

# **PRESERVING SUSTAINABLE RESOURCE LANDS**

**A Summary of Plans and Studies related to the Sustainability of  
Agricultural and Forestry Resources in Maryland**

**Report to  
The Harry R. Hughes Center for Agro-Ecology, Inc.  
Queenstown, Maryland**

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## EXECUTIVE SUMMARY

Hundreds of experts in farming, forestry, planning, environmental management, government, academia, non-profit and other fields have contributed to the twenty eight reports and studies summarized in this document. Some of the reports are products of group deliberations, where problems are identified, ideas and suggestions are offered and voted on by the group, recorded on flip-charts and summarized by the facilitators or leaders of the group. These typically produce many recommendations in each report, based on a consensus of which ones have collective support and highest priority. Other reports represent academic research from university faculty or research staff using statistical techniques and policy analysis to study a narrower set of issues in more depth with fewer recommendations. Both forms of reports have produced important recommendations for policy makers, political leaders, agency administrators and the general public.

This is a summary of a select group of reports written over the past ten years related to the sustainability of agricultural and forestry resources. There are many reasons for preserving farmland and forests as preferred land uses in rural Maryland, for our food and fibre needs, our economy and our overall quality of life. Some of these reasons and the concept of *sustainability* are identified in the introduction. To many, “*Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.*”

In Maryland today, with a total land area of about 6.2 million acres, 27% of the State has been developed, 23% has been permanently preserved by easements or public ownership, and of the remaining 50% an equal amount of private land is unstable with weak zoning, and temporarily stabilized with the most protective zoning. State and local actions in the next 20 to 30 years, either to permanently protect, or allow sprawl to develop the remaining 50% of the State’s land, may be foreshadowed by how many of the recommendations listed below have been or will be implemented.

The summaries of the policy reports are grouped under five categories, generally: I) Sustainability, II) Smart Growth and Land Use, III) Water Quality and Supply, IV) Agriculture and Land Preservation, and V) Forest Resource Preservation. There is a certain amount of redundancy and repetition with the same recommendations from one report to another, even between several reports in different categories. Table I illustrates the pattern. The more common recommendations among the reports include the following generalized phrases, with the recommendations from most reports listed first:

- Improve local comprehensive plans and zoning to preserve farms and forests. (18)
- Support conservation easement programs. (18)
- Increase funding for land preservation. (17)
- Provide tax relief and incentives for farm and forest landowners. (12)
- Establish Priority Preservation Areas to target land preservation investments. (11)
- Retain, expand and sustainably manage forest lands. (11)
- Finalize and Support PlanMaryland (8)
- Maximize return on investment in land preservation with local zoning. (8)

- Adequately fund land preservation and planning agencies and staff. (8)
- Provide incentives and funding for development in existing communities. (6)
- Pursue No Net Loss of Forests. (5)
- Limit funding for infrastructure in Priority Preservation Areas. (4)
- Establish Urban Growth Boundaries. (3)

Many of these reports have made a significant difference. Several laws have been enacted or amended by the Maryland General Assembly and signed by the Governor, in part as a result of these recommendations. Examples include: *Smart, Green and Growing - Maryland Sustainable Growth Commission*, S.B. 278, Chapter 489, 2010; *Smart, Green and Growing - Local Government Planning Visions*, H.B.294, Chapter 181, 2009; the *Sustainable Forestry Act of 2009*, S.B. 549, Chapter 175; the *Agricultural Stewardship Act of 2006*, H.B.2; and the *Certification of County Priority Preservation Areas Bill of 2007*, H.B.1354. A clear value from these can be seen in the multiple recommendations to close the loophole in the State's real estate transfer tax for LLC's. Based on the recommendations, the law was proposed and passed by the Maryland House of Delegates at least twelve times before the Senate finally agreed in 2008 and the loophole was closed, increasing funds for land preservation.

Many of the reports have also had an important cumulative effect on the formation of state policies for consideration by subsequent task forces and commissions, such as the Sustainable Growth Commission or the No Net Loss of Forest Task Force, leading to further action and often legislation. These reports, especially those of the Task Forces to Study the Maryland Agricultural Land Preservation Foundation, have not only helped improve the effectiveness and operations of MALPF, but have had a strong influence on the connections between public investments in land preservation, and the return on these investments that are influenced by local planning and land use decisions, a concept now found in PlanMaryland and its implementation process.

Some aspects of sustainability of farming and forestry in Maryland were outside the scope of this report, including the economic sustainability of the farm and forest landowners or operators themselves. For these industries and lands to be sustainable, it is widely acknowledged that they must be profitable. Owners of private farms and forests must be able to make a reasonable living from their lands or they will sell or develop the land when they have a choice. These choices are often limited by the general economy, alternative land uses permitted by local zoning and whether there is a market for such uses at the time. Additional research may be needed on the profitability of private farming and forestry in the State's remaining undeveloped land area, compared with other regions outside the Chesapeake Bay watershed.

Significant assistance was provided in the preparation of this report by the staff of the Harry R. Hughes Center for Agro-Ecology, Inc., Sarah Taylor-Rogers, Russ Brinsfield and Nancy Nunn; and the members of the Sustainability Committee of the Center. State agency staff and others were very helpful in describing the progress the State has made in response to recommendations, including Gary Allen, Saeid Kasraei, Steve Koehn, Craig Nielsen, Dan Rosen, Joe Tassone, Don VanHassent and Carol West.

**Table 1**

		Goals, Recommendations & Policies															
		Smart Growth, Land Use Management, Zoning & Sustainability Recommendations only															
Report No.	Report Name	Common Themes and Recommendations - Sustainability, Smart Growth & Water Quality and Supply											Pursue No Net Loss of Forests				
		Maximize Return on Investment in Land Preservation with local zoning	Establish Priority Preservation Areas (PPA) to target land preservation investment	Increase Funding for Land Preservation	Support Conservation Easement Programs	Finalize & Support PlanMaryland	Improve Local Comprehensive Plans & Zoning to Preserve Farms & Forests	Provide tax relief & incentives for farm & forest landowners	Provide incentives & funding for development in existing communities	Limit State funding for infrastructure in priority preservation areas	Retain, expand & sustainably manage forest lands	Adequately fund land preservation & planning agencies & staff		Establish Urban Growth Boundaries			
I.1.	Maryland Forward, Governor's Forum on Sustainability			✓		✓		✓		✓							
II.1	PlanMaryland, Revised Draft, Sept 2011	✓	✓	✓	✓	✓		✓									
II.2	Making Maryland the National Leader in Planning & Smart Growth, Transition Team 2007	✓		✓		✓		✓		✓			✓		✓		
II.3	Maryland Transition Work Group on Environment & Natural Resources 2007			✓		✓		✓		✓			✓		✓		✓
II.4	Ten Years Later: An Assessment of Smart Growth in Maryland	✓				✓		✓		✓			✓		✓		
III.1	Maryland Phase I, Watershed Implementation Plan, 2010																
III.2	Maryland's WIP Process & the Role for Agriculture, Resource Conservation Option																
III.3	Chesapeake Bay TMDL & Maryland's WIP, 2010																
III.4	Water for Maryland's Future, What We Must Do Today, 2008			✓				✓							✓		
IV.1	Understanding & Responding to Changing Needs of Maryland Agriculture		✓		✓												
IV.2	Land Preservation, Parks & Recreation Plan, Vol.I, MDP	✓	✓	✓	✓	✓		✓					✓		✓		
IV.3	Land Preservation, Parks & Recreation Plan, Vol.II, DNR		✓		✓												
IV.4	Maryland Farmland Conservation: Supporting Sustainable Use w/ Tax Policy			✓													

✓ = recommended by this report

(continued on next page)

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Goals, Recommendations & Policies														
Common Themes and Recommendations - Agricultural Policy, Land Preservation and Forest Preservation														
No.	Report Name	Maximize Return on Investment in Land Preservation with local zoning	Establish Priority Preservation Areas (PPA) to target land preservation investment	Increase Funding for Land Preservation	Support Conservation Easement Programs	Finalize & Support PlanMaryland	Improve Local Comprehensive Plans & Zoning to Preserve Farms & Forests	Provide tax incentives for farm & forest landowners	Provide incentives & funding for development in existing communities	Limit State funding for infrastructure in priority preservation areas	Retain, expand & sustainably manage forest lands	Adequately fund land preservation agencies & staff	Establish Urban Growth Boundaries	Pursue No Net Loss of Forests
IV.5	Land Preservation & State Land Subcommittee Statement, Transition Team		✓	✓	✓		✓	✓			✓	✓		
IV.6	Comparing Farmland Preservation for Smart Growth in Maryland and Pennsylvania	✓	✓	✓	✓								✓	
IV.7	A Statewide Plan for Agricultural Policy and Resource Management, 2006			✓	✓	✓	✓	✓			✓			
IV.8	Maximizing Return on Public Investment in Maryland's Land Preservation Programs	✓	✓	✓	✓	✓	✓			✓				
IV.9	Task Force to Study the Maryland Agricultural Land Preservation Foundation, '04	✓	✓	✓	✓						✓			
IV.10	Task Force to Study the Maryland Agricultural Land Preservation Foundation, '03	✓	✓	✓	✓									
V.1	Maryland Forest Resource Strategy, 2010-2015				✓		✓	✓			✓			✓
V.2	Maryland Forest Resource Assessment, 2010		✓		✓		✓				✓			
V.3	Mapping a Sustainable Forest Strategy for Maryland: Public Engagement Process, 2009			✓				✓			✓	✓		
V.4	No Net Loss of Forest Task Force, Final Report and Recommendations, 2009			✓	✓		✓	✓	✓		✓			✓
V.5	Governor's Commission for Protecting the Chesapeake Bay through Sustainable Forestry			✓	✓		✓	✓						
V.6	Maryland Strategic Forest Resources Plan, DNR FS 2000			✓	✓		✓	✓			✓			
V.7	Guiding Maryland's Forest Community into the 21st Century, Maryland Forestry Task Force							✓				✓		
V.8	Forest Production, Industry & Forest Retention Assessment, 2004				✓		✓							✓
V.9	Maryland Sustainable Forestry Council, No-Net-Loss of Forest Policy, 2011		✓		✓		✓	✓			✓			✓

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## INTRODUCTION

In the past ten years a significant amount of research, planning and state and federal action has helped advance the concept of sustainability or sustainable development for Maryland's environment and economy, including the sustainability of agriculture, forestry, the Chesapeake Bay and other natural resources.

This report is designed to assist The Harry R. Hughes Center for Agro-Ecology (HRHCAE) identify, document and compare many of these recommendations on how to sustain agriculture and forestry as preferred land uses and viable economic activities in rural Maryland. These recommendations have been advanced by task forces, transition teams, commissions, study committees, state agencies and prior research by the HRHCAE and the University of Maryland. Some recommendations have been adopted in State plans and policies, such as PlanMaryland, or in legislation enacted by the Maryland General Assembly. Many of the reports summarized herein contain the same recommendations as found in other studies or reports, leading to an apparent consensus of opinion on certain issues among the experts on what is needed. Some of the more common recommendations are displayed in Table I.

Several reports identify opportunities for additional research, which could provide a basis for further work on sustainability or sustainable development to be funded by the HRHCAE and its partners.

As background for this summary, it is important to first establish the purposes for preserving sustainable resource lands in Maryland. The current status of Maryland's progress in preserving these lands provides a context for considering the many recommendations today.

### **The Purposes and Context for Preserving Sustainable Resource Lands in Maryland**

#### **Why protect working farms and forests?**

PlanMaryland offers the following statement of *Why This Matters* to lose farmland in Maryland:

*"Losing farmland hurts local economies and diminishes Maryland's cultural heritage. Maryland's residents will lose the value of locally-grown foods, rural tourism, and the unquantifiable but real value to the state of having a healthy and beautiful agricultural landscape."<sup>1</sup>*

Members of the Sustainability Committee of the Harry R. Hughes Center for Agro-Ecology suggested additional reasons:

*"We need to preserve farmland, because if you spread development throughout the state, we could not afford it, because of the cost of infrastructure."*

*"From the point of view of living in Maryland you need some diversity, you need quality of life and of the environment."*

*"Economic development people on the Eastern shore are selling the attraction of farmland and forestry to those businesses that might locate here because of the diversity of the State's environment."*

*"If we import products from all over the world, we may lose our agricultural independence in Maryland. When the price of fuels goes up we may not be able to afford our agricultural products shipped from other parts of the world."*

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<sup>1</sup> *PlanMaryland* Revised Draft, page 2-13

PlanMaryland also addressed the problem of forest fragmentation:

*“The reduction of a large forest to small isolated patches reduces habitat for species that require large tracts of interior forest and reduces the opportunity for gene flow and migration needed to maintain resilient natural plant and animal populations. According to Maryland’s Genuine Progress Indicator, each acre of forest that is lost costs the State \$318.50. Since 1960, Maryland has lost 497,000 acres of forest valued at \$158 million for its potential use as habitat, recreation, and carbon sequestration.”*<sup>2</sup>

In the authorizing legislation for the Maryland Agricultural Land Preservation Foundation (MALPF) the Maryland General Assembly established the following:

§ 2-501. Legislative intent.<sup>3</sup>

“(a) It is the intent of the Maryland General Assembly to preserve agricultural land and woodland in order to:

- (1) Provide sources of agricultural products within the State for the citizens of the State;
- (2) Control the urban expansion which is consuming the agricultural land and woodland of the State;
- (3) Curb the spread of urban blight and deterioration; and
- (4) Protect agricultural land and woodland as open-space land.

(b) With respect to woodland preservation under this subtitle, the General Assembly encourages that fair consideration be given to the retention of forest lands that are working landscapes as defined under §5-101 of the Natural Resources Article.”

Similar language establishing why Maryland protects working farms, forests and open space can be found in the authorizing legislation for the Rural Legacy Program, Program Open Space and the State’s forest management programs. For more detail and a national perspective on why we preserve farmland, read the American Farmland Trust’s *Fact Sheet: Why Save Farmland?*<sup>4</sup>

### **What is Sustainable and Sustainability?**

A central theme running through many of the reports and studies in this summary is the concept of *sustainable* and *sustainability*. The April 2011 Draft of PlanMaryland and the Revised Draft of September 2011 utilize these terms throughout, as do many other reports in this summary.

PlanMaryland in April 2011 defined *sustainable*:

*“By ‘sustainable’ we mean that a high quality of life in Maryland’s communities and rural areas can continue into the future without diminishing the land, water, air, natural and cultural resources that support it.”*<sup>5</sup>

Sustainable development is a concept that became an international challenge or goal in resource economics in 1987 with the publication of the *Report of the Brundtland Commission of the United Nations, Our Common Future*,<sup>6</sup> which defined *sustainable development*:

*“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”*

Both terms have been the subject of books and many studies in Maryland and internationally. They are in the titles of State Laws establishing the *Sustainable Forestry Act*, SB 549, and the

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<sup>2</sup> Ibid, page 2-13

<sup>3</sup> Public Laws of Maryland, Agriculture Article, Title 2, Department of Agriculture, Subtitle 5, Maryland Agricultural Land Preservation Foundation, updated October 2010.

<sup>4</sup> *FACT SHEET, Why Save Farmland*, American Farmland Trust, January 2003

<sup>5</sup> *PlanMaryland*, Draft April 2011, page 3-16

<sup>6</sup> *Report of the World Commission on Environment and Development: Our Common Future*, Oslo, March 1987

Act establishing the Maryland Sustainable Growth Commission, *Smart, Green and Growing - Maryland Sustainable Growth Commission, SB 278*. They were the topic of Governor O'Malley's Governor's Forum on Sustainability in January 2011, and his Transition Team's discussions and reports in 2007.

For a more detailed discussion of these concepts, the reader may want to read University of Maryland Professor Herman Daly's and John Cobb, Jr.'s book: *For the Common Good*.<sup>7</sup>

### **The Context for Sustainability in Maryland: What has been lost and preserved?**

As of 2011, a significant amount of Maryland's land has been developed, while a significant amount of farm and forest land has also been permanently protected:

- 27% of Maryland's total land area of about 6.2 million acres has been developed, or 1.6 million acres.
- 23% or 1.45 million acres has been permanently preserved by conservation easements or public ownership.
- 50% or 3.15 million acres is neither developed nor permanently preserved.
- 22% or 1.4 million acres were considered "unstabilized" by the Department of Planning in PlanMaryland's April 2011 Draft ("*Lands that are already fragmented or are moderately fragmented but at high risk for further development are considered unstable*")<sup>8</sup>. This represents about 45% of the remaining undeveloped and unprotected land area of Maryland.
- 22% or 1.4 million acres, and 45% of the remaining undeveloped and unprotected land is covered by the "most protective zoning" (zoned for 1 dwelling per 20 acres or more), including some lands that are in Resource Conservation Area zones of the Chesapeake Bay Critical Area.
- Based on public ownership, regulations and easements, about 24% of Maryland's forest land has been "protected" from conversion to other uses, according to one HRHCAE study.<sup>9</sup>
- If current trends continue Maryland will lose another 226,000 acres of farmland by 2035.

### **Agricultural and Forest Lands Lost**

The April 2011 Draft of PlanMaryland documented the rate at which farm and forest lands have been lost over the past 25 years.

*"Between 1982 and 2007, total land in farms declined by almost 500,000 acres, an amount equivalent to one fifth of the total lands in farming in 1982."*

The Maryland Forest Resource Assessment of 2010 documented that in the past 22 years:

*"The greatest threat to biodiversity in Maryland's forests has been, and continues to be, land development. Maryland has lost 151,500 acres of forests between 1986 and 2008."*

### **Maryland's Goals for Land Preservation**

Maryland has among the best set of land preservation programs in the United States, with significant accomplishments in preserving farm and forest lands. It was the earliest State in the nation in 1956 to provide lower Agricultural Use Assessments (AUA) to encourage continued farming in an urbanizing region facing rapidly rising real estate values. It was one of the earliest States in the nation to establish by legislation an environmental trust to accept donated

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<sup>7</sup> *For the Common Good, Redirecting the Economy Toward Community, the Environment, and a Sustainable Future*, Herman Daly, John Cobb Jr., Beacon Press, Boston 1989

<sup>8</sup> *PlanMaryland*, Ibid, page 2-33

<sup>9</sup> *Forest Production, Industry & Forest Retention Assessment*, L. Irland, 2004 - MCAE Pub 2004-01

conservation easements on private lands (MET - 1967),<sup>10</sup> the first in 1977 to establish a State level farmland preservation program (MALPF),<sup>11</sup> and one of the first in 1997 to target the protection of large contiguous areas of farmland, forests, historic and cultural lands, i.e multiple resources (Rural Legacy Program). In 1999 the Sierra Club rated Maryland first of all states in the nation in open space protection.<sup>12</sup> Maryland is also recognized as a national leader in planning for land conservation with its Greenways, GreenPrint, Smart Growth and Smart-Green and Growing initiatives.

Therefore, it is consistent with Maryland's history of conservation leadership for the State's Governors and Legislatures to adopt ambitious goals for preserving farms and forest lands in the future. The following is a summary of these goals.

1. In 2002, a Joint Resolution of the Maryland General Assembly established a statewide goal to preserve three times the amount of agricultural lands protected at that time, or a total of 1,030,000 acres by the year 2022, through MALPF, Rural Legacy, GreenPrint and local Purchase of Development Rights (PDR) and Transfer of Development Rights (TDR) programs. **Agricultural Lands: 1,030,000 acres by 2022**
2. In 2006, the Chesapeake Executive Council recognized that "retaining, expanding, and sustainably managing forest lands is essential to restoring a healthy Chesapeake Bay" by signing Directive 06-01. By 2020, the Bay watershed goal is to permanently protect an additional 695,000 acres of forest from conversion, targeting forests in areas of highest water quality value."<sup>13</sup> Maryland's share of this protection goal is 250,000 additional acres by 2020. When added to the 724,000 acres of protected forest lands in 2006, the goal for Maryland is: **Forest Lands: 974,000 acres by 2020**
3. The Maryland Department of Planning projects that an average of 20,000 acres per year or 420,000 additional acres will be developed by 2030 (2,020,588 acres total). Their 2009 Maryland Land Preservation Parks and Recreation Plan (MLPPRP) reiterates the overall goal the State has been operating under since Program Open Space was established in 1967: "*One State goal to which all local governments contribute is the ability to protect recreational open space and resource lands at a rate that equals or exceeds the rate that land is developed at a statewide level.*" At this rate of land development over the next 11 years, this goal would require protection of an additional 220,000 acres of land by 2022, on top of the 1.6 million acres already protected. This goal overlaps and includes land preserved for farm and forest lands. **Open Space & Natural Lands: 1,820,000 acres by 2022**

### **Types of Studies and Recommendations**

The following summary of studies and recommendations reviewed is organized by type of study, report or recommendations, in the following categories:

- I. Sustainability of Maryland's Economy and Natural Resources.
- II. Smart Growth Planning and Land Use Policy
- III. Water Quality and Supply, and the Chesapeake Bay

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<sup>10</sup> Maryland Environmental Trust, <http://www.dnr.state.md.us/met/>

<sup>11</sup> Maryland Agricultural Land Preservation Foundation, <http://www.malpf.info>

<sup>12</sup> Solving Sprawl, The Sierra Club Rates the States, 1999 <http://www.sierraclub.org/sprawl/report99/>

<sup>13</sup> Protecting the Forests of the Chesapeake Bay Watershed, 2007 Response to Directive 06-1, [http://www.chesapeakebay.net/content/publications/cbp\\_27761.pdf](http://www.chesapeakebay.net/content/publications/cbp_27761.pdf)

#### IV. Agricultural Policy, Land Preservation and Management

#### V. Forest Resource Preservation and Management

In some cases the summarized reports could fall into more than one of these categories.

Only those parts of the reviewed reports that relate to the issues of sustainability of farmlands or forests as preferred land uses in rural Maryland are listed. Other aspects of the reports, such as research and recommendations for alternative farming products, marketing techniques for farming or forestry products, the effect of environmental regulations on farming practices, or competition with the farming and forest industries in other states, were considered beyond the scope of this report. While these other aspects may influence the long-term sustainability of the farming and forestry industry in Maryland, they may not influence land use planning, zoning or smart growth decisions directly. As members of the Sustainability Committee said:

*“The economic arguments around Bay pollution and the economic impacts of a dirty bay are so complex they go beyond the scope of this study”*

*“We can only identify the issues, we can't solve the problems.”*

#### **Progress in Implementing Study Recommendations**

After listing and summarizing the many recommendations of the twenty eight studies and reports, an effort was made to determine the current status of responses to the recommendations, without a lengthy accounting of every action taken or not taken by the Governor, General Assembly, State agencies or others with responsibility for the topic reviewed.

After interviews with a few key State officials involved with the groups producing the recommendations, or with responsibility for the programs being reviewed, a brief progress report is provided at the end of the summaries to explain the nature of the actions taken to date.

### **PRESERVING SUSTAINABLE RESOURCE LANDS**

#### **Summary of Plans and Studies Related to the Sustainability of Agricultural and Forestry Resources**

Twenty eight special studies and reports produced by appointed boards, commissions, task forces, transition teams and study groups, or The University of Maryland and the Harry R. Hughes Center For Agro-Ecology, Inc. were reviewed and summarized by this project. These reports and their recommendations were considered relevant to the Center's concern for the sustainability of agriculture and forestry as preferred land uses in rural Maryland. Many others were reviewed, but not summarized here, either because of their limited applicability to smart growth, planning, land use management or zoning that could affect the sustainability of these resources, or because they produced information or findings but did not make recommendations that could be assessed by the Committee.

The following general observations and assessments of these reports and their recommendations contain some personal views of the consultant based on his experience in the field. In four cases the consultant was directly involved or participated in the studies or reports that are summarized. Members of the Center's Sustainability Committee or staff may have their own equally sound observations and assessments of the study results, which may differ from those below.

Large parts of this report contain quotes of recommendations copied directly from the summarized reports [in quotation marks, followed by source page numbers]. Those segments that

are italicized are intended to emphasize important statements by the authors, or were italicized in the original reports.

A list of the reports is provided in the *References* at the end of this document, with internet (URL) links if available, so the reader can access the full reports.

### **I. 1. Maryland Forward: Governor’s Forum on Sustainability:**

This report was a product and summary of the Governor’s Forum on Sustainability held on January 7, 2011 in Wye Mills, Maryland. There was a large attendance at the Forum from a diverse group of over 700 leaders from every region of the State, including farming, forestry, development, the environment, planning and state and local government. It was staffed by the Maryland Department of Planning, and Governor O’Malley played a key role in leading the discussions.

Overall, these recommendations add weight to and are generally consistent with many of those in *PlanMaryland*, and in the Transition Team’s detailed report *Making Maryland the National Leader in Planning and Smart Growth*. This summary is limited only to those Forum sessions and report segments that provided recommendations for Smart Growth and resource based industries. Other parts of the report were not summarized.

#### **Smart Growth recommendations**

- “Require different scales of density for different areas of the state. PFA density requirements could be made flexible for rural vs urban communities.
- Address local concerns regarding Adequate Public Facilities Ordinances (APFO).
- Better standards for development on wells and septic.
- Collaborate with Smart Growth non-profit organizations.
- Finalize PlanMaryland and revise state programs, funding mechanisms and other planning tools to support implementation.
- Complete and launch GrowthPrint.
- Evaluate and quantify the negative impacts of ‘dumb’ growth (i.e. health, environmental and fiscal costs).
- Set minimum state standards for agricultural zoning.
- Establish variable scales for agricultural preservation programs, allowing for smaller niche farming.
- Integrate urban agriculture into agricultural preservation program and food system policies.
- Eliminate or reduce the estate tax and inheritance tax on farmland.
- Do more to incentivize infill development via more funding and green taping.
- Expand the amount of green space and urban agriculture (solicit more donated land) in growth areas to increase livability.
- Provide more funding for schools located in priority growth areas.” [p.19]

All of these policies could contribute substantially to the sustainability of agricultural and forestry land uses in Maryland if adopted.

Many other recommendations were made in the break-out session for protecting resource-based industries, but these were not directly related to the sustainability of farming and forestry as preferred land uses.

Funding and revenue sources to provide for Smart Growth were recommended, including higher gas taxes to support transit; expanded Tax Increment Financing (TIF) and other mechanisms to fund community revitalization; streamlined historic preservation funding; strengthening the

ability of municipalities to raise revenue; incentivizing infill development with more funding; more funding for schools located in PFA's; eliminating or reducing Estate Tax and Inheritance Tax on farmland; and leveraging private funding for land preservation, Bay restoration and other activities.

**Progress to date:** In April 2011 Governor O'Malley signed an executive order forming a Septics Task Force to examine pollution from Septic Systems and find out how much pollution they contribute to the Chesapeake Bay and its rivers. A revised Draft of PlanMaryland was released in September, with comments due November 1st. It calls for a collaborative process with local governments to complete GrowthPrint. A blue-ribbon commission for transportation funding has been established, but their report is not completed.

## II. 1. Plan Maryland, Revised Draft September 2011

This draft of PlanMaryland was released September 1, 2011 after the first round of comments on PlanMaryland, Draft April, 2011. This followed a five month review period including meetings with public officials, interest groups and citizens in all parts of the state, involving more than 1,000 people directly and nearly 5,000 online visitors to the PlanMaryland web site. Governor O'Malley extended the review period for the revised draft another 60 days until November 1. PlanMaryland seeks to protect the sustainability of Maryland's farm and forest resources in several ways.

Goal 1 is to "*Concentrate development and redevelopment in towns, cities and rural centers, where there is existing and planned infrastructure.*" [p.3-2] This would remove much of the economic pressure to develop more farms and forests for lower density development.

Goal 2 is to "*Preserve and protect environmentally sensitive and rural lands and resources from the impacts of development,*" [p.3-5] and provides specific established benchmarks, including:

- "*Restore the health of the Chesapeake Bay by 2020.*(Source: Governor O'Malley's Strategic Policy Goals)," [p.3-5]
- "*Triple the number of acres of productive agricultural land preserved by the Maryland Agricultural Land Preservation Foundation (MALPF), GreenPrint, Rural Legacy, and local preservation programs by the year 2022.*(Source: SJ 10 / HJ 22 Maryland General Assembly 2002)," [p.3-6] and

A proposed new benchmark is to:

- "*Protect 300,000 acres from being converted to development between 2010 and 2030.*"(p.3-6)

Goal 3, is to "*Ensure that a desirable quality of life in Maryland's metropolitan and rural communities is sustainable.*" [p.3-7]

The Progress Report on the April 2011 Draft stated: "*The Plan looks at broad goals such as saving 400,000 acres of farmland and forest over the next 25 years ....*"<sup>14</sup> Governor O'Malley's PowerPoint presentation to the Maryland Association of Counties (MACO) in August also stated: "*A smart growth approach could save 400,000 acres of farmland and forest over the next 25 years*"

Under the 25 year projection and the 20 year benchmark, an average of between 15,000 and 16,000 acres of farmland and forests would be protected per year under PlanMaryland.

To put these measures in context, in the 20 years between 1984 and 2004, a robust period in the real estate market and higher real estate transfer tax revenues, Maryland's primary land conservation easement programs protected 354,000 acres, an average of 17,700 acres per year.

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<sup>14</sup> *PlanMaryland Progress Report*, July 2011, p.1, Maryland Department of Planning

These included easements obtained by MET, MALPF, Rural Legacy and GreenPrint, but *not* local land preservation programs or easements on historic properties held by the Maryland Historical Trust.<sup>15</sup> To meet the General Assembly’s Agricultural Land Preservation goal of 1,030,000 acres by 2022 would require preservation of nearly 43,000 acres per year for the next eleven years.

The Plan has the following objectives for the sustainability of farm and forest lands to achieve Goal 2:

- *“Protect the environment, natural resources and biodiversity* - Protect sensitive environmental areas through easement, public ownership and other means. Protect wetlands, lakes, rivers, and other water bodies from upland impacts.
- *Support resource-based industries* – Protect, support and enhance resource-based industries such as agriculture, forestry, mining, outdoor recreation and tourism, seafood harvesting, renewable energy and other emerging industries from encroachment of incompatible land uses. Minimize the intrusion of rural residential development on resource lands. Promote the economic viability of resource-based businesses and the preservation of relatively large contiguous tracts that sustain resources and resource-based industries.
- *Safeguard water resources* – Ensure adequate supplies of groundwater and surface water. Protect areas integral to sustainable water resources used for public water supply, ecologically important or consumable aquatic natural resources, or other important public purposes.
- *Balance preservation and conservation* – Stabilize the land base of areas designated for preservation and conservation, which supports resource-based industries and preserves the cultural and historic resources. Limit the impact of development in order to protect the integrity of the resources and provide time for easement and land acquisition programs to achieve public land preservation and resource conservation goals.
- *Strategically invest in rural areas* – Target transportation infrastructure investments in rural areas to meet the needs of rural residents and resource-based industries and uses, while minimizing environmental impacts.” [p.3-6]

Changes in PlanMaryland following the review of the April 2011 Draft may influence the effectiveness of the Revised Draft in encouraging local governments to use their planning and zoning authorities to preserve farmland and forests in Priority Resource Areas identified in GreenPrint and AgPrint. The Plan makes it clear that the Place Designation process is voluntary for local governments.

First, the Introduction describes in more detail the role of PlanMaryland:

*“PlanMaryland is not a substitute for local comprehensive plans. It will not remove local planning and zoning authority. It is a policy plan that works within existing statutory authority and does not create new laws or regulations. PlanMaryland does not supplant existing laws and regulations that State agencies must follow. Through the implementation of PlanMaryland, if State agencies identify the need to amend laws or regulations to more effectively achieve the desired public outcomes, those laws and regulations will be subject to the legislative process under the General Assembly. The Plan serves as a management and planning tool to improve the efficient use of State resources and better coordinate those resources with local government resources and decision-making.”*[p.1-5].

Second, the April 2011 Draft contained an objective under Goal 3, for *Plan Consistency*: *“State and local actions that impact land use, development, preservation and quality of life support, to*

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<sup>15</sup> DNR spreadsheet: *Rate of Land Preservation and Development, Maryland 1970-2004*,



*the maximum extent practicable, the Goals and Objectives of PlanMaryland*” [p.3-14 April Draft]. This objective is not in the Revised Draft.

An objective for Goal 3 now reads:

*“Focus government efforts: Utilize the geographic place designations of PlanMaryland to organize the efforts of State agencies and local governments and maximize the effectiveness of governmental resources. Align State and local capital and non-capital plans, regulations, programs and procedures to achieve a consistent and coordinated strategy that addresses the impacts of growth, the benefits of preservation and the need for a sustained quality of life for all Marylanders.”*[p.3-10]

The Introduction to the Revised Draft also declares “What PlanMaryland is Not: *“It is not a:*

- *Substitute for local comprehensive plans nor will it take away local planning and zoning authority.*
- *Top-down approach to force compliance with a statewide land-use plan.”* [p.1-3]

Chapter 4, Defining the geographic focus of the Plan: Designated Places, describes:

*“For State agencies and local governments to be on the same page, it is necessary to map and classify Maryland’s landscape in ways that identify those locations where we want to focus resources for growth and preserve. Designating places will be a collaborative process, starting at the local level. Local governments may choose to participate and nominate Place and Special Area Designations for all, portions or none of the lands within their jurisdiction.”* [p.4-1]

*“The designation process does not require local governments to revise their comprehensive plans beyond the statutory six-year assessment process, nor do local governments have to adopt specific regulations or capital financing to receive designation. PlanMaryland also establishes five Special Area Designation categories that local governments can select from when identifying areas to protect and preserve.”* [p.4-10]

PlanMaryland calls for a State-local *Place Designation* process to classify all lands in the State under:

- *“Growth and Revitalization Areas,*
- *Established Communities in PFAs,*
- *Future Growth Areas,*
- *Low Density Development Areas, and*
- *Rural Resource Areas.”*[p.4-1]

It establishes five Special Area Designation categories that local governments can select from when identifying areas to protect and preserve, including:

- *“Priority Preservation Areas for Agriculture (PPAs),*
- *Ecological Areas,*
- *Water Resource Areas,*
- *Historic and Cultural Areas, and*
- *Areas subject to the effects of Climate Change.”* [p.4-6]

Priority Preservation Areas (PPA) for Agriculture are identified by local comprehensive plans as intended for the conservation of agricultural and related rural resource lands. Mostly undeveloped lands outside Priority Funding Areas, these areas are recognized by the State Certified Agricultural Program, and are:

- *“Rich in agricultural, natural, forestry and other rural resources that support agricultural resource-based industries and numerous important ecosystem functions and features,*

- Of a size that is appropriate to support diverse forms of profitable agricultural production consistent with the local comprehensive plan,
- Supported by local goals in the local comprehensive plan to preserve at least 80% of the undeveloped land remaining in the delineated Area at the time of certification, and to protect the integrity of agricultural operations and industry, and
- Governed by local zoning, land use management and preservation tools that stabilize the resource land base, support resource-based industries, and provide enough time to achieve State and local land preservation goals before they are compromised by development.”[pp.4-6]

### **Guidelines for Implementation Strategies**

PlanMaryland provides Guidelines for Implementation Strategies. The Guidelines for agricultural and resource lands are to:

*“1) Maximize the return on public investment in land preservation by investing strategically where preservation is supported by local goals and land use practices,<sup>16</sup> and 2) Where appropriate, resource protection should be complimentary to an overall economic development strategy that recognizes the need for employment in rural communities.” [pp.5-6]*

A text box in the Introduction of the Revised Draft of PlanMaryland “*What PlanMaryland Is Not*” says:

*“Conclusion: It’s the beginning of a collaborative process between the State and local governments to address critical issues of environmental and fiscal sustainability.” [pp.1-3]*

**Progress to date:** Comments were due on the Revised Draft of PlanMaryland on November 1, 2011. The Place and Special Area Designations Element process started in September 2011, and is scheduled to be accepted by the Governor in March 2012, with the first round of designations expected December 2012. Implementation Strategies for funding, regulatory or other State agency actions are expected no sooner than January 2013.

## **II. 2. Making Maryland the National Leader in Planning & Smart Growth**

This report was prepared by the Planning and Smart Growth Transition Workgroup of the O’Malley - Brown Transition Team, January 19, 2007. The Workgroup included 42 experts in law, planning, zoning, smart growth, land preservation and use, environmental regulation, development, engineering, design, business and local government.

This is the most detailed and significant of the reports reviewed, other than PlanMaryland, for addressing Smart Growth and the sustainability of agricultural and forest lands. Many report recommendations contributed to and are now found in the PlanMaryland Drafts, and in the energized, pro-active planning coming from the Maryland Department of Planning (MDP).

In defining “success,” the goals of the State’s Smart Growth agenda include: “1) Reduce traffic congestion and travel times 2) Reduce school overcrowding, 3) Preserve open space, and 4) Protect the environment;” but one Goal: “**high return from infrastructure investments**” is called “**the single most defining characteristic of “smart growth.”**” [p.6] Based in part on MCAE Pub 2004-04, *Maximizing Return on Public Investment in Maryland’s Rural Land Preservation Programs*, and the *Final Report of the Task Force to Study the Maryland Agricultural Land Preservation Foundation*, of 2004 (described below), this Workgroup’s endorsement or confirmation of this principle was a key policy throughout the first Draft

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<sup>16</sup> Recommended in MCAE Pub 2004-04 and Reports II.1,2,3 & IV.2,6,9,10

PlanMaryland of April 2011, but is only found in *Guidelines for Implementation Strategies* for agricultural and resource lands in the Revised Draft.

The report makes recommendations under six Strategic Imperatives, followed by specific recommendations for each:

### **Recommendations:**

#### **1. “Define a Smart Growth Vision for Maryland” [pp.12-14]**

- “Determine Smart Growth Goals.
  - Define desired smart growth qualitative outcomes and develop associated quantitative measures.
  - Establish an explicit target for each desired outcome.
- ‘Make the Case’ for Smart Growth.
- Develop effective education and communication strategies regarding Smart Growth principles and benefits.
  - The Governor [should] be a highly visible champion for smart growth.”

#### **2. “Align State Government to Achieve Smart Growth Goals” [pp. 15-20]**

- “Establish Clear Direction for State Government.
  - Develop a smart growth strategic plan for Maryland with a 30-50 year transportation plan as a core element.
  - Develop smart growth goals and performance measures in collaboration with all appropriate departments and agencies.
  - Develop smart growth education and training strategies for the key staff in all appropriate departments and agencies.
  - Establish a ‘BRAC’ coordinator with multi-agency authority to develop and implement a strategic response plan.
- Achieve Coordination Across State Government Agencies.
  - Establish a Smart Growth Cabinet with secretaries from all appropriate departments, and chaired by either the Secretary of the Department of Planning and Smart Growth or the Governor’s Special Assistant for Smart Growth (or establish a “stat” process for coordination).
  - Establish a “Smart Growth Stat” program to regularly assess all departments’ performances against smart growth goals.
  - Evaluate proposed state government capital expenditures and grants as they relate to smart growth goals and require conformance.
  - Evaluate proposed legislation as it relates to smart growth goals.
- Achieve Coordination Between the Legislative and Executive Branches.
  - Ask the state legislature to establish smart growth committee(s) or sub-committees with a smart growth focus.
- Achieve Coordination with the District of Columbia and Virginia.
  - Develop a state-level smart growth consortium and regional planning agreement with the District of Columbia and Virginia.
  - Appoint the Secretaries of MDOT and MDP as Maryland’s two voting members of the WMATA (Washington Metropolitan Area Transit Authority) Board of Directors.”

#### **3. “Align Local Governments to Achieve Smart Growth Goals” [pp.21-28]**

- “Achieve Regional Collaboration.

- Establish state/local regional planning agreements focused on greater planning coordination, developing into regional cooperation for funding and/or transfer of development rights.
- Establish regional planning alliances through regional councils of governments, including counties and municipalities, linked to other regions by regional planning alliances. Where appropriate, or after a failure to achieve voluntary coordination, regional councils or even authorities could be considered.
- Provide mediation where needed to foster better local planning cooperation.
- Align Infrastructure Investment with Smart Growth Goals.
  - Establish a state government capital fund that would be provided as state aid to local governments that follow smart growth planning principles.
  - Establish a system and evaluative criteria to link state aid to local compliance with smart growth planning principles.
- Focus New Growth Approved by Local Governments.
  - Tighten designation of Priority Funding Areas or consider some elements of Oregon’s ‘Urban Growth Boundaries’ approach as an alternative. In addition, discourage transitional county zones around municipal areas.
  - Re-evaluate allowed densities, uses and impacts in agricultural and other non-urban areas, and limit state support for agricultural preservation to those counties with effective preservation programs.
- ‘Raise the Bar’ for Local Planning.
  - Require important elements to be addressed within comprehensive plans.
  - Require comprehensive plans to include staging of new growth based on infrastructure availability or investments.
  - Require infrastructure investments identified in a jurisdiction’s comprehensive plan to be included in its CIP.
  - Establish meaningful consequences for failure to adequately maintain or follow comprehensive plans.
- Strengthen Local Jurisdictions’ Planning Capabilities.
  - Provide training, models, best practices and a design studio for best practices and smart growth principles, including strategies for community outreach and citizen involvement, to local governments, residents and stakeholders.
  - Develop smart growth guidelines and/or scorecards to be used in developing measurable, specific goals and in assessing smart growth performance.
  - The state should host (or participate in) regional and/or statewide planning conferences to facilitate information sharing, through which smart growth scorecards and guidelines are developed and shared for assessment of smart growth performance.
  - Provide planning assistance to local jurisdictions as needed.
- Address Potential Structural Impediments to Achieving Smart Growth.
  - Develop a plan to ensure long term viability of resource-based industries such as agriculture and forestry.
  - Evaluate the state tax system to identify changes that would encourage smart growth behavior and discourage non-smart growth behavior.
  - Evaluate revenue sharing mechanisms to identify changes that would encourage smart growth behavior and discourage non-smart growth behavior.
  - Identify all potential new sources of revenue for state and local governments to fund infrastructure investments.”

#### **4. “Build Strong, Smart Growth Communities” [pp. 29-34]**

- “Address Community-Building Comprehensively.
  - For each local community, develop a comprehensive, integrated community-building strategy involving the appropriate local government(s), local stakeholders, and all appropriate state agencies.
- Provide a ‘One-Stop Shop’ in State Government Focused on Community-Building.
  - Establish a single point of contact plus a multi-agency team within state government to bring to bear, for each local community, all state government resources related to community building.
- Target State Resources for Building Strong, Smart Growth Communities.
  - Establish a state government capital investment fund to support strong, smart growth communities.
- Reorient the State’s School Construction Investments to Support Smart Growth.
  - Prioritize state school construction dollars for new or expanded communities that meet smart growth objectives.
  - Establish ‘neighborhood schools’ in smart growth communities. Funding would be awarded to schools that set goals to: a) maximize the number of students walking to school, b) reduce class sizes, and c) offer a more intimate, personalized experience.
  - Build larger ‘core capacity’ (non-classroom support facilities) in schools in smart growth communities in anticipation of increasing enrollment.
  - Explicitly consider ‘life cycle costs’ when designing/funding new schools in order to give appropriate consideration to the potential use of green building design, techniques and systems.
- Assess Community-Building Outcomes.
  - Develop scorecards to assess smart growth outcomes and community health in each community.
  - Regularly survey Maryland residents for their perception of smart growth outcomes and community health.
  - Regularly evaluate community-building efforts by state agencies as part of ‘Smart Growth Stat’.”

#### **5. “Recast MDP to Achieve Maryland’s Smart Growth Agenda” [pp.35-38]**

- “Define MDP’s Mission.
  - Determine MDP’s mission, roles and responsibilities, in light of the state government’s smart growth agenda.
- Organize MDP to Reflect Its Mission.
  - The Maryland Department of Planning (MDP) be renamed to the Maryland Department of Planning and Smart Growth (MDPSG) and reorganized around its core smart growth-related missions.
  - Given the need for community development activities to be far better coordinated, the Maryland Department of Planning serve as the lead coordinating agency for community development initiatives.
- Provide MDP the Resources Needed to Fulfill Its Mission.
  - Provide the department with adequate resources to conduct its core function and also to restore a strong Smart Growth component.
- Explore Alternate State Government Models for Managing Growth.
  - Identify alternate state government models for managing growth.”

#### **6. “Pursue Smart Growth Legislative Priorities” [pp. 39-42]**

- “For the 2007 Legislative Session:

- Submit/support bill prepared by MDP on the Maryland Heritage Structures Rehabilitation Tax Credit Program Bill.
- Support the concept and work with the two legislators in passing the bill on real estate transfer tax. (Close loophole exempting LLC's from tax)
- Submit/support bill prepared by MDP on Maryland Heritage Areas Authority Bill.
- Submit/support bill prepared by MDP on Maryland Historical Trust – Maryland Advisory Council on Historic Preservation.
- Support the concept and work with the supporters in preparing the bill 2006's HB1141 Land Use – Local Government Planning.
- Support the MDP/MDA bill with modifications. Some proposed requirement language is vague. No standard for what constitutes development that 'excessively compromises.' Work with the county Agricultural Program Administrators to develop clear language and standards on Certification of County Agricultural Land Preservation Programs.
- Support the concept and work with the supporters in preparing the Bill on Development Impact Excise Tax – Municipal and County Government Authority.
- Beyond the 2007 Legislative Session:
  - Further develop a bill drafted by MDP on Planning Empowerment Program – Local Zoning, Subdivision and Comprehensive Planning Grants.
  - Priority discussion should take place on a Growth Infrastructure Development Fund.”

**Progress to date:** This report has had significant influence on Smart Growth legislation and State policy related to the sustainability of farmland and forests, primarily through PlanMaryland policies and procedures; the establishment of a Smart Growth Cabinet and Stat, and achieving coordination across State agency boundaries. The Sustainable Communities Act of 2010 was enacted. Strategic use of existing State capital funds will be an important part of PlanMaryland's implementation strategy. While urban growth boundaries will not be required, the Growth and Revitalization designation process within PFAs will call for zoning support to accomplish the same goal. MDP continues to address technical assistance to counties for planning, but more may be needed. However, the agency continues to operate under tight budget constraints.

### **II.3. Maryland Transition Work Group Report on Environment & Natural Resources, 2007**

This report was prepared by the Environment and Natural Resources Transition Workgroup of the O'Malley - Brown Transition Team, January 1, 2007. The Workgroup included more than 150 Marylanders, including 24 Work Group members and many others on Subcommittees with expertise in the environment, natural resources, land preservation, planning, zoning, smart growth, and environmental regulation.

The following proposals and recommendations are those from the Work Group report that relate to the sustainability of farming, forestry resources, and land management that affects these resources. Other concerns of the Work Group, such air and water quality, and global warming, were not summarized in this report.

#### **Strategic Actions**

“Maryland must accelerate its efforts, particularly for reducing nonpoint sources of nutrients and sediments flowing to the Bay by stressing agricultural sources and strategically focusing on the most cost-effective implementation actions and geographic targets. Maryland must once again invest in its natural capital through preserving open space and preventing degradation of its streams and shorelines. We recommend a no-net-loss of forests goal and greater access to public lands and waters, including a trail system second to none in the nation.” [pp. i-ii]

“Maryland’s Smart Growth efforts must become even smarter if we are to maintain the attractiveness of our landscapes, sustain our resource base, and meet water quality goals. This will require that the Administration engage the leadership of local governments, assisting them to meet the requirements of the Local Government Planning Act and ensure adequate water resources. State policies should further reduce the stormwater impacts of new development and maintain investments in open space.” [p.ii]

### **Key requirements**

“We recommend the creation of a statewide integrated conservation and preservation strategy that coordinates growth management with environmental and natural resources planning; and the development of a science-based plan for conserving and restoring our aquatic resources. We also recommend revising the controversial Targeted Watershed Program to create a *Watersheds for the Future* strategy that accomplishes lasting, watershed-scale improvements.” [p.iii]

### **Managing Growth within the Landscape [excerpts]**

“In addition to the many social and economic reasons for achieving smarter growth, including the fabric of our communities and the limits of government resources and transportation systems, it is clear that continuing this path of development will undo gains made in Bay restoration and permanently diminish the state’s land and freshwater resource base.”[p.4]

“Key to meeting this challenge will be adopting smarter growth principles—working in partnership with local governments, fully funding our land preservation programs, and ensuring that we keep our working landscapes working. If we fail, Maryland will be a less, not more, desirable place to live and our social fabric, economic prosperity, and the legacy we leave for future generations will suffer.” [pp.4-5]

### **Strategic Actions [excerpts]**

#### **Accelerate Chesapeake Bay Restoration**

- “...Fully fund the MACS and technical assistance programs for farmers.
- Strategically focus investments in controlling nutrient and sediment loads to the Bay..”[p.11]

#### **Invest in Maryland's Natural Capital**

*“To reverse the decline of our streams, rivers, and Bay, we need a bold, comprehensive growth plan, coupled with a strategy to prioritize our conservation efforts.”* [p.12]

- “Adopt a no net loss of forests policy, including:
  - “...enhancing current tax and other incentives for private landowners to retain small forest holdings,
  - amend the Forest Conservation Act,
  - couple incentives for conservation with greater levels of technical assistance for sustainable forestry, ...with easements and acquisition to preserve forested tracts.”
  - “Direct MDA and DNR to work vigorously to expand and target Conservation Reserve Enhancement and other highly cost-effective programs that help landowners establish new forests and wetlands along the Bay and tributaries.” [pp.12-13]

#### **Restore and Use Resources Sustainably**

- “Expand incentives and support for private forest landowners for sustainable production and conservation, including:
  - providing state and local income tax reductions and credits for providing public benefits,
  - working to protect business opportunities for sustainable forest production,
  - supporting conservation easement programs,

- ensuring that the Maryland Agricultural & Forest Land Preservation Foundation (MALPF) provides parity between agriculture and forestry in support of land conservation.” [pp. 14-16]

### **Achieve Smarter Growth**

- “....Convene a forum of county and municipal officials to explore growth management options....,
- Focus adequate attention and resources on implementing the Local Government Planning Act, House Bill 1141....,
- Require state-of-the-art stormwater management on all new development projects,” [pp.16-18]
- “All land conservation programs using Program Open Space transfer tax revenues and other sources should be fully funded, including any over-attainment from prior fiscal years. The state should immediately freeze changes to the allocation formula that could divert funding from land conservation until a statewide Conservation, Environmental Protection, and Outdoor Recreation Plan is developed that includes land and water trails as well as recreational access.” [pp.17-18]
- “For all transfers in excess of \$1 million, end the property tax loophole allowing limited liability partnerships (LLPs) or corporations (LLCs) to escape the state real property transfer tax of controlling interest in sales of commercial property. This would generate an additional \$13.65 million in state and \$46 million in local revenue annually that could be used for land conservation. Increase the transfer tax on farms that are converted to development.”[p.18]
- “Increase the transfer tax on farms from 3% and 5% to 6% and 10% respectively, depending on the size of the farms that are to be converted from farming to development. Dedicate funds to agricultural easement purchases by county governments and Maryland Agricultural Land Preservation Foundation instead of reallocating additional Program Open Space Funds for Agricultural Preservation.” [p.18]

### **Innovative Funding**

- “Establish a Green Fund to generate \$60-80 million per year...”
- “Modify [MALPF] to follow Pennsylvania’s example of tying farm stewardship responsibility to receipt of preservation funding.”
- “Clarify terms related to development of MALPF land.” [p.30]

### **Planning and coordination**

- “Maryland should establish a statewide integrated conservation and preservation action strategy that helps drive decision-making and leverages limited resources in areas that can achieve the greatest ecological benefit for the least cost. ....The state should establish a task force, staffed by DNR and Departments of Planning and Agriculture, to create a statewide plan that integrates and coordinates growth management with environmental and natural resource planning.” [p.35]

**Progress to date:** PlanMaryland and the two volumes of the Maryland Land Preservation Parks and Recreation Plan of 2009 have provided in part the “key requirement” recommended in this report for a “Statewide integrated conservation and preservation strategy that coordinates growth management with environmental and natural resources planning; and the development of a science-based plan for conserving and restoring our aquatic resources.” The outreach for PlanMaryland involved extensive meetings and discussions with county and municipal officials on the options for growth management. The loophole in the real estate property tax for Limited Liability Corporations was effectively closed by the General Assembly in 2008, increasing funds



available for land preservation, as recommended.<sup>17</sup> However, contrary to the Work Group's recommendation, the Program Open Space allocation formula was changed in 2008 to redirect \$20 million or 21% of DNR's share of POS funds, from the county share of transfer tax revenues toward the management of Maryland State Parks and State Forests. The State Woodland Incentive Program now allows the "piggy-back" of State cost share payments on top of Federal cost-share payments up to a total of 90% of costs.

#### **II.4. Ten Years Later: An Assessment of Smart Growth in Maryland.**

Garrit Knaap and John Frece of the The National Center for Smart Growth ask: "*What has been the effect of Maryland's Smart Growth program?*" [p.1] In response, they claim that:

*"There are many anecdotal examples of urban redevelopment projects that might not have occurred without the financial and rhetorical support of the state's Smart Growth effort; and there are thousands of acres of farmland and other undeveloped natural areas in the state that have been permanently protected as a result of the Rural Legacy Program or its sister conservation programs. However, most local governments throughout the state continue to approve development outside of the Priority Funding Areas designated as a result of the Smart Growth law, and even the successful attempts to purchase development rights on rural lands have not substantially decreased the threat of sprawling development on Maryland's remaining open space."*[p.9]

They cite five major challenges that remain: 1) There was a bias in favor of conservation over development, 2) Priority Funding Areas (PFAs) have proven to be a weak urban containment tool, 3) it has provided too little financial support at the state level, and is too lax in requiring local governments to provide infrastructure in designated growth areas, 4) land conservation efforts have been unsupported by local zoning, and incapable on their own to protect rural areas from sprawl, and 5) Smart Growth has not been integrated with existing planning and land use law into a framework for managing growth, and lacks specific program goals or a system for monitoring progress. PlanMaryland addresses at least two of these challenges in part, especially 4) and 5).

Their policy recommendations summarized below would address other shortcomings.

**The Content and Role of Comprehensive Plans:** Local Comprehensive Plan elements should foster a balance of conservation and development, and should include housing and economic development; all State funding must be consistent with local comprehensive plans; and MDP should establish GIS standards for submission of local plans and make them widely accessible.

**Growth Areas:** The State should convert PFAs to Urban Growth Boundaries that clearly delineate where growth is allowed, or if not, establish new criteria to define PFAs so they facilitate orderly growth. Baltimore County's URDL [Urban-Rural Demarcation Line] has been effective in achieving this, as have Urban Growth Boundaries in other States, such as Oregon.

**Land Preservation:** The State should require more stringent agricultural and natural resource zoning outside of PFAs, especially in areas where the state invested or intends to invest in land preservation; and State transportation policy must be more compatible with state land preservation goals and investment strategies. Transportation improvements should not be made that make lands protected under various state preservation programs more accessible to new development, unless appropriate protection zoning is already in place.

**Infrastructure:** Knaap and Frece also call for a State infrastructure financing program for growth areas in PFAs; amending APFO enabling legislation; requiring local governments to

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<sup>17</sup> The Annotated Code of Maryland, Tax Property Article, Section 12-117(c) and 13-103 (b),

facilitate or limit delays for development in PFAs by changes to APFO requirements; and tax reforms to provide fiscal resources to fund public facilities in growth areas.

**Enhancing coherence:** Integrate Smart Growth with planning, goals and procedures for local plans, and a statewide development plan with quantifiable measures of performance.

**Progress to date:** The intent of PlanMaryland is to achieve some of the purposes of these recommendations, but it is doing it in different ways. The Place Designation process in PlanMaryland and the State Agricultural Certification Program address the need to have urban growth boundaries, and encourage adequate zoning for land preservation outside of PFAs.

### III.1. Maryland Phase I Watershed Implementation Plan - Executive Summary, 2010

This Summary provides a concise background to Maryland's WIP for the Chesapeake Bay:

*"In 2000, the Bay watershed partners signed the Chesapeake 2000 Agreement to clearly identify the actions needed to achieve water quality standards. With this Agreement came the understanding that if the voluntary actions taken were not successful in reaching the water quality goals, EPA would complete a TMDL by the end of 2010. Although much progress has been accomplished, it has not been enough to reach the pollution reduction goals. For the past several years, EPA has led a process to develop TMDLs for the Chesapeake Bay."* [p.ES-1]

The Plan contains, consistent with EPA guidance, the following elements:

- "Interim and Final Nutrient and Sediment Target Loads.
- Current Baseline Loading and Program Capacity.
- Account for Growth in Loads.
- Gap Analysis.
- Commitment & Strategy to Fill Gaps.
- Tracking and Reporting Protocols.
- Contingencies for Slow or Incomplete Implementation.
- Detailed Tables of Interim and Final Nutrient and Sediment Target Loads." [p.ES-1]

The WIP describes current legal, regulatory, programmatic, financial, staffing and technical capacity for each of the major source sectors accounted for in the Bay TMDL.

Since a main source of Chesapeake Bay pollution is animal manure and commercial fertilizers from agricultural uses, implementation of the WIP and the limits imposed by the TMDL could have a significant affect on the sustainability of agriculture in Maryland, when considering competition from farm products from other States not subject to the same limits, or from other land uses allowed in agricultural areas by permissive local zoning.

**Progress to date:** The HRHCAE and its state, local and private partners hosted five regional workshops to help develop the State and local response to the TMDL and Watershed Implementation Plans (WIP II). In May 2009, the Chesapeake Executive Council set specific 2011 Milestones to reduce nitrogen and phosphorus, with short-term measurable targets and pollution reduction actions for the end of 2011. By September 1, 2011 county-wide teams were to submit two-year milestone commitments for 2012-2013 to MDE, to be evaluated and submitted to EPA by September 30, 2011. By November 1, the county-wide teams are to submit local WIPs to MDE, followed by Maryland's submission of the draft WIP II to EPA. Anticipated funding during the 2011 Milestone Period totals \$744 million, from State and federal sources.

### **III.2. Maryland's WIP Process and the Role for Agriculture, Resource Conservation Options, John Rhoderick, MDA, 2010**

This is a PowerPoint outline of the various Resource Conservation Options that agriculture can play in Maryland's Watershed Implementation Plan. The main sources of Bay pollution are listed as agriculture, urban and suburban runoff, air pollution and wastewater from sewage treatment plants. The TMDL calls for reducing nitrogen and phosphorous in two year milestones to 60% by 2017, and 100% by 2025.

**Agriculture's role in the WIP II** is described as:

- "Development and Implementation of an Agricultural Component of WIP II," [p.21] including county load allocations for agriculture assigned by the Soil Conservation District (SCD); developing two year implementation goals; utilizing agriculture workgroups; reporting a plan back to counties in MOUs for 2009 and 2012, and tracking and reporting through "Conservation Tracker;"
- "Assist County Government in development and implementation of the Urban Component," [p.29] including districts delegated environmental and site design review; an expanded role to provide pre-construction conferences; and new storm water regulation that require environmental site design; and
- "Work with the planning office on Smart Growth policy" [p. 30] (trading and offsets), where Districts provide counties, municipalities and the developers the access to farmers and landowners willing to trade and have offsets; Districts provide verification and inspection of offsets; and District funding is provided to develop and implement the program.

**Progress to date:** Progress reported for III.I. Watershed Implementation Plan Summary above, also applies to this PowerPoint presentation. A nutrient point/non-point trading policy has been worked out at the staff level between MDP MDA and MDE, but it is not complete.

### **III.3. Chesapeake Bay TMDL and Maryland's Watershed Implementation Plan, Robert Summers, MDE.**

This is a PowerPoint outline for presentations by Robert Summers, Secretary of the Maryland Department of Environment. It outlines the phased approach to implementing the WIP for 2010, 2011 and 2017, and describes the main Strategies for various categories. Outlined below are the main strategies that relate to the sustainability of agriculture and forestry, but not other strategies in the Plan.

For Septic Systems, the Bay Restoration Fund is to be used for "voluntary upgrades, with priority on failing systems in the Critical Area." [p.15] For Managing Growth, "EPA expects the WIP to include provisions for maintaining the TMDL allocations into the future. Allocations can be set aside for growth, and nutrient loads from new growth can be offset through nutrient trading." [p.16] For Agriculture, the Strategies include: expanded cover crops, improved nutrient management, BMP implementation, stream buffers, Concentrated Animal Feeding Operations (CAFOs), stream fencing, P-index revision, manure and litter transport, alternative uses for organic sources, and increased technical assistance. [p.17]

The presentation also outlines **Critical Next Steps**, including:

- "A Work Plan for 2011 to 2013 Milestones;
- Infrastructure' priorities, including funding; staffing for administration and technical assistance, and tracking and reporting;
- Sector priorities for air emissions, wastewater, stormwater, septic and agriculture;
- Geographic priorities; and

- Beginning development of a growth offset policy, working with State agencies and local government.” [p.22]

This WIP presentation outlines specific goals, objectives and priorities for meeting the TMDLs for the Chesapeake Bay, but does not appear to make policy recommendations for consideration by the General Assembly as other studies and reports in this Sustainability project have.

**III.4. Water for Maryland’s Future, What we Must Do Today: Final Report of the Advisory Committee on the Management and Protection of the State’s Water Resources, M.G. Wolman, Volume 1, 2008**

The introduction states:

*“The Advisory Committee ...was charged with assessing the condition of the State’s water resources management program, recommending steps to assure that the program will provide for the long-term use and protection of Maryland’s water resources, and recommending a strategy and appropriate funding for sustainable management of these resources. The Committee urges the State to develop and fund a more robust, comprehensive, fully-integrated State water resources management program, and that it begin this effort by increasing staffing, making critical improvements to the monitoring program, providing for scientific assessments, and beginning the long-range planning necessary to ensure a sustainable water supply for Maryland’s future.”*[p.1]

The Committee recommends that Maryland move as quickly as possible to:

- “Prepare Statewide and regional long-term plans with federal, State and local government agencies and utilities working collaboratively;
- Establish a broader and more reliable network of monitoring stations;
- Fully fund two major hydrologic studies: the Coastal Plain Aquifer and Fractured Rock Water Supply Studies;
- Improve the analytical tools for assessing the impacts of proposed new water uses;
- Integrate those new tools into allocation and permitting decisions;
- Develop comprehensive guidance and incentives to increase water conservation in all sectors;
- Provide all interested parties with ready access to all the water resources data;
- Strengthen enforcement programs for permit requirements to ensure that the interests of all water users are protected; and
- Establish adequate funding for the water supply program to properly manage water resources for future generations.” [pp.3-4]

*“In addition, water resources management must be integrated with the growth management and land use responsibilities delegated to local governments and the water resource responsibilities of other State agencies. Implementation of Maryland’s water resources program will require increased and sustained support from elected officials, agency leaders, the regulated community and the public to create the institutional structure for successful programs and to provide adequate funding.”* [p.4]

**Findings and Recommendations** [bold text added for emphasis]

- “Maryland must develop **a more robust water resources program** based on sound comprehensive data.” [p.5] “Critical basic data must be obtained,” [p.11] “A Statewide water supply plan should be developed,”[p.13] and “State and local governments should coordinate and plan on a regional basis.”[p.14]

- “The staffing, programmatic and information needs of **the water supply management program must be adequately and reliably funded.**”[p.17] “Establish a permit fee to fund the cost of administering the permitting system,” [p.18] “Fund the hydrologic studies with a separate appropriation,”[p.19] “Fund an expanded monitoring network,”[p.19] “Provide funding for local governments,” [p.19] and “Improve the recruitment and retention of personnel.”[p.20]
- **“Specific legislative, regulatory and programmatic changes should be implemented.”** “The State should take specific steps to promote collaborative local planning and to facilitate regional planning.”[p.21] “MDE should codify its water allocation policies.”[p.22] “The State should require local jurisdictions to protect source waters,”[p.24] and “State and local governments should strengthen their programs for water conservation, water reuse and demand management.”[p.25] “Maryland should strengthen the regulation of individual wells to better protect public health,”[p.26] and “State and local governments should discourage the use of individual wells in areas at high risk for well contamination.”[p.27] “MDE should make greater use of Water Management Strategy Areas.”[p.29] “The General Assembly should authorize administrative penalties for violations of water appropriation permits,”and “Maryland should develop an effective water supply outreach program.”[p.30]

**Progress to date:** A sustainable and reliable source of fresh water is essential for the future of agriculture and forestry as preferred land uses in Maryland. Irrigation of crops and survival of forests are dependent upon ground water, especially during droughts and where the supply is threatened by competing uses.

After the first Wolman Committee report in 2004, The Maryland Geological Survey, the U.S. Geological Survey and MDE began the first of a three phase assessment of Maryland’s Coastal Plain aquifer system, the primary source of water for the Eastern and Western Shore with a western fall line running through Baltimore and Washington. The project has received continuous funding since 2006 from MDE, MGS and USGS. Additional funding will be needed to complete Phases II and III of the plan through 2013. On June 6, 2011 Governor O’Malley signed *The Marcellus Shale Safe Drilling Initiative*,<sup>18</sup> an Executive Order establishing an Advisory Commission to undertake a study of the extraction of natural gas from shale formations in the State, including the Marcellus. Reports are due by August 2012 and 2014. These studies were estimated to cost \$20 million over an 8 year period, but have only received about \$5.3 million to date, so they will take another 5 to 6 years to complete, around 2017.

House Bill 1141 of 2006 required counties and municipalities to incorporate a water resources supply element into their comprehensive plans by October 1, 2009. In June 2006, MDP, MDE and DNR provided a joint guidance document for planning for water supply, wastewater management and stormwater management.<sup>19</sup> The State does not yet have a statewide water supply or water quality plan, but the State maintains a Tributary Strategy Implementation Plan. MDE has not codified the State’s Water Allocation Policies or required local jurisdictions to protect source waters.

In 2008 the General Assembly enacted SB 674 (Senator Brinkley) authorizing MDE to control appropriation or use of surface waters and groundwaters of the State in Carroll, Frederick and Washington Counties. A report on water appropriations called for in SB674 is in final stages, and will recommend further regulatory changes, including those recommended in the Wolman report.

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<sup>18</sup> Executive Order 01.01.2011.11, <http://www.governor.maryland.gov/executiveorders/01.01.2011.pdf>

<sup>19</sup> The Water Resource Element: Planning for Water Supply and Wastewater and Stormwater Management, M&G26, <http://www.mdp.state.md.us/pdf/OurWork/mg26.pdf>

A recommended Statewide Water Supply Plan has not been completed as a single document, but certain elements (e.g. the Water Resources Element) are being done. This recommendation was contingent on sufficient funding, so a single Plan was never pursued due to funding shortages. Public education in water conservation, source protection and water reuse regulations are being pursued incrementally. Staff levels have remained steady in MDE in part due to federal Clean Water Act funding from EPA.

#### **IV.1. Understanding and Responding to Changing Needs of Maryland Agriculture, a Toolkit for Local Communities, The Governor's Intergovernmental Commission on Agriculture, 2011**

In May 2011, the Governor's Intergovernmental Commission on Agriculture issued a report and PowerPoint presentation as a "Toolkit" for local communities, prepared by the Maryland Department of Agriculture staff, following the Commission's 2006 Statewide Plan for Agricultural Policy and Resource Management (see IV. 7.)

*"This toolkit aims to provide local communities and officials with a basic understanding of the current state of Maryland agriculture. It suggests tools, methods, and resources that will help farmers, their neighbors and local officials to better work together towards creating communities that support both profitable agricultural production and a high quality of life."*[p.2]

The report identifies several top issues facing Maryland Agriculture in 2011. Among those addressed by this sustainability report include the following excerpts:

- Increased global competition and access to markets.
- Environmental adaptation, with a variety of new methodologies, technologies, and organizations involved uncertainty regarding potential new regulations.\*
- The loss of farmland, creating conflicts with neighbors, higher costs, and sometimes economic isolation for remaining farmers severed from agricultural corridors.\*\*
- The availability of labor.
- Crop damage and environmental degradation from animals due to growing wildlife populations.
- Unstable prices farmers receive for their products, having little ability to influence them.
- High prices for input commodities used in production, such as fuel, fertilizer, feed grains, and other necessary inputs.

\* "Meeting strict nutrient quotas for agriculture within a short time frame will mean the adoption of increasingly expensive BMPs, as many of the most cost-effective BMPs are in large part already being done. This could drive up the costs of agricultural production, making it harder for Maryland farmers to compete with agricultural producers elsewhere that do not have similar constraints." [p.13]

\*\* "The sale of land has also been an unfortunate reality for a variety of reasons, including to settle debts and estate taxes, and/or to fund retirements if family members are not prepared to take over farming operations. Local governments can play a vital role in conserving our natural resources, which includes smarter planning that preserves enough contiguous farmland to ensure agricultural corridors where food and fiber production remain viable." [p.3]

Issues 2 and 4 above, and the following "Tools for Problem Solving in Local Communities" suggested by the Commission, relate to the issue of sustainability of agriculture as a preferred land use. Issue 2 and the starred comments in the report are applicable to the implementation of Maryland's WIP and TMDLs.

## **Tools for Problem Solving in Local Communities [Excerpts]**

### **Smarter Planning**

- “Nutrient loads from residential septic systems are in fact far higher than residential loads from housing that is located in areas with access to sewage treatment facilities, meaning that smarter planning and less septic sprawl can be another cost effective way to conserve our natural resources.
- Promoting development in areas that have both access to infrastructure, and that may be of marginal use for agriculture.
- Planning development around existing infrastructure is a smart way to conserve natural resources and can be accomplished in a number of ways, including through comprehensive planning and supportive zoning arrangements, the transfer of development rights, directed development (including the encouragement of infill development), and land preservation.” [p.25]

### **Preserving Farmland**

- “One strategy might be for counties to look at ways of preserving those properties that are most at risk of being sold for development, and that may have short time horizons. Identifying those properties and seeking out creative public-private partnerships (involving each level of government) to provide gap financing for the expedient purchase of at-risk properties is one way that counties can ensure that agricultural production remains viable locally.
- Partner with various organizations involved in land preservation.” [p.25-26]

### **Facilitating Workforce Housing**

- “To facilitate workforce housing, local governments should first seek to understand the federal and state regulations already in place.
- Work with farmers to develop reasonable workforce housing standards that will allow them to access the labor they need during the growing season.” [p.37]

### **Avoiding and Responding to Land Use Conflicts Between Neighbors**

- “Realtor Disclosure: Realtors should explain the potential quality of life impacts of agricultural activities and farmers’ protections provided under the state and/or local ‘right to farm’ laws.
- Reverse Setbacks: A reverse setback requires that developers incorporate a certain number of feet between the farm’s property line and the proposed residences as a buffer zone to insulate the eventual residents from the farming operations occurring next door.
- Facilitated meetings: Problem-solving sessions, guided by a trained facilitator who works with various stakeholders as a neutral 3rd party to resolve land-use or other decisions prior to public hearings.
- Right to farm laws: Ordinances that provide some protection to farmers from legal actions aimed at disrupting their normal agricultural operations,... upgraded to accommodate the changing face of Maryland agriculture, including value-added activities such as on-farm processing, agritourism, farm wineries, horse farming and equine activities, tree farming, beekeeping and aquaculture, should be included with more traditional farming activities.” [pp.38-39]

**Progress to date:** This is a relatively new report, yet some steps have been made to address its recommendations. In April 2011 Governor O’Malley issued an executive order establishing a Task Force on Sustainable Growth and Wastewater Disposal (i.e. *The Septics Task Force*) after proposed legislation<sup>20</sup> addressing the septic problem failed to pass in the 2011 General

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<sup>20</sup> Sustainable Growth and Agricultural Preservation Act (SB 846 & HB 1107)

Assembly Session. The State's Right to Farm law now requires Realtor disclosure of an agricultural conservation easement on any farm or forest property for sale.

#### **IV.2. Maryland Land Preservation, Parks and Recreation Plan, Volume I, Maryland Department of Planning, 2009. (MLPPRP)**

The reoccurring theme of this report, updated every six years, reinforces the theme found in the Task Force reports on the Maryland Agricultural Land Preservation Program (IV. 9 &10), several other reports summarized in this Study, and now in PlanMaryland's Guidelines for Implementation, Strategies for Agriculture (II.1):

*"..as Maryland's population increases, we must focus on the congruence between public spending and the numerous other means through which growth, development, infrastructure, and community services are managed and delivered."*[p.I-5, MLPPRP]

The first recommendation in meeting the agricultural preservation goal of 1.03 million acres by 2020 is:

*"Ensure good return on public investment by concentrating State agricultural land preservation funds in areas where the investment is reasonably well supported by both local investment and land use management programs."* [p.II-12]

The MLPPRP originated as a requirement of the federal Land and Water Conservation Act for a "Statewide Comprehensive Outdoor Recreation Plan" (SCORP) for receipt of federal LWCF funds. Since 1969 Program Open Space in DNR has been the primary matching source of funds for the LWCF. The MLPPRP is now prepared by MDP in cooperation with DNR, and DNR prepares its own segment of the Plan, Volume II, focused on State owned and managed parks and open space. [HB 1025 in 2011 changed the MLPPRP process from "Department of Planning in cooperation with" DNR, to DNR "in consultation with the Department of Planning"]

The Plan repeats the Twelve Visions for Smart Growth and local planning from H.B. 294, 2009, that guide PlanMaryland. This Plan also provides the following State Goals for Agriculture and Natural Resource Lands:

#### **State Goals for Agriculture:**

- "Permanently preserve agricultural land capable of supporting a diversity of agricultural production.
- Protect natural, forestry and historic resources and the rural character of the landscape associated with Maryland's farmland.
- To the greatest degree possible, concentrate preserved land in large, relatively contiguous blocks to effectively support long-term protection of resources and resource-based industries.
- Limit the intrusion of development and its impacts on rural resources and resource-based industries.
- Preserve approximately 1,030,000 acres of productive agricultural land by 2020.
- Ensure good return on public investment by concentrating State agricultural land preservation funds in areas where the investment is reasonably well supported by both local investment and land use management programs.
- Work with local governments to:
  - Establish preservation areas goals and strategies through local comprehensive planning processes that address and complement State goals;
  - In each area designated for preservation develop a shared understanding of goals and the strategy to achieve them among rural landowners, the public at large, and State and local government officials;



- Protect the equity interests of rural landowners in preservation areas by ensuring sufficient public commitment and investment in preservation through easement acquisition and incentive programs;
- Use local land use management authority effectively to protect public investment in preservation by managing development in rural preservation areas; and
- Establish effective measures to support profitable agriculture, including assistance in production marketing, and the practice of stewardship, so that farming remains a desirable way of life for both the farmer and the public.” [p.II-12]

**State Goals for Natural Resource Lands:**

- “Identify, protect, and restore lands and waterways in Maryland that support important aquatic and terrestrial natural resources and ecological functions, through combined use of the following techniques:
  - Public land acquisition and stewardship.
  - Private land conservation easements and stewardship practices through purchased or donated easement programs.
  - Local land use management plans and procedures that conserve natural resources and environmentally sensitive areas and minimize impacts to resource lands when development occurs.
  - Support and incentives for resource-based economies that increase retention of forests, wetlands, or agricultural lands.
  - Avoid and minimize impacts of publicly funded infrastructure development projects on natural resources.
  - Appropriate mitigation response, commensurate with the value of resource impacted.
- Focus conservation and restoration activities on priority areas, according to a strategic framework such as GreenPrint.
- Conserve and restore species of concern and important habitat types that fall outside the green infrastructure: rock outcrops, karst systems, caves, shale barren communities, grasslands, shoreline beach and dune systems, mud flats, non-forested islands, etc.
- Develop a more comprehensive inventory of natural resource lands and environmentally sensitive areas to assist State and local implementation programs.
- Assess the combined ability of State and local programs to:
  - Expand and connect forests, farmlands, and other natural lands as a network of contiguous green infrastructure.
  - Protect critical terrestrial and aquatic habitats, biological communities, and populations.
  - Manage watersheds in ways that protect, conserve, and restore stream corridors, riparian forest buffers, wetlands, floodplains, and aquifer recharge areas and their associated hydrologic and water quality functions.
  - Adopt coordinated land and watershed management strategies that recognize the critical links between growth management and aquatic biodiversity and fisheries production.
  - Support a productive forestland base and forest-resource industry, emphasizing the economic viability of privately owned forestland.
- Establish measurable objectives for natural resource conservation and an integrated State/local strategy to achieve them through State and local implementation programs.” [pp.14-15]

**Priority Preservation Areas:**

In response to the MALPF Task Force recommendations in 2004, The Agricultural Stewardship Act of 2006 required certified counties to establish Priority Preservation Areas (PPAs), which

must be accompanied by the County's acreage goal for land to be preserved through easements equal to at least 80% of the remaining undeveloped acres of land in the area. This was a forerunner of this key part of PlanMaryland.

*"The key principle established by the Stewardship Act is that PPAs 'be governed by local policies that stabilize the agricultural and forest land base and provide time for easement acquisition before goals are undermined by development'."* [p.II-21]

*"This requirement puts in practice for the first time a statutory commitment by the State to direct more State funds to areas where the conservation investment is well supported by local zoning and land use management authority."* [p.II-22] (See Progress made to date.)

### **Chesapeake Bay Regional Agreement for Forest Conservation**

The MLPPRP incorporates the 2006 Chesapeake Executive Council's Directive 06-01.

*"The Directive recognized that retaining, expanding, and sustainably managing forest lands are essential to restoring a healthy Chesapeake Bay. In December 2007, the Council signed an implementation document that identified specific actions that the four jurisdictions [MD, PA, VA & D.C.] will take to conserve and restore forests in the Chesapeake Bay watershed..."* [p.II.30]

*"On this foundation and in order to protect our most valuable forests and reduce the loss of forests to development, the signatories resolve to facilitate the following:*

"By 2020, permanently protect an additional 695,000 acres of forest from conversion, targeting forests in areas of highest water quality value. As part of this goal, 266,400 acres of forest land under threat of conversion will be protected by 2012.

By 2020, accelerate reforestation and conservation in:

- Urban and suburban areas, by increasing the number of communities with commitments to tree canopy expansion goals to 120.
- Riparian forest buffers, by reaching a restoration rate of 900 miles/year until 70% of all stream miles in watersheds are buffered over the long term.

By 2010, work with local governments, legislative delegations, land trusts, or other stakeholders to create or augment dedicated sources of local funding, such as through ballot initiatives, for the conservation of forests important to water quality. Where possible, we will support these through incentive programs (e.g., matching grants).

By 2009, establish and implement a mechanism to track and assess forest land cover change every five years at the county and township scale, and to deliver this capacity to local governments, watershed groups, and other partners." [p.II-30]

Maryland's Total Forest lands in the Chesapeake Bay Watershed were listed at 2,400,000 acres, with 724,000 acres or 30% already protected. The Forest Protection Goal for Maryland is 96,000 additional acres by 2012 and 250,000 acres by 2020. When added to the existing protected forests, the goal would be 820,000 acres by 2012, and 974,000 acres by 2020.

### **Meeting Agricultural Preservation Goals: Preservation of 1,030,000 acres by 2022**

Recognizing that it will be very difficult to meet the Legislature's agricultural preservation goal of preserving 1,030,000 acres of farmland by 2022, the MLPPRP cites two reasons: 1) "State conservation expenditures of existing revenues are not being strategically concentrated in areas stabilized by local land use management tools, where goals are most likely to be achieved;" and 2) "Additional funding that could be so concentrated, in amounts capable of winning the race with development pressure, is not likely to materialize in time to achieve Maryland's goals in more than a few areas." [p.II-66]

It proposes two actions that could change this outcome: 1) “One is that counties improve the ability of zoning and land use management tools to limit subdivision and development, commensurate with State land and resource conservation goals...;” and 2) “The second is that the State concentrate expenditure of its land and resource conservation funds where the investment is protected by local zoning and land use management authority, and that this encourage more counties to better protect conservation investment. Clearly, both actions are essential and interdependent if the State is going to realize good return on its investment of public funds for conservation.” [p.II-67]

**Recommendations:** The following recommendations, summarized from the MLPPRP, address the sustainability of agriculture and forestry:

- “The State should establish an over-arching policy to maximize return on conservation investment toward State goals, by investing public funds strategically where they are supported by local goals and land use practices.”[p.II-67]
- “Administrative and statutory changes should be made where necessary to allow programs to invest the majority of State funds in areas that have the potential to yield good return on the investment, that is, areas which are: a) rich in the resources of interest; b) of sufficient size and configuration to sustain targeted resources, if enough of the land is protected from development; and c) stabilized by zoning and land use management tools, to provide time for easement or in-fee acquisition programs to achieve conservation goals before the land is excessively compromised by development.”[p.II-67]
- “The Governor and the legislature should consider statutory changes to implement the funding recommendations made by the MALPF Task Force in its 2004 Final Report. Those recommendations would increase funding for all Maryland state programs funded by the real estate transfer tax, including those focused on agriculture, natural resources and recreation.”[p.II-68]
- The 2009 MLPPRP also reiterates the overall goal the State land preservation and recreation plans have been operating under since Program Open Space was established in 1967:

***“One State goal to which all local governments contribute is the ability to protect recreational open space and resource lands at a rate that equals or exceeds the rate that land is developed at a statewide level.”*** [p.III-107]

**Progress to date:** While an “overarching policy to maximize return on conservation investment toward State goals” has not been adopted, this general concept has been integrated into parts of the Revised Draft of PlanMaryland, the County Agricultural Certification Process for MALPF, and in the language of the LPPRP, related to Priority Preservation Areas (PPAs). All certified counties have identified PPAs and this year will be incorporating these areas into their easement application ranking systems, so that properties in PPAs will have a better chance of being funded. However, the certification process affects only a relatively small amount of land preservation funding: the extra 42% of locally generated agricultural land transfer tax that certified counties retain instead of remitting to the State. The concept of return on investment is not decisive for awarding MALPF and Rural Legacy funds, although Rural Legacy now considers land use context when funding applications. One criterion in the award of Rural Legacy grants for land conservation is “(i) *The degree to which existing planning, zoning, and growth management policies contribute to land conservation and the protection of cultural resources.*”<sup>21</sup> The Program Open Space Targeting System for stateside acquisitions also considers the “*Degree of existing protection (protected lands and protective zoning) and potential for success in areas threatened*

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<sup>21</sup> Maryland Annotated Code, Natural Resources Article §5-9A-05

by development.<sup>22</sup> With regard to the Chesapeake Regional Forest Agreement Directive 06-01, additional acres of forest are being protected through the Rural Legacy, MALPF, Forest Legacy, CREP and other programs at a pace to meet this goal. There has been some resistance to CREP from farming interests due to the successful conversion of farmland to forests, leading to a reduction in the incentives to enroll in CREP.

It is widely acknowledged that, in the current fiscal situation, Maryland will not meet the legislative goal to preserve 1,030,000 acres of agricultural land by the year 2022.

#### **IV. 3. Maryland Land Preservation, Parks and Recreation Plan, Volume II, DNR, 2009**

DNR's part of the MLPPRP serves as a plan for the acquisition, development, use and management of Maryland's 455,000 acre estate of State Parks, State Forests, Wildlife Management Areas, Natural Resource Management Areas, Natural Environmental Areas and Fish Management Areas. It provides system goals for land conservation and recreational development, and new targeting guidelines for maximizing the use of Program Open Space and other fund sources, in order to acquire and protect the State's most important land resources and natural environments.

##### **System Goals: Land Conservation**

*“The Department will continue to focus on protecting recreational open space and natural resource land at a rate that equals or exceeds the rate at which land is developed at a state-wide level.”* [p.4]

- “Expand access to and protection of water resources.
- Continue acquisition of fish and wildlife habitat and sites of threatened or endangered species.
- Seek new opportunities to enhance biological diversity.
- Connect communities to natural areas.
- Preserve and enhance important historical and cultural properties.” [p.5]

##### **System Goals: Recreational Development**

- “Maintain natural resource-based recreation experience in parks.
- Limit improvements in State Forests and Wildlife Management Areas.
- Increase resource-based recreation near urban areas.
- Prevent adverse recreational impacts to natural resources.” [p.6]

**Plan Recommendations** (Only those related to land use and resource sustainability, e.g. agriculture and forestry, are listed for the purpose of this report.)

“...new mechanisms for financing day to day operation of our land units are clearly necessary in a time of continually dwindling General Fund availability and Federal cut-backs of special funds.”[p.88]

- “DNR should develop and implement a market-based fee structure for non-DNR related uses of DNR lands (e.g., rights-of-way, structure sites).
- Adjust budget procedures as necessary to insure that all revenue enhancements are allocated to operation and maintenance of Forests, Parks and Wildlife Areas.
- LAP [Land Acquisition and Planning] and MPS [Maryland Park Service] should develop and implement policy with respect to private development and/or operation of particular types of recreational facilities or services on DNR properties.”[p.89]

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<sup>22</sup> [http://dnr.maryland.gov/land/pos/pos\\_stateside\\_targeting.asp](http://dnr.maryland.gov/land/pos/pos_stateside_targeting.asp)

- “In cooperation with State and local tourism officials, the Maryland Park Service should develop a marketing approach for increasing park visitation in off-peak periods.
- DNR should review leases or other use arrangements and make adjustments as necessary to reflect market value of the property rights utilized while maintaining compatibility with wildlife habitat and recreation requirements.”[p.89]

“POS should continue and expand its partnership arrangements with the Maryland Environmental Trust, private land trusts, counties and municipalities and other state agencies, to: 1) expedite the acquisition of lands and easements, 2) leverage private, local and other state funds for land conservation, 3) improve public outreach and communications with local communities, 4) maximize the benefits of combined use of POS state and local funds, and 5) minimize management burdens of additional protected land on DNR land management units, when private or local ownership of land can protect the State's interest.”[p.90]

### **Targeting and Ranking - Land Conservation**

- “The Department of Natural Resources has set several objectives:
  - The need to be more strategic since conservation opportunities exceed available funding.
  - Target land conservation based first on ecological priorities.
  - Create a more transparent process supported by science.”[p.95]
- “Scientific data will be used to develop an Ecological Screening system to select ‘Targeted Ecological Areas’ (TEAs).”[p.95]
- “Once selected, these ‘Targeted Ecological Areas’ will be processed through a Programmatic Screen to identify a sub-set of ‘Annual Focus Areas.’ These will be selected based on how the area meshes with existing programs, funding, conservation partners, etc, including:
  - Geographic balance.
  - Evaluation of different conservation strategies (other land protection programs, private stewardship programs).
  - Available funding.
  - Evidence of willing sellers.
  - Degree of existing protection (protected lands and protective zoning) and potential for success in areas threatened by development.
  - Consultation with local governments, land trusts, and other partners (Priority Funding Areas and areas they are already working on protecting).”[p.97]

**Progress to date:** Many of the goals and recommendations of DNR’s part of the MLPPRP have been integrated into DNR’s [Land Acquisition and Planning’s] Targeting Process, using selected Targeted Ecological Areas. PlanMaryland will also involve further assessments utilizing this process in the GreenPrint and the Place Designation process. The Forest Service has begun targeting certain high value forest watersheds to give priority for landowners who apply to enroll in Forest Management Agreements, and the Forest Legacy Program also targets high priority forest areas for purchasing easements.

## **IV. 4. Maryland Farmland Conservation: Supporting Sustainable Use of Land through Tax Policy, 2008**

In this research report, funded by the HRHCAE (HCAE Pub. 2008-4), authors Gruby, McElfish, Lynch and Li reviewed Maryland’s experience as the first in the nation to enact an Agricultural Use Assessment (AUA) designed to maintain agricultural lands in farm production with lower property taxes. The AUA law authorizes the assessment of land “actively used for farm or agricultural use” at the land’s use value rather than at its fair market value, thus reducing the annual state and local property taxes paid by landowners. Whenever farmland assessed under the

AUA is sold, the state imposes an agricultural land transfer tax (ATT) on the value of the transfer, unless the land remains in agricultural use after the sale.

*“This study explores Maryland’s primary tax measures affecting agriculture, the agricultural use assessment (AUA) and the agricultural land transfer tax (ATT), in order to determine whether these related tax programs could be improved in ways that would encourage farmland protection while continuing to benefit farmers’ bottom lines.” [p.iii]*

*“These results suggest that increases in the ATT could be supported while not impairing the benefits received by farmers under the AUA or affecting the value of land sold for agriculture. Our results suggest further potential modifications to the tax treatment of agricultural lands that would maintain benefits for all Maryland farms remaining in agricultural use, while improving the performance of the tax structure in preserving agricultural lands and generating public benefit.” [p.iv]*

#### **Recommendations:**

- **“Increase the agricultural land transfer tax rate** by an additional 0.5 to 2 percentage points and distribute the revenue from the increase to counties; or authorize those Maryland counties experiencing farmland loss to levy a county agricultural land transfer tax in that amount....
- **Close the loophole in the agricultural land transfer tax** allowing limited liability corporations to avoid payment of the tax...
- **Maintain the agricultural use valuation only for farms that have complied with Maryland nutrient management and other requirements** in order to reinforce the public benefit side of the program, and meet the water quality objectives of the Agricultural Stewardship Act of 2006.” [p.19]

**Progress to date:** Although this study confirmed and helped support recommendations made by the Task Force to Study the Maryland Land Preservation Foundation in 2004 (see IV.9.) to *“Double the agricultural land transfer tax, to produce a revenue stream more commensurate with the per-acre cost of purchasing easements, and recapture a greater portion of the revenues lost while land is assessed for agricultural use,”* it did not lead to amendments to the agricultural transfer tax. In 2008, the Limited Liability Corporation loophole was closed for the real estate transfer tax and the agricultural transfer tax, providing more funds for MALPF; however, no additional requirements for nutrient management were added to the Agricultural Use Valuation.

#### **IV. 5. Land Preservation & State Land Subcommittee, Summary Statement, O’Malley-Brown Environment & Natural Resources Transition Workgroup, 2007** <sup>23</sup>

The Vision statement of this Subcommittee was:

***“Maryland, the most livable State in the Nation.”***

*“Maryland’s geography and diversity reflect the nation. We have become one of the best places to live because of our environmental qualities and the unique historic, natural and cultural resources that represent our heritage as a people.”[p.1]*

The Statement suggested that:

“This Administration will increase the pace of land and water conservation to protect the best of Maryland, to:

- Support beautiful, healthy and economically vital communities.

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<sup>23</sup> The consultant discloses that he was a member of the Subcommittee and served as facilitator and lead author for the Subcommittee report.

- Protect and maintain diverse natural, cultural, agricultural and forestry resources, our green infrastructure.
- Provide a quality outdoor recreation and educational opportunity for every citizen.” [p.1]

The subcommittee recommended goals and actions that reflect the goals of this sustainability project. The first goal was offered in the context of the Eastern Shore Land Conservancy’s successful effort to obtain pledges from a majority of counties in the upper Eastern Shore to preserve 50% of their remaining open space for agricultural and forestry uses, and Montgomery County’s public announcement that they had protected 50% of their land area as open space.

1. **“Protect three million acres of open space or 50% of total State land area in the early 21<sup>st</sup> Century:**

- Appoint a *Land Preservation and Stewardship Commission* to establish a statewide Priority Preservation Plan...
  - Fully fund land conservation programs with Program Open Space revenues and other sources; freeze changes to the allocation formula that would divert funds from land conservation...
  - Increase existing and identify new fund sources for land and easement acquisition;
    - close the controlling interest loophole and other exemptions in the transfer tax law,
    - increase the real estate transfer tax rate above 0.5%,
    - increase the agricultural transfer tax for converting agricultural and forest lands to development to fund local and state agricultural easements; remove the income cap from these taxes for the Woodland Incentive Program,
    - enact a transferable tax credit for donations of conservation easements,
    - increase MET’s revolving Land Trust Grant Fund, and ability to market new federal tax incentives for easement donations, and
    - provide general obligation bond funds to maintain full funding for land conservation and parks, whenever transfer taxes are diverted to other purposes.
  - Provide incentives to local governments to preserve land through comprehensive planning, zoning, density transfers and county funding.
  - Increase the capacity of the State’s land preservation programs to expedite land and easement acquisitions, by adequately funding staff and streamlining the acquisition process.
  - Pro-actively develop and use intergovernmental and public-private partnerships with land trusts and conservation organizations.
  - Improve access to natural resources, particularly waterfront access. Establish a committee to create a waterfront access plan for the state to be completed within one year.
  - Provide tax incentives for forestland and riparian buffer conservation and management to support recent federal tax incentives.” [p.1-2]
2. **“Establish the first East Coast program for carbon sequestration and avoidance to mitigate global climate change, and establish a Chesapeake Climate Program...”[p.2]**
3. **“Develop a DNR Urban Policy that reaches children and underserved populations.”[p.2]**
4. **“Restore Maryland’s role as national leader in stewardship of natural lands, open space and parks.**
- Reverse a 15 year decline and restore Maryland’s park system to first-rate status.
  - Identify and establish new state parks.
  - Provide quality outdoor recreation and educational opportunities for all citizens and visitors.
  - Protect and enhance forests and parks, programs and services with an immediate infusion of funds for maintenance, improvements and operations of public lands.

- Identify a dedicated new fund sources to support operations and maintenance of the public lands system.
- Reexamine the Declaration of Policy for Forests and Parks in the Natural Resources Article (§15-102) to ensure that public lands are protected and utilized in the public's interest
- Update and clarify DNR's policies in the Real Property Manual for private uses of State lands, to ensure environmentally sensitive stewardship and adequate revenue.
- Establish and maintain improved programs and staffing for monitoring and enforcement of the State's purchased and donated agricultural and conservation easements, while maintaining the provisions of easements that serve the individual purposes of the programs, and the close partnerships between easement grantors, grantees and land trusts.
- Restore and enhance a model volunteer in the parks (VIP) program to encourage citizen volunteerism in park management and open space easement monitoring." [p.2]

**Immediate and Urgent Actions** were recommended by the Subcommittee:

- "Fully fund Program Open Space, land conservation and parks programs with all revenues from the real estate transfer tax, including any over-attainment from prior fiscal years.
- Increase staff for Program Open Space to encumber full funding for land acquisition, easements and local grants, and for MET and land trusts to solicit conservation easements with new federal tax incentives available only through 2007, using a larger share of 3% transfer tax administrative funds.
- Enlist private land trusts to assist in acquiring State lands and easements to encumber appropriated funds.
- Freeze changes to the POS allocation formula until adoption of a statewide Priority Preservation Plan.
- Provide an immediate infusion of general funds to adequately manage, maintain and reverse deterioration of State Forests and Parks.
- Announce the creation of the Harriet Tubman State Visitor's Center as part of Black History Month in February 2008.
- Sign on to the Regional Greenhouse Gas Initiative (RGGI) by June 30, 2007." [p.3]

**Progress to date:** Funding for the MALPF staff was increased following this report, but funding for MDP, MET and DNR staff for land preservation programs remained stable. New legal staff at DGS and MDA help processing and enforcement. Several of the proposed actions in recommendation number 4 were addressed in 2007 with partial success. In response to the *Maryland State Parks Funding Study, A Plan to fully fund the operations of the Maryland Park Service*, the Maryland General Assembly amended the allocation formula for the Real Estate Transfer Tax, dedicating \$21 million or 20% of the Program Open Space share of transfer tax revenues for use of the Maryland State Parks and Maryland State Forests for operations and maintenance of these lands, but this change reduced the county share of this POS allocation for local park acquisition and development. No East Coast program for carbon sequestration has been established, but the Forest Service has started a small test forest to measure for carbon sequestration.

#### **IV. 6. Comparing Farmland Preservation for Smart Growth in Maryland and Pennsylvania : Why is Maryland Only Number Two?** 2007, Tom Daniels

Sponsored by the University of Maryland and Resources for the Future, this report by Professor Tom Daniels of the University of Pennsylvania, evaluated the differences in the primary farmland preservation programs in Maryland and Pennsylvania. While it briefly discusses Maryland's Rural Legacy Program, Maryland Environmental Trust, Program Open Space and the role of private land trusts, the comparison in acres protected and budgets are based on the



progress made by MALPF and its counterpart program in Pennsylvania. In this respect the report has same bias as the annual reports on Purchase of Agricultural Conservation Easement (PACE) programs for farmland by the American Farmland Trust. They both fail to fully recognize the progress made in farmland preservation by the larger network of State, local and private land preservation organizations, using a variety of tools and fund sources to accomplish the preservation of lands with multiple resources values, not just agriculture.

However, Professor Daniels makes a number of important observations and useful recommendations for strengthening MALPF, some of which have been addressed in the MALPF Task Force Reports and other studies reviewed in this summary, but others of which have not.

### **Recommendation for Strengthening MALPF:**

- “An annual meeting of MET, Rural Legacy, MALPF, and county farmland preservation administrators should be held to coordinate farmland preservation efforts, review progress, identify obstacles to farmland preservation, and recommend administrative and legislation adjustments. From this meeting, an annual report should be published on the status of Maryland’s farmland preservation programs.” [p.22]
- “The MALPF program should consider out-sourcing appraisals, title searches, and settlements to the counties to speed up the process of preserving farms.”[p.23]
- “The MALPF program should transition to using comparable sales of preserved farms to determine after values, and thus producing a much more realistic easement value.”[p.23]
- “Coordinate the various state farmland preservation programs and adjust the MALPF funding formula to concentrate on the most important farming areas.”[p.23]
- “Two farmland preservation strategies are key: 1) preserve farmland in large contiguous blocks; and 2) create growth boundaries or buffers between developed areas and agricultural areas.”[pp.23-24]
- “Encourage more farmers to apply to sell conservation easements.”[p.24]
- “MALPF needs steady funding at \$100 million a year from all sources. The MALPF program should become strictly a matching program. This will help to leverage more funding from Maryland counties.”[p.25]
- “MALPF needs to continue working on streamlining its operations to process applications in a timely manner. Eliminating the appraisal after value formula would help as would allowing counties to conduct appraisals, title searches, and settlements as Pennsylvania does.”[p.35]
- “Maryland needs to maintain or increase its state funding for farmland preservation. In the past, funding fluctuations have hindered MALPF and the Rural Legacy programs.”[p.35]
- “Maryland state government in conjunction with the counties needs to better integrate MALPF with the Priority Funding Area strategy by targeting the preservation of quality farmland along parts of PFA boundaries.”[p.35]
- “MALPF should undertake a study to determine: 1) the number of preserved farms and acreage preserved in effective agricultural zones in each county; 2) the number of contiguous blocks of 500 or more acres of preserved farmland and the total number of acres in those blocks; and 3) the number of preserved farms and their acreages along the boundaries of Priority Funding Areas.”[p.36]

**Progress to date:** Some changes in the appraisal procedures, including a new attorney at the Department of General Services, have resulted in expedited processing of easements within an average of three months. A Valuation Committee has been established to consider a “point system” and other changes for appraisals, similar to Rural Legacy. The MALPF annual budget for easements is currently about \$30 million per year, only about half of which is used as matching funds at a 60-40% ratio. This is down from a high in FY2007 of \$91 million. Some

emphasis is given to large contiguous areas of easements in MALPF guidelines for county Priority Preservation Areas, in annual easement applications, and in the State Agricultural Certification Process for local programs. It is part of the Maryland LPPRP and will be part of PlanMaryland's Place Designation Process and AgPrint. Of the 28 reports summarized herein, 17 supported increased funding for land preservation and conservation easements (Table I).

#### **IV. 7. A Statewide Plan for Agricultural Policy and Resource Management,** Maryland Agricultural Commission, 2006

The Commission's purpose statement is:

*"To enhance, protect, preserve and sustain the viability and profitability of Maryland's agricultural industry."* [p.6]

This report organizes recommendations under three main issues, each with sub-issues:

- "Enhance profitability.
- Ensure an adequate base of well managed agricultural land.
- Advance research, education and advocacy of agriculture." [p.8]

Some of the recommendations of the Commission that did not relate to land use or sustainability of agriculture were not summarized here.

#### **ISSUE 1: Enhance Profitability**

Recommendations:

- "Improve marketing and access to markets.
- Provide business development assistance.
- Reduce the cost of production.
- Clarify, harmonize, and improve regulations to encourage profitable agriculture.
- Reduce the tax burden on agriculture." [p.9]

#### **Provide Technical Assistance to Local Jurisdictions**

- "Develop a state guide to planning for agriculture that includes mechanisms, such as reverse setbacks, for reducing land use conflicts, and a model right-to-farm ordinance with guidelines for county officials.
- Develop a technical assistance toolbox for local officials on zoning and regulations that both support traditional agriculture and allow for alternative agricultural uses.
- Convene an ongoing statewide working group to discuss zoning issues related to agriculture and develop tangible action items.
- Encourage modification of local regulations so they honor the intent of existing regulations while developing alternative approaches that scale to farm-based and community-based processing systems.
- Convene an ongoing statewide working group to ensure transparent health regulations, consistent among local jurisdictions, that are most advantageous to the farming community." [p.18]

#### **Encourage County Tax Relief for Agriculture**

- "Encourage all counties to offer tax credits for preserving land.
- Waive amusement tax for agritourism enterprises." [p.20]

#### **Enact Statewide Tax Relief for Agriculture**

- "Enact state tax credits for preserving land.
- Eliminate part or all of the state estate tax for agricultural enterprises.
- Develop and distribute appropriate informational materials." [p.20]

### **Encourage Federal Tax Relief for Agriculture**

- “Encourage the elimination of capital gains taxes on the sale of development rights.
- Eliminate part or all of the federal estate tax for agricultural enterprises.
- Increase threshold for agriculture from \$600 to \$2,000 for reportability and filing of Form 1099 Misc. relating to contract labor.”[p.20]

### **ISSUE 2: Ensure an Adequate Base of Well Managed Agricultural Land:**

Recommendations:

#### **Stabilize the Land Base**

##### **Fully Fund Maryland Land Protection Programs**

- “Provide sufficient funding so that Maryland can obtain its farmland preservation goal of 1.03 million acres of productive farmland protected by 2022.
- Ensure full funding for Maryland’s land protection programs by dedicating the real estate transfer tax and the agricultural transfer tax for their intended uses.
- Explore and adopt new funding sources for agricultural land preservation.
- Establish a revolving fund for MALPF to buy agricultural land in fee and then sell the land at auction to farmers subject to an easement. (The program could be targeted to beginning or young farmers as appropriate.)
- Fund a state-level Critical Farms program.”[p.23]

##### **Increase Effectiveness of Land Protection Programs**

- “Improve MALPF’s flexibility on what agricultural uses are allowed on preserved farms.
- Prioritize the use of state land preservation funding to encourage the preservation of large contiguous blocks of productive farmland.
- Implement a state-level Critical Farms program.
- Develop TDR and new farmland preservation programs through state and county collaboration.
- Monitor the issue of transferring water rights on MALPF protected farmland.
- Establish a permanent Commission on Agricultural Land Preservation and Zoning.
- Establish an Executive Order for state agencies to minimize the extent to which they contribute to the conversion of productive agricultural land.”[p.24]

#### **Encourage Agricultural Stewardship**

##### **Increase Funding for Agricultural Conservation Programs**

- “Provide additional funding for Maryland Soil Conservation Districts to better administer and implement conservation programs.
- Provide sufficient funding for the Maryland Cover Crop Program.
- Implement ways to reward farmers who already are using good stewardship practices.
- Provide additional funding to encourage maximum compliance with nutrient management requirements.
- Provide additional funding for the University system to conduct research on potential new BMPs that address the needs of agriculture and the health of the bay.
- Fund implementation and adaptation of newly developed conservation practices that result from the University system and other research.”[p.26]

##### **Promote the Implementation of Best Management Practices**

- “Design a two-tiered cover crop system to allow for harvesting.
- Examine the possibility of adjusting the cover crop program to reflect planting differences across the state.

- Take advantage of possible future opportunities for farmers to receive “credit” for nutrient reductions from crop management systems that foster carbon sequestration and from new income streams from alternative funding mechanisms such as nutrient trading.
- Create and dedicate a revenue stream to enable research that will support farmers in implementing best management practices to meet sediment and nutrient reduction goals that encourage water quality improvement in the Chesapeake Bay watershed.
- Provide adequate information and practical training on BMPs to better achieve nutrient management plans to protect the health of Chesapeake Bay and its watersheds.
- Maximize compliance with Maryland’s nutrient management regulations.”[p.27]

### **Strengthen and Protect Right-To-Farm**

- “Mandate notification at the front end of estate transactions and also make this notification legally binding as part of the closing contract.
- Amend the existing law to create a process for farmers to request the state Attorney General to review ordinances the farmer believes to be unduly restrictive.
- Create a deterrent against frivolous nuisance suits and illegal ordinances.
- Protect farmers’ rights regarding trespassing on their farm.”[p.28]

### **Require Mediation For Ag-Related Disputes**

- ”Expand the Farm Sense program so that MDA can adequately support counties that choose to create agricultural reconciliation boards (ARBs) with training and expert mediators.
- Authorize and encourage all counties to create ARBs and define their responsibilities.
- Create a state-level board to mediate cases in counties that elect not to create a county-level board and/or to handle more complicated cases.
- Require aggrieved parties to go through mediation before a suit can be filed.”[p.28]

### **Advance Forestry as an Agricultural Enterprise**

- “Promote forestry within the ag community as another way for farmers to remain profitable.”[p.29]
- “Include outreach to foresters as part of the work of Soil Conservation Districts.”[p.30]

## **ISSUE 3: Advance Research, Education and Advocacy of Agriculture.**

### **Direct research to future viability**

#### **“Encourage the University system to solidify and expand Maryland Cooperative Extension capabilities to assist the broad range of production agriculture”[p.34]**

- “Fund and re-open soil testing lab or provide similar services.
- Fund LEAD Maryland Foundation, Inc., program to continue to provide agricultural leaders to advance agriculture in Maryland.
- Establish the CBFED [Center for Beginning Farmers and Enterprise Development] to provide concept development and business planning assistance to agricultural operations and offer specialized services to young and beginning farmers in the areas of marketing, business and financial planning, cultural practices, and policy implications that affect agriculture across the broad range of land-based enterprise.
- Establish a Plant Protection Center at the University of Maryland.”[p.35]

#### **“Encourage the University System to solidify and expand University Agricultural Research Associated with farm enterprises”[p.35]**

- “Strongly support those university programs where agriculture and suburban/urban markets merge: turf, nursery, horticulture, landscaping.

- Establish a Center for Agricultural and Environmental Biotechnology within the University system to enhance and improve current agricultural practice.
- Install the University's IFS3 [Institute for Food Systems Security and Safety] as a premier global authority for comprehensive research, service, and information on food and water protection, defense, and safety.”[p.35]

**Progress to date:** MALPF provides guidelines for preserving agriculture to counties applying for easement funds. In 2011 the Governor's Inter-governmental Commission on Agriculture issued a report and PowerPoint presentation as a “Toolkit” for local communities. (see IV.1 above.) MALPF has new agricultural use policies that identify a long list of uses permitted on MALPF protected lands, including winery and equine uses. A Critical Farms Program has been established in MALPF, but it remains unfunded. A water recharge policy is before the MALPF board for consideration. Right to Farm laws have been strengthened requiring realtors to notify prospective buyers of the preference given to farming on lands subject to an easement.

In the current fiscal climate, little progress has been made in providing county, state or federal tax relief for agriculture, or full funding for Maryland's land preservation programs. While level funding has been maintained by substituting bond funds for diverted transfer tax revenues for most programs, it will not be possible to reach the State's agricultural land preservation goal by 2022 at current levels of funding. Several studies of TDRs in Maryland have been published by the HRHCAE, MDP and Resources for the Future, with recommendations for State oversight and guidelines for successful local programs. Cecil was the latest county to adopt a TDR program in 2006.

#### **IV. 8. Maximizing Return on Public Investment in Maryland's Rural Land Preservation Programs, Maryland Department of Planning (MCAE 2004-04)**

This report was prepared by the MDP staff who serve on the MALPF Board and provided lead staff support for the *Task Force to Study the Maryland Agricultural Land Preservation Foundation* (see IV. 9 & 10). It incorporates research and recommendations that support the MALPF Task Force recommendations, which are now a part of PlanMaryland's Guidelines for Implementation Strategies for agricultural and resource lands.(see II.1).

##### **General Recommendations:**

- “Recognize that State conservation goals for rural land and resources cannot be achieved through public expenditures for easement purchase without supportive zoning.
- Identify the revenue sources for conservation to which the State will make a long-term commitment, truly dedicate those revenues, and use the funds according to a strategy designed to maximize return on public investment and achieve program goals.”[pp.6-7]

**Key Elements of investment strategy:** (Recommendations for agricultural and forest sustainability)

- “Direct the majority of conservation investment to *priority areas*: areas rich in resources, where either development pressure is very low or where local land use management supports investment objectives, stabilizes land use, and allows time and a realistic chance to achieve conservation goals.
- Where resources are still intact, development pressure is increasing, and supportive land use management is lacking, invest seed money only: markedly smaller amounts of funds designed to encourage supporting land use management that will make goals achievable. Invest more public funds when the investment is being better protected and the chances of long-term success improve.

- Where resource lands are already too compromised to achieve rural conservation goals, pursue other, more achievable conservation objectives with appropriate funding sources. For example, buy or otherwise preserve publicly accessible open space with local-side POS funds and local set-asides, and natural resource lands with Stateside POS funds.
- Given constraints on funding, place a greater emphasis on market-based and other incentives for rural land preservation, such as transferable development rights, tax incentives, tax credits for easement donation, etc.
- Support public investment in conservation through transportation policy and investment. Invest in highway improvements that will increase commuter market access to designated rural conservation areas only if established local land use management practices are adequate to protect conservation investment in those areas. Until that time, limit improvements to those necessary to ensure public safety and orderly traffic flow, without increasing capacity and design speeds.
- Generate support for a sound conservation strategy through aggressive marketing and promotion to all stakeholders. Work with legislators, local governments, rural communities, landowners and the general public in each jurisdiction to customize the strategy by county.” [p.7]

“Changes in MALPF’s and Rural Legacy’s enabling legislation would be required for effective implementation.”[p.7]

“In this context, *‘return on public investment’ means achieving the statutory goals for which public money is being spent.*’ ‘Return’ so defined cannot be measured completely or precisely. However, a common goal central to all of Maryland’s rural conservation programs is to conserve rural land and resources from the impacts of expanding development. The degree to which that goal is being achieved can be evaluated by measuring what is happening to the rural landscape, specifically the degree to which rural land is being protected, subdivided and developed.”[p.2]

#### **Recommended investment strategy:**

*“Make the largest investments where the potential for return is best, and relatively small investments where good return is highly questionable. Where land and resources are already too compromised to achieve the established conservation goals, do not invest funds intended for those purposes.”* [pp.50-51]

#### **Program Specific Recommendations**

##### **MALPF Task Force Recommendations:**

- “New revenue sources should be created to generate nearly \$800 million more for land preservation over the next 20 years than would be the case under existing laws governing dedicated land preservation revenues. This would almost double the rate of funding currently enabled by law.
- All resulting new revenues should be allocated to counties for easement acquisition in Priority Preservation Areas (PPAs) that have been established appropriately in the county comprehensive plan.
- To be eligible for these new funds, each county would have to identify PPAs in their comprehensive plan, and describe therein specific county goals, as well as plans to control development, acquire easements, protect the integrity of the land for farming, and accomplish county and MALPF goals. Each county would also have to evaluate the ability of their zoning, other land use management tools, and preservation efforts to achieve these goals, and identify shortcomings in these abilities.

- The State Agricultural Certification Program (the Maryland Department of Planning and the MALPF) should review and evaluate county efforts to establish PPAs to better achieve MALPF goals.
- The Certification Program should periodically report to the Governor and General Assembly about each county’s progress in their efforts to stabilize the land base in PPAs and achieve goals through land preservation activities and land use authority.”[pp.53-54]

**Additional Study Recommendations:**

- “Priority Preservation Areas designated by counties could be evaluated according to an assessment of performance and objective measures similar to those demonstrated in this report, in conjunction with measures used to evaluate the quality of the resource land.
- Based on performance measures and resource quality, each area would be classified according to the part of the investment strategy in which it fit: Part 1, *Low Development Pressure*; Part 2, *Strong Supporting Programs*; Part 3, *Resource Protection Lacking*; or Part 4, *Emphasize Other Conservation Goals*.
- Funds – both existing and, if created, new revenue sources – would be allocated among areas based on their classification and the associated assessments of resource quality and performance, commensurate with the recommended investment strategy.
- To ensure objectivity and fairness, the basis for fund allocations should be publicly disclosed, including the assessments of performance and resource quality and the classification of areas within the investment strategy.”[pp.54-55]

**Rural Legacy Program Recommendations:**

“The [above] strategy should be specified in the [Rural Legacy] law, as should requirements for public disclosure similar to those outlined earlier for the MALPF Program.”[p.55]

**Transportation Recommendations:**

“Public objectives for land use, conservation, communities, and transportation are related. Achieving any of them is dependent upon mutually supportive policies and investments. Accordingly, transportation decisions that affect market access to rural areas should be an explicit part of the State’s strategy to protect its investment in conservation.

If conservation investment is going to continue in an area being negatively affected by highway projects, transportation options that will increase market accessibility should not proceed until appropriate constraints on subdivision and development through local zoning are in place.” [pp. 56-57]

**Progress to date:** The central recommendations of this report, “*Maximizing Return on Public Investment in Maryland’s Rural Land Preservation Programs*” and “*Make the largest investments where the potential for return is best, and relatively small investments where good return is highly questionable*” are now a part of PlanMaryland’s *Guidelines for Implementation Strategies for agricultural and resource lands* policies (see section II.1), but played a larger role in the first Draft of April 2011. The concept is also supported by several other reports in this summary (see Table I). Recommendations for increased funding, new fund sources, and directing new funds to PFAs have not been adopted, and are unlikely in the near future. MDP and MDOT are working on policies related to transportation as part of PlanMaryland. MALPF’s Annual Reports to the Governor and General Assembly report progress on the stabilization of the land base in PPAs.

#### **IV. 9. Task Force to Study the Maryland Agricultural Land Preservation Foundation, Final Report 2004**

This is the third and final report from a Task Force recommissioned by the General Assembly in SB 544 in 2002, to evaluate the MALPF Program and to make findings and recommendations. It was staffed by the Maryland Department of Planning and the Maryland Department of Agriculture. Legislative changes have resulted from some recommendations, and others have led to policies now found in PlanMaryland and the MLPPRP Volume I. The Task Force had representatives from the General Assembly, State resource agencies, land trusts, and non-profit organizations representing farmers, foresters, the environment and local government. Previous reports were submitted in August 2001 and January 2003 (see IV.10).

“The issues facing the Foundation were related to two major shortcomings in the ability of the Foundation to achieve its statutory goals:

- 1) Lack of adequate support in many areas of the state for preservation goals from local zoning and related land use management tools, and
- 2) Public funding that, in the long term, is also inadequate to support achievement of those goals.”[p.iv]

Problems that MALPF faced included: “...development on or near easement properties coming into conflict with agricultural operations, the loss of critical farms, an increase in easement values, an increase in the fragmentation and degradation of the state’s remaining resource lands, a lack of funding to reach the program’s goals, diversions of dedicated preservation funds to balance the budget during the three most recent fiscal years, and a persistent shortage of staff.” [p.iv]

A major finding of this report was that: “*The Task Force estimates that projected revenues between now and 2022 from funding sources dedicated by law to land preservation will fall about \$800 million short of the amount needed to achieve State goals,*” [p.iv] referring to the goal established by Joint Resolution of the House and Senate to triple the acres of agricultural and woodlands then protected, or 1,030,000 acres by 2022.

#### **General recommendations**

The Task Force recommended that counties establish Priority Preservation Areas (PPAs) in their comprehensive plans (incorporated into the *PlanMaryland* Guidelines for Implementation Strategies, for agricultural resource lands.).

The Legislature and the Governor should take the following measures:

- “Supplement existing land preservation revenue sources, primarily by increasing existing taxes on real estate and real estate transactions involving non-agriculturally assessed property outside Priority Funding Areas (PFAs).
- Truly dedicate these preservation funds by committing significant portions to debt service on Installment Purchase Agreements (IPAs) with landowners.” [p.iv]

*“All of the additional revenues we recommend would be derived from real estate and real estate transactions outside PFAs....The Task Force believes that parties benefiting financially and personally from the conversion and use of land in rural areas should provide a greater share of the funds needed to achieve conservation goals for these areas.”*[p.v]

*“The agricultural land transfer tax generates funds at a per-acre rate that is only a fraction of that needed to preserve an acre of land in almost all of Maryland’s counties, and recovers only a fraction of the taxes lost for preferential tax assessment during preceding years.”*[p.v]

#### **Program Recommendations**

##### **Achieving Program Goals:**



**“Priority Preservation Areas:** Each county should establish priority preservation areas [PPAs] in which the goals of the program can be achieved.” “...we recommend enabling legislation to accomplish the following:

- Require each county to establish a Priority Preservation Area to be eligible for new funding sources for the MALPF program.
- Authorize new funding sources specifically for Priority Preservation Areas.
- Require the State to review and periodically report on county efforts to concentrate funds and achieve program goals in PPAs.”[p.21]

**The PPA Process:**

- “....PPAs should be established through the county comprehensive planning process according to general guidelines. Counties should be allowed to set their own additional criteria.”[p.15]
- “...The State [should] approve PPAs through the State certification process for local agricultural land preservation programs.” [p.16]

**PPA Funding:**

- “... All funds resulting from tax increases recommended in this report should be used to fund easement acquisitions in PPAs... PPA funds should be allocated equally among established PPAs each year.” [p.17]

**Installment Purchase Agreements (IPAs):**

“The Foundation should work as appropriate with its consultants, the Departments of Planning and Budget and Management, the Comptroller’s and Treasurer’s offices and the Office of the Attorney General to take ... steps to establish such a program.” [p.17] (see Task Force report for suggested steps)

**Funding and Program Support**

**Additional MALPF Staff.** “... Two additional senior staff at the Administrative Officer III level or above [should] be added to the Foundation’s staff.” [p.24]

**Dedication of Existing Statutory Revenue Sources.** “The legislature and the Governor should pass legislation to dedicate revenue sources to preservation. Dedicated sources should not be subject to diversion through Budget Reconciliation.” [p.25] If unavoidable, “....these diversions should be returned to land preservation programs through bond issues or increases in subsequent allocations equal to the amount of funds diverted (once adjusted for inflation).” [p.25]

**Additional MALPF Funding.** “... Parties benefiting financially and personally from use of developed land in rural areas should provide a greater share of the funds needed to achieve public land and resource conservation goals for these areas.”[pp.25-26]

“The Task Force recommends the following measures to increase revenues for land preservation:

- Double the agricultural land transfer tax, to produce a revenue stream more commensurate with the per-acre cost of purchasing easements, and recapture a greater portion of the revenues lost while land is assessed for agricultural use.
- Double the real estate transfer taxes on non-agriculturally assessed land outside of PFAs.
- Close the loophole exempting transfers of land outside PFA’s by corporate interests from real estate transfer tax.
- Increase capital gains withheld for income taxes of non-state residents selling developed (non-agriculturally assessed) land outside PFAs.
- Impose a new state property tax on non-agriculturally assessed properties outside PFAs.” [p.26]
- “...A state property tax surcharge of about 4% (\$.005 on \$100 assessed value) imposed on non-agriculturally assessed parcels outside a PFA.” As a result, the estimated annual proceeds from

this tax would more than double from just under \$5 million to about \$10 million in 2022, amounting to slightly more than \$100 million over the entire 15-year period.” [p.26]

- “The remaining \$307 million to \$452 million of the shortfall [should] be provided through general obligation bonds.” “...the bonds [should] be issued in installments rather than at the outset of any land purchase program, which would save significantly on interest costs since interest would be paid only on the funds expended.” [p.26]

### **Other Program Enhancements**

#### **Critical Farms**

- “The Task Force recommends the creation of a statewide Critical Farms Program to support the achievement of the Foundation’s objectives [which would] provide interim or emergency financing for the acquisition of agricultural preservation easements on critical farms that would otherwise likely be sold for non-agricultural uses....” [p.32]
- “...Recommends that the legislature pass authorizing legislation for Foundation to develop a Critical Farms Program.” [p.32]

#### **Easement Valuation**

- “...Recommends that the Foundation adopt an interim measure to help counties limit easement costs. Under this measure, the Foundation should allow counties to set their own easement value caps.” [p.33]

**Progress to date:** Legislation in 2006 encouraged the concept of PPAs to be incorporated into local comprehensive plans and the Certification Process. As reported in the Progress for study IV.8 above, PPAs are also addressed in in the Place Designation Process in PlanMaryland, and in the guidelines for counties to prepare annual programs and use PPAs in their ranking systems for applying for MALPF funds, but there is no new money set aside for creating incentives for counties that chose to use PPAs. MALPF’s Annual Report submitted to the Governor and General Assembly includes information on the Certification Process. MALPF convened a Task Force and hired a consultant to study a State Installment Purchase Agreement Program, which was found by the Maryland Comptroller’s office to be unconstitutional because of bond period limits. While the loophole in the real estate transfer tax and agricultural transfer tax for LLC’s was closed by legislation in 2008, no new funding sources or increases have been provided for MALPF. MALPF and DGS have added new staff to better manage the program and expedite applications. A Critical Farms Program has been established in MALPF, but no new funds have been provided to implement it, and it may be available only to young farmers if it is funded.

### **IV. 10. Task Force to Study the Maryland Agricultural Land Preservation Foundation, Report for the 2003 Legislative Session**

This report identified opportunities in the 2003 Session of the Maryland General Assembly for implementing recommendations already agreed to by the Task Force, that could lead to critical improvements in the MALPF Program’s long term success.

#### **“Critical Improvements for Long Term Success:**

- Allow compatible economic activities and supplemental income.
- Level the playing field for farms with good soils and farms in rural areas.
- Focus acquisition on good farmland in areas protected by zoning and increase funding when the current fiscal crisis ends.
- Provide new landowner options for lot exclusions.
- Establish Foundation policy for approving districts from which land will be withheld.

- Revise the easement valuation system to maintain landowner interest and set reasonable limits for public investment.
- Utilize bond funds to replace diverted dedicated funds whenever possible during the current fiscal crisis.” [p.1]

“In the short term, before the establishment of PPAs, the process should begin through county easement ranking systems; then funding should be increased for these priority areas, in the form of Landowner Incentive Grants.” [p.1]

### **Economic Activities and Uses on Easements**

Allow supplemental income opportunities that are compatible with land under easement, if these activities can take place without compromising the State’s investment in the land for agricultural production, under MALPF guidelines.

- “Maintain benefits of lot exclusions but limit their impact on farmland.” [p.5]
- “Clarify policy on withheld land.” [p.7]

### **Easement Valuation**

- “Dispense with the Agricultural Value formula.
- Cap easement values at a maximum % of fair market value (FMV).
- Use new ratio for ranking properties that is equal to easement asking price divided by the price cap.
- MALPF offer is the asking price or cap, whichever is lower.
- Change ranking to preserve competitive bidding and better farming.” [p.10]

### **Achieving Program Goals**

“Goals are increasingly compromised by development; insufficient easement funds to compete with development; weak zoning support for preservation, development incompatible with many forms of production, and biases in valuation and ranking contrary to Program goals.’ [p.11]

- “Give priority to the best farms and areas better protected from development.
- Restore full funding in FY2004 budget by using bond revenue.
- Direct new funding for Landowner Incentive Grants to priority areas when fiscal crisis ends.
- Continue easement acquisition beyond ..priority areas with existing revenue sources.”[p.11]

### **MALPF’s Goals: Strategies to Achievement**

- “Encourage counties to designate Priority Preservation Areas (PPAs).
- Encourage counties to set acquisition and other complementary goals within PPAs.
- Modify MALPF ranking guidelines and regulations to emphasize easement acquisition in PPAs.
- Keep buying easements outside PPAs.
- Use bond funds to support MALPF if dedicated funds are diverted to the general fund.
- Raise the cap on state income tax credits for donated or bargain sale easements.
- When the economy and State finances permit, establish and direct new funding sources, through Landowner Incentive Grants, to PPAs.” [p.14]

### **Recommended Legislation**

- “Clarify Program guidelines to allow farm and forest related economic activities and home occupations, in order to supplement farm income, encourage participation in the Program, and support land preservation (Ag. Art. 2-513(b)).
- Modify lot exclusion policy to give landowners a choice (family lots or one unrestricted lot) and limit the total number consistent with the Program’s purpose (Ag. Art. 2-513(b)).

- Change the Program’s easement valuation system to level the playing field for farms with good soils and farms in rural areas, and to eliminate acquisition costs that approach the in-fee fair market value of the land (Ag. Art. 2-510 & 2-511).
- Change easement ranking procedures to help the Program achieve its goals, by focusing acquisition on good farmland protected from development by zoning (Ag. Art. 2-510).”[p.17]

**Progress to date:** This report initiated the concept that the State and counties should identify Priority Preservation Areas (PPAs), make additional easement funds available in these areas, and use protective zoning to complement the purchase of easements in maintaining the agricultural land base. This concept has been reinforced in subsequent reports by the Task Force and other groups, and incorporated into parts of PlanMaryland and the MLPPRP Volume I. The report also led to significant changes in the rules and procedures governing the MALPF program. MDA established a committee to comprehensively review the Task Force recommendations, recommend modifications to rules that could be changed by regulation, and sought legislative changes where needed. All of the “*Critical Improvements for Long Term Success*” were fully implemented, with the exception of a focus on acquisition on good farmland areas protected by zoning and an increase in funding, which is a work in progress with the certification process, local guidelines for ranking applications, and PlanMaryland.

The requirement to enroll in Agricultural Districts to qualify for MALPF will be abolished in July 2012. More flexibility is permitted with lot exclusions; easement evaluation improvements are in progress; and bond funds have frequently been used by the Governor and General Assembly to replace MALPF transfer taxes diverted to the general fund. A Valuation Committee is reviewing the agricultural value formula, valuation caps, local ranking procedures, and an Easement Valuation System, with the help of DGS. No increases have been made to income tax credits for easements.

## V.1. Maryland Forest Resource Strategy, 2010-2015, Maryland Forest Service, DNR, 2010

### Executive Summary:

***“Forest land conversion to other uses is considered the greatest threat to many of these forest benefits, since forest land is being lost at almost 3% per decade, a loss much greater than the modest but increasing rates of land conservation.”*** [p.iv]

Maryland’s Forest Resource Strategy is a companion document to the Maryland Forest Assessment for 2010 to 2015 (V.2.below), which shows forest trends and conditions as the information base for the Strategy.

### The Forest Resource Strategy:

- “Describes how the Maryland Forest Service proposes to invest both competitive and non-competitive federal funding, along with other available resources, to address national and regional priorities as well as those identified in the state’s forest resource assessment,
- Describes how the state’s proposed activities will accomplish national program objectives and respond to specified performance measures,
- Outlines a specific timeline for project/program implementation,
- Provides a detailed budget including opportunities to leverage non-federal resources,
- Identifies partner/stakeholder involvement, and
- Identifies strategies for monitoring outcomes and revising action as needed.” [p.9]

Only Maryland Issues and Goals related to Smart Growth, land use and preservation are summarized in this report; *Example Tactics* for other Goals are presented in the report, but are

too numerous to be listed, except for those directly related potential policy considerations for sustainable forestry.

### **Maryland Issue I. Restore and Sustain Forest Landscapes**

**“Goal I.A. Keep Forests as Forests:** Prevent the loss of private forest land and forested landscapes through technical assistance, tax guidance, incentives, and mechanisms such as land acquisition and conservation easements.” [p.12]

#### **Strategies:**

- “Improve the economics of private forest management and promote sustainable forest management through the Forest Stewardship Program.” [p.12]
- “Develop and disseminate forestry resources for landowners with emphasis on outreach to new and future owners to help them maintain and manage forests.” [p.12]
- “Provide incentives to maintain forest cover.” [p.13]
- “Reduce the trend toward fragmentation and parcelization, offering technical support and education for local, regional, and state governments and other stakeholders for effectively targeting important forest resources, maintaining working rural landscapes, and supporting responsible forest harvesting.” [p.13]
- “Pursue no-net-loss of forests.” [p.13]
- “Assure supply of expertise and materials for forest management and tree planting, continuing efficient production of affordable seedlings with a diversity of species.” [p.14]

#### **Example tactics**

For the Strategy “Pursue no-net-loss of forests” the report provides useful *Example Tactics*, which the Center might consider for further action or research to improve the sustainability of forest lands:

- “Expand tree planting on public and private land to offset forest loss.
- Establish the Sustainable Forestry Council and implement the Sustainable Forestry Act of 2009.
- Refine the Forest Conservation Act, related laws, and planning guidance to minimize losses of forests important for water quality.
- Identify important large tracts of forests not currently protected from development.
- Use conservation easements, purchase of development rights, Forest Conservation Management Agreements, and other land preservation techniques to protect priority forest lands.
- Improve ability of land preservation programs to protect important forest areas, such as the increased coordination of Maryland Agricultural Land Preservation Foundation with Forest Conservancy District Boards through the annual meetings required by the 2009 Sustainable Forestry Act.
- Work with local jurisdictions to develop land use rules that support sustainable resource management, a viable resource-based economy, and conservation of priority working forests.
- Explore options to create long terms for Forest Conservation Management Agreements, a key program for motivating landowners to conserve forests.” [pp.13-14]

#### **Goal I.B. Manage for Resilient Forests**

“Apply ecologically sound forest management now to keep healthy native forests and habitats into the future, countering stresses from the altered ecology of Maryland’s landscapes.” [p.14]

#### **Strategies:**

- “Improve natural resource management and diminish the use of practices that degrade forest quality and wildlife habitat over time.” [p.14]

- “Focus restoration and conservation efforts using priority areas identified by the State Forest Resource Assessment and Strategies, working across ownerships incorporating all lands.” [p.14]
- “Strengthen landscape restoration initiatives, providing focused integrated support utilizing science, land management, and technology transfer expertise across programs while considering ecological function in efforts to improve forest connectivity.” [p.15]
- “Provide habitats for rare native species dependent on forest ecosystems, integrating efforts with landscape restoration and conservation and reflecting priority actions for forested habitats in the Wildlife Diversity Conservation Plan.” [p.15]

### **Maryland Issue III. Ensure Clean and Abundant Water**

“Keeping and restoring forests in key locations is a fundamental path to reduce many pollutants in waterways with TMDLs, including nitrogen, phosphorus, sediment, and biological impairment. Forests offer long-term, sustainable improvements in water quality, particularly if pollutants are also controlled at sources.” [p.23]

**“Goal III.A. Revitalize the Chesapeake Bay and other priority waters, using forests to help meet Total Maximum Daily Load (TMDL) requirement.” [p.24]**

#### **Strategies:**

- “Collaborate with local partners to use forests and trees to improve watershed conditions.
- Protect 70% of Maryland streambanks and shorelines with riparian forest buffers.
- Conserve forests important for water quality.
- Protect important aquatic habitats and water-dependent terrestrial wildlife.” [p.24]

**“Goal III.B. From Forest to Faucet – Connect people to healthy forests through clean drinking water initiatives in priority watersheds.” [p.24]**

#### **Strategies:**

- “Identify priority watersheds and work with communities to improve source water protection through watershed forestry.” [p.24]
- “Collaborate with watershed partners to restore watershed quality from the headwaters to rivers, through farms and working lands into urban centers.” [p.25]

**“Goal III.C. Avoid water quality impacts from prescribed forest management activities through .. effective and widespread use of harvesting best management practices (BMPs)” [p.25]**

#### **Strategies:**

- “Expand awareness of BMPs.
- Improve implementation of BMPs.” [p.25]

### **Other Issues**

The Maryland Forest Resource Strategy contains several other Goals and Example Tactics for the stewardship and protection of Maryland’s Forests, but are not directly related to land use, growth management or land preservation. These are listed below and are addressed in the MSF Report.

Maryland Issue II. Ensure Healthy and Resilient Forests

Maryland Issue IV. Create Jobs and Sustainable Communities

Maryland Issue V. Make Landscapes More Resilient to Climate Change

**Progress to date:** This is a new report, so there has been little time to pursue recommendations that were not already under consideration. Several actions have been taken in pursuit of No Net Loss of Forests. The Governor established a No Net Loss of Forests Task Force (see V.4.below). Many of the “example tactics” are underway. The Governor established a “Forest Brigade” that

planted a million forest seedlings on public land in three planting seasons. The Sustainable Forestry Council has been established, and the Sustainable Forestry Act of 2009 is being implemented. Conservation easements are being purchased on forest lands using a rating system to target the best private forest areas. A member representing Forest Conservancy District Boards now serves on the MALPF board. Budget constraints do not allow the Maryland Forest Service to provide technical assistance in forestry planning to local governments on a routine basis. Biomass Harvesting Guidelines (in lieu of BMPs) have been developed, and in the last BMP study the Department had compliance rates in the 85% to 90% range due to training of loggers in the industry.

## **V. 2. Maryland Forest Resource Assessment, 2010-2015**, Maryland Forest Service, 2010.

This report is the companion to the Maryland Forest Resource Strategy, 2010-2015 (V.1. above), and shows forest trends and conditions as the information base for the Strategy.

The **Forest Conditions and Trends** section provides detailed information under Criteria for 1) Conservation of biological diversity, 2) Maintenance of productive capacity of forest ecosystems, 3) Maintenance of forest ecosystem health and vitality, 4) Conservation and maintenance of soil and water resources, 5) Maintenance of forest contribution to global carbon cycles, 6) Maintenance and enhancement of long-term multiple socioeconomic benefits to meet the needs of societies, and 7) Legal, institutional, and economic framework for forest conservation and sustainable management.

The Report identifies issues, threats and opportunities related to the long-term sustainability of forests as a preferred land use, including the following:

### **Threats**

- “Land use change, development, and loss of the resource.
- Uncontrolled wildfire and wildlife in the Wildland Urban Interface.
- Climate change will raise sea levels and shift species.
- Forest pests and diseases must be mitigated.
- Invasive species must be dealt with swiftly and effectively.
- Deer populations will inhibit forest regenerative capacity if unchecked.” [p.44]

**Opportunities** are identified for dealing with the issues and threats, which provide the most direct link to the HRHCAE’s project for reviewing recommendations regarding sustainability of forests. These include:

- “Continue to promote perpetual conservation easement programs such as Program Open Space.
- Develop a private landowner enhancement incentive program to curb the conversion of the forest land and improve forest health.
- Encourage jurisdictions to develop and follow comprehensive plans that specifically address the long term protection and management of forested working landscapes.
- Continue to champion working forests as an important component of conservation landscapes in combination with protecting ecological function in core protected areas.
- Bolster conservation easement acquisition programs that are paramount in curbing the current decline of our forest land base.
- Work with state and local governments to enhance existing forest land tax reduction programs and develop new incentives for the expansion and retention of the forest land base.
- Propose legislation that would broaden the purpose and intent of existing land conservation programs by placing greater emphasis on the conservation of working landscapes.” [pp.44-45]

### **Priority Landscape Areas**

A process was developed to provide priority areas for the seven core forestry issues affecting Maryland and three US Forest Service National Priorities. The maps produced by this process identified the following Core Forest Issue Priority areas:

- Development and Parcelization
- Wildfires
- Water Quality and Supply
- Economic Viability
- Fish and Wildlife
- Urban Tree Cover

“**Maryland Priority Areas** were assembled from Core Forestry Issue priority areas. Each priority area from each Core Issue was simply combined with the other priority areas from other issues to produce a Maryland Priority Area.” [p.55] A series of GIS maps were then developed identifying the forested areas in Maryland that characterized the Core Forest Issue as “*Maryland Priority Areas of the USDA Forest Service National Priority for (the Core Issue).*”

**Progress to date:** With sufficient funding, the Forest Service would like to implement audits of environmental performance of logging operations with training. Working forest lands are routinely included in easement purchases by Program Open Space, Rural Legacy and MALPF, and are a required focus of the Forest Legacy easement purchases. The Sustainable Forestry Act was designed to ensure that forests are given equal priority in the MALPF easement program.

### **V. 3. Mapping a Sustainable Forestry Strategy for Maryland: Report on the Public Engagement Process, HRHCAE, December 2009**

This report is a product and summary of a multi-stakeholder partnership meeting held at the Harry R. Hughes Center for Agro-Ecology, led by the HRHCAE and DNR’s Maryland Forest Service. Several other sponsoring organizations participated. The process included a public survey of Maryland’s forestry leaders and other interested parties, five listening sessions held throughout the State, and a Statewide Forestry Summit held in October 2009. It resulted in identification of the following issues, strategies and recommended actions, listed in order of highest priority first. The meeting was held during the preparation of the Maryland Forest Resource Assessment, and Maryland Forest Strategies of 2010, as a requirement of the 2008 Farm Bill. It appears that many of the ideas and recommendations were addressed in these final reports.

#### **Resource based industry recommendations**

##### **“Issue 1. Maintaining Viable Forests and a Viable Forest Industry in Maryland”**

Strategies & Recommended Actions: (by priority)

- “Inventory forests that have high environmental, economic and social value at the landscape scale and adjust management accordingly.
  - Inventory and manage State-owned forests as sustainable working forests.
  - Monitor and mitigate forest threats from invasive species, fires, and predation.
  - Increase the amount of certified forest land, both public and private.
  - Maintain and enhance forest biodiversity.
- Assess impacts of current regulations and institute improvements to retain forest-based enterprises.
  - Review laws or ordinances that affect the health of Maryland’s forests.
  - Reduce and streamline regulations that unnecessarily constrain landowners in managing and harvesting timber.



- Develop and implement industry-focused land use regulations at the state and local level.” [p.iii]
- “Increase State financial assistance to help industry upgrade and modernize.
  - For tax credits, take a long view over short term budget-based decisions.
  - Increase funding and opportunities for logger training and education to increase efficiency, profitability, and public profile of harvest operators.
  - Implement tax exemption program for all equipment and pollution control/mitigation devices used in wood harvesting and manufacturing processes.
- Market Maryland-based products through a Maryland Forests Products Utilization and Marketing Program.
  - Establish a ‘Buy Local’ campaign.
  - Offer forest product utilization funds for new ideas and products.” [p.iv]

### **“Issue 2. Demographic, Social, Cultural, and Economic Trends as Impediments to Forest Retention”**

#### Strategies & Recommended Actions:

- “Address Fragmentation and Parcelization.
  - Make it a State priority to keep large tracts of forest land intact and working.
  - Provide education and incentives to encourage landowners to manage parcelized ownerships as a single large unit.
  - Develop and implement forestry-focused land use regulations at the local level.
  - Prepare for pending intergenerational transfer of land.
  - Manage the urban forest and green space.”[p.iv]

### **“Issue 3. Strengthening Forest Management by the Private Landowner”**

#### Strategies & Recommended Actions:

- “Increase knowledge and implementation of forest values and practice through education.
  - Build capacity among woodland landowners to educate themselves and access professional assistance.
  - Educate legislators and local government officials so they can make informed decisions about the sustainable management of forest resources.
  - Educate citizens/consumers of wood products to support use of sustainably harvested forest products and sustainably managed urban forest systems.
  - Increase use of forest-related curriculum by school children and teachers and increase implementation of forest practices on school properties.” [p.iv]
- “Increase outreach capacity and technical assistance for landowners.
  - Develop a portal for private landowners that provides access to available education, technical and financial assistance (foresters, consultants, nonprofits, certifiers, educators, etc.) through increased partnering of different organizations to leverage limited resources and maximize impacts.
  - Obtain detailed survey information on private landowners to target outreach education.
  - Increase staffing and resources at the State level (Department of Natural Resources Forest Service, University of Maryland Extension) to fill gaps.
  - Create and enhance enterprise opportunities for private foresters.
- Create and provide incentives to private landowners for managing forest land.
  - Provide income and property tax credits for landowners who implement their forest management plan.
  - Offer incentives to engage owners of forested tracts 10 acres or smaller in active forest management.

- Improve the partnership between green industry and the forest industry.” [p.v]

#### “Issue 4. New and Emerging Markets for Forest-based Resources”

Strategies & Recommended Actions:

- “Expand the Maryland Forests Products Utilization and Marketing Program in support of private forest landowners and develop a robust plan addressing emerging opportunities such as biofuels and ecosystem services.
  - Establish pilot projects based on prior research into product viability, new markets and income options.
  - Increase public awareness through education and information about these opportunities.
  - Explore possibilities and create financial incentives to support these opportunities.
  - Provide technical assistance and tools to the industry and to private landowners to take advantage of these opportunities.” [p.v]

**Progress to date:** The MFS has inventoried high value forests and state forests, and has obtained dual certification on all state forest lands. They are now working on a system to certify private working forest lands. They have not done a recent review of the laws that affect the health of forests, but still use a compilation of laws affecting the forest industry done by the University of Maryland Law School. Updating this study was identified as a needed research topic for the Center or the Law School. State, federal and local laws can constrain forestry practices, but many are necessary constraints. However, one State law requiring LEED certification of certain “*Green Buildings*” where State funds are involved, requires the use of Forest Stewardship Council (FSC) certified wood. No tree farmer or sawmill in the State of Maryland produces this kind of wood. This law in effect rejects the use of Maryland produced wood to meet the legal requirements for the construction of *Green Buildings* when using Maryland State funds. Neither the Department of Business and Economic Development or MARBIDCO have provided sufficient loans to help the forest industry upgrade and modernize to protect existing jobs in the forest industry. The forest industry does not currently enjoy the same State tax incentives for equipment and pollution control as those available for agriculture. The MFS would like to pursue a marketing program for Maryland forest products, e.g. “buy local” and suggests incentives for this in DGS’s procurement regulations for State projects. The No Net Loss of Forest Task Force will be making further recommendations on how to keep large tracts of forest land 200 acres or larger intact and in active forest use. There has not been any increase in staff or resources at the State level in the MFS due to the current fiscal situation, nor any further tax incentives to forest tract owners.

#### V. 4. No Net Loss of Forest Task Force, Final Report and Recommendations, 2009

The No Net Loss of Forest Task Force was established by Maryland SB 431 to:

*“...develop and submit a plan, including programs and other necessary actions, to achieve and maintain a policy of no net loss of forests,”* and to *“implement a no-net-loss of forest policy for Maryland.”*

The Executive Summary explains:

*“The Task Force recognized early in its process that the fact that the Forest Conservation Act (FCA) specifically regulated development also limited the FCA’s ability to fully achieve No Net Loss. There are numerous other non-development related factors that also contribute to forest loss and do not offer opportunities for increasing forest acreage. For that reason other programs were discussed and considered, relative to their ability to affect a no-net-loss goal for forests.”* [p.2]

## Key Findings:

- “Maryland has 41% of its land area, 2.6 million acres, in forest by current measures.
- Forest cover has been declining for several decades, and loss averaged over 6,000 acres per year between 1986 and 1999. Most of this loss is attributable to land development.
- Implementation of the Forest Conservation Act (FCA) has slowed, but not eliminated, the loss of forest land, with an average of 73% of forests on eligible development projects retained or replaced over the last 15 years. Of the counties reporting, at least an average of 2781 acres of forest were cleared statewide and not replaced annually since 1992. Forest land is also lost to activities and areas exempt from the FCA.
- Other tree planting programs help offset forests lost to other land uses, but currently fall short of the acres cleared. An annual average of 1,168 acres has been planted since 2004.” [p.2]

The task force identified three key areas for intervention:

- “Refinements to the Forest Conservation Act that can further slow the net loss of forest land to development;
- Stronger action to support private forest land owners, creating more incentives for private retention of forest land; and
- Enhanced state and local government planting programs to reach a no net loss goal annually.” [p.2]

## Key Recommendations:

- “**Improve tracking** and definitions for forest cover and urban tree canopy, increasing resolution and timeliness of forest cover data statewide.” [p.3]
- “**Support a statewide Sustainable Forestry Act**, ..that “should address incentives, ecosystem markets, renewable energy policies, forest product markets, education, and outreach.” [p.3]
- “**Modify the Forest Conservation Act** to close loopholes, expand eligible projects, and improve effectiveness of mitigation...” (Specific recommended changes quoted below.) [p.3]
- “**Modify the Chesapeake Bay Critical Area Law** to require some amount of mitigation on non-agricultural sites that are currently not forested.
- **Improve support and guidance for local government planning** to protect forests and other natural areas, and expand local initiatives to support tree planting, urban tree canopy, forest economic priority resource areas, woodland zoning, or other mechanisms to encourage forested working landscapes and retention of green infrastructure. Augment land conservation funding by establishing clear authorization for local jurisdiction bonds or fees for local land conservation, preferably with state matching funding.
- **Support new tree planting programs** such as *Marylanders Grow Trees* and landowner assistance for tree planting, such as through the 2008 Farm Bill enhancements.
- **Improve landowner incentives for retaining forests** through cost-share, easement programs, tax incentives, improved forest product markets, technical assistance, and development of new ecosystem markets like carbon, water, and energy/biomass.” [p.3]
- **Forest Conservation Act**
  - Eliminate the exemptions for projects licensed by the Public Service Commission; but provide full-rate recovery for the impacted utility.
  - Eliminate the exemption for electric generating stations licensed by the Public Service Commission; but provide full-rate recovery for the impacted utility.
  - Narrow the exemption for intrafamily transfers to eliminate ‘family subdivisions.’
  - Lower the allowable forest area to be cleared under an exemption from 40,000 square feet to 20,000 square feet.

- Modify offsite retention mitigation language to allow areas temporarily protected to be used as mitigation. The current language does not allow areas that are ‘currently protected’ to be used.
- Modify the priority areas for retention and protection language to prevent disturbance to these areas, including stream buffers, wetlands, and rare species habitat.
- Modify the exemption for ‘previously developed and covered by paved surface’ exemption to require tree canopy.
- Modify the language requiring the local authority to amend ordinances, policies and procedures that are inconsistent with FCA.
- Modify the Fee-in-lieu fund by increasing the minimum amount from \$0.10 to \$0.30 per square foot by both the state and local government.
- Modify the Fee-in-lieu fund to allow its use for maintenance of existing forested areas and to accomplish established urban tree canopy goals by both the state and local government.
- Add or modify language that would enable timber harvesting in easement areas.”[pp.10-11]

#### **“Other Local and State Provisions**

The most fundamental approach to conserving forests is to direct development to areas where adequate infrastructure for growth (water, sewer, roads, and the like) already exists.

- Provide incentives to encourage local governments to employ regional development patterns to protect contiguous forests and other natural areas.
- Require consideration of clustering where forest is part of a block 50 acres or more, or part of the State Green Infrastructure Hub or Corridor.
- Trade density to protect existing forest land and allow more compact development elsewhere.
- Require that a Forest Resource Element be developed for local Comprehensive Plans, which in municipalities can be written as an Urban Tree Canopy Element. The Department of Natural Resources should work with the Maryland Department of Planning to develop basic guidance for the scope of the forest element.
- Even in Priority Funding Areas, continue to emphasize riparian and floodplain protection, and augment urban forest canopy for air/water quality benefits.
- Establish a Regional Mitigation banking option, including:
  - Coordination and targeting high priority locations to augment Maryland GreenPrint,
  - Allowing participation by multiple programs to provide greater incentives to landowners to participate, and
  - Supporting development of mitigation banks with technical assistance.
- Adjust state inheritance/estate taxes to increase the possibility of forested land being transferred to the next generation, thereby increasing the potential for keeping land in forest, with equivalent provisions for other working lands like agriculture.” [p.12]

#### **Non-Regulatory Reforestation / Afforestation Programs**

##### ***“State Tree planting programs***

- Ensure sufficient program funding for tree planting and public outreach, particularly resources needed to adequately develop *Marylanders Plant Trees* in the Governor’s Smart, Green and Growing Initiative.” [p.12]

##### ***“Local Tree Planting Programs***

- Continue support for and expand where possible effective local programs for conserving and planting trees, through coordination, outreach, partnerships, and support for continued grant funding.” [p.13]

### ***“2008 Farm Bill Enhancements***

- Effectively use Chesapeake Bay enhancements in Farm Bill funding to implement forest plantings and conserve forest health,” [p.13] including CREP [Conservation Reserve Enhancement Program] and EQIP [Environmental Quality Incentive Program].

### ***“Landowner incentives***

- Easements:
  - Maryland Agricultural Land Preservation Foundation (MALPF) - Modify statute to include class IV soils for forests to allow important forest blocks to qualify for easement purchase.
  - Assure that conservation easements allow sustainable forest management under a forest management plan.
- Property tax reduction on forested land:
  - Decrease minimum acreage for Forest Conservation Management Agreements (FCMA) from 5 to 3 acres, leading to greater opportunity for participation.
- Income tax modification:
  - Extend Income Tax Treatment of Reforestation and Timber Stand Improvement (TAXMOD) credits for reforestation expenses to include preparation of forest stewardship plans or costs of implementing harvesting Best Management Practices beyond minimums, similar to Virginia’s expanded buffer program.
  - Expand credits and period for claiming credits for donated easements.
- Target and enhance landowner incentives to encourage sustainable forestry:
  - Enhance technical assistance delivery for private forest owners.
  - Expand opportunities for landowners to certify forest land as sustainably managed.
  - Audit ‘current use’ tax programs and forest stewardship program for use as group certification. Group certification can also serve to aggregate landowners for ecosystem markets.
  - Support Forest Conservancy District boards, Resource Conservation and Development Districts (RC&Ds), and non-profit partners to provide resources to landowners and catalyze action.” [p.14]
- “Provide start-up capital for Maryland Agricultural and Resource Based Industries Development Council’s (MARBIDCO) Sustainable Forestry Emergency Loan fund. A revolving loan fund will provide low-interest loans to qualified landowners who are faced with a sudden need for cash (e.g. healthcare expenses) to lower the risk of land conversion.
- Augment land conservation funding by establishing clear authorization for local bonds or fees for local land conservation. Provide uniform enabling authority to local governments (county or municipal authorities) to raise money for forest and land conservation by establishing a dedicated revenue source, coupled with State incentives such as reliable matching funds through existing state land conservation programs (Program Open Space, Rural Legacy, MALPF or other comparable program), sanctioning the cost-effective leveraging of existing State funds by extending the reach of State dollars invested in forest and land conservation.
- Develop private sector markets for an expanded set of forest products and services, including carbon, water, energy/biomass, ecosystem services. Target landowner outreach to landowners enrolled in the Bay Bank, the Chesapeake region's multi-credit ecosystem marketplace, establishing a means to improve knowledge of programs and eligibility for their lands.
- Establish managed woodland zones/forest economic resource areas:
  - Accompanies green infrastructure and strategic forestland assessment programs.
  - Within these zones avoid mitigation on prime agricultural land, target stream buffers.
  - Use income tax credits to ease acceptance by landowners.

- Ask landowners to commit to implementing a forest stewardship plan and sustaining the forest use for 10 years.
- Target and enhance industry incentives to zones to encourage sustainable forestry:
  - Establish timber industry as a state ‘growth industry.’
  - Establish financial incentives to increase use of low-value wood and biomass.
  - Promote ‘green’ policies in Maryland that focus on forestry residues/by-products for renewable energy production and use of materials in public construction (i.e. use Maryland-based wood in bridge and sound barrier projects).
  - Bolster sawmills and other declining industry through funding of DNR’s forest marketing and utilization program.” [pp.14-15]

**Progress to date:** The Sustainable Forestry Act was enacted in 2009 (Chapter 175 (SB 549). The No Net Loss of Forest Task Force has completed its report and has passed its recommendations on to the Sustainable Forestry Council, which will make additional recommendations to the Secretary of DNR at the end of 2011. The MFS continues programs to plant new trees, including EQIP and CREP, but land to plant new trees is becoming scarce, unless State land under farm leases is used, and that creates resistance from farmers and MDA. Most State programs require a Forest Management Plan, but the MFS and the federal NRCS do not have enough staff to prepare the Plans to qualify more landowners for all of the existing state and federal assistance programs for forestry. There is an opportunity to attract wood-to-energy product industries to Maryland for bio-energy jobs.

## **V.5. Governor’s Commission for Protecting the Chesapeake Bay through Sustainable Forestry, 2006**

### **“Implications Facing Maryland’s Forest Community**

- Generational change of ownership, which is currently underway, that often necessitates a sale of a portion or all of the owners forest land in order to offset attendant tax liability, thereby contributing to fragmentation and parcelization.
- A declining forest products industry due to burdensome regulation, sprawl and lack of statewide support.
- Inadequate representation of Maryland’s forest community within State, federal or local non-profit policy forums.” [p.2]

### **“Public Interests in Sustainable Forestry in Maryland**

- Assure a clean and healthy environment for Maryland’s urban and rural citizens (e.g. clean air, and clean and abundant drinking water, etc.)
- Provide economic opportunities and stability for rural, natural resource based communities.
- Protect quality habitat for Maryland’s plants and animals (including rare, threatened and endangered species).
- Maintain access to open space and appropriate outdoor recreation.
- Enhance Maryland’s state security by protecting life and property from wildfire and embracing bioenergy opportunities to become more energy self-sufficient.
- Preserve Maryland’s cultural and traditional heritage.
- Assume the role as a national leader in natural resource / environmental sustainability.” [p.2]

### **“State Government’s Role in Ensuring Sustainable Forestry in Maryland**

The need to retain an effective role for state government in private forest management increases every year as more and more private forestland is broken up and sold off to other private entities

or otherwise fragmented and parcelized due to land use change (a.k.a. development), thereby increasing the pressure on remaining private forestlands to provide public benefits.” [pp.2-3]

## **Recommended Strategies and Actions to Address Forest Threats**

### **Strategy 1 - Landowners Encouraged to Keep Forests in Forests**

#### **Financial Assistance for Landowners [excerpts]**

- “Advance legislation to expand upon the financial incentives available to private forest landowners intended to help encourage retention over development or conversion while simultaneously working with appropriate parties to help mitigate existing regulatory burdens.
  - State/local income tax credits to offset the costs of developing State-approved Forest Stewardship Plans.
  - Abatement of State/local property taxes for forest lands subject to Forest Stewardship Plans.
  - Clean water quality credits that can be traded in the evolving renewable energy market (RECs –renewable energy credits) where forests are well-managed and protected against development via conservation easements and/or Forest Stewardship Plans.
  - Income tax credits for the sale and/or donation of perpetual conservation easements on forest lands.
  - Mitigation of existing regulations imposed upon Maryland’s forest products industry.” [p.4]
- “Encourage [the] Maryland Agricultural Land Preservation Foundation (MALPF) to provide parity between agriculture and forestry in terms of land conservation, consistent with existing State law:
  - Rename the MALPF to the Maryland Agricultural and Forestry Land Preservation Foundation.
  - Encourage Maryland’s agriculture boards to cooperate with Maryland’s forestry boards in the allocation of MALPF dollars for forest land conservation.” [p.4]
- “Introduce legislation to eliminate the \$200,000 funding cap on the Woodland Incentive Program (WIP) and earmark 100% of all forest-related agricultural transfer tax proceeds to WIP.
- Request a performance and/or fiscal compliance audit by the Office of Legislative Audits within the Maryland General Assembly’s Department of Legislative Services for purposes of reviewing how the Agricultural Land Transfer Tax is assessed on converted timber land and allocated to the Woodland Improvement Fund.” [p.4]
- “Reward landowners for sustainable forest management, the sale of conservation easements, the sale of forestlands that will be sustainably managed and/or conserved, and the sale of sustainably harvested timber:
  - Increase the amount of allowable tax credit for donations of working forest easements.
  - Make tax credits for donations of forest easements refundable for landowners that cannot take full advantage of tax credits in a given year.” [pp.4-5]
- “Provide greater incentives for managing forests under sustainable forest management plans.
  - Property tax forgiveness on wooded acreage.
  - Tax credits for the cost of sustainable forest certification, the additional cost of BMPs and management needs required by the plan.
- Provide disincentives or penalties for the conversion of forests to development, such as a targeted land conversion tax, with revenue going toward forest land protection.” [p.5]

**“Strategy 2 - Increase Public Awareness through Education of Forest Values / Threats to Sustainability”** [p.5] (details not included in summary, see full report)

**“Strategy 3 - Strengthen Forest Industry at all levels”** [p.6] (partial list of details)

- “Create equity of forestry and agriculture practices within state and local regulations.
- Improve comprehensive planning at the county and municipal level relative to the economic and ecological importance of forestry through enhanced state level guidance during the Land Preservation, Parks and Recreation Plan process.
- Clarify language in Article 66b of Maryland Annotated Code relative to treatment of working forests within county and municipal comprehensive plans.
- Encourage greater integration of programs designed to protect working land protections within various state agencies with the goal of improving forestland land management and stewardship.” [p.6]

**“Strategy 4 - Increased Emphasis on and Funding for Forest Health**

- Establish a contingency fund for forest health purposes (e.g. insects, disease, fire and wind, etc.), funded by proceeds derived from the conversion of forest lands via the imposition of the agricultural transfer tax and/or revenues derived from enhanced management on DNR-owned lands.” [p.6]

**“Strategy 5 - Coordination of Forest Management at a Landscape Scale / Across Ownerships**

- Strengthen forestry representation on all public boards and policy forums whose focus and mission relates to land use within the State of Maryland.
- Assess existing programs, projects and policies whose focus and mission relates to land use within the State of Maryland.
- Take a ‘Lead by Example’ position with the Chesapeake Bay Executive Council on promoting the environmental and economic benefits attendant to pro-forestry policies.
- Creating or maintaining public policy in other regards, which supports private ownership and sustainable management of forests, e.g., policies on the Right to Practice Forestry.
- Long-term attitudes towards development must be changed to ameliorate the threat of development of Maryland’s forests.
- Training / education for planners.” [p.7]

**“Strategy 6 - Improved Forest Inventory and Monitoring**

- Support the new Sustainable Forestry Assessment of Needs (Resource Lands Assessment) strategy that delineates the best of Maryland’s forestlands worthy of conservation, strategies predicated upon public input and the most advanced technology available to the State.
- Support and enhance forest resource inventory statewide through the US Forest Service Forest Inventory and Analysis (FIA).
- Support and enhance more detailed forest resource inventory on State lands through the Continuous Forest Inventory (CFI).” [p.7]

**“Strategy 7 –Potential Funding Mechanisms**

- Re-direct State-side Program Open Space funding to the Maryland Park Service to relieve their dependence on State Forest timber sale revenue for operational, maintenance and other costs, thus freeing up this revenue stream for greater use by the Maryland Forest Service in support of sustainable forestry.” [p.7]

**Progress to date:** Recommendations in this report contributed to the content of the *Sustainable Forestry Act of 2009*, S.B. 549, amending the MALPF law to give parity between agriculture and forestry in terms of land preservation and easement purchases. The MFS supported additional tax incentives recommended, and the removal of the \$200,000 cap on the Woodland Improvement Program, but each change had a fiscal note that made passage difficult in the current economy. DNR conducted a study of refundable or transferable tax credits for easement donations, but the fiscal climate is not favorable to new revenue losses. The Sustainable Forestry Act did not change the name of MALPF. A contingency fund for forest health purposes is badly



needed, because a large forest fire or other emergency such as insect infestation, hurricane or ice damage has to be funded out of the existing MFS budget. Funding was redirected from the local side of Program Open Space for management and operations of State Forests and State Parks by a change in the POS allocation formula in 2007 (see Progress in IV.5. above).

## **V.6. Maryland's Strategic Forest Resource Plan, Maryland DNR Forest Service, 2006**

This report was done to meet Federal requirements for state forestry assistance:

*“This document delineates a common vision for Maryland’s forest resources and lays out the framework for achieving that vision through the use of goals and objectives. The plan incorporates the range of trends and issues affecting Maryland’s forests and their ecological, economic, and social implications.”* [p.3]

*“In Maryland, sustainable forestry means ensuring healthy and protected forests, a thriving and diverse forest ecosystem, a productive and stable forest products economy, a strong and broadly shared conservation and stewardship ethic and a forest resource that provides a wide variety of recreational opportunities.”* [p.15] (from Conclusion)

*“Consistent with previous Maryland forest assessments and plans, this plan frames the future of Maryland’s forests around sustainability. Maryland is committed to meeting the needs of the present without compromising the ability of future generations to meet their own needs, the underlying definition of sustainability. Ensuring a sustainable future requires addressing ecological, economic, and social dimensions with respect to our forests and doing so in the context of strong partnerships among the wide array of organizations that can help steward our forests and address the many challenges and opportunities of the present and the future. Maryland’s Strategic Forest Resource Plan provides a framework for our collective and ongoing commitment to sustainable forestry.”* [p.15] (from Conclusion)

### **Vision**

“Our vision is a Maryland that honors the inter-connectedness of life by striving in all of its actions to safeguard and steward its natural resources now and for future generations.” [p.6]

### **Mission**

“To restore, manage, and protect Maryland’s trees, forests, and forested ecosystems to sustain our natural resources and connect people to the land.” [p.6]

### **Goals**

- “Forests are conserved, healthy, protected from land use change, pathogens, and managed according to sound stewardship practices.
- Forests provide a diverse range of native plant and animal species and their habitats.
- Forests are productive, providing raw material for consumers and economic stability for local communities.
- Forests provide multiple recreational opportunities.
- Forestry educational outreach is the key to an informed public.” [p.7]

### **Strategies**

#### **“Land Use Change / Forest Loss**

- Partner with Maryland Agricultural Land Preservation Foundation (MALPF), Rural Legacy and other local land preservation programs to work with the Department of Planning, Maryland Department of Agriculture, Department of Assessments & Taxation and local governments to develop new programs and support existing local forest conservation

programs, land acquisitions and easement preservation goals. Use the Local Land Preservation, Parks & Recreation Plan (LPPRP) process to promote the development of these goals that are competitive and financially attractive to forest land owners.

- Continue to promote perpetual conservation easement programs such as Program Open Space (POS).
- Develop a private landowner enhancement incentive program to curb the conversion of the forest land and improve forest health.
- Encourage jurisdictions to develop and follow comprehensive plans that specifically address the long term protection and management of forested working landscapes.
- Continue to champion working forests as an important component of conservation landscapes in combination with protecting ecological function in core protected areas.
- Bolster conservation easement acquisition programs that are paramount in curbing the current decline of our forest land base.
- Work with state and local governments to enhance existing forest land tax reduction programs and develop new incentives for the expansion and retention of the forest land base.
- Propose legislation that would broaden the purpose and intent of existing land conservation programs by placing greater emphasis on the conservation of working landscapes.” [p.12]

#### **“Forest Health, Pests, Pathogens & Ecosystem Sustainability**

- Monitor and reduce forests threats from invasive species, fires, and other threats.
- Work with partners to develop and implement emergency action plans to minimize impacts of forest threats.
- Review and consider stricter State laws relating to invasive species in Maryland.
- Use forest certification to assure forest sustainability and monitoring occurs, first on publicly managed forests and then on private forest lands.” [p.12]

#### **“Sustainability of Forest Resource Economies**

- Work with Department of Business and Economic Development (DBED) to complete a regional forest economic assessment to determine the viability of forest resource economies.
- Explore innovative approaches to seek forestland owner cooperatives to achieve forest certification on private land.
- Develop proposals that would recognize and promote the importance of conserving working landscapes for the myriad of energy-related benefits.” [p.12]

#### **“Forest Ecosystem Goods & Services**

- Identify the key goods and services provided by Maryland forests.
- Work with the forests research community to develop models that assign values to each key good and service that can be easily understood by the public.
- Work with Federal, State and local governments, NGO's and private foundations to adopt and implement programs to compensate private forest land owners for providing ecosystem services.
- Recommend the current Administration and Maryland’s Congressional Delegation work together to secure additional funds in the next Farm Bill for forestry-related projects and programs.” [p.13]

#### **“Connecting People to the Land**

- Work with NGO’s to promote the value of key forests ecosystem goods and services.
- Link key forest ecosystems good and services with the restoration of the Chesapeake Bay.
- By 2010, work with at least 5 local jurisdictions and communities in each county to complete an assessment of urban forests, adopt a local goal to increase urban tree canopy cover and

encourage measures to attain the established goals in order to enhance and extend forest buffer functions in urban areas.

- Encourage increases in the amount of tree canopy in all urban and suburban areas by promoting the adoption of tree canopy goals as a tool for communities in watershed planning.” [p.13]

#### “Public Forests Lands

- Use the Chesapeake Forest sustainable management approach as a model to achieve dual certification on the entire 200,000 acres of DNR managed State Forest Land.
- Consider third party contractors for managing State Forests and land under public/private partnerships such as Chesapeake Forests.” [p.13]
- “Provide adequate resources to sustainably manage State Forest Lands .
- Make use of competitive and targeted easement programs such as, though not limited to, the USFS Forest Legacy Program, Program Open Space, Rural Legacy, NOAA’s, and MALPF as one of the major public mechanisms for retaining the forest land base.
- Consider fee simple acquisitions for high priority forest lands that are adjacent to or in-holdings to State Lands that aide or enhance overall management of the desired land use for its designated objectives.
- Complete a Comprehensive State Forest Assessment to collect, compile, analyze, classify, and manage the data necessary for sustainable forest management and third party certification of all 200,000 acres of Maryland State Forest land.
- Evaluate the findings and recommendations of the DNR ‘Old Growth Committee’ and take appropriate action.” [pp.13-14]

#### “Partnering

- DNR-FS will develop a partnership with DBED to determine long-term goals for regional resource economies.
- DNR-FS will bolster partnerships with conservation easement acquisition organizations to identify forested tracts to enroll them into long term protective agreements such as local land trusts, TNC, Trust for Public Lands, The Conservation Fund, MET, and Maryland Agricultural and Resources Based Industry Development Corporation (MARBIDCO).
- Promote forestry within the agriculture community as another way for farmers to increase the profitability of their farms.
- Integrate forestry into outreach and technical assistance targeted to farmers both through soil conservation districts and cooperative extension programs.
- Create a task force of Ag and Forestry experts to examine ways to ensure that state programs and regulations are more consistent between forestry and farming.
- Encourage forestry and agriculture leaders to work cooperatively.” [p.14]

**Progress to date:** The DNR MFS has worked with other land preservation programs to support easement acquisitions on private forest lands, and the 2009 LPPRP Volume I addresses forestry preservation goals, including the Chesapeake Bay Regional Forestry Agreement. The MFS has completed over 75 county assessments of urban forests and is leading the Chesapeake Bay region in the number of assessments completed. Setting protection goals is the next step. The State is now dual certified for all of its State forests. The GreenPrint rating system for targeting easement program purchases is now being used for State easement purchases. A Comprehensive State Forest Assessment has been completed, and partnerships with private land conservation organizations continue. In August 2010 DNR established an “Ecosystems Services Working Group” to assess the status of, and make recommendations on how to incentivize, ecosystem markets in Maryland. Their *Interim Report* of December 2010 is cited in *Other References*.

## **V. 7. Guiding Maryland's Forest Community into the 21st Century, Maryland Forestry Task Force Final Report, 2000**

This report was a product of an Executive Order by Governor Parris Glendening establishing the Maryland Forestry Task Force, to undertake a comprehensive survey of the State's forest resources, and other tasks.<sup>24</sup>

### **Recommendations designed to encourage retention and management of privately owned forest lands.** The report recommends that:

- "Maryland's Forest Service, Forestry Boards and the Maryland Cooperative Extension Service be given the financial resources necessary to advise private forest landowners on ways to better manage their forest lands,
- Maryland's principal land conservation programs be better coordinated to collectively conserve forest areas of the State,
- An inventory data base of Maryland's forest resources be developed every 5 years,
- Tax incentives be provided to those private forest landowners willing to implement forest conservation management plans, and
- Maryland's primary and secondary education curricula ensure a concerted focus on the values, benefits and management of forests to Maryland's environment and economy." [p.2]

### **Recommendations designed to promote the economic viability of Maryland's Forest Products Industry.** The Report recommends that:

- "State financial assistance be rendered in helping Maryland's forest products industry upgrade and modernize its manufacturing equipment in order to enhance operational efficiency and promote job retention/growth within Maryland's rural communities,
- Maryland's Forest Products Utilization and Marketing Program be created, and
- A user guide be developed that facilitates an awareness of land use regulations which impact the management of privately owned forest lands and the operations of Maryland's forest products industry." [p.2]

### **Chapters and recommendations** (excerpts related to sustainability of forest land use)

#### **Maryland's Threatened Forests**

- "Adequately fund, implement and strengthen the analysis of an inventory data base concerning Maryland's forest resources that is updated annually and completed statewide every five years." [p.8]
- "Create a Targeted Priority Resource Initiative by an Interagency Workgroup" (comprised of MDA, DNR, UMD, MACO & MML)... to be reviewed and approved by the Governor and General Assembly's Joint POS-MALPF Subcommittee," [p.8]. This Workgroup would establish priorities governing annual distribution of funds for POS, MALPF and Rural Legacy programs, by:
  - Concentrating significant funds in 10 counties where population growth and development are greatest to achieve linkages to contiguous forests; and
  - Utilizing the funds for promotion and conservation of riparian buffers, wildlife habitat, aesthetics, environmental and passive recreation bordering the Bay and its tributaries." [p.8]

#### **Public/Private Role in Sustainability**

- "Develop, upgrade and/or modify forest stewardship plans on all DNR-managed public lands...
- Encourage future forest land acquisitions that come into the public domain to also be accompanied with the development of forest stewardship plans when deemed appropriate." [p.9]

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<sup>24</sup> State of Maryland, Executive Order 01.01.1998.09, Feb. 24, 1998, extended until December 2000

### **Incentives for Stewardship**

- “Provide financial incentives to private landowners to encourage them to retain and manage forested lands and prevent permanent conversion to non-forested use.
- Support legislation for State income tax credit for development of forest stewardship plans.
- Support statewide enabling legislation authorizing all counties to grant property tax credit on agricultural land subject to nutrient management plans, or forest land that is subject to a forest management plan or similar agreement.”[p.10]

### **Urban Forest Land Interface**

- “Direct DNR to initiate a Strategic Forest Land Assessment and update it every 5 years, to identify forest lands that are critical for their environmental [and] economic benefits.”[p.14]

### **Urban Forestry - A Smart Future for Maryland’s Communities**

- “Direct DNR FS to create regional forest consortia in several areas of Maryland to develop cost of community services studies which ...include the loss of forest resources and the fiscal impact of residential development and its significance for creation of forest resource fragmentation and effect on watersheds.” [p.15]
- “Encourage the Forest Conservancy District Boards to provide advice and input into the development of county-based green infrastructure plans.” [p.15]

### **Managing for the Future**

- Develop MOUs between MDA, MDE and DNR re: natural resource land management and regulation. With POS, MALPF, Rural Legacy and CREP, a strengthened partnership will help ensure the continued conservation of Maryland’s natural resources into the 21st Century.
- Ensure that an appointed representative from Maryland’s forest community always serves on the Board of MALPF, and that Forest Conservancy District Boards play a pivotal role in helping to approve individual applications under the MALPF program.

**Progress to date:** This is the oldest of the reports reviewed. Funding has not been available to inventory Maryland’s forest resources every 5 years. The ambitious Targeted Priority Resource Initiative Interagency Workgroup, with review and approval by the Governor and Joint POS-MALPF Subcommittee, to prioritize distribution of POS funds never happened, nor did State land preservation funds get redirected to ten counties. The CREP program has provided funds for conservation of riparian buffers, and has enrolled 70,000 acres in rental agreements out of a goal of 100,000 acres. A representative of Maryland’s forest community now serves on the MALPF Board as Vice Chair.

## **V. 8. Forest Production, Industry & Forest Retention Assessment, L. Irland, MCAE 2004**

### **Key Findings:**

*“...the future availability of wood supplies supporting rural Maryland wood-using plants has come into question.” [p.v]*

### **Growth Management:**

*“We conducted brief case studies of Dorchester, Wicomico, and Worcester Counties on the Eastern Shore, and St. Mary’s, Garrett, and Carroll Counties on the Western Shore. In these counties, powerful forces are re-shaping land ownership and use. Land prices in most areas are so high as to render forest management impossible as a primary investment goal.” [p.vi]*

### **Economic significance:**

*“Total worker earnings in all wood processing industries were \$495 million in year 2000, or 6% of the manufacturing total. ... We estimate that about 2,500 jobs depend either moderately or heavily on Maryland wood, and these jobs probably generate an equal number of additional jobs through the “multiplier” effect.” [p.9]*

*“Manufacturing accounts for just 6% of total employment. Forest products (i.e. wood, paper and furniture manufacturing) accounts for about 9% of manufacturing employment statewide” [p.35]*

*“The reason for retaining forest land in general is the positive externalities provided by forests, for which owners receive no compensation. We believe that a wide range of social values are promoted by retaining actively managed forests, even in a highly suburbanized state in which the direct employment in primary wood processing is small. [p.145]*

### **Critical Mass:**

*“ The concept of ‘Critical Mass’ offers a useful way to describe the concern. This question is simply, “Is there a critical mass of forest land that is needed to support, on a sustained-yield basis, the wood-based manufacturing activity that is so important to parts of rural Maryland?” [p.v]*

*“In our opinion, there is no sharp line defining a Critical Mass for wood supply. One reason is that wood can travel long distances. Another is that the industry can adjust for a time to conditions that are really not optimal for its survival. What is important is that economic change is cumulative. It is slowly and steadily decreasing the availability of wood through regulations, public policies, subdivision, fragmentation, and land use conversion. The relative impact of each factor depends on the area and the ownership.” [p.ix]*

### **Maryland Policies:**

*“While there are many policies aimed at retaining land in forest, there are only a few that attempt to retain forests in managed condition as part of a future wood supply.” [p.ix]*

*“We believe that more effective growth management is the only long-term hope for retaining forests and commercial timber supply in much of Maryland. There is little doubt that many subdivision projects are of higher quality and will function at lower long-term social costs than would have been the case without these policies. Yet, in our sample counties, we are unable to see evidence that policies to date have had noticeable effect on the scattering of these subdivisions around the landscape.” [p.147]*

### **Policy Findings (Selective excerpts related to sustainability.)**

- *“Based on public ownership, regulations, and easements, about 24% of Maryland’s forest land has been ‘protected’ from conversion to other uses. This is a substantial achievement. Only a fraction of this acreage is suitable or available for timber harvesting, however. This would be expected given the primarily non-timber objectives of much of this land.” [p.146]*
- *“The State also has a suite of regulations designed to protect riparian areas and waters, and to retain trees and forests in larger development projects. Some are nominally focused on The Bay, but they in effect cover the bulk of the State. Few eastern states exceed Maryland in thoroughness and detail of these regulations.” [p.146]*
- *“An unprecedented period of inflation in real estate values and in development has brought large and rising revenues into the coffers to fund land conservation initiatives. This situation is in itself unsustainable, even apart from the current revenue crisis in which state government now finds itself. The counties with the most rapid rates of growth have also seen the largest increase in use of easements. The ability to fund aggressive acquisition and easement programs is likely to decline, however. Other approaches will have to take a more prominent role, at least for a time.” [p.146]*

- “Maryland has nationally recognized growth management programs. We believe that more effective growth management is the only long-term hope for retaining forests and commercial timber supply in much of Maryland. There is little doubt that many subdivision projects are of higher quality and will function at lower long-term social costs than would have been the case without these policies.” [p.147]
- “It is not clear that the acquisitions, regulations and other policies have yet left behind a coherent footprint on Maryland’s landscape that reflects reasonable priorities for protection of habitat, recreation and open space values, water protection, or other major non-timber resources. We cannot criticize decision makers for taking acquisition opportunities as they arise, but would hope that the results of the SFLA and other planning efforts might in the future be brought to bear more clearly on program decisions. If this is not done, the numbers will continue to be impressive but the results on the land may not be.” [p.147]
- “It does not seem that public landownership, in a political setting that is hostile to active forest management, is a reliable means of sustaining a commercial forest land base in a suburbanizing state. When properly drafted and managed, conservation easements do have the potential to immunize farms and forest tracts from further subdivision and development and thereby retain the potential for multiple use management. But there remains much to be learned about drafting and managing ‘working forest conservation easements’.” [pp.147-148]

**Policy Recommendations:** (Selective excerpts by number in report)

- “Adopt a working bias for a No Net Loss of commercial timber availability policy under which public policy changes that reduce availability will be compensated, over time, by policies and practices that offset that change.” [p.149]
- “Review the State’s approach to the federal Forest Legacy program and expand its use of that program.” [p.149]
- “...The Forest Conservation Act process is missing opportunities to maintain manageable tracts of forest in developments. Potentially manageable tracts are being retained in trees but are being unnecessarily cut into tiny bits as part of residential lots that yield little real value and create only maintenance problems. Significant benefits could result if the same areas are simply retained in some common ownership instead of being chopped up. DNR should fully review the FCA’s implementation...” [p.149]
- “Conduct training workshops and other outreach on the drafting of effective and workable ‘working forest conservation easements,’ as well as on easement documentation, monitoring and administration.” [p.149]
- The soon to be completed SFLA should be used as the basis for a Gap Analysis that would identify lands most needed to complete the State’s ‘Green Infrastructure.’ This analysis should guide future acquisition and easement activity.” [pp. 149-150]
- “A detailed assessment must be made of options for managing the effects of ownership fragmentation.” [p.150]
- “Maryland’s state and county business and economic development programs [should] give full attention to the needs and opportunities of the wood based sector, as they do for other rural manufacturing enterprises.” [p.150]

**Progress to date:** A *Working bias for No Net Loss* is being formed in the next two months. A review of the State’s Forest Legacy Program is done, pending responses to questions from the federal government. The MFS has not conducted training workshops on conservation easement drafting. Identification of lands most needed to complete the State’s Green Infrastructure system has been completed by the Land Acquisition and Planning Unit of DNR.

## **V. 9. Maryland Sustainable Forestry Council Recommendations to the Maryland Department of Natural Resources on Implementing a No Net Loss Forest Policy, December 2011**

The Sustainable Forestry Council was created by The Sustainable Forestry Act of 2009 (SB 549) to replace the Forest Advisory Commission. Nine members appointed by the Governor advise DNR on sustainable forestry management in the state and other matters.

The report generally supports many previous recommendations by other forestry groups, but with some changes or more detailed recommendations.

*“The Council strongly believes that the integrated set of measures outlined in our Report can make an important contribution to “bending the curve” for the rate of forest loss in Maryland and if fully implemented by 2020 can sustain the state’s forest land cover at 40%.”* [p.1, transmittal letter, Gary G. Allen, Chair]

“Sustainable Forestry Council’s task is to use the findings of ... previous efforts and new information to advise the Department of Natural Resources on timely forest conservation issues and appropriate actions. This white paper focuses on the actions that can help Maryland implement a no-net-loss of forest policy. The recommended actions build on existing programs and regulations including the development of Watershed Implementation Plans to meet the Total Maximum Daily Load requirements for the Chesapeake Bay, the Forest Conservation Act and local planning and zoning requirements.” [p. 2]

“The Sustainable Forestry Council recommends that the Maryland Department of Natural Resources work with partners and stakeholders to pursue an integrated set of actions and measures to achieve a no-net-loss of forest policy.” ...“The recommendations are organized in four policy elements:” [p.4]

### **Prioritize Forest Conservation**

“Maryland’s “green infrastructure” plan has long recognized that larger forested “hubs” and connecting “corridors” provide greater environmental services for water quality and habitat. Program Open Space currently prioritizes these areas when making land conservation decisions. The Forest Conservation Act should also recognize this and provide these areas the highest protection from conversion to non-forest land cover.” [p.4]

“The State should develop management strategies that address key functional and spatial characteristics of forest areas within existing State programmatic frameworks for forest resource management, smart growth and Chesapeake Bay Program commitments. Attention should be directed at three spatially significant forest resource area groupings:” [p.5]

- “Forest Priority Areas: Contiguous forest patches greater than 200 acres should be provided enhanced protection from conversion and parcelization because of their importance to water quality and watershed health.” [p.5]
- “Urban Tree Canopy Areas: Urban Tree Canopy Areas contain trees, woods and forests within U.S. Census- designated ‘urbanized areas or other widely recognized definitions.” [p.5] “...achieve and maintain a minimum 40% Urban Tree Canopy cover.” [p.5] “The state should alter Forest Conservation Act mitigation ratios or allowable exemptions to incentivize the maintenance and expansion urban tree canopies.” [p.5]
- “Woodland Conservation Areas ...all forested areas outside of Urban Tree Canopy and Forest Conservation Areas. [p.5] “...Conserve the resource to the extent possible and mitigate forest loss fully.” [p.6] “The Forest Conservation Act should be revised to differentiate forest clearing based on type of development...”, similar to the Critical Area Act. “Sprawl development ...should be discouraged in priority forest areas and any associated forest loss



should be mitigated fully. Alternatively, smart growth development could be given lower mitigation thresholds.”[p.5]

### **Protect High Quality Forests**

“Strengthen land use planning by requiring local governments to adopt a new Forest Resource Element that identifies forest conservation areas in comprehensive plans. This new element will ensure that forests are included with other sensitive area protection elements and that natural resources are considered at a landscape level.” [p. 4]

“...It will be critical that local land use decisions better protect forest cover overall, and especially Forest Conservation Areas, from conversion because of land development pressure. Improved land use planning can reduce the vulnerability of forests to land conversion and ‘keeping forest in forest’.” [p.6]

- “Prepare a revised Models and Guidelines for forest resources,” [p.7] including a forest resource assessment and forest vulnerability assessment.
- “Require county governments to prepare a ‘Forest Resource Element’,” [p.7] similar to the required Water Resources Element.

### **Offset all sources of forest loss**

“While it is not practical to protect all forest from conversion, it is nevertheless important that all forest losses be offset. A strategic approach to forest loss should include directing reforestation to priority needs including expanding urban tree canopy and riparian buffers, and to targeting plantings on low-conflict opportunities such as excess lawn on large rural residential lots rather than on productive farmland” [p.4]

“To achieved a no-net-loss of forest policy, most of the existing exemptions in the current Forest Conservation Act (FCA) will need to be revised.. including clearing of permitted public rights-of-way and mining.” [p.7]

The Council recommends that DNR: “...develop a requirement for the mitigation of forest loss due to currently exempt sources and develop options to assist local governments in using fee-in-lieu funds by the end of 2012.” [p.7]

### **Encourage working land and family-owned forest stewardship**

“.. Incentives to encourage landowner stewardship in Forest Conservation, Urban Tree Canopy and Woodland Conservation Areas will be essential..” [p.8]. The Council recommends:

- “Encourage forest conservation by facilitating landowner involvement in third-party forest certification systems
- Provide technical and financial assistance for programs that promote the conversion residential turf to trees
- Ensure landowner access to emerging markets through appropriate incentives in areas like wood biomass energy (e.g. fuels for schools, district heating systems and combined heat and power energy systems)
- Increase funding and priority for working forest conservation easements in all appropriate state land conservation programs
- Provide tax incentives for landowners to increase, retain and manage forest cover including the development of forest stewardship plans.” [p.8]

### **Defining and Tracking Forest Loss**

“...The state must be able to track forest losses and gains.” [p.8] The Council recommends that “...Maryland use the most reliable source of data for forest canopy...adopt one-meter NAIP data as the baseline for determining forest cover area and tracking forest changes.” [pp.8-9]

### **Additional Measures to Encourage Working Forest and Family-owned Forest Stewardship**

- “Provide adequate resources to the Maryland Forestry Boards to provide stewardship activities for private landowners including the continued expansion of forest stewardship plans.” [p.11]
- “Encourage Forest Service and Wildlife staff to collaborate with partners to deliver technical assistance to landowners.” [p.11]
- “Encourage DNR and other state grant programs to recognize the protection of high quality forests (i.e., avoided deforestation) as an eligible and priority water quality strategy in grant programs including the Bay Restoration Fund.” [p.11]
- “Evaluate the fiscal impacts of lowering the “current use” property tax exemption for forest landowners from five to three acres.” [p.11]
- “Reserve State riparian buffer cost share funding for only forest cover.” [p.11]

## REFERENCES

(In order of Report Summaries)

- Maryland Forward, January 7, 2011, *Governor's Forum on Sustainability*, Chesapeake College Wye Mills, Maryland. Retrieved in October 2011 from:  
<http://www.governor.maryland.gov/documents/ForumReportSustainability.pdf>
- Maryland Department of Planning, April 28, 2011, *PlanMaryland, Draft Plan*, Retrieved in August 2011 from: [http://plan.maryland.gov/PDF/draftPlan/pmddraft\\_April.pdf](http://plan.maryland.gov/PDF/draftPlan/pmddraft_April.pdf)
- Maryland Department of Planning, September 2011 *PlanMaryland, Revised Draft*, Retrieved in September 2011 from: [http://plan.maryland.gov/PDF/draftPlan/PM\\_revisedDraft.pdf](http://plan.maryland.gov/PDF/draftPlan/PM_revisedDraft.pdf)
- Planning and Smart Growth Transition Workgroup, O'Malley-Brown Transition Team, January, 2007, *Making Maryland the National Leader in Planning and Smart Growth*, Retrieved in August 2011 from: <http://www.gov.state.md.us/documents/transition/Planning&SmartGrowth.pdf>
- Maryland Transition Work Group on Environment and Natural Resources, January 31, 2007 *Maryland Transition Work Group Report on Environment and Natural Resources*, Retrieved in August 2011 from: <http://www.gov.state.md.us/documents/transition/Environment.pdf>
- Knaap, G. & Frece, J., 2007, *Ten Years Later: An Assessment of Smart Growth in Maryland*, University of Maryland, National Center for Smart Growth & Resources for the Future, Retrieved in August 2011 from: [http://www.rff.org/rff/Events/upload/30261\\_1.pdf](http://www.rff.org/rff/Events/upload/30261_1.pdf)
- Maryland Department of the Environment, 2010, *Maryland Phase I Watershed Implementation Plan, Executive Summary Submitted Final*. Retrieved in August 2011 from:  
[www.mde.state.md.us/programs/Water/TMDL/Documents/www.mde.state.md.us/assets/document/MD\\_Phase\\_I\\_Plan\\_Exec\\_Sum\\_Submitted\\_Final.pdf](http://www.mde.state.md.us/programs/Water/TMDL/Documents/www.mde.state.md.us/assets/document/MD_Phase_I_Plan_Exec_Sum_Submitted_Final.pdf)
- Rhoderick, J., 2010, *Maryland's WIP Process and the Role for Agriculture, Resource Conservation Options*, Maryland Department of Agriculture, Retrieved in August 2011 from:  
[http://www.chesapeake.org/stac/presentations/63\\_rhoderick.pdf](http://www.chesapeake.org/stac/presentations/63_rhoderick.pdf)
- Summers, R., 2011, *Chesapeake Bay TMDL and Maryland's Watershed Implementation Plan, PowerPoint*, Maryland Department of the Environment, Retrieved in August 2011 from:  
[http://www.mde.state.md.us/programs/ResearchCenter/LawsandRegulations/MDETestimonies/Documents/TMDL\\_WIP\\_1\\_26\\_11.PDF](http://www.mde.state.md.us/programs/ResearchCenter/LawsandRegulations/MDETestimonies/Documents/TMDL_WIP_1_26_11.PDF)
- Wolman, G., Chairman, 2008, *Water for Maryland's Future, What We Must Do Today, Final Report of the Advisory Commission on the Management and Protection of the State's Water Resources*, Volume 1, Final Report, Retrieved in August 2011 from:  
[http://www.mde.state.md.us/programs/ResearchCenter/Documents/www.mde.state.md.us/assets/document/WolmanReport\\_Vol1.pdf](http://www.mde.state.md.us/programs/ResearchCenter/Documents/www.mde.state.md.us/assets/document/WolmanReport_Vol1.pdf)
- Schmid, M., May 2011, *Understanding and Responding to the Changing Needs of Maryland Agriculture: A Toolkit for Local Communities*, Governor's Intergovernmental Commission for Agriculture, Maryland Department of Agriculture, Retrieved in August 2011 from:  
<http://www.mda.state.md.us/pdf/gica.toolkit.pdf>
- Maryland Department of Planning, 2009, *Maryland Land Preservation Parks & Recreation Plan Volume I*, Retrieved in August 2011 from:  
[http://www.mdp.state.md.us/PDF/OurProducts/Publications/Misc/Web\\_LPPRP\\_Vol\\_1.pdf](http://www.mdp.state.md.us/PDF/OurProducts/Publications/Misc/Web_LPPRP_Vol_1.pdf)
- Maryland Department of Natural Resources, 2009, *Maryland Land Preservation Parks & Recreation Plan, Volume II*, Retrieved in August 2011 from:  
<http://www.dnr.state.md.us/land/stewardship/pdfs/CompleteDNRORP.pdf>

- Gruby, R., McElfish, J. Jr., Lynch, L., & Li, Q.; 2008, *Maryland Farmland Conservation: Supporting Sustainable Use of Land through Tax Policy Report*, Environmental Law Institute & Harry R. Hughes Center for Agro-Ecology, University of Maryland, (HCAE Pub. 2008-05), Retrieved in October 2011 from: [http://www.elistore.org/reports\\_detail.asp?ID=11348](http://www.elistore.org/reports_detail.asp?ID=11348)
- Maryland Transition Work Group on Environment and Natural Resources, 2007, *Land Preservation & State Land Subcommittee Summary Statement*.
- Daniels, T., October 2007, *Comparing Farmland Preservation for Smart Growth in Maryland and Pennsylvania: Why is Maryland Only Number Two?* National Center for Smart Growth, University of Maryland & Resources for the Future, Retrieved in August 2011 from: [http://www.rff.org/rff/Events/upload/30220\\_1.pdf](http://www.rff.org/rff/Events/upload/30220_1.pdf)
- Maryland Agricultural Commission, June 2006, *A Statewide Plan for Agricultural Policy and Resource Management*, Retrieved in August 2011 from: <http://www.mda.state.md.us/pdf/finalagplan.pdf>
- Tassone, J., Balsley E., Eisenberg, L., Martins, S. & Hall, R.; October 2004, *Maximizing Return on Public Investment in Maryland's Rural Land Preservation Programs*, Maryland Department of Planning, Harry R. Hughes Center for Agro-Ecology, Inc. (HCAE Pub. 2004-04) Retrieved in August 2011 from: <http://agroecol.umd.edu/files/Tassone%20Report.pdf>
- Maryland Department of Planning & Maryland Department of Agriculture, December 2004, *Task Force to Study the Maryland Agricultural Land Preservation Foundation, Final Report*, Retrieved in August 2011 from: <http://www.malpf.info/reports/TFFinalReport2005.pdf>
- Maryland Department of Planning & Maryland Department of Agriculture, January 2003, *Task Force to Study the Maryland Agricultural Land Preservation Foundation, Interim Report for the 2003 Legislative Session*, Retrieved in August 2011 from: <http://www.mdp.state.md.us/pdf/OurWork/rurallegacy/MALPFinterimReport.pdf>
- Maryland Department of Natural Resources, Forest Service, June 18, 2010, *Maryland Forest Resource Strategies: 2010-2015*, Retrieved in August 2011 from: <http://www.dnr.md.gov/forests/pdfs/sas/MDForestStrategy.pdf>
- Maryland Department of Natural Resources, Forest Service, June 18, 2010, *Maryland Forest Resource Assessment 2010*, Retrieved in August 2011 from: <http://www.dnr.state.md.us/forests/pdfs/sas/MARYLANDSTATEFORESTRESOURCEASSESSMENT.pdf>
- Harry R. Hughes Center for Agro-Ecology, Inc., December 2009, *Mapping a Sustainable Forestry Strategy for Maryland: Report on the Public Engagement Process*, Retrieved in August 2011 from: <http://agroecol.umd.edu/files/Forestry%20Summit%20Report.pdf>
- No Net Loss of Forest Task Force, January 2009, *No Net Loss of Forest Task Force Final Report and Recommendations*, Department of Natural Resources, Retrieved in August 2011 from: <http://www.dnr.state.md.us/dnrnews/pdfs/NNLTFFINALREPORT1.pdf>
- Governor's Commission for Protecting the Chesapeake Bay through Sustainable Forestry, October 2006, *General Findings and Final Recommendations Report*, Retrieved in September 2011 from: <http://www.dnr.maryland.gov/forests/pdfs/GCSF%20Recd%20Report%20-%20Final.pdf>
- Maryland Department of Natural Resources, Forest Service, 2006, *Maryland's Strategic Forest Resource Plan*, Retrieved in September 2011 from: <http://www.dnr.maryland.gov/forests/pdfs/06mdsfrplan.pdf>
- Maryland Forestry Task Force, 2000, *Guiding Maryland's Forest Community into the 21st Century*, Final Report, Retrieved in September 2011 from: <http://www.dnr.state.md.us/irc/docs/00006253.pdf>

Irland, L., Goetz, A. & Weiland, R., January 2004, *Forest Production, Industry & Forest Retention Assessment*, Maryland Center for Agro-Ecology (MCAE Pub 2004-01) Retrieved in August 2011 from: <http://www.agroecol.umd.edu/files/L.%20Irland%20Forest%20Production.pdf>

Maryland Sustainable Forestry Council Recommendations to the Maryland Department of Natural Resources on Implementing a No Net Loss Forest Policy, December 2011

## OTHER REFERENCES

(Alphabetical, Not Summarized)

- American Farmland Trust, January 2003, *FACT SHEET, Why Save Farmland*, Retrieved in September 2011 from: [http://www.farmlandinfo.org/documents/28562/FS\\_Why%20Save%20Farmland\\_1-03.pdf](http://www.farmlandinfo.org/documents/28562/FS_Why%20Save%20Farmland_1-03.pdf)
- Chesapeake Bay Foundation, August 2005, *Vital Signs: Assessing the State of Chesapeake in 2005*, Retrieved in September 2011 from: <http://www.cbf.org/document.doc?id=136>
- Chesapeake Executive Council, 2007, *Protecting the Forests of the Chesapeake Bay Watershed, 2007 Response to Directive 06-1*. Retrieved in September 2011 from: [http://www.chesapeakebay.net/content/publications/cbp\\_27761.pdf](http://www.chesapeakebay.net/content/publications/cbp_27761.pdf)
- Daly, H. & Cobb, J. Jr., 1989, *For the Common Good, Redirecting the Economy Toward Community, the Environment, and a Sustainable Future*, Beacon Press, Boston,
- Environmental Law Institute, August 2003 *Chesapeake 2000 Tax Policy Study*, Research Report, Retrieved in September 2011 from: <http://www.efc.umd.edu/pdf/ELITaxPolicyStudy.pdf>
- Hall, J., Kratochvil, B., & Lo, Y., December 2005, *Shore Agricultural Sustainability Program*, Harry R. Hughes Center for Agro-Ecology, Inc., Retrieved in September 2011 from: <http://www.agroecol.umd.edu/files/J.%20Hall%20Ag.%20Sustainability.pdf>
- Harry R. Hughes Center for Agro-Ecology, Summer 2011, *TMDL Planning Hits Home, Maryland Counties and Municipalities Plan Strategies to Clean Up the Bay & Its Rivers*, Working Landscapes, Retrieved in October 2011 from: <http://www.agroecol.umd.edu/files/Summer%202011%20Newsletter.pdf>
- Harry R. Hughes Center for Agro-Ecology, Inc., March 12, 2007, *2007-2012 Strategic Plan*, Retrieved in September 2011 from: <http://agroecol.umd.edu/files/HRHCAE%2007-12%20strategic%20plan.pdf>
- Lynch, L., Gray, W. & Geoghegan, J., November 2007, *An Evaluation of Working Land and Open Space Preservation Programs in Maryland: Are They Paying Too Much?*, WP 07-11, University of Maryland, Retrieved in September 2011 from: <http://ageconsearch.umn.edu/bitstream/6887/2/wp070011.pdf>
- Maryland Department of Agriculture, October 2010, *Code of the Public Laws of Maryland Agriculture Article Title 2, Department of Agriculture Subtitle 5, Maryland Agricultural Land Preservation Foundation*, Retrieved in September 2011 from: [http://www.malpf.info/laws/MDCCode\\_10\\_2010.pdf](http://www.malpf.info/laws/MDCCode_10_2010.pdf)
- Maryland Department of Natural Resources, *Ecosystems Services Working Group Interim Report*, December 2010, Retrieved in September 2011 from: <http://www.dnr.maryland.gov/download/ESWG-InterimReport-Dec2010.pdf>
- Maryland Department of Natural Resources & Maryland State Parks Funding Study Work Group, *Maryland State Parks Funding Study, A Plan to fully fund the operations of the Maryland Park Service*, September 12, 2007, Retrieved in August 2011 from: <http://www.dnr.state.md.us/irc/docs/00014476.pdf>

- Maryland Department of Planning, July 2011, *PlanMaryland Progress Report*, Retrieved in August 2011 from:  
[http://www.mdp.state.md.us/PDF/YourPart/773/20110725/MDP\\_PlanMarylandProgressReport.pdf](http://www.mdp.state.md.us/PDF/YourPart/773/20110725/MDP_PlanMarylandProgressReport.pdf)
- Maryland Farm Bureau, Inc. December 7, 2010, *Maryland Farm Bureau Policy 2011*, Retrieved in September 2011 from: <http://www.mdfarmbureau.com/Files/HomePageFiles/2011Policy.pdf>
- Maryland General Assembly, 2006, *Agricultural Stewardship Act of 2006*, H.B.2, Retrieved in September 2011 from: <http://mlis.state.md.us/2006rs/bills/hb/h0b002e.pdf>
- Maryland General Assembly, 2007, *Certification of County Priority Preservation Areas*, H.B. 1354, Retrieved in September 2011 from: <http://mlis.state.md.us/2007rs/billfile/hb1354.htm>
- Maryland General Assembly, 2009, *Green and Growing - Local Government Planning Visions*, H.B.294, Chapter 181, Retrieved in September 2011 from:  
<http://mlis.state.md.us/2009rs/bills/hb/h0b294e.pdf>
- Maryland General Assembly, 2009, *Forestry Act of 2009*, S.B. 549, Chapter 175, Retrieved in September 2011 from: [http://mlis.state.md.us/2009rs/chapters\\_noln/Ch\\_175\\_sb0549T.pdf](http://mlis.state.md.us/2009rs/chapters_noln/Ch_175_sb0549T.pdf)
- Maryland General Assembly, *Smart, Green and Growing - Maryland Sustainable Growth Commission*, 2010, S.B. 278, Chapter 489, Retrieved in September 2011 from:  
[http://mlis.state.md.us/2010rs/chapters\\_noln/Ch\\_489\\_sb0278T.pdf](http://mlis.state.md.us/2010rs/chapters_noln/Ch_489_sb0278T.pdf)
- Maryland Sustainable Growth Commission, December 13, 2010, *Maryland Sustainable Growth Commission 2011 Work Plan*, Retrieved in September 2011 from:  
[http://www.mdp.state.md.us/PDF/YourPart/773/20110124/msgc\\_2011workplan\\_012411.pdf](http://www.mdp.state.md.us/PDF/YourPart/773/20110124/msgc_2011workplan_012411.pdf)
- Sartori, J., Moore, T. & Knaap, G., January 2011, *Indicators of Smart Growth in Maryland*, National Center for Smart Growth, University of Maryland, Retrieved in September 2011 from: [http://www.smartgrowth.umd.edu/research/pdf/SartoriMooreKnaap\\_MDIndicators\\_010611.pdf](http://www.smartgrowth.umd.edu/research/pdf/SartoriMooreKnaap_MDIndicators_010611.pdf)
- Stieglitz J., Sen, M. & Fitoussi, J., September 14, 2009, *Report by the Commission on the Measurement of Economic Performance and Social Progress*, Retrieved in August 2011 from: [http://www.stiglitz-sen-fitoussi.fr/documents/rapport\\_anglais.pdf](http://www.stiglitz-sen-fitoussi.fr/documents/rapport_anglais.pdf)
- The World Commission on Environment and Development, March 1987, *Report of the Brundtland Commission of the United Nations, Our Common Future*, Oslo, Norway Retrieved in October 2011 from :<http://www.un-documents.net/wced-ocf.htm>
- Walls, M. & McConnell, V., March 2004, *Incentive Based Land Use Policies and Water Quality in the Chesapeake Bay*, Discussion Paper 04-20, Resources for the Future, Retrieved in September 2011 from: <http://www.rff.org/documents/RFF-DP-04-20.pdf>

## **ABBREVIATIONS & ACRONYMS**

(Alphabetical)

APFO	Adequate Public Facilities Ordinance
ARB	Agricultural Reconciliation Board
ATT	Agricultural Transfer Tax
AUA	Agricultural Use Assessment
BMP	Best Management Practice
CAFO	Concentrated Animal Feeding Operation
CIP	Capital Improvement Program
CREP	Conservation Reserve Enhanced Program
DBED	Department of Business and Economic Development
DGS	Department of General Services
DNR	Department of Natural Resources
EPA	Environmental Protection Agency (federal)
EQIP	Environmental Quality Incentive Program
FCA	Forest Conservation Act
FCMA	Forest Conservation Management Agreement
GIS	Geographic Information System
H.B.	House Bill
HRHCAE	Harry R. Hughes Center for Agro-Ecology, Inc.
IPA	Installment Purchase Agreement
LEED	Leadership in Energy and Environmental Design
LLC	Limited Liability Corporation
LLP	Limited Liability Partnership
LWCF	Land and Water Conservation Fund
MACO	Maryland Association of Counties
MACS	Maryland Agricultural Water Quality Cost-Share Program
MALPF	Maryland Agricultural Land Preservation Foundation
MARBIDCO	Maryland Agricultural & Resource-Based Industry Development Corp.
MCAE	Maryland Center for Agro-Ecology, Inc. (now the Harry R. Hughes Center for Agro-Ecology, Inc.)
MDA	Maryland Department of Agriculture
MDOT	Maryland Department of Transportation
MDP	Maryland Department of Planning
MET	Maryland Environmental Trust
MFS	Maryland Forest Service
MGS	Maryland Geological Survey
MLPPRP	Maryland Land Preservation Parks and Recreation Plan

MOU	Memorandum of Understanding
MPS	Maryland Park Service
NGO	Non Governmental Organization
NOAA	National Oceanic and Atmospheric Administration (federal)
NRCS	Natural Resources Conservation Service (federal)
PACE	Purchase of Agricultural Conservation Easement
PDR	Purchase of Development Rights
PFA	Priority Funding Area
POS	Program Open Space
PPA	Priority Preservation Area
RGGI	Regional Greenhouse Gas Initiative
RFF	Resources for the Future, Inc.
S.B.	Senate Bill
SCD	Soil Conservation District
SCORP	State Comprehensive Outdoor Recreation Plan
TDR	Transfer of Development Rights
TEA	Targeted Ecological Area
TIF	Tax Increment Financing
TMDL	Total Maximum Daily Load
UMD	University of Maryland
URL	Uniform Resource Locator
USFS	United States Forest Service
USGS	United States Geological Survey
WIP	Watershed Implementation Plan





