### QUARTERLY PROGRESS MEETING – March 9 2023 Chesapeake Bay Program





# Land Use Options Evaluation

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Photo: Chesapeake Bay Program; Slides prepared by Sophie Waterman, CRC and Renee Thompson, USGS

Through the Chesapeake Bay Watershed Agreement, the Chesapeake Bay Program has committed to...



**Image: Conservation Innovation Center** 

### Goal: Land Conservation

Outcome: By the end of 2017, with the direct involvement of local governments or their representatives, evaluate policy options, incentives and planning tools that could assist them in continually improving their capacity to reduce the rate of conversion of agricultural lands, forests and wetlands as well as the rate of changing landscapes from more natural lands that soak up pollutants to those that are paved over, hardscaped or otherwise impervious.

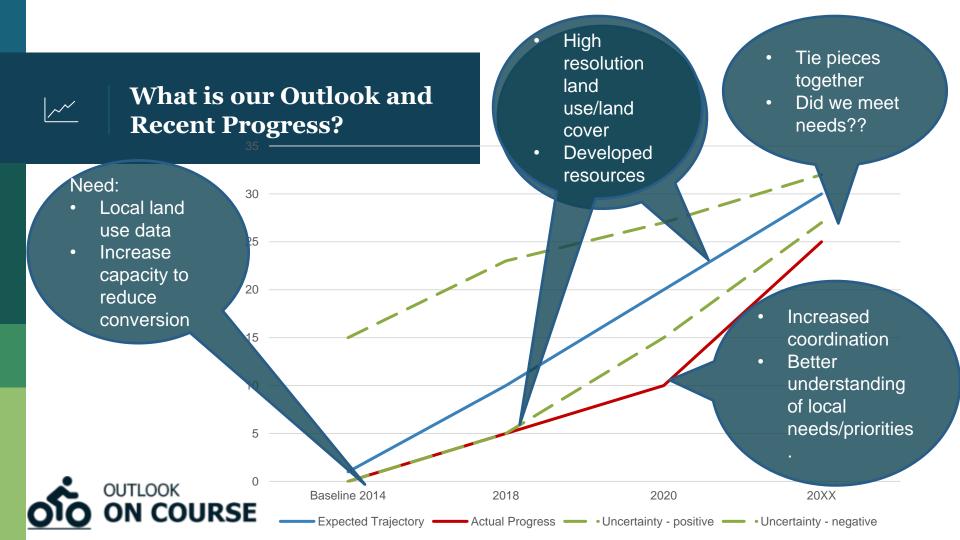


2014 – This outcome was included in the Agreement to provide tools and support to local governments to ensure their capacity to plan for and mitigate land change impact. – source

PUBLIC NOTICE

2014 "Current" condition? – WIP process shed light on the differences between CBP land use and local-scale information

Why this Outcome? – This outcome responds to public comments related to the need to address the extent and impact of land use change (the Land Use Workgroup and the Water Quality GIT were instrumental in this outcome)





## Learn

What have we learned in the last two years?

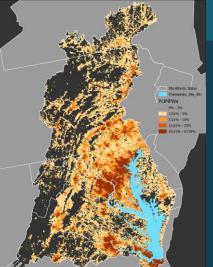


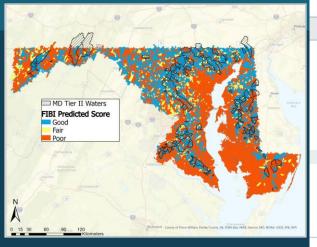
### **Successes and Challenges**

### What have we learned?

- We are dependent on the collaboration and participation of related outcomes and workgroups, as well as their work/products
- 2-way input and direct involvement of locals requires a sustained pathway of mutual listening and learning.
- This outcome is qualitative there remains a need to understand if our efforts are helping to reduce the rate of land conversion
- Population growth and vulnerability of high value healthy watersheds and habitats to conversion (impervious surfaces), remain priority factors affecting our ability to achieve our outcomes.















The cover includes all trees countring on all land uses, such as individuals found over turf, importious, apricultural, wretlands, or other land it also includes areas of "lurest," defined in the detaset as patched to the ecover Tace over last a land to the ecover Tace over last with a minimum patch width of 280 feet.

of "other" and all the land use categories.









Stormwater Runoff Value

\$10,594 saved annually

### Data

 Land use land cover, metrics

#### Tools

• Maps, viewers

### **Projects**

Land Policy & Conservation

Land Policy & Conservation Background:

Chesapeake Bay Program Land Conservation

Land Policy BMPs Frequently Asked Questions

Chesapeake Bay Trust Conservation Land-Use

Additional Resources

Land Policy Implementation:

GIT funnding

#### **Presentations**

 Conferences and workshops

### Communications

· Fact sheets, storymaps



### **Land Use Resource Guide**

The Chesapeake Bay Program (CBP), through its Maintain Healthy Watersheds Goal Implementation Team, has a goal of maintaining the long-term health of watersheds identified as healthy by its partner jurisdictions.

In addition, under the leadership of the Land Use Workstour, CBP is working to continually improve our knowledge of land conversion and the associated impacts throughout the watershed. This is a compilation of ongoing initiatives, databases, tools, other resources developed to support local governments and land use managers in designing sustainable landscapes.

land use policy tools local governments can use to slow the conversion of Growth Research and Education (NCSG) at the University of Maryland.

Accounting for Growth: Factsheet on CBP Land Change Model (CBPLCM) Chesapeake Bay High-Resolution Land Cover: 2013 1-m and 10-m land cover and land use data Chesapeake Phase 6 Land Use Viewer: This data viewer allows you to explore the high-resolution



### Scientific, Fiscal and Policy-related developments

### Scientific:

- Additional analysis of High-resolution land cover and related metrics (1m, 10m) and change products
- LCMAP Analysis and distillation
- Evolving communication/outreach plan

### Fiscal:

 A new or extended Cooperative Agreement to monitor land use change through 2034.



Scientific, Fiscal and Policy-related developments

### Policy:

- Better incorporate DEIJ and Climate considerations.
- Integrate climate and DEIJ metrics
- Population growth and land use change need to remain in focus beyond 2025

### Communication, Translation and Engagement:

- Translate, format, package and flow information through to trusted sources.
- How to effectively engage locals directly (New GIT funding will help to address)



# Adapt

How does all of this impact our work?



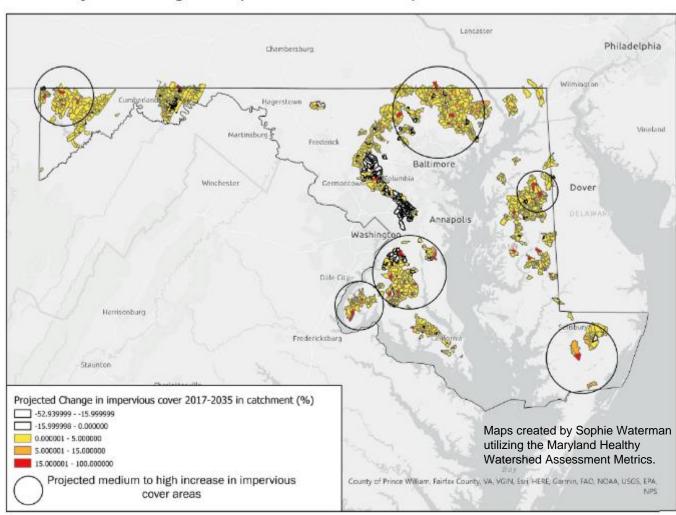
### Coordination and Communication:

- Work with relevant CBP groups (Local Government Advisory Committee, Local Leadership Workgroup, Healthy Watersheds GIT, and Forestry Workgroup)
- Community Response to Land Use Change in cooperation with Rachel Felver and others (GIT Funding 2023)
- Coordination with Strategic Engagement Team (SET)

### Management Strategy evolution:

 Move to integrate the management strategies for the Land Use Methods and Metrics Outcome and Land Use Options Evaluation Outcome.

### Projected Change in Impervious Cover in Maryland Tier II Watersheds





- Diversity, Equity, Inclusion and Justice (DEIJ) and climate considerations are not well accounted for in the LUOE Outcome.
- Need for assessments to be completed to determine how underserved communities would be helped or hindered by sources related to policies, incentives and planning tools to reduce land conversion
- Evolve to support a broader array of local uses of the data
- Supporting flood, hazard mitigation, climate resiliency planning



## Fill the Gap

How can the Management Board help achieve the Outcome?

### Filling the Gap

- **BECAUSE** of the need for translation of data and resources and the shared relationship of the land use outcomes,
- •Over the next 2 years, we PLAN to...combine the land use outcome management approaches and partner with others at CBP to expand our capacity to meet local needs and engage with them...
- •BUT − to fill the gap −



- Advise the USEPA that continued monitoring of high-res land use change through 2034 is needed to support the achievement of multiple outcomes and the Phase 7 model.
- Support the integration of the management strategies for the Land Use Methods and Metrics Outcome and Land Use Options Evaluation Outcome.
- Promote active use of these data, tools and resources by jurisdictions and locals

Convey the urgency of habitat and living resource loss as a result of population increase and land use decisions happening recently and in the near term.

### QUARTERLY PROGRESS MEETING Chesapeake Bay Program

See you again Summer '23 for the Healthy Watersheds Cohort!

## Discussion

