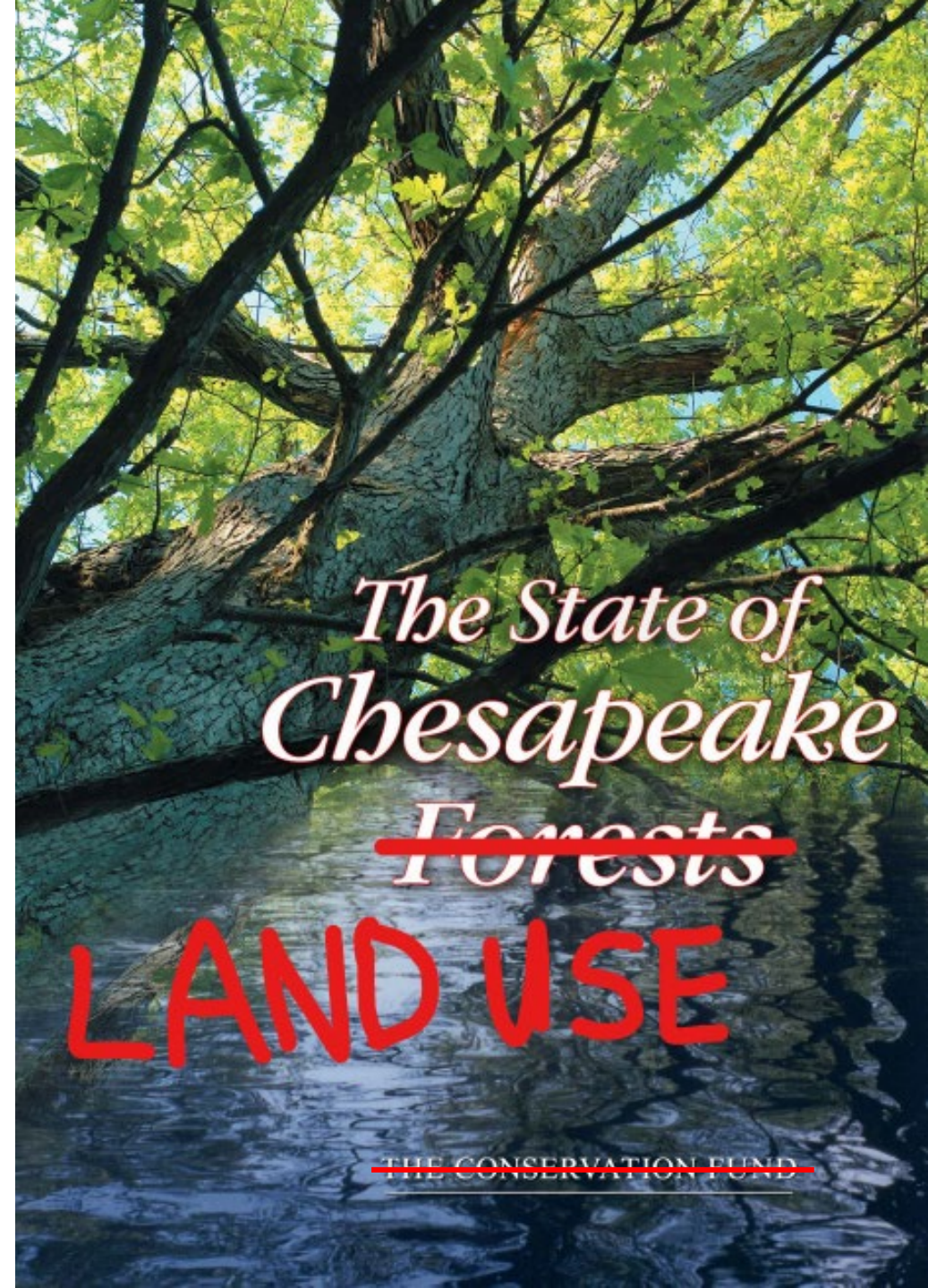
- **Watershed Population** → influencing factor, not measure of progress
[Existing]
- **Impervious Surface Change (Net Change)** → indicator of hydrologic impacts **[Existing]**
 - will also track changes in energy infrastructure (e.g., solar), roads, and agricultural intensification
- **Impervious Surface Change (Per Capita)** → indicator of land use policies/smart growth **[New]**
- **Natural Land Conversion** → indicator of water quality & habitat impacts **[New]**
 - Wetlands & forests
- **Farmland Conversion** → indicator of water quality & and working land impacts **[New]**

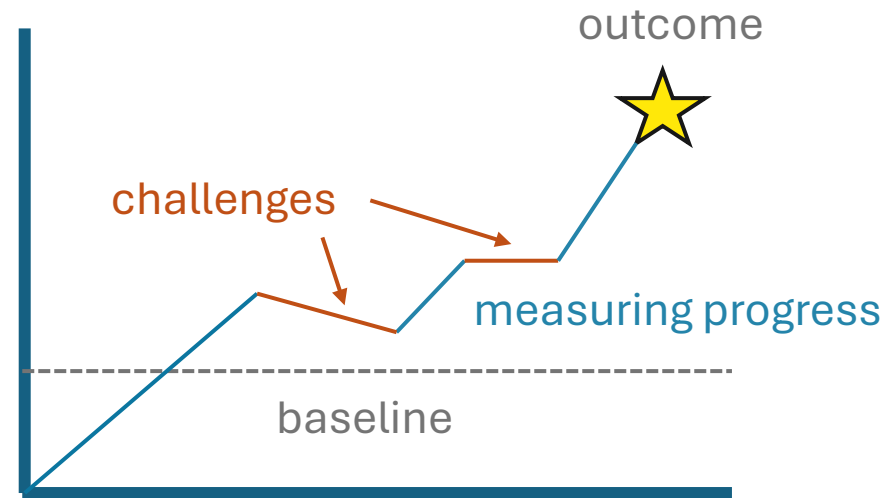
State of Chesapeake Land Use Report?

Produced with every high-resolution land use/land cover data release (every 3-4 years).

Could outline significant demographic, housing, employment, and land use changes, as well as emerging phenomena (e.g., solar fields, data centers).

NOTE: LUWG indicated they had reservations the creation of this report, noting concerns about a) the level of effort it would take to produce at the workgroup level; b) localities misinterpreting themes or trends in the report; and c) overstepping into local purview with a report solely focused on land use.





Situation Analysis

What are the current (and future) challenges in meeting this outcome?

Challenges **within** CBP control/influence

SOCIAL

- Building trust and recognition for the LUWG (and CBP data) among audiences that decision-makers already rely on as trusted sources. Lack of strong communication between those creating the data and those who use it.
- Identifying and addressing local priorities effectively and communicating CBP data so that it is relevant to local priorities and needs.
- Getting representative feedback on what information and formats would be most useful to a diversity of stakeholders.
- Strengthening our approach to collecting use cases and sharing information.

FINANCIAL

- Continued long-term financial support to monitor the landscape over time, as well as create tools and resources based on updated data.

TECHNICAL/SCIENTIFIC

- Adapting to rapidly evolving landscape-monitoring technologies.
- Maintaining confidence in the data as it changes with new methods and data sources.

Challenges **outside** CBP control/influence

SOCIAL/ENVIRONMENTAL

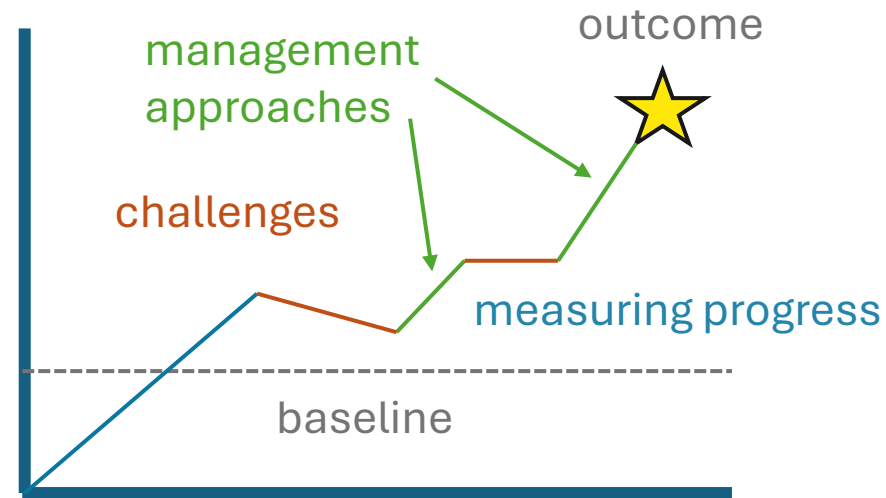
- Population growth.
- Lack of network of translators and trusted sources to deliver relevant land use information to local decision makers.
- Wide variation in who makes land-use decisions, when they're made, and what data they use makes it hard to deliver consistent, targeted support across the watershed.
- Vulnerability of high-value watersheds/habitats to development due to growth pressure.
- Rapid expansion of emergent phenomena (e.g., data centers, warehouses, solar fields, and agricultural intensification).

POLITICAL

- Diminished scientific capacity/workforce/expertise of federal agencies.
- Local government capacity to use the products produced.
- Legislative authority to shape growth patterns can be difficult to obtain.
- Dynamic permitting landscape.

TECHNICAL/SCIENTIFIC

- Adapting to rapidly evolving landscape-monitoring technologies.
- Time lag of monitoring the landscape and producing the data.



Management Approaches

How might we address the challenges identified in “Situation Analysis”?

Transform the current use-case repository into a comprehensive and accessible system that produces high-quality case studies tailored to local planning processes and Chesapeake Bay outcomes.

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

2022 Edition survey (~39 use cases from 2023)

Management Approach 1: Use Cases

- Step 1: Create a follow-up survey to collect essential information for analysis and replication.
- Step 2: Build an Online Use-Case Viewer and Story Map Platform.
- Step 3: Publish an Annual “Impact Memo”
 - Each jurisdiction would be responsible for championing a use case in the annual impact memo.

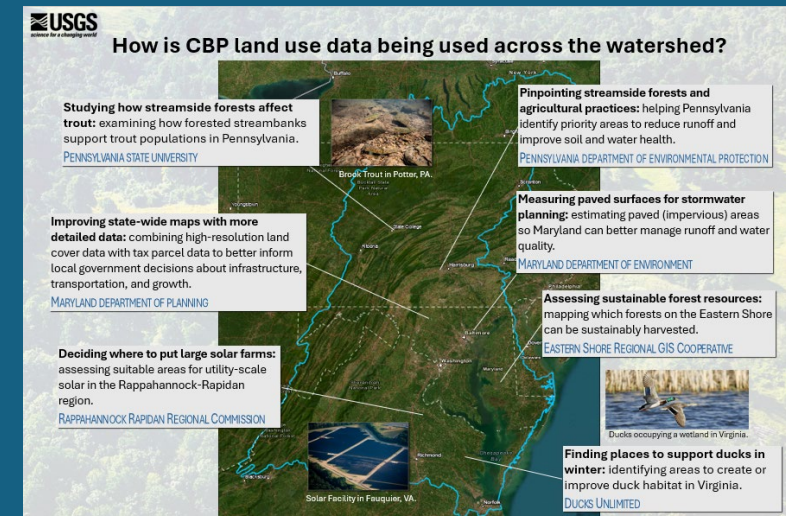
For example:

- Background and problem definition
- Decision context (what decision was influenced and when?)
- Relevant data sources
- Partners involved
- Methods
- Relevant outcomes and/or co-benefits achieved
- Opportunities for replication or scaling
- Funding mechanisms?
- Ask for feedback on data

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Would include: geographic filters, tags by topic (stormwater, climate, flooding, public health, agriculture, etc.), direct links to relevant data sources, and multiple visualization formats (storymaps, graphics, links, etc.)



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Highlights at least five use cases that demonstrate impact and at least two widely applicable use cases.

Management Approach 2: Pilot Areas for Land Use Decision Support

Identify 7 areas across the watershed as pilots to create a place-based strategy for supporting land use decisions.

Each jurisdiction will be responsible for identifying an area of interest and providing support for that area.

NOTE: Initial feedback from the LUWG indicated they may not be comfortable supporting this approach due to wide variation across states in how they are able to engage with local governments and the role they play in land use decision-making. We are working on developing an alternative strategy.

Management Approach 2: Pilot Areas for Land Use Decision Support

- Step 1: Each jurisdiction* chooses area of interest.
- Step 2: Create a LUDS “inventory” .
- Step 2: Co-develop a LUDS “road-map” or strategy based on the inventory and existing use cases.

Can choose areas of interest based on various criteria: e.g., high projected growth, low capacity, or emerging issues (e.g., solar fields or data center development).

*Relevant at-large members will also be included the selection process.

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Identify key local governments, organizations, decision-makers, and their priority land-use issues.

Document trusted data sources, communication channels, and preferred ways stakeholders receive information.

Map each jurisdiction’s planning cycles and workflows.

*Relevant at-large members will also be included the selection process.

Management Approach 2: Pilot Areas for Land Use Decision Support

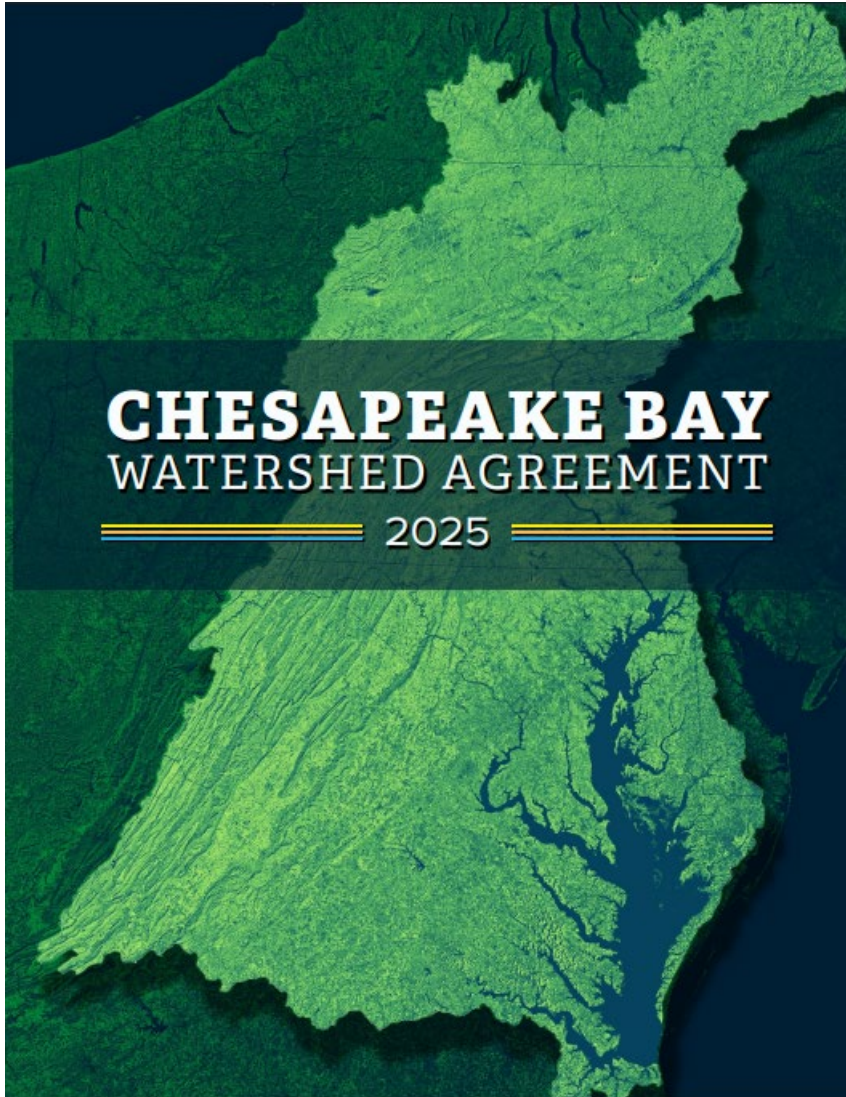
- Step 1: Each jurisdiction* chooses area of interest.
- Step 2: Create a LUDS “inventory” .
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Create tailored LUDS products and messaging based on each area’s specific needs and priorities.

Establish consistent two-way communication with local partners to refine data, tools, and analyses over time.

Adapt existing LUWG use cases to help jurisdictions apply proven approaches to locally-specific challenges.

*Relevant at-large members will also be included the selection process.



Thank you!

Any additional feedback on the Management Strategy Draft?

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Chesapeake Bay Program
Science. Restoration. Partnership.

Acronyms



- CBP: Chesapeake Bay Program (partnership)
- CBPO: Chesapeake Bay Program Office
- COB: Close of Business
- GIT: Goal Implementation Team
- LGAC: [Local Government Advisory Committee](#)
- LGLWG: [Local Government Leadership Workgroup](#)
- LUDS: Land Use Decision Support [Outcome]
- LULC: Land Use/Land Cover
- LUWG: Land Use Workgroup
- USGS: United States Geological Survey