Land Use Options Evaluation Outcome
Management Strategy

Introduction

Preventing the loss of forests and wetlands by minimizing the amount of natural lands consumed by new development is the best method for retaining the natural hydrology and pollution control that these lands provide to the Chesapeake Bay watershed. Although farms alter hydrology and add nutrients and sediment to the watershed, conserving farmland is an important local, state and federal priority for a variety of reasons including, food production and capacity and rural economic development. Simultaneously, strengthening our towns and cities through smart growth provides many quality-of-life and economic benefits. Smart Growth America defines "smart growth" as "building urban, suburban and rural communities with housing and transportation choices near jobs, shops and schools". Currently, about half of the 41 million acre watershed is currently forested and another quarter is farmland. [...to respond to MDP's comments, need CBP staff to provide the percent of forest and farmland for the Bay watershed portion of each state...] The population of the watershed is expected to grow by 2 million people, or the equivalent to 770,000 households by 2030.

The loss of natural and rural land is dependent on the amount of land each new home consumes. For example, if each new household consumes two acres, rural and natural lands could decrease by as much as 1.5 million acres, but if they consume one-quarter acre, as little as 200,000 acres could be lost. Although traditional land conservation - land purchase, preservation easements - can help to direct new populations into designated or existing growth areas, additional land use "policy options, incentives and planning tools" as called for in this outcome are also needed to "reduce the rate of conversion of agricultural lands, forest and wetlands". Achieving this outcome requires not just protection of our rural and natural lands, but also considering growth options within our rural towns, cities and suburban areas that can effectively increase densities and attract new residents, while still providing for public open space (e.g., the work of NeighborSpace in Baltimore County within the Urban Rural Development Line).

Types of land use "policy options, incentives and planning tools" include traditional land conservation, such as land purchase and preservation easements, as well as other land protection policy mechanisms such as; innovative land use planning and zoning (e.g., conservation zoning, transfer of development rights (TDRs) and rural economic development, financial incentives (e.g., taxes), adaptive reuse, and methods to address urban blight and facilitate infill and redevelopment within our cities and towns.

This management strategy identifies three major tasks:

- Determine the spectrum of existing land use "policy options, incentives and planning tools" currently being implemented at the local and state level.

- Gather, summarize and place on the Chesapeake Bay Program website existing studies and reports on the costs, benefits and effectiveness of both local and state level land use "policy options, incentives and planning tools".

- Survey local governments and interest groups to determine which of the "policy options, incentives and planning tools" implemented at the local or state level have been most effective at reducing land conversion rates; whether the compilation of existing studies and reports on "policy options, incentives and planning tools" placed on the Bay Program website (under the second task) is sufficient to meet their needs; and if not, what more do they need to achieve a reduction in land conversion rates.

When completed, the results of the three tasks will indicate whether additional work is needed to fulfill the evaluation component of this outcome and will inform Bay Program partners how to proceed with the strategy development component of this outcome.

I.   Goal, Outcome and Baseline

This management strategy identifies approaches for achieving the following goal and outcome:

Land Use Options Evaluation 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.

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

The Land Use Options Evaluation Outcome calls for:

- **Evaluation**, by the end of 2017, of "policy options, incentives and planning tools" that can help local governments to "reduce the rate of conversion of agricultural lands, forest and wetlands", and

- **Development of strategies** to support "local governments' and others' efforts in reducing" the "rate of conversion of agricultural lands, forest and wetlands" by 2025 and beyond.

Baseline and Current Condition

Under current conditions, despite the efforts by many local governments and other organizations to reduce the conversion of agricultural lands, forests and wetlands within the watershed to parking lots, rooftops and other impervious surfaces, these natural landscapes continue to be lost to low-density development. The population in the watershed will continue to grow, reaching 20 million people by 2030, bringing additional demand for natural resources and subsequent land use changes.

The baseline for local level metrics for characterizing land conversion rates will be developed through the Land Use Methods and Metrics Development Management Strategy.

II. Participating Partners

The following partners have participated in the development of this strategy. A work plan to accompany this management strategy will be completed six months after this document is finalized. It will identify specific partner commitments for implementing the strategy.

Chesapeake Bay Watershed Agreement Signatories

- State of Delaware
- State of Maryland
- 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).

Local Engagement

Local governments (including regional councils of governments) and nongovernmental organizations also will have a significant role. This outcome specifically calls for the direct involvement of local governments. Local government's specific role in achieving this outcome is to assist the Bay Program with evaluating policy options, incentives and planning tools. While not called for specifically, local government should be consulted in developing strategies to support efforts to reduce the rate of conversion. In addition, the advice, guidance and direct assistance of LGAC will be needed throughout the process of implementing this management strategy.

III. Factors Influencing

The following are factors that influence the Partnership's ability to attain this outcome, they are listed in order of most difficult:

- **Political and Educational Challenges**

  Reducing land conversion rates presents both a political and educational challenge. Growth pressure can impact political decisions for where and whether growth should be concentrated; legislative authority to shape growth patterns, for example, through conservation zoning, might be difficult to obtain. Also, efforts to minimize impacts from future land change within the watershed are sometimes neglected given the significant effort needed to reduce existing impacts from existing land conversion. There are many nongovernmental organizations focused on minimizing impacts from future land change, including approximately 180 local land trusts within the watershed, as well as smart growth advocacy organizations. Some existing policy drivers, such as the Chesapeake Bay Executive Order and the TMDL, are influencing federal efforts to mitigate future land change impacts to the Bay.

  Local governments need better information on the variety of benefits of land conservation and smart growth, such as source water protection, fiscal benefits, public health, and helping to meet regulatory responsibilities under the Chesapeake Bay TMDL. In addition, concentrating development can require changes to local government development codes and plans, such as reducing the number of parking spaces required, and encouraging two-story schools, libraries and other public buildings. Local governments must consider many diverse factors when regulating land use, including affordability of housing, property rights, and the adequacy of surrounding infrastructure. Local economic development objectives, especially in areas where there is high unemployment, also are of concern to local governments. Some local governments might need technical assistance to harmonize (through the comprehensive planning process) economic development objectives with environmental objectives. Governments most in need of such assistance sometimes are those that are just beginning to experience significant

development pressure. There also is a need to ensure that open space areas set aside by local governments are not rezoned and then lost to future development.

- **Sustaining the Agricultural and Forestry Industries**
  The loss of forest and farmland can be slowed by strengthening the agricultural and forestry industries in the watershed. Two areas of concern include: ensuring the continued affordability of working forests and farmland so they can continue to be managed as working lands, and facilitating the transfer of those lands from those currently working them (often an aging population) to the next generation of farmers and foresters.

- **Ability to Engage Local Governments in Conducting the Evaluation**
  A major task in achieving this outcome will be surveying local governments and interest groups. To do so, the Bay Program must engage with local governments and groups throughout the watershed. Similar to the the technical challenges, this is mitigated to some extent by the long timeframe – 2017 – to complete the evaluation.

- **Technical Challenge**
  Completing the evaluation component of this outcome presents a technical and administrative challenge and will require sufficient funding. The challenge is mitigated to some extent by the long timeframe – 2017 - to complete the evaluation.

IV. Current Efforts and Gaps

Current efforts and gaps in current land conversion reduction efforts will be determined through the tasks listed under the management approach. At all levels of government and among many nongovernmental organizations, efforts to promote and implement smart growth measures are underway, but the level and type of effort varies across the watershed. At this time there is no coordinated watershed effort to promote and implement smart growth measures as a means to protect the Bay and the rural lands in the watershed.

Actions, Tools and Support to Empower Local Government and Others
Actions, tools or technical support needed to empower local government and others will be determined through the tasks listed under the management approach.

V. Management Approaches

The Partnership will work together to carry out the following actions and strategies to achieve the Land Use Options Evaluation Outcome. These approaches seek to address the factors affecting our ability to meet the goal and the gaps identified above.

This management strategy identifies three major tasks:

- Determine the spectrum of existing land use "policy options, incentives and planning tools" currently being implemented at the local and state level. Although the focus will be on efforts within the watershed, examples of successful efforts outside of the watershed also

- will be gathered, as appropriate, such as specific examples of cities and communities that have directly addressed the issue of land conversion, like Chicago, Illinois and Portland, Oregon.

- Consult with Bay Program communications and web team to gather, summarize and place on the Bay Program website existing studies and reports on the costs, benefits and effectiveness of both local and state level land use "policy options, incentives and planning tools".

- Survey local governments and interest groups to determine which of the "policy options, incentives and planning tools" implemented at the local or state level have been most effective at reducing land conversion rates; whether the compilation of existing studies and reports on "policy options, incentives and planning tools" placed on the Bay Program website is sufficient to meet their needs; and if not, what more do they need to achieve a reduction in land conversion rates.

When completed, the results of the three tasks will indicate whether additional work is needed to fulfill the evaluation component of this outcome and will inform Bay Program partners how to proceed with the strategy development component of this outcome.

With regard to the second task of gathering, summarizing and placing existing studies and reports on the costs, benefits and effectiveness of both local and state level land use "policy options, incentives and planning tools" on the Bay Program website , academics; organizations like the Urban Land Institute, American Planning Association, Environmental Law Institute, Resources for the Future, Smart Growth America, EPA Office of Sustainable Communities, Lincoln Land Use Institute, the Victoria Transport Policy Institute; and some government agencies, have completed studies of the benefits and costs of policy options, incentives and planning tools focused on reducing land conversion. The Lincoln Land Use Institute has evaluated the effectiveness of state-level smart growth programs. The site should highlight the most effective best practices; the survey under the third task will help to identify those practices.

Local Government Advisory Committee (LGAC) members support the idea of making the existing knowledge base more easily accessible to local government leaders. In addition, LGAC members would like to ensure the following information is made accessible: local land change forecasting tools; George Washington Regional Commission growth projection scenarios could serve as a model to analyze the impacts of proposed land use policies. A summary of legal issues related to land use policy development, economic benefits and costs of different approaches shown as alternatives, including capital planning and budgeting impacts, examples of policy options by type of community and credentialing will also serve as useful tools.

NOTE: the proposed Bay Program web page could be expanded beyond land use "policy options, incentives and planning tools" to cover other information and tools needed by local governments and other participating entities to achieve other Chesapeake Bay Watershed Agreement Outcomes. Existing successful federal and state efforts to provide web-based technical assistance to local governments can be used as a template. Additional details will be worked out with Bay Program communications and web team and outlined in our work plan.

With regard to the third task, state associations of counties and towns along with state agencies focused on land use planning technical assistance might be able to facilitate the survey effort. In addition, the other technical assistance providers listed above could help with designing the survey. Each state will be consulted to determine the best approach for surveying local governments, including who to survey and the wording of the survey. In some cases, surveying planning districts versus local governments might be a better approach to reach everyone effectively.

Before beginning to work on the development of strategies to support the portion of the outcome related to "local governments' and others' efforts in reducing" the "rate of conversion of agricultural lands, forest and wetlands" by 2025 and beyond, the Partnership will wait until the results and lessons learned from the above three tasks are determined. Ideally this will enable the Bay Program to understand what local governments and other applicable interest groups need to reduce land conversion rates. Also, the results and lessons learned through implementation of other Watershed Agreement Outcomes (e.g., Local Leadership Outcome) over the next few years should be used to guide the development of strategies under the Land Use Options Evaluation Outcome. This proposed approach is meant to ensure that any strategies developed add to the work already completed under the other Watershed Agreement Outcomes.

Although this management strategy does not propose to immediately begin developing strategies to support "local governments' and others' efforts in reducing" the "rate of conversion of agricultural lands, forest and wetlands" by 2025 and beyond, there is recognition that certain approaches are likely to be more effective than others including: the provision of incentives (e.g., state funding for new development or revitalization efforts within growth areas, economic justification, presenting options as policy alternatives versus directives and ensuring continued technical support and training as local government administrations change.

Cross-Outcome Collaboration and Multiple Benefits
With regard to other outcomes in the Watershed Agreement, this outcome differs from the Local Leadership Outcome in having a 2025 goal for reducing land conversion rates; however, the outcomes are similar because the evaluation will serve to "increase the knowledge and capacity of local officials on issues related to water resources." Overall, the management strategy for this outcome will propose methods for informing and supporting other outcomes in the Watershed Agreement (e.g., 2025 WIP, Wetlands, Stream Health, Brook Trout, Healthy Watersheds, Local Leadership, and Protected Lands), including regular communication with and guidance from the GITs responsible for these outcomes

VI. Monitoring Progress
See "Adaptively Manage" section

VII. Assessing Progress
See "Adaptively Manage" section

VIII. Adaptively Manage

The Partnership will use the following approaches to ensure adaptive management:
- The local level metrics for characterizing land conversion rates developed through the Land Use Methods and Metrics Development Outcome, along with other tools and information, will be used to direct our efforts and to assess progress towards the goal for "supporting local governments' and others' efforts in reducing these rates by 2025 and beyond."

IX. Biennial Workplan
Biennial workplans for each management strategy will be developed by December 2015. It will include the following information:
- Each key action
- Timeline for the action
- Expected outcome
- Partners responsible for each action
- Estimated resources