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August 24, 2012*

Hon. Robert M. Summers, PhD
Secretary, Maryland Department of the Environment
1800 Washington Blvd.
Baltimore, MD 21230.

Dear Secretary Summers:

Maryland has made a strong commitment to reaching our Chesapeake Bay restoration goals -- yet as we take action to reduce existing pollution, new growth and development threatens to undermine that success. To the extent that Maryland cannot entirely prevent new pollution from growth, any additional loads *must* be offset in a way that is verifiable, transparent and enforceable in order for us to truly achieve a healthy Bay and local waters for our residents. Maryland's "Accounting for Growth" policy must be strong enough to ensure that we do not allow new high-polluting, sprawling development to add even more to our pollution burden.

While the Department can expect further detailed comments from many of the undersigned organizations, we write to collectively request that the following principles be included in state's "Accounting for Growth" policy. This feedback is based on MDE's proposed offset policy as described in the "Discussion Draft," as updated on July 17, 2012:

1. All aspects of the offset trading program must be transparent, and the practices must be verifiable and enforceable.

- Transparency shall include public access to records (online and in paper copy) that demonstrate compliance with conditions of certification.
- An independent third party shall verify practices under precisely prescribed conditions.
- Any verification mechanism shall satisfy MDE's statutory obligation to verify all trades certified as offsets, including those that the Department of Agriculture (MDA) may supervise.

2. Transactions that rely on credits generated by BMPs (or by an entity meeting baseline via BMPs) shall require an offset of *at least* 2:1 to add a measure of safety to the transaction and ensure that there is a net benefit to water quality. While a ratio of greater than 1:1 for certain high-polluting new development was discussed in the State's Phase I WIP, it was unfortunately not included in the Discussion Draft presented in July.

3. The regulations shall include a reasonable grandfathering date of December 31, 2013, for new development. The Discussion Draft proposes to grandfather new development until the end of 2014, and in recent public workshops, the Department has indicated an interest in potentially applying grandfathering provisions from the stormwater management regulations to the offset policy — regulations that have dates extending as far as 2017, nearly halfway through the Bay cleanup effort. Maryland and its local jurisdictions simply cannot afford to pay for the additional burden of pollution from new development, and, as such, an extended grandfathering date is unacceptable.

4. Trades that would harm any water body segment shall not be allowed. Local water quality must be protected, even when doing so restricts trading geography. This is critical for both local water quality and for environmental justice issues. Low-income and minority communities are particularly vulnerable to impairment caused by trading.

5. New pollution to a given water body may only be permitted when existing dischargers to that water body are subject to compliance schedules designed to bring that water body into compliance with water quality standards. (see 40 CFR 122.4)

6. Development that creates new and continuing pollution (a permanent impact) shall be offset by pollution reduction practices that are equally permanent.

7. Regulations that establish offsets for growth shall include phosphorus and sediment offsets as well as nitrogen offsets. One practice may be allowed to offset all pollutants, if the applicant can verify that the practice meets the offsets for all the regulated pollutants.

8. Local governments shall have the option of requiring offsets for new hook-ups to wastewater treatment plants, even if those plants have surplus capacity under their permit. The proposed policy generally supports infill development by not requiring developers to offset their loads if they connect to an existing, under-utilized treatment plant. But there may be instances where a local government wants to incentivize specific development through selective application of an offset requirement.

9. "Fee-in-lieu" shall not be an option for large-scale development. If this option is made available for small-scale or redevelopment projects, the process shall remain <u>transparent</u>, <u>verifiable</u> and <u>enforceable</u>. If developers are allowed to pay a fee instead of purchasing credits from a BMP, the fee must capture the real cost of the implementing credit generating practices. All "fees in lieu" should be phased out after the first several years of the program, and all in lieu fees shall be used promptly as part of a program designed to bring the affected waters into compliance with water quality standards.

10. Overall, the policy should be kept simple enough so that local governments and developers may easily understand and implement it. As noted by a workgroup of the Maryland Sustainable Growth Commission, aspects such as Edge-of-Stream loads, standardized calculations of impact, and local trading geographies offer clear and consistent standards for implementing this policy.

Please note that while these general principles are specifically intended to inform the development of Maryland's offset policy, they should also be applied to any policies related to trading for permit compliance, or any further offset policies developed regarding offset providers, such as agricultural BMPs.

In addition, as the Agency responsible for enforcing the Clean Water Act, we expect MDE will continue to be responsible for the transparency, validation, and enforcement of all trading, including agricultural BMPs used for trades.

Maryland is on the right track for clean water, public health, and a strong economy with our Watershed Implementation Plans. But for the plans to have their intended impact, a strong accounting for growth policy is absolutely critical. As you know well, preventing pollution in the first place is far more efficient and cost-effective than cleaning it up after the fact.

We commend MDE for engaging the public in an open and accessible way as this important policy is developed. We thank you for considering our request and look forward to discussing it with you further.

Sincerely,

1000 Friends of Maryland

Cecil Land Use Alliance

Eastern Shore Land Conservancy

Environmental Integrity Project

Friends of Frederick County

Friends of Herring Run Parks

Maryland League of Conservation Voters

Maryland Sierra Club

Port Tobacco River Conservancy

Queen Anne's Conservation Association

Severn Riverkeeper

South River Federation

West/Rhode Riverkeeper

Note: This is an updated version of the letter sent on August 20, 2012, with additional groups signed on in agreement with the recommendations listed above.

CC: David Costello, Deputy Secretary, Maryland Dept. of the Environment
John Griffin, Secretary, Maryland Dept. of Natural Resources
Richard Hall, Secretary, Maryland Dept. of Planning

Earl F. “Buddy” Hance, Secretary, Maryland Dept. of Agriculture

October 1, 2012

Paul Emmart
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore MD 21230-1718

Dear Mr. Emmart:

On August 20, 2012, the organizations signed onto this letter submitted, in writing, ten recommendations regarding the State's "Accounting for Growth" discussion draft of July 10, 2012. We again submit these recommendations as part of formal public comments to MDE in response to the "Accounting for Growth" draft regulations for discussion purposes of August 27, 2012. While the August 27, 2012 draft does address our concern that any offsets be permanent (#6), none of our other recommendations have been addressed, so we resubmit them to you at this time. If you have any questions, please contact Robert Gallagher, Chair, West/Rhode Riverkeeper, at (301) 261-5021.

Maryland has made a strong commitment to reaching our Chesapeake Bay restoration goals -- yet as we take action to reduce existing pollution, new growth and development threatens to undermine that success. To the extent that Maryland cannot entirely prevent new pollution from growth, any additional loads *must* be offset in a way that is verifiable, transparent and enforceable in order for us to truly achieve a healthy Bay and local waters for our residents. Maryland's "Accounting for Growth" policy must be strong enough to ensure that we do not allow new high-polluting, sprawling development to add even more to our pollution burden.

1. All aspects of the offset trading program must be transparent, and the practices must be verifiable and enforceable.

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Please note that while these general principles are specifically intended to inform the development of Maryland's offset policy, they should also be applied to any policies related to trading for permit compliance, or any further offset policies developed regarding offset providers, such as agricultural BMPs.

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Maryland Sierra Club
National Wildlife Federation
Port Tobacco River Conservancy
Queen Anne's Conservation Association
Severn Riverkeeper
South River Federation
St. Mary's River Watershed Association
West/Rhode Riverkeeper
Wicomico Environmental Trust

CC: Bob Summers, Secretary, Maryland Dept. of the Environment
David Costello, Deputy Secretary, Maryland Dept. of the Environment
John Griffin, Secretary, Maryland Dept. of Natural Resources
Richard Hall, Secretary, Maryland Dept. of Planning
Earl F. "Buddy" Hance, Secretary, Maryland Dept. of Agriculture

CHESAPEAKE BAY FOUNDATION
Saving a National Treasure

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AILEEN BOWDOIN TRAIN

October 1, 2012

Maryland Department of the Environment
1800 Washington Boulevard
Baltimore MD 21230-1718
Attn: Mr. Paul Emmart

SENT VIA EMAIL TO afg@mde.state.md.us

RE: Accounting for Growth – Draft Offset Policy

Dear Mr. Emmart:

Thank you for the opportunity to submit comments on the draft "Accounting for Growth" policy as presented via several presentations and written documents circulated by the Department of Environment (MDE). The Chesapeake Bay Foundation is pleased to see the state moving forward with an offset policy on a schedule consistent with the commitment made to the Environmental Protection Agency (EPA) in the state's Phase II Watershed Implementation Plan (WIP) and the Sustainable Growth and Preservation Act of 2012 (the septics bill). Similarly, MDE, with assistance from the Harry Hughes Center for Agro-Ecology and the Town Creek Foundation, should be commended for providing an accessible and open approach to stakeholder engagement as regulations are developed.

Loads from new growth threaten to undermine the substantial progress and investments in clean water programmed for the next 13 years, unless these loads are fully offset. The Maryland Department of Planning projects that development could contribute as much as 2.3 million new pounds of nitrogen pollution to the Chesapeake Bay watershed over the next 13 years, which equates to an increase of 23% in the total load reduction currently required by the TMDL in Maryland. We believe it is paramount that the offset policy move the development process away from the "business as usual" of transferring the burden of pollution reduction to the public, to the

PHILIP MERRILL ENVIRONMENTAL CENTER | 6 HERNDON AVENUE | ANNAPOLIS, MD 21403
410/268-8816 | FAX: 410/268-6687 | CBF.ORG

necessary "new normal" of fully accounting for impacts on water quality – and making decisions at the outset that will minimize these impacts before they occur.

To that end, we are concerned that incentives built into the original policy proposals for avoiding and minimizing impacts have been reduced or eliminated entirely in the most recent discussion materials. For example, discussion of a fee-in-lieu program continues without specifics about how such a program would be structured to ensure that measurable, verifiable pollution reductions occur, and how use of fee-in-lieu would be minimized. The application of delivery ratios could result in reduced offset requirements in the piedmont that could potentially endanger local water quality. Perhaps most troubling, increased offset ratios have been eliminated for the highest polluting forms of development in conflict with the terms of Maryland's Accounting for Growth strategy as presented in the state's WIP.

A robust offset policy in Maryland is critical to the continued success of our state's substantial investment in clean water. We have carefully reviewed the materials made available by the Department, including the presentation and spreadsheet provided to the Maryland Sustainable Growth Commission, the July 12, 2012 Discussion Draft, and the Draft Regulations for Discussion Purposes dated August 27, 2012. We have also considered input from state agencies and comments provided by other stakeholders throughout the public review period. CBF respectfully offers the following detailed comments and recommendations to ensure that growth management supports rather than hinders progress on clean water in Maryland.

The policy should adhere to the highest standards of transparency, verification and enforcement.

Maryland anticipates the development of a private offset market to function as a key supplier of offset credits. It is imperative that trades completed in pursuit of compliance with the state's Accounting for Growth framework be individually verifiable, that the exchange of credits be transparent, and that compliance with contract and permit terms be fully enforced.

CBF recognizes that offsets for growth will comprise but a subset of nutrient trading activity in Maryland. Existing Maryland trading policy documents note the need for annual or semi-annual verification and inspection of credit or offset generating practices[1]; however, these documents lack specific details. <u>We recommend that MDE, in promulgating the Accounting for Growth policy, be more explicit in its expectations about verification procedures as well as specifying how documented trades will be tracked and made accessible to the public. Furthermore, we suggest that Maryland's existing trading registry be expanded to include not just agricultural trades, but all offset/credit generating projects</u>. The registry

[1] See Maryland's Phase II B trading document, p. 9

could also provide tracking for verification documentation, similar to the system in place for carbon credits.

The offset ratio for high-polluting new development should not be reduced to 1:1. Offset ratios should also reflect the TMDL's iterative accountability framework and the contribution of redevelopment to improved water quality.

Based on statements made to EPA in the Phase I and Phase II WIPs, the state's offset policy was expected to require offsets at a ratio greater than 1:1 for projects projected to generate the highest new pollution loads. Maryland's Phase I WIP states that "High Per Capita Loading areas may be subject to greater offset requirements, i.e., development may be required to offset point and post-development nonpoint source loads in excess of the standard forest loading rate established by MDE, at a ratio that is higher than that required in Low and Moderate Per Capita Loading areas" (p. 3-8). The Phase II WIP affirms this approach, stating in the March 30 2012 transmittal letter that, "in areas with higher per-capita pollution rates, greater offsets will be required," and in the WIP itself that the "strategy will encourage growth where pollutant loading is low by easing offset requirements in those areas, and will increase offset requirements where loadings are high or sensitive areas need to be protected" (p. 46). It is clear from the Phase II WIP that this "increase" is to reflect more than just the heightened loads associated with harmful sprawl: "the goal of Maryland's Offset Policy will be to offset new loads in a way that is not just load neutral, but begins to address the need to reduce current loadings and is supportive and consistent with the State's Smart Growth policies" (p. 47). On page three of the July 12 Discussion Draft, MDE acknowledges but fails to adequately explain the inconsistency of the current proposal with the WIPs.

Maryland's WIPs establish a framework for increased offset ratios substantiated by several compelling public purposes, including:

(1) prioritize minimization and avoidance of impacts over mitigation;
(2) incentivize conservation of offsets in a limited-supply scenario;
(3) stimulate the development of a robust trading market; and
(4) preserve economic development opportunities.

We are unclear as to what has changed since the Phase II WIP was drafted just a few short months ago that would warrant the regression to 1:1 for all types of development. In light of the state's interest in ensuring the policy achieves the public purposes for which it is intended, <u>we strongly urge the Department to restore the requirement of an offset ratio significantly higher than 1:1 for the highest polluting forms of development.</u>

Just as high-polluting development should be actively discouraged, the offset policy should strengthen incentives for development activity that improves the runoff characteristics of existing urban land. For these projects, the policy should provide a method for calculating the net benefit to water quality and assign credit for reductions appropriately. Ideally, developers would obtain credits through a system that respects the current allocation to local government per Maryland's MS4 permitting provisions.

Finally, CBF acknowledges the proposed increase to a 4:1 offset if Maryland fails to achieve required load reductions by 2025; however, we view this end-game approach to accountability as insufficient to encourage corrective actions in a timely manner. Indeed, the Bay states have agreed to two-year milestones precisely because long-term accountability measures have historically proven inadequate to motivate compliance with pollution reduction agreements. We recommend that the offset ratios in the policy be made consistent with the TMDL's accountability framework, including establishment of a 2.5:1 offset ratio if the state's 2013-2015 two-year milestones for non-point sources are not achieved and a 3:1 offset ratio if Maryland fails to accomplish its 2017 interim commitments. The 4:1 offset ratio if 2025 targets are not achieved should be retained. EPA consequences for failing to make meaningful progress include the potential to withhold construction general permits for new dischargers. A proactive effort by the state to establish a graduated accountability framework through increased ratios could provide a reasonable and effective deterrent for non-compliance within the framework of existing measures.

The offset policy should not include a fee-in-lieu option. The state should resolve questions about limited supply before making a decision to offer a public sector aggregation of nutrient offsets.

We were surprised to learn that Maryland is considering a fee-in-lieu option as a method of compliance with the policy. As recently as February of this year, EPA reported that "Maryland's expectations regarding use of credit banks, in-lieu-of-fees, insurance, exchanges aggregators or other third parties are as follows…The Maryland trading process will not include credit banks or in-lieu of programs, but will use aggregators for NPS trades."[2] Accordingly, the state's Phase I and Phase II WIPs do not include discussion of a fee-in-lieu component.

Several important considerations suggest that a fee-in-lieu approach is unacceptable. The inherent disconnect under a fee-in-lieu system between pollution generators and the establishment of BMPs raises fundamental questions about the viability of such a program:

- Will the fee payments be sufficient to fully offset the new load, including uncertainties;

[2] US EPA. "Maryland's Trading and Offset Programs Review Observations." Final Report, February 17, 2012, p. 14. Emphasis added.

- Will the program ensure that new loads and their offsets occur within the same trading geography, and fully protect local water quality;
- Will offsets exist at the time they are purchased;
- What measures to be taken to prevent fee-in-lieu projects from usurping pollution reduction progress and activities toward target load allocations under the TMDL;
- Will long-term management and renewal of the offset be linked in perpetuity to the development activity that generated the increase in pollution; and, perhaps most importantly,
- Will avoidance and minimization measures be fully exploited prior to pursuing offsets.

These and other questions suggest that there is not reasonable assurance that loads from growth will be fully accounted for under a fee-in-lieu provision. We also question how fee-in-lieu would provide a sufficient response to the potential challenge of limited offset capacity: if offsets are not available, how can the fee-in-lieu administrator apply the funds to the delivery of pollution reduction actions and demonstrate that pollution has been offset? If offsets are available, the development activity should be directly responsible for securing them consistent with the open market approach Maryland has presented to the EPA, either by creating them on-site, completing an off-site private transaction, or obtaining credits through an aggregator (which could include a government entity engaged in a regional project, provided that target load reductions have been achieved). We respectfully request that the Department recognize the unique dynamics associated with nutrient offsets and reject a fee-in-lieu approach, consistent with current policies and commitments.

We are aware that the state is considering an expansion of the Bay Restoration Fund structure to function as a public-sector "backstop" aggregator of nutrient offsets. Unfortunately, we have not seen details of this approach that would alleviate the concerns outlined above. And while we understand some are apprehensive about a potential shortage of offsets in the early years of the policy, we believe that questions about supply should be resolved before embarking on a program that could, if not carefully designed, encourage a cycle of pollution and mitigation over stewardship. We respectfully request that the state complete and release for stakeholder input its long-promised review of offset generation capacity prior to making a decision about public sector aggregation.

Offsets should be permanent and include safeguards to ensure maintenance and renewal.

Maryland's offset policy will be protective of water quality only as long as offsets required under the regulations remain in place. A policy that requires offsetting only over a period of time or fails to require adequate maintenance of BMPs simply delays – and does not prevent, nor fully account for – new loads to the Chesapeake Bay. Accordingly, we support the language contained in section .06(A) of the August 27 draft regulations that would require offsets to continue "as long as the load being offset exists" (p. 6).

However, we are concerned about vague language appearing later in Section .06 stating that "in most cases" the offset must be permanent, and that "offsets may be purchased from the Maryland Nutrient Trading Program" without providing additional details. It is unclear from this language whether some annual practices will qualify for sale as offsets and if so under what conditions such contracts would be accepted. It is also unclear who is responsible for on-going maintenance after the developer completes initial responsibilities under the permit. The draft regulations must include additional specifics outlining those practices that will qualify as "permanent" offsets, and how the public can be assured that those offsets will continue as long as the new source continues to pollute.

We believe that the use of annual practices would substantially elevate the uncertainty associated with offsetting new pollution from growth. First, the installation and success of annual practices is dependent on a number of factors, such as the weather. Second, changes in land ownership or the needs of the agricultural operation may threaten BMP renewal. Third, it seems reasonable to expect that annual practices are more likely to be discontinued at the end of a contract period than structural or eased BMPs. While some state officials have noted that a reserve is included in non-point trades to mitigate uncertainty, the EPA is clear that "in Maryland, the reserve is not insurance for failed offsets."[3] For these reasons, CBF is generally opposed to the use of annual practices as offsets under the state's Accounting for Growth framework.

We recognize that an under-developed offset market carries the potential for a constricted supply of offsets and the possibility of elevated costs in the early years of the policy. Even so, the use of annual practices for offsetting growth should only become compelling when all other options are exhausted. If such a scenario were to arise, we recommend the use of annual practices be subject to the following conditions that would help to mitigate the concerns outlined above:

(1) limited to offsets obtained within the first three years of the policy's effective date;
(2) capped at a low percentage of the total offset required for a project;
(3) subject to an offset ratio substantially greater than otherwise applicable; and
(4) subject to legally binding measures that establish accountability for maintaining, or, if necessary, replacing the offsets for the life of the new development.

The August 27 discussion draft fails to assign responsibility for the maintenance and renewal of offsets (permanent or annual) after the permit term. While Maryland's Nutrient Trading Program may include some safeguards, the offset policy allows for a variety of other options (such as direct mitigation) that appear ungoverned at this time. The regulations should identify the entity charged with ensuring that

[3] See EPA's *Maryland's Trading and Offset Programs Review Observations, Final Report* dated 2-17-12, p. 12.

offsets remain in place, equip that entity with the authority to hold funds in escrow and/or recover costs, and outline the consequences for failure.

The offset policy should become effective by the end of 2013 for all construction activity.

As previously noted, MDP has projected that growth could add approximately 2.3 million pounds of new nitrogen to the Maryland portion of the watershed by 2025. EPA expects that new loads that are not offset by a developer will be added to the existing target loads for pollution reduction; in other words, every development project that is not offset by a developer must be offset by the public. Unfortunately, the Discussion Draft anticipates that "the policy will apply to any development that seeks coverage under a General Permit for the Discharge of Stormwater Associated with Construction Activity or applies for an individual Discharge Permit for Stormwater Associated with Construction Activity after December 31, 2014" (p. 8), more than two years from now. This delay in implementation could add hundreds of thousands of pounds of additional pollution reduction responsibility to state and local governments that are already challenged to meet current targets. Furthermore, at a recent public workshop MDE representatives intimated that the grandfathering provisions contained in the recently-issued stormwater management regulations could provide a model for the offset policy. These regulations include dates as far out as 2017.

We oppose an effective date for the policy that extends beyond the end of 2013. Maryland land use regulations that included effective dates delayed for a period of years (such as the Critical Area and stormwater management regulations) recognized that extensive changes to development plans would be required to comply with the new rules. Offsets, while complex in their own right, primarily involve financial considerations unlikely to render current plans unbuildable or current investments unrecoverable. Timely implementation of the offset policy is also critical to maintaining compliance with EPA's accountability framework.

Fundamentally, we question how a delay in implementing the offset policy could be considered consistent with the TMDL and the state's WIP. EPA openly questioned grandfathering provisions in their recent review of Virginia's offset and trading program, observing that:

> Virginia's final Phase I WIP did not include an allocation for new growth because Virginia maintained that proposed regulations would ensure that there be no net increase and therefore no allocations for new growth were necessary…with the regulations' grandfathering provisions, how will the assurance of no net increase be achieved in accordance with the TMDL?[4]

[4] See EPA's *Virginia's Offset and Trading Programs Review Observations, Final Report* dated 2-17-12, p. 3.

We understand that the only allocation for growth included in Maryland's WIP is for new loads that flow to a wastewater treatment plant discharging under its permit cap for nutrients and operating with Enhanced Nutrient Removal (ENR) technology. We are not aware of an allocation for new non-point source loads or other discharges in Maryland's WIPs that would suggest the state has committed to cleaning up, or even accounting for, new loads that occur before the offset policy becomes effective. Consistent with Maryland's WIP, and in light of the substantial commitments Maryland and its local jurisdictions face for reducing existing pollution loads, we recommend that the offset policy become effective as soon as possible, applying to all construction activity no later than December 31, 2013.

Edge of Stream loads should be required.

CBF recently became aware that the state is proposing to adjust offset requirements based on delivery factors for pollution to the Chesapeake Bay. We are very concerned that the blanket use of delivery factors could lead to degraded local water quality as well as further disconnect the offset policy from Maryland's smart growth framework.

Chesapeake Bay Program partners are currently working to standardize delivery ratios by segment, so the precise set of factors likely to be used in the offset policy are not available for analysis. However, CBF reviewed several recent model scenarios and found that a number of segments on the piedmont are calculated to deliver between 0 and 85% of the edge-of-stream load.[5] Some of these segments appear to drain to water bodies that are impaired for nutrients, such as Antietam Creek and the Patuxent River. Offset requirements based on Chesapeake Bay delivery ratios could result in a net increase in nutrient pollution to these impaired local waterways.

Low delivery ratios on the piedmont also threaten to provide a perverse incentive for sprawl development, all else being equal. Once reduced by delivery factors, the offset requirements for harmful sprawl in Frederick or Carroll counties could be less than the burden imposed on smarter development patterns in tidal counties that do not receive a calculated reduction in load. This raises questions about regional equity as well as consistency issues with existing state growth policy.

We believe that the policy should require the more conservative calculation of offset requirements based solely on edge-of-stream loads to protect local water quality, maintain consistency with existing policies, and preserve equity among different regions across the state. If the state insists on the use of delivered

[5] See www.chesapeakebay.net/content/publications/cbp_12268.pdf or www.chesapeakebay.net/documents/3689/3_776.pdf

loads, we believe that edge-of-stream loads must be required for any development activity located in a local watershed that is impaired or has a TMDL due to nutrients or sediment.

Offsets should apply to all development activity, including un-built subdivisions and smaller projects that have a substantial collective impact.

The State of Maryland is obligated by the TMDL to account for increases in pollution due to growth. We believe that the the draft offset policy should address the full range of development activities that could, collectively, significantly increase pollution loads from urban lands.

The draft language would exempt development activity disturbing less than one acre of land, even if served by high-polluting septic systems. In addition to overlooking the pollution generated by these activities, this exemption could create a loophole whereby larger projects are phased to avoid offset requirements. We suggest that the state include a simplified offset mechanism for projects of less than one acre, rather than exempting them and presumably transferring their collective burden to the public sector.

The policy should also address approved or recorded yet un-built subdivisions. Many of these "ghost plats" were planned prior to the establishment of current environmental protections and could have a disproportionately large impact on future loads. Even recently approved projects threaten cleanup efforts if left unaccounted for: the City of Cambridge has approximately 4,700 approved residential lots in the development pipeline[6] that could add more than 10,000 pounds of nitrogen to the Choptank River, according to MDE's draft nutrient offset calculator. The new stormwater pollution alone would represent almost 20% of the urban load reduction assigned to the county and could cost taxpayers an additional $7,000,000 based on the cost estimates for urban load reductions contained in the county's WIP.[7] Maryland's Accounting for Growth strategy should identify how pollution from approved but un-built subdivisions will be offset; we recommend that all development activity be required to fully mitigate its impact through the offset policy.

In addition to the issues raised above, we request the following changes to specific subsections of the draft language:

03.B.7 Reword "increase in residential density" to "increase in density, intensity, or wastewater demand" to ensure that all projects with a larger impact are accounted for.

[6] *City of Cambridge Comprehensive Plan* dated March 28, 2011, p. 26.
[7] See *Dorchester County Chesapeake Bay TMDL Phase II Watershed Implementation Plan* (undated), pp. 5, 19.

05.A.1.e We are skeptical that some zero-discharge groundwater permits actually result in zero discharge; for example, systems relying on plant uptake are likely to contribute nitrogen in winter. We request an offset greater than zero be applied to these permits.

05.A.2.b Developers should be given the option to resolve an ENR WWTP capacity restriction by offering permanent offsets to mitigate new pollution from increased wastewater discharge.

05.E.2 Reword: "the county where the development will be located has implemented SUFFICIENT actions designed to FULLY meet the Bay TMDL…" Offsets should not complicate or distract from the responsibility of local jurisdictions to meet existing target load allocations.

[Add] The regulations should not preclude local governments from adopting more stringent requirements (for example, requiring offsets even for development that hooks into an existing WWTP with capacity).

Also, the policy does not provide persuasive justification for using nitrogen as a surrogate for phosphorus and sediment loads. Differences in delivery ratios between these pollutants are particularly worrisome within a policy built on the assumption that controlling for one pollutant will protect water quality from other pollutants. <u>We request that MDE provide a rigorous, scientifically grounded explanation of how a policy directed at nitrogen will be protective of additional phosphorus and sediment loads</u>.

We encourage the Department to press forward with a strong and effective offset policy.

CBF believes that the draft proposal takes an essential first step toward ensuring that pollution from growth does not undermine our collective investments in clean water and a healthy Chesapeake Bay. As we have stated, it is imperative that we keep the goal line for pollution reduction right where it is. In that regard, we are supportive of the policy's baseline approach that requires 100% of the post-development load to be offset. We concur with the incentives for smart growth that reduce the offset burden for wastewater and stormwater as appropriate, and restrict the allowable trading geography to the county level for high polluting development. We also are pleased to see the inclusion of airborne NOx emissions in the draft and we concur with the Department's proposal to increase the stormwater loading calculation for projects that receive a waiver from the 2007 stormwater management regulations. We remain hopeful that the Department will insist on the use of permanent practices to offset a permanent load. These and other strong elements of the policy should be carried forward in the final regulations.

My staff and I stand ready to assist the Department as the draft proposal moves forward. Please do not hesitate to contact me at (410) 268-8816 with any questions you may have, or to discuss our recommendations in further detail.

Sincerely,

Alison Prost, Esq.
Maryland Executive Director

Erik Fisher, AICP
Maryland Land Use Planner

cc: Mr. David Costello, MDE
Ms. Brigid Kenney, MDE
Secretary Robert Summers, MDE
Secretary Richard Hall, MDP
Secretary John Griffin, DNR
Secretary Buddy Hance, MDA
Mr. Jeff Corbin, EPA
Mr. Nick DiPasquale, EPA

VERIFICATION, ACCOUNTABILITY, AND TRANSPARENCY

- Existing Maryland trading policy documents note the need for annual or semi-annual verification and inspection of credit or offset generating practices[1]; however, these documents lack specific details. We recommend that MDE use this opportunity to be more explicit in their expectations about verification procedures as well as specifying how this documentation will be tracked and made available to the public (see below).
- We recommend that Maryland's existing trading registry be expanded to include not just agricultural trades, but all offset/credit generating projects. In addition, this registry could also be used to track the necessary verification documentation. This is similar to what is done in registries for carbon credits.
- The draft regulation seems to imply that the offset requirements will be part of the discharge permit issued to the developer. If so, how will the permanent offset requirements be tracked and monitored after the development has been finished and the permit expired?

EOS VS. DELIVERED LOADS

- Edge-of-stream loads should be required.
    - We recognize that the Chesapeake Bay Program partners are currently seeking to standardize delivery ratios by segment– currently, they vary depending on the model scenario. However, even with this standardization we do not think delivered loads should be used for offsets.
    - This approach would neglect the effects of new loads to local waters, especially those that are already impaired for nutrients or sediments.
    - Given that delivery ratios vary for N, P and sediment, what assurance is there that N-based offsets will be protective?
    - Delivered loads greatly reduce the policy's connection to smart growth. For example, offsets required for sprawl development in Frederick or Carroll could be similar to smart growth in areas closer to the Bay.
- If the state insists on the use of delivered loads (which we do not support) despite these shortcomings, offsets for EOS loads MUST be required for any development activity located in a local watershed that is impaired or has a TMDL due to nutrients or sediment.

GRANDFATHERING

We remain concerned with how a grandfathering policy interplays with the Clean Water Act requirement of no new loads to an impaired water body. If a grandfathering policy was put in place, grandfathered projects would potentially be in violation of the Clean Water Act. While below we have started to outline what a grandfather policy might look, we continue to research the legality of such a policy.

- Grandfathering should not be part of the program if fee-in-lieu is made available.
- Otherwise, the policy should apply to any development project that is <u>granted final site or subdivision plat approval</u> by a local jurisdiction after <u>December 31, 2013</u>.

[1] See Maryland's Phase II B trading document, p. 9

- Offset exemptions should sunset if the land is not recorded (for subdivisions) or building permits are not issued (for site plans) by December 31, 2014.
    - We are unclear as to when a general discharge permit is considered "granted" for a project. Does this occur when the ESD and SW construction drawings are signed by the local reviewer? Could it vary depending on the procedures of the local jurisdiction?
    - Preliminary plans and general, concept, or "master" development plans often change, and can reflect development that will not occur for a decade or more. These early-stage plans are also procedurally separated from the fiscal/transactional phase of the local development approval process.
    - The WIP anticipated the offset policy to be in place by the end of 2013.
    - The state will be challenged to afford increases in its load reduction targets.

OFFSET RATIO

- On existing urban land inside Priority Funding Areas, the difference between the pre- and post-development load should be calculated. Reductions should be credited and apportioned appropriately between the developer and the local jurisdiction's urban stormwater load reduction target. Offsets should be required at a ratio of 1:1 for any increase.
- The offset ratio should be set at 2:1 outside Priority Funding Areas.
- The ratio should increase to 2.5:1 if two-year milestones for NPS are not achieved on schedule.
- The ratio should increase to 3:1 if 2017 interim targets for NPS are not achieved on schedule.
- We support the draft policy of a 4:1 offset ratio if 2025 targets are not achieved.

PERMANENCE OF OFFSETS

- Consistent with other environmental mitigation programs, such as wetlands and forest conservation, we strongly support MDE's position that nutrient offsets be permanent.
- Offsets involving land features (forest buffers, wetland creation, vegetated swales, etc.) or structural practices must be protected in perpetuity by easement or similar mechanism.
- Offsets must be insured for renewal/replacement through:
    - Payment of impact fees sufficient to cover the cost of maintenance and replacement;
    - Covenants requiring a levy on the parcel(s) for maintenance of the offset; or
    - Special taxing districts established for the purpose of maintaining the offset.
    - We believe that a certification process for aggregators could provide the necessary level of assurance for trade-based offsets; however, more specifics are required before we can adequately assess the potential of certification requirements to guarantee the permanence of offsets.

FEE-IN-LIEU

- We strongly oppose a traditional Fee-in-Lieu program as part of the offset policy, where funds are collected and subsequently applied by a jurisdiction to the future establishment of BMPs. We remain unconvinced that a fee-in-lieu program could ensure that:
    - Payments are sufficient to fully offset the new load, including uncertainties;
    - New loads and their offsets occur within the same policy geography;

- Offsets actually exist at the time they are purchased;
- Projects managed by a government entity do not usurp pollution reduction progress toward target load allocations under the TMDL;
- Long-term management and renewal of the offset is borne by the development activity that generated the increase in pollution; and
- Avoidance and minimization are fully exhausted during development planning.

QUESTIONS AND OTHER COMMENTS

TN vs. TP:

The policy does not provide justification for using nitrogen as a surrogate for phosphorus and sediment loads. We request that MDE provide a demonstration of their assumption that a policy directed at nitrogen, will be protective of additional phosphorus and sediment loads.

Partnerships:

The AfG Fact Sheet suggests that "developers could partner with local government to implement larger pollution reduction projects like stream restoration or upgrading minor wastewater treatment plants". We remain concerned about the possibility of delay in meeting target load reductions from existing sources (or even double-counting) if local governments direct their resources to facilitate the generation of credits to offset new loads. For example, Dorchester County's Phase II WIP contemplates upgrades to several minor wastewater treatment plans as a cost-effective exchange for stormwater load. It would be detrimental to the county's WIP for a developer to eat into pollution reduction potential that is otherwise marked for existing loads. What safeguards is the Department considering to ensure that the focus of local governments remains on achieving required reductions?

Applicability:

Our understanding is that the offset requirements would apply at the time of subdivision or site planning, which could create several loopholes:

- Projects disturbing less than one acre are still likely to have a collective significant impact, especially if served by septic systems. We suggest that the state include a simplified offset mechanism for projects of less than one acre, rather than exempting them and transferring the collective burden of these projects to the public sector.
- How does the proposed policy address recorded but un-built lots and subdivisions?
- How will development activity not currently requiring a discharge permit (<10,000 GPD) be addressed by the policy?

Additionally:

03.B.7 Why is land use change a prerequisite for offsets to apply? Seems to muddy the water as redevelopment is explicitly exempted later in the regulation. If it must remain, reword "increase in residential density" to "increase in density, intensity, or wastewater demand".

05.1.e We are skeptical that some zero-discharge groundwater permits actually result in zero discharge; for example, systems relying on plant uptake are likely to contribute nitrogen in winter. We request an offset greater than zero be applied to these permits.

05.2.b Does this wording shift the offset burden to the entity that controls the WWTP? Does this render developers incapable of resolving a capacity restriction, to the potential detriment of smart growth?

05.E.2 Reword: "the county where the development will be located has implemented SUFFICIENT actions designed to FULLY meet the Bay TMDL…"

The regulations should not preclude local governments from adopting more stringent requirements (for example, requiring offsets even for development that hooks into an existing WWTP with capacity).

MARYLAND STATE BUILDERS ASSOCIATION
121 Cathedral Street Suite 2A, Office 2
Annapolis, Maryland 21401

(410) 263-0070 phone
katmaloney@verizon.net

October 1, 2012

Mr. Paul Emmart
Maryland Department of the Environment
1800 Washington Blvd.
Baltimore, MD 21230-1718

Dear Mr. Emmart:

Thank you for the opportunity to comment on the proposed offset policy as outlined in the *July 12, 2012 Accounting for Growth Policy Proposal*. We also appreciate the time that you and other MDE staff have taken to meet and discuss development industry concerns about the proposed policy. This policy and the ensuing regulations and general permit will have an unprecedented impact on our industry. Although the development industry shares MDE's concerns about pollution entering the Chesapeake Bay, the complexity of the draft policy will have severe consequences on the industry's ability to develop in compliance with the offset requirements and the cost may be prohibitively expensive. We hope to continue the productive dialogue in the coming months as this policy is finalized to avoid an unnecessarily onerous regulation that could bog down the economic recovery and cost thousands of jobs. It is imperative that the Department provide ample time to fully review and consider all comments on the policy PRIOR to proposing regulations to ensure that the regulations are consistent with the policy, accurate and science-based

In order to most-effectively comment on the thrust of this policy which seeks to establish a market-based nutrient trading system, our comments have been organized as follows:

1. General Comments
2. Specific Comments to Avoid Artificially Inflating the Demand for Credits
3. Specific Comments to Avoid Unnecessarily Restricting the Supply of Credits

General Comments

1. **Developers must have an Optional Method to Help Drive Nutrient Reductions.**
   We support MDE's intent to provide a simple method for compliance. While we have many concerns and objections about elements of MDE's simplified method and believe that it overstates a project's offset requirement by orders of magnitude, we agree in principle with the concept of a simplified method as one option. However, in many cases the benefits of a simple method will be far outweighed by the costs. Therefore, developers should have an opportunity to use an "Optional Method" of calculating load that gives developers an opportunity to obtain credit for pre-development Nitrogen loading as well as credit for voluntary efforts that result in enhanced Nitrogen reductions. The Optional Method could be used to drive additional reductions in this sector through innovation and technology if a developer could create and trade credits as a result of the reductions from pre-development conditions. For example, a

developer that is redeveloping a 50 year old, 25% impervious garden apartment community in close proximity to metro should be able to count the existing Nitrogen load resulting from the wastewater from the existing apartment units, unmanaged stormwater runoff, and vehicle emissions. If, as part of the redevelopment of this property, the developer exceeds requirements in order to further reduce Nitrogen loads, such as stream restoration, vehicle trip reduction efforts, or water-efficient plumbing fixtures, then those efforts should be recognized. While this calculation might be more time consuming and costly to the developer, the additional Nitrogen reduction and cost savings may justify its use in appropriate situations.
Request: Include an Optional Method Offset Calculation in the policy and regulations.

2. **We assume that the industry does not have a conflict with MS-4 jurisdictions in terms of credit generation as MS-4 permits require reduction of impervious surface and offsets require developers to reduce nitrogen.**

3. **The policy requires reductions beyond that required to restore the Bay.**
The TMDL requires that, across all sectors, the Nitrogen load be reduced by 21% to a maximum load of 185 million pounds per year. The TMDL acknowledges an assimilative capacity and recognizes that with reductions of 185 million pounds of Nitrogen per year, that water quality standards can be met and the waters will be swimmable and fishable. As such, a certain amount of Nitrogen is expected and permitted for all land uses and activities. However, this policy requires new growth to zero-out the Nitrogen load and does not recognize the allocated share of Nitrogen to this sector. The result is an over-stated Nitrogen offset requirement for new growth.
Request: Include an Optional Method Offset Calculation in the policy and regulations

4. **The underlying assumption of this policy that new growth be held responsible for driving reductions. from other sectors is unfounded and unfair.** New development should be required only to demonstrate that a parcel is not adding load. Requiring reductions over and above what is required to "neutralize" the project footprint exceeds the proposed actions in Maryland's WIP. Cleanup efforts are more likely to be accelerated as funding becomes available. The increase in the Bay Restoration Fund and the imposition of the Stormwater Utility Fee will provide necessary funding to expedite pollution reduction plans.
Request: Include an Optional Method Offset Calculation in the policy and regulations

5. **Limiting "Redevelopment" to the Stormwater Management definition is too narrow and does not adequately incent growth in areas that can create the most benefit.** Only redevelopment of commercial properties, not mixed use that includes residential units, is fully exempt from the offset requirements. These mixed use projects most often contain as residential a multi-family component, which would be required to at least offset the air emissions load. Since these types of residential units tend to be more affordable yet the air emissions costs are the same as a large lot residential project, this policy is regressive. Using the Stormwater Regulation definition for redevelopment excludes many projects throughout the state that are conversion from an existing low-intensity urban use to a higher intensity urban use. These projects should be exempt from any requirement to offset in order to incentive mixed use development.

Request: Change definition of "redevelopment" for purposes of this offset policy to "Redevelopment means the reuse of a property that was previously used for residential, commercial or industrial purposes provided that the reuse reduces the nutrient load from the property."

6. **A fee-in-lieu option is essential.**
   We are encouraged that the Department will establish a fee-in-lieu to allow for compliance with the offset policy. The fee structure must be uniformly applied throughout the state with a single price per pound cost that reflects the average estimate of nitrogen removal for the most common and cost-effective BMP's. The cost of all realistic BMP's including annual practices should be used to determine the average. The fee must be a permanent option in order to provide an alternative method of compliance even with a robust trading market to deal with periods of market supply shortages. The fee must be established prior to the finalization of both the policy and the regulations.

7. **Effective Date and Grandfathering.**
   We believe that a transition provision that grandfathers projects with an approved Preliminary Plan or NPDES coverage as of Dec. 31, 2013 is a reasonable transition provision provided a reasonable mechanism for compliance is available. Should we consider 2014 to avoid stalling the fragile economy?

8. **The EPA-Approved TMDL already has a built-in Margin of Safety (MOS).**
   The Clean Water Act requires that the TMDL include a margin of safety (MOS). The 185 million pounds per year TMDL includes a margin of safety to ensure that water quality standards are achieved. However, throughout this policy and imbedded within the calculations, methods, protocols and procedures, additional "margins of safety" are built in. These additional, redundant and unnecessary margins inaccurately inflate the calculated Nitrogen load from new growth, which drives up the cost of compliance.
   Request: Remove all MOS that are not required by the TMDL.

9. **The proposed policy compromises water quality by attempting to integrate planning and social policies.**
   By requiring offsets to address water quality issues only, all future projects will be assessed by the ability to eliminate any pollution load, regardless of the location or type of project. Overlaying land use policy will undermine the reduction potential for rural areas in the western part of the state and the eastern shore.

10. **Planning areas, not redevelopment status, should be used to incentivize planning goals.**
    Notwithstanding our comments made herein, to the extent that this policy is going to attempt to integrate planning goals, redevelopment is not the appropriate tool. Redevelopment deals with the current use of a property, not its proximity to services and preference of location. We believe that what is intended is to accommodate development in Tier 1 and Tier 2, under SB236 and Targeted Growth and Revitalization Areas (TGRAs). Many properties in these Tiers and TGRAs from PlanMD do not meet the definition of redevelopment. We encourage MDE to consider a different approach. **MDE's *Offset Calculator* does not provide for analysis of mixed-use projects containing residential units.** The offset calculator prepared by MDE and posted on MDE's website for analysis of projects does not include a mixed use project model. Most projects in the State of Maryland contain a mix of residential and commercial uses and are unable to evaluate the impact of this proposal.

11. **The regulations and permit must have an annual adjustment provision based upon new information as technology and innovation improve.**
The restoration of the Chesapeake Bay relies upon future technologies and innovation. The only way those technologies will develop is if the policy and regulations allow developers to obtain credit for using these new technologies. For example, Nitrogen reductions could occur through more efficient water fixtures, improved wastewater treatment technologies, and advances in stormwater management. A mechanism must be in place that swiftly allows these technologies to be placed in the mainstream.

12. **We need the ENR capacity status for all WWTP's in order to begin to evaluate the impact of this policy.**
This information is not publicly available. While it is understood that local water and sewer plans may have information about capacity, it is essential that MDE maintain a list of all plants including status of capacity (as of a specific date) to better coordinate information and identify preferred areas for future growth. We believe that MDE will not be able to review and approve permit applications without this information.

13. **The costs associated with implementing this policy are still unclear.** In addition to the costs to the commercial and residential construction industry, there will be costs borne by local jurisdictions and the state to administer an offset policy that is in addition to the current nutrient trading program. These costs are not yet known and are an essential element of this policy.
Request: DELAY final adoption of this policy until an accurate fiscal analysis is complete.

14. **Analysis of the potential demand for offset credits relative to the supply is needed.**
A comprehensive inventory of potential credits by county is required in order to determine the overall current inventory based on approved BMPs. This will assist MDE in determining any immediate need to identify alternatives or adjust trading geography limitations.

15. **An established and liquid nutrient trading market must be in place before offsets are required.**
If an option for meeting this requirement, such as available credits and/or a permanent fee-in-lieu option are not in place when this requirement takes effect, a de facto moratorium on investment and development will occur in the State of Maryland.

16. **Include a funding mechanism for assessment of future residents as an alternative to fee-in-lieu.**
In addition to a fee-in-lieu option and as part of this compliance process, MDE should consider a funding mechanism that would enable future residents to be assessed directly, instead of a one-time, upfront payment, since their actions will be primarily responsible for future Nitrogen loading activities. This assessment would be in addition to current revenue programs. Fees paid to meet offset responsibility must be used ONLY for nutrient reduction projects and funds CANNOT be reverted to the general fund.

17. **Purchasing offset credits should be phased as growth comes on line.**
The proposed requirement that all offset credits be installed and verified and that a developer purchase credits for the entire project's load up front is inconsistent with principles of concurrency and will make financing some projects impossible. Many projects take many years to build out, financing is phased, and the future loads should not have to be accommodated until the units come on line.
Request: The purchase of offset credits or payment in lieu should occur at the time of builder permit issuance.

18. **Efforts need to be made to lower the burdens for the creation of Nitrogen credits.**
    MDE must urge the U.S. EPA to quickly acknowledge both Maryland's approved technologies and new emerging technologies. The future inventory of offsets may be minimal in some areas and a flexible trading policy with a variety of BMP alternatives will be necessary to maintain a viable program.

Specific Comments to Avoid Artificially Inflating the Calculated Load from Growth Using MDE's Standard, Simplified Method

The ultimate costs to offset Nitrogen are the sum of all the parts that are factored into calculating the project's Nitrogen load using MDE's method as outlined in *Accounting for Growth, July 12, 2012*, hereafter referred to as the "Standard Method". The benefit of intended simplicity from the Standard Method is significantly outweighed by inflated demand for credits. This inflation is due to a variety of the independent components that comprise the Standard Method. The following specific concerns must be addressed by MDE as the final offset policy is developed:

Stormwater

19. **Forested land should not require offsets.**
    Tree planting is a viable credit option for offsets and thus the act of planting and/or saving forest on site by developers should not create an offset requirement. The lowest loading factor is from forests and if woods are being preserved then it is a constraint for that parcel.

20. **The *delivered load* should be the standard for establishing the offset.**
    There appears to be some confusion as to whether the delivered or edge of stream load is required to be offset. The July 12 Discussion Draft methodology indicates that the edge of stream load is what is required to be offset. However, we were told by MDE officials in September that a delivery factor will be provided for each of the segments, which will reduce the July 12 calculation and be the credit required to be offset. We support using the delivered load, as clarified by MDE officials and the draft regulations. The TMDL is established and measured at the tidal edge of the Chesapeake Bay. The Nitrogen load generated by a parcel is reduced by a delivery factor depending on its proximity and distance to the Bay. In some cases, a pound of Nitrogen can be reduced by almost one-half by the time it reaches the Chesapeake Bay through denitrification, immobilization and other natural causes. By basing the offset requirement on the "edge of stream" load, the offset requirement is inflated and over-stated. Not only is this fundamentally unfair and scientifically flawed, it effectively penalizes properties that are farther from the Bay.
    Request: Use delivered loads for purposes of calculating the offset requirement

21. **What is the basis of the average loads for an acre of impervious and pervious surfaces?**
    We request the analysis that MDE utilized to arrive at these average loads.

22. **The policy does not address Stormwater manual approved BMPs such as green roofs or permeable paving surfaces.**
    It is unclear whether these approved, alternative surfaces are considered impervious or pervious and what their assigned loading rate should be. This has an impact on a project owner's ability to analyze this policy.

23. **The loading rates are higher for development offsets than the loading rates for MS-4 permits. If the parcel is in an MS-4 jurisdiction, it should be assumed to have the same loading rate.**

24. **The load reduction for Environmental Site Design is under-stated.**
According to MDE's calculations, an acre that is ½ impervious and ½ pervious would generate a load of approximately 12.5 lbs/yr and, if reduced by 50% for ESD would result in a load of 6.25 lbs/yr. Since ESD is designed to achieve 'woods in good condition' and we know that an acre of forest generates approximately 3 lbs/ac/yr, then the credit for ESD should be closer to 75-80%, not 50%. ESD should be 3 lbs/acre (woods in good condition); 2000 regulations should be a 50% (or more) credit.

25. **Opportunities for additional efforts to reduce Nitrogen are not provided.**
We encourage MDE to create opportunities for developers to reduce Nitrogen as part of their project's design with the objective of reducing their offset requirement or generating a tradable credit. We believe that developers, if given the opportunity to be compensated, will make Nitrogen-reducing investments as part of their projects. This profit motive will help drive technology, innovation and Nitrogen reductions.

26. **Existing loads from stormwater must be credited.**
As part of the "optional method" that we urge MDE to develop, existing loads from stormwater, like the other two sources, must be credited. We believe this could be done in a variety of ways as part of the State permitting process. One possible method would be to utilize mapped land uses and apply segment-specific loading rates.

Wastewater

27. **Existing loads from wastewater must be credited.**
28. **Credits for wastewater reduction methods should be provided.**

Air Emissions

Air Emissions are already included within the stormwater loading factor so requiring an additional offset for air constitutes double-counting this source.

29. Air Emissions are not regulated by the Clean Water Act and should not be required to be offset. Existing loads from emissions must be credited as they are offset through Stormwater BMP installation. We believe that the correlation between VMT, population density and Nitrogen loading is unreliable and inconsistent.

Specific Comments to Avoid Unnecessarily Restricting the Supply of Credits

A robust and liquid market for trading credits will be essential to the State's ability to account for and accommodate growth. However, several statements in the draft policy will unnecessarily restrict the supply of credits that will be available to offset new growth.

30. **Trading areas should not be geographically constrained.**

We believe that the location of the supply of credits will not match with the location of the demand of credits and that this program needs to apply as broadly as possible, preferably beyond State boundaries within the Bay watershed.

31. **A percentage of credits should not be automatically retired.**
    Reducing the supply of credits by 10%, or any amount, is unnecessary since delivery factors are being applied to the supply of credits AND the demand.

32. **Intrusive verification requirements could be an impediment to generating credits.**
    We understand from the farming community that they are concerned about occasional inspections onto their property from government representatives. What is the frequency of verification and what does it entail? We encourage the State to remove the impediments of this requirement.

33. **Annual practices, such as cover crops, must be a viable credit-generating practice.**
    Annual practices are among the cheapest Nitrogen reduction options. However, it is still unclear how the long-term assurance of annual practices will occur. A 100% reserve seems like a very high barrier to entry for any aggregator to generate a profitable enterprise.

34. **Agricultural baseline standards restrict participation. Nutrient Management Regulations limit potential offset credits.**
    Farmers that install practices to meet these new regulations should also be allowed to trade credits generated by these practices. We understand that is not the case.

Again, we appreciate the opportunity to provide comments to the Draft Offset Policy. If you have any questions or require further detail about any of the comments provided in this letter, please feel free to contact Katie Maloney at 410-263-0070 or katmaloney@verizon.net.

Sincerely,

Eliot Powell
MSBA President

cc: David Costello
Jay Sakai
Brigid Kinney
Michael Powell
Maggie Witherup

M E M O

To: Jon Laria, Chair, Maryland Sustainable Growth Commission
Sustainable Growth Commissioners

From: Alan Girard, WIP Workgroup Chair, Maryland Sustainable Growth Commission
Yates Clagett, WIP Workgroup Vice-Chair, Maryland Sustainable Growth Commission

Subject: Summary Comments and Recommendation on May 30, 2012 Accounting for Growth Discussion Draft PowerPoint Presentation

Date: July 23, 2012

The WIP Workgroup is charged by the Maryland Sustainable Growth Commission to serve in an advisory capacity to the interagency Growth Offset Workgroup, referred to in this memo as the Bay Workgroup.

On May 30, 2012, the WIP Workgroup was briefed by members of the Bay Workgroup using a PowerPoint presentation on a draft Accounting for Growth policy, the content of which is being developed and refined to serve as the basis for a proposed regulation expected to be promulgated by December 2012 (consistent with Maryland's commitment to the U.S. Environmental Protection Agency under the Bay TMDL process). Written and oral comments on the presentation by WIP Workgroup members and interested parties were discussed on July 10, 2012 (written comments attached). Subsequent collaboration resulted in the creation of this summary comment memo and recommendation. Contributing organizations included 1000 Friends of Maryland, Chesapeake Bay Commission, Chesapeake Bay Foundation, Chester River Association, Eastern Shore Land Conservancy, Maryland Association of Counties, Maryland Farm Bureau, Maryland Municipal League, Maryland State Builders Association, NAIOP Maryland Chapters – The Association for Commercial Real Estate, South River Federation, Sierra Club – Maryland Chapter, and the Upper Shore Regional Council.

The WIP Workgroup recommends that the Sustainable Growth Commission formally submit these summary comments to the Bay Workgroup.

Summary Comments

1. **Offset Ratios.** The Discussion Draft proposes that urban growth should offset loads at a ratio of 1:1, with certain exemptions included for infill and redevelopment activities. This portion of the policy received much attention in oral and written comments received from stakeholder groups.

   A number of stakeholders agreed that development located outside Targeted Growth and Revitalization Areas (including Priority Funding Areas and other areas defined by the strategy) should be required to offset the post-development load at a ratio greater than 1:1. Both the Phase II WIP and the Discussion Draft of the offset policy recognize that "minimizing loads from new development is essential to the success of the strategy to offset growth" (p. 46). To minimize loads, the state's WIP stated that the "strategy will encourage growth where pollutant loading is low by easing offset requirements in those areas, and will increase offset requirements where loadings are high or sensitive areas need to be protected" (p. 46).

   The use of increased ratios was advanced in the WIPs to actively discourage high-polluting forms of growth, and to protect offset generation capacity, a vital public interest in terms of economic development and environmental protection. It also provides a margin of safety against modeling errors and the inefficiencies associated with mitigation. For these reasons, many in the workgroup suggested that the 1:1 calculation put forth in the discussion draft would be insufficient to achieve the state's valid public policy objectives as represented to EPA in the Phase I and Phase II WIPs.

   While the proposed calculator for post development load attempts to fully account for loads from new growth, the WIP requires additional reductions beyond the net increase in load for development that contributes the highest levels of pollution. The WIP states that "the goal of Maryland's Offset Policy will be to offset new loads in a way that is not just load neutral, but begins to address the need to reduce current loadings and is supportive and consistent with the State's Smart Growth policies" (p. 47). Stakeholders expressed concern that the 1:1 ratio in the draft policy could run counter to the state's smart growth policies because it could require fewer offsets from low-density "sprawl" development than smart growth on a per-acre basis. For example, a development of two-acre residential lots on BAT septic would be required to offset approximately 8.5 lbs N per acre converted to urban use, while a project meeting the state's smart growth criteria of quarter-acre lots on ENR wastewater treatment would be required to offset more than 19 lbs N per acre. Given the major role that land use and land area plays both in the development process and the TMDL accountability framework, these stakeholders suggested that the policy should speak with one voice regardless of whether the offset requirements are viewed in terms of households or acres.

   Support for an increase in the offset ratio above 1:1 was not unanimous in the Workgroup. Some stakeholders cautioned that the cost of offsets in Maryland should be an important consideration in the determination of appropriate offset ratios, and recommended that the ratios should not be finalized until cost estimates are available. Nutrient credits in neighboring states are valued at about $5/lb of N in Pennsylvania to approximately $650/lb of N in North Carolina and depend on a number of factors, including supply. Additional research on projected costs in Maryland is recommended (see #4 below).

   Another stakeholder suggested that achieving a 1:1 offset should be considered as a baseline requirement for development outside of Target Growth and Revitalization Areas but opposed a 1:1

offset ratio without the existence of adequate flexibility for achieving such an offset. It was suggested that for flexibility to exist, a broad range of acceptable offset practices must be established, including a robust and practical trading program and consideration of a fee-in-lieu program (see #5).

2. **Offset Stability.** Practices installed to offset pollution from growth should fully account for the long-term impact of the development activity. Therefore, these practices should have a long-term design life. Administrative mechanisms should be established to ensure that practices are adequately monitored, maintained, and renewed as necessary. It is recognized that such mechanisms could require additional administrative responsibility for those state and local agencies involved in the development approval process. The state should clearly describe how credits would be certified, verified, and tracked, in addition to detailing the enforcement mechanism citizens can expect for failures to comply with certain conditions.

3. **Simplicity.** The process to purchase and verify credit should be as simple and transparent as possible. Effort should be made to ensure the public understands the intention of the policy to promote pollution prevention first (to help reduce the need for offsets and help preserve Maryland's economic and environmental health) while making a mechanism to purchase offsets available as a last resort. Some stakeholders expressed concern that the complex monitoring and enforcement duties of the proposed program could present a financial administrative burden to state and local jurisdictions that should be addressed. Others indicated that updating existing trading policies independent from the finalization of the Accounting for Growth policy will undermine the state's ability to adequately build the public's confidence in nutrient trading as an acceptable form of pollution management.

4. **Cost estimates.** Estimated costs to purchase offset credits and install practices should be determined to adequately evaluate the implications and consequences of the policy. Estimates could be based on an analysis of Maryland's capacity to generate offsets, including an inventory of anticipated supply and demand of offsets and an analysis of the overall impact on the rate, location, and extent of planned growth. It is noted that the Maryland Sustainable Growth Commission formally requested in November 2011 that the Governor should see that Maryland's offset generation capacity is determined. A cost-per-pound of reduction by offset practice (similar to information already calculated by BayStat) should be calculated and shared with the Maryland Sustainable Growth Commission and the general public to further develop the foundation of the trading marketplace envisioned under the policy. This can help build confidence in and ease uncertainty about the new marketplace for offset credits.

5. **Fee-in-lieu.** A fee-in-lieu option would provide developers an alternative to purchasing offset credits by paying into a fund that would be accessed to implement pollution reduction practices as part of the strategy. Some stakeholders suggested a fee-in-lieu option would increase flexibility and help address an anticipated deficiency in the supply of offset credits in the near term so as not to prevent development when a required level of credit is unavailable to be purchased. Others suggested that a fee-in lieu option would not address the root challenge of potential limitations in offset credit supply, increasing uncertainty about the ability of practices to be installed and appropriately credited for pollution reduction and potentially confounding the open-market approach already adopted by the state for nutrient trading. The effectiveness of some current environmental fee-in-lieu programs was also debated. Neither the draft strategy nor current trading policies allow for fee-in-lieu payments to offset the impacts of growth.

6. **Trading Geography.** The draft strategy allows for impacts from new development *within* Targeted Growth and Revitalization Areas to be offset by purchasing credits anywhere in the state that is permitted by the basic trading policies, but restricts new development *outside* of Targeted Growth and Revitalization Areas to purchasing credits only within the county in which the development occurs. Some stakeholders favored expanding the allowable trading area to include subwatersheds or watersheds of various scales. This approach could maximize trading opportunities and potentially lower costs. Forest conservation mitigation, which is generally limited to within counties, was posited to yield very low margins once all the necessary resources are used to develop, market, and sell credits. A suggestion was made to expand markets beyond counties to two primary sectors of the state – one above the fault line and one below.

   Others stakeholders favored the strategy as drafted to preserve a county's ability to prevent other counties from consuming local offset potential, and to support and promote local government efforts to manage growth and related water quality impacts based on unique local circumstances over which the jurisdiction has significant control. Offset generation capacity within counties can be a valuable asset in the credit marketplace and counties may have a strong interest in managing land use in a way that is sensitive to the limited nature of that capacity.

7. **Phosphorus and Sediment Offsets.** Of the Bay's pollutants, nitrogen has been a primary focus of the Bay Workgroup, which has asserted that BMPs are generally more successful at reducing phosphorus and sediment than nitrogen, so that offsetting the more-difficult-to-treat nitrogen load will also offset the phosphorus and sediment loads. The State should provide technical data supporting these claims and the decision to exclude phosphorus and sediment from the offset policy. Development industry research that shows a negligible impact of phosphorus and sediment from construction compliant with current rules and regulations should be corroborated as part of the analysis.

<u>Comments Already Addressed in Draft or Existing Policies</u>

1. **Post Development Load/Land Use Change.** The Bay Cabinet unanimously decided that the post development load on a site will be the amount of load required to be offset regardless of the predevelopment land use. This decision was made in order to be consistent with the policy that prohibits the purchase of credits sought as a result of a change in land use. Some stakeholders suggested that offset requirements should be limited to the difference between pre and post development loading; however, the discussion draft clarifies that a change in land use resulting from new development is accounted for as a change in pollution source inventory under Maryland's WIP. To be consistent with the WIP, the full post development load must be accounted for without consideration of the pre-development load. Developers remain interested in generating credits for contributing to nutrient reductions beyond responsibilities outlined under the Bay TMDL.

2. **Loading Rates.** The draft strategy includes "Edge of Stream" loading rates of land uses to account for the amount of nutrient pollution that is lost from a site to the nearest water body. Some stakeholders supported the use of Edge of Stream loading rates to maximize equity and fully protect local water quality. Others supported the use of delivered loads, because these could more accurately reflect the effect on the mainstem of the Bay and better account for degrees of treatment that occur within a stream. The Discussion Draft points out that, under the existing Trading Policies, delivery factors are applied to account for differences in delivered loads between trading partners due to location. Additional detail on

these delivery factors could help build the public's confidence in how a standardized loading rate is employed as part of the program and address concerns that "Edge of Stream" loading rates exceed TMDL goals. One stakeholder suggested that mobile emissions and vehicle miles traveled (VMTs) loading should not be part of the post development load calculation and that mobile emissions should be targeted more directly outside of the proposed offset program.

3. **Applicability to Development Types.** The draft strategy applies to all development types, not just residential development. While it is noted the proposed effective date of the policy is December 31, 2014, any anticipated grandfathering provisions should be fully described.

4. **Third Party Enforcement/Verification.** Existing trading policy requires practices to be installed and verified before they can be offered for sale as credits. This policy decision was made to provide reasonable assurance that practices installed based on the sale of nutrient credits deliver the intended performance. The development of enforcement and verification mechanisms should be sensitive to the need to not hinder the development of a robust marketplace.

5. **Infill Development.** Loads from new development inside Targeted Growth and Revitalization Areas must be offset as part of Maryland's commitment to account for growth under the draft strategy. Redevelopment inside Targeted Growth and Revitalization Areas will not require the purchase of offset credits for stormwater because current regulations generally ensure that post-development stormwater load will be smaller than the pre-development load. To the extent development in Targeted Growth and Revitalization Areas is served by wastewater treatment plants that have sufficient capacity under their nutrient caps, no wastewater offset would be required. To the extent wastewater or stormwater offsets are needed in Targeted Growth and Revitalization Areas, credits can be purchased anywhere in the state, helping provide the most cost-effective offsets. Some stakeholders suggested that while redevelopment should not be subject to the same offset requirements as development occurring outside a Targeted Growth and Revitalization Area, some consideration should be given to a redevelopment project's impact.

Sustainable Growth Commission: Watershed Implementation Plan Workgroup

Compiled Comments on proposed Growth Offset Policy

July 10, 2012

1,000 Friends of Maryland

Thank you for the opportunity to review the proposed WIP Growth Offset Policy. 1000 Friends of Maryland strongly supports the policy as drafted. We encourage the department to move forward with implementation swiftly and aggressively so local efforts to implement the Sustainable Growth Act (SB236) and the WIP proceed concurrently.

To meet bay restoration goals, Maryland's TMDL process must fully address existing and future growth. It is clear that if all other sources of pollution are reduced or eliminated the Bay will continue to degrade because of the increase pollutant loads from development. Runoff from urban and suburban lands is the only source of pollution in the watershed that is still increasing.[1] In fact, in 2007 the Environmental Protection Agency found that increased pollution loads from continued development were outpacing pollution reductions from all other sectors combined.[2]

To reverse this startling trend, new development must fully account for its pollution loads. We agree that the offset requirement must correspond to the "smartness" of the development, and would oppose efforts to decrease the offset obligation for large lot, rural development. In addition, we support requiring no offset for redevelopment or wastewater discharged to a WWTP operating below its nutrient cap, and requiring all other development to offset 100% of the post-development load.

Footnotes:

[1] Chesapeake Bay Program, http://www.chesapeakebay.net/landuse_urbansuburban.aspx?menuitem=19557, last accessed 7/25/10.

[2] Environmental Protection Agency, "Development Growth Outpacing Progress in Watershed Efforts to Restore the Chesapeake Bay," September 10, 2007.

Chesapeake Bay Foundation

MD Draft Offset Policy – Initial Comments from CBF. The following is not a formal position or position statement and is intended only to facilitate the work of the Maryland Sustainable Growth Commission.

- CBF believes the policy should require offsets at a ratio of at least 2:1 outside of Priority Funding Areas.
    - 2:1 is consistent with the state's Phase I and Phase II WIP

    - Current 1:1 proposal would require a smaller offset per acre for harmful sprawl development, suggesting the policy is generally not strong enough and potentially could result in a disincentive for smart growth projects

- CBF supports the use of EOS loads as most protective of local water quality, and to facilitate a straightforward and equitable offset policy across the state.

- CBF supports the use of a uniform baseline site condition for calculating loads. We would oppose a policy that employs existing land use/site conditions as the baseline.

    - Existing site conditions are not reflective of reduction requirements under the WIP

    - The use of existing site conditions could accelerate the loss of farmland to sprawl

- The policy must require offsets from all types of development, not just residential loads.

- Offsets must be permanent.

    - VA requires permanent offsets

    - Easements and/or covenants should be required where the BMP cannot be acquired in fee simple.

    - Endowment/bond/escrow for ongoing maintenance should be required.

    - Local governments should have tax/lien authority on development to recover costs if escrow is insufficient or practice is terminated.

- CBF opposes a "fee-in-lieu" option for offsets.

    - Wetland fee-in-lieu programs have a generally poor track record

    - Offsets are already a "fee-in-lieu"

    - Would remove local government responsibility to manage offset capacity wisely

    - No guarantee that these offsets will be completed at the price paid by the developer

    - If offsets aren't available, how would the fee-in-lieu get spent and pollution reduced?

    - Would concentrate offsets in large regional banks, potentially endangering local WQ

- We remain unconvinced that N offsets will adequately address P and S. Without proof, we recommend a separate offset for P/S

    - VA based stormwater offset reg on P, indicating they thought THAT was protective!

- CBF appreciates the value of uniform, statewide loading numbers, and support the use of uniform rates as the starting point; however, we recommend that a state-sanctioned site-level "modifier" formula be included that allows for:

- Site-specific innovation and best management practices to prevent and minimize loads prior to utilizing offsets;
- Consistency with basin-specific trading areas and factors;
- Consistency with agricultural "baseline" formulas.

- We oppose a generic, private-sector "alternative calculation" option.

Chester River Association

On behalf of the Chester River Association I want to thank you for the opportunity to comment on this proposal and believe that you have made an important contribution toward the goal of providing for sustainable development in Maryland. In this regard I have two relatively minor comments and one major one:

1. On slide # 6, "Calculation of Post-Development N Loads," you have collapsed direct loads into two categories, Waste Water and Storm Water. As the TMDLs and WIPs typically break this into three categories; Waste Water Treatment Plants, Septic Systems, and Storm Water; I would suggest that you follow the typology already established in the TMDLs.

2. On slide # 7, "New Growth, Pounds to Offset," you have indicated widely differing offset requirements but failed to provide the basis for those #s. While I agree with you that we want to incentivize smart growth and higher density development, I believe it is dangerous to make it appear that you are basing the offset ratios on the desire for smart growth rather than on the demonstrated impacts on water quality. The public needs to understand that this program is based on good science and where we have a scientific basis for these ratios we should show it. – Good Public Policy Requires Transparency –

3. On slide # 12, "Trading Geographies," the current draft is rather confusing and appears to impose a constraint, limiting offsets to within the same county, which is not required by either State or Federal law. More importantly, I don't believe that there is any scientific basis for such a requirement and it may impose significant additional costs. If for example, new development in the town of Chestertown (in Kent County, Maryland) should require an offset, there is really no scientific basis for outlawing an offsetting Nitrogen reduction from just two miles upstream on the opposite side of the Chester River in Queen Anne's County, Maryland. I assure you that our fish, crabs and oysters (wonderful as they may be) cannot tell the difference between a Kent County nitrogen reduction and a Queen Anne's County reduction. Furthermore, they really can't tell the difference between an offset costing $5/pound (possibly from Switchgrass) and one costing $500/pound (from additional storm water retrofits).

While trades involving two or more counties could impose some administrative burden, any additional costs involved could be paid by the purchaser/aggregator and that should not in itself be an insurmountable problem. Both counties will, of course, still be subject to the regulations of MDE and DNR.

Given the current political climate, there is a constant danger that the public may reject our water quality management strategy because of the high costs involved and we must, therefore, be careful to minimize the cost of achieving and maintaining our environmental goals wherever possible. – Sustainable Environmental Protection Requires Attention to Cost-Effectiveness –

Maryland Association of Counties

The Maryland Association of Counties (MACo) offers the following comments concerning the proposed conceptual framework for growth offsets:

- *Simplicity*: Any offset program must be simple to understand and administer. MACo remains concerned that the complex monitoring and enforcement duties of the proposed offset program will pushed onto the county governments. MACo and the counties would oppose the imposition of another unfunded mandate and the State should be responsible for the .

- *Offset Percentage*: Achieving a 1:1 offset will be challenging in many circumstances but should be considered as a baseline requirement for development outside of target growth areas IF adequate flexibility exists for achieving such an offset. For flexibility to exist, a broad range of acceptable offset practices must be established, including a robust and practical nutrient trading program. A fee-in-lieu program should also be considered. MACo opposes establishing an offset requirement greater than 100%.

- *Calculation of Nitrogen Loads*: The offset should be based on property's pre-existing nutrient load, not the post-development load. Further reductions under the property's pre-existing nutrient load should be encouraged through a system of credits and nutrient trading. Additionally, mobile emissions and vehicle miles traveled (VMTs) loading should not be part of the post development load calculation. Instead, mobile emissions should be targeted more directly and not as part of the proposed offset program.

- *Redevelopment*: While redevelopment should be encouraged and not be subject to the same offset requirements as development occurring outside a targeted growth area, MACo is concerned about a blanket exemption. Certain redevelopment projects can significantly increase nutrient runoff in a given area and there should be some consideration with regards to a redevelopment project's impact.

- *Permanency of Offsets*: Mandating that an offset be "permanent" is unrealistic and presents significant tracking and logistical challenges. Preserving land from development through a perpetual easement or similar restriction is the only practical and cost-effective way of ensuring that an offset is "permanent." Other discussed offsets should be viewed as having a short-term or long-term effect. Short-term effects should be avoided and long-term effects should be promoted.

Maryland Farm Bureau

Although at this point the accounting for growth scenarios tend to have more of a specific impact on other constituents, the ag community is sure to be impacted directly through the nutrient trading programs and indirectly through economic impact to rural areas as a result of development (residential and commercial) limitations. Having said that we do have some thoughts regarding the proposals.

- Page 9 of the PowerPoint presentation made to the workgroup dealt with "Jobs, Population and Load". The full SGC should be well briefed on what, if any, policy implications the numbers in that chart would have regarding state economic development assistance to rural areas.
- With regard to agricultural nutrient offsets, discussions of any 3rd party enforcement/verification cause great concern to the ag community.
- The cost per pound of nitrogen "removed" from all sectors/sources should be clearly laid out for the full SGC as well as the general public. If estimates show that it will cost $196/lb of N removed (tradable credit essentially) people need to see that to enable sound policy decisions.

Maryland State Builders Association

1. Simplicity AND accuracy.

For many projects, a simple calculation (HH X loading rate) is most appropriate. The loading rates for the simple calculation method (slide 7) need to be divided into 2 categories, above the fault line and below the fault line, in recognition of the lower delivered loads above the fault line. Applicants should have the option to undertake an advanced calculation for their project if they believe their loads are different.

2. Offset should be based on increases over the parcel baseline, not 100% of post-development.

The restoration of the bay is predicated upon improving technologies and needs to accommodate the profit motive as an incentive to drive reductions by all sectors, especially developers. Developers should have the option to undertake a calculation to measure the relative change of loading from pre and post developed condition and allow projects that reduce loads to below the parcel's TMDL allocation to trade those credits. This will incent developers to find low cost, effective solutions and will drive loading reductions.

3. Offset should be based on delivered load, not edge of stream.

We should be looking at delivered loads, not edge of stream loads.

4. Need a fee in lieu option.

In is not possible to evaluate the costs to housing and jobs without a cost per pound of reduction. Further, there isn't a supply to meet the demand presumed in 6 months and farmers are concerned about meeting their baseline. The State should set a fee in lieu option similar to other programs and States.

5. Infill, other Smart Growth type development should not require offset.

The offset program will increase permitting complexities and project costs. Areas targeted for growth, including infill, should not be required to provide offsets.

6. What about other land uses? Mixed Use? Commercial? Schools? Parks? Etc?

How are other land uses required to offset their loads? All land uses need to be considered.

Maryland State Builders Association Response to July 16, 2012 Draft WIP Workgroup Summary Comments and Recommendation Memo

Summary Comments

1. **Offset Ratios.** *The determination of ratios should not be made until the cost per pound of Nitrogen is established. Based upon the latest offset calculator issued by MDE in conjunction with the costs/pound of Nitrogen from North Carolina's program, the cost to consumers will exceed $15K per household. (Suggest that the fastest way to establish the cost is to create a fee-in-lieu option) Encourage the Commission to hold on evaluating the ratios until the costs are known.*

2. **Offset Permanence.** *How is the "long-term impact of the development activity" defined? Is it the annual load times # of years? If so, how many years? What methodology do we use to determine annual load? What does "Practices should be permanent" mean? Is this suggesting an easement or covenant? If so, what are the terms? What entity is the landowner entering into an agreement with? What is the scope of the "administrative mechanisms"? With septics, we've found that the ratio of local staff resources needed to execute septic conversions is high and we would expect stormwater to be even higher. The number of SW facilities and BMPs could be orders of magnitude greater than the number of septic conversions, thereby creating an enormous public administrative responsibility.*

3. **Simplicity.** *Agreed – keep it simple. Any efforts to "ensure the public understands the need to prevent pollution" should be credited as a reduction.*

4. **Cost estimates.** *Absolutely. This information is fundamentally necessary for this decision.*

5. **Fee-in-lieu.** *Actually, both are needed. In order to create a sufficient supply of credits sooner to meet future demand and to avoid de facto building moratoria, a centrally administered fee in lieu program is needed and efforts need to be made to incent potential suppliers of credits. The wetland fee in lieu option has not been a failure. Wetlands have been created, maintained and enhanced with this program while developers, who were required to prove that on-site mitigation was not environmentally feasible, were able to move forward. There are many examples where Forest Conservation fee in lieu has been very successful. Perhaps the fee in lieu could be directed to local MS4s (where applicable) to help fund their programs. Maryland has a rich history of using FIL to execute environmental policies.*

   The market for potential suppliers needs to be opened up beyond the ag sector. Any landowner should have the ability to generate a supply of marketable/tradable offsets.

6. **Trading Geography.** *The greater the geography for potential suppliers, the greater the market activity will be. As we have found with forest conservation, which is generally limited to within the County, there is a very low margin once all the necessary resources are utilized to develop, market and sell the credits. We should open the market to two sectors within the State – above the fault line and below the fault line – and require trading within those areas.*

7. **Loading Rates.** *Delivered loads should be utilized for the same reason as we have greater protection for critical areas – the actual impact to the Chesapeake Bay is different for each subwatershed. The farther the activity is from the Chesapeake Bay, the lower the effective impact of the nutrient will be through natural processes. Much of the Nitrogen reduction happens instream (between the "edge of stream" and "delivered load"), which is already factored into the Bay TMDL. Using EOS exceeds the already ambitious goals of the TMDL. If standard loading rates are utilized, at a minimum, create two rates for each use; one for below the fault line and one for above the fault line, generally around Interstate 95.*

8. **Phosphorus and Sediment Offsets.** *Recent actions in Maryland to reduce these sources include Phosphorous/Fertilizer legislation, New E/SC Regulations/Grading Limit/Stabilization Requirements and Agricultural Nutrient Management provisions. The development industry research has shown a negligible impact of P and TSS from the construction industry.*

<u>Comments Already Addressed in Draft or Existing Policies</u>

1. **Post Development Load/Land Use Change.** *The purpose of the TMDL is to reduce loads to specified levels – the TMDL. We have other programs and standards to "preserve active farmland" and the government should not be expected to influence mentalities. The development of the TMDL is predominantly a mathematical/science exercise. The execution and documentation of the TMDL, in order to be effective, needs to also be mathematical/science based. If a farmer is responsible for bringing his farm up to baseline conditions before he can sell, a non-farmer landowner should be able to sell credits if he is above the baseline. Developers and builders are increasingly interested in developing properties (new or redevelopment) in a way that optimizes nutrient reductions ONLY IF they can simultaneously create a tradable commodity in the form of an offset. Credit generation should be an option to help housing remain a viable business in MD.*

2. **Applicability to Development Types.** *What is the triggering mechanism? Land disturbance? Preliminary Plan? Projects that have filed Preliminary Plans should be grandfathered.*

3. **Third Party Enforcement/Verification.** *Agreed, but don't let this slow down the process of creating supply.*

4. **Infill Development.** *This will adversely impact non-redevelopment infill projects and the premises upon which this argument is based is flawed. First, redevelopment is not required to treat 100% - only 50%, whereas new development is required to treat 100%, the first 1" of which using ESD. Infill or at*

least already-developed infill (defined as less than 40% impervious and 75% surrounded by developed properties) should both be exempted from offset requirements.

NAIOP Maryland Chapters – The Association for Commercial Real Estate

Development Nitrogen Offsets – Preliminary Comments on Draft MDE Framework

Dear Mr. Costello:

On behalf of NAIOP's 700 member commercial real estate companies I am writing with preliminary comments on the development offsets framework outlined in the May 30, 2012 presentation to the growth commission's WIP workgroup and MDE's Accounting for Growth Discussion Draft dated July 12, 2012. We appreciate your interest in working with the commercial real estate industry on matters of policy and technical implementation of the TMDL. Our initial comments and questions related to the offsets framework are below.

1. Development Offset Requirements Should Be Limited To The Difference Between The Pre and Post Development Loading - By requiring that 100% of the post development loading be offset, the framework would require property owners to mitigate not only any additional loading resulting from the development activity but also fully offset all existing Nitrogen loads. This approach would force development to carry a disproportionate share of the cost and operational responsibility for reducing existing nitrogen load. Future Nitrogen loading from development parcels should be net neutral but not required to provide a net zero loading.

2. Reductions In Loading Resulting From Actions Taken By The Property Owner Should Be Credited To The Property Owner - While development should fully offset "increased" loadings, government should not be permitted to require net reductions in the baseline/pre development loading as a condition of development approval and then apply some or all of those Nitrogen reductions to MS4 or other load reduction responsibilities for other sectors. Also, while we see a role for an uncertainty factor or reserve to account for variations in the performance of credited practices, the nutrient trading framework should not permit a set percentage of traded credits to be discounted or retired and claimed as a reduction in load by other sectors.

3. Trading Policies Should Be Reevaluated and A Liquid Market in Place Before Offsets are Required - We believe it will be essential for urban developers to have access to a large, diverse and liquid trading market before development offsets are required. The current nutrient trading framework has not shown it is capable of generating significant credits nor does it seem to be consistent with the draft offsets framework. Issues important to the nutrient trading program should be clarified or reconsidered. For example, it is our understanding that permanent nutrient trades in Virginia are almost exclusively achieved through the conversion of crop land to forest buffers, yet Maryland's nutrient trading policies contain language that seems to discourage or prevent agricultural land conversions.

4. Availability of Offsets and Impact on Planned Growth - It is of concern to us that not enough information is known about the extent to which stormwater and wastewater offsets and credits will be needed in key growth areas and how the, "scarcity of offsets" predicted in MDE's May 30 PowerPoint

will serve as a deterrent to future growth area development. In the instances where wastewater or stormwater offset capacity are limited how does this policy or existing law direct the allocation of capacity? If, as in the discussion draft example, a project approval necessitates amendment to a WWTP discharge permit, what is the process for this to be done on a project by project basis? An inventory and analysis of offset supply versus demand from planned growth should be conducted and the overall influence on the rate, location and extent of planned growth should be presented.

5. Loading Rates Should be Explained and Examples for Commercial Development Added to the Offset Calculator – Loading rates listed on the offset calculator including their relationship to the CBP model loading numbers should be explained. Examples related to commercial development should be added including an explanation of how mobile emissions offset requirements are allocated between residential and commercial uses.

6. Effective Date and Grandfathering – As the capability of the nutrient trading program and the extent of the offset requirements become better understood an appropriate effective date should be set. If an offset program is finalized the requirements should not be applied to projects with preliminary plan approval or to projects seeking renewal of coverage under an existing permit.

7. Offsets Should be Based on Delivered Loads - Edge of stream buffer or edge of field loading rates should never be used unless a location ratio or other factor is applied to account for the actual load delivered to the resource.

8. Fee in Lieu – A fee in lieu of offsets that funds equivalent nutrient reductions should be part of the program.

9. Controlling Mechanism to Reduce Overlap of TMDL Related Taxes Fees and Regulatory Programs is Needed - Our member companies are willing to contribute their fair share toward TMDL compliance and to go beyond that level under certain circumstances but as an industry we believe it is important for some controlling mechanism to eliminate overlap between the fees and regulatory mandates that can result in a disproportionate burden on individual property owners. For example, how do the mobile emissions offsets under the TMDL relate to the vehicle miles traveled air offsets associated with MDE's proposed greenhouse gas reduction strategies or, how will a new development that fully offsets stormwater and wastewater Nitrogen loads be treated under the stormwater utility and Bay Restoration Fee programs?

Thank you for your consideration. NAIOP's member companies look forward to working with you throughout TMDL implementation.

Sincerely;

Tom Ballentine, Vice President for Policy

<u>South River Federation</u>

- In the objectives, the goal of the program should not be to "minimize pollutant load from new growth" but to "eliminate" it, per the terms of the TMDL.

- I'm assuming the "no offset" for redevelopment means no stormwater offset, but it is theoretically possible that a redevelopment project could significantly expand its wastewater load, and that should still need to be offset. In terms of re-development, it's still not clear to me whether a developer can get credits for going beyond regulatory compliance (which I think they should be able to).
- I don't think localities should be precluded from assessing offsets to new development on WWTPs. Though they may have permit capacity, expansion at the WWTP is going to require reductions, which could likely be more costly, in other sectors.
- There should be some sort of protection ratio associated with the offsets, whether it be 1.5:1 or 2:1 to ensure no degradation, and perhaps some improvement, in local water quality.

Maryland Chapter
7338 Baltimore Avenue, Suite 111
College Park, MD 20740-3211

October 1, 2012

Paul Emmart
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore MD 21230-1718

Re: Accounting for Growth Draft Regulations

Dear Mr. Emmart:

The Maryland Chapter of the Sierra Club appreciates the opportunity to comment on the Accounting for Growth Draft Regulations. The Maryland Sierra Club has 14,000 members and over 30,000 supporters in the state of Maryland. Water protection and restoration is one of the organization's two key priorities.

The Maryland Department of the Environment (MDE) has shown great leadership in advancing the pollution reduction strategies of the Phase I Watershed Implementation Plan. While we are impressed with MDE's commitment to moving forward, the state needs to ensure that the regulations currently being promulgated are designed to achieve a healthy Chesapeake Bay without further degrading local rivers and streams. We would lose the public's trust in Chesapeake Bay Restoration if we attempted to clean the Bay at the expense of local water quality. Regrettably, we have doubts that the Accounting for Growth draft regulations will effectively protect local waters from the impact of new, high-polluting, sprawling development.

Further more, we believe that, until we can properly measure the cost of implementation and evaluate the success of the market, it is unclear if nutrient trading will be environmentally or economically beneficial for the Bay. These comments are intended to advance the best regulatory structure possible, should a trading program move forward, and should not be seen as an endorsement of any particular program.

We are disappointed that virtually none of our recommendations have been included in the draft Accounting for Growth regulations. We urge MDE to make the following changes in the final Accounting for Growth Regulations.

1. Local Water Quality

A commitment to protecting local water quality must be explicitly stated in the final Accounting for Growth regulations. Trades that would harm any water body segment should not be allowed. Indeed, trades that merely put a water body at increased risk of water degradation should be prohibited. There must be a standard process for evaluating proposed trades to ensure that they do not impact local water quality, including a standard process for evaluating proposed trades involving unregulated stormwater. According to the EPA guidance on trading, "Offsets must be

prohibited where such use would cause or contribute to exceedances of water quality standards, TMLDs, waste load allocations (WLAs) or load allocations (LA) in the affected receiving waters, locally or elsewhere." Offsets must not cause an impairment of existing or designated uses.[1] To protect local water quality, an "upstream reduction policy" should be in place, where credit sellers are located upstream of credit buyers.

The draft regulations state that for calculating the number of credits needed as offsets, EOS loads will be converted to delivered loads. To adequately protect local water quality, EOS loads should be used to calculate the number of credits needed not delivered loads, which would endanger local water quality.

2. Trading Ratios

We have previously recommended that transactions that rely on credits generated by BMPs should require at least a trading ratio of 2:1 as envisioned in the state's Phase I and Phase II WIPs. Despite our recommendation, the draft regulations stipulate a 1:1 trading ratio. The 1:1 trading ratio fails to offer protection against variations in BMP performance and inaccuracies in model efficiencies. To account for these issues, the offset regulations should include a 2:1 uncertainty ratio. In fact, the EPA Trading policy states that "the use of greater than 1:1 trading ration between nonpoint and point sources" is an essential element of a credible trading program. In addition, allowing for a 1:1 trading ratio outside of PFAs could create a disincentive for smart growth projects and endanger local water quality.

3. Offsetting All Pollutants

We have previously urged MDE to offset all pollutants, including nitrogen, phosphorus and sediment. The draft regulations state that offsets are only required for nitrogen. We recommend that MDE include offsets for nitrogen as well as phosphorus and sediment in the draft regulations.

We are unclear on how this system will sync with the MDA Marketplace, which measures and trades phosphorous and nitrogen separately.

4. Transparency, Verification and Enforcement

As stated previously, all aspects of the offset trading program must be transparent, and the practices must be verifiable and enforceable.

Transparency shall include public access to records (online and in paper copy) that demonstrate compliance with conditions of certification. Rates of inspections or third-party verification should be made available, including information concerning the types of offsets purchased, how many offsets were verified, and how many were in compliance.

An independent third party shall verify practices under precisely prescribed conditions. A process must be in place to verify that the offset credit was and continues to be generated, via monitoring, inspection, reporting, or some other mechanism, including articulating the frequency of on-site or other monitoring and the entity responsible for conducting monitoring or inspections.

[1] EPA Trading Policy F.5.

Point sources must not be allowed to generate credits by reducing discharges that are covered by that source's NPDES permit. Credit generation from point sources should be measured by actual discharge, not by pollution limits in a NPDES permit.

Any verification mechanism shall satisfy MDE's statutory obligation to verify all trades certified as offsets, including those that the Department of Agriculture (MDA) may supervise.

5. Fee in Lieu

We commend MDE for excluding a fee in lieu option for large-scale development. As MDE moves forward in finalizing the regulations, we strongly urge the Department to hold the line on fee-in-lieu. If this option is made available for small-scale or redevelopment projects, the process shall remain transparent, verifiable and enforceable. If developers are allowed to pay a fee instead of purchasing credits from a BMP, the fee must capture the real cost of the implementing credit generating practices. All "fees in lieu" should be phased out after the first several years of the program, and all in lieu fees should be used promptly as part of a program designed to bring the affected waters into compliance with water quality standards.

6. Grandfathering

The regulations shall include a reasonable grandfathering date of December 31, 2013, for new development. The Discussion Draft proposes to grandfather new development until the end of 2014, and in recent public workshops, the Department has indicated an interest in potentially applying grandfathering provisions from the stormwater management regulations to the offset policy — regulations that have dates extending as far as 2017, nearly halfway through the Bay cleanup effort. Maryland and its local jurisdictions simply cannot afford to pay for the additional burden of pollution from new development, and, as such, an extended grandfathering date is unacceptable.

7. Offsets for Hook-Up to Waste Water Treatment Plants

Local governments shall have the option of requiring offsets for new hook-ups to wastewater treatment plants, even if those plants have surplus capacity under their permit. The proposed policy generally supports infill development by not requiring developers to offset their loads if they connect to an existing, under-utilized treatment plant. But there may be instances where a local government wants to incentivize specific development through selective application of an offset requirement.

8. Clarification of Existing "Trading Rules"

Core components of any trading policy should be codified in regulation or legislation. In meetings with MDE and MDA, we have expressed concern that referencing the existing "Draft Nutrient Trading Policy" creates uncertainty about the certainty and trust in these policies. Given the debate over issues such as trading ratios and geographic regions, it would be problematic to change these policies with out a legally enforceable process.

Please note that while these general principles are specifically intended to inform the development of Maryland's offset policy, they should also be applied to any policies related

to trading for permit compliance, or any further offset policies developed regarding offset providers, such as agricultural BMPs.

In addition, as the Agency responsible for enforcing the Clean Water Act, we expect MDE will continue to be responsible for the transparency, validation, and enforcement of all trading, including agricultural BMPs used for trades.

Maryland has made great strides in meeting our clean water goals under Chesapeake Bay restoration. A strong Accounting For Growth policy is key to effectively neutralizing the impact of new growth in Maryland on the Chesapeake Bay, and achieving the ultimate goal of a restored Bay.

We appreciate your continued leadership and commitment to the waterways of Maryland.

Best wishes,
Claudia Friedetzky
Conservation Representative
Maryland Chapter of the Sierra Club

NAIOP
MARYLAND CHAPTERS
THE ASSOCIATION FOR COMMERCIAL REAL ESTATE

July 17, 2012

Mr. David Costello, Deputy Secretary for Policy and Planning
Maryland Department of Environment
1800 Washington Blvd.
Baltimore, Maryland 21230

Development Nitrogen Offsets – Preliminary Comments on Draft MDE Framework

Dear Mr. Costello:

On behalf of NAIOP's 700 member commercial real estate companies I am writing with preliminary comments on the development offsets framework outlined in the May 30, 2012 presentation to the growth commission's WIP workgroup and MDE's Accounting for Growth Discussion Draft dated July 12, 2012. We appreciate your interest in working with the commercial real estate industry on matters of policy and technical implementation of the TMDL. Our initial comments and questions related to the offsets framework are below.

1. **Development Offset Requirements Should Be Limited To The Difference Between The Pre and Post Development Loading** - By requiring that 100% of the post development loading be offset, the framework would require property owners to mitigate not only any additional loading resulting from the development activity but also fully offset all existing Nitrogen loads. This approach would force development to carry a disproportionate share of the cost and operational responsibility for reducing existing nitrogen load. Future Nitrogen loading from development parcels should be net neutral but not required to provide a net zero loading.

2. **Reductions In Loading Resulting From Actions Taken By The Property Owner Should Be Credited To The Property Owner** - While development should fully offset "increased" loadings, government should not be permitted to require net reductions in the baseline/pre development loading as a condition of development approval and then apply some or all of those Nitrogen reductions to MS4 or other load reduction responsibilities for other sectors. Also, while we see a role for an uncertainty factor or reserve to account for variations in the performance of credited practices, the nutrient trading framework should not permit a set percentage of traded credits to be discounted or retired and claimed as a reduction in load by other sectors.

3. **Trading Policies Should Be Reevaluated and A Liquid Market in Place Before Offsets are Required** - We believe it will be essential for urban developers to have access to a large, diverse and liquid trading market before development offsets are required. The current nutrient trading framework has not shown it is capable of generating significant credits nor does it seem to be consistent with the draft offsets framework. Issues important to the nutrient trading program should be clarified or reconsidered. For example, it is our understanding that permanent nutrient trades in Virginia are almost exclusively achieved through the conversion of crop land to forest buffers, yet Maryland's nutrient trading policies contain language that seems to discourage or prevent agricultural land conversions.

U.S. Mail: P.O. Box 16280, Baltimore, Maryland 21210 **Phone:** 410.977.2053 **Email:** naiop.md.tom@verizon.net

4. **Availability of Offsets and Impact on Planned Growth** - It is of concern to us that not enough information is known about the extent to which stormwater and wastewater offsets and credits will be needed in key growth areas and how the, "scarcity of offsets" predicted in MDE's May 30 PowerPoint will serve as a deterrent to future growth area development. In the instances where wastewater or stormwater offset capacity are limited how does this policy or existing law direct the allocation of capacity? If, as in the discussion draft example, a project approval necessitates amendment to a WWTP discharge permit, what is the process for this to be done on a project by project basis? An inventory and analysis of offset supply versus demand from planned growth should be conducted and the overall influence on the rate, location and extent of planned growth should be presented.

5. **Loading Rates Should be Explained and Examples for Commercial Development Added to the Offset Calculator** – Loading rates listed on the offset calculator including their relationship to the CBP model loading numbers should be explained. Examples related to commercial development should be added including an explanation of how mobile emissions offset requirements are allocated between residential and commercial uses.

6. **Effective Date and Grandfathering** – As the capability of the nutrient trading program and the extent of the offset requirements become better understood an appropriate effective date should be set. If an offset program is finalized the requirements should not be applied to projects with preliminary plan approval or to projects seeking renewal of coverage under an existing permit.

7. **Offsets Should be Based on Delivered Loads** - Edge of stream buffer or edge of field loading rates should never be used unless a location ratio or other factor is applied to account for the actual load delivered to the resource.

8. **Fee in Lieu** – A fee in lieu of offsets that funds equivalent nutrient reductions should be part of the program.

9. **Controlling Mechanism to Reduce Overlap of TMDL Related Taxes Fees and Regulatory Programs is Needed** - Our member companies are willing to contribute their fair share toward TMDL compliance and to go beyond that level under certain circumstances but as an industry we believe it is important for some controlling mechanism to eliminate overlap between the fees and regulatory mandates that can result in a disproportionate burden on individual property owners. For example, how do the mobile emissions offsets under the TMDL relate to the vehicle miles traveled air offsets associated with MDE's proposed greenhouse gas reduction strategies or, how will a new development that fully offsets stormwater and wastewater Nitrogen loads be treated under the stormwater utility and Bay Restoration Fee programs?

Thank you for your consideration. NAIOP's member companies look forward to working with you throughout TMDL implementation.

Sincerely;

Tom Ballentine, Vice President for Policy
NAIOP Maryland Chapters -*The Association for Commercial Real Estate*

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MARYLAND CHAPTERS
THE ASSOCIATION FOR COMMERCIAL REAL ESTATE

October 1, 2012

Mr. David Costello, Deputy Secretary for Policy and Planning
Maryland Department of Environment
1800 Washington Blvd.
Baltimore, Maryland 21230

Accounting for Growth / Growth Offsets Policy – Commercial Real Estate Comments on Public Review Draft

Dear Mr. Costello:

On behalf of NAIOP's 700 member commercial real estate companies I am writing with comments on the public review draft Accounting for Growth framework.

We appreciate MDE's interest in working with the commercial real estate industry on matters of policy and technical implementation of the TMDL and appreciate the time spent over the last several months discussing issues of importance related to the growth offsets policy. We are encouraged by progress made toward establishing a fee in lieu and using a consistent delivered load calculation for both offset requirements and nutrient trades. We are hopeful that continued progress can be made on a significant number of remaining concerns. The industry's comments and questions related to the offsets framework as it stands today are below.

1. **Development Offset Requirements Should Be Based on The Difference Between The Pre and Post Development Loading** – The draft framework exceeds EPA requirements by requiring that 100% of the post development loading be offset. This would require development applicants to mitigate not only any increased loading resulting from the development activity but also combine on and offsite mitigation to fully offset all existing Nitrogen loads so that development parcels load at a "net zero." This approach would force the development or growth sector to carry a disproportionate share of the cost and operational responsibility for reducing existing nitrogen loading; loading that is not caused by the growth sector and is not required by EPA to be reduced to net zero. This approach shifts pollutant reduction responsibilities from the MS4 / urban stormwater sector to the growth sector contradicting MDE's policy of designing Maryland's Watershed Implementation Plan to require proportionate reductions from each of the respective TMDL sectors. This portion of the policy drastically increases the cost of compliance for development projects and increases demand for offsite credits at a time when there are few if any approved trading opportunities.

2. **Development Property Should be Permitted to Generate Tradable Credits When Reducing Existing Loads** – Current policy permits wastewater treatment plants and agricultural operators to generate tradable nutrient credits when reducing loads below levels necessary to meet the TMDL but the draft growth offset policy does not allow development property to generate credits in the same way. To the contrary, the growth offsets framework would require the pre development loading to be fully neutralized as a condition of development approval without generating tradable credits. In prohibiting the generation of credits by development parcels the policy would implicitly allow Nitrogen reductions achieved by development activity to be applied to the load reduction responsibilities of the MS4 / urban stormwater sector. This outcome would be inequitable and we recommend that development activities be allowed to generate nutrient credits beginning at the point that the

U.S. Mail: P.O. Box 16280, Baltimore, Maryland 21210 **Phone:** 410.977.2053 **Email:** naiop.md.tom@verizon.net

predevelopment load has been reduced by the amount necessary to meet the TMDL load reductions in the sub watershed where the parcel of land is located. Under this scenario development activity would be treated in a manner consistent with credit generation opportunities in other sectors and MS4 jurisdictions could obtain credit toward the separate impervious surface reduction requirements in their EPA permits.

3. **The Regulation Unnecessarily Inflates Development Offset Requirements in Two Ways** – As you know, new development projects are required to meet current stormwater management regulations by controlling post-development stormwater runoff to a condition equivalent to a healthy forest. The loading rate for forest in both the bay model and the draft growth offset policy is 3 lbs. of Nitrogen per acre yet the growth offset policy assumes that loading rates from developed land using state of the art stormwater management practices will be 7 lbs. per acre. This assumption overstates post-development runoff and inflates the number offsets required. Second, the assumed Nitrogen loading rates for land prior to development in MDE's growth offset calculator are higher than the loading rates MDE instructed MS4 jurisdictions to use when calculating urban nitrogen loading and their reduction responsibilities; 10.85 lbs. per acre for the MS4 calculator vs. 15.34 in the growth offsets calculator. The use of a higher pre-development loading rate for development parcels located in MS4 jurisdictions inflates the load reduction responsibilities imposed on development projects and has not be adequately explained by MDE. The assumed pre-development loading rate used for MS4s and development parcels subject to the growth offsets policy should be the same.

4. **Effective Date and Grandfathering Should Recognize the Cost and Complications of Offsets** – The impact if this policy on project design and added cost should not be underestimated and necessitates a reasonable transition period. Provided that a trading market and/or fee in lieu are in place, offset requirements should not be applied to projects with an approved preliminary plan or NPDES coverage as of December 31, 2013. Projects that begin construction during that time frame have been financed and are in engineering now. Even those that are following development of these regulations closely have little on which to estimate offset responsibilities or to base a compliance strategy.

5. **A Permanent Fee in Lieu Should be Operational Before the Effective Date** – A fee in lieu of offsets that funds should be in place prior to implementation and continued as a permanent part of the program. The fee per pound of Nitrogen should be set based on the most cost effective practices including the funding of annual agricultural practices such as cover crops. The current working formula bases the fee only on the cost of septic system replacement which is pound for pound more expensive than other practices likely to be funded by a fee in lieu program.

6. **Coordinating Offset Generation and Fees with Long Term Phased Development Must be Addressed** - An essential element to the fee in lieu as well as the offset program generally should be phasing the payment of fees and the generation of offsets with development phases. As currently written the policy requires advance purchase of installed and verified practices. This is not practical and would require offsets many years before any additional loading occurs.

7. **Trading Policies Should Be Reevaluated and A Liquid Market in Place Before Offsets are Required** - We believe it is essential for Maryland to have a large, diverse and liquid nutrient trading market before development offsets are required. Maryland's current nutrient trading framework has not shown it is capable of generating significant credits. In its current posture it isolates urban activities in a way that makes cost effective agricultural practices difficult or impossible to use as part of a compliance strategy. Maryland's program appears hampered by a dated framework, high barriers to entry for those wishing to utilize and generate credits and rules that increase the cost

of credits. Meanwhile Pennsylvania is reported to have certified more than 3 million Nitrogen credits and is auctioning them at $4 to $8 per pound while the most optimistic estimates under the Maryland program are more than $2,000 per pound.

While we are not suggesting the wholesale adoption of the Pennsylvania program, numerous issues hindering Maryland's nutrient trading program should be clarified and reconsidered and the reasons that our state program lags behind our neighboring states should be addressed. For example, it is our understanding that permanent nutrient trades in Virginia are almost exclusively achieved through the conversion of crop land to forest, hay to forest or pasture to forest, yet Maryland's trading policies contain language that seems to discourage or prevent agricultural land conversions. Preliminary surveys by the Maryland Department of Agriculture indicate 80% of future credit generation opportunities are annual practices such as cover crops, yet the state nutrient trading framework does not permit trading of annual practices.

Also, even though the TMDL already contains an uncertainty factor or reserve to account for variations in the performance of compliance practices, the nutrient trading framework still requires a percentage of traded credits to be discounted or retired as either an uncertainty factor or claimed "for the bay" as a reduction in waste load allocations by other sectors.

8. **Offsets Should be Based on Delivered Loads** - The July 12 Discussion Draft methodology indicates that the edge of stream load is what is required to be offset. However, we were told by MDE officials in September that a delivery factor will be provided for each of the segments, which will reduce the July 12 calculation and be used as the final offset requirement. We support using the delivered load, as clarified by MDE officials and the draft regulations. The TMDL is established and measured at the tidal edge of the Chesapeake Bay. The Nitrogen load generated by a parcel is reduced by a delivery factor depending on its proximity and distance to the Bay. In some cases, a pound of Nitrogen can be reduced by almost one-half by the time it reaches the Chesapeake Bay through denitrification, immobilization and other natural causes. By basing the offset requirement on the "edge of stream" load, the offset requirement is inflated and over-stated. Not only is this fundamentally unfair and scientifically flawed, it effectively penalizes properties that are farther from the Bay.

9. **Availability of Offsets, Demand for Offsets and Impact on Planned Growth Have Not Been Studied** - It is of concern to us that MDP and her sister agencies have not completed analysis about the extent to which stormwater and wastewater offsets and credits will be needed and available in key growth areas and how the, "scarcity of offsets" predicted in MDE's public outreach PowerPoint will affect future growth. MDE's estimates of ENR status and future capacity of waste water treatment plants has not been made publically available. These types of research tasks and other deliverables were rightly included in the WIP but are still yet to be completed.

10. **Loading Rates Should be Explained and Examples for Mixed Use Development Added to the Offset Calculator** – Loading rates listed on the offset calculator including their relationship to the CBP model loading numbers should be explained. Examples related to mixed use development should be added.

11. **Using the Definition of Redevelopment in the Stormwater Management Regulations is Too Narrow –** Basing the policy on the definition of redevelopment contained in the state stormwater regulations will expose growth area infill projects and projects that most would consider redevelopment to the full weight of these regulations. The regulation should be changed to exempt projects located in designated Priority Funding Areas.

12. **Definition of "Change in Land Use" is Overly Broad and Would Expose Already Improved Parcels to Offsets** – The August 27th draft regulation requires 100% offset of loading associated with a "change in land use" and defines change in use to be a change in the runoff characteristics of a parcel of land. We see few if any development activities even on already improved parcels that would not change the runoff characteristics of the property. We expect, and urge MDE to acknowledge in this policy, that development activity and the accompanying stormwater management regulations will improve runoff characteristics of a parcel of land. The change in use should be defined as activity that would move the parcel from one TMDL loading sector to another.

13. **Limiting Trading Geography Could Stifle Development in Growth Areas and Should be Reconsidered** – The current policy would severely limit trading options for projects located inside Smart Growth Priority Funding Areas but outside of Plan Maryland's Growth and Revitalization Areas. By limiting compliance options to those available within a county the policy could eliminate development and redevelopment where offsets are not available or are prohibitively expensive. Trading geographies should be expanded.

14. **Escalating Development Offsets to Four Times Post Development Loading As Penalty for Non Compliance in Other Sectors or States is Unreasonable** – The August 27th draft regulation contains a provision on the bottom of page five that increases the development offset requirement to four times the post development loading if Chesapeake Bay water quality standards are not met by 2026. This provision ignores the fact that development activities are by regulation improving existing conditions and would penalize development activities regardless of whether the failure to meet water quality standards is attributable to other sectors in Maryland or to out of state activities.

15. **Controlling Mechanisms to Reduce Overlap of TMDL Related Taxes, Fees and Regulatory Programs Such as the Forest Conservation Act are Needed** - Our member companies are willing to contribute their fair share toward TMDL compliance and to go beyond that level under certain circumstances but as an industry we believe it is important for some controlling mechanism to eliminate overlap between the fees and regulatory mandates that can result in a disproportionate burden on individual property owners. For example, the Forest Conservation Act will require the preservation and planting of forest on development projects while at the same time this growth offsets program will require that the 3 lbs. per acre of Nitrogen loading from that forest be offset by the developer as a further condition of development approval. We question how the mobile emissions offsets under the TMDL relate to the vehicle use based air offsets associated with MDE's proposed greenhouse gas reduction strategies and how a new development that fully offsets stormwater and wastewater Nitrogen loads will be treated under the stormwater utility and Bay Restoration Fee programs?

Thank you for your consideration of our views and we look forward to continuing work on these critical issues.

Sincerely;

Tom Ballentine, Vice President for Policy
NAIOP Maryland Chapters -*The Association for Commercial Real Estate*

January 2012

SENIOR SCIENTISTS AND POLICYMAKERS FOR THE BAY NUTRIENT TRADING SUBCOMMITTEE

Nutrient Trading

Preliminary Investigation: Findings and Recommendations

Chesapeake Bay Action Plan

Senior Scientists & Policymakers for the Bay

AUTHORS AND RESEARCHERS

Dr. William Dennison
University of Maryland Center for Environmental Science

Michael Helfrich
Lower Susquehanna Riverkeeper

Erik Michelsen
South River Federation

Richard Pritzlaff
Biophilia Foundation

Fred Tutman
Patuxent Riverkeeper

INTRODUCTION

A Nutrient Trading Subcommittee of the Senior Scientists and Policymakers for the Bay was convened to investigate nutrient trading for Chesapeake Bay. This document is a summary of this preliminary investigation and findings and recommendations.

The immediate issues concerning nutrient trading are apparent.
1) There are a variety of different definitions for nutrient trading being used by the Environmental Protection Agency and the different jurisdictional agencies implementing nutrient trading. These differences in definitions could lead to difficulties in administering nutrient trading programs and many of these comments and recommendations are designed to ensure that a rigorous and credible nutrient trading program would be achieved for the Chesapeake Bay watershed;
2) Nutrient trading is an emotive issue, and highly charged terms are often used to describe the virtues or the problems associated with nutrient trading; and
3) The use of nutrient trading for water quality issues is not well developed and there is a lack of data and case studies to support or refute assertions about nutrient trading. The fact that nutrient trading is complicated, emotive and data poor leads to the strategy in this document of beginning a process of creating an informed debate.

Overall, there are potential positive and negative aspects to nutrient trading:

On a positive note, nutrient trading promises to unleash free market forces; provide maximum flexibility for regulatory action; increase stakeholder support (including local watershed organizations and citizens); improve the political climate; provide a new source of revenue for compensating Best Management Practices, incentivize annual verification/certification of credit generating practices; and capitalize on previous trading successes in air quality.

On a negative note, independent, rigorous verification is difficult; ecosystem services other than nutrients need to be considered, those that can be measured and non-quantifiable co-benefits such as improved biodiversity conservation through increased wildlife habitat; nutrient trading could promote large organizations and corporations over more local, grass-roots organizations; environmental justice issues may ensue; and previous success in air quality trading may not translate to water quality.

If restricted to permanent offsets, and not annual credit purchases, it is possible that the credit market could be used to promote wise planning for future growth. By balancing incentives and deterrents for development within and outside of sewered areas, based on their relative impacts on the Total Maximum Daily Load, nutrient trading could promote growth scenarios that result in positive nutrient results. For example, the credits can be used as a deterrent for development in unsewered areas by establishing more stringent compensation ratios than in sewered areas. There are various ways that the market can

be manipulated to achieve nutrient reductions and better overall environmental outcomes, and this should be the goal of nutrient trading, rather than just providing ways to meet regulatory requirements.

We urge caution in developing a nutrient trading approach, recognizing that a nutrient trading system on this scale is unprecedented. Given the lack of supporting evidence for such an approach, we encourage policymakers move cautiously and that they carefully consider the following concerns. There will be only one opportunity to develop a credible nutrient market, and loss of credibility would be an extremely difficult set back to overcome. As this is an emerging management strategy, it will require scrutinized trial and error, with mid-course adjustments and modifications needed.

TEN CAVEATS AND RECOMMENDATIONS FOR CHESAPEAKE BAY NUTRIENT TRADING ARE THE FOLLOWING:

1) Nutrient trading is a relatively new and untested technique for pollutant reductions in waterbodies that makes assumptions regarding short and long term effects.
2) All efforts should be made to improve and then preserve local water quality.
3) Independent, rigorous, and transparent verification is essential.
4) A policy of net improvement credit is needed to account for uncertainties in non-point sources reductions and runoff variability.
5) Nutrient trading should not be used to maintain discharges at technology levels below industry standards.
6) Nutrient trading may create environmental justice issues by moving problems to disadvantaged areas.
7) Trading could benefit large organizations and corporations without protecting the interests of local waterways and grassroots entities.
8) The total impacts of nutrient trades need to be measured and adequate compensation provided.
9) Credited practices and the models used to calculate the amounts of credits awarded need to be standardized.
10) Growth allocations should be based on demonstrated pollution reductions in other sectors, not on speculative, proposed

RECOMMENDATIONS

1.) NUTRIENT TRADING IS A RELATIVELY NEW AND UNTESTED TECHNIQUE FOR POLLUTANT REDUCTIONS IN WATERBODIES THAT MAKES ASSUMPTIONS REGARDING SHORT AND LONG TERM EFFECTS.

The Environmental Protection Agency needs to provide vigilant oversight and frequent re-evaluation of jurisdictional trading methods. The successes of the Clean Air Act trading program to reduce sulfur emissions from point sources are recognized, however, the qualities of air emissions trading may not translate to discharges to waterbodies. Chesapeake tributaries are each unique, in a confined area, and mostly flow in a single direction. Each type of effluent or runoff to be traded has different characteristics, with many other constituents (including endocrine disrupting compounds) beyond the three common Total Maximum Daily Load (TMDL) related pollutants; nitrogen, phosphorus, and sediment. The differences in the waterbodies and their unique load constituents must be considered in a trading program. The effects of trading between sources, a) agricultural runoff, b) increased stormwater, c) waterwater treatment plants discharge, or d) industrial discharge must be closely scrutinized as the programs develop.

2) ALL EFFORTS SHOULD BE MADE TO PRESERVE LOCAL WATER QUALITY.

Trading within a watershed may be very useful to reduce pollution in a local waterway and in the Chesapeake Bay. Inter-watershed trading could lead to diminished water quality in an individual waterway, for the sake of improving another. Nutrient trading and the Chesapeake Total Maximum Daily Load (TMDL) should not be used to maximize local waterway loads to the maximum allowable limit. The ideal trade, geographically speaking, is one where the reductions are made upstream of any new source. This "Upstream Reduction Policy" improves local waterways, as well as the Chesapeake Bay. For example, if an offset created by an increased nutrient load from a wastewater treatment plant (WWTP) occurs at mile marker 20 of a waterway (20 miles upstream from the Chesapeake Bay), and the increased WWTP load adds nutrients at mile marker 10, ten miles of waterway will have been improved as well as an overall reduced load to the Chesapeake Bay. To the contrary, if the new load is upstream at mile marker 20, and the offset is at mile marker 10, ten miles of a local waterway will have been degraded. The other benefit of an "upstream reduction" policy is that it may promote restoration of smaller agricultural waterways. Forested or reforested small waterways are responsible for large amounts of nutrient reduction (see Stroud Water Research Center, 2009)

3) INDEPENDENT, RIGOROUS VERIFICATION IS ESSENTIAL.

Market integrity must be established from the beginning for the nutrient trading program to maintain credibility. There are many advantages of using free market forces to advance pollutant reduction rates for the Chesapeake Bay, but free market forces must be regulated to deter the temptation of over-crediting or unverified credited practices. Without a third-party, independent verification, nutrient trading programs face a risk factor to buyers that could permanently damage the demand for credits. Additionally, permitting trading transactions only in those scenarios where the pollution reductions and watershed gains can be adequately quantified and documented will maintain market integrity. Aggregators of credits acting as verifiers of credits is unacceptable and could lead to disastrous results (e.g., the recent mortgage debacle). It is recognized that there will be real costs to obtain this verification, but it is needed for vigilant verification, and costs can be incorporated into other "transaction costs" paid at the time of transaction by buyer, seller, or split between the two. Independent, third-party verifiers create a buffer between the aggregators and sellers, who in many instances engage in other business together (e.g., agricultural consultants).

In addition, a transparent and simple policy is needed, where the trades produce actual reductions and benefits for the resource, and are clearly authenticated. Toward that end, credits should only be generated by actual practices and reductions instead of on anticipated practices or speculative ones that have yet to occur. As an illustration, the awarding of credits for farmers who elect to farm their lands instead of selling it to developers should not automatically result in a nutrient credit, unless the farmers elect to install nutrient credit generating practices. Using trading to pre-empt hypothetical reductions is nearly impossible to track or quantify. There are many other funding programs designed to incentivize land conservation. Pollution trading has not been designed to specifically serve land conservation purposes which generally do not benefit water quality in any measurable way.

4) A POLICY OF NET IMPROVEMENT CREDIT IS NEEDED TO ACCOUNT FOR UNCERTAINTIES IN NON-POINT SOURCES REDUCTIONS AND RUNOFF VARIABILITY.

A trading source ratio of at least 2:1, and preferably 3:1 for units of nutrients gained vs. units of nutrients traded is needed, along with permanent retirement ratios. While minimum reserve and retirement ratios are worthwhile, they do not adequately reflect the uncertainty and variability of non-point source runoff. In recent years, it is easy to see the great uncertainty and variability that precipitation brings to non-point to point source nutrient trading. Best Management Practices (BMPs) in northern Pennsylvania and

in Lancaster County, Pennsylvania were reported to have failed during high precipitation events in March and September 2011, and the predicted reductions providing credits to industry for the same period have not been verified. This annual and seasonal precipitation uncertainty, and the uncertainty of BMP effectiveness, soil types, groundwater depths, and geology, to name a few of the variables, suggest that a robust ratio of predicted non-point source reductions be implemented. In addition, permanent increases should have permanent offsets, such as reforested lands, vegetated buffers, and restored wetlands with a permanent easement and adequate adaptive management language; conversion of septics to sewer; sewer upgrades; and even certain stormwater practices with a permanent easement.

5) NUTRIENT TRADING SHOULD NOT BE USED TO MAINTAIN DISCHARGES AT TECHNOLOGY LEVELS BELOW INDUSTRY STANDARDS.

Nutrient trading provides some communities and industries a degree of "breathing time" to come into compliance with technology standards. One important reason for nutrient trading is to provide some flexibility to facilitate discharge sources coming into compliance with the Clean Water Act. However, nutrient trading should not be used as a substitute for compliance. The overall aim of nutrient trading is to expediently reduce the loading of nutrients into our waterways, and to then maintain that level of water quality in our waterways. Nutrient trading should not be used as a first avenue for those wishing to institutionalize or monetize bad practice. Pollution sources seeking to trade must as a matter of good policy either already be in compliance, or on an enumerated schedule to come into compliance and the credits generated must be retired expediently so that resulting trade is a genuine mechanism for producing better practice on some specific timetable. For example, similar to a Total Maximum Daily Load schedule of compliance, a point source should create a schedule of upgrades before being allowed to offset loads in excess of National Pollutant Discharge Elimination System (NPDES) permitted effluent loads.

6) NUTRIENT TRADING MAY CREATE ENVIRONMENTAL JUSTICE ISSUES BY MOVING PROBLEMS TO DISADVANTAGED AREAS.

Nutrient trading provides opportunities to transfer funding to agricultural communities for much-needed Best Management Practices (BMPs). However, nutrient trading programs should not extend negative ecological impacts of human health effects and quality of life issues into locales already impaired for the constituent being traded. Environmental justice principles reveal that those economically disadvantaged already suffer lopsided consequences of onerous environmental practices. Allowing these practices to continue unabated by allowing perpetrators to pay fees to credit marketers or aggregators elsewhere only perpetuates an existing disparity and provides a

marketplace that sanctions disparity for economic gain. Communities suffering the impact of onerous environmental problems should share, as a matter of equity, the economic and ecological benefits of the regulatory activity that seeks to address those impairments. If any compounds beyond nutrients and sediments are considered for trading (e.g., toxins, endocrine disrupters), serious consideration of the environmental justice issues will need to be made.

7) TRADING COULD BENEFIT LARGE ORGANIZATIONS AND CORPORATIONS WITHOUT PROTECTING THE INTERESTS OF LOCAL WATERWAYS AND GRASSROOTS ENTITIES.

Trading should not sanction Clean Water Act violations or non-abatement of ongoing violations of Federal or State water quality protection laws. Most nutrient trades are likely to be advanced by business interests or municipalities concerned primarily with economic considerations. Meanwhile small local and grassroots champions of water quality are much more likely to be concerned about local impacts of trading and how such trades will accrue to better water quality in their communities and waterways as opposed to economic development or even Chesapeake Bay considerations. These local groups may not have the resources to be parties to these trades. Trading programs provide an additional tool for regulators and for polluters but there is the risk of creating a scenario that greatly undermines the tributary teams, the Waterkeepers and other local watershed advocacy groups. Providing the option of trading in lieu of compliance would greatly hinder the opportunity for citizens to engage, overhaul or intervene in problematic or unjust trades. For example, allowing violations of wastewater treatment plant discharges by purchasing nutrient credits could lead to localized "hot spots" while reductions are made elsewhere, potentially in another watershed. For these reasons, trading geographies must be carefully analyzed and chosen, and robust independent and transparent third party oversight is needed that includes the active participation of local watershed groups and citizenry in overall program performance audit and credit stewardship/annual verification and certification. The oversight "authority" may be best provided by a public/private partnership as opposed to leaving it in the realm of public agencies subject to changing political, industry interest and economic development pressures. In addition, water quality standards for local waterways or narrative criteria for "swimmable and fishable" conditions would help develop objective criteria for nutrient trading.

8) THE TOTAL IMPACTS OF NUTRIENT TRADES NEED TO BE MEASURED AND ADEQUATE COMPENSATION PROVIDED.

Various development activities may have multiple impacts that transcend the impacts from nutrients and sediments. For example, even though the construction of wastewater treatment facilities can vastly reduce nutrient pollution (e.g. septic to small WWTP),

nonetheless this still creates impacts (e.g., loss of riparian vegetation, increased impervious surfaces with associated runoff) that can lead to deleterious impacts. These multiple impacts provide another reason to have adequate compensation ratios. Some Best Management Practices have highly variable application efficiencies which lead to divergent nutrient results and nutrient credits need to reflect the actual nutrient savings. For example, transport of animal manure can be highly variable and difficult to assign credit. The length of time and conditions that animal manure is stored and the distance that it is transported will affect the nutrient removal efficiency. In Pennsylvania, credits appear to be provided inversely to the logical agronomic use and practices that were the worst are given more credit, i.e. if an agricultural operation previously incorporated manure within two days to maximize nutrient efficiency they receive fewer credits for manure export than an operation that allowed manure to sit in the field and release nutrients to the environment. Also, manure transport does not properly account for ammonia volatilization rates, potential for redeposition within the Chesapeake Watershed, or the nitrogen emissions from the vehicles transporting the manure. A more rigorous mass-balance approach must be used when crediting all practices.

9. CREDITED PRACTICES AND THE AMOUNTS OF CREDITS AWARDED NEED TO BE STANDARDIZED.

Discrepancies in the amount of credits awarded for different practices can lead to inequities across jurisdictional boundaries. Non-point source practices are particularly difficult to standardize (see recent PennFuture report) and highly variable crediting can undermine the nutrient trading program. The standardization, like the verification process, needs to be conducted by independent, third parties in a scientifically rigorous manner. This standardization of nutrient credits should not curtail innovation and creativity of nutrient reduction practices.

10: "GROWTH ALLOCATIONS" REPRESENT AN UNMITIGATED GIVEAWAY OF POLLUTION AND SHOULD BE ELIMINATED OR, RECOGNIZING THE POLITICAL DIFFICULTY IN WITHDRAWING AN ALLOCATION PREVIOUSLY AWARDED, SEVERELY CURTAILED.

In order for a market system to function effectively, a firm pollution cap needs to be put in place, and growth allocations effectively extend that cap date well into the future, harming the development of the market. The granting of extra pollution capacity to wastewater treatment plants should be based on demonstrated pollution reductions in other sectors, and should not be granted on speculative, proposed reductions in those sectors.

219 Duke of Gloucester Street, Annapolis MD 21401 | (410) 562-5655

Senior Scientists & Policymakers for the Bay

August 20, 2012

Hon. Robert M. Summers, PhD
Secretary, Maryland Department of the Environment
1800 Washington Blvd.
Baltimore, MD 21230.

Dear Secretary Summers:

These comments are submitted regarding the state's Accounting for Growth policy as found in MDE's proposed offset policy in the Discussion Draft as updated on July 17, 2012.

In 2011, a Nutrient Trading Subcommittee of the Senior Scientists and Policymakers for the Bay was convened to investigate nutrient trading for Chesapeake Bay. The Subcommittee was chaired by Dr. William Dennison, University of Maryland Center for Environmental Science, and had as its members:
Michael Helfrich, Lower Susquehanna Riverkeeper
Erik Michelsen, South River Federation
Richard Pritzlaff, Biophilia Foundation
Fred Tutman, Patuxent Riverkeeper

The Subcommittee developed and the Senior Scientists and Policymakers for the Bay received and accepted their attached Nutrient Trading Report in January 2012. The attached document is a summary of this preliminary investigation and of the findings and recommendations. We would urge you and your staff to review the findings and recommendations and consider the serious issues raised in them in drafting any offset policy.

The attached Report states that:
On a positive note, nutrient trading promises to unleash free market forces; provide maximum flexibility for regulatory action; increase stakeholder support (including local watershed organizations and citizens); improve the political climate; provide a new source of revenue for compensating Best Management Practices, incentivize annual verification/certification of credit generating practices; and capitalize on previous trading successes in air quality.

On a negative note, independent, rigorous verification is difficult; ecosystem services other than nutrients need to be considered, those that can be measured and non-quantifiable co-benefits such as improved biodiversity conservation through increased wildlife habitat; nutrient trading could promote large organizations and corporations over more local, grass-roots organizations; environmental justice issues may ensue; and previous success in air quality trading may not translate to water quality.

If restricted to permanent offsets, and not annual credit purchases, it is possible that the credit market could be used to promote wise planning for future growth. By balancing incentives and deterrents for development within and outside of sewered areas, based on their relative impacts on the Total Maximum Daily Load, nutrient trading could promote growth scenarios that result in positive nutrient results. For example, **the credits can be used as a deterrent for development in unsewered areas by establishing**

more stringent compensation ratios than in sewered areas. (Emphasis added). There are various ways that the market can be manipulated to achieve nutrient reductions and better overall environmental outcomes, and this should be the goal of nutrient trading, rather than just providing ways to meet regulatory requirements.

We urge caution in developing a nutrient trading approach, recognizing that a nutrient trading system on this scale is unprecedented. Given the lack of supporting evidence for such an approach, we encourage policymakers move cautiously and that they carefully consider the following concerns. There will be only one opportunity to develop a credible nutrient market, and loss of credibility would be an extremely difficult set back to overcome. As this is an emerging management strategy, it will require scrutinized trial and error, with mid-course adjustments and modifications needed.

Ten caveats and recommendations for Chesapeake Bay nutrient trading are the following:

1) Nutrient trading is a relatively new and untested technique for pollutant reductions in waterbodies that makes assumptions regarding short and long term effects.
2) All efforts should be made to improve and then preserve local water quality.
3) Independent, rigorous, and transparent verification is essential.
4) A policy of net improvement credit is needed to account for uncertainties in non-point sources reductions and runoff variability.
5) Nutrient trading should not be used to maintain discharges at technology levels below industry standards.
6) Nutrient trading may create environmental justice issues by moving problems to disadvantaged areas.
7) Trading could benefit large organizations and corporations without protecting the interests of local waterways and grassroots entities.
8) The total impacts of nutrient trades need to be measured and adequate compensation provided.
9) Credited practices and the models used to calculate the amounts of credits awarded need to be standardized.
10) Growth allocations should be based on demonstrated pollution reductions in other sectors, not on speculative, proposed reductions in those sectors. See the attached Report.

Beyond this Report, agricultural specialists in our group have pointed out substantial problems with offsets or trading from point sources or development that are linked to nonpoint source reductions in agriculture and stated their concerns that:

A. Under current regulations there is no reasonable way to verify compliance needed for a farmer to qualify to trade;

B. There is little credibility in the efficiencies currently assigned to most of the farm BMP's on which trading would be based, especially for phosphorus; and

C. Until there is in place a reporting requirement that assures that soil P-levels are tracked over time at the field or at a minimum at the farm scale, offsets or trades involving farm land should not be allowed.

I should also mention that our Senior Scientists and Policymakers for the Bay has developed 25 action items necessary to restore the Bay and presented these to you, other Bay Cabinet members, and to the Governor. These priority actions include these items germane to your deliberations on offsets:

*Greater accountability and verification of performance of agricultural BMPs is essential and should be required;

*Offsetting the effects of population growth and development by 100% is essential to maintaining any progress made by other sectors;

*A requirement is critically needed for no net increases in stormwater discharge rate, volume, and pollutants for all new development for a 5-year storm. Current state stormwater laws clearly do not accomplish this and Maryland should require and enforce a no net increase in rate, volume, and pollutant loads from all new development. This will require mandatory on-site containment through environmental site design;

*Maryland should include improved water quality retrofit requirements for MS4 permits and for all developed lands including road construction or reconstruction, and all such MS4 permits should be required to meet the no net increase in rate, volume, and pollutants rule. For re-development, to the maximum extent practicable, no net increase in rate, volume, or pollutants should be required for a 5-year storm and offsets required where this no net increase requirement cannot be met. Maryland must provide funding mechanisms to provide reasonable assurances that such urban retrofit will be accomplished and include these funding mechanisms in its WIP; and

*Maryland should allocate WWTP pollution loads based on 2010 wastewater flows, assuming a concentration of 3.0 mg/l of nitrogen and 0.3 mg/l of phosphorus. Any increased nitrogen or phosphorus loads with flows beyond 2010 actual flow levels must be offset with equal or greater reductions from other sources.

Thank you for your consideration of these comments.

Respectfully,

Gerald W. Winegrad, Chairman
Senior Scientists and Policymakers for the Bay
1328 Washington Drive
Annapolis, MD 21403
Phone: 410-280-8956

Sassafras River Association
P.O. Box 333
Georgetown, MD 21930
(410)275-1400
www.sassafrasriver.org

October 1, 2012

Paul Emmart
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230-1718

RE: Sassafras River Association Comments on Maryland's Accounting for Growth Discussion Draft

Dear Mr. Emmart,

Maryland has been working hard to achieve its Chesapeake Bay restoration goals. In order to continue to make progress cleaning up the Bay, Maryland must address the new pollution coming from new growth and development. The Accounting for Growth policy must be developed to ensure new development does not hinder or reverse Bay restoration. The Sassafras River Association commends the Maryland Department of the Environment on their continued efforts to restore the Chesapeake Bay and its tributaries and we offer the following comments on the Accounting for Growth discussion draft. Our comments concern the impact on local waters; a fee in lieu system; how to define a permanent offset; the importance of including nitrogen, phosphorus, and sediment in the policy; and the different effects the policy will have from county to county.

- The policy states that development outside of the designated growth areas must be offset within the county. Local waterways, like the Sassafras River, could be harmed if

pollution from the development, but not the offset, occurs within the Sassafras River watershed. The total nitrogen load entering the Chesapeake Bay will be offset, but the pollution entering the Sassafras River will increase. For this reason, the state must take into consideration the policy's effect on local water quality, not just the overall quality of the Chesapeake Bay.

- The accounting for growth policy should not include a fee in lieu system. An increase in development warrants on-the-ground offsets to ensure the pollution is offset in reality, not just on paper.

- The policy must also address the idea of permanence mentioned throughout the discussion draft. The policy states that the offsets must be permanent, but the definition is not clearly outlined. Some offset practices are known to maintain their effectiveness for a limited number of years, so the state must clearly define the amount of time the practice must maintain its function and effectiveness to be considered a valid offset.

- In order to ensure the state makes progress in combating pollution and does not lose ground in Bay cleanup efforts, any new nitrogen, phosphorus, and sediment pollution from new development must be offset. While the reason for requiring only nitrogen to be offset is understood, phosphorus and sediment must be included in the offset policy to coincide with WIP cleanup efforts.

- The accounting for growth policy must be especially clear, detailed, and defined. This is especially important because development may occur at different rates from county to county. Regulations and criteria for development may be lax in some counties,

so it is critical to put a strong accounting for growth policy in place to ensure the pollution is offset.

Maryland is on the right track towards cleaning up the Chesapeake Bay through the Watershed Implementation Plans. To ensure these efforts aren't derailed by new growth and development, a clear and enforceable accounting for growth policy must be developed and implemented. We understand the challenges the state faces in creating and implementing a policy addressing future growth, and we appreciate the opportunity to submit our comments to the discussion draft.

Sincerely,
Sassafras River Association

STATE WATER QUALITY ADVISORY COMMITTEE

Terry R. Matthews, M.S.
Chair

Dr. Sarah Taylor Rogers
1st Vice Chair

Dr. Fred Jacobs
2nd Vice Chair

September 26, 2012

The Honorable Robert M. Summers, PhD
Secretary, Department of the Environment
1800 Washington Blvd.
Baltimore, MD 21230

RE: Comments from the State Water Quality Advisory Committee on the Proposed Growth Offset Policy

Dear Secretary Summers:

Thank you for the opportunity to ask questions, offer comments and express our collective concerns about the proposed Growth Offset policy. We appreciate the fact that your staff agreed to first present to the State Water Quality Advisory Committee as a "test format" for the remaining public outreach meetings scheduled during July through mid-September. We also want you to know that we support the development of offsets.

Our letter to you is divided into the following sections: questions and concerns about the proposed policy from the Committee, general comments and specific comments on the topics around which your Department is seeking input.

I. Questions/Concerns

1. The policy appears to be directed to the fact that there will be no new nitrogen loadings from septic systems to the Bay because all new septic systems will be required to meet zero nitrogen discharge. SWQAC is concerned about how the nexus between the proposed offset policy and SB 236 requirement for BRF and BAT systems for new development will function. Example: When a new BAT system is installed to reduce nitrogen by 50%, how will the offset policy address the remaining 50%? Will the offset be required to be in the same watershed? Will the new home (or expansion) equal a zero impact? How will this new home (or expansion of existing use) be accounted for in local governments' WIP? If there are no offsets available, will the new home (or expansion) be prohibited? Who will be tracking these BAT and offsets?

2. It is clear that whatever is done, the offsets need to be permanent. In the final policy, it should be clear as to who will be tracking the offsets and who is responsible for seeing to it that the offsets continue to function as originally designed and implemented. In the final policy, if offset designed performance becomes deficient or negated in the future and needs to be remediated or restored, it should also be clear who is responsible for that as well.

3. The final policy should also be clear concerning who is in charge of implementing the policy. Will it be a joint effort between State and local government or will it be mainly a State effort? If the decision is that a combination will most likely be needed, there should be clarity with respect to the division of responsibilities between both levels. And finally, there should be an entity that has knowledge of all of the facets of the policy from a comprehensive perspective to make sure that what is envisioned as being an effective policy with regulations actually is an effective policy with regulations.

4. Any disturbance greater than one acre requires a NPDES permit (general construction permit), and would presumably trigger the need for offsets. The final policy should be clear as to how this will be documented and accounted for. Perhaps the offsets should be written into the General Construction permit. There should also be a way to address how development with disturbances under one acre will be handled.

5. The offsets are only to address nitrogen. The TMDLs are both for nitrogen and phosphorus. The final policy should clarify why it is addressing only the nitrogen component or it should include both.

6. The policy appears to be "one size fits all." There is concern as to how the policy will be applied at the local level given that some jurisdictions are more rural in nature and others are more developed. Will local jurisdictions be able to work with the State to modify this policy as needed to better account for and address local conditions and their own WIP efforts, or will each local government have to comply with one policy and one set of regulations?

7. How will the existing trading programs work effectively with the Offset Policy in light of the questions and issues associated with those programs?

8. Could more preference be given to lands that are preserved?

9. If credits are lost, who is responsible to implement other measures to make up for the loss?

II. General Comments

1. The policy should be as simple as possible, along with the manner in which it is expected to be implemented. The more that the policy entails monitoring and regulation, the more cumbersome and costly it will become for the local governments to implement.

2. The Offset Policy should provide an expanded range of offset options including, but not limited to, treating offsite stormwater drainage on the development site, additional on-site a forestation, on-site stream restoration, upgrades of existing septic systems to BAT, connection of existing septic systems to sanitary sewer and installation of additional SWM controls beyond the requirements for redevelopment sites. It will be important, however, that in conjunction with the expanded offset options, the Policy provide guidance designed to avoid or limit the creation of undesirable competition that may otherwise result between developers taking advantage of additional offset options, and local governments seeking similar low cost BMP options for meeting their pollutant reduction requirements.

3. The calculation of the offset credits required for the stormwater portion of the nitrogen load should be based on using forests as the baseline load. Forest is the natural land cover in the Chesapeake Bay watershed; achieving forest-loading rates for nitrogen, phosphorus and sediment should result in meeting water quality standards. The current proposed method of calculating the stormwater offset credits required would hold new development to a higher standard than is being required for other sectors.

4. The offsets need to be permanent. Perhaps they need to be recorded on the land records (e.g. as forest conservation, stormwater management or some other easement) so that they are similar to perpetual easements that run with the land.

5. When it comes time for the regulations to be developed ; and we understand that MDE may be working on them in tandem with the policy outreach meetings; the counties, municipalities, builders, agricultural interests, etc. all should be involved in this process.

6. Members of the Committee have looked at the Nutrient Trading Program as it currently exists. There is definite need for improvement with the existing Trading Program vis-à-vis what is proposed in the offset policy. The existence of both is unclear without further explanation and programmatic coordination between the two. The Nutrient Management regulations and sewage sludge application need to be incorporated somehow.

7. All stakeholders should have input not only in the beginning of this policy formulation but on a continued basis so problems that arise can be addressed. In fact there should be a Forum created in order to handle matters that arise as a result of the regulations that pertain to the policy.

8. The development of a MAST-type program that accounts for all the different aspects of the Offset Policy may be useful.

9. If one places an offset on top of the 40% stormwater reduction requirement for redevelopment, this could hinder growth in the areas where the State says growth ought to occur under Plan Maryland.

10. The Offset Policy needs a mechanism to address redevelopment cases in the 20%-40% imperviousness range. This is because if a redevelopment in this lower impervious range is done well, it might not increase loads, even though it is below the current impervious threshold. This approach would encourage a redevelopment approach in a greater number of contexts. The use of performance curves instead of percent load reductions may be useful in addressing this point.

11. A series of performance curves would allow for maximum effectiveness. This is an idea worth considering as industrial/commercial entities are hesitant to remove imperviousness because it will place a developer into another category at the State level.

12. On page 2 of 10, under C titled: “The Concept from the Phase II WIP to this Policy,” with the sentence that begins with “New Septic Systems”, it might be clearer to state the sentence as follows: “New Septic Systems shall meet all applicable Maryland law and regulations, and the post-development septic load shall be fully offset.”

III. Comments Arranged according to Topic around Which MDE is Seeking Input

<u>Alternative Approaches:</u>

Re-development does more for water quality than just contributing to an offset. The categories should be broadened for the use of different kinds of offsets to provide for flexibility.

<u>Using Nitrogen and not Phosphorus or Sediment:</u>

There is concern that by not meeting P and sediment with respect to the offset policy that the TMDL will not be able to be met by the local jurisdictions as they try to meet the local water quality standards set by the TMDL. Phosphorus and sediment need to be included.

Calculating the Post- development Load

In crafting an Offset Policy, MDE needs to consider that jurisdictions also have to address local water impairments. Because of this, a better nested mitigation approach needs to be developed. For example, if mitigation cannot be done in the same 8-digit watershed where the development occurs, it should occur in another watershed within the same County.

Alternatively, the draft Offset Policy could be modified to stipulate that new development in a Targeted Growth and Revitalization area will be able to obtain offsets anywhere in the same county that also drains to the Chesapeake Bay. All other new development must obtain offsets in the same 8-digit watershed where the development is located, or in another watershed in the same county that also drains to the Bay that has a greater need based on degree of local water quality impairment. Such an approach will help local jurisdictions to meet the Bay TMDLs, while minimizing the impacts of new development on the water quality of local streams. It would also preserve a similar incentive, as in the Draft Offset Policy, for new development to occur in Targeted Growth and Revitalization Areas.

Trading Geographies

As with offsets, trading should occur first within the same 8-digit watershed. If that is not possible it should occur elsewhere within the County and then outside of the County. Trading outside the jurisdiction should be the last resort because it can be cumbersome and until a system is developed to handle that complexity, it could prove untenable. Furthermore, at what point do we say that there are no more offsets to handle the development?

Trading should be at the local level and there should be an examination of what the unanticipated consequences might be from doing so.

Whatever is designed and agreed to must be equitable.

We are losing people who have the capability to carry this out, especially at the State level. Whatever is put into place must be able to pay for the additional staff that will be required to manage this effort whether at the State or the local level, or both.

Use of Delivery Factors

If one reduces nitrogen, then one should reduce nitrogen to meet the TMDL. This is particularly true for the Eastern Shore and the Upper Western Shore where the circulation patterns in the Bay are the best but from a local water quality perspective may not be necessarily good.

Delivery factors may, when factored into the mix, provide for an equitable approach from a water quality perspective but from a fiscal or cost perspective may not be good at all.

Verification and Recording of Offsets and Trades

A mechanism needs to be created to record all of this and it would be preferable to have it designed at the State level for consistency. The agriculture trading program could be a model for this.

Verifying and recording for septic system upgrades should take place at the local government level.

The stormwater best management practices could go into a stormwater database.

There should be a required reporting system and/or inspection program for the long term.

Ensuring that offsets are permanent

This should be documented somehow in the land records (e.g. as forest conservation, stormwater management, or some other easement).

It should be made clear who is "on the hook" to make sure that the offsets remain permanent over the short and long term.

Use of Fees in Lieu

Fees in lieu should only be used as a last resort and that would be when one gets to the point where nothing further can be done and a project is needed for the benefit of the majority of the people within a local jurisdiction.

To make sure that the offsets associated with fees-in-lieu also help to improve local water quality as much as possible, any fees-in-lieu should be based on the least expensive offsets that could be done in the same 8-digit watershed. If this cannot be done then the offsets should be the least expensive ones that could be done in the same county.

Need to set the fees high enough to pay for the most costly improvements, additional staff and operation and maintenance.

Effective Date for the Policy

Use the SB 236 dates.

There should also be a grandfathering provision.

The Committee would caution MDE in getting people primed and ready for implementation of the policy and then not moving forward.

Roles for County Government, Aggregators, Brokers

Depending on local resources and capacities, Counties should have a variety of options regarding the degree of delegation of the offset policy and its regulations ranging from: 1) full delegation, 2) partial delegation and 3) no delegation.

Given the current economic climate and the fact that local governments are struggling to maintain current staffing and programs, it seems likely that in most jurisdictions the State will need to administer the Offset Program. If, however, a local jurisdiction cannot administer an Offset Program, but believes modifications to the State's program are justified to address local conditions, the Committee recommends that the State work with locals to make sure those concerns are met in implementing the State's Offset Program in those jurisdictions. It is important that the State's Offset Policy have the necessary flexibility built into it to allow for this kind of local fine tuning to occur.

The Committee viewpoint is that it is a good thing to bring in the private sector into this process and there should be a list or specific credentials that would need to be met by the aggregators and brokers in order for them to be qualified. Specifically, there should be a licensing and bonding system associated with the aggregator/broker part of policy/regulatory implementation.

Additional Comment on the Proposal

Circuit Riders should be considered for the counties and municipalities that do not have the wherewithal to carry out the policy and need technical assistance and other help.

Thank you for your attention to the questions, concerns and comments from the Committee on the offset policy. We look forward to hearing from you and look forward to reviewing the revised policy and the regulations as they are developed.

Sincerely,

Terry R. Matthews
Chair

DEPARTMENT OF THE NAVY
COMMANDER
NAVY REGION, MID-ATLANTIC
1510 GILBERT ST.
NORFOLK, VA 23511-2737

IN REPLY REFER TO:
5090
EVN40/00/RE557
OCT 1 2012

Mr. Paul Emmart
MD Department of the Environment
1800 Washington Boulevard
Baltimore MD 21230-1718

Dear Mr. Emmart:

SUBJECT: ACCOUNTING FOR GROWTH - DRAFT REGULATIONS FOR DISCUSSION PURPOSES

As the Department of Defense (DoD) Regional Environmental Coordinator (REC) for U.S. Environmental Protection Agency (EPA) Region III and on behalf of all of the military services, Commander, Navy Region Mid-Atlantic is responsible for coordinating responses to various environmental policies or regulatory matters of interest. We appreciate the opportunity, as part of the regulated community, to comment on the draft "for discussion purposes" regulation supporting Maryland's Accounting for Growth Plan.

We are pleased to provide the enclosed comments and recommendations, which we believe will clarify the regulation and better consider the unique nature of DoD installations. If you have any questions, my point of contact for this matter is Mr. Will Bullard, who can be reached by telephone at (757) 322-0429, or E-Mail william.bullard@navy.mil.

Sincerely,

CHRISTINE H. PORTER
Director for Regional
Environmental Coordination
By direction of the Commander

Copy to: U.S. Army REC, Region III (Ms. Amy Alton)
USAF REC, Region II, III (Mr. Ron Joyner)

26.08.11.03.B(7)(c). "A change in the runoff characteristics of a parcel of land in conjunction with residential, commercial, industrial, or institutional construction or alteration."

Comment: A change in land use typically means converting land use from one type of zoning to another, (e.g. agricultural to commercial, or residential to commercial). However, (c) above may broaden the definition to include any project that changes the runoff characteristics of the land.

Recommendation: Request that Maryland clarify whether a typical land use change is required before a change in runoff characteristics would require nitrogen offsets under this regulation. Further, we recommend that Maryland clarifies how a change in land use applies to military installations where all land internal to the installation is normally considered designated for military use.

26.08.11.03.B(21). "Redevelopment means any construction, alteration, removal, or improvement performed on existing impervious area at a site where existing land use is commercial, industrial, institutional, or multifamily residential and existing project site impervious area exceeds 40 percent."

Comment: There is no definition proposed for "site" or "project site."

Recommendation: Include definitions for both "site" and "project site." "Site" in the context of redevelopment should include not only the area of the existing project, i.e. "project site", but the larger land use in the project area. The redevelopment offset exclusion should apply to the land use in the area immediately surrounding the project not just the "project site". Therefore any project in a highly industrialized and impervious area (40%) would receive the exemption recognizing the difficulty of achieving an offset in this type area.

26.08.11.05.A(2)(b). " New development may not connect to a WWTP that does not have available capacity below its discharge permit and nutrient WLA unless the WWTP is able to offset the new load …"

Comment: If a formal and fair process of inquiry and evaluation regarding a WWTP's available treatment capacity is not established it could cause confusion for all and disparate treatment of some regulated entities.

Recommendation: MDE should establish guidelines for WWTPs to receive and respond to inquiries regarding available capacity.

26.08.11.05.A(3). Post development stormwater load from development.

Comment: The entire post-development load requires offset. State-wide averages for impervious, pervious, and forest loading rates are used in the calculations. How exactly these state-wide averages were calculated is not discussed? In addition, the offset proposed exceeds the increase from the new development itself effectively imposing a penalty similar to the retrofit requirement imposed in Phase 1 (and will be in Phase 2) MS4 permits.

Recommendation: Suggest that Maryland explain the derivation of the state-wide loading rates. Also suggest that Maryland reconsider placing any additional nutrient reduction burdens on MS4s. Feasibility appears to be a very real issue.

26.08.11.05.A(5). Nitrogen from mobile sources associated with development.

Comment: A nitrogen load requiring offset is proposed for increases in vehicle emissions associated with residential development. It should be noted that military housing is different from normal residential development. These housing areas are either located on an installation or very close to it. One parent and sometimes both work on the base and the families take advantage of the shopping (Exchanges and Commissaries) and recreational facilities (theatres, gymnasiums, bowling alleys, athletic fields, golf courses, etc.). This greatly reduces vehicle use for everyday activities.

Recommendtion: If a mobile source offset is required for new military housing areas, recommend one that recognizes the above distinctions. We suggest consideration of 0.25 pounds per EDU, i.e. half that of the more densely developed census tract described in (a) under this item.

26.08.11.05.E(1). "Except as provided in Regulation (2), the offset for any development in the Chesapeake Bay watershed shall be four (4) times the post-development load, as calculated in Regulation .05 of this chapter, of the pollutants for which the water quality standards are not met; …"

Comment: Even if all the necessary nutrient reductions are made to restore Bay water quality, standards may not be met exactly on 31 DEC 25, as natural systems take time to recover.

Recommendation: Recognize that natural systems take time to recover and state only that offsets will be re-evaluated if Bay water quality standards are not met by 31 December 2025.

26.08.11.05.E(2). "If the developer can demonstrate, to the satisfaction of the Department, that the county where the development will be located has implemented actions designed to meet the Bay TMDL, … the stormwater offset in Regulation .05A(3) of this chapter shall not require an offset for postdevelopment loads from forest."

Comment: It is our understanding that most DoD facilities (at least those 5 acres or greater in size) will be given their own nutrient allocation in an MS4 permit or be part of a separate, aggregated DoD or federal nutrient allocation separate from the County allocation.

Recommendation: Since DoD nutrient allocations for meeting Bay TMDL reductions are separate from the County, DoD facilities recommend that this provision apply to DoD facilities if they demonstrate implementation of actions designed to meet their share of the Bay TMDL.

26.08.11.06.D&E. "Offsets may be purchased from the Maryland Nutrient Trading Program. Offsets may be directly purchased, constructed or planted provided they meet the requirements of Maryland's Nutrient Trading Policies and these regulations."

Comment: The Maryland trading program currently does not allow nutrient trading within the urban (stormwater) sector or between this sector and other sectors, e.g. WWTP (point source).

Recommendation: Maryland Department of the Environment should complete any additional regulatory or policy changes necessary to allow and provide adequate guidance for nutrient trading for the urban (stormwater) sector. Tracking and reporting procedures for Bay TMDL and other accounting purposes should be clear for all entities including federal facilities. Duplication should be avoided wherever possible.

Comment: Federal statutory authority currently does not exist to allow DoD facilities to purchase or sell nutrient credits on the open market and fully participate in the Maryland Nutrient Trading Program.

Recommendation: Since ownership and management of all military facilities is by the DoD, the Maryland nutrient trading program should not stipulate the method of credit exchange between these facilities provided that credits are properly certified and documented. Additional guidance on tracking and reporting of credits would also be helpful: How will tracking and reporting of credits be conducted? Will installations be expected to keep records of projects that generated extra nutrient credits and report them annually in a specific report? Will there be a central database maintained by Maryland Department of the Environment?

Comment: In the Accounting for Growth discussion document, comments were requested concerning the desirability of a fee-in-lieu system. We are currently unclear if federal statutory authority will allow DoD facilities to participate in a fee-in-lieu system.

Recommendation: Although it is unclear if the DoD may avail itself of a fee-in-lieu system, we recommend that Maryland establish a fee-in-lieu system in addition to allowing nutrient trading for the urban stormwater sector. Such a system would provide another option for meeting offset reductions on difficult sites and has been proposed in other Bay jurisdictions (e.g., Virginia and District of Columbia).

The Nature Conservancy
Protecting nature. Preserving life.™

The Nature Conservancy of
Maryland/DC
5410 Grosvenor Lane, Ste. 100
Bethesda, MD 20815

tel (301) 897-8570
fax (301) 897-0858
nature.org

October 1, 2012

Mr. Paul Emmart
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore MD 21230-1718

Dear Mr. Emmart:

Thank you for the opportunity to provide comments on Maryland's "Accounting for Growth" discussion draft, dated July 12, 2012.

The Nature Conservancy is an international, non-governmental organization whose mission is to conserve the lands and waters on which all life depends. We currently work in more than 30 countries worldwide, and have worked for more than three decades to achieve our mission in Maryland and the broader Chesapeake Bay watershed. Here in Maryland, we are engaged in a variety of conservation activities, including land protection and restoration efforts that support healthy lands, streams, rivers, and coastal systems that provide tangible benefits to nature and people.

With more than 3 million new people projected to move into the Chesapeake watershed in the coming two decades, managing new sources of pollution is one of the biggest challenges facing the future health of the Chesapeake Bay. Finding effective and transparent ways to "off-set" new pollution loads will be essential to meet our goals for the Chesapeake, including meeting nutrient reduction goals of the Chesapeake Bay TMDL.

As such, the Conservancy supports Maryland's ambitious and proactive approach to address the challenge of accommodating residential and commercial growth without undoing the hard-won gains in reducing loads from existing urban and agricultural sectors. In support of your efforts to finalize this policy, we provide the following comments on the Accounting for Growth Discussion Draft dated July 12, 2012.

Provide incentives to maintain "healthy watersheds"

Maintaining healthy watersheds within the Bay drainage is an essential element of Bay recovery and one that has been neglected too often in the past. As we have learned over the years, it is much more cost effective to maintain healthy watersheds than to try to restore them after they become degraded. In makes no sense either financially or ecologically to allow new development to degrade intact watersheds that underpin the current health of local streams and the Bay.

We argue that this step is warranted – indeed critical -- because of the unique role of healthy watersheds:

- Conserving the ecological function of healthy watersheds is our most effective investment in "holding the line" – that is, maintaining the current health of the Bay while we undertake the costly work to reduce existing loads.
- Streams with natural or less altered hydrologic flows contribute less pollution downstream (all other things equal)
- Keeping healthy areas from being degraded avoids the increased need for expensive restoration projects. This is more important than ever as research reveals how frequently stream restoration fails to return ecological function.
- Healthy watersheds provide a variety of ecological services including clean drinking water, flood mitigation, and recreational opportunities.

We recognize that incorporating a healthy watersheds overlay will add unwanted complexity to MD's growth offset program. However, Maryland state agencies are already leaders in the Bay watershed in assessing and identifying healthy watersheds. MDE could use the currently designated Tier 2 watersheds to identify healthy watersheds. The policy could include provisions such that development occurring in healthy watersheds could be assessed additional nutrient reduction requirements, and/or, additional credit could be given to offsetting actions that are preferentially located in healthy watersheds. We urge you to consider the incorporation of healthy watersheds concepts into the new policy to discourage new growth in areas identified as healthy watersheds and encourage the use of offsets in healthy watersheds.

Learn from other successes (and failures) in mitigation.

The policy described in the Accounting for Growth Discussion Draft has all the features of a mitigation program, in that actions that have a negative environmental impact (in this case new or increased nitrogen loads) are subject to provisions to avoid or reduce the impact and to offset any remaining impact. In developing this nitrogen mitigation program, we urge you to look to the lessons learned in the wetlands and forest conservation arenas on the design and implementation of successful mitigation programs. Key items to consider:

1) The mitigation hierarchy for addressing impacts is critical: avoid if possible, reduce to maximum extent practical, and only then seek to offset. Without adequate emphasis on avoidance and reduction, there will be an over reliance on offsets. Experience shows that this can undermine the ability to meet program goals, especially for a "no net loss" goal (in this case, of course, the implied goal is "no net gain").
2) For the policy to be effective in offsetting nutrient loading from new growth, the nutrient reductions from the use of offsets need to be perpetual. Although the Accounting for Growth policy discusses permanence, the presentation at the regional meetings referenced offsets with a 30 year lifespan. Although we support any offset that provides verifiable nutrient reductions, it's important that the nutrient reductions achieved through offsets are as permanent as can be achieved. We would ask that the issue of what constitutes permanence be clarified in the policy. For instance, cover crops were given as an example of an offset during one of the regional meeting. How would the use of cover crops be ensured over the time frame required for offsets? Would the aggregator hold funds in escrow to be

provided to the farmer every year for cover crop? Would structural BMPs (such as a manure storage shed) with a 30 year operational life be considered permanent?

3) The success of any mitigation or offset program is dependent on implementation and verification through periodic monitoring to ensure that the offsets are still in place and functioning properly. As we understand it, this role could be played by the local government or 3rd party non-profit, or for profit, entities (aggregators). The ultimate entity responsible for verification would be the State as it regulates local government and aggregator implementation. If part of this implementation chain fails to function, the State would be left with the ultimate responsibility to correct the problem. We would suggest that the state might consider the creation of bonding requirements for aggregators, or a fund created from a portion of the offset monies and maintained by the state, that could be used in cases where aggregators fail to properly ensure compliance, either because the aggregator has gone out of business or is negligent in meeting their monitoring responsibilities.

Consideration should be given to including phosphorus and sediment in the policy

We are concerned that the use of nitrogen alone in the Accounting for Growth policy may not adequately account for phosphorus and sediment increases from new development. Certainly nitrogen is more mobile than phosphorus and sediment, but phosphorus and sediment have much different transport mechanisms than nitrogen, such that it may not serve as an adequate surrogate.

We understand the need to keep the policy as simple and straightforward as possible. However, we would encourage MDE to develop an evaluation program to determine if the use of nitrogen alone provides for the needed reductions for phosphorus and sediment. If it is determined that the use of nitrogen alone does not account for the impacts from growth, the program should be expanded. The Maryland Department of Agriculture already includes phosphorus in its nutrient trading program with verifiable credits that would be available for implementation of an expanded program.

Thank you for this opportunity to provide formal comments on the "Accounting for Growth" discussion draft. As you move forward to finalize this policy, we hope that a continued dialogue will enable us to contribute to successful implementation. Please don't hesitate to contact us if you have any questions on these comments.

Sincerely,

Steve Bunker

Steve Bunker
Director of Conservation Programs

MARYLAND ASSOCIATION OF MUNICIPAL WASTEWATER AGENCIES, INC.'S COMMENTS ON "ACCOUNTING FOR GROWTH" (7/12/12 DRAFT) AND "OFFSET REGULATIONS" (8/27/12 DRAFT)

OCTOBER 1, 2012

These comments address the Maryland Department of the Environment's (MDE) *Accounting for Growth Discussion Draft* dated July 12, 2012 (Discussion Draft) and related draft regulations dated August 27, 2012 for offsetting nitrogen loads for changes in land use in the Bay and Atlantic Coastal Bays watersheds (Draft Regulations). MAMWA is a statewide association of owners and operators of municipal wastewater treatment plants (WWTPs), which the Clean Water Act refers to as publicly owned treatment works (POTWs). Many MAMWA Members' facilities clean and discharge highly treated wastewater within the Chesapeake Bay and Atlantic Coastal Bay watersheds pursuant to state-issued National Pollutant Discharge Elimination System (NPDES) permits. As owners and operators of highly-regulated pollutant removing facilities, MAMWA's Members have a direct interest in how the rules for offsetting future growth will impact our wastewater systems and our communities. MAMWA's initial comments regarding the Discussion Draft and Draft Regulations follow.

MAMWA Comment #1: MDE Should Develop a Streamlined Procedure for Adding Offset Allocations to WTTP Nutrient Waste Load Allocations (Permit Limits)

In the "Step by Step" section of the Discussion Draft (E.2), MDE illustrates how it expects a developer to calculate the number of pounds of nitrogen needed to offset the post-development load (stormwater, wastewater, and mobile sources) of a particular project. With regard to development that will be served by a WWTP (versus on-site septic or land application of treated wastewater), the Discussion Draft explains:

> If a development is served by a wastewater treatment plant that discharges to surface water, the initial question is whether the WWTP has nutrient capacity to accept the wastewater and stay within the nutrient cap. The WWTP can provide this information. If the WWTP has nutrient capacity it can accept the additional load, using up some of its capacity but requiring no further offset. **If the WWTP does not have nutrient capacity, an offset will be required and memorialized in the WWTP's discharge permit.** The amount of the offset can be calculated by the spreadsheet using the nitrogen limit in WWTP's permit.

The Discussion Draft goes on to state that if the WWTP has no room under its nutrient cap to provide service "…**it will not be able to accept the wastewater without a modification to its**

discharge permit. The permit modification will have to document how the load is to be offset permanently." Discussion Draft at E.3.

MAMWA is concerned that requiring each WWTP in the state to go through a formal, presumably major, permit modification process each time a developer provides an offset allocation. This would be administratively burdensome, expensive, and time-consuming for the WWTP owner as well as the state. In addition, this process could significantly slow down development projects and even hurt projects with sensitive development timelines and thus cause economic harm to the private sector, the local community, and state.

As an alternative, MAMWA requests that MDE consider including a provision in WWTP NPDES permits (upon reissuance) that would allow a development to proceed without awaiting WWTP permit modification, so long as MDE has approved the associated offset in advance. This streamlining procedure could take the form of a footnote that provides that the nutrient limit is a calculation based on the sum of the numerical load limit stated on the effluent limitations page of the permit plus and additional allocation approved by MDE as an offset pursuant to the offset regulation. DMRs would be revised accordingly.

MAMWA Comment #2: Clarify Draft Regulation's "Change in Land Use" Definition to Exclude Wastewater Projects

Pursuant to the Draft Regulations, with two stated exceptions, a developer must offset post-development loads if a change in land use resulting from development or redevelopment disturbs more than one acre. Draft Regulations at COMAR 26.08.11.04. A "change in land use" is defined as a: "(a) Conversion of land from an agricultural, forest, recreational or other natural land use/land cover type to an industrial, commercial, institutional or residential use; (b) Increase in residential density; or (c) A change in the runoff characteristics of a parcel of land in conjunction with residential, commercial, industrial or institutional construction or alteration." Draft Regulations at COMAR 26.08.11.03(B)(7).

As MDE is aware, MAMWA's Members are currently in the midst of a treatment upgrade program estimated to cost approximately $2.31 Billion. Final Phase II WIP, App. C, C-2. Once installed and operational, these state-of-the-art facilities will have a significant impact on the total amount of nutrients discharged to the Chesapeake Bay each year. MAMWA seeks MDE's clarification that neither construction of these mandated upgrades, nor the construction, maintenance and operation of the sewer systems that convey wastewater to these facilities for treatment, will require stormwater offsets (most of these projects will disturb more than one acre of earth).

MAMWA asks that MDE clarify the regulations to exempt wastewater conveyance and treatment projects. Further, MDE should consider more clearly exempting construction, operation and maintenance of all types of water quality projects or best management practices related to implementation of the Bay TMDL.

Thank you for your consideration.

MARYLAND Association of COUNTIES

October 1, 2012

Paul Emmart
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, Maryland 21230

RE: PROPOSED ACCOUNTING FOR GROWTH POLICY AND REGULATIONS

Dear Mr. Emmart:

The Maryland Association of Counties (MACo) appreciates the opportunity to comment on the Accounting for Growth (AfG) policy and regulations (COMAR 26.08.11.01-.07) proposed by the Maryland Department of the Environment.

These comments supplement earlier comments submitted by MACo as part of a memorandum submitted by the WIP Workgroup to the Maryland Sustainable Growth Commission on July 23. It is MACo's understanding that MACo's prior comments have been incorporated into the comment record. MACo's comments fall into six broad categories.

(1) SIMPLICITY AND TRANSPARENCY

Any AfG policy and offset program must be transparent and simple to understand and administer. MACo remains concerned that the proposed AfG policy will become increasingly complex and unwieldy over time.

(2) FLEXIBILITY

The AfG policy must acknowledge local differences and allow county governments the flexibility to allow or reject a range of credit options. Adopting a rigid, "one-size-fits-all" approach will result in regional disparities and unfair application of the policy.

(3) OFFSET LOADS

MACo is opposed to establishing an offset load requirement that is greater than 100% of the change made to a parcel of land pre- and post- development. While it makes sense to require a developer to mitigate any new nutrient and sediment runoff generated by the development (*i.e.*, offsetting the new growth), MACo questions why a

169 Conduit Street, Annapolis, MD 21401
410.269.0043 BALT/ANNAP ◆ 301.261.1140 WASH DC ◆ 410.268.1775 FAX
www.mdcounties.org

developer should be *required* to address nutrient and sediment runoff that existed on the land prior to the new development. Such a policy could halt growth in many areas of the state. However, while it should not be a mandate, developers should be strongly *encouraged and incentivized* to achieve additional nutrient and sediment reductions beyond their pre- and post- development target.

MACo is also concerned that the offset load calculations are too generic and do not take into account site specific circumstances. There are instances where a lower density development will generate far less nutrients and sediment runoff than the offset target indicates and where a redevelopment project could generate significant new runoff that is not captured by the offset target. While MACo acknowledges that a true site specific analysis may not be feasible, the proposed offset targets seem to be based on overly broad assumptions. Further refinement, and if necessary the creation of tools to estimate nutrient and sediment changes based on site specific characteristics, is needed.

Finally, MACo is concerned about the inclusion of air deposition sources in the nutrient target. Air deposition is better addressed through the various proposed transportation greenhouse gas reduction strategies that are included in the State's draft greenhouse gas reduction plan.

(4)CREDIT OPTIONS AND FEE IN LIEU

Options for generating credits, including a fee in lieu and a nutrient trading program, must be clearly defined. A broad range of credit options must be available at the same time the offset requirement takes effect. If the nutrient trading program is not ready at the same time as the offset requirements take effect, the future of such a program will already be weakened at the outset. Trading geographies should not be restricted based on development type as the restriction may unduly limit the ability of rural counties to grow. Likewise, a fee in lieu should remain available as a local option.

(5)VERIFICATION AND ENFORCEMENT

MACo remains concerned that the ultimate burden of verification and enforcement for offsets will fall on local governments. MACo would strongly oppose any mandate that

would force verification and enforcement duties, whether expressly or implicitly, on the counties. Counties lack the staff and resources to track what will likely become a significant number of offsets.

MACo also questions the logistical challenges that will arise from trying to track offsets over time. The AfG policy envisions that offsets will be "permanent." However, the only practical way to easily track a permanent offset is through a perpetual easement or similar restriction entered into the land records. While some offsets, such as planting trees on a tract of land, may have a significant lifespan other offsets, such as a farmer maintaining a vegetated buffer on a field, will require regular maintenance and upkeep. The AfG policy must clearly define how such offsets will be monitored and enforced.

(6)COST

Further detail is needed regarding the cost implications of the proposed AfG policy. Offsetting nutrients and sediment from new development will carry a significant cost and it is critical to ensure that offsets can be done in the most cost effective manner possible.

MACo is committed to the creation of a reasonable and practical AfG policy and will continue to engage with stakeholders to address the concerns of county governments. The purpose of the AfG policy should be to offset the impacts of new growth and it is imperative that the policy not go beyond its intended purpose. MACo cannot support a policy that would effectively halt growth in rural areas or destroy the viability of redevelopment projects in urban areas. Please do not hesitate to contact me if you have any questions regarding these comments.

Sincerely,

Leslie Knapp Jr.

Leslie Knapp Jr.
MACo Legal and Policy Counsel

Public Comment submitted by Mr. Foster – 8/5/12

While we may provide additional comments later on, I wanted to follow up promptly on a few issues:

1. As we discussed during your presentation, I believe that there is a significant error in the Septic example provided on page 5 of your handout. This example suggests that the Nitrogen loading is 9.86 per household whereas I believe that this should be per resident. Other figures that I have seen quoted from MDE and EPA have suggested 8.8 pounds of Nitrogen per person X 2.63 residents per household giving a total of 23 pounds of Nitrogen annually.
2. John Rhoderick provided some very interesting power point slides showing the estimated percentage of farmers who would be able to meet their baselines and the potential amount of nutrient credits available. Could you please send me copies of those slides.
3. As indicated by WIP teams from Talbot, Queen Anne's, and Kent Counties; the current version of the MAST is no where close to providing adequate information regarding the relative effectiveness and cost-effectiveness of urban BMPs. There is a desperate need for this information throughout the state and I urge you in the strongest possible terms to try and provide this information as soon as possible. Even providing ball park estimates such as contained in recent publication by World Resources Institute and Research Triangle Institute would be greatly appreciated. Unfortunately, the alternative is for these WIP teams to either waste their time pursuing inefficient measures like Street Sweeping (estimated by RTI at over $ 1,000 per pound of Nitrogen removed) or to simply throw up their hands and stop working altogether.

Thanks again for your help and your sincere efforts to help the public understand some important but very complicated issues.

Regards,

David

J. David Foster
Riverkeeper
Chester River Association

Public Comment submitted by David Liddle – 7/20/12

There are a number of things that could be done to improve the overall quality of the Chesapeake Bay.

The Bay has at least two natural cleaners, the Oyster and the Menhaden. These two creatures alone, if left alone, could go a long way toward cleaning up The Bay. The Oyster and the Menhaden spend 24 hours a day for their whole lives doing nothing but cleaning The Bay. But what do we do with these two miracles that could accomplish what billions of dollars have not been able to make a dent in? We eat them. In fact in the case of the Menhaden we don't even eat them we feed them to our pets and our pigs and put them onto our fields as fertilizer! Then, having destroyed that which could solve our problem we try to solve the problem - a simple problem to an Oyster or a Menhaden - by throwing money at it.

There are other obvious problems, most of which could be fixed, and quite easily, but it would involve politicians upsetting some people. Those are of course rich people. And we all know that a politician is not going to upset someone who has contributed money to him/her.

Going back to the Oysters and The Menhaden, the obvious answer is to stop taking them. But I am going to be realistic. That is not going to happen. So how about a huge reduction in the catch. In the case of the Oyster put half of the Bay off limits to Oyster catching. And if anyone is caught catching there, the automatic penalty is loss of their license. (The license not to be reissued to someone else - there would simply be one less Oyster fisherman) Menhaden, just stop catching them. OK, OK rich people, I know, I know. But do we really need to destroy our Bay to feed our pets, pigs and to make fertilizer?

Talking of fertilizer, that is another one of the problems. Millions of people want to live on and near to the Bay, unfortunately they also want to have to greenest, weed free lawn possible. So millions of people pour millions of gallons of weed killer and fertilizer and insecticide onto their lawns. This of course washes directly into The Bay. The weed killers doubtless kill the underwater weeds that are vital to the young crabs, fish etc . The fertilizer, we already know what that does. And can anyone think that insecticides will help The Bay? Again the obvious answer is to ban all three in the Chesapeake Bay area>

I hear you, "It's not going to happen." Of course it is not because a very few, very rich people will spend millions lobbying, sorry bribing, sorry contributing to our politicians. So because of that we will lose The Chesapeake Bay.

Public Comment submitted by Mr. E Fry – 9/14/12

Two comments about proposed regulations for "Accounting for Growth"

The planned regulations call for 0 net N and Sediment impact on the Bay for new growth. Since the Bay is sick, this is appropriate. However this regulation and plan is permanent (in perpetuity) which is problematic. If the Bay is restored to a healthy state, 10 or 30 years from now, there should be allowance for growth that may have acceptable increase in N and sediment and the healthy Bay will not be adversely affected. Zero tolerance **for ever** on growth is not sustainable for the State.

Second concern; These regulations are being fast tracked, and they are uniform for the entire State. I am sure there will be numerous unintended consequences to these new regulations. I do not think enough energy and time has been dedicated to potential unintended consequences. What will this do to land values for Agriculture, or development? Will this stop growth, create a vacuum for new jobs for the young and better educated workforce? Will population, new businesses and agriculture migrate to other states? Will our tax base stagnate or go down ? Is this sustainable? We need to thoroughly vet these proposed regulations.

Public Comment submitted by Mr. Berg – 7/20/12

Cc: "MDE Secretary" <mde_secretary@mde.state.md.us>

http://www.mde.state.md.us/programs/Water/TMDL/TMDLImplementation/Documents/Accounting_for_Growth.pdf

All increases in development loadings are to be offset, except for Urban Redevelopment.
This Policy is the Death of the Bay !!!
With most urban (80%) development in the State being redevelopment, it makes no sense to exempt this type of development from the required offsets that all other urban developments must meet.
Even farms are being required to retrofit the farms with BMPs to offset existing impacts.

How do you expect to meet Bay Goals when the largest development number in acres and highest per acre loads are excused from offsetting their historic increases in nutrient and sediment loads from the standard of "Woods Good, Hydrologic Condition"?
MDE and State Government has predestined the Bay Program to failure with this policy.
Retrofitting the many many urban problems of the past is the only way to reverse the Death of the Bay.

"Status Quo" for Redevelopment Projects in Maryland is not an acceptable standard. Learn from the mistakes of the past and change this policy to be proactive and Bay friendly !!!

Vincent H. Berg, P.E.
Director of MDE, Sediment and Stormwater Administration, 1989 to 1992

Public Comment submitted by Ms. T. Bartley – 9/12/12

How does the Accounting for Growth Policy and Offsets/Nutrient Trading apply to Federal Facilities such as Military Installations?

Teresa Bartley
DPW Environmental Division
Natural Resources Branch

Public Comment submitted by Ms. Merkel – 8/21/12

Credit Purchasers

1. What can existing point sources use nutrient trading for if they must first comply with all NPDES permit limits, including TMDL waste load allocations, tech-based standards and WQBELs?

2. For new sources or new dischargers, will there have be remaining allocations from the TMDL available and will all other dischargers have to be under compliance schedules?

3. Will new sources or new discharges be able to use offsets to exceed load allocations or waste load allocations (e.g., septics)?

4. How does the General Permit for offsets work? Will it be incorporated by reference in individual or general NPDES permits? What information will be included in the permit?

5. Under MD's offset policy, can you offset to discharge into an impaired waterway?

6. How do you avoid hotspots under the Growth and Trading policies?

7. Can sources, such as MS4s that do not have numeric limits in their permits, purchase credits to comply with their permits? Who and how will this be monitored?

Credit Generators

1. If WWTPs (or other point sources) have the ability to generate credits by reducing their discharges below ENR, then shouldn't the permit limit be adjusted to reflect the lower concentration or mass? Doesn't the CWA require more stringent limits when technologically feasible? How will we ever meet the goal of the CWA to eliminate pollution if there is no incentive to rachet down pollution discharges?

2. Will CAFOs be able to generate credits? How is this possible since they have a zero discharge limit under the CWA?

Best,

Michele

Michele Merkel
Co-Director, Food & Water Justice
Food & Water Watch

Subject:	Accounting for Growth Comments
Created By:	nbrown2@marylandports.com
Scheduled Date:	
Creation Date:	8/28/2012 2:27 PM
From:	Nat Brown <nbrown2@marylandports.com>

Recipient	Action	Date & Time	Comment
CC: (APENA@menv.com)			
To: AFG MDE (AFG@mde.state.md.us)			
CC: David Blazer (dblazer@marylandports.com)			
CC: 'Kenna Oseroff' (KOSER@menv.com)			
CC: Lauren Leese (LLEES@menv.com)			
CC: Steve Storms (sstorms@marylandports.com)			

To Whom This Concerns:

Please accept these attached review comments from the MPA/MES TMDL Management Work Group on the *Accounting for Growth* document. Should you have questions regarding these comments, please feel free to contact my office. Thank you.

Sincerely,

Nathaniel K Brown
Maryland Port Administration
Harbor Development
(410)385-4748
nbrown2@marylandports.com

Comments and Questions on the 7/12/12 Accounting For Growth Draft Document

Specific comments to the draft document:

- It should be made clear in the document that "development" means development by any entity: residential, commercial, industrial, state and federal.

- How will the State deal with existing nutrient loads that MDE was not aware of because there has never been monitoring to indicate that loads exist for a given entity? Will they have to be offset?

- How will the State deal with very large loads that were never accounted for in the Chesapeake Bay modeling, e.g., sediment and phosphorus loads from Conowingo dam if an unplanned discharge occurs?

- If this plan is adopted, there must be enforceable requirements on the State to abide by published guidelines and timeframes for approving acceptable plans. This also means that the State's trading system must have reasonably priced credits available when they are needed. Without these requirements on the regulatory community, developers will never be able to construct or modify projects.

- Who will be responsible if a sizable operation that supplies credits goes bankrupt? Buyers of those credits will have to be given some period of time to find other suppliers to meet their TMDL-based requirements.

- Although there is a theoretical "trading system" in place, the present time, Maryland's nutrient trading program is not viable as almost no nutrient credits are available if they were needed, and the State has been extremely slow in approving credits for inclusion into NutrientNet.

- There needs to be a clearer interpretation of what constitutes a new source, a net increase or "<u>any</u> construction, alteration or improvement" (emphasis added). Is there a *de minimus* loading or alteration that would not trigger offset requirements?

- On page 9 of 10 of the draft, it would be very useful if more detailed calculations were shown more clearly to demonstrate the offset requirements in the examples.

- Nutrient trading should be allowed region-wide with possibly some discounting of losses of nitrogen to the atmosphere (in-stream de-nitrification). Constraints that limit trading within watersheds or regions may be counter-productive. If the broad -based trading is found to be ineffective, then, and only then, should the trading be limited to watersheds. Getting the process started is more important that getting it exactly right. If the broad goal is met, or at least partially achieved, we will be further along in meeting the goal than failing to get the process underway.

Public Comment submitted by Melanie A. Frisch, DoD Chesapeake Bay Program State Liaison

From my read of the "Accounting for Growth Discussion Draft dated July 12, 2012" and from the "Draft dated August 27, 2012 For Discussion Purposes Only" with respect to applicability to DoD installations, I understand the following:

1.Redevelopment projects must comply with applicable stormwater regulations but they will not be subject to the offset post-development nonpoint source loads. The 20% stormwater retrofits required by Maryland under the Phase II WIP and the Chesapeake Bay TMDL fall under the definition of redevelopment projects as they will focus on treating lands that were not previously treated by stormwater management best management practices.

2.If a land use change is required for a specific project and that project will disturb one (1.0) or more acres of land in the Maryland portions of the Atlantic Coastal Bays or Chesapeake Bay Watersheds the Accounting for Growth regulations will apply.

3.If a land use change is not required regardless of the area of land disturbed, the Accounting for Growth regulations do not apply.

4.The land use changes the Accounting for Growth regulations are focusing on are:

a. Conversion of land uses from agricultural, forest, recreational or other natural land use/land cover type to an industrial, commercial, institutional or residential use;

b. Increases in residential density; or

c. Changes in the runoff characteristics of a parcel of land in conjunction with residential, commercial, industrial or institutional construction or alteration.

Land use categories on a DoD installation are set by the DoD Service responsible for that installation; Maryland does not have zoning authority over the lands within the boundaries of a DoD installation. Because land use changes will not apply to DoD installations, the draft Accounting for Growth regulations will not apply to DoD installations. Projects on DoD installations will however have to comply with Maryland's Stormwater Management laws and regulations.

Please confirm that my understanding is correct or if it is not, where I went wrong. Please note the DoD remains supportive of Maryland's efforts to meet the requirements of the Chesapeake Bay TMDL and its Phase II WIP however, we want to be sure we understand how the draft Accounting for Growth regulations may or may not affect the missions of the DoD installations located in Maryland. Thank you.

Accounting for Growth: Essential Elements for Success

Maryland has made a strong commitment to reaching our Chesapeake Bay restoration goals. Yet, as we take action to reduce existing pollution, new growth and development threatens to undermine our potential to achieve success. The Maryland Department of Environment (MDE) is currently drafting regulations that would "offset" pollution from future growth and development by creating a new program to "trade" pollution credits. These draft regulations, as they currently stand, do not include the elements necessary for a credible offset program – rules for verification, enforcement, and transparency are missing from its provisions. Much stronger safeguards are also needed to protect water quality. MDE has met with stakeholders over the past month and is currently revising the draft, expecting to release a new draft in November.

In order for us to truly achieve a healthy Bay and local waters for our residents, Maryland's "Accounting for Growth" policy must address the following:

1. **All aspects of the offset trading program must be transparent, and the practices must be verifiable and enforceable: offset integrity is key.**

- Transparency shall include public access to records – online and in paper copy – that allow for citizen oversight of the offset program and its participants.
- An independent third party shall verify practices under clearly articulated rules.
- Verification shall satisfy MDE's statutory obligation to verify all trades certified as offsets, including those that the Department of Agriculture (MDA) may supervise. MDE and the point sources it regulates under the Clean Water Act are ultimately responsible for meeting the Bay TMDL's pollution limits; MDE must ensure that offsets in Maryland are verified so that the state meets the TMDL and EPA's offset requirements.

2. **The offset regulations should include a 2:1 uncertainty ratio – the standard ratio – for nonpoint-point source trades.** Uncertainty ratios provide protection against model efficiency overestimates and help account for variations in the performance of credited BMP practices. EPA Trading Policy provides that "the use of greater than 1:1 trading ratios between nonpoint and point sources" is an essential element of a credible trading program.

3. **The regulations shall include a reasonable grandfathering date of December 31, 2013, for new development.** The Discussion Draft proposes to grandfather new development until the end of 2014. In recent public workshops, MDE has indicated an interest in potentially applying grandfathering provisions from the stormwater management regulations to the offset policy — regulations that have dates extending as far as 2017, *nearly halfway through the Bay cleanup effort*. Maryland and its local jurisdictions simply cannot afford to pay for the additional burden of pollution from new development. An extended grandfathering date is unacceptable.

4. **Offsets must be prohibited where such use would harm local water quality or create "hot spots" of concentrations of pollution**. Local water quality must be protected, even when doing so restricts trading geography. Low-income and minority communities are particularly vulnerable because offsets could create high concentrations of pollution or "hot spots" in local waterways that could expose nearby residents, especially local

fishermen and their families, to pathogens and other harmful co-pollutants.

5. **Offsets cannot create new pollution on an impaired waterway unless certain EPA regulations are met.** New pollution to an impaired waterway is only allowed when existing dischargers are subject to "compliance schedules" that are designed to bring the waterway in compliance with water quality standards. (See 40 CFR 122.4).

6. **Development that creates new and continuing pollution (a permanent impact) shall be offset by pollution reduction practices that are equally permanent.** Development creates an ongoing pollution impact on our waterways. If offsets are not similarly permanent, the pollution reduction gains offsetting the development will gradually disappear and Maryland will not meet its restoration goals under the Bay TMDL.

7. **Regulations that establish offsets for growth shall include phosphorus and sediment offsets as well as nitrogen offsets.** One practice may be allowed to offset all pollutants, if the applicant can verify that the practice meets the offsets for all the regulated pollutants.

8. **Local governments shall have the option of requiring offsets for new hook-ups to wastewater treatment plants, even if those plants have surplus capacity under their permit.** The proposed policy generally supports infill development by not requiring developers to offset their loads if they connect to an existing, under-utilized treatment plant. A local government may wants to incentivize specific development through selective application of an offset requirement and thus should be allowed to do so.

9. **"Fee-in-lieu" shall not be an option for large-scale development because fees instead of on-the-ground action do not translate into pollution reductions.** If developers are allowed to pay a fee instead of purchasing offsets, the fee must capture the real cost of the implementing credit generating practices. All "fees in lieu" should be phased out after the first several years of the program, and all in lieu fees shall be used promptly as part of a program designed to bring the affected waters into compliance with water quality standards.

10. **Overall, the policy should be kept simple enough so that local governments and developers may easily understand and implement it.** To streamline the process, MDE should be the one agency to provide a "one stop shop" for offset and trading policy and implementation. Only MDE has the authority under the Clean Water Act and the expertise to ensure that Maryland offset and trading programs are verifiable, transparent, and enforceable.

We strongly believe that the program's design and implementation must be done right at the outset. Maryland cannot afford to adopt a solution that sounds good on paper but does not deliver results. Because some hope to expand the program and use it to inform increased trading efforts in the state, the likelihood Maryland will get the rules right in the future will be greatly diminished unless we set strong rules now.

The attached briefing paper developed by the Center for Progressive Reform outlines in more detail how the offset regulations must incorporate verification, enforcement, and transparency mechanisms so that the offset program is best positioned to create legitimate

reductions, meets EPA policy and the Bay TMDL's requirements, and better ensures the offset market functions successfully. The paper also includes recommendations for safeguards designed to protect local water quality. The table below provides a quick reference to help readers quickly find recommendations related to the principles we've identified above.

Maryland is charting completely new territory in developing its offset program, – caution is therefore warranted. MDE officials must create a growth offset policy that ensures we improve water quality and meet our Bay restoration goals and obligations. Recent studies indicate that MDE enforcement of environmental laws is lacking. Without adequate enforcement, any trading or offset program will be problematic. Only with careful planning and effective offset regulations that create real reductions will Maryland be able to grow in a way that is smart, sustainable, and protects our greatest natural resource, the Chesapeake Bay.

Maryland Sierra Club
South River Federation
West/Rhode Riverkeeper

CPR White Paper Quick Reference	
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Rena Steinzor and Shana Jones[1]

Accounting for Growth: Offset Integrity Critical for Success

New pollution created by growth and future development threatens to degrade Maryland's waters and undermine any gains the state has made and will make to restore the Chesapeake Bay. The 2012 Sustainable Growth and Agricultural Preservation Act (also known as "The Septics Bill") includes a variety of measures designed to better plan for new growth.[1] This paper focuses specifically on the Act's offset provision, which obligates the Maryland Department of Environment (MDE) to create offset requirements for developers building new residential subdivisions located in areas planned for future growth on septic systems.[2] Under the Act, offsets allow developers to counterbalance the impact of the pollution loads by allowing them to purchase pollution reductions generated from other sources able to find reductions above and beyond existing pollution reduction requirements.[3] MDE released draft regulations creating an offset program on August 27, 2012. Another draft is set to be released in November.

MDE's draft offset regulations, as they currently stand, address almost none of the elements necessary for a credible offset program – rules for verification, enforcement, and transparency are glaringly missing from its provisions. While the Act is also designed in part to help the state meet the Bay TMDL's requirement that Maryland to "account for and manage new or increased loadings" of nutrients caused by future growth,[4] MDE also has not followed EPA guidance for offsets or met the expectations for offsets outlined in Appendix S of the Bay TMDL.[5] Maryland's offset program is narrow in scope, as it has been created to reduce the pollution impact of septics, sources not traditionally covered under the Clean Water Act but crucial to control if we hope to restore the Bay and meet the Bay TMDL's requirements. The program's design and implementation therefore must be done right at the outset. Maryland cannot afford to adopt a solution that sounds good on paper but does not deliver results – especially if some hope to expand the program and use it to inform increased trading efforts in the state. If MDE is unable to set strong rules at this juncture, whether it will get the rules right on more prominent sources is a reasonable concern. Moreover, if the new program fails to deliver results or creates loopholes that allow sources to exceed the TMDL's cap, credibility for expanded trading and offset programs will be destroyed.

For all of these reasons, to better ensure that actual and additional pollution reductions take place and that Maryland's offset program succeeds, offset integrity is key: offsets must be <u>verifiable,</u> <u>enforceable,</u> and <u>transparent</u>. They must include

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[1]The Center for Reform (CPR) is a 501(c)(3) organization founded in 2002 to provide policy advice in the arena of efforts to protect public health, worker safety, and the environment to decision-makers at the federal, state, and local level. Rena Steinzor is the President of CPR and a professor of law at the University of Maryland School of Law. Shana Jones is a lawyer and is a senior consultant on Bay issues for CPR.

safeguards to protect local water quality and not undermine the Bay TMDL. An offset that either reflects reductions that would have happened anyway or does not represent genuine reductions will undermine overall pollution reduction goals.[6] The purpose of this paper is to explain how and why Maryland's draft regulations must incorporate these critical elements so that the offset program is best positioned to create legitimate reductions.

We recognize that Maryland faces a daunting task to address new growth, and we understand why policymakers are exploring an offset program to address new growth from developments on septic systems. But just as we must proceed with the goal of making the offset program as strong and as credible as possible, we must also move forward with a healthy dose of realism. Potential credit generators may well decline to participate in the offset program. Even a well-designed program may not achieve expected pollution reduction results because assessing BMP effectiveness is so difficult.

All of these factors lead us to conclude that implementing an offset program with the expectation that it will lead to wider trading cannot be used as a distraction from policymakers making the hard choices that will also be necessary to make to ensure real and lasting gains. We must also strengthen our enforcement efforts to under existing law. Water pollution violations are unacceptable, and we can only send that message if deterrence-based civil and criminal enforcement are a priority. Finally, while MDE is clearly the agency with the legal authority and administrative capacity to oversee offsets and trading in Maryland, its resources are severely stretched. The recommendations we outline below are critical elements for better ensuring Maryland's offset program succeeds. Even if they are adopted, however, they will be worth no more than the paper they are written on if dedicated resources are lacking to ensure their effective implementation.

Below, we describe why each element is critical and then provide concrete recommendations for adoption. At a minimum, MDE must follow EPA guidance for offsets or met the expectations for offsets outlined in Appendix S of the Bay TMDL. A chart at the end of this document provides all of our recommendations in one list.

VERIFICATION – PROTECTING OFFSET INTEGRITY

Verification under the draft rules. The draft rules released by MDE on August 27, 2012 contain no verification provisions.

Why verification matters. Offsets work to counterbalance new growth only if they represent genuine pollution reductions. This is especially true for any offset program that allows offset credits to be created by agricultural Best Management Practices (BMPs). Verification data collected on BMPs is currently extremely lacking and inconsistent, and thus whether they are being successfully and reliably implemented remains largely uncertain. Indeed, in 2009, after a committee for the National Research Council evaluated nutrient reduction programs in the Bay, it concluded that it "was unable to determine the reliability and accuracy of the BMP data reported by the Bay jurisdictions."[7] To address this problem, the NRC found that "[i]ndependent (third-party)

auditing of the tracking and accounting at state and local levels would be necessary to ensure the reliability and accuracy of the data reported."

Verification will not only help ensure that the BMPs used to generate offset credits both exist and work, but it also will help ensure offset market credibility. No market succeeds without verifiable market information, and a market designed to improve environmental quality should face an even higher threshold of oversight. In most markets, buyers have the incentive to verify the quality of the product because they intend to use and profit from it.[8] In pollution offset programs, however, buyers may be concerned less by the quality of pollution reductions memorialized in an offset than by the fact that they are able to show regulating authorities that they have acquired it in the first place. Unless buyers retain liability for the pollution reductions represented by the offsets in their permits and know the offsets are likely to be independently verified, they have little incentive to investigate whether the offsets they have purchased result in actual pollution reduction gains. Strong and impartial oversight is therefore needed to ensure that the offsets purchased represent real and permanent reductions.

Finally, strong verification measures should be included in the offset program because MDE has the statutory obligation to protect the state's water quality and to verify offsets designed to meet federal and state regulatory requirements.[9] EPA expects robust verification to occur for any offset programs designed to meet the Bay TMDL. As part of its offset expectations outlined in Appendix S of the Bay TMDL, EPA has stated that offsets must be "quantified using appropriate metrics" and are "routinely verified."[10] Because MDE and the point sources it regulates under the Clean Water Act are ultimately responsible for meeting the Bay TMDL's pollution limits, MDE must ensure that offsets in Maryland are verified so that the state meets the TMDL and EPA's offset requirements.

Recommendations. Any verification mechanism must satisfy MDE's statutory obligation to protect the state's water quality and ensure that offsets meet regulatory requirements. Maryland's offset regulations should also meet EPA's expectations for verification that are outlined in Appendix S of the TMDL as well as well as clarify how verification will be conducted. Therefore, the final regulations should include:

- The minimum quality standards for installed BMPs eligible for the offset program must be established, including identifying the metrics and data used to quantify the offset/credit generated.[11]

- A process must be established to verify that the offset credit was and continues to be generated, via monitoring, inspection, reporting, or some other mechanism, including articulating the frequency of on-site or other monitoring and that MDE is responsible for conducting monitoring or inspections.[12]

- Accreditation and de-accreditation criteria and deadlines for verification reports and determinations should be established.[13]

If MDE intends to use third-party verification as a mechanism for verification and compliance assurance, then:

- Clear rules for third-party verification must be articulated.[14] Ideally, the Chesapeake Bay Program would establish an Office of the Independent Evaluator to provide clear, transparent, and real-time information about the progress toward Bay restoration and serve in the capacity as a third-party verifier, and MDE should support efforts to create such an office at the Bay Program. Until that happens, MDE officials must set rules for verification and closely monitor whether third-party verifiers are following them.

- Clear rules for third-party verification independence.[15] Agency officials must set conflict-of-interest rules, including providing that verifiers and aggregators cannot provide consulting services to the entities they certify and requiring disclosures of potential conflicts-of interest.[16]

- Third-party verification training must be required. Third-party verifiers must be trained by MDE or meet minimum education requirements established by MDE.

- Offset market participants should pay the costs of third-party verification and compliance assurance.

ENFORCEMENT: ENSURING OFFSET PERFORMANCE

Compliance assurance and enforcement under the draft rules. The draft rules released by MDE on August 27, 2012 do not adequately provide assurance of compliance or mechanisms for private and state enforcement. The rules do not directly designate MDE as the institutional entity responsible for ensuring offset integrity, even though the General Assembly clearly authorized the agency to create regulations for all "nutrient offset requirements" under the new Act. The rules also do not address the process by which buyers and sellers of offsets become eligible and ineligible to participate in the offset market; rather, the rules imply that all point source credits certified by MDE and all non-point credits certified by MDA "can be used" for offsets.[17] Likewise, the rules sidestep providing a minimum standard for the offset credits themselves, referencing only MDE and MDA policies. Because the policies established by MDE and MDA could change without public notice and comment, the regulations – not policy guidance – should establish the eligibility requirements for particular offset credits to be sold in the market.

Why enforcement matters. Ensuring that buyers are purchasing offsets that perform as promised is critical to protecting both water quality and offset market integrity. On a most basic level, the possibility of legal liability for non-performance drives performance. Indeed, avoiding consequences for failing to perform underlies all business transactions and regulatory and legal requirements.

Rational sellers of offsets will base their decisions on whether to sell credits that accurately reflect genuine pollution reductions based on the expected benefits and

expected costs of noncompliance.[18] If offsets are permitted to be generated and sold without consequences for non-performance, then some sellers may well conclude that investing in the pollution reductions memorialized in the credits is unnecessary. Credible consequences for non-performance protect against this problem.

EPA Trading Policy provides that "[m]echanisms for determining and ensuring compliance are essential for all trades and trading programs."[19] In Appendix S of the Bay TMDL, EPA expects states to address non-performance problems in two parts: certification and enforcement.[20] EPA first expects states to "designat[e] the process to be used and the institutional entity responsible for credit/offset program operation and certification."[21] EPA then lists a series of criteria that "ensur[e] the enforceability of Clean Water Act discharge permits and offset transactions." As detailed in the recommendations below, far more clarity about both certification and enforcement is needed if Maryland is going to create a "credible offset program" that meets the TMDL's requirements.[22]

Recommendations: Certification and Eligibility. The final regulations must include the following:

- The regulations must designate MDE as the institutional entity ultimately responsible for credit/offset program operation and certification, including determining whether offset buyers and sellers are eligible to participate in the program and whether particular credits are eligible to be bought and sold.[23]

- Eligibility criteria for offset credits should be established and should require that offsets represent real, additional, quantifiable, permanent, verifiable, and enforceable credits in a manner consistent with meeting water quality standards and the Bay TMDL.[24]

- The regulations must establish eligibility criteria for offset buyers and sellers so that market participants that violate the criteria become ineligible to participate in the offset program.[25] Offset market participants having any unresolved violations of pollution control laws and requirements or having a history of repeated noncompliance with such laws must be determined ineligible to participate.[26]

- The regulations must establish eligibility requirements for and the acceptable roles of aggregators, nutrient credit exchanges, or third parties in generation, sale, and purchase of offsets on behalf of others, if such use is anticipated.[27]

- Point sources must not be allowed to generate credits by reducing discharges that are required by that source's NPDES permit.[28]

- Non-point sources must not be allowed to generate credits where a BMP has been cost-shared by state or federal funds.[29]

- Non-point sources must not be allowed to generate credits where a BMP has been implemented before January 1, 2013 or when the offset program starts in order to

ensure additionality, namely, that reductions occur above and beyond what would have happened anyway without the offset market. Otherwise, pollution reductions that have already occurred and accounted for will be counted again, resulting in no new net reductions overall.

Recommendations: Enforcement. Any offset program must satisfy MDE's obligation to ensure that offsets represent real and additional reductions. The offset regulations should also meet EPA's expectations for enforcement that are outlined in Appendix S of the TMDL as well as well as clarify how enforcement will be conducted. The final regulations must include the following:

- MDE must have the resources to provide compliance assistance and meet routinely with offset buyers and sellers to clarify potential misunderstandings and resolve concerns in order to prevent implementation problems.[30] Between 2000 and 2009, the overall workforce budget for the Water Management Administration (WMA) between 2000 and 2009 declined from $3.39 million to $3.16 million. When adjusted for inflation, this decline is nearly 25 percent and coincides with a doubling of permits-in-effect. MDE must also have an adequate number of new staff positions dedicated to performing offset oversight and enforcement for all offset market participants. The staff should include field inspectors, compliance auditors, and additional assistant attorneys general.

- Civilly enforceable agreements between an offset generator and an offset purchaser must be required.[31] Should a nutrient credit exchange or aggregator be utilized to sell offsets,[32] purchasers must enter into civilly enforceable agreements with the exchange or aggregator.[33]

- MDE must review the agreements to determine whether they are civilly enforceable. "The written trade agreement should contain sufficient detail to allow the permitting authority to determine with some degree of certainty that the terms of the agreement will result in loading reductions and generation of sufficient credits to satisfy water quality requirements."[34]

- Any offsets must be included and recorded in the buyer's NPDES permit.[35] Under the draft rules, developers purchasing credits must "provide satisfactory documentation of offset credits" to MDE prior to the issuance of any General or Individual NDPES permit.[36] The draft rules should define the minimum requirements for "satisfactory documentation," provide that the documentation will be made available to the public, and determine how offsets will be included and recorded as part of the NPDES permit.[37]

- MDE should provide public notice when offset purchases are proposed.[38] Because developers are likely to be the majority of offset purchasers, MDE could utilize the normal comment and notice period of 45 days under the General or Individual Permit for Stormwater Associated with Construction Activity to provide for public notice and allow for public comment. Likewise, the public should have the same opportunity to object to a proposed offset purchase that it

has to object to proposed Erosion and Sediment Control Plan under the General or Individual Permit for Stormwater Associated with Construction Activity.[39]

- Permits "must provide the vehicle for enforcement of the trade condition."[40] The new regulations should incorporate MDE's trading policy provision that provides that "point source trades will be implemented and enforced through discharge permits"[41] and ensure that point-nonpoint source trades are similarly enforceable.

- MDE must ensure that the transactions can be enforced by the jurisdiction or otherwise articulate how the transactions will be protected by the jurisdiction if failure for performance occurs.[42] MDE could, for example, require all offset agreements to provide that the agreement is enforceable by the agency by naming the agency as a third-party beneficiary.

TRANSPARENCY—PROTECTING OFFSET VALUE

Transparency under the draft rules. The draft rules released by MDE on August 27, 2012 contain no transparency provisions.

Why transparency matters. Transparency creates accountability for offset programs in at least two ways. At the most basic level, transparency provides the public with the information it needs to oversee government and private action.[43] Because they know their actions will be scrutinized, public disclosure of environmental information pressures both regulatory agencies and private entities to follow rules designed to benefit the public. "Sunlight," as Justice Brandeis famously said, is "the best of disinfectants."

Transparency is also crucial to ensure the integrity of the market. Disclosure of information allows buyers and sellers to make rational decisions and increases market efficiency. Put simply, markets only work if buyers and sellers operate with good information. Because an offset that doesn't represent pollution reductions is a worthless offset, a lack of certainty about offset integrity may result in offsets being valued lower by the market. For this reason, "public institutions can improve the efficiency of private exchange by preventing fraud and encouraging disclosure."[44] Indeed, EPA Trading Policy reflects this reality by stating that "[e]asy and timely public access to information is necessary for markets to function efficiently and for the public to monitor trading activity."[45]

Recommendations. All aspects of the offset program must be transparent. The final regulations must include the following:

- Information sufficient to allow the public to evaluate compliance with trade agreements and permit conditions in a timely manner must be made easily accessible.[46] Full disclosure of offset documentation must be required, including offset eligibility determinations, monitoring and verification reports, determinations of verification decisions and compliance, and disclosure of the quantity of nutrient reductions offset by eligible projects.

- The accreditation process for third-party verifiers must be made public; a public registry of accredited third-party verifiers must be provided online.

- Rates of inspections or third-party verification should be made available, including information concerning the types of offsets purchased, how many offsets were verified, and how many were in compliance.[47]

- To allow for citizen oversight, locations of proposed and existing offset projects should be provided to the public. This will allow interested citizens the opportunity to provide information relative to the offset that otherwise might not be accessible to MDE.[48] Ideally, offsets would be linked to a Geographical Information System (GIS).

SAFEGUARDS FOR PROTECTING LOCAL WATER QUALITY

Safeguards for protecting local water quality under the draft rules. The draft rules released by MDE on August 27, 2012 do not include adequate safeguards to protect water quality. Nor do they incorporate the safeguards listed by EPA in Appendix S of the Bay TMDL that requires, "for any offset, safeguards to ensure that the entire delivered load is accounted for and that water quality will be protected."[49]

Why safeguards protecting water quality matters for offset integrity. Maryland has made a strong commitment to reaching our Chesapeake Bay Restoration goals, yet as we take action to reduce existing pollution, new growth and development threatens to undermine that success. Maryland's offset policy must be environmentally sound enough to ensure that we do not add even more to our pollution loads. Meanwhile, no offset policy will succeed if it does not contain safeguards to protect against risk and uncertainties inherent in offsets – especially offset credits generated by BMP implementation.[50]

Recommendations: Safeguards to Protect Water Quality. The final regulations must include the following:

- Offsets must be prohibited where such use would cause or contribute to exceedances of water quality standards, TMDLs, waste load allocations (WLAs) or load allocations (LA) in the affected receiving waters, locally or elsewhere.[51]

- Offsets must be prohibited where such use would disproportionately harm affected communities and create "hot spots."[52] If offset and trading programs are not carefully designed and monitored, they can cause localized concentrations of nutrients and accompanying contaminants in local waters, posing a significant threat to human health and aquatic ecosystems. After all, by purchasing an offset, the source is not reducing the pollution it will add to the local waterway; rather, it is paying someone else to make those reductions elsewhere. Not only are any potential improvements to local water quality lost, but the pollution generated by offset purchasers is likely to increase pollution loads locally as well. High concentrations of pollution ("hot spots") could expose residents of nearby

communities to pathogens and other harmful co-pollutants. In addition to prohibiting the creation of hot spots outright, requiring credit-generating activities that improve water quality in the local community and watershed where offsets are occurring would be one way to better ensure that all Marylander's benefit from the offset program. CPR's white paper, *Fairness in the Bay: Environmental Justice and Nutrient Trading,* provides more detail about the problem of hot spots and how they should and can be prevented.[2]

- Offsets must not cause an impairment of existing or designated uses.[53]

- To account for uncertainty of source reductions due to practice inefficiencies related to the use of BMPs,[54] the offset regulations should include a 2:1 uncertainty ratio – the standard ratio -- for nonpoint-point source trades.[55] Under a 2:1 ratio, a credit buyer purchases two pounds worth of credits for every pound he or she intends to discharge. Uncertainty ratios provide protection against model efficiency overestimates and help account for variations in the performance of credited practices. EPA Trading Policy provides that "the use of greater than 1:1 trading ratios between nonpoint and point sources" is an essential element of a credible trading program.[56] In the Bay TMDL, uncertainty ratios are also an important means of reaching EPA's standard of reasonable assurance. Uncertainty ratios are also away to protect against hot spots.

- All new loads, regardless of the size of the disturbance, must be offset.[57]

- Development that creates new and continuing pollution (a permanent impact) must be offset by pollution reduction practices that are equally permanent. Development creates an ongoing pollution impact on our waterways. If offsets are not similarly permanent, the pollution reduction gains offsetting the development will gradually disappear. Some BMPs – such as cover crops – require new action annually. Other BMPs lose their effectiveness if they are not properly maintained. A forested buffer protected by covenants or easements recorded in the land records would be an example of a permanent offset.

- Offsets cannot create new pollution on an impaired waterway unless certain EPA regulations are met. Under 40 C.F.R. § 122.4, which applies to Maryland's NPDES program, sources on impaired waterways may not offset their discharges unless every existing source contributing to the impairment has a load allocation or wasteload allocation in an EPA-approved TMDL for each relevant pollutant, each source is covered by a compliance schedule for meeting its wasteload allocations, and there are sufficient remaining pollution load allocations to allow for a new discharge.

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[2]Rena Steinzor, Robert Verchick, Nick Vidargas, & Yee Huang, *Fairness in the Bay: Environmental Justice and Nutrient Trading*, CENTER FOR PROGRESSIVE REFORM BRIEFING PAPER No. 1208 (August 2012), *available at* www.progressivereform.org/articles/WQT_and_EJ_1208.pdf.

- As the regulations currently stand, they only provide for offsetting nitrogen. If offsets for phosphorus or sediment are proposed, a BMP offsetting nitrogen should not serve as a proxy for simultaneously reducing phosphorus and sediment loads. One practice may be permitted to offset all of these pollutants only if the credit generator can verify that the practice indeed functions in that capacity. Offsets or credits for phosphorus and/or sediment should not be permitted based on assumed reductions deriving from nitrogen offsets.

- "Fee-in-lieu" should not be an option for large-scale development because fees instead of on-the-ground action do not translate into pollution reductions. The primary purpose of Maryland's offset program must be improving the state's water quality. Unless the fees are managed well and strategically used for pollution reduction purposes, we may well face a "money for nothing" situation, where revenue is raised but the environmental impact of the development is not addressed. Moreover, fees may be less expensive than purchasing credits, and thus may undercut the overall offset market and discourage the purchase of offset credits.[3] For these reasons, if developers are allowed to pay a fee instead of purchasing offsets, the fee must capture the real cost of implementing credit-generating practices. All "fees-in-lieu" should be phased out after the first several years of the program, and all in lieu fees should be used promptly as part of a program designed to bring the affected waters into compliance with water quality standards.

- Local governments should have the option of requiring offsets for new hook-ups to wastewater treatment plants, even if those plants have surplus capacity under their permit. The proposed policy generally supports infill development by not requiring developers to offset their loads if they connect to an existing, under-utilized treatment plant. A local government, however, may want to incentivize specific development through selective application of an offset requirement and should be allowed to do so. Put simply, local governments should have the authority to exceed the state's requirements, giving them the ability to create additional pollution reduction practices within their jurisdictions to offset new demands on their wastewater treatment plants and direct development in certain areas.

- MDE should be the lead agency for offsets and trading in order to streamline the process and provide a "one stop shop" for local governments and offset market participants. Only MDE has the authority under the Clean Water Act and the expertise to ensure that the Maryland offset and trading programs are verifiable, transparent, and enforceable. MDE is also the appropriate agency to lead because EPA and Chesapeake Bay Program policy anticipate that one institutional entity should be responsible for overseeing state trading and offset efforts. Appendix S strongly suggests that EPA expects that one institutional entity will have the

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[3] *See, e.g.*, Royal C. Gardner, *Money for Nothing? The Rise of Wetland Fee Mitigation*, 19 VA. ENVTL. L.J. 1, 4 (2000).

primary responsibility for ensuring that the policy principles outlined within it are met. Indeed, this expectation would be consistent with the trading principles established by the Chesapeake Bay Program that were arrived at through a negotiated process involving various stakeholders in 2001. As one of its "Guidelines for Performing Trade Administration," Section 6 of the Chesapeake Bay Program Nutrient Trading Fundamental Principles and Guidelines provides that "[a] central trading coordinating office should be established within each state to track the administration of trades." These recommendations reflect common sense, as clarifying administrative responsibility increases the likelihood of successful program implementation.

CONCLUSION

Only an accountable offset program will have the likelihood of improving Maryland's water quality, ensuring that the state meets federal and state requirements, and preventing the degradation of unimpaired waters. If Maryland's offset program is designed to ensure that promised nutrient pollution reductions are actually happening, the program has a much greater chance for success. Much more detail, however, is currently needed in the new rules to better ensure that actual and additional pollution reductions take place. Maryland's draft regulations must incorporate strong verification, enforcement, transparency, and water quality safeguards so that the offsets create legitimate reductions, water quality is protected, and the offset market functions successfully.

Recommendations and Sources

Verification	
The minimum quality standards for installed BMPs eligible for the offset program must be established, including identifying the metrics and data used to quantify the offset/credit generated.	Bay TMDL Appendix S-4.
A process to verify that the offset credit was and continues to be generated, via monitoring, inspection, reporting, or some other mechanism, including articulating the frequency of on-site or other monitoring and the entity responsible for conducting monitoring or inspections.	Bay TMDL Appendix S-4.
Clear rules for third-party verification must be articulated.	Bay TMDL Appendix S-4.
Clear rules for third-party verification independence must be established. Agency officials must set conflict-of-interest rules, including providing that verifiers and aggregators cannot provide consulting services to the entities they certify and requiring disclosures of potential conflicts-of interest.	*The Willlamette Partnership*, IN IT TOGETHER: A HOW-TO REFERENCE FOR BUILDING POINT-NONPOINT WATER QUALITY TRADING PROGRAMS (2012), at 33; academic literature.
Third-party verification training must be required. Third-party verifiers must be trained by MDE or meet minimum education requirements established by MDE.	Expert Policy Analysis.

Certification and Enforcement	
The regulations must designate MDE as the institutional entity ultimately responsible for credit/offset program operation and certification, including determining whether offset buyers and sellers are eligible to participate in the program and whether particular credits are eligible to be bought and sold.	Bay TMDL Appendix S-5.
Eligibility criteria for offset credits should require that offsets represent real, additional, quantifiable, permanent, verifiable, and enforceable credits in a manner consistent with meeting water quality standards and the Bay TMDL.	Bay TMDL 10.1; Bay TMDL Appendix S.
The regulations must establish eligibility criteria for offset market participants so that those that violate the criteria are become ineligible to participate in the offset program. Offset market participants having any unresolved violations of pollution control laws and requirements or having a history of repeated noncompliance with such laws must be determined ineligible to participate.	Bay TMDL Appendix S-3; MDE Trading Policy 3.5; MDA Trading Policy at 6.
The regulations must establish eligibility requirements for and the	Bay TMDL Appendix S-3.

acceptable roles of aggregators, nutrient credit exchanges, or third parties in generation, sale, and purchase of offsets on behalf of others, if such use is anticipated.	
Point sources must not be allowed to generate credits by reducing discharges that are required by that source's NPDES permit.	Bay TMDL Appendix S-3; MDE Trading Policy 4.4.
Non-point sources must not be allowed to generate credits where a BMP has been cost-shared by state or federal funds.	MDE Trading Policy 4.2.
Non-point sources must not be allowed to generate credits where a BMP has been implemented before January 1, 2013 or when the offset program starts to ensure that reductions are additional.	Bay TMDL 10.1.2.
MDE must have the resources to provide compliance assistance and meet routinely with offset buyers and sellers to clarify potential misunderstandings and resolve concerns in order to prevent implementation problems.	Expert Policy Analysis.
Civilly enforceable agreements between an offset generator and an offset purchaser must be required. Should a nutrient credit exchange or aggregator be utilized to sell offsets, purchasers must enter into civilly enforceable agreements with the exchange or aggregator.	EPA Trading Toolkit for Permit Writers, *Point-Source-Nonpoint Source Trading* at 11; EPA Trading Toolkit for Permit Writers, *Nonpoint Source Credit Exchange* at 14.
MDE must review the agreements to determine whether they are civilly enforceable.	EPA Trading Toolkit for Permit Writers, *Point-Source-Nonpoint Source Trading* at 12; EPA Trading Toolkit for Permit Writers, *Nonpoint Source Credit Exchange* at 14.
Any offsets must be included and recorded in the buyer's NPDES permit.	EPA Trading Policy F.2.; Bay TMDL Appendix S-5.
MDE should provide public notice when offset purchases are proposed.	EPA Trading Toolkit for Permit Writers, *Point-Source-Nonpoint Source Trading* at 12; EPA Trading Toolkit for Permit Writers, *Nonpoint Source Credit Exchange* at 14.; MDE Trading Policy at 8.
Permits must provide the vehicle for enforcement of the trade condition.	EPA Trading Toolkit for Permit Writers, *Nonpoint Source Credit Exchange* at 14; MDE Trading Policy at 8.
MDE must ensure that the transactions can be enforced by the jurisdiction or otherwise articulate how the transactions will be protected by the jurisdiction if failure for performance occurs.	Bay TMDL Appendix S-5.

Transparency	
Information sufficient to allow the public to evaluate compliance with trade agreements and permit conditions must be made easily accessible.	EPA Water Quality Trading Toolkit, Fundamentals, at 39.

The accreditation process for third-party verifiers must be made public; a public registry of accredited third-party verifiers must be provided online.	Expert Policy Analysis.
Rates of inspections or third-party verification should be made available, including information concerning the types of offsets purchased, how many offsets were verified, and how many were in compliance.	EPA Trading Policy G. 7.
Interested citizens must have the ability and opportunity to provide information relative to the offset that otherwise might not be accessible to MDE. To allow for citizen ovresight, locations of proposed and existing offset projects should be provided to the public.	EPA Water Quality Trading Toolkit, Fundamentals, at 39.

Safeguards for Protecting Local Water Quality	
Offsets must be prohibited where such use would cause or contribute to exceedances of water quality standards, TMLDs, waste load allocations (WLAs) or load allocations (LA) in the affected receiving waters, locally or elsewhere.	EPA Trading Policy F. 7; Bay TMDL Appendix S-4.
Offsets must be prohibited where such use would disproportionately harm affected communities and create "hot spots."	Bay TMDL Appendix S-4
Offsets must not cause an impairment of existing or designated uses.	EPA Trading Policy F.5.
To account for uncertainty of source reductions due to practice inefficiencies related to the use of BMPs, the offset regulations should include a 2:1 uncertainty ratio – the standard ratio -- for nonpoint-point sources trades.	EPA Trading Policy G. 4; Bay TMDL Appendix S-3; academic literature.
All new loads, regardless of the size of the disturbance, must be offset.	Bay TMDL 10.1.
Development that creates new and continuing pollution (a permanent impact) must be offset by pollution reduction practices that are equally permanent.	Expert policy analysis.
Offsets cannot create new pollution on an impaired waterway unless certain EPA regulations are met.	40 C.F.R. §122.4.
As the regulations currently stand, they only provide for offsetting nitrogen. If offsets for phosphorus or sediment are proposed, a BMP offsetting nitrogen should not serve as a proxy for simultaneously reducing phosphorus and sediment loads.	*See* Bay TMDL Appendix S.
"Fee-in-lieu" should not be an option for large-scale development because fees instead of on-the-ground action do not translate into pollution reductions.	Expert policy analysis.

Local governments should have the option of requiring offsets for new hook-ups to wastewater treatment plants, even if those plants have surplus capacity under their permit.	Expert policy analysis.
MDE should be the lead agency for offsets and trading in order to streamline the process and provide a "one stop shop" for local governments and offset market participants.	Federal and state law; Bay TMDL Appendix S.

Endnotes

[1]S.B. 236, Maryland 2012 Regular Session, 2012 Md. Laws 149 (enacted)[hereinafter "Septics Bill"].

[2]The Act provides that "on or before December 31, 2012, the Department of Environment shall propose regulations that establish nutrient offset requirements for new residential major subdivisions within Tier III areas that are to be served by on-site sewage disposal systems or shared systems." Septics Bill at 1–505, Section 8(a). Tier III areas are areas:

I) Not planned for sewerage service and not dominated by agricultural or forest land, and

II) Not planned or zoned by a local jurisdiction for land, agricultural, or resource protection, preservation, or conservation; and

III) Are one of the following:

1. Municipal Corporations not served by a public sewerage system;
2. Rural Villages as described in § 5–7B–03(F) of the State Finance and Procurement Article;
3. Mapped locally designated growth areas or
4. Areas planned and zoned for Large Lot and Rural Development.

1–508(A)(3).

[3]For the purposes of the Bay TMDL, an offset means "a reduction in the loading of a pollutant of concern from a source or sources that is used to compensate for the loading of the pollutant of concern from a different point or nonpoint source in a manner consistent with meeting WQS [Water Quality Standards]." Bay TMDL Appendix S.

[4]For example, the Preamble to SB 236 provides, in part:

> WHEREAS, In 2010 the U.S. Environmental Protection Agency (EPA) set limits 1 on the amount of nutrient and sediment pollution that can enter the Chesapeake Bay, 2 known as Total Maximum Daily Loads (TMDLs); and
>
> WHEREAS, As required by EPA, Maryland submitted and EPA approved Phase I Watershed Implementation Plans (WIP) which allocate the allowable pollution load among different sources and identify strategies for reducing nutrients and sediments that harm the Chesapeake Bay; and
>
> WHEREAS, Maryland is in the process of developing the Phase II WIP, which will refine the Phase I WIP and provide additional detail on pollution reductions; and
>
> WHEREAS, The Phase II WIP will also identify a set of specific actions that, once implemented, will achieve the reductions necessary to meet the nutrient and sediment limits by 2025 ….

[5] U.S. EPA, FINAL CHESAPEAKE BAY TOTAL MAXIMUM DAILY LOAD FOR NITROGEN, PHOSPHORUS, AND SEDIMENT 10.1 (Dec. 29, 2010)[hereinafter "Bay TMDL"]. In 2010, the Environmental Protection Agency (EPA) established the Chesapeake Bay Total Daily Maximum Load (TMDL), imposing strict numerical limits on the total amount of nutrients that may be discharged in Bay waters. Meeting the TMDL requires Maryland to make sure that nutrient pollution sources do not exceed the Bay TMDL's limits. This will require the state to rewrite the permits of regulated sources to reduce their discharges and otherwise create incentives for unregulated sources to cut their pollution loads.

[6] 28 VA. ENVTL. L.J. 343, 372 (2010).
[7] NAT'L RES. COUNCIL, NAT'L ACAD. OF SCI., ACHIEVING NUTRIENT AND SEDIMENT REDUCTION GOALS IN THE CHESAPEAKE BAY: AN EVALUATION OF PROGRAM STRATEGIES AND IMPLEMENTATION, at 4 (2009), *available at* www.nap.edu/catalog.php?record_id=13131 [hereinafter NRC COMMITTEE REPORT]. The National Research Council (NRC) is the operating agency for National Academy of Sciences and consists of a staff that enlists, organizes, and supports experts from around the nation—who are unpaid for their service on NAS study committees—to issue studies and reports upon request. In 2009, the EPA requested the NRC to "evaluate and provide advice on the CBP nutrient reduction program and strategy, [specifically directing] the NRC to evaluate the tracking of best management practice implementation, tracking and accounting efforts, the two-year milestone strategy, and the states' and federal agencies' adaptive management strategies, and to suggest improvements to these strategies that might better attain the CBP goals." *Id.* at viii.
[8]James Salzman, *Creating Markets for Ecosystem Services: Notes from the Field*, 80 N.Y.U.L. REV. 870, 911 (2005).
[9]MD. ENVIRONMENTAL CODE ANN. § 4-402 (2012) (authorizing MDE to protect the state's water quality). The General Assembly also clearly designated MDE as the agency authorized to oversee and implement any trading or offset programs designed to meet state, federal, or other regulatory requirements. Section 8-904 of Maryland's Agriculture Code provides that "nothing in this subtitle is intended to supplant or limit the authority of the Department of the Environment to establish eligibility and other requirements for the use of nutrient offset credits under any State or federal permit or other regulatory program." Md. Code Ann. § 8-904. The 2012 Sustainable Growth and Agricultural Preservation Act requires MDE to create regulations for all "nutrient offset requirements." In this way, the Act places the responsibility for offsets squarely within MDE's authority, and §8-904 likewise applies.
[10] Bay TMDL Appendix S-3.
[11] Bay TMDL Appendix S-4.
[12] *Id.*
[13] *Id.*
[14] *Id.*
[15] *The Willlamette Partnership*, IN IT TOGETHER: A HOW-TO REFERENCE FOR BUILDING POINT-NONPOINT WATER QUALITY TRADING PROGRAMS (2012), at 33.
[16] Lesley McAllister, *Regulation by Third-Party Verification*, 53 B.C. L. REV. 1, 57 (2012)[hereinafter "Regulation by Third-Party"].
[17] Draft MDE Regulations dated August 27, 2012 at 07 A(2)[hereinafter "Draft Regulations"]
[18] *See* Lesley McAllister, *The Enforcement Challenge of Cap-and-Trade Regulation*, ENVIRONMENTAL LAW (2012), *available at* http://elawreview.org/2012/02/the-enforcement-challenge-of-cap-and-trade-regulation/#_ftn26.
[19] U.S. EPA, WATER QUALITY TRADING POLICY G. 5 (2003)[hereinafter "EPA Trading Policy"].
[20] Bay TMDL Appendix S-5.
[21] *Id.*
[22] *See* letter to John Rhoderick dated February 17, 2012, *available at* http://www.chesapeakebay.net/channel_files/17761/md_trading_and_offset_letter_02_17_2012.pdf (emphasizing the "the need for credible offset programs for each sector.").
[23] Bay TMDL Appendix S-5.
[24] Bay TMDL 10.1; Bay TMDL Appendix S.
[25] Bay TMDL Appendix S-3.
[26] MARYLAND DEPT. OF ENVIRONMENT, *Maryland Policy for Nutrient Cap Management and Trading in Maryland's Chesapeake Bay Watershed*, 3.5 (April 17, 2008)[hereinafter "MDE Trading Policy"]; MARYLAND DEPT. OF AGRICULTURE, *Maryland Policy for Nutrient Cap Management and Trading in Maryland's Chesapeake Bay Watershed Phase II-A Guidelines for the Generation of Agricultural Nonpoint Nutreint Credits*, 6 (April 2008)[hereinafter "MDA Trading Policy"].
[27] Bay TMDL Appendix S-3.
[28] Bay TMDL Appendix S-3; MDE Trading Policy 4.4.
[29] MDE Trading Policy 4.2.
[30] *See* Lesley McAllister, *The Enforcement Challenge of Cap-and-Trade Regulation*, ENVIRONMENTAL LAW (2012), *available at* http://elawreview.org/2012/02/the-enforcement-challenge-of-cap-and-trade-regulation/#_ftn26.

[31] U.S. EPA, WATER QUALITY TRADING TOOLKIT FOR PERMIT WRITERS, *Point-Source-Nonpoint Source Trading,* 11 (2009)[hereinafter "Trading Toolkit for Permit Writers"].
[32] "A nonpoint source credit exchange is a pool of nonpoint source credits managed by a third party that facilitates trades." *Id.* at *Nonpoint Source Credit Exchange,* 14.
[33] *Id.*
[34]*Id.* at *Point-Source-Nonpoint Source Trading,* 12; *Id.* at *Nonpoint Source Credit Exchange,* 14.
[35] EPA Trading Policy at F.2.
[36] The draft regulations provide, under "General Requirements":

> The developer must provide satisfactory documentation of offset credits to the Department prior to the issuance of a General Discharge Permit or an individual discharge permit issued under COMAR 26.08.04.

Draft Regulations at .07.
[37] Bay TMDL Appendix S-5.
[38] MDE Trading Policy at 8.
[39] See, e.g., MDE's explanation of the process:

> If MDE receives, prior to the expiration of the public participation period, a request from any person that the site be required to obtain an individual permit with a detailed, written explanation as to why the Erosion and Sediment Control Plan fails to meet State erosion and sediment control or stormwater management standards, MDE will do the following: (i) notify the general permit applicant that a request that an individual permit be required has been received, (ii) evaluate the information, and (iii) make a decision and send notification of that decision to the NOI applicant and the person requesting that an individual permit be required.

[40] MDE Trading Policy at 8; EPA Trading Toolkit for Permit Writers, *Nonpoint Source Credit Exchange* at 14.
[41] MDE Trading Policy at 5.5.1.
[42] Bay TMDL Appendix S-5.
[43] Regulation by Third-Party at 32.
[44] Avery W. Katz, FOUNDATIONS OF THE ECONOMIC APPROACH TO LAW 256 (1998).
[45] EPA Trading Policy G. 7 (2003).
[46] EPA Water Quality Trading Toolkit, Fundamentals, at 39.
[47] EPA Trading Policy G. 7 (2003)(stating "the resuts of program evaluations should be made available to the public."); Regulation by Third-Party at 57 (2012).
[48] EPA Water Quality Trading Toolkit, Fundamentals, at 39.
[49] Bay TMDL Appendix S-4.
[50] NRC report at 73.
[51] EPA Trading Policy F. 7; Bay TMDL Appendix S-4.
[52] Bay TMDL Appendix S-4.
[53] EPA Trading Policy F.5.
[54] Bay TMDL Appendix S-3.
[55] Cynthia Morgan and Ann Wolverton, *Water Quality Trading in the United States*, Working Paper #05-07 for the National Center for Environmental Economics, U.S. EPA, at 15-16 (June 2005); M.O. Ribaudo and J. Gottlieb, *Point-Nonpoint Trading – Can it Work?*, 47 J. AM. WATER RESOURCES ASSN. 5, 9 (Feb. 2011)("Uncertainty ratios in water quality trading programs generally range from 2:1 to 5:1).
[56] EPA Trading Policy at G. 4.
[57] Bay TMDL 10.1.