

QUARTERLY PROGRESS MEETING – February 2021  
*Chesapeake Bay Program*



## Land Use Options Evaluation

*Renee Thompson*  
*Maintain Healthy Watersheds*  
*GIT, Coordinator*

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

## 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.

## Land Use Options Evaluation - Context

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

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)

# Co-Benefits

Reducing the rate of conversion provides:

- Clean Water
- Resilience (flooding, climate change, invasives)
- Social and economic benefits
- Drinking water sources
- Critical habitat and connectivity
- Recreational opportunities



Cost to Protect

VS.



Cost to Restore



## What is our Expected and Actual Progress?

35

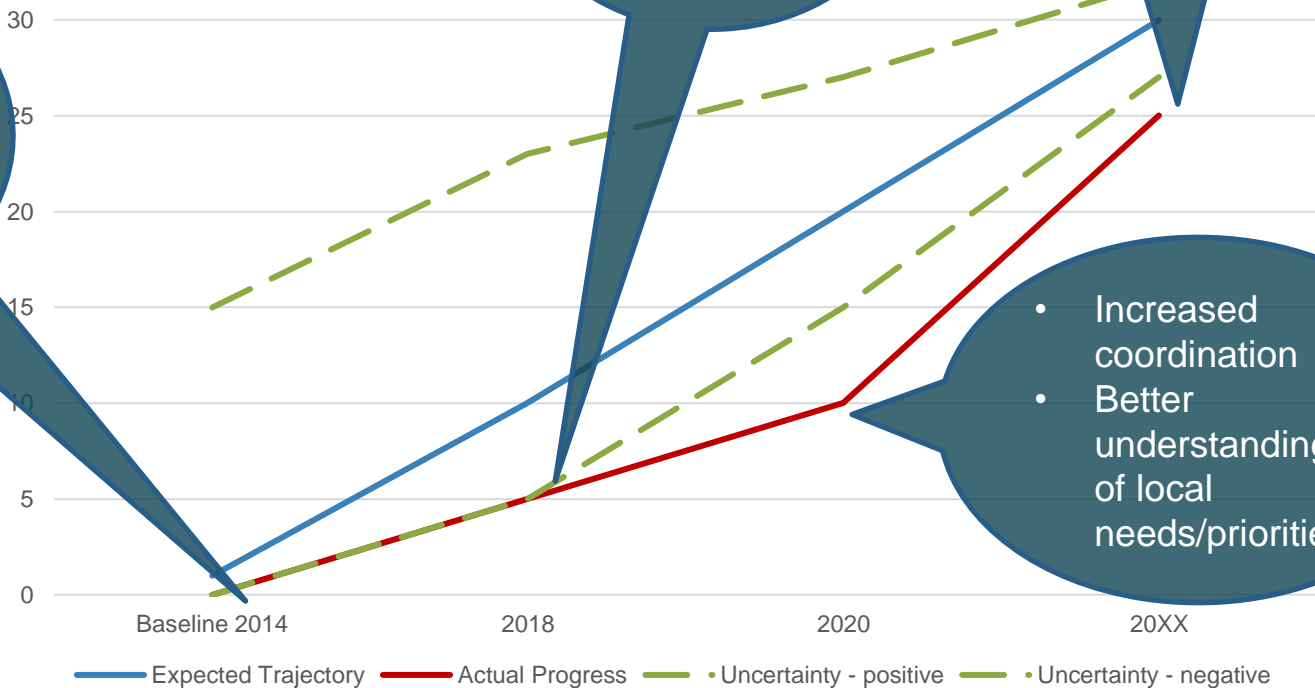
### Need:

- Local land use data
- Increase capacity to reduce conversion

- High resolution land use/land cover
- Developed resources

- Tie pieces together
- Did we meet needs??

- Increased coordination
- Better understanding of local needs/priorities.





## USGS Land Change Monitoring, Assessment, and Projection Data Thirty Years of Change (1985 – 2015)

### Parcel-Level Deconstruction of Urban Development (1985 – 2017)

LCMAP\_Reclassified

- No Pattern
- Afforestation
- Deforestation
- Harvest\_TC
- Harvest\_nTC
- Urbanization
- Crop Rotation
- Wetland Dynamics
- Pre-Development\_D
- Pre-Development\_nD
- Water
- Not\_classified
- MidAtlantic\_Counties
- Chesapeake\_Bay

Year-Built Attributes  
from Tax Records

yearblt

- 1985-1989
- 1990-1994
- 1995-1999
- 2000-2004
- 2005-2009
- 2010-2014
- 2015-2017

Year-Built Attributes  
from USGS' LCMAP

# Increasing knowledge at a scale that is locally relevant

Rates of conversion:

- Farmland
- Forest
- Wetland
- Impervious Cover

2020

2013 - 2017

# Chesapeake Bay Environmental Justice and Equity Dashboard (DRAFT)

Overview

Demographic Indicators

Cross-Outcome Applications

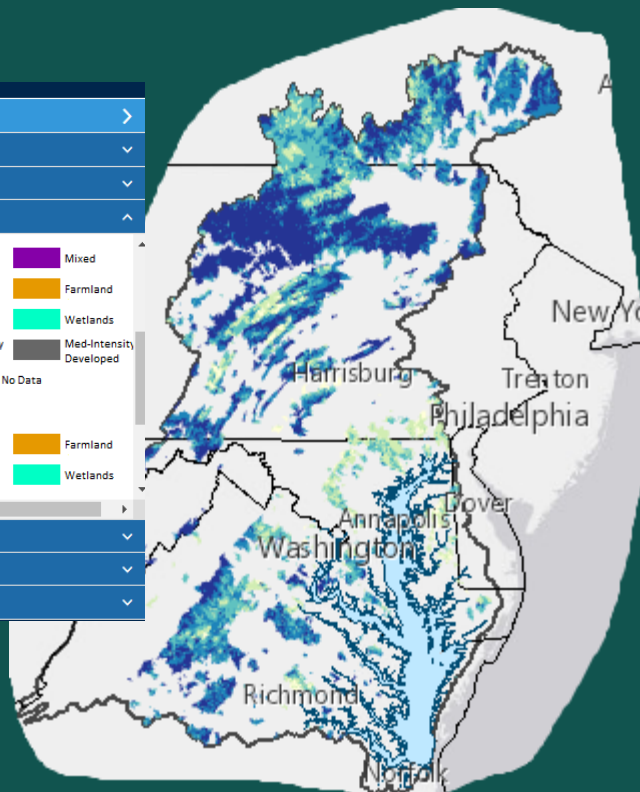
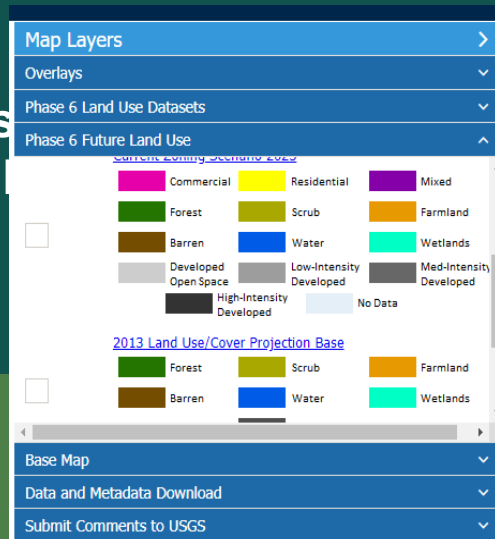
Current Initiatives

Acknowledgements

.."Evaluate policy options, incentives and planning tools that could assist in continual improving capacity.."

## Data and Tools

- Hi-res land cover
- Phase 6 Land Use Viewer
- Data Dashboard
- Chesapeake Healthy Watersheds Assessment
- Environmental Justice and Equity Dashboard

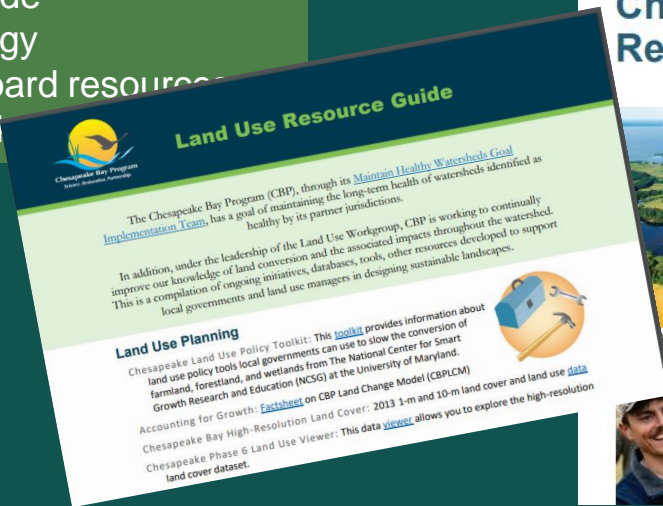


## Projects

- Cross-Outcome Watershed Educational Materials
- Conservation of Working Lands-Finance Forum consultants
- Improving Technical Service Delivery for Private Landowners
- Targeted local outreach for green infrastructure in vulnerable areas
- Chesapeake Watershed Finance Intensive Workshop

## Communications

- Land Use Resources Guide
- Forest Restoration Strategy
- Land Policy Data Dashboard resources
- Presenter, panelist, speaker



### Land Policy & Conservation

### Additional Resources

Land Policy & Conservation Background:

[Chesapeake Bay Program Land Conservation Goal](#)

[Chesapeake Bay TMDL and Land Policy BMPs Overview](#)

[Land Policy BMPs Frequently Asked Questions](#)

Land Policy Implementation:

[Chesapeake Bay Trust Conservation Land-Use Policy Toolkit](#)



## Chesapeake Forest Restoration Strategy





## Potential Metrics to measure progress

- Land Use Metrics: rate of farm, forest, and wetland conversion through time
- Assess the rate of conversion against key policies (in selected jurisdictions) to determine if the policies, incentives, and planning tools are having the intended effect. (How can the land policy BMPs be utilized?)
- Number of projects, presentations tools – total people reached
- Survey of key audience needs? / Does what we have developed meet their needs?
- Web Analytics: Total downloads, site visits, use of resources, tools and information provided on websites.
- Provide a mechanism for feedback directly on the web support tools (to demonstrate direct involvement)



# Learn

*What have we learned in the last two years?*



## Successes and Challenges

### What have we learned?

- We are dependent on the participation of related outcomes and workgroups, as well as their work/products
- The importance of champions and relationships

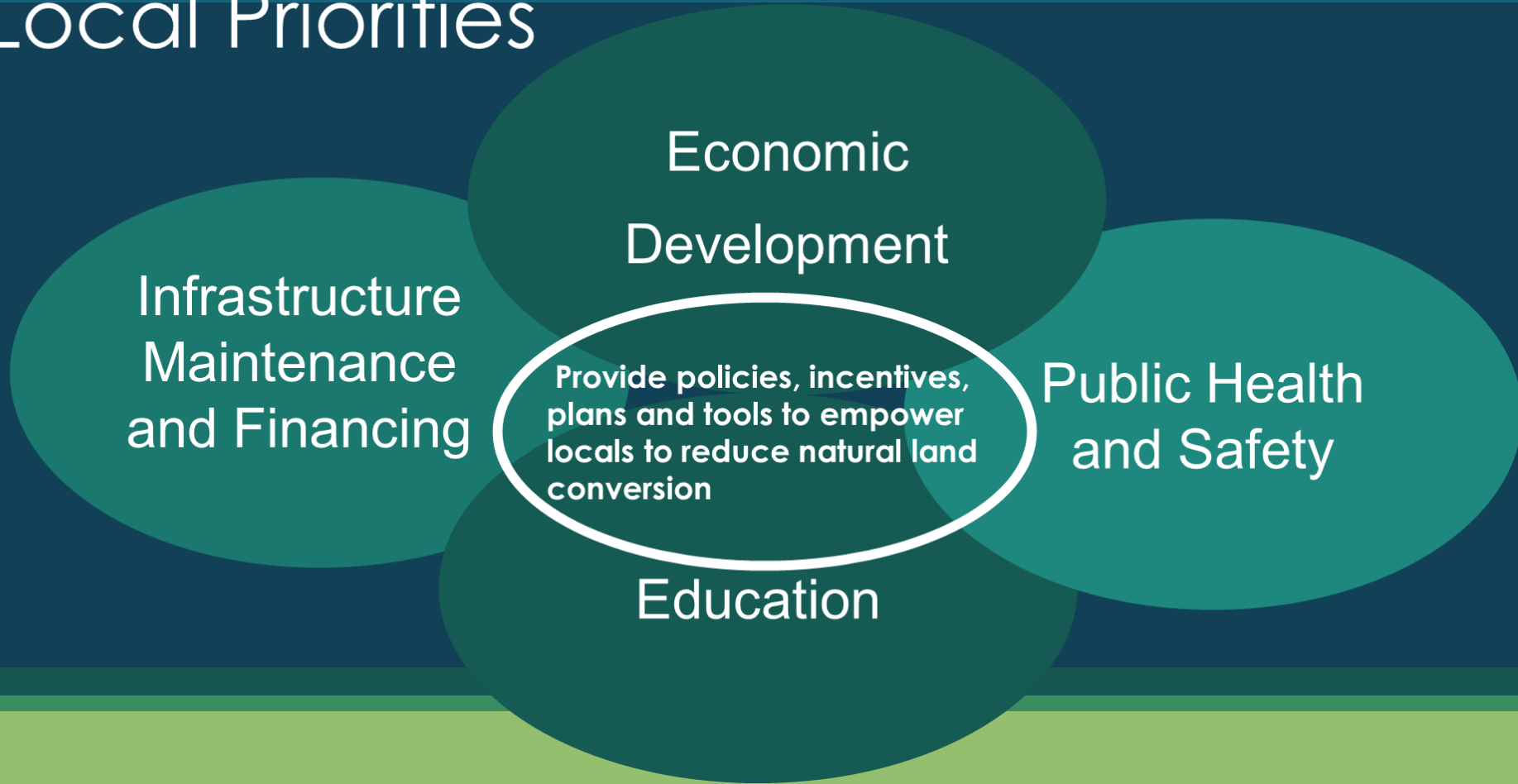


#### Chesapeake Bay Program Local Engagement Strategy



Chesapeake Bay Program  
*Science. Restoration. Partnership.*

# Local Priorities





Audience



Trusted Sources



Translators



Subject Matter  
Experts



What **ACTION** needs to happen at the local level to further this outcome?



Slide courtesy of CBP Local Engagement Team

## Factors Influencing

### Management Strategy

- Political and Education Challenges (*legislative engagement*)
- Sustaining the Ag and Forestry Industries (*funding and finances*)
- Ability to Engage Local Governments in Conducting the Evaluation (*education and outreach*)
- Technical Challenges

### Current Logic and Action table (STAC factors)

- Partner Coordination
- Technical understanding
- Education and outreach
- Local engagement
- Legislative engagement / political challenges.



## On the Horizon

**Scientific, Fiscal and Policy-related  
developments**

### **Scientific:**

- ☐ High resolution land cover and related metrics (1m, 10m)
- ☐ LCMAP – Analysis and distillation by Sarah MacDonald, USGS CBP
- ☐ No communication/outreach plan



## Policy and other developments

### **Policy:**

- ❑ Better incorporate DEIJ and Climate considerations.
- ❑ Integrate climate and DEIJ metrics

### **Communication, Translation and Engagement:**

- ❑ Translate, format, package and flow information through to trusted sources.
- ❑ How to effectively engage locals directly



# Adapt

*How does all of this impact our work?*



**Based on what we  
learned, we plan to ...**

**Engagement,  
Coordination and  
Accounting.**

- ☐ Determine how to “directly involve local” land use decision makers.
- ☐ Reinvigorate LUOE and LUMM engagement across the CBP
- ☐ Directly engage CBP teams including: HWGIT, LUWG, CCP, FWG, AGWG, Comm, Diversity, Climate, STAC, STAR, LLWG, LGAC as well NGOs and locals.



# Help

*How can the Management Board  
lead the Program to adapt?*





## How You Can Help

- ❑ Gap in knowledge related to the connection to the land use planning process and how it works at the local level.
- ❑ Resources related to “translation” of CBP resources pursuant to the Local Engagement Strategy.
- ❑ Renewed signatory engagement across living resources and land use related outcomes. E.g., Formation of a LU outcomes action team/workgroup

# QUARTERLY PROGRESS MEETING

## *Chesapeake Bay Program*



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# Discussion