

**Executive Order 13508 – Chesapeake Bay Protection and Restoration  
Pennsylvania Comments on the Section 202 Reports**

**202(a): the Next Generation of Tools and Actions to Restore Water  
Quality in the Chesapeake Bay, EPA**

**Below comments provided by:  
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General:

- 1) Placing additional burden on point sources for insufficient progress in meeting NPS load reductions is a fundamentally flawed strategy. Requiring one sector to make up for the difference of another creates an atmosphere that is counter-productive and disruptive to working partnerships at the local level. A better approach might be to consider expansions of new sources only after an analysis of existing load reductions is conducted and a percentage of load reduction achieved. This “offsetting” approach drives sectors to work together far more productively than what has been proposed.
- 2) Setting of sediment and nutrient targets by watersheds would severely limit PA’s ability to utilize all tools in its tool box to meet boundary line LAs and WLAs.
- 3) Setting interim milestones targets makes sense as long as states have flexibility in determining those targets and are not forced to set some equalized milestone that is inconsistent with its implementation strategy.
- 4) Holding back federal money from key grant programs is always a measure that EPA has held over states. Certainly states need to be accountable for the federal money they receive, but keep in mind, states have for the most part provided far more tangible outputs and accomplishments than the commitments listed in federal grants.

CAFOs:

- 1) It is questionable as to what benefit will be accomplished through expanding the universe of CAFOs. While I would agree that enhanced compliance efforts in the agricultural sector is beneficial, placing the family farm under the control of an NPDES permit does little more than create an insurmountable workload for the state. In order for any regulatory requirement to achieve the ultimate goal of water quality protection, it takes a willingness to comply by the regulated entity, resources for compliance, and resources for the regulator to assure compliance. Without these, an NPDES permit means little. A better approach is for states to craft targeted agricultural compliance strategies that utilize existing compliance tools and resources in the most efficient ways possible, evaluate progress and then evaluate where regulatory gaps may exist and additional tools needed to affect a beneficial change in water quality and sediment and nutrient reductions. Placing more tools in the toolbox simply creates a heavier toolbox that states won’t be able to lift.

- 2) On another agriculture related topic, it would be extremely helpful if EPA could resolve the long standing practice or requirement at USDA that keeps names and locations of farms and the practices present a secret. If states or the Bay program could receive data from NRCS, or FSA on the locations of BMPs funded over the years, it would provide invaluable data needed to accurately reflect current conditions and plan for the future.

CWA Funding:

- 1) Using 319(h)(8) to make states revise their 319 management plans and have EPA assess progress, is simply another way to withhold federal money from states for not meeting milestones. It seems redundant to me since you are already proposing 2-year milestones for bay implementation goals and enforcing similar sanctions if goals are not met.

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EPA regulation of agriculture appears to be beyond levels authorized by federal law/regulations and does not recognize existing/successful state regulatory programs; gives little credence to state/federal voluntary programs that have accomplished one-half of the state Bay goals on a shoestring budget; and ignores state resource concerns, which have the potential to get much worse in the near future. Other concerns include:

Page 2 - Appreciate the recognition of voluntary efforts to reduce nutrients and sediments, but reject conclusion that voluntary efforts will not ensure restoration in "a reasonable period of time." Specifically for agriculture, and up until the past year, these voluntary efforts have proceeded with limited resources. The new Farm Bill has injected additional funds for EQIP and other NRCS efforts that have significantly increased the available funds for agricultural BMPs. This influx of funds will result in a four-fold increase in funds available in Pennsylvania, but the results of this current years projects is just now being tabulated and has not yet been made available. This significant, voluntary program may lead to significant sediment and nutrient reductions and restoration of the resource. It seems irresponsible to reject successful - but under funded - methods at just the time when these methods are receiving a significant level of resources.

Page 2 - "EPA believes that state adoption of enforceable or similarly accountable pollution control programs will reduce pollutant loadings ... ." fails to recognize existing regulatory programs for agriculture that currently exist in Pennsylvania and address the concerns of sediment and nutrient pollution on all farms, far in excess of EPA CAFO regulations. PA's regulatory authority for nutrient management (Chapter 83, Chapter 91, Chapter 92), soil erosion (Chapter 102), and general water quality (Chapter 91.36) as well as broad statutory authority under the Pennsylvania Clean Streams Law provide significant authority to address water quality concerns in agricultural operations. There

are also well developed Nutrient Management Planning requirements under Act 38 and a well developed permitting program for large animal operations, using the federal CAFO permitting requirements and the PA water quality regulatory authorities. Also, if newly proposed amendments to the Chapter 102 are enacted, positive environmental benefits will be achieved by addressing soil erosion due to animal heavy use areas and by increasing protection of near stream areas. It is not the regulatory structure that is "missing," its the staff resources to implement the existing regulatory program. Also, it would appear to be counter-productive if EPA chooses to inflict "consequences" by withholding resources to an effort that is already resource-deficient.

Page 26 - "Increasing the Size of the Universe of CAFOs with NPDES Permits." Given Pennsylvania's existing regulatory requirements for agriculture, increasing the number of farm operation under permit may not do anything to reduce nutrients and sediments to the Bay, but would require additional government staff resources to process, review and inspect the additional operations. Also, if EPA does designate more AFOs as CAFOs or revises existing regulations to increase the number of operations that qualify as CAFOs, please do not limit these revisions to only farm operations in the Bay watershed. This establishes increased regulatory requirements on some farms in Pennsylvania, but not on others. This would complicate the regulatory/compliance efforts for Pennsylvania and put some PA farms at a competitive disadvantage with other PA farms and farms in other states.

Page 27 - "Off-site transfer of reporting and record-keeping" section does not recognize existing Pennsylvania program to do just what is proposed. Also, on this page, EPA's focus on establishing effluent limits and guidance for barnyard areas and potential discharges at CAFOs is of concern, particularly when there was no acknowledgement of the technical expertise of this federal agency or of any currently-available guidance from USDA on these situations. In addition, in Pennsylvania, a discharge from a farm operations is currently considered a violation and either must be stopped or acquire a permit. This generally results not in a permit with effluent limits but a solution that eliminates the discharge.

Page 26-27 - EPA suggests several areas of expansion of the CAFO program, but there is no recognition or identification of a similar increase in staff resources to address these new requirements. At this time, state-wide, Pennsylvania has about 340 permitted CAFOs. Pennsylvania has about 8 staff positions assigned to address these 340 operations; These 8 staff also address all other regulation on farm operations. Pennsylvania has about 35,000 farm operations in the Chesapeake Bay watershed. If EPA would increase regulatory requirements on 1% of these farms, it would require a doubling of staff resources, just to address this minimal increase in permitted facilities. There is no recognition of the need for these additional staff resources.

Page 41 - Greatly welcome an increased partnership between EPA and USDA. A similar partnership exists in Pennsylvania and has lead to significant levels of cooperation on a variety of projects and issues. One such project is a potential "centerpiece project" on the Conewago Creek in south-central Pennsylvania. USDA, DEP, three conservation

districts, the local watershed group, Penn State and many other organizations have begun an effort to implement innovative, and common, conservation practice on all operations in this relatively large watershed in Lancaster, Dauphin and Lebanon counties.

Appendix 1- Specifically for CAFOs, this Compliance Strategy recognizes that state and local resources are the "cops on the beat" and that EPA will work "with" state partners. This strategy needs to recognize that EPA inspection of farm operations, particularly those non-CAFO operations, is not appropriate and will be counter productive to achieving compliance at agricultural facilities. EPA's role should be specifically recognized as support to local and state efforts, with any EPA on-farm activities to be at the invitation of the land-owner or state/local government. There also needs to be some recognition of USDA's role, particularly when it comes to the conservation practices that are necessary to achieve agricultural compliance. Targeting of resources to animal operations in Lancaster County is appropriate, as this area has a significant number of impaired streams. However, given the 200+ year history of animal agriculture in the region, the implication that "inconsistent implementation of sound nutrient management" is the reason for the nutrient problems is a bit disingenuous.

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General Comments.

New Accountability and Leadership.

The proposal states that EPA will be setting expectations for states regarding detailed implementation plans with clear milestones which must be developed by jurisdictions in major Bay watersheds. Further EPA states that these plans need to articulate precisely how states will reduce loads from nonpoint sources such as stormwater and agricultural runoff. Recommend that the federal government take a leadership role by requiring the same actions and accountability for federal facilities and lands, if not more, than those EPA is proposing for the states, DC, and local jurisdictions.

New rulemaking/actions under the CWA, CAA, or other authorities: Stormwater

The expansion of the MS4 designation is not an effective approach to correct impairments or implement TMDLs because it does not address stormwater from a comprehensive water quality protection and improvement standpoint. There are 1189 local municipalities in Pennsylvania's portion of the Chesapeake watershed with 277 municipalities designated as MS4s of which 206 permits (176 GPs and 30 IPs) issued and 71 waivers due to low population or density. Regulating every municipality in the Chesapeake Bay watershed as a MS4 is not a cost-effective or environmentally effective approach to regulating stormwater in Pennsylvania. In Pennsylvania, only local municipalities currently have all of the powers necessary for implementing stormwater management and controls, and land use authority. PADEP believes that our

comprehensive stormwater management planning program (Act 167) is a much more effective and progressive approach meet Pennsylvania's water quality goals and objectives. The Pennsylvania legislature enacted the Storm Water Management Act, No. 167, in 1978 (Act 167). Act 167 establishes a comprehensive systematic program for counties to develop comprehensive watershed-based stormwater management plans (Plans) that provide control measures for development and activities that affect stormwater runoff, including quality, quantity, and groundwater recharge. These control measures are implemented through the adoption of ordinances and regulations by local municipalities. Act 167 requires counties to prepare, periodically update, and adopt Plans for all 372 stormwater management watersheds that have been designated by the Environmental Quality Board. During the Plan development process, counties establish a plan advisory committee consisting of county planners, municipal representatives, conservation district personnel, and other interested groups and individuals. This committee provides the valuable expertise, perspective, and advice needed to address the local governments' and citizens' recommendations and concerns. PADEP provides technical, administrative and financial assistance to counties as they prepare Plans.

Compliance and enforcement.

Although the reference to the EPA compliance strategy is vague, it needs to ensure that states and local jurisdictions, such as MS4s have the same power and authority to enforce these requirements at federal facilities and on federal lands. This is especially crucial since states and jurisdictions will be held accountable in making progress and meeting their milestones.

Additional requirements to address stormwater.

The goal of ensuring no increases in discharge volumes and pollutants to a retention performance standard equivalent to the 95<sup>th</sup> percentile storm volume is an inappropriate global standard from several perspectives. One, these provisions do not recognize that infiltration in some areas (such as karst topography/geology) needs special provisions and may not be able to meet these standards. Second, it does not recognize, nor is it consistent with state laws and standards. An example includes the standards established by Pennsylvania under our antidegradation approach to stormwater management. This approach utilizes a comparison of pre- and post- construction conditions for the two-year/24 hour storm (typically 3.0 inches of rainfall) rather than an impervious cover surrogate or the smaller rain events of 1.2 to 1.7 inches.

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- 1) Throughout much of the report, the use of offsetting is discussed which is encouraging but serious thought needs to be given to EPA's proposals to expand permitting requirements and how to balance any new requirements with the concepts of water quality trading. For example, pages 26 & 27 discuss CAFO permitting concepts that have the potential to become very prescriptive. New and expanded permitting requirements would become part of an entity's baseline thus reducing their opportunities to go beyond baseline to generate nutrient credits and would not provide incentives that some may need to incorporate new practices. Flexibility and options are needed to ensure that the potential of market based programs is not negatively impacted.
- 2) Page 28 discusses the Coastal Zone program, and the link between the CNPP and 319 programs. We would recommend that, for clarification purposes, that the document language be modified to make it clear that NOAA has a major role in the CNPP program, essentially sharing it with EPA. More substantively, the language as written does not apply to Pennsylvania and cannot be implemented under the current Coastal program. Pennsylvania's program is approved for work that focuses in the Lake Erie and Delaware Estuary drainage areas. Pennsylvania will not be able to revise its CNPP program to meet Chesapeake Bay goals, unless two actions occur: 1) NOAA approves expansion of the Pennsylvania program for significant, on-going work in the Chesapeake Bay Program; and 2) Funding is significantly increased for new, additional Chesapeake Bay Basin work. A new staff person would be needed, if the CNPP program were to be substantively amended. It may be helpful to note that this may not be the situation for other states.
- 3) Air deposition is a very important topic and we commend EPA for pointing this out. More work is needed to better understand deposition and how to quantify its impacts and potential reductions.
- 4) We believe that new technologies and ecosystem markets can play a role in providing new revenues and advance restoration and we support the inclusion of both in the report. It is recommended that as a component of committing to develop and apply new technologies, that a review system be established to help the states advance such practices. This review system could act as a sounding board on the nutrient reduction benefits of new technologies.
- 5) Targeting resources in priority watersheds should be balanced in a manner to ensure that other watersheds then do not degrade causing additional problems.
- 6) The establishment of centerpiece projects can target a number of valuable environmental outcomes while supporting many efforts jointly. Projects of this nature are currently underway. For example, PADEP is working in partnership with PSU, NRCS, Conservation Districts, TCCA (watershed association), etc. for the Conewago Creek Conservation Initiative. This public-private partnership seeks to advance

reductions identified in the 319 plan, expand monitoring data and advance the implementation of innovative BMPs.

- 7) While there are many concepts that can be supported related to the advancement of incentive programs, market based activities, technologies and partnerships, there are a number of components of this report that raise concern. Much of the concern relates to the additional staffing (tracking and permitting requirements, etc.) and assistance (technical and financial) that would be needed by the states to advance the tasks. Additional resources should be provided.

## **202(b) Focusing Resources to Restore and Protect the Chesapeake Bay and its Tributary Waters**

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General:

- 1) I am in general agreement with targeting resources and efforts in high priority watersheds. However, the identification of high priority watersheds must be the responsibility of the state, not the Chesapeake Bay Program or EPA. While both can and should be part of the discussion, the ultimate decision has to rest with the state. I do not agree that “science” is the primary driving factor to determining priorities. Local impairment, diversity, number, and type of operations, watershed size, funding availability, and local government and conservation district cooperation are far more important than science when it comes to targeting priority watersheds.
- 2) Watershed size is extremely important in determining priorities and also contributing to success. I have been involved in this stuff for over 25 years, and one thing I have learned is the finer you concentrated your efforts the better success you will have. The HUC 12 watersheds listed in this report may, in many cases be too large to accomplished a watershed focus given staff resources and funding availability. States should have the flexibility to set priority watersheds at an appropriate size that will, in fact, maximize implementation and WQ improvement.
- 3) Please keep in mind, that although the ultimate goal of this program is to restore the bay, at the end of the day we should also have states waters with localized impairments restored as well. It would be a shame to have a wonderfully pristine Bay and not have equally pristine local waters. You may say, well the two are linked. Not necessarily, without states being able effectively target the right watersheds, localized improvement may not occur to its fullest potential.

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Difficult not to agree with the five recommendations for focusing resources. Specific concerns include:

Page 12 - Targeting resources to priority watersheds. The need to target resources and activities is apparent. Pennsylvania DEP has chosen this approach when developing its

agricultural compliance strategy. This targeting of resources has begun with the availability of new USDA funds, and DEP does target when allocating Chesapeake Bay Implementation Grant funds for best management practices. However, without "new" resources, additional targeting may be difficult/painful to achieve. Pennsylvania uses about 80% of its Chesapeake Bay Implementation Grant (section 117 funding) to support projects and staff in 38 counties. If no additional resources become available, targeting resources to priority areas will mean the loss Chesapeake Bay staff in some areas of the Bay watershed. This will be a difficult decision for DEP and a painful one for the staff that will lose their jobs because they work in a non-priority area of the Bay watershed.

Page 18 - Focus on Priority Practices. Agree that it is useful to target priority practices. Pennsylvania's selection of "Core Four" practices - nutrient management, cover crops, buffers and no-till - are priorities for several funding programs, including Pennsylvania's Chesapeake Bay Implementation Grant.

Page 21 - Concur that USDA and EPA need to coordinate and communicate. There is a need for more communication and cooperation between these two federal agencies on the issues of agricultural compliance. There is a tremendous need for both agencies to work together to create a compliance strategy for agriculture operations - see "Appendix 1" in 202(a) report.

Page 23 - "Deliver programs most effectively." Technical assistance is essential to delivering conservation programs and practices. Since the middle of the last century, USDA staff were the prime provider of conservation technical assistance. However, given the need to deliver more technical assistance to more landowners, there needs to be a recognition that there is not enough available USDA staff resources to provide the various conservation technical assistance that is needed, and a new mechanism to deliver this technical assistance must be made available. More staff from organizations and the private sector must be allowed to write conservation plans, and the restrictions and requirements that limit the number of non-USDA staff must be eliminated.

Page 23 - "Accelerate conservation adoption." The current farm economics is such that a 50% or 75% cost share may not be enough to increase the installation of BMPs. State and federal resources can be used together to leverage the installation of BMPs, but any out-of-pocket costs for some priority practices may be too much. USDA should consider 100% "cost -share" for specific priority practices like streambank fencing or buffers which do not necessarily improve farm operations "bottom-line."

Page 25 - "Build ecosystem markets." Please coordinate any new USDA effort for "ecosystem markets" with existing trading efforts found in the states. The development of a USDA program, separate from an EPA or PA DEP or PA Farm Bureau effort will only confuse the program for producers.

Page 27 - "Accelerate development of new conservation technologies." As noted, many federal, state and other organizations support innovative technology research, development and implementation. Need to ensure that any grant programs that support

projects / products in the Chesapeake watershed that reduce nutrients and sediments are required to report these reductions in a manner that is "trackable" for the Bay model.

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- 1) EPA, USDA and the other federal agencies should be commended for working together to develop a plan to integrate resources with the intent to maximize environmental results. Integrating resources and coordination will advance new and innovative practices and technologies, thus providing greater incentive for cost savings and ancillary environmental benefits to be achieved.
- 2) The report discusses a specific list of priority conservation practices that would provide the greatest reduction in potential nutrient losses. This is a concept that should be given consideration to expanding to other areas. For example, the calculator employed in the Pennsylvania trading program calculates pounds of nutrient reductions from certain BMPs. This tool could be used to develop information on pounds of nutrient reductions per dollar spent. This market mechanism would help serve as a guide for finding the most reductions per dollar spent.
- 3) Targeting resources in priority watersheds should be balanced in a manner to ensure that other watersheds then do not degrade causing additional problems.
- 4) Related to targeting watersheds, the states should be involved in choosing the priority areas in an effort to leverage the protection and restoration of other concerns. For example, under Pennsylvania's Act 220, Critical Water Planning Areas can be identified where existing or future demands exceed or threaten to exceed the safe yield of available water resources. The two concepts (restoration for water quality and quantity) should be advanced concurrently to have more impact on the overall health and viability of the watershed.
- 5) Pennsylvania enthusiastically supports the concepts of ecosystem markets and credit trading. We believe that new technologies and ecosystem markets can play a role in providing new revenues and advance restoration and we support the inclusion of both in the report.

- 6) It is recommended that as a component of committing to develop and apply new technologies, that a review system be established to help the states advance such practices. This review system could act as a sounding board on the nutrient reduction benefits of new technologies.
- 7) The report recognizes that many measures and data are already in place as the result of ongoing tracking and reporting. It is important that, if new systems are designed, they do not duplicate or unnecessarily increase reporting workloads, due to reduced staff at the state level to perform these functions.

## **202(c) Strengthening Stormwater Management Requirements at Federal Facilities and on Federal Lands**

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Recommend that the federal government will take leadership role by requiring actions and accountability for federal facilities and lands. Although the report cites EISA Section 438 which requires agencies to maintain and restore hydrology with regard to temperature, rate, volume, and duration of flow for new development or redevelopment, the report only recommends that the agencies take actions to meet these federal requirements rather than affirmatively commit to these obligations.

EPA's proposed approaches for strengthening the management of stormwater on federal lands are ones the Pennsylvania currently requires and supports.

## **202(d) Draft Report on Chesapeake Bay Watershed Climate Change Impacts**

**Below comments provided by:**

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1) Overall – The report disproportionately focuses on the potential impacts on coastal areas and does not adequately address or identify the potential impacts, nor provide any direction or recommendation for the protection of the vast upland forests that define the majority of the area of the watershed itself. It appears the main focus has been on rising sea levels – but the overall health of the Bay itself will be much more dependant on the health of the upland forests in the upper parts of the watershed and the upstream maintenance of water quality, species diversity, carbon capture, and overall biodiversity. Something could/should be added to the section on Forests (p.12) to address this.

The report devotes considerable space to wastewater, storm water, and saltwater inundation but no extensive recognition (one sentence on maintaining forest cover riparian areas and other water bodies in section IV – Adaptive Actions) of the role forests (healthy & existing) play in reducing the potential impacts of these. In addition, there's no mention of the role of urban forests and the significant role they play in reducing infrastructure costs associated with managing these. PA Act 70 – The Climate Change Advisory Committee Report – indicates that Urban Forestry (CH. 11 – Macroeconomic analysis) is one of the most cost-effective and economically positive approaches to abating many of the proposed impacts. Focusing solely on impacts without addressing potential solutions like carbon sequestration make the report less constructive.

2) Adaptive Actions Section – p20

Perhaps a statement in here advocating the implementation of state level climate action plans, and their mitigation strategies, would be beneficial. Or an analysis and integration at the federal program level for the Bay of the existing work plan recommendations within the participating states to integrate or share knowledge and opportunities of what the best short term investments are?

3) Section V – Subsection C: There is an overarching tendency to develop “new” things here. It strikes us that there is a lot of capacity to accomplish many of these recommendations through the integration of existing activities within the participating agencies – but again – many of these activities appear to focus on the bay itself and the coastal zones and not the watershed as a whole.

Within this section we suggest adding a statement that advocates for developing on the ground pilot projects for climate change mitigation and adaptation. Activities ranging

from piloting forestry based mitigation projects (terrestrial offset credits) to forestry adaptation projects (propagation of southern tree species to have seed plantations to provide for reforestation efforts in the event the models and projections are right and there will be significant species composition shifts within the next 50-100 yrs). These could serve as immediate examples and a basis for understanding the actual implementation of mitigation and adaptation strategies.

Many of these frameworks have been developed through stakeholder driven processes and exist at the state level. Examples of these for PA can be found within the CMAG and CCAC reports –

PA CMAG Report (Carbon Management Advisory Group )

<http://www.dcnr.state.pa.us/info/carbon/documents/final-report-050708.pdf>

DEP Act 70 – Main Page -

<http://www.depweb.state.pa.us/energy/cwp/view.asp?a=1532&q=539829>

<<http://www.depweb.state.pa.us/energy/cwp/view.asp?a=1532&q=539829>>

DEP Act 70 – PA Climate Impacts Assessment Report -

<http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-75375/7000-BK-DEP4252.pdf>

(See Ch.7 – Forestry and Wildlife)

DEP Act 70 Forestry Work plans - [http://www.depweb.state.pa.us/energy/lib/energy/07-13-09\\_Forestry\\_SC\\_Draft\\_Workplan.doc](http://www.depweb.state.pa.us/energy/lib/energy/07-13-09_Forestry_SC_Draft_Workplan.doc)

DEP Act 70 Forestry Work plans qualitative descriptions -

[http://www.depweb.state.pa.us/energy/lib/energy/AG\\_&\\_Forestry\\_Recommendations\\_with\\_Descriptions.doc](http://www.depweb.state.pa.us/energy/lib/energy/AG_&_Forestry_Recommendations_with_Descriptions.doc)

<[http://www.depweb.state.pa.us/energy/lib/energy/AG\\_&\\_Forestry\\_Recommendations\\_with\\_Descriptions.doc](http://www.depweb.state.pa.us/energy/lib/energy/AG_&_Forestry_Recommendations_with_Descriptions.doc)

4) Appendix A - Section VII – Survey of State Needs: For Pennsylvania add under Federal Agency Support Needed (State Level):

- Invest more in managing for healthy, resilient forests with a high degree of biodiversity
- Aggressively combat invasive species to eliminate them where possible or at least reduce their spread.
- Continue and increase research to address the state’s forest regeneration problem.
- Maintain deer populations at a level that is commensurate with the forest’s ability to provide forage for a healthy deer population.

## **202(e) Landscape Conservation & Public Access in the Chesapeake Bay Region**

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- 1) Executive Summary, p. iv, also p. 8; Pennsylvania's Agricultural Easement Purchase Program is one of the most successful in the nation, and has protected farmland under long-term easements since 1988. Through 2008, the program has preserved 3,579 farms and protected 395,636 acres in the state.
- 2) Recommendation 1a - Target Funding: DCNR supports targeting federal funding to the Chesapeake Bay region including targeting LWCF funding. However, this will only be effective if program funding is increased. The report or the implementation strategy should consider the role the Chesapeake Bay Gateway program could play in assisting to target these funding for conservation, access to the bay and major tributaries, and to heritage development.

In addition, Federal Highway funding from Transportation Enhancements, Scenic Byway and the Recreational Trails programs could provide significant dollars for public access and heritage development. Consider developing a Transportation Improvement Plan or "TIP" for Chesapeake Bay projects in each state based on county greenway and open space plans, trail gaps, land trust planning efforts, and most importantly the regional transportation organizations. This would gather a strategically prioritized list of projects that integrate with the bay objectives and local transportation planning objectives.

- 3) Recommendation 1b - Develop an inclusive definition and approach to identifying the Landscapes of the Chesapeake: On page 2-3 of the report, landscapes are described in inclusive terms as the relation of people to the land; how human habitation has shaped and been shaped by the landscape of the region. This section also identifies the contribution of special landscapes of the region to their economic well being and quality of life of its residents.

In the report's recommendation 1 (b) "Identify and Prioritize Treasured Landscapes," page 24, the importance of both landscapes of cultural and ecological value are recognized. However, the approach to identifying these landscapes is too focused on gathering land conservation information with the goal of making "strategic land protection decisions." It is important to recognize that cultural landscapes are multi-layered and interrelated just like an ecosystem. They can only be understood by through a consultative process. So the second paragraph of recommendation 1 (b) might be revised to say --- working closely with "descendant communities, heritage associations (organizations or areas), and state and local government" to identify

those landscapes of significance to different communities and the region and then identify the areas of significance in a paragraph format instead of just a list.

- 4) Recommendation 1C - Develop public access working with other Federal programs: Maryland and Pennsylvania are working with utility companies along the river as well. There seems to be huge opportunities right now for conservancies, land trusts and state agencies to acquire land from utility companies. However there have been challenges coordinating with the Federal Energy regulatory Commission's requirements on land control and recreational access. Given the report identification of the need for public access, working with FERC and utility land owners should be made a priority.
- 5) Recommendation 2- Utilizing new and existing federal management units - Importantly, National Heritage Areas have worked in partnership with other organizations and local governments to demonstrate the value of a region's landscape through education, interpretation and assistance. These areas' authorizing legislation is very clear that they do not become involved in land management decisions. Given current political issues, this section should be re-titled "Consider using national and state heritage areas to promote conservation values." The recommendation should also speak specifically to working with the existing national and state heritage areas as partners as well as designating a new heritage area in Virginia.

The plan mentioned federal trail network projects such as the Chesapeake Bay Gateways and Water Trails program, the Captain John Smith Chesapeake National Historic Trail, etc. We could elevate the Susquehanna Greenway to this level if more resources and effective leadership were given to this project. We need to put our heads together on how to do this. Other partners could be the Susquehanna Gateway Heritage Area as well.

Finally, the recommendation to create U.S. Army Corps of Engineers recreation areas raises immediate concerns to DCNR if this, in fact, means more dams. We would ask that this recommendation be eliminated or modified to explain that it would not include new dams or impoundments.

- 6) Recommendation 5 - The use of Federal Regulatory Tools: This whole recommendation should be rewritten in a more collaborative tone similar to the rest of 202 (e). At this time the states have delegated authority for many of these watershed and wetlands programs. While there are good opportunities to coordinate work with land conservation particularly around mitigation banking. The language to "federally mandate" this work and in particular to require a direct link to water quality regulations should be revised to "consider" the relationship between these factors.
- 7) Consider adding a new recommendation on Stewardship: Landscape scale work at the state and national level has generated strong interest in the citizens in the Bay regions and in its many communities to tell their story in a larger context and to build awareness of its resources. The report should take advantage of this renewed interest

by adding a section on encouraging stewardship around landscape values. Some ideas that might be included under a stewardship recommendation include:

- Consider adding a new recommendation on communication and marketing. There should be a recommendation for a communication and marketing strategy which focuses on the latest technology based on the internet. (Blogs, twitter, tweets, pod casts, etc.) This will enhance communication the generation X and Y and the youthful members of our urban population centers. We should also tie the Chesapeake Bay work to broad educational and out reach initiatives such as the recent Ken Burn's series on the role of the National Park Service and the proposal of Eco-International to develop a Chesapeake Bay IMAX film.
- Use the Appalachian Trail (AT) model as an example. There should be a recommendation to emulate the good work of the Appalachian Trail and their initiatives to connect teachers to the AT through their week long training sessions. In Pennsylvania these are based on they had on the "Land Choices" curriculum.

**Below comments provided by:**

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1. Pennsylvania's success in land preservation is really never mentioned in the report. Pennsylvania is number 1 in farmland preservation in the Country and has one of the few Forest Legacy projects that the US Forest Service has funded. DCNR has been in an acquisition mode in the last 5 years so it's amazing that their numbers were not included either. And of course, our work to improve access isn't mentioned either.
2. Although the continuation of the federal tax incentive for easements granted by private landowners is mentioned, the report does not do a good job advocating it's extension as a permanent incentive which the Land Trust Alliance (LTA) has been encouraging since the incentive was first introduced. LTA has tracked the increase in easements with this incentive so it's a shame those numbers were not included.
3. The report offers nothing new in how to increase private landowner participation in land preservation programs. For example, one of the major deterrents to landowners preserving their land is that it reduces their land's value while not offering perceived benefits for future owners. So future owners have to sell the land at a lower "Preserved" value but get no tax incentive for doing so. You can certainly argue that the present and future owners have the choice of not preserving or buying a preserved property in the first place, but the fact remains if we want the private sector to help with reaching these preservation goals, finding a way to reward future owners for purchasing preserved properties I think would go a long way in getting current landowners to preserve their properties. Secondly, I would guess 80% of the people who preserve their land are NOT motivated by the current incentives. Their motivation is the love of their land and any incentive is just the icing on the cake.

Unfortunately, there are a lot more landowners who need an incentive to preserve their land. It's clear to me the existing incentives, are not attracting those folks.

4. The railroad companies will continue to be a problem when it comes to access along the rivers and streams that make up the Chesapeake Bay watershed. The Beaver properties along the Clarion River are a good example. There is no mention of this problem in the report.
5. The current Farm Bill program for conservation easements requires a 50% match of their funds. 25% of the match can be donated land value. Until 50% of the match can be donated land value, there will be missed opportunities by land trusts who can't come up with the match. The report does not mention this as a recommendation even though I know NCRS has been asked on several occasions to consider this revision.
6. The recommendation to support a "capacity building" program for land trusts is a good one but needs more substance. DCNR through PALTA does provide funding to reimburse land trusts for easement costs (title searches, baselines, legal fees) but the land trusts only get reimbursed for those direct costs (no administrative staff time) and it doesn't provide money for paying for the easement. DEP does the same thing with their riparian buffer program through Chesapeake Bay funding. The bottom line is both programs are lacking in what they fund so their help is limited. The report really doesn't detail how they plan on building land trust capacity. With the exception of LIP, which is coming to an end, I don't know of any existing federal programs that are really helping land trusts build their capacity or support them financially.
7. Riparian buffer easements are missing in the conversation. What we do is a good first step in preserving the land closest to the streams and rivers and getting public access. The focus seems to be on preserving large tracts of land. Not a bad idea, but in this economy not giving more emphasis and funding for riparian buffer easements seems to be a missed opportunity by the report writers.

## **202(f) Strengthening Science and Decision Support for Ecosystem Management in the Chesapeake Bay and its Watershed**

**Below comments provided by:**

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In summary, the report is an over-optimistic and idealistic text-book type approach to the issue at hand. The report fulfills the need of a concept paper. As a concept paper, there is no consideration for the level of funding needed to implement what is presented. For what is recommended the cost would be astronomical. Due to present economic environment it would be appropriate to suggest a staged approach for the Ecosystem-Based Management System. Without additional funding, the effort to coordinate and set-up the intense monitoring and computer modeling that are recommended would direct funding from the effort to reduce the acknowledged single greatest cause of Bay impairment; that being, excessive nutrients and sediment reaching the Bay.

The report focuses on the concept of a sustainable Chesapeake Bay. This is an excellent concept. However, the Bay must first recover to a level that is considered a sustainable level. At this point it would be more important to focus on sustainable actions that will drive recovery forward. After decades of research and acquired understanding, the acknowledged immediate approach to Bay restoration is the need to reduce nutrient and sediment reaching the Bay. This is the first objective that needs to be addressed. All the mechanisms to accomplish this are in place. It all comes down to having the necessary resources, man power, funding, and shareholder cooperation. After the Bay has reach a level of recovery (getting it out of intensive care, so to speak) then the EMB approach should be considered. But first, the Bay must reach an acceptable state of recovery that is sustainable.

The report fails to acknowledge that stakeholders in those states not bordering on the Bay, most likely, will have different political and socioeconomic concerns for working towards a restored Bay than states with Bay waters. The Ecosystem-Based Management concept in headwater states, by necessity, may require a different more local-based approach.

The report at times considers the social and economic benefits of the Bay the same as the socioeconomic needs of the 17 million people in the watershed. The two are completely different concepts. Not all residents within the Bay watershed have “needs” for Chesapeake Bay or for products from Chesapeake Bay.

Specific comments:

Page 4 local governments --- The small size (municipality level) and large number of local governments (over 1,200) in Pennsylvania’s Chesapeake Bay watershed makes a local government approach difficult if not impossible. If you visit one local government

a day, it would take over 4.5 work years to visit all of the local governments in Pennsylvania's watershed.

Page 4 Elected Officials --- The Pennsylvania legislature traditionally addresses legislative issues on a state-wide basis. This makes dedicated Chesapeake Bay legislation difficult to accomplish.

Page 8 Second paragraph. "The continued poor health of the Bay suggests that the Chesapeake Partnership must adopt new approaches..." This statement seems to imply that the efforts of the states in reducing nutrient and sediment have failed. The statement fails to consider that the level of reductions accomplished by the Partners, although significant, have yet to be sufficient to remove the quantity of "excess" loads resulting in the current Bay conditions. It may be that additional time is needed to reduce loads to a "tipping point" level needed to result in significant improvements. Continuing the current approach may be needed to reach the necessary water-quality that will allow the Bay to reach the first stage of a sustainable condition at which point a more aggressive ecosystem approach may be appropriate. This is consistent with the statement on page 9 second paragraph that "successful restoration and management of the Chesapeake Bay will need to expand from a water-quality emphasis to one focused on sustainability and EBM" the question becomes: Is this the correct time to do so?

Page 11 --- It would be more appropriate to adapt an existing Bay Program group to take on the role of decision support group. I see no need to generate a separate group for this purpose. The current Bay Program adaptive management system could be easily modified to include the components of an ecosystem management system. The underlying adaptive management principles are identical for both.

Page 14 The NWQMN and IOOS monitoring programs are listed as addressing costal and oceanic monitoring, respectively. Neither of these appears to address water quality within the non-tidal watersheds. If the EBM philosophy is to be effective, there must be a corresponding integrated watershed monitoring program. The current non-tidal monitoring network is designed to evaluate changes at the large watershed/river basin level. To be more effective, small scale monitoring would be required if the impact of management efforts in the watersheds are to be evaluated. Reductions in loads will first be realized at the small watershed scale where land uses and local waters are more closely tied to the management practices that are implemented.

Page 20 Information Management --- The report fails to mention the National Environmental Information Exchange Network. There is an existing mechanism specifically designed to allow transfer of information on management actions on agricultural, urban/suburban, and forested lands information to a central node at the Chesapeake Bay Program Office in Annapolis, MD.

Page 21 Models and Forecasting --- It is not clear whether this applies only to tidal areas or includes expansion into the watersheds.

Page 21 Communication --- It would be imperative to properly explain the correct meaning and use of computer model results and associated forecasts. The lack of appropriate explanation of model results was a significant contributing factor in the Bay Program previously being investigated by the U.S. Government Accountability Office and the EPA's Office of Inspector General.

Page 24 lines 36-38. The general tone of this paragraph is misleading. The Bay water TMDLs currently under development will be based on the water quality conditions need to reach and maintain healthy living resources in the Bay. So to say there is no emphasis on "how changes in water quality will improve...the health of living resources" is incorrect.

Appendix 4 --- The only Pennsylvania programs listed are the air monitoring program and SRBC's nutrient monitoring program and interstate macro invertebrate monitoring program. No Pennsylvania Department of Environmental Protection water-quality monitoring programs are listed.

Page 42 line 37 section 1b --- Recommending that the CBP set goals for fish and wildlife management in the watersheds of the Bay states is ludicrous. The ability to show cause and effect upon Chesapeake Bay for such management levels is far beyond present capabilities. Additionally, this brings up questions of states rights versus federal rights. The issue of endocrine-disrupting chemicals is more correctly dealt with through control/regulations not by setting goals for fish and wildlife management.

Page 43 lines 18-20 --- What is the connection between management goals for fish and wildlife in the watersheds and reducing toxic algal blooms in the Bay?

Page 45 Lines 33-34 --- Existing homeland security based regulations prevent federal agencies from providing location specific geo-referenced tracking information. USDA's Natural Resources and Conservation Service and Farm Services Agency collectively fund the most management practices on agricultural land in Pennsylvania.

Page 48 lines 21-25 --- USDA also funds BMP implementation through NRCS programs.

Page 48 Monitoring of water quality related to human health -- The intent of the 2000 agreement was not to track the quality of drinking water in all Bay Program states. This is a state activity.

Page 49 – 4e air quality monitoring --- There are existing federal and state programs specifically directed to this purpose.

Page 49 – 6.0 Socioeconomic conditions. --- Is this a program to save the human race or to restore the Bay??? Yes, there are many benefits to a restored Chesapeake Bay; but there has to be limits to which the CBP completes such a task. The Federal Bay Program's purpose should not be to establish management goals for fish and wildlife in the watershed, to monitor drinking water in the watershed, to monitor habitats in the

watershed, and finally to evaluate the socioeconomic well-being of humans as a result of these actions. There are existing state programs to accomplish these tasks.

Page 53 Modeling Recommendations --- The single most important need for computer modeling within the CBP is to develop stakeholder understanding and support for model results. The most prevalent misunderstanding about model results is that the load reductions and the water-quality improvements projected by the models are “real”. The computer models were developed to be tools that allow program managers to assess the relative impacts of various “what-if” management scenarios. The models serve this purpose quite well. However, the models are not capable of providing estimates of “real time” actual load reductions and actual improvements in water-quality.

## **Section 202 (g) Habitat and Research Activities to Protect and Restore Chesapeake Bay Living Resources and Water Quality**

**Below comments provided by:**

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Accelerate Habitat Protection and Restoration.

Recommend a reference to, and reliance on, the federal regulations regarding Compensatory Mitigation of Losses of Aquatic Resources and Wetlands being implemented by EPA, Army Corp, and states with assistance from state and federal resource agencies.

Coordinate Research and Assessment.

Recommend supporting existing state and federal partnerships such as the Mid-Atlantic Wetland Work Group (MAWWG) to support and enhance ecosystem assessment and management approaches.

**Below comments provided by:**

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**Chief**  
**Division of Habitat Management**  
**Pennsylvania Fish and Boat Commission**  
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I reviewed the 202(g) habitat report. It was well done and I have a few comments:

1) Funding support to the states for Fish Passage Coordinator positions is cornerstone to keeping momentum regarding opening of historic spawning areas and improving lotic habitat through dam removal projects.

2) The PFBC established the Division of Habitat Management in 2006. The Division has staff and equipment to conduct habitat improvement projects and monitoring for success throughout the Bay watershed. Direct funding to the PFBC for project implementation and additional staff support would be beneficial. We have significant experience and can implement projects at minimal cost.

3) Page 22; Recommendations Section. Pennsylvania has completed more fish passage/dam removal projects than all other jurisdictions combined. This is due to many factors including our approach to prioritizing projects. In light of this, the PFBC does not feel the need to "follow the Maryland Model" - we have demonstrated resounding success using our current approach.

4) Page 29; general comment. Natural channel design approach to stream restoration and stabilization are often extremely technical and expensive to implement. The PFBC has been doing stream habitat improvement and stabilization activities for over 50 years using various community based groups to implement. Our approach is economical and easy to implement using natural materials like logs and stone. It also engages environmental groups to participate in project implementation. It may be beneficial to communicate our approach to other federal, state, and county agencies - we would be happy to do so.

5) Page 30; general comment. Despite a concerted effort, the PFBC has had difficulty accessing NRCS Farm Bill funding for habitat improvement activities. It is desirable that some pressure be applied to the Pennsylvania NRCS office to partner in such activities. A change in priorities for PA NRCS from Washington DC is desirable.

**Below comments provided by:**

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- 1) Table 1, p. 11; priority habitats should include large-scale natural forestland, not just old growth, which has a negligible presence in the Bay watershed. Management practices should be encouraged that enhance and augment old growth, but priorities should include natural forestland generally. In addition, the table's list of stressors include poorly managed forestland but not poorly managed agricultural lands, which are significantly more impactful to Bay resources than forestlands. Either add agriculture or omit forestlands from the list.
- 2) P.22, fish blockage recommendations. Replace Maryland as a model with Pennsylvania's highly successful Fish Passage Program. Pennsylvania leads the nation in dam removal with more than 120 dams removed to date. Maryland has not made comparable progress in addressing fish barriers. Pennsylvania's program is largely a success because of private-public partnerships and a flexible permitting system that expedites restoration practices like dam removal, not because of a priority system.
- 3) P. 28. Habitat types and recommendations. Suggest replacing the generic category "Upland Habitats" as a priority ecosystem type with the more focused and more valuable "Large Continuous Natural Forestlands". Recommendations can then be more specific and actionable. The importance of conserving natural forestlands is reflected in report 202(e), where forestlands are listed first among landscapes that provide high-value habitat, watershed values, and reflect traditional uses of the region's lands and waters.

- 4) P. 53, chart on current Habitat Protection Tools; Under LWCF, add “open space” acquisition to the description of priorities. Also add EQIP to the table.

**Below comments provided by:**  
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Comments are underlined and are focused on riparian buffer recommendations in 202g on page 28:

- Riparian buffers should be managed to ensure that predominantly native trees and shrubs are being established/maintained along the waterways.
- Use the Partners for Fish and Wildlife Program to coordinate and deliver riparian buffer restoration on private lands.
- Develop an exotic and invasive species control manual for habitat managers identifying the best management practices by species and region and what activities should be avoided when implementing habitat projects.
- Use existing methods for a rapid riparian and channel assessment.
- Revise riparian forest buffer goal to include width requirements sufficient to support outcomes for water quality protection and improvement as well as for forest dwelling bird and other wildlife species.
- Limit or eliminate development within riparian areas, using a similar approach such as Maryland’s Critical Areas legislation and Virginia’s Chesapeake Bay Preservation Act.
- Consider extra credit in the next calibration of the Chesapeake Bay watershed model for riparian/wetland complexes.
- Establish long term monitoring of restored buffers to evaluate success against defined objectives, and create incentives to ensure that restored buffers remain intact.