

# Final Report of the Workgroup on Accounting for Growth (AfG) in Maryland

August 2013

*Facilitated By:*



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## Accounting for Growth Acronyms and Terms

1KF	1000 Friends of Maryland
AfG	Accounting for Growth
BAT	Best Available Technology
BMP	Best Management Practices
BNR	Biological Nutrient Removal
BRF	Bay Restoration Fund
CA	Critical Area
CBC	Chesapeake Bay Commission
CBF	Chesapeake Bay Foundation
CF	Council Fire
DNR	Department of Natural Resources
ENGOS	Environmental Representatives
ENR	Enhanced Nutrient Removal
EOS	Edge of Stream
FIL	Fee-in-Lieu
GF	Gordon Feinblatt, LLC
MACo	Maryland Association of Counties
MDA	Maryland Department of Agriculture
MDE	Maryland Department of the Environment
MDP	Maryland Department of Planning
MFB	Maryland Farm Bureau
MGPA	Maryland Grain Producers Association
MML	Maryland Municipal League
MSBA	Maryland State Builders Association
MSGC	Maryland Sustainable Growth Commission
N	Nitrogen
NAIOP	NAIOP Maryland, Commercial Real Estate Development Association
OSDS	On-site Disposal System (Septic System)
P	Phosphorus
SRF	South River Federation
SC	Sierra Club
TSS	Total Suspended Solids (Sediment)
WIP	Watershed Implementation Plan

## Introduction and Background

As required by the State's Watershed Implementation Plan (WIP) and the Clean Water Act, Maryland is developing an Accounting for Growth (AfG) policy that will address any increase in the State's pollution load from population growth and new development. To restore the Bay, each of the watershed states, including Maryland, not only needs to reduce its current nutrient load, but also hold the line against new pollution. Maryland is expected to add an estimated 478,000 households by 2035. This growth may also lead to additional roadways, public buildings and other structures. The additional growth may add additional nutrient pollution to the Bay on an annual basis.

Maryland's plan for addressing pollution load from new development centers on: 1) the strategic allotment of nutrient loads to large wastewater treatment plants, upgraded to the best available technology, to accommodate growth; and 2) the requirement that all other new loads must be offset by securing pollution credits. The State is designing its AFG policy to account for any increased loads through a combination of on-site practices and through a nutrient trading market in Maryland that has the potential to lower pollution reduction costs for local governments, developers, tax and rate payers, and accelerate the Bay's restoration.

A previous draft of a proposed AfG policy was widely circulated through stakeholder meetings and documents posted online in 2012, however, extensive outreach and public comment in the summer and fall of 2012 revealed a lack of consensus on many fundamental issues. Therefore, a work group was established with key stakeholders to find common ground, clarify areas of disagreement and make recommendations for a revised AfG policy. Ten meetings of the Work Group were conducted, beginning January 18, 2013 and ending July 19, 2013. This report submitted in August 2013, describes the process followed by the Work Group and its recommendations.

For more information (e.g. meeting summaries, technical information, presentations and more) on Maryland's Accounting for Growth Work Group, please see MDE's [AfG website](#).

### Supporting the Accounting For Growth Work Group

To enable a comprehensive discussion on the issues and options related to an AfG policy, the Work Group required resources that would provide experience, expertise and information to the process including technical information, data and case studies relevant to the issues at hand. The following agencies, organizations and individuals, known as the Support Team<sup>1</sup>, were identified to support the AfG Work Group process:

- Baltimore County
- Council Fire
- Maryland Association of Counties
- Maryland Department of Agriculture
- Maryland Department of the Environment
- Maryland Department of Planning
- Maryland Department of Natural Resources

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<sup>1</sup> A complete list of Support Team Members can be found in Appendix A.

- Maryland Municipal League
- University of Maryland
- US Environmental Protection Agency
- Washington County
- Other subject matter experts including scientists, land planners, and ecosystem credit brokers and bankers

The Support Team provided the following support to the Work Group process:

Council Fire was assigned to:

- Facilitate the Work Group by ensuring adherence to agendas and the AfG Work Group Charter, and promoting an exploration of the diversity of member opinions.
- Facilitate the Work Group in discovering ways to identify common ground and build consensus around issues and topics.
- Assist and organize the Support Team in conducting activities to best support the efforts of the Work Group.
- Allocate meeting time to accommodate discussions; prepare and distribute meeting agendas, meeting summaries and working documents; arrange for meeting space; and secure necessary materials and/or resources for meetings.
- Assist in the communications and logistics between Work Group Members and constituents, as appropriate.

State agencies and advisors were assigned to:

- Prepare and present the State’s Guiding Principles for the Work Group process.
- Provide technical support, information and consultation regarding technical issues.
- Participate in discussions and provide perspective when appropriate.
- Interpret the Guiding Principles and provide context as needed.

### **Members of the Accounting for Growth Work Group**

To identify members for the AfG Work Group process, MDE created an initial list of key stakeholders who either worked on issues related to Accounting for Growth and/or were representative of a stakeholder network. Council Fire, MDE, and other participating agencies identified agricultural, development, environmental, local government and public interest communities as distinct broad stakeholder groups and selected individuals representative of these communities. MDE then began to contact the identified stakeholders to introduce the stakeholder Work Group process. During those interviews, stakeholders were asked to recommend other individuals who should participate in the work group process. The information was prioritized and 17 individuals were identified to constitute a balanced group, representative of the broad stakeholder community impacted by an Accounting for Growth policy.

#### **Agriculture Representatives**

Yates Clagett  
Lynne Hoot

Farmer At-Large  
Maryland Grain Producers Association; Maryland  
Association of Soil Conservation Districts

Pat Langenfelder<sup>2</sup> Maryland Farm Bureau (Valerie Connelly served as proxy)

### **Commercial and Residential Development Representatives**

Tom Ballentine NAIOP Maryland Commercial Real Estate Development Association  
Katie Maloney Maryland State Builders Association  
Mike Powell<sup>3</sup> Gordon Feinblatt, LLC

### **Environmental Community Representatives**

Erik Michelsen South River Federation  
Alison Prost Chesapeake Bay Foundation  
Dru Schmidt-Perkins 1000 Friends of Maryland  
Josh Tulkin<sup>4</sup> Sierra Club

### **Local Government Representatives<sup>5</sup>**

Sandy Coyman MACo; Talbot Co. Planning and Zoning Department  
Cathy Drzyzgula MML; Gaithersburg City Councilwoman  
Mary Ann Lisanti MACo; Hartford Co. Councilwoman  
Shannon Moore MACo; Frederick Co. Sustainability and Environmental Resources

### **Public Interest Representatives**

Bevin Buchheister Chesapeake Bay Commission  
Stephen Harper Public At-Large  
Jon Laria Maryland Sustainable Growth Commission

### **Decision-Making Process**

To ensure balance, equity, consensus-building, and a structured approach to the process and individual meetings, rules of engagement including Work Group Member and Support Team roles, responsibilities, decision-making protocols, and other important elements of the effort were established in an [AfG Work Group Charter](#) and approved by the Work Group. This Charter<sup>6</sup> supported flexibility, forward thinking, respect and innovation among Work Group and Support Team Members, as well as providing a productive working environment for the effort.

Midway through the process, the Work Group agreed to form a subcommittee to meet separately from the full group and develop alternative recommendations for the Work Group to consider. The subcommittee met three times and reported back with recommendations to the full Work Group.

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<sup>2</sup> Valerie Connelly served as Ms. Langenfelder's alternate when absent.

<sup>3</sup> Jonas Jacobson served as Mr. Powell's alternate when absent.

<sup>4</sup> Claudia Friedetzky served as Mr. Tulkin's alternate when absent.

<sup>5</sup> Les Knapp and Candace Donoho served as the local government alternates when representatives were absent.

<sup>6</sup> The AfG Work Group Charter can be found in Appendix B and also includes Work Group Principles and Responsibilities.

## AfG Work Group Technical Information and Process

### AfG Work Group Schedule and Timeline

The AfG Work Group approved a meeting schedule and timeline that laid out a process to discuss issues and options related to an AfG policy. The timeline was updated as additional meetings and information were added to the schedule as needed.

Meeting Date	Location	Topics
January 18th: 2pm to 5:30pm <a href="#">Meeting Summary</a>	Tawes State Office Building (DNR) in Annapolis (Conference Room C-1)	<ul style="list-style-type: none"> <li>- Welcome and Introductions</li> <li>- Leadership Remarks (Secretaries, EPA)</li> <li>- AfG Framework</li> <li>- Presentation of Management Principles</li> <li>- Review of Stakeholder Timeline &amp; Agenda</li> <li>- Review of Team Charter</li> <li>- Work Group: Identifying Common Ground</li> </ul>
February 15th: 12:30pm to 4:30pm <a href="#">Meeting Summary</a>	Tawes State Office Building (DNR) in Annapolis (Conference Room C-1)	<ul style="list-style-type: none"> <li>- Which nutrients need to be offset?</li> <li>- Supporting data and baseline information (e.g. loading factors and loads to be offset)</li> <li>- Nutrient Trading Introduction and available tools</li> </ul>
March 22nd: 12:30pm to 4:30pm <a href="#">Meeting Summary</a>	Tawes State Office Building (DNR) in Annapolis (Conference Room C-1)	<ul style="list-style-type: none"> <li>- Creating an AfG Trading Program (e.g. baselines, trading geographies, accountability measures)</li> </ul>
April 19th: 12:30pm to 4:30pm <a href="#">Meeting Summary</a>	Aeris and Aqua Conference Rooms Lobby level at MDE, 1800 Washington Blvd., Baltimore	<ul style="list-style-type: none"> <li>- Fee-in-lieu (e.g. availability, limitations, who/how/where fee is used)</li> <li>- Effective date</li> <li>- AfG Options Matrix</li> </ul>
May 10th: 2:30pm to 4:30pm <a href="#">Meeting Summary</a>	Aeris and Aqua Conference Rooms Lobby level at MDE	<ul style="list-style-type: none"> <li>- Review and Discussion of Subcommittee Alternatives</li> </ul>
May 31st: 9:00am to 1:00pm <a href="#">Meeting Summary</a>	Aeris and Aqua Conference Rooms Lobby level at MDE	<ul style="list-style-type: none"> <li>- What Allocation should be given to the Post-Development Load (Baseline) <ul style="list-style-type: none"> <li>▪ Discussion on the Implications of the Options</li> <li>▪ Work Group Proposals</li> <li>▪ Use MDE Calculator to demonstrate impact as needed</li> </ul> </li> </ul>
June 14th: 9:00am to 3:00pm <a href="#">Meeting Summary</a>	Aeris and Aqua Conference Rooms Lobby level at MDE	<ul style="list-style-type: none"> <li>- Finish Baseline Proposals</li> <li>- How can the Post-Development Load be permanently offset</li> <li>- Effective Date / Transitioning</li> <li>- Which Pollutants</li> <li>- Review of Recommendations-to-date</li> </ul>
June 28th: 9:00am to 3:00pm <a href="#">Meeting Summary</a>	Aeris and Aqua Conference Rooms Lobby level at MDE	<ul style="list-style-type: none"> <li>- Trading and Offset Rules</li> <li>- Applicability</li> <li>- Calculating the Post-Development Load</li> <li>- Review of Recommendations To Date</li> </ul>

Meeting Date	Location	Topics
July 11 <sup>th</sup> : 9:00am to 3:00pm <a href="#">Meeting Summary</a>	Aeris and Aqua Conference Rooms Lobby level at MDE	- Sustainable Development Patterns - Ratios to Increase Margins of Safety - Review of Work Group recommendations and proposals
July 19 <sup>th</sup> : 1:00pm to 4:00pm <a href="#">Meeting Summary</a>	MD Dept. of Agriculture Conference Room 114	- Review outstanding issues, recommendations and proposals - Review AfG Work Group Report schedule

### Maryland's Accounting for Growth Guiding Principles

Participating State agencies (MDE, MDA, MDP, DNR) worked together to develop Guiding Principles for the AfG Work Group. These principles provided a threshold of requirements that the State of Maryland must meet in crafting this program. As such, they provided a set of guideposts for Work Group consideration as it sought to develop its programmatic recommendations for the State. The Guiding Principles are set forth below:

1. Just as the Watershed Implementation Plan requires that existing loads of nitrogen, phosphorus and sediment must be reduced to meet the allocations in the Chesapeake Bay TMDL, it also requires that loads from population increase and economic growth that do not have load allocations under the TMDL be offset by an Accounting for Growth program.
2. The Accounting for Growth program cannot undermine other important state policies such as growing the economy, preserving agricultural and forestland, revitalizing communities, conserving energy, and addressing climate change.
3. The AfG program will encourage developers to plan and locate their developments to minimize pollution, and will require developers to offset the remaining pollution by securing reductions elsewhere.
4. Offsets must last as long as the new load exists, but the specific practices producing the offsets may change and the responsibility for maintaining the offsets may be shifted to another entity with its consent.
5. The AfG program needs to minimize market restrictions and barriers to participation while maximizing accountability and transparency.
6. Verifiability and enforcement are critical components to the AfG program.
7. A nutrient trading program will be established to offset new and increased loads and to spur innovation, accelerate pollution reductions, and reduce the overall cost of restoring and maintaining a clean Bay.<sup>7</sup>
8. The AfG program will establish a platform for trading with sufficient predictability and stability to satisfy the reasonable expectations of buyers, sellers and investors, and encourage innovation and a robust market.
9. Maryland's point and nonpoint trading policies and procedures will be fully integrated, with low transactional costs and manageable administrative burdens for the participants and the implementing agencies.

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<sup>7</sup> Maryland already has a voluntary nutrient trading program that is administered by the Department of Agriculture. The State will leverage this current infrastructure to build a comprehensive trading platform to support the AfG policy.



## AfG Work Group Technical Materials

Throughout the process, the Support Team provided information to the Work Group related to issues and options for the elements of an AfG program. In addition, Work Group Members requested additional information during the effort based on discussions to support their deliberations.

The following foundational resources were provided to Work Group Members and can also be found on MDE's Accounting for Growth [website](#):

1. Presentations on relevant issues including the most current information and data
2. Case studies on relevant programs implemented in other states and industries
3. AfG Matrix and Options:<sup>8</sup> Excel document with options related to an estimated 30 major issues identified for possible inclusion in an AfG Program
4. AfG Calculator Tool: Created by MDE to provide offset estimates of nitrogen and phosphorus based upon geographic location within the Bay watershed, pre-development land use assumptions, post-development land use assumptions and type of sewage treatment.
5. Maryland Nutrient Trading Tool: A web-based platform consisting of four components:
  - A Calculation Tool that determines baseline compliance and computes credits generated by agricultural best management practices;
  - A Registry of certified credits;
  - A Marketplace that can be used to post, trade, and track credits and manage individual accounts; and
  - An Administrative Module to assist in program supervision and the generation of relevant reports.

## Work Group Recommendations

The AfG Work Group developed general and specific recommendations on the elements of an AfG policy and program based on the issues discussed by the Members. These recommendations are offered to the State for their careful consideration as they formalize Maryland's program.

The table below sets forth each of the issues considered and the outcomes of the Work Group's deliberations. "Work Group Consensus" signifies all Work Group Members agreed with the proposed option. Where consensus was not met on a given issue, options that were considered are detailed and Work Group Member positions are defined.

The Work Group made considerable progress given the time constraints and complexities of the issues. Engagement and participation levels were extraordinarily high throughout the process and, despite the conclusion of the formal meetings, constituency representatives remain engaged in providing feedback to the State agencies on the details of specific recommendations as well as additional thoughts on issues where consensus was not reached.

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<sup>8</sup> Appendix C provides definitions of key issues and terms used in the recommendations for the AfG policy.

As part of this on-going dialogue, all Work Group Members requested that MDE establish, prior to drafting and finalizing the program regulations, an ad hoc representative subcommittee of all impacted stakeholders (or consider using the BRF Advisory Committee provided it is representative of all impacted stakeholders) to consider the following issues:

- Fee-in-lieu (FIL)
  - The calculation of the “reduced” fee and sliding scale for the threshold for disturbed land between 5,000 or more sq. ft. but less than 43,560 sq. ft.
  - Language on what fee-in-lieu is, how it is used and how it acts as safety valve for the AfG Program
  - Assess ways to adjust FIL price over time
- Effective Date
  - Details on preliminary site plan documentation
  - Requirements for submittal of site plan and drop dead dates associated with grandfathering clause
- Exemption process for certain public works projects that meet specific criteria
  - Criteria may include the cost of the offsets versus the cost of the entire project, the amount of water pollution the project would generate, and the public benefits the project would create.
- Cross sector trading for TMDL compliance
- Verification, certification and transparency of urban credits

The balance of the issues, and the outcome of Work Group deliberations, are set forth in the table that follows.

Issues	Outcome
<b>General Recommendations</b>	
1.MDE will prioritize and streamline the process for setting nutrient and sediment TMDLs for impaired waters	Work Group Consensus
2.Establish stakeholder group to review AfG program issues, including FIL, as the program is implemented and matures <ul style="list-style-type: none"> <li>• Consider using BRF Advisory Committee as the stakeholder group provided it is representative of all impacted stakeholders</li> </ul>	Work Group Consensus
3.Conduct triennial (once every 3 years) review of AfG policy and nutrient trading program	Work Group Consensus
4.Effective and comprehensive communication of the AfG program to local governments and to the general public in advance of program implementation is necessary for success	Work Group Consensus

<p>5.The local government should have a right of first refusal for each fee collected, rather than a decision to run the entire FIL program.</p>	<p><u>Support:</u> 1KF, CBC, Clagett, GF, Harper, Laria, MACo, MFB, MGPA, MML, MSBA, NAIOP, SRF  <u>No Support:</u> CBF  <u>Undecided:</u> None  <u>Abstain:</u> SC</p>
<p><b>1. Applicability</b></p>	
<p><b>Triggers</b></p>	
<p>1.The alteration of land, or construction or alteration of a structure that creates a disturbed area equal to or above the threshold limit and (1) increases the wastewater load, or (2) increases the nonpoint source pollution coming from the parcel. Construction of agricultural-related structures on agricultural land would trigger the offset policy, but changes in agricultural practices or activities, such as the type of crop, do not trigger the offset policy. Change in land use alone does not trigger the offset policy.</p> <p>2.The alteration of land, or construction or alteration of a structure that creates a disturbed area equal to or above the threshold limit and (1) increases the wastewater load, or (2) increases the nonpoint source pollution coming from the parcel. Construction of agricultural-related structures on agricultural land would <b>not</b> trigger the offset policy, nor would changes in agricultural practices or activities, such as the type of crop, do not trigger the offset policy. Change in land use alone does not trigger the offset policy.</p>	<p>Option 1  <u>Support:</u> 1KF, CBC, CBF, GF, Harper, Laria, MACo, MML, MSBA, NAIOP, SC, SRF</p> <p>Option 2  <u>Support:</u>  Clagett, MFB, MGPA</p> <p><u>Undecided:</u> None  <u>Abstain:</u> None</p>
<p><b>Thresholds</b></p>	
<p>Projects that disturb 5,000 or more square feet of land</p> <ul style="list-style-type: none"> <li>• Projects disturbing 5,000 or more sq. ft. but less than 43,560 sq. ft. (one acre) are subject to a set “reasonable” or “reduced” FIL per a sliding scale <ul style="list-style-type: none"> <li>○ The fee and sliding scale will be set by regulation with additional stakeholder input</li> <li>○ A project subject to a reduced FIL may opt to pay the FIL or elect to undertake the required offsets</li> </ul> </li> <li>• Projects that disturb 1 acre or more of land are subject to full offset calculation analysis</li> </ul>	<p>Work Group Consensus</p>

<p><b>Exceptions</b></p> <p>No exceptions</p> <ul style="list-style-type: none"> <li>• Consider creation of specific criteria for public works project exceptions using subcommittee process</li> </ul>	<p>Work Group Consensus</p>
<p><b>2. Effective Date</b></p>	
<p><b>Effective Date / Transitioning</b></p> <p>December 31, 2014</p> <ul style="list-style-type: none"> <li>• Allow local government option to modify, by shortening the timeframe for, the grandfathering clause</li> </ul> <p>Preliminary site plan submittal:</p> <ul style="list-style-type: none"> <li>• Provide similar documentation to stormwater requirements (i.e. certain level of engineering and investment) for preliminary site plan <ul style="list-style-type: none"> <li>◦ Need regulations to clarify definition of “submittal” requirements</li> </ul> </li> </ul> <p>Trigger dates</p> <ul style="list-style-type: none"> <li>• MDE regulations finalized by Dec. 2013</li> <li>• If a local jurisdiction must make revisions to a local policy or regulation, local jurisdictions have up to one year (until December 2014) to take the necessary steps (e.g. ordinances, regulations) to establish a program for accepting FILs and implementing offsets with those fees</li> <li>• To be grandfathered, a preliminary site plan must be submitted within six months after county has established its program for accepting FILs or by June 2015, whichever is earlier</li> <li>• End of construction “drop dead” date(s) – similar to stormwater regulation date(s)</li> <li>• Alternative: Developer could submit preliminary site plan to the local jurisdiction for approval before the local jurisdiction has finalized its regulations or ordinances and be subject to only MDE regulations on offsets (not county regulations and ordinances on offsets)</li> </ul> <p>The Work Group noted that loads generated between now and implementation date will be accounted for.</p>	<p>Work Group Consensus</p>

<b>3. Fee-in-Lieu (FIL)</b>	
<b>Available or not, under what circumstances</b> FIL is a permanent option.	Work Group Consensus
<b>Payable to whom, and for what purposes</b> Establish a FIL for all nutrients that need to be offset. The Program goal is to get nutrient reduction on the ground as fast as possible to offset any increases in load. <ul style="list-style-type: none"> <li>Local governments have the right of first refusal to run the FIL program</li> <li>Criteria must be in place for how/when fees are used to offset loads (using permanent or temporary BMPs)</li> <li>Whoever runs program is responsible for offsetting loads with BMPs and maintaining the practices</li> <li>Money and obligation should revert to BRF if funds are not used appropriately</li> <li>Need to define timeframe when party receiving the FIL funds must have practices in place</li> <li>Local water impairment issues must be addressed by FIL program</li> <li>Include provision for periodic review of price</li> </ul>	Work Group Consensus
<b>Setting the cost of the FIL</b> 1. <b>Set initial price at \$3000 per pound of nitrogen</b> The Work Group did not discuss the cost of a FIL for phosphorus or sediment 2. <b>Set initial price at \$3500 per pound of nitrogen</b> The Work Group did not discuss the cost of a FIL for phosphorus or sediment	Option 1: <u>Support:</u> None  Option 2: <u>Support:</u> 1FK, CBC, CBF, Clagett, GF, Harper, Laria, MACo, MFB, MGPA, MML, MSBA, NAIOP, SRF <u>Undecided:</u> None <u>Abstain:</u> SC
<b>Setting the cost of the FIL</b> Price is adjusted based on 3-year review and: <ul style="list-style-type: none"> <li>Assess use of a continuous rolling average of actual costs on permanent practices (credit generation and/or WIP compliance practices) beginning in Year 3 of AfG Program</li> </ul>	Work Group Consensus
<b>4. Which Pollutants</b>	
Offset nitrogen statewide and credit associated phosphorus and sediment reduction as to demonstrate no net load increase on a project by project basis; Offset phosphorus, nitrogen and/or sediment wherever there is a local impairment at TMDL watershed scale.	Work Group Consensus

<b>5. Calculating the Post-Development Load</b>	
<p><b>Stormwater Loading Factors – Scale, Edge of Stream (EOS) and Delivered Loads</b></p> <ol style="list-style-type: none"> <li>1. Use 5-basin EOS loading factors, followed by Land River Delivery factors for segments not subject to a local TMDL. Use Edge of Stream loading factors for segments subject to a local nitrogen, phosphorus, or sediment TMDL, but only for the impairing substance.</li> <li>2. Use Edge of Stream Loads</li> </ol>	<p>Option 1:  <u>Support:</u> CBC, Clagett, GF, Harper, Laria, MACo, MFB, MGPA, MML, MSBA, NAIOP</p> <p>Option 2:  <u>Support:</u> 1KF, CBF, SC, SRF</p> <p><u>Undecided:</u> None</p> <p><u>Abstain:</u> None</p>
<p><b>Stormwater Loading Factors – Adjustments for On-site Stormwater BMPs</b></p> <ul style="list-style-type: none"> <li>• Default – 50% reduction of nitrogen and 60% reduction of phosphorus for ESD to the MEP</li> <li>• Recognize additional reduction if developer opts to demonstrate the use of more effective BMPs, using EPA’s efficiencies</li> <li>• Use Expert Panel to determine performance standards for new practices or default</li> </ul>	<p>Work Group Consensus</p>
<p><b>OSDS (septic systems) Loading Factors – Location</b></p> <p>Use area specific EOS loading rate based on 3 zones (80% in Critical Area (CA), 50% within 1,000 feet of a stream but not in CA, 30% for all others)</p>	<p>Work Group Consensus</p>
<p><b>OSDS Loading Factors Adjustments for efficiency of Nitrogen removal at Edge of Field</b></p> <p>Use MDE field-verified nitrogen reduction credits based on type of BAT system installed</p>	<p>Work Group Consensus</p>
<p><b>Wastewater going to WWTP</b></p> <p>If BNR or ENR and/or Secondary Treatment with available nutrient capacity, no offset needed</p>	<p>Work Group Consensus</p>
<p><b>Atmospheric Deposition</b></p> <p>Atmospheric Deposition will not be considered separately</p>	<p>Work Group Consensus</p>

6. Baseline	
<p><b>What Allocation, if any, should be given to the Post-Development Load</b></p> <p><b>Stormwater</b></p> <p><u>Options:</u></p> <p>1. The offset = (the calculated post-development load) minus (the allocation in the 2025 WIP for the pre-development land use), except:  <u>Active farmland</u> (i.e., assessed as agricultural use) - use statewide average for pasture load, except that if the result is a negative number, it resets to zero.  <u>Redevelopment</u> – Projects that meet the stormwater management regulations definition of “redevelopment” would have either a minimal or no stormwater offset requirement. Projects that do not meet that definition, but where the pre-development impervious surface was between 20% and 40% would have their stormwater offset based on a sliding scale  <u>Infill</u> - Projects that meet the definition of “infill” would have either a minimal or no stormwater offset requirement, however, infill needs to be further defined  <u>Forest land</u> - forest baseline</p> <p>2. The offset = (the calculated post-development load) minus (the allocation in the 2025 WIP for the pre-development land use), except:  <u>Active farmland</u> (i.e., assessed as agricultural use) - use statewide average for pasture load, except that if, the result is a negative number, it resets to zero.  <u>Redevelopment</u> – Projects that meet the stormwater management regulations definition of “redevelopment” would have either a minimal or no stormwater offset requirement. Projects that do not meet that definition, but where the pre-development impervious surface was between 20% and 40% would have their stormwater offset based on a sliding scale  <u>Forest land</u> - forest baseline</p> <p>3. Forest load baseline for all offsets, that is, the offset = (the calculated post-development load) minus (the forest load)</p>	<p>Option 1:  <u>Support:</u> Harper, Laria</p> <p>Option 2:  <u>Support:</u> CBC, GF, MACo, MML, MSBA, NAIOP, SRF</p> <p>Option 3:  <u>Support:</u> 1FK, CBF, Clagett, MFB, MGPA, SC</p> <p><u>Undecided:</u> None  <u>Abstain:</u> None</p>

<p><b>On-Site Disposal Systems (OSDS)</b> Allocation should be equal to the load from any pre-existing OSDS, adjusted as if they had been upgraded to BAT</p>	Work Group Consensus
<p><b>Atmospheric Deposition</b> Atmospheric deposition will not be separately considered</p>	Work Group Consensus
<p><b>7. Permanency</b></p>	
<p><b>How can the Post-Development Load be permanently offset</b> Offsets must be definably permanent and operation and maintenance for the offset must be guaranteed in perpetuity.</p>	Work Group Consensus
<p><b>8. Post-Development Load</b></p>	
<p><b>When do the offsets have to be in place</b> Except for BMPs to be installed on the development site, all the offsets must be installed to offset the load for each of the defined phases of the development before the grading permit is issued and construction of that phase can begin. See also FIL regarding BMPs installed using those fees.</p>	Work Group Consensus
<p><b>When do the Post-Development load offsets have to be made public</b> At an early stage in the process, the developer must propose the amount of offsets needed and the calculations used to arrive at the offset amount.</p>	Work Group Consensus
<p><b>9. Encouraging Sustainable Development Patterns</b></p>	
<p><b>Definitions</b> Redevelopment: If a project meets the stormwater management regulations definition of “redevelopment” it would have either a minimal or no (total exemption) stormwater offset requirement. Projects that do not meet that definition, but where the pre-development impervious surface was between 20% and 40% would have their stormwater offset based on a sliding scale.</p>	Work Group Consensus
<p>Infill: Include in policy but needs definition.</p>	<p><u>Support</u>: Harper, Laria, SC  <u>Does Not Support</u>: CBC, CBF, Clagett, GF, MML, MACo, MGPA, MSBA, NAIOP, SRF  <u>Undecided</u>: None  <u>Abstain</u>: 1KF, MFB</p>
<p><b>Exceptions</b> No exceptions</p>	Work Group Consensus



10. Credit Trading Program	
<p><b>On-site Pollution Reduction Practices</b></p> <p>Enhance current approval process that streamlines additional/new BMPs available to reduce post-development load, including:</p> <ul style="list-style-type: none"> <li>• On-site Credit Generation – All non-farm conversion development can generate tradable credits for sale to the trading market or use by the developer for future projects to the extent the post development load is lower than the AfG Program’s baseline.</li> <li>• Enhanced site design reduction practices, such as, fingerprinting of layout</li> <li>• Preservation of forest practices beyond the requirements of the Forest Conservation Act (FCA)</li> <li>• Reforestation/afforestation practices beyond the requirements the FCA or local riparian buffer requirements</li> <li>• Reductions from on-site stream restoration would need to be approved by local jurisdictions to assure it fits with the local policy and restoration efforts</li> <li>• Use of Expert Panel to assist existing process in reviewing and approving new or innovative BMPs in a timely manner</li> <li>• The State should provide a list of acceptable on-site BMPs</li> </ul> <p>Could be similar to the stormwater manual (which is incorporated by reference into the regulations) and include a provision for BMPs as used in Bay Model (MDE’s accounting for stormwater document)</p>	<p style="text-align: center;">Work Group Consensus</p>

**Off-site Pollution Reduction Practices**

Establish approval process that streamlines additional/new BMPs available for credit generation, so long as it does not conflict with local TMDL requirements including:

- Credit for capturing offsite drainage and providing treatment (retrofit). Credit based on loading to the new facility and the type of facility installed using the CBP document on stormwater retrofitting credits
- Expand and convert a SWM facility that is immediately adjacent to the project, would need land on the project to achieve the expansion
- Convert existing stormwater facilities for greater pollutant removal. This would need to be approved by local jurisdictions, but would probably involve the conversion to privately owned facilities
- Install denitrifying OSDS systems. Need to be sure it does not conflict with local TMDL requirements. Have owners register their systems as available for installation
- Assess possibility for a variety of offsite reforestation offsets
- Generate credits through exceeding the stormwater management requirements for redevelopment by installing greater SWM or planting. Maybe not available for revitalization projects
- Identify other local jurisdiction projects for urban credit options (connection of package treatment plant to WWTP with ENR, installation of spray irrigation for land application of treated wastewater, etc.)
- Use Expert Panel to assist established process in reviewing and approving new or innovative BMPs in a timely manner
- The State should provide a list of acceptable off-site BMPs

Could be similar to the stormwater manual (which is incorporated by reference into the regulations) and include a provision for BMP practices as used in Bay Model (MDE's accounting for stormwater document)

Work Group Consensus

<p><b>Credit Certification, Verification and Transparency</b></p> <p>Option 1:</p> <ol style="list-style-type: none"> <li>1. Establish independent reviewers (that are qualified, knowledgeable and truly independent) to certify and verify credits; additional checks and balances to avoid conflict of interest</li> <li>2. All trades to be in a publicly accessible, on-line database established by State (MDE and MDA) and used to track progress</li> <li>3. Leverage existing MDA certification and verification policies for development of urban practices and standards by MDE</li> <li>4. MDE is ultimately responsible for verification, enforcement and transparency of permitting process and market trading program <ul style="list-style-type: none"> <li>o MDA is responsible for certification, verification, and registration of agricultural credits</li> <li>o MDE is responsible for certification, verification, and registration of urban credits</li> </ul> </li> <li>5. All Credit Verifiers receive and are up-to-date with state certification for market trading program</li> </ol> <p>Option 2: All recommendations as Option 1 except #3 and #4. MDE should strengthen MDA's existing verification policies.</p>	<p>Option 1: <u>Support:</u> 1KF, CBC, CBF, Clagett, GF, Harper, Laria, MACo, MFB, MGPA, MML, MSBA, NAIOP, SRF</p> <p>Option 2: <u>Support:</u> SC</p> <p><u>Undecided:</u> None <u>Abstain:</u> None</p>
<p><b>Regulation of Brokers and Aggregators</b></p> <ul style="list-style-type: none"> <li>• Establish third party review of aggregator practices</li> <li>• Qualifications and best practices should be defined (bonding, certification, required percentage of reserve and more) <ul style="list-style-type: none"> <li>o MDE should conduct additional research on best practices regarding aggregator/broker regulations</li> </ul> </li> </ul>	<p>Work Group Consensus</p>
<p><b>Restrictions on Trading Geographies</b></p> <p><u>Interstate</u></p> <p>When available, allow interstate trading within the basin. However, the State of Maryland must verify that the other watershed states have consistent and compatible trading programs.</p>	<p><u>Support:</u> All Work Group Members except for SRF</p> <p><u>Undecided:</u> None <u>Abstain:</u> SC</p>

<p><u>In-State:</u>  Option 1:  Use a hierarchical trading geography – limit trading to the affected basin first, then expand trading statewide if no credits are available; offset is required at TMDL watershed scale if there is a local impairment.</p> <ul style="list-style-type: none"> <li>○ 3-year review to assess trading scale impacts</li> </ul> <p>Option 2:  Allow trading statewide, unless the development occurs on a local segment subject to a TMDL for nitrogen, phosphorus, or sediment, then must be offset at local level for that nutrient; county has option to limit trading to smaller scale if they wish to do so.</p> <ul style="list-style-type: none"> <li>○ Periodic review to assess trading scale impacts</li> </ul>	<p>Option 1:  <u>Support:</u> 1KF, CBF, CBC, Clagett, Harper, Laria, MFB, MGPA, SRF</p> <p>Option 2:  <u>Support:</u> GF, MACo, MML, MSBA, NAIOP</p> <p><u>Undecided:</u> None  <u>Abstain:</u> SC</p>
<p><b>Credit Stacking</b>  Horizontal credit stacking should be allowed. It is not acceptable to credit stack when meeting an obligation or environmental functional replacement like mitigation requirements.</p> <ul style="list-style-type: none"> <li>• Vertical credit stacking should be evaluated at future date</li> </ul>	<p>Work Group Consensus</p>
<p><b>Cross-sector Trading for TMDL Compliance</b>  The Work Group considered a policy of allowing, once an individual’s TMDL requirements were met, any sector (primarily urban sector/local jurisdictions) to trade (buy credits) with another sector (primarily agricultural sector). However, the work group believed that more discussion was needed at a subcommittee level and does not endorse or prohibit cross-sector trading at this time.</p>	<p>Work Group Consensus</p>
<p><b>11. Margins of safety</b></p>	
<p><b>Ratios to increase margin of safety and accelerate Bay restoration</b>  Require that the load be offset at a 1:1 ratio, with a 10% retirement ratio.</p>	<p>Work Group Consensus</p>

**Conclusion**

In the face of an extremely complex and interrelated set of topics related to the development and implementation of an AfG program for Maryland, the Work Group successfully developed consensus recommendations for 28 of 36 issues that were discussed, including general recommendations. The remaining unresolved issues were not without progress. Often, the universe of options related to those issues was substantially reduced and plans have been secured for on-going dialogue between state agencies and

stakeholders as the regulations are developed between August and December 2013. The Work Group recognizes that its consensus recommendations may or may not be adopted, in full or in part, by the responsible State agencies, but offer them to provide strong program constituency guidance to Maryland.

In addition, the Work Group Members were strong proponents of using adaptive management techniques to help ensure that the program eventually implemented in Maryland would find success. As such, the Work Group recommended that the State conduct a program-wide periodic review and make subsequent adjustments based on performance, utility and impacts.

The Work Group Members are proud of their service to the State of Maryland and are pleased to have engaged in and successfully completed an effective process that brought understanding of key issues to major constituencies, achieved acceptable compromise on nearly 80% of program issues, further defined and limited options for non-consensus issues, and provided an excellent foundation for successful resolution of those outstanding issues. The Work Group is confident that these recommendations can form a strong and comprehensive foundation for the Accounting for Growth policy and the Members look forward to providing ongoing input to the State as the program is formalized and implemented.

## Appendix

### Appendix A: AfG Support Team List

<b>AfG Support Team Contact List</b>	
Steven Stewart	Baltimore County; Dept. of Environmental Protection and Resource Management
George Chmael II	Council Fire
Kate Culzoni	Council Fire
George Kelly	Environmental Banc & Exchange
Doug Lashley	GreenVest, LLC
Les Knapp	Maryland Association of Counties
John Rhoderick	Maryland Department of Agriculture
Susan Payne	Maryland Department of Agriculture
David Costello	Maryland Department of the Environment
Brigid Kenney	Maryland Department of the Environment
Jim George	Maryland Department of the Environment
Lee Currey	Maryland Department of the Environment
Vimal Amin	Maryland Department of the Environment
Dinorah Dalmasy	Maryland Department of the Environment
Dave Goshorn	Maryland Department of Natural Resources
Helen Stewart	Maryland Department of Natural Resources
Joe Tassone	Maryland Department of Planning
Dan Baldwin	Maryland Department of Planning
Roger Venezia	Maryland Department of Business and Economic Development
Meg Andrews	Maryland Department of Transportation
Candace Donoho	Maryland Municipal League
Dusty Rood	Rodgers Consulting
Jeff Corbin	U.S. Environmental Protection Agency
Darrell Brown	U.S. Environmental Protection Agency
Dave Nemazie	University of Maryland
Julie Pippel	Washington County; Division of Environmental Management

## Appendix B: Accounting For Growth Work Group Charter

### Process

To ensure balance, equity, consensus building, and a structured approach to the process and individual meetings, rules of engagement including Member and Support Team roles, responsibilities, decision-making protocols, and other important elements of the effort have been established. This Charter supports flexibility, forward thinking, respect and innovation among Work Group Members and Support Team as well as providing a productive working environment.

### Work Group Principles

The Members of the Work Group and Support Team unanimously agree to abide by the following principles:

- Work to achieve outcomes that serve the best interests of Maryland's economy, environment and its citizens.
- Abide by the concept that disagreement does not equal disrespect and treat all other Members of the Work Group and the Support Team, as well as all others participating in the process, with respect, honor, fairness and dignity.
- Bring any and all matters falling within the purview of the Work Group, as described herein, to the Work Group for consideration and resolution prior to pursuing the matter in other venues, including the media.
- Maintain an open mind and consider all perspectives before reaching a conclusion on a Work Group matter.
- Consider and strive to develop recommendations that meet the "Guiding Principles" set forth by the participating government agencies with responsibilities related to the Accounting for Growth Program.

### Responsibilities

The Members of the Work Group unanimously agree to meet the following responsibilities:

#### Between meetings:

- Review and be prepared to discuss all relevant topic and agenda information including all meeting materials and other communications delivered before each meeting.
- Maintain all provided information in a binder provided to each Work Group Member.
- Contact a member of the Support Team as soon as you discover that you are unable to attend a meeting.

#### During Meetings:

- Always act in accordance with Work Group Principles.
- Be on time and committed to engage and participate in meetings.
- Work to follow the agenda and process of each meeting.

### Work Group Meeting Procedures

The following meeting procedures shall guide the Work Group's activities:

- A quorum of Members is necessary to hold Work Group meetings. A simple majority of appointed Work Group Members shall constitute a quorum.

- Work Group decisions shall be made as follows:
  - Members shall work together to reach a recommendation on each topic and Members may offer a position on any matter before the Work Group.
  - Recommendations shall be made through a consensus building process where mutually acceptable and beneficial conclusions are first sought.
  - A “straw poll” (a facilitator-conducted verbal survey of Work Group Members in attendance) may be used to assess the degree of preliminary support for issues before the Work Group finalizes recommendations. Straw polls may lead to subsequent work by the group to revise the text of a recommendation and continue to explore ways to reach consensus.
  - If consensus decision methods are not feasible and/or consensus cannot be achieved on an issue, the meeting summaries will capture common ground achieved and all disparate opinion(s), along with the proffered rationale for each opinion(s), on matters considered by the Work Group.
- Work Group Members may bring others to assist them, but only Work Group Members and Support Team members shall be seated at the table.
- Other attendees will have an opportunity to provide comments to the group during a designated time at the end of each meeting.
- Meetings will be open to the public and posted on the [MDE website](#).

### **Support Team**

A Support Team, comprised of personnel from Council Fire, MDE, MDA, DNR, DBED, MDP and EPA has been established and will conduct the following activities in support of the Work Group process:

Council Fire Team will:

- Facilitate the Work Group by ensuring adherence to agendas and this Charter, and promoting an exploration of the diversity of member opinions. Council Fire Facilitator will help the group discover ways to identify common groups and build consensus around issues and topics.
- Allocate meeting time to accommodate discussions; prepare and distribute meeting agendas, meeting summaries and working documents; arrange for meeting space; and secure necessary materials and/or resources for meetings.
- Assist in the communications and logistics between Work Group Members and constituents, as appropriate.

MDE, DNR, MDA, MDP, DBED, EPA and advisors will:

- Prepare and present the Guiding Principles for the Work Group process.
- Provide technical support, information and consultation regarding technical issues.
- Participate in discussions and provide perspective when appropriate.
- Interpret the Guiding Principles and provide context as needed.

### **Work Group Process Goal**

The Work Group’s objective is to produce a set of recommendations by June for Accounting for Growth regulations to participating agencies that are created in a manner consistent with the processes and procedures set forth in this Charter.

- The Accounting for Growth Work Group’s recommendations will be submitted to the relevant agencies and for consideration by the Bay Cabinet.



### Appendix C: Accounting for Growth Definitions

Actual costs	The cost of design, construction and maintenance, including contract administration
Basin	An area of land that drains into a particular river, lake, bay or other body of water; also called a watershed
Certification	Confirmation that the estimated nutrient reductions are creditable and/or the nutrient reductions are being generated
Continuous rolling average	A way of calculating the mean whereby newer data displaces older data
Cross-sector	Between sectors (examples of sectors are agriculture, wastewater, forest, urban runoff)
Fee-in-lieu	Money paid to a public agency in place of having to secure a required offset; the agency uses the money to generate credits at least equal to the required offset
Fingerprinting	A planning tool used to design a development so that it minimizes impacts on sensitive natural resources and incorporates natural features of the site
Horizontal (credit) stacking	Horizontal stacking occurs when a project performs more than one distinct management practice on non-spatially overlapping areas and the project participant receives a single payment for each practice
Loading rate	The total amount of material (pollutants) entering the system from a source, expressed as weight per unit time.
Local impairment	A water body smaller than the Bay that does not meet one or more water quality standards and has been determined to require a Total Maximum Daily Load
Threshold (Applicability)	The minimum amount, for example, of disturbed acreage, that is sufficient to require a project to comply with a regulatory program
Trading geographies	Spatial areas within or between which credits can be traded
Trigger (Applicability)	The activity or the characteristics of the activity that bring a project within the ambit of a regulatory program
Verification	Confirmation by examination that specified baseline requirements have been met and that the credit calculation is correct
Vertical (credit) stacking	Vertical stacking occurs when a project participant receives multiple payments for a single management activity on spatially overlapping areas based on the multiple benefits