

## **SENIOR SCIENTISTS AND POLICY LEADERS FOR THE BAY**

June 2, 2010

To Bay State Governors and the Mayor of Washington, DC:

Our group of senior Bay scientists and policy makers has unanimously concluded that after 26 years of effort, the formal Bay Program and the restoration efforts under the voluntary, collaborative approach currently in place have not worked and current efforts have been insufficient and are failing. Water quality is declining or not improving in much of the Bay and its rivers, and living resources continue to decline. An EPA Bay program analysis concluded that the Bay was severely degraded and that under current programs, it would be 2034 before the agreed upon nitrogen reduction goal was achieved and 2050 for the phosphorus goal.

Despite commitments in 2000 to do so, the states, have failed by a wide margin to meet the 2010 deadline for pollution reduction goals necessary to restore the Bay. This means that most of the Bay's waters fail to meet basic Clean Water Act requirements precipitating the setting of TMDLs.

Because of this failure, our group urges your state and all the Bay states and the EPA to transition from the voluntary collaborative approach in place for 26 years to a more comprehensive regulatory program that would establish mandatory, enforceable measures for meeting the nutrient, sediment, and toxic chemical reductions needed to remove all Bay waters from the Clean Water Act impaired waters list. These measures should be under existing laws and regulations, as well as under new regulations or legislation that may be necessary to achieve the pollution reductions necessary for Bay restoration. These measures must be undertaken in a definitive, regulatory manner with enforceable deadlines with the certainty of penalties.

We, the more than 50 individuals signing onto this statement, include residents of Maryland, Virginia, and Pennsylvania. We have unanimously concluded and recommended for your adoption the 25 action items below through your Watershed Implementation Plans (WIP). We all have concluded that your state and each Bay state needs to fully implement the 25 measures below to improve water quality in the Chesapeake Bay to meet the requirements of the Clean Water Act.

Together our group represents an extraordinary assemblage of Bay leaders from Maryland, Virginia, and Pennsylvania many of whom were instrumental in initiating the

Bay restoration in 1983 that led to the first Bay Agreement and the development of the EPA Chesapeake Bay Program. We are particularly concerned over the failure to achieve the significant and necessary reductions in nonpoint source pollution loads and meet the caps set for nutrients and sediment. We urge you to take the aggressive actions detailed below in nutrient and sediment loading from agriculture and development. These action items must be included in your WIP. Without these the Bay is doomed.

We are concerned over resistance to EPA actions to establish meaningful TMDLs by the end of this year to and to adopt Watershed Implementation Plans (WIPs) as scheduled to achieve these TMDLs. Clearly, enhanced regulatory measures for nutrient loading from CAFOs, AFOs, and nutrient and sediment loading from new and existing development are needed. Better controls of other nutrient and sediment flows from farms and the retrofitting of existing developed lands also are essential to remove the Bay's waters from the Clean Water Act's Section 303(d) list of impaired waters.

The EPA and the Bay states have repeatedly failed by wide margins to achieve the agreed upon nutrient and sediment reductions necessary to restore the Bay, particularly from agriculture and from existing and new development. This is due to a failure to adopt the necessary measures to accomplish these reductions. While we fully support increased federal funding for direct, verifiable reductions from nonpoint sources, we are more convinced than ever that the current mostly voluntary approach to agricultural pollutants, especially animal waste, has not and will not succeed without mandatory, enforceable regulations. At best, the agricultural sector has only achieved one-half of the agreed-upon nutrient and sediment reductions after 26 years of funding enhancements. Further, pollutants flowing from developed lands are the only major pollution source that has been increasing, not decreasing, and it is clear that the states are not doing all that is necessary to control development and the resultant significant increases in impervious surfaces. There also has been a failure to retrofit existing developed areas for better stormwater control as called for in the Tributary Strategies.

The EPA's Inspector General issued a report in September 2007 noting that impervious surfaces added over the previous five years resulted in an annual increase of one million pounds of nitrogen flowing to the Bay, impeding Bay restoration. Again in July 2008, researchers with the EPA's Inspector General Office cited several serious problems hindering the Bay's cleanup, including uncontrolled land development and the limited implementation of agricultural conservation practices. The Inspector General's Office noted that in some cases, there are no clear regulatory programs to control these major nonpoint sources of pollution.

Therefore, we urge the you to fully support the Strategy for Protecting and Restoring the

Chesapeake Bay Watershed (released May 12) under the Chesapeake Bay Executive Order (13508) and to exert the necessary leadership in taking the bold budgetary, regulatory, and enforcement actions detailed below that are necessary to restore the Bay.

The first actions you are urged to take are: 1) fully support the establishment of TMDLs so as to meet the current schedule for TMDLs to be finalized by the end of this year—this process is ongoing; and 2) submit a detailed Watershed Implementation Plan (WIP) that includes the 25 measures detailed below to accomplish the nutrient and sediment load limits by the September 1, 2010 due date and to assure these are finalized by the end of the year. We urge you to meet these schedules and deadlines and end the politics of postponement that have crippled Bay recovery efforts.

Because of our deep concerns over the failure to achieve the significant and necessary reductions in nonpoint source pollution loads from agriculture and development, we urge you to include in your state's WIP definitive measures that would deal with agriculture and developed lands with the following 21 mandatory measures. Without these the Bay is doomed:

**NECESSARY MEASURES FOR AGRICULTURAL POLLUTANTS TO BE INCLUDED IN WIPS.**

1) Discrete, performance-based targets for nutrient and sediment reductions from all nonpoint sources to improve water quality, including all BMPs, should be required in your WIP, and assessments of those BMPs and reduction targets should be required to be conducted by independent third-party entities to assure effectiveness and proper implementation.

2) Your state's WIP should include requirements to implement measures, including BMPs, throughout each waterway segment in your state of the 92 designated by the EPA for the entire Bay watershed. These are necessary to achieve the nutrient and sediment TMDLs by a date certain to meet "reasonable assurance" expectations. Your state's WIP should include detailed sanctions for any source that fails to meet the TMDL limits and two-year milestones. The primary proposed Federal punitive measure to address failure to achieve two-year milestones appears to be a further reduction in the waste load allocation for point sources. Point source controls are expected to achieve their allotted nutrient reductions by about 2012. It appears illogical and unfair to punish this sector if it meets the targeted caps while leaving nonpoint sources without any realistic and certain sanctions. It would be much more effective for the state to develop regulatory sanctions against nonpoint sources with assured enforcement.

3) Reducing nonpoint source loads from agricultural operations, including any necessary new regulations and better enforcement, should be part of your WIP. These must include

readily enforceable mechanisms. The required “reasonable assurances” that your state will meet nonpoint source load limits dictate strong, verifiable measures to reduce agricultural nutrients and sediment loads. Assuring monitoring efforts at a reasonable scale for nonpoint source pollutants from agriculture is essential. The monitoring results should be available to the public. The implementation of Best Management Practices (BMPs) needs to be publicly reported at a parcel scale.

4) Your WIP should include a significant expansion of the CAFO designation to cover all but the smallest AFOs. All agricultural lands receiving manures from any AFO should be treated as a regulated entity/activity. It is equally important that assessment and accountability of all CAFOs and all other federal and state regulated agricultural activities be increased. Current state programs do not provide adequate assurance that the CAFO permits, particularly related to land application, and other state regulations of agricultural activities are being enforced. Enforcement must be assured.

5) Your state should adopt requirements in its WIP for all land disposal of animal waste/manure that parallel Maryland’s regulations under the Maryland Department of Environment for the land disposal of human sludge from advanced wastewater treatment facilities. These requirements should include the provisions already extant for human sludge that require the incorporation of all animal waste/manure into soils within 24 hours of application on land, soil tests to assure the land is not phosphorus saturated, and that prohibit application on steep slopes, highly erodible soils, frozen ground, and in riparian buffers of up to 200 feet. See the Maryland human sludge disposal regulations at COMAR 26.04.06.09

<http://www.dsd.state.md.us/comar/comarhtml/26/26.04.06.09.htm>.

6) Your WIP should require that on any agricultural lands that receive human sludge and/or animal waste/manure, cover crops should be mandatory for a minimum of one year after application. Even with the use of cover crops, sludge and animal waste/manure should be required to be injected or incorporated into soils within 24 hours of application. Further, the practice of human sludge or animal waste/manure application to fields with excessive phosphorus levels must be stopped. The WIP should require reducing phosphorus levels to agronomic requirements and soil tests before all applications of human sludge and/or animal waste/manure. These latter measures must be required to assure that phosphorus is not applied where not needed.

7) Greater accountability and verification of performance of agricultural BMPs is essential and must be required in your WIP.

8) Your WIP should mandate whole-farm water quality plans for all agricultural lands including the next generation of nutrient management, with clear targets, a reasonable

implementation schedule, progress checks, and enforcement. This is critical to restoring the Bay and should be mandatory.

**NECESSARY MEASURES FOR DEVELOPED LAND POLLUTANTS TO BE INCLUDED IN WIPS.**

9) While reducing agricultural nutrients and sediment loadings may be the immediate challenge as farm pollutants are the greatest source of loadings and the most cost-effective to reduce, offsetting the effects of population growth and development by 100% is essential to maintaining any progress made by other sectors. Your state WIP should include measures to expand MS4 jurisdiction over more developed lands, better septic system requirements, and improved growth control measures as these are essential and your WIP should require completely offsetting growth related loads elsewhere in each watershed in your state.

10) 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 your WIP 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.

11) Your State WIP 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. Your WIP must include funding mechanisms to provide reasonable assurances that such urban retrofit will be accomplished.

12) Your state's WIP should include provisions for improved water quality through systematic urban retrofits of large areas of developed lands such as shopping centers, large industrial sites, and other large impervious surfaced areas in private ownership, with mandatory measures and timelines for such retrofits.

13) Measures to reduce or eliminate fertilizer usage on residential lawns, golf courses, and public lands should be included in your state's WIP, including measures to prohibit phosphorus in fertilizers sold for maintenance of such properties.

14) Your WIP should ensure that all federal and state facilities and public lands in the watershed undertake stormwater retrofits to meet TMDL allocations and state 2-year milestones. The federal and state facilities and lands should follow guidance developed

by EPA pursuant to Section 438 of the Energy Independence and Security Act and Section 502 of Chesapeake Bay Executive Order (13508). All new government construction should meet a requirement for no net increase in rate, volume, or pollutants for a 5-year storm.

**FOREST LAND PROTECTION AND INCREASED FORESTED BUFFERS SHOULD BE IN WIPS.**

15) Your state's WIP should require a no net loss of forest coverage in each Bay watershed of the [XXX92] waterway segments to achieve the nutrient and sediment TMDLs by a date certain to meet "reasonable assurance" expectations. Your WIP also should contain detailed measures to expand forested buffer coverage to at least 85% of all the shores of the Bay and its tributaries.

16) Your state's WIP should target funds, such as from Maryland's Program Open Space and Maryland's Agricultural Preservation Foundation, for the fee simple or easement purchase of sensitive lands such as forests and wetlands on private lands and farm lands, especially those bordering the Bay and its rivers. Acquisitions should take into consideration State Wildlife Action Plans and Green Infrastructure maps that have been updated to reflect the implications of climate change and expected sea level rise.

**WIPS SHOULD INCLUDE SEPTIC SYSTEM NUTRIENT REDUCTION REQUIREMENTS.**

17) Your WIP must include provisions that require all new and replacement on-site waste disposal systems (OSWDS) in the Chesapeake Bay watershed to be systems that utilize the best available technology (BAT) for nitrogen removal.

18) Your state WIP should include requirements for implementation of a mandatory septic inspection program for existing systems, with a requirement for a best available technology (BAT) system for nitrogen removal in failing systems.

19) Your WIP should contain requirements to evaluate existing clusters of septic systems for connection to centralized sewage treatment that uses Enhanced Nutrient Removal (ENR).

**AIR EMISSIONS NEED TO BE REDUCED THROUGH WIPS.**

20) Your WIP should contain provisions for better control of air emissions by better regulating and enforcing emission controls from all sources in your state.

21) All new stationary sources of air emissions in your state that contribute increased nitrogen to the Bay should be offset and your WIP must include provisions for accomplishing this offset.

We now turn to point source pollutants and recommend the following measures for inclusion in your WIP:

**BETTER CONTROLS NECESSARY TO REDUCE NUTRIENTS FROM WWTPS IN WIPS.**

22) All Wastewater Treatment Plants (WWTPs) should be required to meet nutrient discharge limits of no more than 3.0 mg/l Nitrogen and 0.3 mg/l Phosphorus in the WIP.

23) Your state WIP 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.

24) Your WIP must aggressively address and fund infrastructure upgrades to prevent and treat combined sewer overflows.

25) Your WIP should adopt measures to assure that existing Clean Water Act and other water quality laws are fully enforced, including at all WWTPs.

We all firmly believe that the 25 items outlined above are essential if there is to be any reasonable assurance that the nutrient and sediment reductions necessary to restore the Chesapeake Bay will be achieved under the current planned timelines. It will never be easier or less expensive than now. We are hopeful that your state will adopt the above measures in your Watershed Implementation Plan and begin a new period where the Chesapeake Bay and its living resources are not subjected to the continuing death by a thousand cuts and are sacrificed on the altar of political expediency.

We believe these changes are essential to ensure the Bay's restoration and urge you to meet the WIP and TMDL deadlines set for this year and to turn back any attempts to delay these.

We respectfully request a meeting with you and your Bay Cabinet leaders where representatives of our group could discuss our visions for Bay restoration with you and your staff. Please contact former Maryland State Senator Gerald W. Winegrad at 410-280-8956 to arrange for such a meeting. Thank you.

Respectfully Submitted,

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