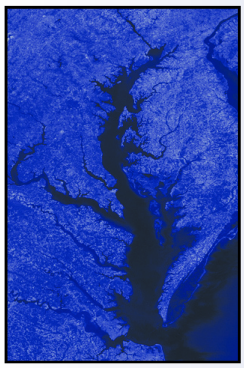

Reauthorizing the Chesapeake Bay Program:

Exchanging Promises for Results

By Rena Steinzor and Shana Campbell Jones

CPR CENTER FOR PROGRESSIVE REFORM

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WHITE PAPER #903

June 2009

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Founded in 2002, the Center for Progressive Reform is a 501(c)(3) nonprofit research and educational organization comprising a network of scholars across the nation dedicated to protecting health, safety, and the environment through analysis and commentary. CPR believes sensible safeguards in these areas serve important shared values, including doing the best we can to prevent harm to people and the environment, distributing environmental harms and benefits fairly, and protecting the earth for future generations. CPR rejects the view that the economic efficiency of private markets should be the only value used to guide government action. Rather, CPR supports thoughtful government action and reform to advance the well-being of human life and the environment. Additionally, CPR believes people play a crucial role in ensuring both private and public sector decisions that result in improved protection of consumers, public health and safety, and the environment. Accordingly, CPR supports ready public access to the courts, enhanced public participation and improved public access to information. The Center for Progressive Reform is grateful to the National Wildlife Federation for funding this report, as well as to the Bauman Foundation and the Deer Creek Foundation for their generous support of its work in general.

A number of CPR scholars made significant contributions to this publication, providing essential analysis and generating the ideas expressed in this white paper. Authors and contributors include **Robert Adler**, **William Andreen**, **Holly Doremus**, **Brad Karkkainen**, **Dan Tarlock**, and **Sandi Zellmer**. CPR Policy Analyst **Yee Huang** also provided research assistance and drafted portions of the report.

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Acknowledgments

The Center for Progressive Reform is grateful to the National Wildlife Federation for its generous support of this project.

Printed in the U.S.A.

Introduction

In 1983 Congress created the Chesapeake Bay Program, establishing it under § 117 of the Clean Water Act. It was the first estuary to be targeted by Congress for restoration, and today it is the nation's oldest estuary restoration program. The regional partnership, which now includes several federal agencies in addition to Maryland, Virginia, Pennsylvania, Delaware, West Virginia, New York and the District of Columbia, is world-renowned for the quality of its science and its monitoring capabilities.[1] Yet, although approximately $4 billion has been spent on restoration efforts since 1995, the Chesapeake Bay remains "severely degraded." [2] Analysis of the Bay's stagnating health over the last 15 years tells a discouraging story: while things have not gotten worse, they have not improved either. In short, we have been treading water instead of moving forward.

A national treasure, the Chesapeake Bay is the largest estuary in North America, home to more than 3,600 species of plants and animals. The Chesapeake Bay watershed – the land that drains into the Bay – encompasses parts of six states and Washington, D.C. Approximately 17 million people live in the watershed, and more than 100,000 streams, creeks, and rivers drain into the Bay.

The Chesapeake Bay has been deteriorating since the 1930s, when water clarity, crab and oyster populations, and underwater bay grasses began to decline. Excess nutrients – phosphorus and nitrogen – and sediment runoff from agriculture, urban and suburban development, and sewage treatment plants have caused "dead zones" in the Bay that contain too little oxygen to support aquatic life. The Bay's oyster population has been devastated, down to 2 percent of its average levels in the 1950s. And its famous blue crab populations are also low, about 30 percent below the annual average from 1968 to 2002.

While population growth in the region has certainly made Bay restoration efforts more difficult, the critical problem lies with the underlying premise of the Program itself: that a voluntary, cooperative approach among federal and state partners without genuine accountability and strong leadership works. A quarter century of experience demonstrates conclusively that it does not. The Bay Program has a long history of promoting "lowest common denominator solutions" aimed at achieving political consensus and of being "captured by the states,"[3] who refuse to risk short-term economic interests to secure the health of the Bay and the long-term interests dependent upon it. The Environmental Protection Agency itself has been missing in action over the past decade, preferring to step lightly instead of using its existing statutory authority to press for more progress and controls. As long as the Bay Program lacks real authority to require its federal and state partners to take action, no entity is directly responsible for Bay cleanup – and no entity takes the blame for the manifest failure.

To change this deeply embedded culture of enthusiastic cooperation without real responsibility, and deep regret over missed goals without meaningful consequences, this report recommends that Congress include five crucial provisions in the upcoming Bay reauthorization:

- **EPA should be assigned specific, non-discretionary duties, with deadlines, enforceable by citizen suits, to keep restoration on track.**
- **The Bay Program needs an Independent Evaluator with a small staff that reports directly to the Executive Council regarding partners' progress in meeting their commitments.**
- **If the states do not meet the "milestones" for progress that will bring them into**

compliance with water quality standards by 2020, EPA should prohibit issuance of new source permits, redirect state Clean Water Act grants to the Bay Program, and assume responsibility for regulating non-point pollution.

- **Citizens should have the right to petition to withdraw states' authority under specific criteria and strict time deadlines, and EPA's response to such petitions—or refusal to respond in a timely fashion—should be judicially reviewable.**
- **The Bay-wide TMDL should be strengthened by providing EPA with the tools and authorities it needs to ensure it is actually implemented.**

A New Federal Commitment

To make these commitments permanent, and to give EPA and the states the legal authority they need to get the Bay Program back on track, congressional leadership is sorely needed. The Obama Executive Order issued in May 2009 will move government efforts in the right direction, but without statutory changes, even these new commitments are vulnerable to the Bay Program's culture of avoiding the most difficult and effective choices in favor of tinkering around the margins and claiming incremental progress.

The political subdivisions participating in the Chesapeake Bay Program partnership include Pennsylvania, Virginia, Maryland, West Virginia, Delaware, New York, and the District of Columbia.

This document refers to these collectively as "Bay jurisdictions" and "partner jurisdictions."

The purpose of this document is to provide policymakers with concrete recommendations for reauthorizing the Chesapeake Bay Program to improve its effectiveness and increase accountability for Bay restoration. We stress that several of the changes we recommend could also be accomplished by EPA and the states under existing legal authority and in the context of the Executive Order. Other recommendations would require enactment of new legal authority. We explain which category applies as we present each specific recommendation in detail, below. The reason to codify polices that could be effected without congressional action is to ensure that new directions for the Bay Program are not solely dependent on the political support of future presidents and governors. Public support for Bay restoration is consistent and unbroken, but cleanup efforts to date have been undermined by political opportunism. It is past time to stop relying on goodwill and start relying on the law.

Demand for change is strong. A consensus is growing among Bay stakeholders that the Bay Program must change from a science-based program that *encourages* action to a program that has enforceable expectations. In order for the Bay Program to make this crucial shift, however, new tools and authorities are needed because the Program – in contrast to EPA and the states themselves – does not have what it needs to get the job done.[4]

The time is now. Although the Bay Program's stature has been diminished in recent years because of the criticisms it has received for not reporting more credibly the extent of the Bay's problems and the lack of progress being made, it nevertheless includes some of the best and most dedicated federal and state officials, scientists, and program officers in the

nation. Thanks in large part to the Bay Program's command of the science, the Chesapeake Bay is one of the most studied bodies of water on Earth. Rarely has an environmental problem been so well understood. For this reason, the opportunity for policymakers to steer the Bay Program in a new and more productive direction based on good and extensive science is real, and the Bay Program could emerge as a watershed management program that is emulated by other programs for many years to come.

Reform will bolster current efforts. Congress, the U.S. Government Accountability Office (GAO), and the Inspector General for EPA have criticized the Bay Program for lacking a comprehensive implementation strategy and for not effectively and credibly reporting the state of the Bay's restoration progress.[5] During this time, the Executive Council for the Bay Program acknowledged that the Bay partners would fall far short of meeting the restoration goals established in the Chesapeake Bay 2000 agreement.

The Bay Program and its partners know that the status quo is no longer acceptable. Although they are taking many steps, there are three important developments that policymakers could take to strengthen the Bay Program in several, crucial ways, thereby making a significant impact on federal and state restoration efforts.

1. **The Creation of an Independent Evaluator for the Bay Program.** Over the past year, due in large part to criticisms made by the GAO, Bay partners have discussed the need for an independent entity to monitor the performance of the Program and to hold EPA and the states accountable for their efforts to reduce nutrient loading in the Bay. In Section 206 of his Executive Order on Chesapeake Bay Protection and Restoration, President Obama requires such an Independent Evaluator to report to a Federal Leadership Committee headed by EPA to oversee program activities and progress made toward reaching Bay goals. For example, because the Clean Water Act does not ultimately require that a TMDL (described below) be implemented, independent oversight and monitoring is needed to spotlight on an ongoing basis if partner efforts to meet the Bay-wide TMDL's requirements are occurring.

   Such independent oversight is essential to ensuring Bay cleanup happens. Unfortunately, some Bay partners have suggested that this evaluation could be accomplished on a one-shot basis by the National Academy of Sciences. Although the NAS has a deservedly excellent reputation for assembling the best and brightest minds in the country, and it might be helpful to enlist its assistance in solving particularly intractable problems in the Bay—the design of a program for non-point urban and agricultural run-off, for example—no single report can substitute for an ongoing accountability mechanism.

   Instead of devoting scarce resources to another study by an independent entity, EPA and Congress should develop an independent entity within the Program that would answer directly to the Executive Council, would have its own investigative authority and resources, and would report on whether partners—including EPA—have met their specific commitments to restoration.

"Current tools, programs, authorities and resources are inadequate to achieve the needed reductions of nutrients and sediments."
—Jeff Lape, Director of the Bay Program

2009 STATE OF THE CHESAPEAKE BAY PROGRAM

2. **The Creation of Two-Year Milestones by Jurisdictions in the Bay Watershed.** At the May 2009 meeting of the Bay Program's governing body, the Executive Council, Gov. Tim Kaine, Executive Council Chairman, committed the Bay partnership to adopting two-year milestones. This commitment is itself an important watershed in the Bay Program partnership, which has a long history of setting goals with deadlines so far out on the horizon that the political leaders could rest assured they would not be in office when the deadlines arrived. Supposedly, these two-year milestones will ensure that compliance with water quality standards will be achieved no later than 2025, already a painfully attenuated time period.

   Of course, setting milestones is one thing: ensuring they are robust milestones that will result in real cleanup and that they are enforced is much harder. Time and time again, partners have said they will do things, fail to do them, sweep the lack of progress off the table, and begin with a new set of promises. If the two-year milestones are to mean anything-–and, most specifically, if they are to get us where we need to be in 2025—Congress must therefore establish that they are requirements and include both incentives for making progress and consequences for lack of action.

For failures to meet milestones, we recommend these consequences:

- **EPA prohibits the issuance of new point source permits.** Adding more pollution to a severely degraded Bay makes little sense unless real gains are being made and the new pollution sources are offset by substantial progress.
- **EPA withdraws Nonpoint Source Management Program funding (Section 319 funding) and other financial assistance from jurisdictional partners and gives it to the Bay Program to implement nonpoint source management programs.**
- **EPA regulates nonpoint sources using direct and mandatory controls and BMPs.**

3. **The Development of the Bay-wide TMDL.** Often described as a "pollution budget, a TMDL ("Total Maximum Daily Load") is the combined amount of pollution from both point sources and nonpoint sources that a waterbody can accept without exceeding water quality standards. The Bay-wide TMDL will be the largest TMDL to date and will serve as an example – for good or bad – for large-scale TMDLs nationwide. By reauthorizing the Bay Program in a way that works to maximize the Bay-wide TMDL effort, policymakers will not only improve Bay restoration efforts, but they will also establish a model TMDL process that other watersheds could follow, laying the groundwork for improving ecosystem management programs across the country.

   In order for the Bay-wide TMDL to result in real cleanup, however, we urge Congress to act to ensure the Bay Program has the tools and authorities it needs to ensure that the TMDL is actually implemented. Because of the way the Clean Water Act currently is written, however, the risk is great that the Bay-wide TMDL will be implemented ineffectively – if at all. The resources it will take to develop the Bay-wide TMDL are

and will continue to be significant, but if the Bay-wide TMDL is never implemented, years of effort will result in nothing more than a waste of time.

Although described separately, these developments will affect each other and should be strengthened to reinforce each other. In addition, all of these developments have grown out of the most important obstacles with Bay cleanup efforts, namely that:

- Much of the work required to clean up the Bay falls within state – not federal – control, and
- Where federal control exists, EPA has not exercised its authority to regulate the areas within in its control to the fullest extent.

By improving the Bay-wide TMDL, giving much-needed direction and authority to the Independent Evaluator, and establishing expectations and consequences for progress made by Bay jurisdictions toward meeting two-year milestones, Congress will establish a mechanism for spotlighting who is responsible for taking necessary action, establishing a much-needed federal leadership role in Bay restoration while also pressing states to do more to clean up the Bay.

A summary of our Recommendations follows, which fall into two large categories — an accountability mechanism and the Bay-wide TMDL. More detailed explanations of each follow in the rest of this document.

Total Maximum Daily Load —TMDL — is the combined amount of pollution that a water body can accept without exceeding water quality standards.

SUMMARY OF RECOMMENDATIONS

Accountability Mechanism

INDEPENDENT EVALUATOR

✓Congress should establish and fund an Independent Evaluator for the Program designed to ensure that state and federal jurisdictional partners keep their commitments and deliver results.

✓Congress should clearly define the Independent Evaluator's mission as including spotlighting regulatory and resource management responsibility among state and federal jurisdictional partners for ensuring actions are taken to solve the Bay's most pressing problems.

✓Congress should clearly define the Independent Evaluator's duties to include conducting audits and evaluations of federal and state Bay restoration programs, reviewing existing levels of federal and state permitting and enforcement, determining whether the reasonable assurance standard is being met under the Bay-wide TMDL, and keeping Congress, EPA, the Executive Council and the public fully informed about Bay jurisdictional progress toward meeting two-year milestones.

✓Congress should require the Independent Evaluator to implement an ongoing accountability mechanism that consists of applying accountability (performance) metrics to the Program and its partners, gathering data and reporting, and providing recommendations for adaptation and corrective action.

✓Congress should require the U.S. Department of Agriculture to disclose information to the Chesapeake Bay Program and the Independent Evaluator regarding conservation practices administered by the USDA on private agricultural land.

EXPECTATIONS AND CONSEQUENCES

Substantial progress should be defined as meeting 20 percent of the total load reduction requirements over an interim two-year period

✓Congress should set a statutory deadline of 2020 for Bay restoration, requiring that EPA has the non-discretionary duty to ensure that the Bay meet water quality standards by that time.

✓Congress should require Bay jurisdictions to establish five sets of two-year milestones outlining the interim reduction requirements necessary to achieve the statutory deadline by 2020.

✓Congress should require that substantial progress is made toward meeting the two-year milestones. Substantial progress should be defined as meeting 20 percent of the total load reduction requirements (the overall Bay-wide nutrient reduction goal) over an interim two-year period.

✓Congress should require the EPA Administrator to make a formal finding within 60 days after a two-year milestone deadline has passed. The finding should declare whether Bay watershed jurisdictions are making substantial progress in meeting their two-year milestones, allowing for states and citizens to petition for a finding and for judicial review if the Administrator fails to carry out this non-discretionary duty.

✓As an incentive for jurisdictions to make substantial progress toward meeting their two-year milestones, Congress should authorize the EPA Administrator to impose penalties for failing to make progress, including:

- Prohibiting the issuance of new NPDES permits in the jurisdiction.
- Withdrawing Section 319 funding from a jurisdiction to be given to the Bay Program for nonpoint source programs.
- Regulating nonpoint sources using direct and mandatory controls and best management practices (BMPs).

The Bay-wide TMDL

✓Congress should reauthorize the Bay Program to require jurisdictional partners in the Bay Program to develop an implementation plan for the Bay-wide "Total Maximum Daily Load" (TMDL) by the December 2010 TMDL deadline.

✓Congress should define the required elements of the Bay-wide TMDL jurisdictional implementation plans, including:

- Requiring the plans to meet a robust "reasonable assurance." For EPA to approve a jurisdictional implementation plan, it must have reasonable assurance that controls and BMPs to meet the TMDL 2020 are identified, government capacity to monitor and achieve these controls and BMPs is explained, and an enforceable compliance schedule that ensures that identified controls and BMPs are implemented is established.
- Requiring each jurisdiction to identify by TMDL segment the three largest point and three largest nonpoint sources of nutrient pollution and ensure the implementation of enforceable controls of these sources by 2012.
- Requiring each jurisdiction to prioritize the implementation of controls and BMPs in the geographic areas where more than half of the manure nitrogen is generated in the watershed.

✓Congress should require that the Bay-wide TMDL is translated into stricter permit limits and mandatory nonpoint source controls within five years of EPA's approval of the permits and controls.

✓Congress should require EPA to deny new NPDES permits in the Bay jurisdictions if the compliance schedules outlined in the TMDL implementation plans are not designed to bring the waters into compliance with applicable water quality standards and do not include enforcement provisions.

✓If a jurisdiction does not meet its commitments outlined in its TMDL implementation plan or if substantial progress is not being made toward meeting the TMDL's overall reduction goals, Congress should require that the Administrator of EPA shall:

- Revoke his or her approval of the Bay-wide TMDL.
- Implement or direct the Bay Program to implement TMDL jurisdictional implementation plans.
- Suspend, withdraw, or redirect financial assistance and withdraw approval of the implementation plan.

✓Congress should provide for judicial review of the Bay-wide TMDL by allowing states, political subdivisions, and citizens to:

- Petition the Administrator of EPA to review the implementation of Bay-wide TMDL implementation plans and withdraw a jurisdiction's implementation plan if a state or the District of Columbia is not making substantial progress on meeting the Bay-wide TMDL's overall reduction goals or a jurisdiction is not implementing identified control measures or enforcing the implementation plan's compliance schedules.

An Accountability Mechanism for the Bay: Overview

Restoring environmental quality throughout the Chesapeake Bay is an exceedingly difficult job. Covering 64,000 square miles, the Chesapeake Bay watershed includes Maryland, Virginia, Delaware, Pennsylvania, West Virginia, New York, and the District of Columbia. Approximately 17 million people live in the watershed, and more than 100,000 streams, creeks, and rivers drain into the Bay.

Approximately 17 million people live in the watershed of the Chesapeake Bay, which includes Maryland, Virginia, Delaware, Pennsylvania, West Virginia, New York and the District of Columbia.

The Bay Program's recognition that it must make hard choices and shift from a tone of mutual celebration to one of enforceable expectations is a landmark in its institutional maturation. While the Bay Program often gets blamed for the lack of progress made in the Bay, it has historically been a science-based program designed to encourage collaboration among the jurisdictions in the watershed. It has no independent regulatory authority, and depends on dozens of committees, working groups, and taskforces to jawbone, shame, and cajole the partners to redouble their pollution control efforts.

Meanwhile, crucial information about the location of pollution sources and the levels of controls implemented to control these sources remain opaque. For example, the Bay Program's *2008 Health and Restoration Assessment* focuses on various indicators of the Bay's health – bay grasses restored, levels of nitrogen and phosphorus, etc. – but does not explain which specific institutions are responsible for addressing the worst problems.[6] Instead, the report recites worsening environmental conditions in the Bay without tying these conditions to the regulatory efforts designed to improve them, and it avoids describing the regulatory approaches that its own scientists know are necessary to restore the Bay to a healthy condition.

The Government Accountability Office (GAO) in its 2005 report criticizing the Bay Program describes the problem well:

> Mirroring the shortcomings in the program's measures, the Bay program's primary mechanism for reporting on the health status of the bay—the State of the Chesapeake Bay Report—does not provide an effective or credible assessment on the bay's current health status. This is because these reports (1) focus on individual species and pollutants instead of providing an overall assessment of the bay's health; (2) commingle data on the bay's health attributes with program actions, and (3) lack an independent review process. **As a result, when these reports are issued, they do not provide information in a manner that would allow the public and stakeholders to easily determine how effective program activities have been in improving the health of the bay.**[7]

In response to such criticisms, Bay Program partners began discussing ways to reorganize the Program to increase its accountability, including establishing an Independent Evaluator for the Program and establishing two-year milestones for Program partners. For these important developments to succeed, we recommend Congress adopt the following recommendations so that a robust accountability mechanism is established for the Bay.

An Accountability Mechanism: The Independent Evaluator

In November 2008, the Executive Council charged the Bay Program with the task of creating an Independent Evaluator for the Bay Program as a way to keep EPA, the Program, and the Bay-wide jurisdictional partners accountable for their commitments to clean up the Bay. President Obama's subsequent Executive Order on the Bay requires the creation of an Independent Evaluator, who will report periodically on progress made toward meeting Bay-wide goals and to ensure these reports are made public and posted on EPA's website.

An Independent Evaluator Action Team is currently working to develop how the Independent Evaluator would work. The Action Team has recommended that that National Academy of Sciences conduct the first evaluation as a pilot. The Action Team is currently further exploring how to develop an accountability mechanism that would be conducted completely independently of the Bay program and on an ongoing basis. Funding, however, is limited.

Providing clear congressional direction for the Independent Evaluator will ensure its centrality and independence, promote focused action, and promote high-level commitment by federal and state Bay Program partners.

While most agree reform is needed, there is real concern among Bay officials and advocates that an Independent Evaluator, as currently envisioned, will not result in genuine quality control or pressure concrete actions to be taken. Several legitimate reasons underlie this concern. In the past five years, at least 11 reports have been issued detailing the problems with the Bay Program's structure. There is a real fear that an accountability mechanism that produces yet another report about the Program's woes will consume precious time, energy and resources, while delaying on-the-ground action.

Meanwhile, less attention has been paid to the role the jurisdictional partners – including several federal agencies themselves – have played in contributing to the Bay Program's dysfunction. For this reason, as long as the Bay jurisdictions are responsible for defining the Independent Evaluator's role, there is a strong sense that much-needed independence, credibility, and authority will be lacking, and, more crucially, the recommendations that jurisdictional partners don't want to hear won't be made. Ultimately, unless Congress clearly defines the mission of the Independent Evaluator and establishes it as a critical function, it will be difficult for it to succeed.

Recommendations

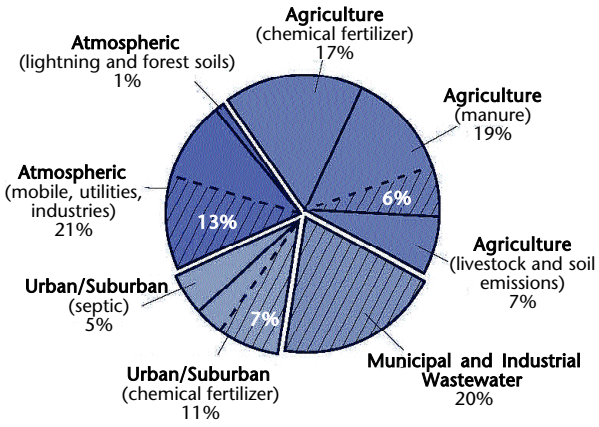
- ✓**Congress should establish and fund an Independent Evaluator, to be appointed by the Executive Council but subject to removal by EPA, the President, or Congress, for the Bay Program as part of an independent, ongoing accountability mechanism for the Program designed to ensure that state and federal jurisdictional partners keep their commitments and deliver results.**

Organizational options for this function are outlined below. We recommend that Congress empower the Executive Council to appoint an independent, high-profile individual with a sterling professional reputation to accomplish this task. This individual should be authorized to either hire or contract for assistance or establish an inspection panel of Bay Program officers and experts to conduct his or her work. Alternatively, to save expense, Congress could create an Inspection Panel constituted by members of the Bay Program and program officers from other watershed programs, who would agree to evaluate and audit each jurisdiction's programs on a rotating basis. We do not recommend that Congress or EPA try to substitute a one-time National Academy of Sciences audit for this very different institutional function.

✓**Congress should clearly define the Independent Evaluator's mission as helping promote Bay restoration by assessing how the most pressing pollutions**

Relative Responsibility for Regulating Pollution Loads to the Bay

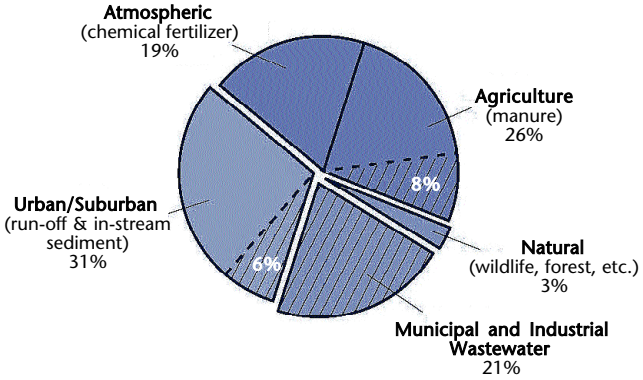
Nitrogen



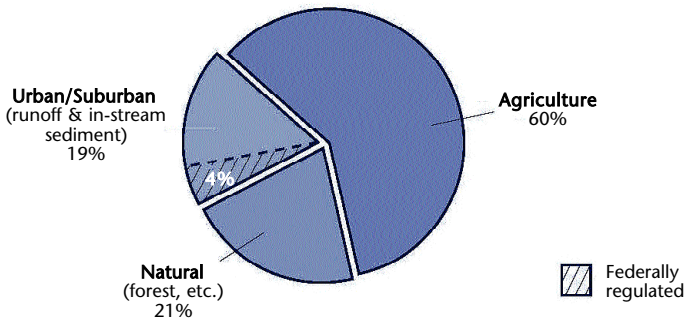
As the pie charts indicate, state and federal partners have differing levels of regulatory control over pollution sources to the Bay.

A persistent problem has been that the Bay Program has been unclear about which specific institutions are responsible for addressing the worst problems. An Independent Evaluator charged with spotlighting which states and which federal agencies have what regulatory and resource management responsibilities would greatly improve accountability for the Bay, as policymakers, the Program partners, and the public would know which institution to hold accountable for results and where additional resources may be needed.

Phosphorus



Sediment



Source: 2009 State of the Chesapeake Bay Program, Summary Report to the Chesapeake Bay Executive Council

problems facing the Bay should be solved, spotlighting responsibility among state and federal jurisdictional partners for ensuring actions are taken to solve these problems, and making annual recommendations to Congress, the Federal Leadership Committee, and the Executive Council for the Bay Program so that identified problems are addressed, adjustments are made, incentives are adopted, and consequences are imposed.

The Independent Evaluator: Organizational Options

The Independent Evaluator should provide independent and expert input to the Chesapeake Bay Program so that state and federal jurisdictional partners keep their commitments and deliver results. Several correlative accountability mechanisms provide potential models.

- **Inspector General.** By federal statute, Inspectors General ("IGs") are empowered to conduct independent and objective audits, investigations, and inspections, with the primary objective of preventing and detecting waste, fraud, and abuse. Most are nominated by the President and confirmed by the Senate, although some federal agencies can appoint and remove IGs if they notify Congress. IGs report to Congress biannually. The Executive Council could agree to appoint an "Independent Evaluator" for the Program, modeled on the IG approach. Because allegations of fraud or waste are not at the crux of the Program's problems, the Independent Evaluator would differ from the IGs in that its primary objective would be to ensure program environmental accountability instead of preventing fraud or abuse.
- **Office of Accountability.** Offices of Accountability are independent offices within an institution's organizational structure. They may assess and respond to internal and/or external complaints; conduct compliance reviews; and/or conduct or oversee audits. They may report to the organization's director or governing board.
- **Inspection Panel.** Inspection panels carry out independent investigations of organizations. For example, the World Bank established an Inspection Panel, a three-member body appointed by the bank's board for five-year terms. One Inspector, the Chairperson, works on a full-time basis; the other two work part-time. The panel investigates based on citizen requests and makes recommendations to the Board of Executive Directors, who consider the actions, if any, to be taken. Here, an Independent Evaluator/Inspection Panel could be appointed by the Executive Council, with the chairmanship of the Panel rotating on an annual basis. To save expense, the panel could be constituted with members of the Bay Program and program officers from other watershed programs, who would agree to evaluate and audit each jurisdiction's programs on a rotating basis.
- **Compliance Advisor.** An Office of the Compliance Advisor is another way to foster accountability. For example, the International Finance Corporation (IFC) established such an office to "improve the social and environmental outcomes of their work." The role involves overseeing compliance reviews; reviewing overall environmental and social performance, and specific projects; and providing independent advice on specific projects.
- **Accountability Partnership.** An accountability partnership is best characterized as a community-driven effort to achieve a common goal. For example, charged by the Washington Governor and Legislature with creating an "Action Agenda" to protect the Puget Sound, the Puget Sound Partnership "consists of citizens, governments, tribes, scientists and businesses," although it is essentially a state agency with governance mechanisms including these groups. The Action Agenda will be released in December 2008; after that, the Partnership "will hold its partners accountable for delivering results." One way the Partnership plans to promote accountability is by signing performance agreements with its partner state agencies.

Defining the Independent Evaluator's duties will promote focus and effectiveness.

A recurring problem with past Bay Program reports is that the information communicated is generally descriptive instead of specifically diagnostic. "Actions" are recommended but responsibility for ensuring that these actions occur is left undefined. While developing their two-year milestones, the Bay jurisdictions have done some very good work toward creating a mechanism for revealing better information about what actually is being done, although allocations of responsibility and consequences for inaction are less clear.

Moreover, in areas where there is no direct legal or regulatory responsibility for an action identified as necessary to clean up the Bay, there is no mechanism for pointing out that problem or way for decision-makers to see the limits in which the Bay Program and its partners operate. Specificity about partners as well as sources of pollution is needed. This is the only way Congress and state legislators will be able to know that more or targeted resources may be needed if continued progress is to be made.

Recommendations

✓**Congress should establish that the duties of the Independent Evaluator include:**

- To develop an accountability mechanism that reveals the institutional barriers as to why the Bay Program and its state and federal partners are unable to achieve its statutory mission of Bay restoration;
- To conduct, supervise, and coordinate audits and evaluations relating to federal and state Bay restoration programs, including agricultural programs designed to make environmental improvements and whether the reasonable assurance standard is being met under the Bay-wide TMDL;
- To review existing federal and state levels of permitting and enforcement;
- To review existing and proposed legislation and regulations relating to Bay restoration programs and to make recommendations concerning the impact of such legislation or regulations on Bay restoration;
- To recommend policies and/or activities for the purpose of promoting Bay restoration;
- To recommend policies for improved information sharing and coordination among Federal agencies, state and local governmental agencies, and nongovernmental entities with respect to Bay restoration; and
- To keep Congress, EPA, the Executive Council, and the public fully and currently informed, by means of reports and other means, concerning progress and problems related to jurisdictional partners meeting milestones and overall Bay restoration goals, to recommend corrective actions concerning such problems, abuses, and deficiencies, and to report on the progress made in implementing such corrective actions.

✓**Congress should require the Independent Evaluator implement an accountability mechanism for the Bay that consists of the following:**

- **The development of "accountability metrics" that are designed to judge the Program and its partners' institutional progress toward meeting milestones and overall Bay restoration goals.** The metrics must reveal: who is responsible for an activity, what the activity will involve, when they will complete the activity, why the activity is important to restoration of the Bay, and, if applicable, why not—that is, why the partner was unable to achieve success. The Independent Evaluator should prioritize evaluating Bay-wide TMDL implementation when the Bay-wide TMDL is completed.
- **Data Gathering and Reporting.** Once metrics are crafted, the Independent Evaluator must gather the information necessary to respond to accountability metrics and then issue an annual report that identifies progress and/or problems in meeting two-year milestones and overall Bay restoration goals. The report must be presented annually to the Executive Council, Federal Leadership Committee, and made available to the public online. Bay jurisdictions should have the opportunity to respond to and comment on the report.
- **Adaptation & Corrective Action.** Once problems are identified, recommendations for policy solutions requiring adaptive management and/or corrective actions must be made. Examples of possible policy solutions include redirecting funding, addressing information constraints, establishing new agreements, or requesting that Congress create stronger controls in the Clean Water Act.

Ensuring that crucial information about conservation practices designed to protect the Bay is shared among EPA, the Bay Program, the U.S. Department of Agriculture, and the Independent Evaluator will promote accountability, improve monitoring, and reduce duplicative information-gathering.

Agriculture is the largest source of pollution to the Bay, and conservation programs administered by the U.S. Department of Agriculture (USDA) are opportunities for significant reduction of this pollution. Manure in agricultural areas in the Bay contributes 18 percent of the total nitrogen load to the Bay and 27 percent of the total phosphorous load. In Maryland, for example, 270 million chickens are raised each year, generating 1 billion pounds of manure annually. Excess chemical fertilizer further adds to the problem, contributing 26 percent of the total nitrogen load and 18 percent of the total phosphorus load. More than half of this amount is from excess chemical fertilizer applied to agricultural lands. Finally, agriculture contributes 62 percent of the total sediment load to the Bay, by far the largest source of the sediment clouding the Bay's waters.

Federal funding often provides the economic incentive for operators to implement practices that reduce nutrient and sediment pollution. In May 2008, Congress reauthorized the federal Farm Bill, which included $188 million to fund the Chesapeake Bay Watershed Initiative for

fiscal years 2009 through 2012. The Initiative, administered by the USDA's Natural Resources Conservation Services and funded by the Commodity Credit Corporation, was established to improve the water quality and quantity and to restore, enhance, and preserve natural resources in the watershed. The Initiative focuses on high-priority areas, including the Susquehanna, Shenandoah, Potomac, and Patuxent River basins. By supporting certain agricultural practices such as nutrient management, vegetative buffers, and crop residue management and providing technical and financial assistance for these priority areas, the Initiative affirms the federal commitment to restoring the Bay.

Information constraints and public access to conservation information, however, remain significant obstacles to Bay restoration and loom over all conservation programs administered by the USDA. The 2008 Farm Bill reaffirmed earlier non-disclosure mandates of information provided by private entities that participate in programs of the USDA. In addition, the most recent Farm Bill also mandates non-disclosure of geospatial information. By withholding information related to the location and effectiveness of conservation practices, the Farm Bill dooms efforts to maintain accountability and ultimately the effectiveness of these conservation programs.

Recommendation

✓**Require the U.S. Department of Agriculture to disclose information to the Chesapeake Bay Program and the Independent Evaluator regarding conservation practices administered by the USDA on private agricultural land.**

An Accountability Mechanism: Expectations and Consequences

Increasing accountability without consequences in place for non-performance is impossible, as the Bay Program's voluntary and collaborative approach to Bay restoration has proved. Spotlighting information about institutional progress is an important first step to establishing real accountability for the Bay, but genuine progress will only be made if the federal and state jurisdictions involved in Bay cleanup face consequences for missed deadlines. The following recommendations are designed to press both EPA and the Bay jurisdictions to take the actions necessary to restore the Chesapeake Bay in 10 years.

Establishing a statutory deadline of 2020 for Bay restoration will signal that Congress clearly expects that the Bay will meet water quality standards by this time.

The Bay Program partners have had a long history of delaying Bay restoration goals years into the future, allowing EPA, the Program and the Program partners to avoid making hard choices about cleaning up the Bay. The reduction goals set in the 1983 Chesapeake Bay Agreement, which was strengthened in 1987, were never met. The Chesapeake Bay partners came to the table again in 2000, signing with great fanfare Chesapeake 2000, promising that the Bay would meet water quality standards and be taken off of EPA's impaired waters list by 2010. Five years later the GAO found that the Bay Program was "downplaying" "negative trends" and painting a "a rosier picture of the bay's health being reported than may have been warranted."[8]

Only Congress can change this culture of delay by establishing, by statute, its expectation that the Bay will be restored – meet water quality standards – by 2020. Moreover, by establishing it as a non-discretionary duty, citizens will be able to challenge the agency's failure to take action by the statutory deadline under the Clean Water Act's citizen suit provision.[9] Often called "deadline suits," these cases have often challenged the agency's failure to take specific action by a statutory deadline.

The Bay Program partners have had a long history of delaying goals years into the future, allowing EPA and partners to avoid making hard decisions.

Recommendation

✓ **Congress should set a statutory deadline of 2020 for Bay restoration, requiring that EPA has the non-discretionary duty to ensure that the Bay meets water quality standards by this time.**

Establishing that the Bay Program partners' two-year milestones are requirements will promote meaningful reductions designed to meet the overall Bay-wide nutrient reduction goal.

The Bay jurisdictions' commitment to two-year milestones is a critical development in the

life of the Bay Program. All of the Program Partners are aware, however, that unless there is a way to ensure that the milestones result in actual cleanup, little will get done. Yet they are unable to fashion meaningful consequences for themselves. Consequently, as it has in other environmental contexts such as the Clean Air Act, Congress must put real teeth into a jurisdiction's goals for making environmental progress by establishing that the Bay jurisdictions' two-year milestones are requirements.

Recommendations

- ✓**Congress should require Bay jurisdictions to establish five sets of two-year milestones outlining the interim reduction requirements necessary to achieve Bay Program nutrient reduction goals by 2020.**
- ✓**Congress should require that substantial progress must be made toward meeting the two-year milestones. Substantial progress should be defined as meeting 20 percent of the total load reduction requirements (the overall Bay-wide nutrient reduction goal) during an interim two-year period.**

Requiring EPA to find whether Bay watershed jurisdictions are making substantial progress in meeting their two-year mile - stones would press EPA to be more proactive and exercise a stronger leadership role.

While Bay partners have been notorious for being unwilling and unable to impose meaningful consequences on themselves, EPA in past years has declined to press them hard for action. One way Congress has pressed EPA to take action in other environmental contexts is to require it to make formal findings.[10]

Recommendations

- ✓**Congress should require the Administrator of EPA to make a formal finding within 60 days after a two-year milestone has passed as to whether Bay watershed jurisdictions are making substantial progress in meeting their two-year milestones.**
- ✓**Congress should allow states, political subdivisions, and citizens to petition for a finding and require the Administrator of EPA to respond to such petition within 60 days and after a public hearing.**
- ✓**Congress should provide for judicial review if the EPA Administrator fails to meet these non-discretionary duties.**

Establishing that the EPA shall impose consequences if a jurisdiction does not make substantial progress toward meeting its two-year milestones will press EPA and the Bay jurisdictions to exercise their authorities to the fullest extent to ensure that the two-year milestones are met.

Recommendations

- ✓**Congress should require that EPA shall prohibit the issuance of new point source (NPDES) permits if a jurisdiction does not make substantial progress toward meeting its two-year milestones.**
- ✓**Congress should require that EPA shall regulate nonpoint sources using direct and mandatory controls and BMPs if a jurisdiction does not make substantial progress toward meeting its two-year milestones.**
- ✓**Congress should require that Section 319 funding be withdrawn from jurisdictional partners and given to the Bay Program for nonpoint source programs if a jurisdiction does not make substantial progress toward meeting its two-year milestones.**

The Colorado River Basin Salinity Control Program: A Potential Model

One of the challenges facing the Chesapeake Bay is that "upstream" jurisdictions – Pennsylvania, West Virginia, New York, and Delaware – do not benefit directly from the Bay and have less incentive than Maryland and Virginia to invest the resources necessary to clean it up. Subsidizing pollution reductions is therefore an important approach for Congress to also consider.

The Colorado River Basin Salinity Control Program (CRBSCP), one of the oldest watershed programs in the country and involving six federal agencies and seven states, successfully achieved significant reductions from upstream sources of water pollution after Congress established in 1995 a competitive bidding program designed to subsidize pollution controls. A study conducted by CPR Member Scholar Bob Adler for the National Academy of Public Administration found that the cost-effectiveness of federal and state pollution controls were "improved substantially" by means of a competitive-bidding process where other entities (public, private, or both) were invited to propose pollution control projects for controls beyond existing programs to be funded by the CRBSCP. Under the Program, projects are selected based on a combination of cost-effectiveness and the likelihood of project success. Professor Adler's study found that there are significant parallels between the CRBSCP and the Chesapeake Bay Program that suggest that such a competitive-bidding program would work well for the Bay.

See Robert W. Adler et al., Lessons from Large Watershed Programs 80 (2000) (report to National Academy of Public Administration)

The Bay-wide TMDL: Overview

In 1998, Virginia, Maryland, and the District of Columbia listed the Chesapeake Bay as impaired under the Section 303(d) of the Clean Water Act. When a waterway is listed as impaired, a "Total Maximum Daily Load" or TMDL must be established for the impaired waterway. Often described as a "pollution budget," a TMDL is the combined amount of pollution from both point sources and nonpoint sources that a waterway can accept without exceeding water quality standards.

The Bay TMDL = Sum of Bay Segment TMDLs

— Rich Batiuk, Associate Director of Science, Chesapeake Bay Program

Under the Bay-wide TMDL, the amount of nitrogen that may be discharged into the Bay will be capped at 175 million pounds per year. Phosphorus will be capped at 12.8 million pounds. According to EPA, the Bay-wide TMDL "will identify pollutant caps by major river basin in the 64,000-square-mile Bay watershed."[11] These pollution caps will be subdivided into "load allocations" of nitrogen, phosphorus and sediment among all of the jurisdictions in the watershed, which includes New York, Pennsylvania, West Virginia, Delaware, Maryland, Virginia and the District of Columbia.

Once the load allocations are assigned to each jurisdiction, they will then be divided further among the TMDLs required for waters impaired by nitrogen, phosphorus, and sediment for that jurisdiction. Accordingly, while the Bay-wide TMDL is often referred to as a single entity, it will actually consist of 92 individual TMDLs for each impaired tidal Bay segment, addressing the loads from the watershed draining directly into each impaired tidal Bay segment. The rationale for this approach is that, while individual TMDLs are required for each impaired tidal Bay segment, coordination among jurisdictions and across TMDLs is also needed, because sources in one jurisdiction may pollute multiple segments in other jurisdictions. Over the summer and fall of 2009, partners will allocate nutrient and sediment caps within impaired segments, which EPA will then verify. Bay watershed jurisdictions will be developing implementation plans beginning in September 2009.

Reasonable Assurance: Will the Bay-wide TMDL be implemented? The success of the Bay-wide TMDL will depend in large part upon its effectiveness in controlling both point and nonpoint sources of nitrogen and phosphorus. The risk is great, however, that actual pollution reductions will never occur because the Clean Water Act does not expressly require that identified controls of nonpoint sources of pollution designed to meet the TMDL be put into action. The situation facing EPA as it develops the Bay-wide TMDL would be comical if it wasn't so ludicrous, as it is in effect required to spend millions of dollars and countless hours to develop a pollution budget for the Bay *without the direct authority under the Clean Water Act to ensure that it is actually implemented with respect to the largest sources of pollution in the Bay, nonpoint sources.*

Much discussion has therefore arisen among Bay Program partners about how partners will ensure that the TMDL will be more than an expensive and time-consuming exercise and

that real nonpoint source reductions will occur. Bay Program partners have focused on the term "reasonable assurance" – a standard with a rather tortured history in the TMDL context – as a benchmark for ensuring that the Bay-wide TMDL will actually be implemented. (See opposite page for a brief background of the standard.) Ultimately, the idea behind the reasonable assurance standard is that, while EPA does not have direct authority to regulate nonpoint source pollution, it can require states to identify the point and nonpoint source controls needed to improve water quality as part of the TMDL's implementation plan. In other words, without reasonable assurances that both point source and nonpoint controls are in place to meet the TMDL's pollution budget, EPA has the authority to decline to approve a TMDL.

What "reasonable assurance" should look like for the Bay-wide TMDL is still being formulated as of the writing of this document. EPA, however, appears to be moving in the direction of developing a more robust reasonable assurance standard to be applied specifically in the Chesapeake Bay context than it has required for TMDLs generally in the past. In a letter dated September 11, 2008, from Donald Welsh, Regional Administrator for EPA Region III, to John Griffin, Secretary of the Maryland Department of Natural Resources, EPA emphasized the Bay partners' knowledge and expertise, observing that "Bay partners already have significant knowledge regarding needed implementation mechanisms that goes far beyond the usual level of information generally available when developing TMDLs."[12]

Based on input it received from the PSC Reasonable Assurance Workgroup, which included representatives from all of the Bay Program jurisdictional partners, EPA then described the elements of the Bay-wide TMDL's "reasonable assurance and implementation" framework that each State and the District must show, including, for example, requiring jurisdictional milestones.[13] EPA's letter is a departure from the past, moving significantly in the direction of requiring more transparency and accountability. Each jurisdiction has already agreed to commit to two-year milestones for meeting load allocations, a significant break from the longer-term goals Bay Program partners set for Bay restoration in previous years.

Setting milestones is only the first step. Enforcing them is another. The element in EPA's reasonable assurance list related to what will happen when jurisdictions fail to meet their commitments is essentially undefined. Therefore, the following recommendations outline the legislative changes needed to strengthen EPA's and the Bay Program's authority to ensure the Bay-wide TMDL is implemented effectively and that jurisdictions meet their commitments.

Reasonable Assurance: A Controversial History

The term "reasonable assurance" first appeared in a 1991 EPA guidance document, which required a TMDL for water bodies contaminated by point and non-point source pollution to contain "reasonable assurance that nonpoint source controls will be implemented and maintained or that nonpoint source reductions are demonstrated through an effective monitoring program." If there were no reasonable assurances, the entire load allocation was assigned to point sources, pursuant to Section 301 of the Clean Water Act.

In July 2000, the EPA promulgated a final rule that required states to develop implementation plans for each TMDL. Among other things, the rule elaborated on the "reasonable assurance" that a state must show to fulfill implementation plan requirements. Under the rule, reasonable assurance was described as a "a 'snapshot-in-time' identification of those voluntary and regulatory actions that the State, Territory, authorized Tribe, or EPA intends to take to ensure that the nonpoint source load allocations assigned in the TMDL will be realized." For a state to demonstrate "reasonable assurance" for actions to implement load allocations for nonpoint source pollution, the state would have to meet a four-part test:

- The action must be specific to the pollutant and the waterbody for which TMDL is established. The state or implementing authority "knows of, and can point to, information showing that the management measure relied upon to achieve the reduction in the loading can reduce that pollutant."
- The action must be implemented as expeditiously as practicable, meaning "as quickly as [a state] reasonably [can] in light of other water quality needs."
- The load allocation reduction must be accomplished through reliable delivery mechanisms, including the programmatic and administrative means to implement and monitor management measures and control actions as well as voluntary or incentive-based programs. Regulations, local ordinances, performance bonds, trading programs, voluntary best management plans, and monitoring programs could constitute reliable delivery mechanisms.
- The action must be supported by adequate funding. Here, a state can demonstrate that existing water quality funds have been allocated for implementing load allocation reductions to the fullest extent practicable and consistent with other clean water programs. If the funding does not exist or is inadequate, the state must provide an explanation and a schedule for obtaining and using funds. The schedule must generally be within 5 years when practicable for waters impaired only by sources that are not subject to NPDES permits, including nonpoint sources.

Due to opposition from the American Farm Bureau Federation and congressional involvement, the EPA first proposed to delay the effective date of the rule and then eventually withdrew the rule on March 19, 2003.

Current EPA guidance requires that a TMDL developed for waters impaired by both point and nonpoint sources must include "reasonable assurance that nonpoint source control measures will achieve expected load reductions in order for the TMDL to be approvable." This guidance is relatively toothless. Indeed, EPA's TMDL website contains this disturbing note acknowledging EPA's lack of authority: "EPA cannot disapprove a TMDL for nonpoint source-only impaired waters, which do not have a demonstration of reasonable assurance that [load allocations] will be achieved, because such a showing is not required by current regulations."

The Bay-wide TMDL: Recommendations

Providing EPA with express authority to require that implementation plans accompany the Bay-wide TMDL will greatly increase the EPA and the Independent Evaluator's ability to track whether necessary pollution reduction measures are being implemented.

Section 303 of the Clean Water Act does not expressly provide for the implementation of TMDLs. Some states require TMDL implementation plans, although Virginia is the only state in the Bay watershed to require by statute TMDL implementation plans.[14] Several analogous environmental statutes require management plans that are similar to TMDL implementation plans. For example, the Coastal Zone Management Act requires states to adopt management programs.[15] The Clean Air Act requires "state implementation plans" (SIPs) for meeting national ambient air quality standards.[16]

A recent EPA report found that "[o]nly 37 percent of EPA TMDL respondents report that TMDLs *often* or *always* have implementation plans, and 46 percent of respondents indicate that TMDLs *never* or *seldom* have detailed implementation plans."[17] Even though EPA apparently intends to require each Bay partner to submit an implementation plan as part of the Bay-wide TMDL, the gap in EPA's express statutory authority to require a plan greatly weakens EPA's hand and the Bay-wide TMDL's potential for success.

Recommendations

✓**Congress should reauthorize the Bay Program to require each jurisdiction in the Bay watershed to develop an implementation plan for the Bay-wide TMDL by the December 2010 TMDL deadline.**

✓**Congress should define the required elements of the Bay-wide TMDL jurisdictional implementation plans as including, at a minimum, the following:**

- The pollution sources that must be controlled to implement load allocations;
- A description of specific regulatory actions by Federal, State or local governments, and authorized Tribes that provide reasonable assurance (defined below) that allocations will be implemented and achieve the assigned load reductions;
- An enforceable compliance schedule for implementing the management measures or other control actions to achieve load allocations in the TMDL within 10 years or by 2020, with five sets of two-year milestones outlining interim reduction requirements over the ten-year period;
- A description of how the two-year interim milestones will be evaluated to determine whether management measures or other control actions are being implemented;
- A monitoring and/or modeling plan designed to measure the effectiveness of the management measures or other controls implementing the load allocations and the progress the waterbody is making toward attaining water quality standards, and a

requirement that stronger and more effective management measures will be implemented if substantial progress is not achieved toward meeting jurisdictional two-year milestones.

Establishing a statutory definition of "reasonable assurance" will promote significant nonpoint source reductions.

The Clean Water Act requires point sources such as sewage treatment plants to tighten their permits as necessary to meet water quality standards and their respective TMDL's wasteload allocations.[18] Accordingly, implementation for point source dischargers is ultimately required under the Act, regardless of whether an implementation plan is in place for the applicable TMDL or not. Nonpoint sources, on the other hand, are not subject to NPDES permit limitations. Therefore, how they will implement and prioritize reductions is not outlined under the Act.

EPA's regulations at 40 C.F.R. 130, the regulatory requirements for "approvable TMDLs," attempt to address the implementation problem indirectly. EPA guidance requires that a TMDL developed for waters impaired by both point and nonpoint sources must include "reasonable assurance that nonpoint source control measures will achieve expected load reductions in order for the TMDL to be approvable."[19] But this guidance is relatively toothless and EPA's TMDL website contains this disturbing note acknowledging EPA's lack of authority: "EPA cannot disapprove a TMDL for nonpoint source-only impaired waters, which do not have a demonstration of reasonable assurance that [load allocations] will be achieved, because such a showing is not required by current regulations."[20]

In the Chesapeake Bay context, EPA has made a very important effort to develop a more robust "reasonable assurance" standard for the Bay-wide TMDL. In this effort, EPA has emphasized the Bay partners' experience and expertise, observing that "Bay partners already have significant knowledge regarding needed implementation mechanisms that goes far beyond the usual level of information generally available when developing TMDLs."[21] EPA also solicited input from representatives from all of the Bay partners to develop a more robust set of elements constituting "reasonable assurance and implementation." EPA clearly understands that, if the Bay-wide TMDL is to be worth the paper it is written on, concrete actions by both point and nonpoint sources must be assured and actions prioritized. Because EPA does not have the authority to ensure that the reasonable assurances standard will be met, however, EPA is ultimately relying on the Bay partners to meet their load reductions, and has little recourse if the partners fail to do their jobs. Meanwhile, partners are placed in the unenviable position of developing consequences for noncompliance applicable to themselves. Strong federal leadership is critical.

Recommendations

✓**Congress should define "reasonable assurance" as part of the Bay Program's reauthorization, so that a meaningful standard is established that lays out Congress' expectations for the Bay-wide TMDL's jurisdictional-specific implementation plans. See box below for elements.**

✓**Congress should require each jurisdiction to identify, as part of their implementation plans, by TMDL segment the three largest point and three largest nonpoint sources of nutrient pollution and ensure the implementation of enforceable controls of these sources by 2012.**

A Robust Standard of Reasonable Assurance

- Identifies the controls and best management practices (BMPs), targeted geographically by TMDL segment, needed to achieve the Bay-wide TMDL's nutrient and sediment reduction goals by 2020.
- Identifies an enforceable compliance schedule that ensures that identified controls and BMPs are implemented and consequences imposed if they are not.
- Identifies deadlines for implementation of controls and BMPs and nutrient reductions as part of two-year milestones set by jurisdictional partners;
- Identifies the current state and local government capacity to achieve identified controls and BMPs, including:
  - current rates of point source permitting (including CAFOs), inspections, and types and numbers of enforcement actions taken;
  - current rates of stormwater discharger permitting, inspections, and types and numbers of enforcement actions taken;
  - existing and projected sewage treatment upgrades with funding;
  - existing state and local regulations requiring additional controls and BMPs for point and nonpoint sources;
  - current rates of nonpoint sources implementing controls and BMPs;
  - existing responsibilities of local, state, and federal agencies to ensure the implementation of identified controls and BMPs;
  - current voluntary controls and non-governmental funding of controls and BMPs; and
  - current federal, state, and local funding for implementing needed controls and BMPs.
- Identifies the gaps in current programs and funding to achieve the needed controls and BMPs, including:
  - capacity to review and update all point source permits within five years;
  - capacity to review and update all stormwater permits within five years;
  - capacity to inspect point source and stormwater permits;
  - capacity to take enforcement actions against permittees;
  - capacity to provide technical assistance;
  - capacity to inspect implementation of BMPs;
  - needed sewage treatment upgrades lacking funding;
  - needed state and local regulations requiring additional controls and BMPs for point and nonpoint sources; and
  - the funding gap between current federal, state, and local funding for implementing controls and BMPs and necessary funding to achieve water quality standards by 2020.
- Identifies how controls and BMPs will be monitored, tracked, and reported to EPA and the public, including:
  - A commitment to establish enforceable state and local regulations requiring additional controls and BMPs for point and nonpoint sources when two-year milestones are not met;
  - A commitment to increase technical assistance and enforcement capacity when two-year milestones are not met; and
  - Financial assistance for nonpoint source BMPs.

✓Congress should require each jurisdiction to prioritize, as part of their implementation plans, the implementation of controls and BMPs in the geographic areas where more than half of the manure nitrogen is generated in the watershed: Lancaster County, Pennsylvania; the Delmarva Peninsula; and Rockingham County, Virginia.

Requiring the Bay-wide TMDL to be implemented will ensure that the TMDL is more than a planning process and that on-the-ground actions are taken.

It bears emphasizing that the reasonable assurances requirement has been used only in the context of EPA approving a TMDL. Again, Section 303 of the Clean Water Act does not expressly provide that a TMDL be implemented. In addition to using a robust reasonable assurance standard to press Bay jurisdictions into taking concrete action, Congress should directly require certain actions to ensure that concrete reductions take place.

Recommendations

✓**Congress should require that the Bay-wide TMDL is translated into stricter permit limits and mandatory nonpoint source controls within five years of EPA approval.**

The Possibilities of Pinto Creek

In *Friends of Pinto Creek v. EPA*, 504 F.3d 1007 (9th Cir. 2007), *cert. denied*, 129 S.Ct. 896 (2009), EPA issued an NPDES permit to a new copper mine that would discharge copper into a section 303(d)-listed stream segment, which was listed as impaired for copper. The Ninth Circuit held that, pursuant to 40 C.F.R. § 122.4(i), the NPDES regulation, "**no permit may be issued to a new discharger if the discharge will contribute to the violation of water quality standards**." 504 F.3d at 1012.

The Court noted in its decision that the regulation provides for an exception to this rule where a TMDL has been performed and the owner or operator demonstrates that two conditions are met, namely:

- There are sufficient remaining pollutant load allocations to allow for this discharge; and
- The existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable water quality standards.

Id. (quoting 40 C.F.R. § 122.4.(i)). The Court concluded that "[t]he plain language of this exception to the prohibited discharge by a new source provides that the exception does not apply unless the new source can demonstrate that, under the TMDL, the plan is designed to bring the waters into compliance with applicable water quality standards." *Id.*

In essence, *Pinto Creek* stands for the proposition that new NPDES permits must comport with any applicable TMDL; otherwise, they aren't allowed. In the Chesapeake Bay context, such a rule would likely affect new sewage treatment plants most keenly, although it could also affect CAFOs that have not yet applied for an NPDES permit under the new CAFO rule.

Nonpoint sources not subject to NPDES permits may also be affected under this analysis as well. In addition to holding

✓**Congress should require EPA to deny new NPDES permits in the Bay jurisdictions if the compliance schedules outlined in the TMDL implementation plans are not designed to bring the waters into compliance with applicable water quality standards and do not include enforcement provisions.[22] (The *Pinto Creek* standard).**

Authorizing EPA to revoke its approval of the Bay-wide TMDL and take other action if commitments made in the accompanying implementation plans will strengthen EPA's ability to ensure that promised reductions are carried out.

None of EPA's authorities to revoke a state permitting program or enforce state-issued NPDES permits apply with respect to reasonable assurances or to nonpoint source allocations after a TMDL is approved and while it is being implemented. Nor has EPA been required to ensure the implementation of the control measures necessary to meet a TMDL should a state fail to do so.

Several environmental statutes, however, include provisions designed to ensure that management plans are implemented and enforced or agency action is taken. The Coastal

that no new permit may be issued for point sources discharging into impaired waters, the case also provides a strong rationale for including within TMDL implementation plans the requirement from the regulation that "existing dischargers into that segment are subject to compliance schedules." Notably, the Court construed the term "compliance schedules" in the regulation to include all sources discharging into the stream when point source schedules alone would not be sufficient to achieve water quality standards:

> The EPA has the responsibility to regulate discharges from point sources and the states have the responsibility to limit pollution coming into the waters from non-point sources. If point sources, other than the permitted point source, are necessary to be scheduled in order to achieve the water quality standard, then the EPA must locate any such point sources and establish compliance schedules to meet the water quality standard before issuing a permit. **If there are not adequate point sources to do so, then a permit cannot be issued unless the state or [the discharger] agrees to establish a schedule to limit pollution from a nonpoint source or sources sufficient to achieve water quality standards.**

Id. at 1014 (emphasis added).

Ultimately, the Court's overall conclusion that lower courts must take a hard look at a TMDL to see if it will actually result in meeting water quality standards before any new NPDES permit makes tremendous sense: if a water way is impaired, why should a new permit be issued allowing further impairments? Congressional action adopting and/or extending the standard would go a long way in ensuring the Bay-wide TMDL achieves real reductions.

Zone Management Act, for example, provides for penalties against states if they have failed to adhere to the required coastal zone management plan.[23] The Clean Water Act itself allows EPA to withdraw a state's NDPES permitting program.[24] Indeed, with respect to point sources, citizens play an integral role in the Clean Water Act's enforcement scheme, both in supplementing government enforcement efforts and spurring EPA to act. Under the Clean Water Act, the citizen suit provision also allows a citizen to bring suit against the EPA administrator when there is an alleged failure of the Administrator to perform any nondiscretionary act or duty.[25] Establishing specific EPA duties in the TMDL context will allow for judicial review if the agency fails to act.

Recommendations

✓**Congress should require that the Administrator of EPA shall revoke his or her approval of the Bay-wide TMDL if substantial progress is not made toward meeting the TMDL's overall reduction goals.**

✓**Congress should require that EPA shall implement Bay-wide TMDL jurisdictional implementation plans if the Administrator for EPA determines a state or the District of Columbia is not making substantial progress toward meeting the TMDL's overall reduction goals or finds that a jurisdiction is not implementing identified control measures or enforcing TMDL compliance schedules.**

✓**Congress should require that that, if, after written evaluation of Bay jurisdiction's TMDL implementation and enforcement of a TMDL implementation plan, the Administrator of EPA determines that the state has failed to adhere to the implementation plan, then the Administrator may suspend, withdraw, or redirect financial assistance and may withdraw approval of the implementation plan.[26]**

✓**Congress should allow states, political subdivisions, and citizens to petition the Administrator of EPA to review the implementation of Bay-wide TMDL implementation plans and withdraw a jurisdiction's implementation authority if a state or the District of Columbia is not making substantial progress toward meeting the TMDL's overall reduction goals or a jurisdiction is not implementing identified control measures or enforcing TMDL compliance schedules. EPA must grant or deny the petition within 90 days. If the Administrator determines, after a public hearing, that a state is not administering and enforcing an authorized program, the Administrator shall withdraw authorization of the state's TMDL implementation plan and establish a Federal program.[27] Congress should also provide for judicial review if the Administrator of EPA denies a petition for fails to grant or deny a petition within the 90-day period.**

End Notes

[i] *See* Rena Steinzor & Shana Jones, *An Accountability Mechanism for the Chesapeake Bay: Interview Findings,* 4, CPR White Paper No. 808 (Nov. 2008), *available at* http://www.progressivereform.org/articles/Chesapeake_Bay_808.pdf.

[2] Chesapeake Bay Program, *Bay Barometer: A Health and Restoration Assessment of the Chesapeake Bay and Watershed* in 2008, EPA-903-R-09-001, March 2009, *available at* http://www.chesapeakebay.net/content/publications/cbp_34915.pdf; Testimony of Anu K. Mittal before the House Submcommittee on Water Resources and Environment, Committee on Transportation and Infrastructure, Government Accountability Office, Chesapeake Bay Program: Recent Actions are Positive Steps Toward More Effectively Guiding Restoration Effort, July 30, 2008.

[3] *See supra* note 1 at 5.

[4] Jeff Lape, the Director of the Bay Program, put the problem bluntly in his May 2009 report to the Chesapeake Executive Council saying, "Current tools, programs, authorities and resources are inadequate to achieve the needed reductions of nutrients and sediments." 2009 State of the Chesapeake Bay Program, Summary Report to the Chesapeake Executive Council, *available at* http://archive.chesapeakebay.net/pressrelease/EC_2009_stateofprogram.pdf.

[5] Government Accountability Office, Chesapeake Bay Program: Improved Strategies Are Needed to Better Assess, Report, and Manage Restoration Progress, October 28, 2005 (*available at* http://www.gao.gov/new.items/d0696.pdf) [hereinafter "2005 GAO Report]. Indeed, in response to the 2005 GAO report, in 2008, the Senate and House Appropriations Committees withheld $5 million from the program until EPA implements GAO's recommendations.

[6] *See supra* note 2.

[7] *See supra* note 5, 2005 GAO Report, at 17 (emphasis added).

[8] *Id.*

[9] 33 U.S.C. § 1365(b)(1). This section allows allows a citizen to bring suit against the EPA administrator when there is an alleged failure of the Administrator to perform any nondiscretionary act or duty. These "citizen enforcement actions" require citizens to provide 60 days notice to EPA, the state, and the violator before the complaint may be filed, although action may be brought immediately for violations of new source performance standards or toxic effluent limitations. Id. § 1365(b).

[10] *See e.g.* Clean Air Act, 42 U.S.C. § 7426(a).

[11] *EPA Outlines Plans to Set Pollution Caps for the Chesapeake Bay*, Press Release, EPA, Office of Office of Wetlands, Oceans, and Watersheds, *available at* http://yosemite.epa.gov/opa/admpress.nsf/e51aa292bac25b0b85257359003d925f/44f0fe46e1fc960d85257508005c78e9!OpenDocument (Nov. 21, 2008).

[12] Letter dated Sept. 11, 2008 from Region III Administrator Donald Walsh to Secretary John Griffin [hereinafter "John Griffin Letter"]. The letter goes on to state that, "[i]n light of some recent court decisions and higher scrutiny of the relationship between TMDLs and NPDES permits, EPA is engaging in an effort to further refine the concept of reasonable assurance and expects to complete that work in FY 2009."

[13] The elements outlined in the Sept. 2008 letter to John Griffin are as follows:
1. Identify the controls needed to achieve their nutrient and sediment reduction goals (the WLA and LA) by revising their tributary strategies, which are river-specific cleanup plans, known as tributary strategies.
2. Identify the current state and local government capacity to achieve needed controls (i.e. an assessment of current point source permitting/treatment upgrades funding programs and nonpoint source control funding, programmatic capacity, regulations, legislative authorities, etc.).
3. Identify the gaps in current programs to achieve the needed controls (additional incentives, state or local regulatory programs, market-based tools, technical or financial assistance, new legislative authorities required, etc.).
4. A commitment to work to systematically fill the identified gaps to build the program capacity needed to achieve the needed controls. As part of this commitment, the states and the District would agree to meet specific, iterative, and short-term (1-2 year) milestones demonstrating increased levels of implementation and/or nutrient and sediment load reductions.
5. A commitment to continue efforts underway to expand monitoring, tracking, and reporting directed towards assessing the effectiveness of implementation actions and use these data to drive adaptive decision-making and redirect management actions.
6. Agree that if jurisdictions do not meet these commitments, additional measures will be necessary. Where programs or funding are not adequate to achieve the goals, the states must identify measures needed to fill those gaps. Those could be further incentives, additional regulatory programs, technical assistance, changes in laws or other actions.

[14] Va. Code Ann. § 62.1-44.19:7.

[15] 16 U.S.C. 1451.

[16] 42 U.S.C. § 7409.

[17] Environmental Protection Agency, *Developing Effective Nonpoint Source TMDLs: An Evaluation of the TMDL Development Process*, January 2007, available at www.epa.gov/evaluate/tmd/final.pdf (last visited May 31, 2009).

[18] 33 U.S.C. § 1311(b)(1)(C).

[19] Environmental Protection Agency, *Guidelines for Reviewing TMDLs Under Existing Regulations Published in 1992 (2002), available at* http://www.epa.gov/owow/tmdl/guidance/final52002.html (last visited Mar. 31, 2009).

[20] Environmental Protection Agency, *TMDL Guidance, avail - able at* http://www.epa.gov/owow/tmdl/guidance/final52002.html.

[21] *See* John Griffin Letter *supra* note 12.

[22] EPA arguably already has this authority under § 402(d) of the Clean Water Act, although they have declined to exercise it.

[23] 16 U.S.C. 1451.

[24] 33 U.S.C. § 1342(c).

[25] 33 U.S.C. § 1365.

[26] *See* 16 U.S.C. 1451.

[24] *See* 42 U.S.C. § 6926 (e).

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