Chesapeake Bay Program
Science. Restoration. Partnership.

Land Use Options Evaluation

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Maintain Healthy Watersheds GIT, Coordinator

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

Land Conservation Goal

Conserve landscapes treasured by citizens in order to maintain water quality and habitat; sustain working forests, farms and maritime communities; and conserve lands of cultural, indigenous and community value.

Outcome

- **Evaluation of *policy options, incentives and planning tools* that can help local governments reduce the rate of conversion of agricultural lands, forests and wetlands by the end of 2017**
- **Development of *strategies* to support local government efforts in *reducing land conversion* rates by 2025 and beyond**

Full outcome language

What We Want

Support integration into existing CBP efforts

- Invite subject matter experts to present to your relevant groups
- Increase collaboration and incorporate policies, plans, and incentives for reducing land conversion into your work
- Tap into sources for local government engagement and outreach to develop "strategies"

Signatory and initial Participating Partners

Chesapeake Bay Watershed Agreement Signatories

- State of Delaware
- ***State of Maryland (Department of Planning)***
- District of Columbia
- Commonwealth of Pennsylvania
- Commonwealth of Virginia
- U.S. Environmental Protection Agency (EPA)
- Chesapeake Bay Commission (CBC)

Other Key Participants

- Local Government Advisory Committee (LGAC)
- U.S. Fish Wildlife Service (USFWS)
- U.S. Geological Survey (USGS)
- National Park Service (NPS)
- USDA Natural Resources Conservation Service (NRCS)
- ***The Nature Conservancy (TNC)***

Current Participating Partners

Maintain Healthy Watersheds GIT

Renee Thompson, Coordinator

Katherine Wares, Staffer

Note: We are not seeking to form a new workgroup. We aim to better tie into existing efforts.

1

Setting the Stage:

What are our assumptions?

Context & Background

Reducing the rate of conversion helps maintain:

- Clean water and healthy waters
- 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

Logic Behind Our Outcome

Following the Decision Framework:

Factors Influencing

- 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 Efforts & Gaps

- CBP and HWGIT capacity
- Knowledge of how to package materials effectively for local governments
- Knowledge of how to reach our audience (local governments, planners, and officials)

Logic Behind Our Outcome, Cont.

Following the Decision Framework:

Management Approaches

1. Determine the spectrum of existing “policy options, incentives and planning tools”
2. Gather materials and putting them on a platform local leaders can/will access (in consultation with CBP Comm/Web Team)
3. Survey local governments and interest groups to determine most effective “policy options, incentives and planning tools”

2

Progress:

Are we doing what we said we would do?

What is our progress?

Target:

By the end 2017, evaluate policy options, incentives and planning tools that could assist local gov’ts in reducing the rate of conversion

Progress:

- Approach to Chesapeake Bay Land Use Policy Tasks
- Conservation Land-Use Policy Toolkit
- Healthy Watersheds Forest Retention Project

What is our progress?

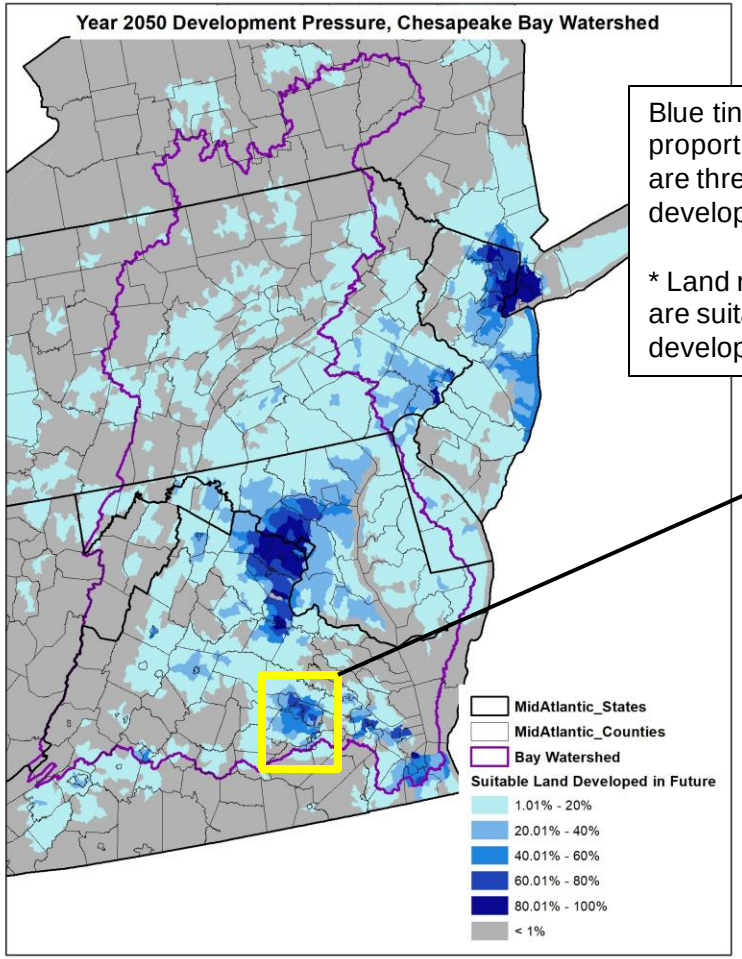
Target:

By 2025 and beyond, develop strategies for supporting local gov’ts in reducing land conversion rates

In Progress:

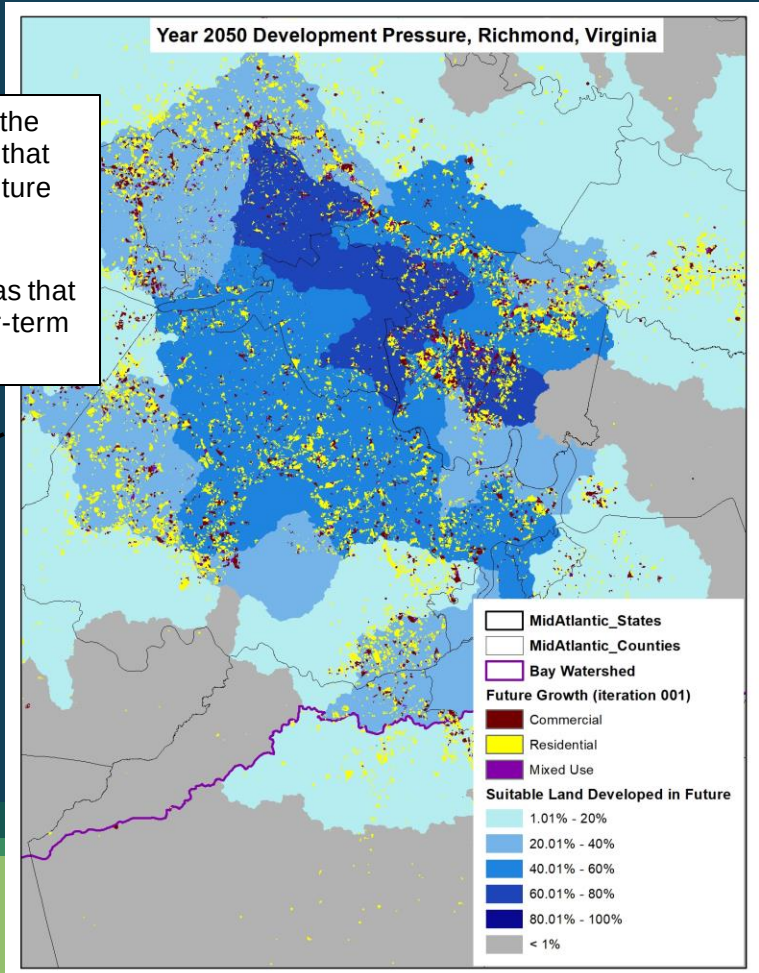
- *In close consultation and coordination with Land Use Methods and Metrics, Local Government Advisory Council, Local Leadership, Communications, Web and GIS Teams.*
- *Land Policy BMPs*

Vulnerability to Land Conversion



Blue tints represent the proportion of lands* that are threatened by future development

* Land refers to areas that are suitable for near-term development



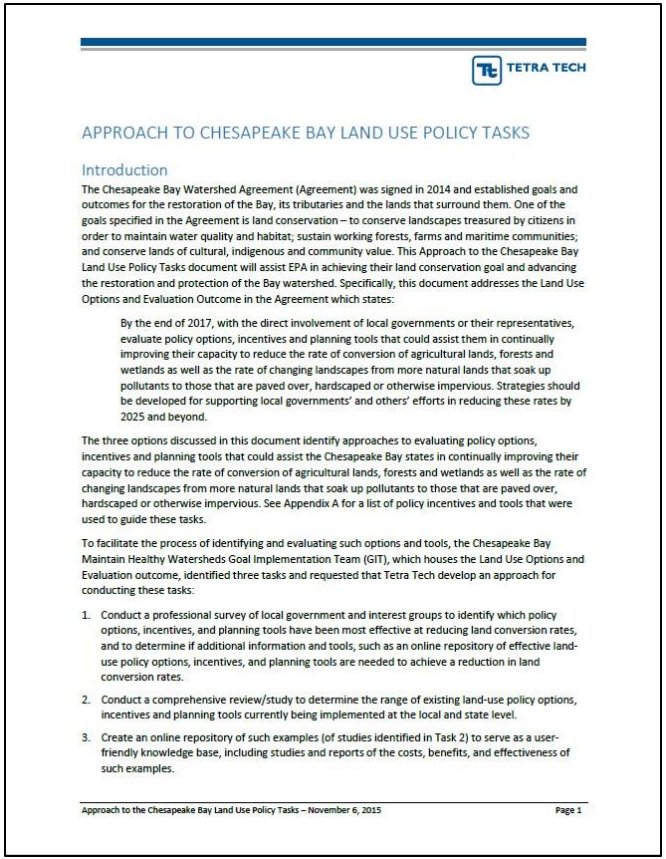
What is our progress?

Approach to Land Policy Tasks (2015)

- Provided recommendations on how to achieve the outcome and outlined 3 tasks

1) Survey to identify effective options and needs
2) Identify existing policy options, incentives, and tools
3) Online repository of policy examples

- Deliverables: Report



TETRA TECH

APPROACH TO CHESAPEAKE BAY LAND USE POLICY TASKS

Introduction

The Chesapeake Bay Watershed Agreement (Agreement) was signed in 2014 and established goals and outcomes for the restoration of the Bay, its tributaries and the lands that surround them. One of the goals specified in the Agreement is land conservation – to conserve landscapes treasured by citizens in order to maintain water quality and habitat; sustain working forests, farms and maritime communities; and conserve lands of cultural, indigenous and community value. This Approach to the Chesapeake Bay Land Use Policy Tasks document will assist EPA in achieving their land conservation goal and advancing the restoration and protection of the Bay watershed. Specifically, this document addresses the Land Use Options and Evaluation Outcome in the Agreement which states:

> 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. Strategies should be developed for supporting local governments' and others' efforts in reducing these rates by 2025 and beyond.

The three options discussed in this document identify approaches to evaluating policy options, incentives and planning tools that could assist the Chesapeake Bay states 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. See Appendix A for a list of policy incentives and tools that were used to guide these tasks.

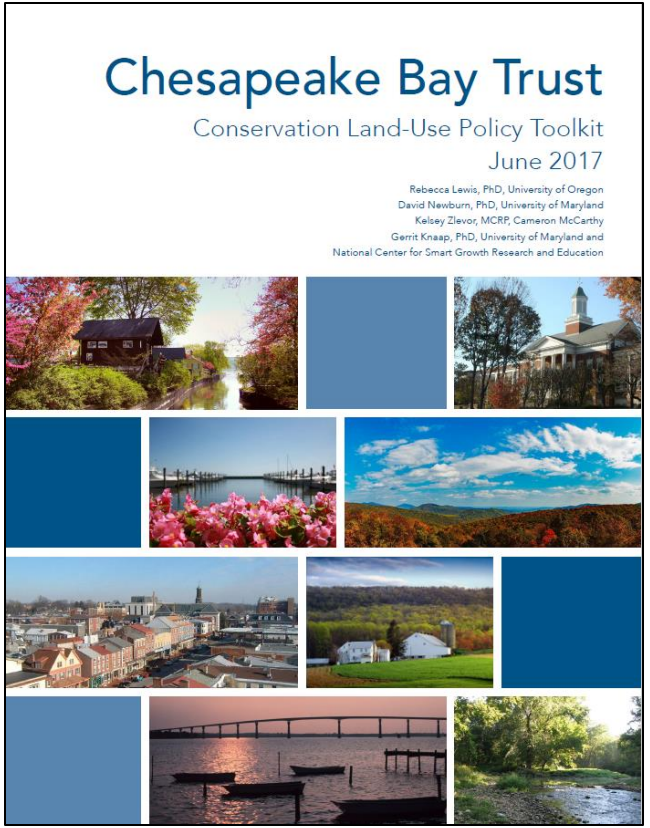
To facilitate the process of identifying and evaluating such options and tools, the Chesapeake Bay Maintain Healthy Watersheds Goal Implementation Team (GIT), which houses the Land Use Options and Evaluation outcome, identified three tasks and requested that Tetra Tech develop an approach for conducting these tasks:

1. Conduct a professional survey of local government and interest groups to identify which policy options, incentives, and planning tools have been most effective at reducing land conversion rates, and to determine if additional information and tools, such as an online repository of effective land-use policy options, incentives, and planning tools are needed to achieve a reduction in land conversion rates.
2. Conduct a comprehensive review/study to determine the range of existing land-use policy options, incentives and planning tools currently being implemented at the local and state level.
3. Create an online repository of such examples (of studies identified in Task 2) to serve as a user-friendly knowledge base, including studies and reports of the costs, benefits, and effectiveness of such examples.

What is our progress?

Conservation Land-Use Policy Toolkit (2017)

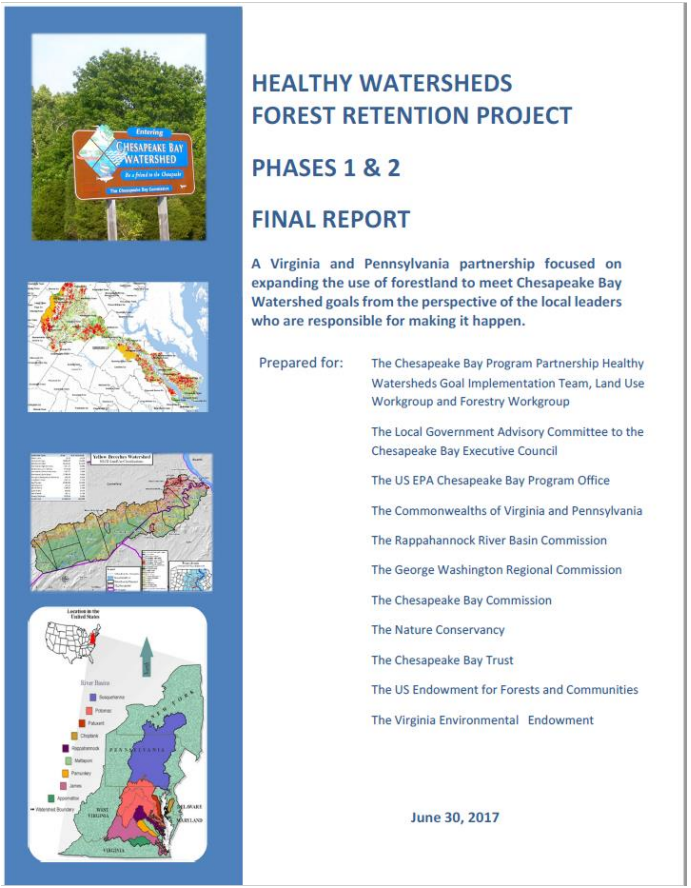
- Determined existing policy options, incentives, and planning tools that could be used by local government planners to reduce the rate of ag, forest, and wetland conversion
- Deliverables: Toolkit, Webinar



What is our progress?

Healthy Watersheds Forest Retention Project (2014 – present)

- Phase I: Quantified the value of retaining forestland (economic case for "crediting conservation")
- Phase II: VA/PA partnership – Worked with localities to identify policy tools and incentives
- Phase III: Implement tools in the field and develop large-scale private sector financing model



- Deliverables: Toolbox

What's in the "Toolboxes"?

What is our progress?

Link Crediting Land Conservation and Planning in the Bay TMDL with "strategies to reduce land conversion"

- **Land Policy BMPs** represent coordinated state approaches to implement measures that reduce land conversion rates.
- Place an emphasis on each state's roles in supporting and/or encouraging local government efforts to reduce land conversion rates with a combination of land protection and planning strategies.

3

Challenges:

Are our actions having the expected effect?

Challenges

Factors

- Education and Outreach to Local, State Governments *(use partner coordination to address)*

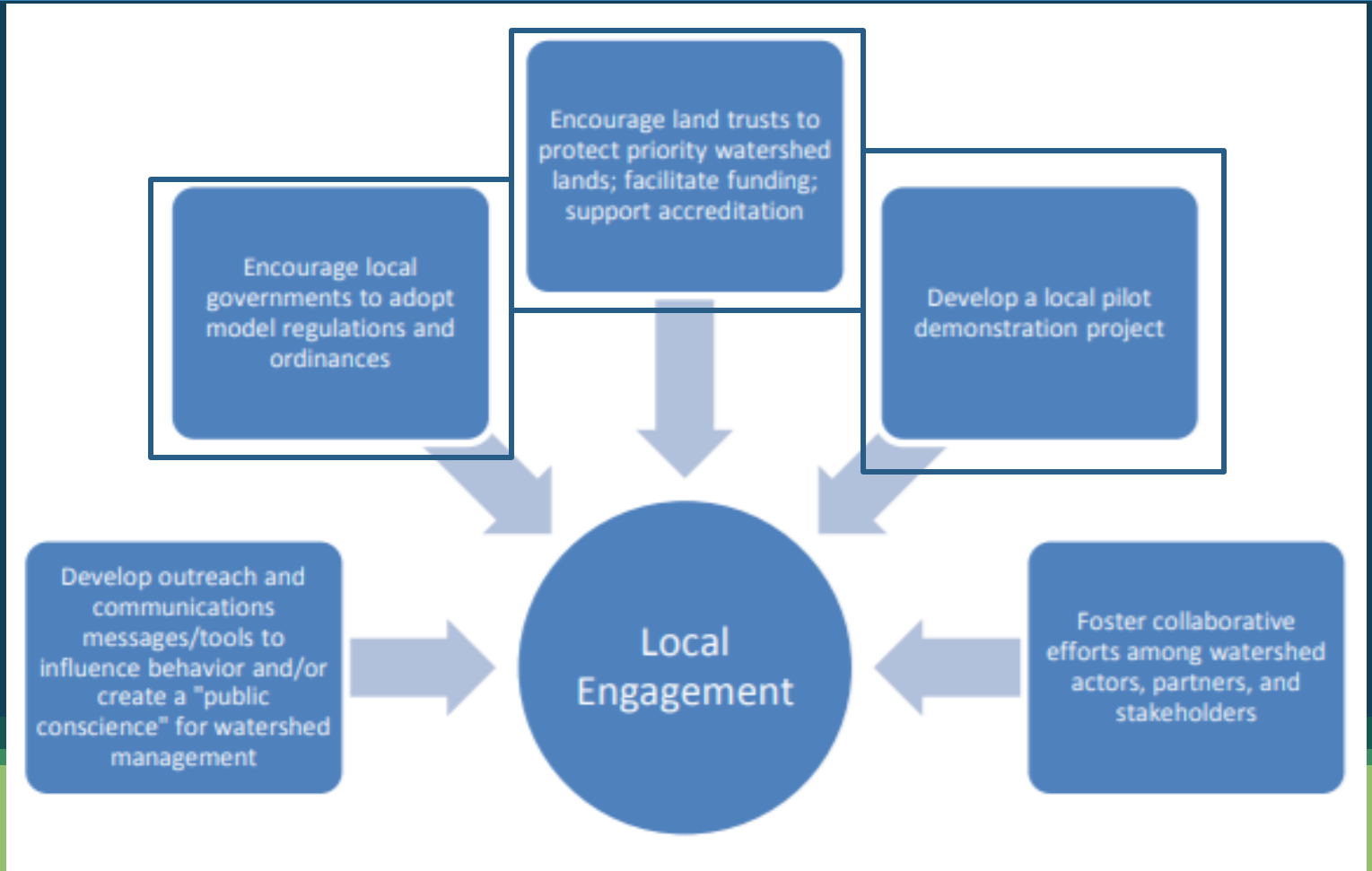
Gaps

- HW GIT capacity
- Knowledge on how to package materials and reach audience *(use partner coordination to address)*

Approaches

- Gather materials and put them on a platform *(use partner coordination to address)*
- Survey to determine effective options *(still needed?)*

Local Engagement Challenges and Needs



4

Adaptations:

How should we adapt?

Based on what we've learned, we plan to…

Increase Partner Coordination

- Work with CBP groups (LUWG, LGAC, Local Leadership and Comm and Web Team) to distill information into effective materials for local practitioners who influence land use change.

Collaborate with existing CBP Efforts

- Work with other outcomes to incorporate policies, plans, and incentives for reducing land conversion into workplans and projects
- Work more directly with Land Use Methods and Metrics outcome to sync rates of change with "tools" to help locals address vulnerabilities.

Improve Local Government Education and Outreach

- Potentially using the LGEI model to get information out to locals

Cross Outcomes Considerations

Vital Habitats Goal

- Brook Trout
- Fish Habitat
- SAV
- Tree Canopy

Land Conservation Goal

- Protected Lands
- Land Use Methods and Metrics

Healthy Watersheds Goal

- Healthy Watersheds

Stewardship Goal

- Local Leadership

Cross Outcome: Factor Influencing Success – Land Use

>20% developed land negatively affects SAV

>4% impervious surface negatively affects brook trout

What We Want

Support integration into existing CBP efforts

- Invite subject matter experts to present to your relevant groups
- Increase collaboration and incorporate policies, plans, and incentives for reducing land conversion into your work
- Tap into sources for local government engagement and outreach to develop "strategies"

Discussion