

**TESTIMONY OF SUSAN PARKER BODINE
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BEFORE THE SUBCOMMITTEE ON WATER AND WILDLIFE
OF THE SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
LEGISLATIVE HEARING ON GREAT WATER BODY LEGISLATION:
S. 1816 AND S. 1311
NOVEMBER 9, 2009**

Chairman Cardin, Ranking Member Crapo, and members of the Subcommittee, thank you for the invitation to testify today on S. 1816, the Chesapeake Clean Water and Ecosystem Restoration Act of 2009 and S. 1311, the Gulf of Mexico Restoration and Protection Act.

My goal today is to provide a legal analysis of these two legislative proposals, based on my understanding of the Clean Water Act and water quality implementation programs. I am currently a partner in the law firm of Barnes & Thornburg. I have previously held positions at both the U.S. Environmental Protection Agency (EPA), as Assistant Administrator for the Office of Solid Waste and Emergency Response, and in the House of Representatives, as the staff director for the Water Resources and Environment Subcommittee of the Committee on Transportation and Infrastructure. During my tenure on the Water Resources and Environment Subcommittee, I worked on the last reauthorization of the Chesapeake Bay Program, as Title II of Public Law 106-457 (2000). I also participated in extensive oversight of EPA's Total Maximum Daily Load (TMDL) program.

S. 1816, the Chesapeake Clean Water and Ecosystem Restoration Act of 2009

Establishment of a Chesapeake Bay TMDL

Consistent with EPA's announced plans, S. 1816, the Chesapeake Clean Water and Ecosystem Restoration Act of 2009, requires EPA to establish, by December 31, 2010, a basin-wide Chesapeake Bay TMDL for the 92 Bay and tidal tributary segments that are impaired by nitrogen, phosphorus, and sediment. This TMDL will cover 64,000 square miles in six States and the District of Columbia. Under the bill, the TMDL must include wasteload allocations for point sources for nitrogen, phosphorus, and sediment, necessary to implement applicable water quality standards. The bill also requires the TMDL to include enforceable or otherwise binding

load allocations on nonpoint sources, including atmospheric deposition, agricultural runoff, and any stormwater runoff that is not currently regulated. Finally, under the bill, the TMDL must prohibit any net increase in nitrogen, phosphorus, and sediment from any new or expanding source, including increases from new or increased impervious surfaces, concentrated animal feeding operations, transportation systems, and septic systems, even if a discharge meets water quality criteria so the source is not causing or contributing to the violation of a water quality standard.

S. 1816 provides States with greatly expanded State authorities to implement the TMDL. If a State fails to implement the TMDL, EPA must implement it, with the greatly expanded federal authorities provided by the bill. Finally, if persons are not satisfied with the implementation by a State or by EPA, the bill provides for citizen suits to use the courts to implement the TMDL. These provisions all raise significant issues. A few of those issues are highlighted below.

Load Allocations and Water Quality Standards

Under new section 117(i), S. 1816 requires each State to develop an implementation plan for each impaired segment in its jurisdiction. The implementation plans must incorporate the caps on nitrogen, phosphorus, and sediment that were agreed to among EPA and the States in 2003, or the caps identified in the TMDL developed by EPA. The 2003 agreement caps nitrogen loads at 175 million pounds, phosphorus loads at 12.8 million pounds, and sediment loads at 4.15 million pounds.¹ These maximum loads were based on modeling in 2003 that assumed that States would be modifying their water quality standards based on ambient water quality criteria for the Bay for dissolved oxygen, water clarity, and chlorophyll published by EPA in April 2003.² The 2003 agreement notes that:

¹ Memorandum dated April 28, 2003, from W. Tayloe Murphy, Jr., Chair, Chesapeake Bay Program Principals' Staff Committee to Principal Staff Committee Members and Representatives of the Chesapeake Bay "Headwater" States, titled "Summary of Decision Regarding Nutrient and Sediment Load Allocations and New Submerged Aquatic Vegetation (SAV) Restoration Goals," reprinted as Appendix A of "Setting and Allocating the Chesapeake Bay Basin Nutrient and Sediment Loads," EPA 903-R-03-007, December 2003.

² Ambient Water Quality Criteria for Dissolved Oxygen, Water Clarity and Chlorophyll *a* for the Chesapeake Bay and Its Tidal Tributaries, EPA 903-R-03-002 (April 2003).

“Over the next two years, Maryland, Virginia, Delaware, and the District of Columbia will promulgate new water quality standards based on the guidance published by EPA. Although the public process for adopting water quality standards varies among the states, each state’s process will provide opportunities for considering and acquiring new information at the local level. States may choose to explore a number of issues during their adoption process, such as the economic impact of water quality standards and specific designated uses.”³

Scientific analysis did not stop in December 2003, and EPA and the Chesapeake Bay States have continued to refine the models on which these load allocations are based. In fact, based on the most recent modeling, EPA and the Chesapeake Bay Program’s Principals’ Staff Committee have agreed to preliminary target loads of 200 million tons per year of nitrogen and 15 million tons per year of phosphorus. These targets are likely to continue to change. In fact, the most recent model (phase 5.3) is not expected to be ready until December 2009. However, S. 1816 codifies the nitrogen, phosphorus and sediment load allocations as no more than the December 2003 allocations, or whatever allocations EPA establishes in the TMDL. Thus, the load allocations are capped by federal law even if, after the TMDL is established in December 2010, new data or further changes to the model show that increased loads would achieve water quality standards.

By codifying specific pollutant caps in law, S. 1813 may be freezing both science and policy. As noted above, the models used to establish pollutant loads are very complex and are continually evolving. Codifying the pollutant caps could preclude EPA and States from using their evolving understanding of the Bay and improved modeling to achieve water quality goals. Also, the models seek to answer the question of whether or not water quality standards are met. States must review and, as appropriate, revise, their water quality standards every three years. 40 CFR 131.20. Under current law, water quality standards can be made less stringent if meeting those standards “would result in substantial and widespread economic and social impact.” 40 CFR

³ “Setting and Allocating the Chesapeake Bay Basin Nutrient and Sediment Loads,” December 2003, at A6. For example, in setting its water quality standards for dissolved oxygen, Maryland has included variance that allows dissolved oxygen criteria to exceed the water quality standard in some of the deepest parts of the Bay because: “Even after spending billions of dollars to reduce nitrogen, phosphorus, and sediment pollution to clean up the rest of the Bay, essentially doing everything we know how to do at this time, the deep areas still could not attain the dissolved oxygen standard.” <http://www.mde.state.md.us/Programs/WaterPrograms/TMDL/wqstandards/faqs.asp>

131.10(g)(6). It appears that, by codifying specific load allocations, S. 1813 would eliminate the ability of States to later make changes to the loads based on changed water quality standards that may be needed to account for substantial and widespread economic and social impacts. Finally, codifying load allocations is contrary to the principles of adaptive management. The Chesapeake Bay watershed is a complex, dynamic system. It is unclear how the watershed will respond to the various measures being proposed. In its report, *Assessing the TMDL Approach to Water Quality Management*, the National Academy of Sciences (NAS) recommended using the scientific method to apply adaptive implementation to TMDLs. NAS describes this as “a process of taking actions of limited scope commensurate with available data and information to continuously improve our understanding of a problem and its solutions, while at the same time making progress toward attaining a water quality standard.”⁴ The NAS’s recommended framework for water quality management includes reviewing the attainability of designated uses and water quality standards both before the development of a TMDL and as part of adaptive implementation.⁵ S. 1813 would prevent EPA and States from implementing that recommendation.

State Implementation

S. 1816 requires State implementation plans to include enforceable or otherwise binding measures to reduce loads of nitrogen, phosphorus, and sediments, to meet the targets discussed above. Although programs to achieve voluntary reductions through funding commitments may be included in the implementation plan, S. 1816 makes it clear that the State must have enforcement mechanisms to employ if an entity does not achieve its assigned pollutant reductions. S. 1816 provides federal authority for binding measures and enforcement mechanisms in new section 117(i)(2), which **authorizes States to issue permits under section 402 of the Clean Water Act to any pollution source the State determines to be necessary to achieve the nitrogen, phosphorus, and sediment reductions in the implementation plan.** These permits are authorized for any source of pollution, whether or not that source is currently

⁴ *Assessing the TMDL Approach to Water Quality Management*, National Research Council, National Academy of Sciences (2001), at 90.

⁵ *See id.*, Figure 5-1, at p. 91.

excluded from regulation under current law. The permits are then fully enforceable by EPA and by citizen suits.

This provision greatly expands the scope of federal water pollution control law. Under current law, the Clean Water Act controls point source discharges of pollutants. "Point sources" are defined in section 502 of the Clean Water Act as any discernible, confined and discrete conveyance, such as pipes, ditches, channels, etc. Diffuse runoff of water is not a point source. The Clean Water Act also specifically excludes agricultural stormwater discharges and return flows from irrigated agriculture from the definition of point source, so they are not regulated under federal law. In addition, EPA, by regulation (in 40 CFR 122.27) has defined what is and is not a silviculture point source, excluding a variety of activities such as natural runoff from forest road construction and maintenance. These sources all could be subject to permits under S. 1816.

"Pollutants" are defined in section 502 of the Act as specific, measurable, materials that are discharged into water, such as solid waste, sewage, chemical wastes, biological materials, radioactive materials, heat, and industrial, municipal, and agricultural waste. In contrast, "pollution" is defined as the man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water. Pollution includes increased water flows and habitat alternation. Under S. 1816, any activity that causes increases flow or habitat alteration, no matter how distant from a body of water, could be required to obtain a permit.

In fact, under S. 1816, permits issued under section 402 of the Clean Water Act could be required for any activity that affects water, whether or not there is any addition of a pollutant to the water, and whether or not there is even a discharge that can be measured and controlled. The bill specifically requires reductions in pollution from agricultural runoff, point sources including point source stormwater discharges, nonpoint source stormwater discharges, and septic systems. Although not specifically required, the bill also would authorize a State to issue a section 402 permit to a source of air deposition, because the States' new authority applies to "any pollution source," and air deposition is a source of pollution to the Bay. Finally, the bill does not restrict the States' new authority to sources located within the geographic boundaries of that State.

The section 402 permitting program is designed for point source discharges of measurable pollutants into bodies of water. It is unclear how section 402 permits could be used to address all the diverse sources of pollution affecting the Chesapeake Bay. For example, S. 1816 does not address what types of technology-based and water-quality based effluent limitations could be established to address diffuse sources of pollution that do not directly discharge into a water body. Absent specific statutory language clarifying how these sources are intended to be controlled, it is unclear where and how compliance is to be measured, whether numeric limitations could be imposed, and who would be legally responsible for meeting any requirements. Because these new permits can be enforced by citizen suits, these questions may be answered by courts.

S. 1816 also imposes specific requirements for development. Under new section 117(i)(3), EPA must issue regulations identifying, based on the area of impervious surface,⁶ what development projects States must regulate to maintain or restore predevelopment hydrology, to the maximum extent feasible. EPA must define “predevelopment hydrology” by regulation. This may mean that the owner of property must return the volume of water leaving the property to its predevelopment levels, whether or not the water flows into a water body and whether or not there is any impact on water quality. These requirements will apply to existing projects seeking to expand, as well as new projects. When the term “maximum extent feasible” is used, that is usually understood to mean technically feasible without regard to cost.⁷ If an impact to predevelopment hydrology is not avoidable, then a permit (presumably a section 402 permit, although the bill does not specify) must require mitigation using a ratio to be established by EPA by regulation. States are required to provide assurance to EPA that they will implement these regulations.

Federal Implementation

If a State fails to submit an implementation plan or submits a plan that does not meet criteria established by EPA, new section 117(j)(5) requires EPA to withhold all Clean Water Act funds

⁶ The area of impervious surface may include roofs as well as parking lots.

⁷ In contrast, the term “practicable” is usually understood to include consideration of cost.

from the State. This includes the capitalization grants for State Revolving Loan Funds. EPA also must develop a federal implementation plan to implement the TMDL in that State.

To implement the TMDL, S. 1816 gives EPA the authority to **promulgate any regulations or issue any permits as EPA determines is necessary** to control pollution sufficient to meet the water quality goals defined in the implementation plan. This is an extraordinary expansion of federal authority. It literally means that EPA could regulate any activity that has any impact at all on water quality. Under this provision EPA could supersede the local development plan of every community, as well as State and metropolitan transportation plans. EPA could prohibit or prescribe sidewalks, parking lots, buildings, roads, even lawns. EPA could dictate the length of gutters or require rain barrels and green roofs. EPA could prohibit the use of fertilizer. EPA could shut down factories or require farm land to become idle. EPA could force communities to spend billions of dollars beyond the limits of affordability to meet nutrient standards at sewage treatment plants. EPA could require all municipal separate storm sewer systems to carry out retrofits, at an estimated cost of \$7.9 billion.⁸

S. 1816 also requires EPA to impose requirements for 2 to 1 offsets in permits under section 402 for any new or expanding discharges of nitrogen, phosphorus, or sediments in a State where EPA is implementing the TMDL. All permits would be enforceable as permits issued under section 402 of the Clean Water Act, including citizen suit enforcement.

EPA's new authority is to be implemented to advance a single goal: meeting the load allocations of a TMDL. S. 1816 does not provide for consideration of other values that a State or local government may want to take into account, such as safe transportation, locally grown produce, the economic health of a community, and even the ability of individuals to afford the cost of shelter. In fact, as discussed above, even if a State chooses to change its water quality standards to address any substantial and widespread social and economic impacts of implementing the TMDL, those new standards may not be implemented. It appears that S. 1816 would still

⁸ See "The Next Generation of Tools and Actions to Restore Water Quality in the Chesapeake Bay, A Draft Report Fulfilling Section 202a of Executive Order 13508" (Sept. 9, 2009), at 23-24.

mandate achievement of the goals established in 2003 or in the TMDL to be issued in December 2010.

Nutrient Trading

New section 117(j)6) directs EPA to establish, by May 2012, an interstate nitrogen and phosphorus trading program to facilitate implementation of the TMDL. However, trading opportunities may be limited. First, it appears that trading must occur between “points-of-regulation” which must be entities regulated under the Clean Water Act. It is unclear if a regulated entity can rely on credits generated from unregulated activities, such as wetlands restoration, nutria eradication, or increasing the number of filter feeders such as oysters. It also is unclear if trading can occur with sources of air deposition. Second, few sources will be able to reduce nitrogen, phosphorus, or sediment loadings above the reductions assigned to them under the TMDL implementation plan. Given that credits must arise in the watershed and all sources of pollution in the watershed would become regulated under the bill, there may be very few excess reductions to trade as credits. In fact, the only cost-effective source of credits may be the retirement of agricultural land, driving agriculture from the watershed. The May 2009 plans put forth by States to meet their 2011 milestones for reducing nitrogen and phosphorus already assume the retirement of 81,676 acres of land.⁹

Federal Assistance

S. 1816 requires EPA to develop guidance, model ordinances, and guidelines, to help States and local governments ensure that land maintains predevelopment hydrology and to encourage low impact development. The bill authorizes \$1.5 billion in grants to help local governments that adopt the guidance, ordinances, and guidelines to implement projects designed to reduce stormwater discharges. However, as noted above, EPA estimates the cost of retrofitting municipal separate storm sewer systems to reduce stormwater discharges of nitrogen, phosphorus, and sediment to be \$7.9 billion.

⁹ See http://archive.chesapeakebay.net/pressrelease/EC_2009_allmilestones.pdf

Enforcement

New section 117(n) includes provisions to authorize federal and citizen suit enforcement against States for failure to implement the TMDL, and citizen suit enforcement against EPA for failure to carry out any requirement of section 117.

The section authorizing federal and citizen suit enforcement against States for failure to act would likely be found to be unconstitutional under the 10th Amendment to the Constitution, even if the bill successfully waives State sovereign immunity under the 11th Amendment.¹⁰

Specifically, the Supreme Court has held that Congress may not “commandeer the legislative process of the States by directly compelling them to enact a federal regulatory program.” *New York v. United States*, 505 U.S. 144, 161 (1992) (relating to solid waste disposal). *See also Printz v. United States*, 521 U.S. 98 (1997) (the Federal government may not compel the States to enact or administer a federal program, relating to regulation of guns). Thus, Congress cannot compel a State to implement the Bay TMDL.

Congress can authorize citizen suits against EPA for failure to carry out any provision of the Act. While EPA does retain the discretion to choose where and how to utilize most of its new authorities, if a citizen believes that EPA’s actions are not sufficient to meet the goals of the TMDL, then that person can file suit in federal court to compel action. In deciding the case, the federal court will not be able to balance competing interests. Implementation of the load allocations in the TMDL could be ordered, no matter what the impact is on communities or individuals.

S. 1311, the Gulf of Mexico Restoration and Protection Act

S. 1311, the Gulf of Mexico Restoration and Protection Act would amend the Clean Water Act to add section 123 to formally establish a Gulf of Mexico Program office, to be located in a Gulf

¹⁰ The Supreme Court has gone back and forth in recent years regarding whether Congress can waive State sovereign immunity through the exercise of Article I authority. *Compare Seminole Tribe of Florida v. Florida*, 517 U.S. 44 (1996) (Congress cannot abrogate State sovereign immunity under Article I), with *Central Virginia Community College v. Katz*, 546 U.S. 356 (2006) (the Bankruptcy Clause of Article I abrogates State sovereign immunity).

Coast State.¹¹ The Program Office is to coordinate and carry out activities to improve the water quality and living resources in the Gulf of Mexico. These activities may include research, monitoring, modeling, education and outreach, and providing information. The Program Office also is to be a liaison with counterparts in Mexico.

S. 1311 authorizes grants to non-profits, State and local governments, colleges and universities, interstate agencies, and individuals for monitoring, research, addressing water quality and living resource needs, habitat restoration, and reducing point source discharges of pollutants. The grants have a 25 percent local cost share and a 15 percent cap on administrative costs. The bill also requires periodic reports and, in coordination with the Gulf of Mexico Executive Council, periodic assessments of the state of the Gulf of Mexico ecosystem and implementation of the Program. The bill authorizes \$10 million in 2010, \$15 million in 2011, and \$25 million in each of 2012 through 2014 to carry out the Program.

The bill defines the Gulf of Mexico Executive Council as “the formal collaborative Federal, State, local and private participants in the Program” but does not establish the Council or specify how people become members of the Council. If the Council includes private citizens, it can be advisory only. The only function provided for the Council in the bill is to coordinate with EPA on the assessment of the ecosystem and the Program that must take place every five years. It is unclear what other functions, if any, the Council is intended to perform. Currently, there is a Gulf of Mexico Alliance that is a partnership of the States of Alabama, Florida, Louisiana, Mississippi, and Texas. There also is a Citizens Advisory Committee, a Policy Review Board that includes public and private entities, and a Management Committee that includes public and private entities. It is unclear how the efforts of these existing organizations are intended to be integrated. It also is unclear how existing efforts, such as the Governors’ Action Plans developed by the Gulf of Mexico Alliance, will be supported.

In new section 123(b)(1)(C)(iii), the bill authorizes the Program Office to implement State-led and community-led restoration plans and projects, and facilitate science, research, modeling, monitoring, data collection and other activities to support the program. As drafted, it appears

¹¹ The existing Gulf of Mexico Program Office is located at the Stennis Space Center in Mississippi.

that this provision would be carried out using contract authority. If it is intended to be carried out using grants, it should cross-reference subsection (d), authorizing grants.

Among the purposes of the grants authorized under subsection (d) is to eliminate or reduce point sources of pollutants, including eliminating leaking septic systems. Septic systems are nonpoint sources, not point sources.