Nos. 04-1034, 04-1384

In The Supreme Court of the United States

JOHN A. RAPANOS, *et al.*,

Petitioners,

v.

UNITED STATES,

Respondent.

JUNE CARABELL, *et al.*,

Petitioners,

v.

UNITED STATES ARMY CORPS OF ENGINEERS, *et al.*,

Respondents.

ON WRITS OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE SIXTH CIRCUIT

BRIEF FOR AMICI CURIAE THE CHESAPEAKE BAY FOUNDATION IN SUPPORT OF RESPONDENTS WITH APPENDIX

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TABLE OF CONTENTS

Page

TABLE OF AUTHORITIES

Page(s)

CASES

STATUTES

RULES

REGULATIONS

OTHER AUTHORITIES

INTEREST OF AMICUS CURIAE[1]

The Chesapeake Bay Foundation (CBF) is the only independent 501 (c)(3) organization dedicated solely to restoring and protecting the Bay and its tributary rivers. Since 1967, our goal has been to improve water quality by reducing pollution. Our motto is *Save the Bay*.

Pollution is choking the Bay and many of its tributary rivers. In the summer of 2005, 41 percent of the volume of the Bay was considered a "dead zone," an area with insufficient oxygen to support marine life. The Chesapeake Bay Program, an arm of the U.S. Environmental Protection Agency (EPA), recently declared that the size of this area is the largest on record. This anoxic zone is caused in large part by excessive nitrogen and phosphorous discharges to the Bay and its tributaries. CBF strives to reduce this pollution from, among other sources, sewage treatment facilities, other industrial sources, agricultural runoff, and urban and suburban stormwater.

CBF's efforts are supported by its 140,000 members, volunteers, concerned citizens, advocates and staff. CBF's staff of 170 includes scientists, policy experts, attorneys, educators, and grassroots organizers pursues our goal through environmental advocacy, litigation, environmental education, strategic communications, and habitat restoration throughout the Bay watershed. We inform and engage the public, the private sector, and government officials to request that the necessary legislative and regulatory decisions and adequate public and private investments be made to save the Bay.

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[1] Pursuant to S. Ct. R. 37.3(a) and 37.6, the undersigned represents that (1) all parties consented to the filing of this brief, (2) no counsel for any party authored this brief in whole or in part, and (3) no person or entity other than the above-named amicus curiae and its counsel made a monetary contribution to the preparation or submission of this brief.

SUMMARY OF ARGUMENT

The purpose of this brief is to impress upon the Court that a decision to strip Clean Water Act ("CWA") safeguards from non-navigable tributaries and their adjacent wetlands will cause great harm to the Chesapeake Bay, its watershed, its aquatic ecosystem, and its people. The Chesapeake Bay is North America's largest and most biologically diverse estuary. "For more than 300 years, the Bay and its tributaries have sustained the region's economy and defined its traditions and culture."[2]

The Chesapeake Bay receives fully half of its water from an intricate network of 110,000 streams and 1.7 million wetlands most of which are non-navigable tributaries and non-tidal wetlands that drain or "tend to drain" to those tributaries, very much like the wetlands and tributaries at issue in these cases. This brief will demonstrate that the headwater streams and wetlands, and other non-navigable tributaries and associated wetlands, of the 64,000 square mile Chesapeake Bay watershed are indeed "inseparably bound up" with the Susquehanna, the Potomac, the James, and the other large navigable rivers that flow to the Bay. This intricate hydrological network cleanses the surface water, recharges the groundwater, moderates the flood flows, and provides the aquatic habitat on which the ecological and economic life of the Chesapeake Bay and its watershed depends. The health of the Chesapeake Bay truly does begin at its source.

The states of Maryland, Pennsylvania, and Virginia, the District of Columbia and the United States recognized in the 1970s that they could not solve the dire problems facing the Chesapeake Bay alone or in

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[2] Chesapeake 2000 Agreement, Preamble, at Appendix A. The signatories to the Chesapeake 2000 Agreement are Maryland, Virginia, Pennsylvania, the District of Columbia, the Chesapeake Bay Commission (representing the Maryland, Pennsylvania, and Virginia state legislatures), and the EPA, representing the United States.

piecemeal fashion. They entered into an historic compact, the Chesapeake Agreement of 1983,[3] and an expanded agreement in 1987.[4] In 2000, Congress and the state and federal Chesapeake Bay partners strengthened their commitment to restoring the Bay ecosystem with congressional action and execution of the Chesapeake 2000 Agreement.

The Chesapeake Bay partnership exemplifies the concept of cooperative federalism – a cornerstone of the CWA. The Bay partners, through the Chesapeake Bay Agreements, have set ambitious requirements to improve the water quality and restore the living resources of the Chesapeake Bay and its watershed. They recognize, however, that without CWA jurisdiction over non-navigable tributaries and adjacent wetlands, the Bay partners cannot achieve the stricter water quality standards and waste load allocations necessary to "save the Bay."

In *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985) (*Riverside Bayview)*, the Court recognized that Congress intended to regulate wetlands "inseparably bound up with the waters of the United States," and upheld the Army Corps of Engineers' exercise of CWA jurisdiction over adjacent wetlands on that basis. The Court approved this *Riverside Bayview* adjacency holding in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers,* 531 U.S. 159 (2001) (*SWANCC)*, while narrowly holding that CWA jurisdiction did not extend to certain truly isolated intrastate ponds. The *Riverside Bayview* holding applies with equal force in this case, where the wetlands at issue drain or "tend to drain" to non-navigable tributaries that are hydrologically and ecologically bound up with downstream navigable waters. As in *Riverside Bayview,*

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[3] 1983 Chesapeake Bay Agreement, Appendix B.

[4] Chesapeake Bay Agreement of 1987, Appendix C; http://www.chesapeakebay.net/pubs/1987ChesapeakeBayAgreement.pdf (last visited January 12, 2006).

the Corps of Engineers properly asserted jurisdiction over the wetlands at issue in these cases.

The Chesapeake Bay ecosystem and the Chesapeake Bay Agreement demonstrate that the extensive networks of non-navigable tributaries and the wetlands that drain to them located upstream in watersheds are inseparably bound up with downstream navigable waters, and that the CWA goal of maintaining and restoring the physical, chemical, and biological integrity of the Nation's waters cannot be met unless these waters remain subject to the Act. For these reasons, Amicus Curiae the Chesapeake Bay Foundation respectfully requests that the Court affirm each of the decisions of the Sixth Circuit.

ARGUMENT

I. THE ECOLOGICAL AND ECONOMIC HEALTH OF THE CHESAPEAKE BAY IS "INSEPARABLY BOUND UP" WITH THE WATERSHED'S NON-NAVIGABLE TRIBUTARIES AND ADJACENT WETLANDS.

A. The Chesapeake Bay is the largest and most biologically diverse estuary in North America.

The Chesapeake Bay, a national treasure, is the largest and most biologically diverse estuary in North America.[5] It is home to more than 3,600 species of unique animals, fish, and plants including bald eagles, blue crabs, menhaden, striped bass (rockfish), osprey, oysters, and the American lotus. For more than three centuries, "the Bay and its tributaries have sustained the region's economy and defined its traditions and culture."[6]

The Bay proper is approximately 200 miles long, stretching from Havre de Grace, Maryland to Norfolk,

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[5] Chesapeake 2000 Agreement, Preamble, at Appendix A.

[6] *Id.*

Virginia. Including its tidal tributaries, the Bay has approximately 11,684 miles of shoreline. The Chesapeake Bay watershed encompasses 64,000 square miles and some or all of six states and the District of Columbia. Fifty major tributaries traverse the Appalachian, Piedmont and Atlantic Coastal Plain before flowing into the Chesapeake Bay.[7]

B. The Chesapeake Bay Watershed Is Comprised Largely of Non-navigable Streams and Adjacent Wetlands.

1. Most of the Bay watershed's stream miles are non-navigable and many flow intermittently.

One hundred and eleven thousand (111,000) miles creeks, streams, and rivers throughout the Bay watershed converge into fifty major tributaries that send water to the Chesapeake Bay.[8] The Bay's nine largest tributaries contribute 93% of the total fresh water to Chesapeake Bay,[9] about half of the Bay's total water volume.[10] The Susquehanna River is the Bay's largest tributary and contributes more than one half of the freshwater that enters the Bay.[11] The Susquehanna and its tributaries originate as small headwater streams and wetlands in New York, drain Central Pennsylvania, and

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[7] U.S. Environmental Protection Agency (EPA), *Chesapeake Bay: Introduction to an Ecosystem*, EPA 903-R-04-003 (July 2004) (*Introduction to an Ecosystem)* at http://www.chesapeakebay.net/pubs/ecosystem.pdf (last visited 1/9/06); *see,* Chesapeake Bay Watershed Map at Appendix D.

[8] Chesapeake Bay Watershed Partners Agreement (2001) at http://www.chesapeakebay.net/pubs/waterqualitycriteria/DOC_wq_finalmou.pdf (last visited January 7, 2006), Appendix D; *see also, Introduction to an Ecosystem* at 1, 5.

[9] U.S. Geological Survey, *Chesapeake Bay: Measuring Pollution Reduction*, Fact Sheet FS-055-95, at http://water.usgs.gov/wid/html/chesbay.html (last visited January 6, 2006).

[10] *Introduction to an Ecosystem* at 5.

[11] *Id.*

empty into the Bay in Maryland. The Potomac and James Rivers are the next two largest tributary systems flowing to the Chesapeake Bay.[12]

Each of these major Bay tributaries begins at their headwaters, far upstream of the navigable-in-fact rivers they will become. Headwaters are "the dendritic system of wetlands, swales and small streams that make up the beginnings of most watersheds."[13] Headwater streams[14] comprise the majority of streams and waters in a watershed, and they play the most important role within the watershed in improving water quality by filtering runoff, sediment, nutrients, and contaminants before they move further downstream.[15]

EPA estimates that first-order headwater streams, alone, comprise over 50% of the over 200,000 miles of

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[12] *Id.; See,* Chesapeake Bay Watershed Map, Appendix D. *See also,* Chesapeake Bay Program Powerpoint Presentation at www.chesapeakebay.net/pubs/waterqualitycriteria/DOC-nspresentation.ppt at slides 54, 55.

[13] Consolidated EPA Region III Response to the Advanced Notice of Proposed Rulemaking on the Clean Water Act Regulatory Definition of "Waters of the United States" (2003) (EPA Region III ANPRM Response) at 3.

[14] Headwater streams are typically defined as first and second order streams. Higher order streams are formed by the confluence of lower order tributary streams. *See,* Meyer, J. L. et al. *Where Rivers Are Born: The Scientific Imperative for Defending Small Streams and Wetlands*, American Rivers and Sierra Club, publishers (September 2003) (*Where Rivers Are Born*) at 10-11. http://www.americanrivers.org/site/DocServer/WhereRiversAreBorn1.pdf?docID=182 (last visited January 8, 2006); *see* Appendix E for stream photo.

[15] EPA Region III ANPRM Response at Appendix E, Literature Review: Extent and Function of Headwater Streams, EPA, Wheeling West Virginia (February 2003) at 3-9; *see also,* EPA letter to Jeanne Christie, dated January 9, 2005 (sent January 9, 2006) (EPA letter) *in* Amicus Curiae Brief of Association of State Wetland Managers, et al (ASWM Br.), Appendix; *see also,* M.M. Brinson, *Changes in the Functioning of Wetlands Along Environmental Gradients,* 13 (2) Wetlands 65 (June 1993); Bruce J. Peterson *et al.*, *Control of Nitrogen Export from Watersheds by Headwater Streams.* 292 Science 86-90 (April 6, 2001).

streams in EPA Region III, which encompasses most of the Chesapeake Bay watershed.[16] The Bay watershed's extensive headwater streams are important tributaries to downstream navigable waters, but they do not always flow year round; nor do they always flow above ground. Many EPA Region III first-order streams have intermittent flow periods during the summer months or during dry years.[17]

Headwater streams in the limestone or karst regions of the Bay watershed flow underground for some length before they re-emerge as a surface stream some distance downstream. These types of streams have a definite hydrological connection to downstream navigable-in-fact rivers, though the connection is not apparent by observing surface water flows exclusively.[18] However, under Petitioners' view, these tributaries would not be subject to CWA jurisdiction and would be subject to development and contamination.

Many Bay watershed headwater streams, as well as higher order non-navigable tributaries, have been channelized over time and incorporated into ditch and stormwater systems that connect non-navigable streams and adjacent wetlands to downstream waters.[19] In two recent cases, the Fourth Circuit recognized that

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[16] EPA Region III ANPRM Response, at 10, Appendix E at 3; *see also,* Rhodes, C.A., EPA Region III, *Findings in the Mid-Atlantic Region Concerning Implications for Clean Water Act Jurisdiction for Various Interpretations of SWANCC,* Presented to the ASWM Legal Workshop, Albuquerque New Mexico, October 18, 2005 (*EPA Mid-Atlantic Findings Presentation*), at 16, 20. http://www.aswm.org/calendar/legal/rhodes.pdf (last visited January 12, 2006).

[17] *Id. See also,* EPA Letter (EPA NHD analysis indicates that 59% of the U.S. (except Alaska) stream miles have intermittent or ephemeral flow.

[18] *Id.* at 4.

[19] *See,* Council on Environmental Quality, *Environmental Trends* (1989) at 35 (estimating that 10% of perennial streams in the United States have been channelized); *Where Rivers Are Born,* at 11.

manmade ditches draining Bay watershed wetlands are nonetheless tributaries subject to the CWA. *See, United States v. Deaton*, 332 F. 3d 698, 712 (4th Cir. 2003), *cert. denied,* 541 U.S. 972 (2004) (*Deaton)*; *Treacy v. Newdunn*, 344 F. 3d 407, 417 *cert. denied* 124 S.Ct. 1874 (2004) (4th Cir. 2003) (*Newdunn)* ("Whether manmade or natural, the tributary [the I-64 ditch] flows into traditional, navigable waters.").

2. Most of the Bay watershed's wetlands are non-tidal wetlands connected to tributaries.

Approximately 1.7 million wetland acres remain in the Chesapeake Bay watershed.[20] Almost 90% (about 1.5 million acres) of these remaining wetlands are non-tidal, freshwater "palustrine" wetlands, including freshwater marshes, wet meadows, forested swamps, and bogs.[21] Forested palustrine wetlands comprise the bulk of these freshwater wetlands. These are the freshwater wetlands most likely to be considered "adjacent" for CWA purposes because they are located next to but not within the banks of freshwater lakes, streams, or rivers. Some might be considered "isolated," though most of these are connected to surface waters by groundwater.[22] Over 36,000 of these palustrine wetland acres were destroyed between 1982 and 1989 alone.[23]

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[20] *See,* Tiner, R.W., *Trends in the Chesapeake Bay Watershed Wetlands,* U.S. Fish and Wildlife Service, Ecological Services, Hadley, MA. at http://biology.usgs.gov/s+t/SNT/noframe/ne124.htm (last visited January 9, 2006) (derived from Tiner's estimate of 690,000 hectares remaining in 1989).

[21] *See,* Freshwater "Palustrine" Wetland Photo, Appendix F.

[22] *See,* Hershner, Carl et al., *Wetlands of Virginia: total, isolated and headwater,* Virginia Institute of Marine Science (VIMS) Special Report No. 03-1 (February 2003). http://ccrm.vims.edu/pubs/WetlandsOfVA203.pdf (last visited January 11, 2006).

[23] *Trends in the Chesapeake Bay Watershed Wetlands, supra.*

EPA Region III estimates that roughly 36% of its remaining wetlands are headwater wetlands.[24] About 12% of the Region's remaining wetlands are headwater wetlands that lack a perennial or intermittent surface water connection to navigable-in-fact waters.[25] These Bay area headwater wetland habitats include bogs, fens, Delmarva Bays, eastern vernal pools, and pocosins.[26]

An estimated 35-39% of the wetland acreage in the U.S. Fish and Wildlife Service's Upper Delmarva Potholes (or Bays) study area was designated "isolated," though many of these wetlands were likely to have groundwater connections to streams.[27] In addition to groundwater connections, many headwater wetlands on the Delmarva Peninsula are connected to downstream waters by drainage ditches.[28]

EPA Region III field studies show that "fully 73% of the assessed sites had groundwater pathways

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[24] EPA Region III ANPRM Response, at 9-11; *see also, EPA Mid-Atlantic Findings Presentation*, *supra*, at 12-14.

[25] *Id.* These numbers likely underestimate the extent of headwater wetlands because National Wetland Inventory (NWI) maps underestimate wetland acreage by up to 50%, and small headwater wetlands are the type most frequently missed by the NWI.

[26] EPA Region III ANPRM Response, Appendix I: Threatened and Endangered Species, at 1. The Delmarva bays are so named because of their location on the Delmarva Peninsula, the peninsula on the Eastern Shore of the Chesapeake Bay that includes all of Delaware as well as parts of Maryland and Virginia.

[27] Tiner, R.W., et al, Geographically Isolated Wetlands: A Preliminary Assessment of their Characteristics and Status in Selected Areas of the United States (Geographically Isolated Wetlands), U.S. Department of Interior, Fish and Wildlife Service, Northeast Region, Hadley, MA. (June 2002), Section 2, Delmarva Potholes, Section 3, Region 5 Study Results at http://wetlands.fws.gov/Pubs_Reports/isolated/report_files/3_section/Results/Region_5/r5_results.htm (last visited January 6, 2006).

[28] Ator, Scott W., et al. *Hydrologic and Geochemical Controls on Pesticide and Nutrient Transport to Two Streams on the Delmarva Peninsula.* U.S. Geological Survey, Scientific Investigations Report 2004-5051. http://pubs.usgs.gov/sir/2004/5051/SIR2004-5051.pdf (last visited January 11, 2006).

connecting them to downstream water bodies." Groundwater was frequently one of several hydrological sources linking downstream waters.[29]

Importantly, EPA's field studies also found that the interrelationships between wetlands with linkages by non-perennial surface and/or groundwater flows and their surroundings require on-site inspections because these complex linkages are not displayed on widely used mapping and planning tools.[30] Consequently, while the great majority of Bay watershed headwater wetlands are connected hydrologically to downstream navigable-in-fact waters, identifying these complex connections with precision in each case for regulatory purposes is often very time and resource intensive. Petitioners' suggestion that regulators must definitively establish such a connection in each case prior to asserting jurisdiction is untenable.

C. Bay Watershed Adjacent Wetlands and Non-navigable Streams Are Essential to Restoring and Protecting the Chesapeake Bay Region.

1. Bay watershed headwater wetlands and streams filter pollutants.

Extensive phosphorus and nitrogen pollution causing eutrophication[31] is the most significant threat to Chesapeake Bay watershed restoration.[32] In 2003, 350 million pounds of nitrogen pollution and 30 million

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[29] EPA Region III ANPRM Response, Section IV. Case Study, at 1, 4.

[30] *Id.*

[31] The Chesapeake Bay Program website defines eutrophication as "the process of excess nutrients accelerating the growth of algae, oftentimes ultimately depleting the water of oxygen." http://www.chesapeakebay.net/glossary.htm (last visited January 10, 2006).

[32] Chesapeake 2000 Agreement, Water Quality Protection and Restoration, at 5.

pounds of phosphorus pollution entered the Bay through its nine major tributaries.[33]

Chesapeake Bay's headwater wetlands and streams are essential tools in combating this nutrient enrichment because they absorb, filter, and recycle this pollution, preventing eutrophication.[34] Studies have shown that non-tidal wetlands near the Chesapeake Bay removed an estimated 89% of the nitrogen pollution and 80% of the phosphorus pollution that entered the wetlands through upland runoff, groundwater, and bulk precipitation.[35] In Eastern Maryland, concentrations of nitrate pollution have been found to decrease in watersheds with a prevalence of forested wetlands.[36] Wetlands restored in an agricultural area on the

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[33] Langland, M.J. et al, *Changes in streamflow and water quality in selected nontidal sites in the Chesapeake Bay Basin, 1985-2003: U.S.Geological Survey Scientific Investigations Report 2004*-5259 (2004), at 23-27 at http://pubs.usgs.gov/sir/2004/5259/sir2004-5259.pdf (last visited January 6, 2006)) (2003 loads affected in part by high 2003 stream flow).

[34] *Wetlands of Virginia: total, isolated and headwater*, *citing, inter alia,* Peterjohn, W.T. and D.L. Correll, *Nutrient dynamics in an agricultural watershed: Observations on the role of a riparian forest.* Ecology 65(5): 1466-1475 (1984); *see generally*, David K. Mueller & Dennis R. Helsel, U.S. Geological Survey Circular, No. 1136, *Nutrients in the Nation's Waters – Too Much of a Good Thing?* (1996) at http://water.usgs.gov/nawqa/circ-1136/h6.html (last visited January 5, 2006).

[35] EPA Region III ANPRM Response, at Appendix D, Literature Review: Character and Function of "Isolated Wetlands," U.S. EPA, Philadelphia, PA (2003) at 13-14 *citing* Peterjohn, W.T. and D.L. Correll (1984), *supra*); *see also,* Tiner, R.W. and D.G. Burke, *Wetlands of Maryland,* U.S. Fish and Wildlife Service, Ecological Services, Region 5, Hadley, MA and Maryland Department of Natural Resources, Annapolis, MD (1995) at 146-147 (the "riparian forest" in the 1984 Peterjohn and Correll study was later recognized to be part of a wetland continuum).

[36] Phillips, P.J. et al, *Effect of Forested Wetlands on Nitrate Concentrations in Ground Water and Surface Water on the Delmarva Peninsula*, 13 Wetlands 75-83 (1993).

Delmarva Peninsula removed an average of 68% of nitrate nitrogen.[37]

As the 4th Circuit explained in *United States v. Deaton*, the filtering effect of wetlands is actually reversed, releasing trapped pollutants back into surface and groundwater, when wetlands are drained and developed. *Deaton*, 209 F.3d at 336 (citing Office of Technology Assessment, U.S. Congress, *Wetlands: Their Use and Regulation*, 48-50, 124 (1984)). The *Deaton* Court recognized that protecting and restoring the Chesapeake Bay's adjacent wetlands and non-navigable tributaries is essential to reducing pollution downstream in the Chesapeake Bay and its major tributaries.

2. Bay watershed headwater wetlands and streams are essential for pure drinking water supplies.

Between 148 and 526 surface drinking water intakes, serving populations ranging from 535,000 to 3 million people, are located in non-navigable headwaters in Chesapeake Bay states.[38] The headwaters of the Potomac River and other Chesapeake Bay tributaries serve as a natural filter for drinking water, much like "a giant Brita."[39] Residents of the Delmarva Peninsula rely on ground water aquifers for drinking water and other water supplies, at least some of which are vulnerable to contamination from pollutants discharged into headwater wetlands, streams, and ditches.[40]

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[37] Jordan, T.E. et al., Restored Wetlands in Crop Fields Control Nutrient Runoff in Nutrient Cycling and Retention in natural and Constructed Wetlands, pp 49-60.

[38] EPA Region III ANPRM comments at 7-8, Section II, GIS Highlights; *see,* Drinking Water Intake Map, Appendix G; s*ee also, EPA Mid-Atlantic Findings Presentation, supra,* at 8-11; EPA Letter, *supra.*.

[39] Mary Battiata, *Silent Streams,* Washington Post (Sunday, November 27, 2005; W10).

[40] *See Hydrologic and Geochemical Controls, supra,* at Section 2, Delmarva Potholes.

Removal of the source water protection measures afforded by the CWA would increase risks to human health, and will require additional infrastructure expenditures by public utilities using surface water intakes.[41] For example, if CWA jurisdiction is removed for first order streams, untreated or partially treated municipal sewage or animal waste discharged upstream of a drinking water intake could contaminate water supplies with pathogens such as *Cryptosporidium* and *E.Coli* that are hardy and resistant to treatment. Many EPA Region III sewage treatment plants are located on first or second order streams. Unless these plants are closely regulated, these pathogens, routinely found in human sewage, can show up in finished tap water.[42] Removal of federal jurisdiction over such waters would impair the ability of states and the federal government to monitor and control the level of discharges to these waters.[43]

3. Bay watershed headwater wetlands and streams reduce sediment loads downstream.

Chesapeake Bay watershed headwater streams and wetlands slow and hold run-off and sediment upstream, reducing channel erosion and sediment loads downstream. Conversely, when headwater wetlands and streams are altered, they retain less sediment and send

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[41] Region III ANPRM Response at 7.

[42] *Id.* at 8, 27.

[43] *See, infra*, at Part II (regarding the need for a federal umbrella for downstream states like Maryland (the Susquehanna) and Virginia (the Potomac).

more sediment downstream.[44] Increased sediment loads downstream reduce water clarity and habitat quality.[45]

Increased sediment loads from headwaters and smaller streams also adversely affect the navigability of downstream waters. Loss or lack of regulation of these important filtering areas will result in the need for more extensive and recurrent dredging.[46] For example, "keeping Baltimore Harbor navigable costs $10 to $11.5 million annually to dredge and dispose of sediment the Patapsco River [a Bay tributary] deposits in the harbor."[47]

4. Bay watershed headwater wetlands and streams and moderate flood flows.

Chesapeake Bay headwater wetlands and streams provide for the graduated release of surface and groundwater flows, holding back heavy surface water

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[44] *See,* Herman, J., Hupp, C., and Langland, M., *Chapter 4. Watershed Sediment Deposition and Storage* in *A Summary Report of Sediment Processes in Chesapeake Bay and Watershed,* U.S. Geological Survey Water Resources Investigations Report 03-4123, New Cumberland, PA (2003), at 43-45; EPA Region III ANPRM Response at 14-18, Appendix E at 7-9.

[45] *See,* Chesapeake Bay Program, *Background: Sediment and the Bay* at http://www.chesapeakebay.net/sediment.htm (last visited January 7, 2006); U.S. EPA Region III, *Ambient Water Quality Criteria for Dissolved Oxygen, Water Clarity and Chrlorophyll a for the Chesapeake Bay and Its Tidal Tributaries*, EPA 903-R-03-002 (April 2003), Executive Summary at xii-xiii. http://www.chesapeakebay.net/pubs/waterqualitycriteria/12022002/Executive_Summary.pdf (last visited January 7, 2006); Koroncai, Robert et al., *Setting and Allocating the Chesapeake Bay Basin Nutrient and Sediment Loads: The collaborative process, technical tools, and innovative approaches,* EPA 903-R-03-007. U.S. EPA Region III Chesapeake Bay Program Office, Annapolis, MD (December 2003) at Executive Summary, xiii. http://www.chesapeakebay.net/pubs/doc-allocating-front.pdf (last visited January 7, 2006).

[46] EPA Region III ANPRM Response, at 8.

[47] Where Rivers are Born, at 12.

flows during storm events, and releasing base flow through groundwater during dry periods.[48]

The U.S. Fish and Wildlife Service study of the Delmarva Potholes (Delmarva Bays) reports:

> Given their abundance, Delmarva potholes aid in temporary storage of surface water and thereby help reduce local flooding. They alternately serve as ground-water discharge (wet season) and recharge (dry season) areas, with some recharge water eventually discharging into coastal plain streams and contributing to base flows vital for sustaining aquatic biota.[49]

Conversely, destruction of these headwater wetlands and streams will contribute to larger flood flows downstream,[50] and decreased base flow to streams, reducing water quality and harming aquatic flora and fauna.[51] Growth in storm sewers and paved surfaces around Watts Branch, Maryland more than tripled the

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[48] *See e.g.,* EPA Region III ANPRM Response at 14-18, Appendix D, at 10-13, and Appendix E at 7-9; *Where Rivers Are Born* at 10-11; Winter, T. *et al., Groundwater and Surface Water: A Single Resource,* U.S. Geological Survey Circular 1139, 67 (1998). http://pubs.usgs.gov/circ/circ1139/ (last visited January 11, 2006).

[49] Tiner, R.W. Geographically Isolated Wetlands of the United States, Wetlands, Vol. 23 (3), 494-516, at 505 (citations omitted); see also, Hydrologic and Geochemical Controls on Pesticide and Nutrient Transport to Two Streams on the Delmarva Peninsula, supra.

[50] *See e.g.,* EPA Region III ANPRM at 8, 16-18, Appendix E at 9 *citing* Meyer and Wallace (2001); *Where Rivers are Born,* at 10-11.

[51] *See,* EPA Region III ANPRM Response, at 16-17, Appendix D at 14, Appendix E at 9; *Where Rivers Are Born* at 11; *Groundwater and Surface Water: A Single Resource., supra*, at 67.

number of floods and increased average annual flood size by 23 percent.[52]

5. Bay area non-navigable tributaries and adjacent wetlands support the Bay area's fisheries and shell-fisheries.

Non-tidal wetlands throughout the Bay watershed provide essential services to finfish and shellfisheries in the Chesapeake Bay. For example, Maryland's non-tidal wetlands support numerous fish (menhaden and striped bass) and shellfish (blue crabs and oysters) species, either directly by providing habitat, or indirectly by regulating freshwater flow and filtering pollutants. Approximately 200 fish species use Chesapeake Bay waters.[53] Maryland's non-tidal seasonal and temporarily flooded wetlands provide spawning, feeding, and nursery habitat for some freshwater fish species during flooding periods, and some also appear to be important in supporting the invertebrate food base for Maryland's riverine fisheries.[54] Bay watershed non-tidal wetlands and tributaries support a healthy freshwater sport fishery. In 2001, 367,000 resident and non-resident anglers fished in Maryland's fresh waters. Over 720,000 fished in Virginia's.[55]

The American eel is commercially important fish species that relies on the upstream non-navigable tributaries of the Chesapeake Bay watershed. The eel

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[52] Meyers, J.L. and J.B. Wallace, *Lost Linkages and Lotic Ecology: Rediscovering Small Streams.* Pages 295-317, at 307, *citing* Leopold, L.B., *A View of the River.* Cambridge, Mass: Harvard University Press, in M.C. Press, N.J. Huntly and S. Levin, editors. *Ecology: Achievement and Challenge.* Blackwell Science.

[53] *Wetlands of Maryland,* at 141.

[54] *Id.* at 141-142; *see also,* EPA Region III ANPRM Response, Appendix E at 18.

[55] U.S. Fish and Wildlife Service, *2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*, 108 (2001), available at http://www.census.gov/prod/2003pubs/fhws01-us.pdf (last visited January 5, 2006).

lives most of its life in the inland reaches of these upstream waters and then goes to sea to spawn. The Bay area commercial harvest was about 700,000 pounds in 1981.[56] The Maryland commercial harvest was just over 192,000 pounds in 2002.[57] Loss of headwater streams due to unchecked development will eliminate essential eel habitat and will result declining catch.

Bay headwaters and other non-navigable tributaries and adjacent wetlands provide essential water quality and quantity functions that support the Chesapeake Bay's striped bass, shad, and perch fisheries, among others, by regulating freshwater flow and filtering pollutants, helping protect critical spawning and nursery habitat for these species. The upper reaches of Chesapeake Bay tidal waters and the upper mainstem are used as spawning and nursery grounds for striped bass, shad, perch and other fish. The importance of this use is reflected in state and federal water quality standards that assign a "migratory fish spawning and nursery" designated use to these waters.[58]

The major tributaries of the Chesapeake Bay support 70-90% of the striped bass spawned on the East Coast.[59] The 2002 commercial harvest in Maryland alone

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[56] *See,* Chesapeake Bay Program, Fish: American Eel at http://www.chesapeakebay.net/baybio.htm (last visited January 10, 2006).

[57] Maryland's Commercial Fisheries Annual Landings Data Set: American Eel/Common Eel, at http://mddnr.chesapeakebay.net/mdcomfish/mdcomfishery.html (last visited January 10, 2006).

[58] *See, Ambient Water Quality Criteria*, *supra*; Chesapeake Bay Program Powerpoint Presentation at www.chesapeakebay.net/pubs/waterqualitycriteria/DOC-nspresentation.ppt at slide 28, 31. EPA has published water quality standards for the Bay and tidal tributaries. http://www.chesapeakebay.net/pubs/waterqualitycriteria/12022002/cover.pdf.

[59] Chesapeake Bay Program, *Animals and Plants: Striped Bass* at http://www.chesapeakebay.net/striped_bass.htm (last visited January 7, 2006).

was over 1.8 million pounds.[60] Another important Chesapeake Bay commercial fishery is the menhaden fishery. This fishery is highlighted for protection in the Bay through the "open water and shellfish" designated use.[61] The village of Reedville, Virginia on the Bay was reported as the second-largest port in the Nation in terms of catch landed in 2004. Federal figures show 400.5 million pounds of fish were unloaded there that year, trailing only Dutch Harbor, Alaska.[62] About 97% of the Chesapeake Bay area fish harvest is estuarine dependent.[63] In 2004, the Chesapeake Bay area harvest in Maryland and Virginia for all fish species was over 500 million pounds and was valued at over $209 million.[64]

Bay watershed headwaters and other non-navigable tributaries and adjacent wetlands support the Bay's world renowned shellfishery by reducing nitrogen and phosphorus pollution and sediment loads in downstream waters, and thereby fostering growth of submerged aquatic vegetation ("SAV") with increased water clarity and increases in dissolved oxygen from

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[60] Maryland's Commercial Fisheries Annual Landings Data Set: Striped Bass, at http://mddnr.chesapeakebay.net/mdcomfish/mdcomfishery.html (last visited January 10, 2006).

[61] *See,* Chesapeake Bay Program Powerpoint Presentation, *supra*, at slide 34.

[62] National Marine Fisheries Service, *Fisheries of the United States 2004*, Current Fisheries Statistics No. 2004, Silver Spring, MD (November 2005), at U.S. Commercial Landings, 2, 7. http://www.st.nmfs.gov/st1/fus/fus04/02_commercial2004.pdf (last visited January 10, 2006).

[63] *See, Ambient Water Quality Criteria*, *supra*; Chesapeake Bay Program Powerpoint Presentation, *supra*, at slides 28, 31.

[64] National Marine Fisheries Service, *Fisheries of the United States 2004*, Current Fisheries Statistics No. 2004, Silver Spring, MD (November 2005), at U.S. Commercial Landings, http://www.st.nmfs.gov/st1/fus/fus04/02_commercial2004.pdf (last visited January 10, 2006).

reductions in nitrogen and phosphorus pollution loads.[65] SAV provides essential habitat for immature and molting blue crabs.

Oyster and blue crab commercial harvests have declined since the 1970s due to the combined effects of several factors including pollution and the loss of SAV. Still, the Chesapeake Bay remains one of the world's largest producers of blue crabs. The Chesapeake region blue crab harvest in 2004 was 58.4 million pounds, worth over $44 million.[66] Currently, the combined value of the Chesapeake's shellfish and finfish harvests is estimated around $1 billion annually.[67] The Chesapeake Bay fisheries so central to the region's culture and economy are clearly placed in harm's way by the removal of CWA protections upstream.

6. Bay area adjacent wetlands and non-navigable streams support waterfowl and other migratory bird populations.

The Chesapeake Bay watershed is home to 29 species of waterfowl and is a major resting ground along the Atlantic Migratory Bird Flyway. [68] At one time, millions of waterfowl spent their winters in the Bay region, supported by profuse SAV beds and supplemental

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[65] *See, Ambient Water Quality Criteria*, *supra*; *see also,* Chesapeake Bay Program Powerpoint Presentation, *supra*, at slides 32, 36.

[66] *Fisheries of the United States 2004*, *supra*, at Review. http://www.st.nmfs.gov/st1/fus/fus04/01_intro2004.pdf (last visited January 10, 2006).

[67] Northeast Midwest Institute, *Large Scale Ecosystem Restoration Initiatives – Protecting and Restoring the Chesapeake Bay*, (2005) at "Ecosystem Users". www.nemw.org/chesapeake.htm (last visited January 7, 2006).

[68] *Wetlands of Maryland, supra*, at 142 (One third of all waterfowl using the Atlantic Flyway find winter habitat in the Chesapeake Bay and its wetlands); *see also,* Chesapeake Bay Program, *Waterfowl.* http://www.chesapeakebay.net/waterfowl.htm (last visited January 7, 2006); *Large Scale Ecosystem Restoration Initiatives – Protecting and Restoring the Chesapeake Bay*, *supra*, at "About the Ecosystem".

diets rich in invertebrates. Many of the bird and waterfowl species identified in Maryland regularly use vegetated non-tidal wetlands, and a significant number of these depend on these habitats for survival.[69] The destruction of wetlands, and dramatic declines in SAV and water quality, among other things, have reduced the number of waterfowl in the Bay area to about one million birds.[70] Loss of SAV and non-tidal wetland habitat must be reversed to protect and restore the waterfowl and other migratory bird populations of the Chesapeake Bay watershed – and the entire Atlantic Migratory Bird Flyway.

II. CWA JURISDICTION THROUGHOUT THE WATERSHED IS ESSENTIAL TO ACHIEVING THE COMMITMENTS OF THE CHESAPEAKE BAY AGREEMENTS

A. Federal and State Partners Recognize the Importance of Broad Clean Water Act Jurisdiction to Bay Watershed Restoration.

The argument that states alone can best protect their non-navigable tributaries and adjacent wetlands rings hollow in the Chesapeake Bay watershed. The CWA requires the Bay states, like all others in the Nation, to identify waters within their respective boundaries that were impaired, 33 U.S.C. § 1313, and to develop plans for removing those impairments. The states of Maryland, Pennsylvania, and Virginia, the District of Columbia and the United States recognized in the 1970s, that they could not solve the dire problems facing their rivers, streams and the Chesapeake Bay alone or in piecemeal fashion. Thus, they entered into an historic compact, the Chesapeake Agreement of 1983. That agreement was reaffirmed and strengthened in similar agreements signed in 1987 and 2000. Congress

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[69] *Wetlands of Maryland, supra,* at 142-144.

[70] *Id.*

recognized the need for these agreements and the cooperative federalism principle [71] they embody by passing legislation which created the Chesapeake Bay Program, under the auspices of the EPA, and authorizing the expenditure of a significant amount of federal funds to support those agreements. 42 U.S.C. § 1267.[72] Recognizing the importance of pollution reduction in the headwaters of the Bay watershed, the "headwater states" of Delaware, New York, and West Virginia have joined the Chesapeake Bay partnership through a memorandum of understanding.[73]

The state and federal signatories to the Chesapeake Bay Agreements recognize that the fate of the Chesapeake Bay ecosystem and watershed depend upon the willingness and capability of the six watershed states and the District of Columbia to significantly reduce nitrogen, phosphorus, and sediment loads throughout the Chesapeake Bay watershed.[74] The Chesapeake Bay partners recognize that they cannot achieve these nutrient and sediment reductions without the federal resources and uniform federal regulatory framework supplied by the Clean Water Act.[75]

B. The Chesapeake Bay Partners Must Apply the Clean Water Act Throughout the Watershed to Restore the Chesapeake Bay.

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[71] See, Weiser, J, Towards a Constitutional Architecture for Cooperative Federalism, 79 N.C.L. Rev. 663 (2001); Comment: This Dog Has Teeth . . . Cooperative Federalism and Environmental Law, 16 Vill. Envtl. L.J. 109 (2005).

[72] *See,* 33 USC 1267(j), P.L. 106-457, Title II, §202-203 (Nov. 7, 2000).

[73] Chesapeake Bay Watershed Partners Agreement (2001), *supra,* and Appendix H.

[74] *See,* discussion of nitrogen and phosphorus and sediment load allocations, *infra,* at Part II.C.2.

[75] *See e.g., Chesapeake 2000* at 5.

1. The Bay partners need broad Clean Water Act jurisdiction to improve water quality.

The 2000 Chesapeake Bay Agreement states unequivocally that *"[i]mproving water quality is the most critical element of the overall protection and restoration of the Chesapeake Bay and its tributaries*." These water quality improvements are necessary to, among other things, protect and restore the Bay's fisheries. [76]

The partners leave no doubt that the implementation of the CWA water quality standards and waste allocation provisions throughout the watershed is essential to achieving the Agreement's central water quality restoration commitment:

> Recent actions taken under the Clean Water Act resulted in listing portions of the Chesapeake Bay and its tidal rivers as 'impaired waters.' *These actions have emphasized the regulatory framework of the Act along with the ongoing cooperative efforts of the Chesapeake Bay Program as the means to address the nutrient enrichment problems of the Bay and its rivers* …. We have agreed to the goal of improving water quality in the Bay and its tributaries so that these waters may be removed from the impaired waters list prior to the time when regulatory mechanisms under Section 303(d) of the Clean Water Act would be applied.[77]

The Bay partners have further agreed that a regulatory TMDL covering the entire 64,000 square mile

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[76] *Chesapeake 2000* at 2.

[77] *Id.* (emphasis added).

Bay watershed will be put in place by 2011 if Bay water quality is not restored by 2010.[78] However, without the broad federal framework of the CWA upon which each of the signatories to the Bay Agreements could base their independent regulatory actions, the commitments made in these agreements could not be achieved. Restricting CWA jurisdiction to the largest Bay tributaries and their adjacent wetlands will make it nearly impossible for the Bay partners to meet the revised water quality standards and waste allocations necessary to achieve their water quality restoration commitments.[79]

2. The Bay partners need broad Clean Water Act jurisdiction to protect and restore vital wetlands and SAV areas.

The Chesapeake Bay partners recognize that to restore the living resources of the Bay, they must protect and restore the Bay's "natural infrastructure": its "thousands of miles of river and stream habitat that interconnect the land, water, living resources and human communities of the Bay watershed." The partners recognize, in particular, the importance of protecting and restoring SAV, wetlands, streams, and riparian forests for their erosion reduction and water quality filtration capabilities.[80] SAV restoration will require more stringent water clarity standards and strategies. Increasing water clarity requires decreasing nutrient and sediment loads.[81] Headwater wetlands and streams contribute to improving water clarity in the Bay.

The Bay partners commit to "achieve a no-net loss of existing wetlands acreage and function in the

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[78] *See e.g.,* Chesapeake Bay Program, *Water Quality Protection and Restoration: The Comprehensive Approach to Restoring Bay Water Quality* at www.chesapeakebay.net/info/wqcriteriatech/index.cfm at 2 (last visited January 7, 2006).

[79] *See,* EPA Region III ANPRM Response at 23.

[80] *Chesapeake 2000,* Vital Habitat Protection and Restoration, at 3-5.

[81] *Id.* at 3-4.

signatories' regulatory programs."[82] This commitment cannot be honored without CWA jurisdiction that extends to non-navigable tributaries and their adjacent wetlands. The District of Columbia has no independent regulatory program that can ensure no-net-loss of wetlands within its boundaries. Neither does West Virginia. New York's wetlands program does not regulate many non-tidal wetlands under 12.4 acres in size.[83]

While Maryland, Virginia, and Pennsylvania do have independent wetlands regulatory programs, their success in ensuring no-net-loss of existing wetlands depends to no small extent on the uniform federal "no-net-loss" standard. The federal §404 program also provides important support for these state programs, sharing the burdens of wetland delineation, functional assessment, permit review and enforcement. Narrowing CWA jurisdiction will shift more of the economic burden for regulating headwaters and other adjacent wetlands and non-navigable tributaries to state and local governments. [84]

C. Clean Water Act Jurisdiction Throughout the Watershed is Essential to Achieve the Stricter Water Quality Standards and Load Allocations Necessary to "Save the Bay."

1. CWA jurisdiction drives the stricter water quality standards and waste load allocations needed throughout the Bay watershed.

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[82] *Id.* at 4-5.

[83] *See e.g.,* Association of State Wetlands Managers, State Wetland Programs at http://aswm.org/swp/statemainpage9.htm (last visited January 7, 2006).

[84] *See e.g.,* EPA Region III ANPRM Response at 20, Appendix K: State Programs in Region III; *see also,* ASWM Br.and the Amicus Brief of the States of New York and Michigan et al.

Clean Water Act-mandated water quality standards are central to meeting the CWA mandate to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). EPA acts as an important federal backstop for state promulgation and implementation of state water quality standards, ensuring that state standards are consistent with the CWA. If the CWA no longer extends to non-navigable streams and adjacent wetlands, the applicability of water quality standards to these waters is open to question, and EPA's ability to ensure that state water quality standards will achieve the requirements of the CWA would be undermined.[85]

CWA §303(d) requires states to list as "impaired waters" those waters that are not meeting state water quality standards, and to develop and execute Total Maximum Daily Loads (TMDLs) to bring those impaired waters back into compliance with state water quality standards. A TMDL defines the pollutant load that a waterbody can assimilate without triggering violations of water quality standards and then allocates the loading of each pollutant of concern to specific contributing point sources (e.g, industrial and municipal waste water treatment plants) and non-point sources (e.g., agricultural run-off). TMDLs for downstream impaired waters will fail to meet water quality standards if the TMDLs cannot limit pollutant loadings in upstream tributaries and adjacent wetlands.[86]

CWA NPDES (§402) permitting goes hand-in-hand with implementing TMDLs. The TMDL waste load allocations for point source discharges are implemented through NPDES permits. If NPDES permits are no longer required for facilities discharging into upstream tributaries, then it will be difficult to assign and enforce

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[85] EPA Region III ANPRM Response, at 22.

[86] *Id.* at 22-25.

waste load allocations to such facilities.[87] Because pollutant loadings are often in small streams, exclusion of these smaller upstream tributaries from NPDES permits and TMDL allocations would result in an inability to control water quality in large mainstem waters.[88]

Environmental Amici present a graphic illustration of this pollution risk: photographs of two District of Columbia sewer outfalls into two small tributaries of Rock Creek and the Potomac River. Presently, these sewer outfalls require NPDES permits that limit pollution discharges, including raw sewage, to downstream waters. Under Petitioner Rapanos' theory of this case, these outfalls would no longer require NPDES permits and water quality in Rock Creek and downstream would suffer.[89]

Baywide, sewage treatment plants contribute 19% of the nitrogen that flows into the Bay each year.[90] The Chesapeake Bay Program has reported that where Bay watershed municipal wastewater treatment plants have reduced nitrogen discharges to comply with a nitrogen limit in an NPDES permit, it is because the limit has been imposed through a local TMDL in one of the many Bay sub-basins.[91] Without the NPDES and TMDL

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[87] *See*, Region III ANPRM Response, Appendix. J at 2 and Table 1, Sample of Current NPDES Permits on Small Streams.

[88] Region III ANPRM Response at 23. *See also,* EPA Letter, *supra* note 17 (EPA estimate that over 40% of NPDES permits are for discharges of pollutants into non-navigable streams (excluding Alaska). About 28% of these are from municipal sewage treatment systems. The rest are from an array of over 500 industrial categories).

[89] *See,* Amicus Brief of American Rivers, et al, at 12 and Appendix A.

[90] *See*, Chesapeake Bay Program Tributary Strategies Backgrounder at 2: http://www.chesapeakebay.net/pubs/tribstrats_backgrounder_final.pdf . (last visited January 7, 2006).

[91] Chesapeake Bay Program, *What's the Status of Point Source Nitrogen Reduction in the Chesapeake Bay Watershed?* (January 2004). http://www.chesapeakebay.net/pubs/waterqualitycriteria/doc-pointsource_for_tribtools.pdf. (last visited January 7, 2006).

requirements, nitrogen discharges into upstream tributaries will be impossible to adequately control.

2. The Bay partners cannot achieve the necessary pollution reductions without CWA jurisdiction over non-navigable tributaries and adjacent wetlands.

In order to achieve their restoration requirements, particularly the stricter water quality standards necessary to protect migratory fish spawning and nursery use and shellfish use, the six Bay watershed states and the District of Columbia recently agreed to substantially reduce nutrient pollution below 2000 levels by 2010. The new nitrogen reduction requirement is to reduce annual loads to no more than 175 million pounds. The new phosphorus reduction requirement is to reduce annual loads to no more than 12.8 million pounds.[92] The partners have also agreed to reduce annual loads of land-based sediment to no more than 4.15 million tons in order to reduce sediment loads enough to provide the water clarity necessary for underwater grasses to thrive.[93]

To achieve these ambitious pollution reduction commitments all six Bay watershed states and the District of Columbia must "pull their weight".[94] The Chesapeake Bay Program ran simulation models to determine the maximum load allocations for each of the

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[92] *Setting and allocating the Chesapeake Bay Basin Nutrient and Sediment Loads*, Executive Summary, *supra*; *see also,* Chesapeake Bay Program Powerpoint Presentation, *supra*, slide 53.

[93] *Id*. See also, Chesapeake 2000 Agreement at 4-6; Setting and allocating the Chesapeake Bay Basin Nutrient and Sediment Loads, Executive Summary, *supra*.

[94] *See e.g.,* Maryland Water Quality Standards –COMAR 26.08.02; Virginia Water Quality Standards, at 9 VAC 25—260.

nine major watershed basins, including the New York headwaters of the Susquehanna.[95]

Tributary strategies to meet these maximum nutrient and sediment load allocations are being developed and implemented for each subwatershed within the nine major Bay tributary basins. These tributary strategies will include, among other actions, facility-by-facility assessments of what additional pollution reduction actions will be required for point sources. The states are developing nutrient pollution-related water quality standards. These standards, together with the tributary strategies, will form the basis of NPDES permit requirements for point source facilities. For nitrogen reductions, the most important point source facilities will be the 310 municipal wastewater treatment plants in the Bay watershed.[96]

If the Court decides to remove from CWA jurisdiction over half of the Bay watershed's stream miles and over one third of the watershed's adjacent wetlands, it will be virtually impossible for the Chesapeake Bay watershed states and the District of Columbia to achieve the nutrient and sediment requirements that must be met to Save the Bay. The exercise in cooperative federalism that is the Chesapeake Bay Program and Agreements will have failed.

III. THE UNITED STATES PROPERLY ASSERTS JURISDICTION OVER TRIBUTARIES AND THEIR ADJACENT WETLANDS "INSEPARABLY BOUND UP" WITH NAVIGABLE WATERS.

In *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 134-135 (1985) (*Riverside Bayview)*, the Court recognized that Congress intended to regulate

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[95] *Setting and allocating the Chesapeake Bay Basin Nutrient and Sediment Loads*, Executive Summary, *supra.*

[96] *See, What's the Status of Point Source Nitrogen Reduction in the Chesapeake Bay Watershed?, supra.*

wetlands "inseparably bound up with the waters of the United States," and upheld the Army Corps of Engineers' exercise of CWA jurisdiction over adjacent wetlands on that basis. The Court approved this *Riverside Bayview* adjacency holding in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers,* 531 U.S. 159, 167-168 (2001) (*SWANCC)*, while narrowly holding that CWA jurisdiction did not extend to certain truly isolated intrastate ponds. The *Riverside Bayview* holding applies with equal force in this case, where the wetlands at issue drain or "tend to drain" to non-navigable tributaries that are hydrologically and ecologically bound up with downstream navigable waters. *See, United States v. Rapanos*, 376 F. 3d 629, 642-43 (6th Cir. 2004); *Carabell v. U.S. Army Corps of Engineers,* 391 F. 3d 704, 705-706, 708 (6th Cir. 2004); JA Vol. 3 at 639: 16-23 (testimony at wetland application hearing). As in *Riverside Bayview,* the Corps of Engineers properly asserted jurisdiction over the wetlands at issue in these cases.

CONCLUSION

The Chesapeake Bay ecosystem and the Chesapeake Bay Agreements demonstrate that the extensive networks of non-navigable tributaries and adjacent wetlands located upstream in watersheds are inseparably bound up with downstream navigable waters, and that the Clean Water Act goal of maintaining and restoring the physical, chemical, and biological integrity of the Nation's waters cannot be met unless these upstream waters continue to be subject to the Act. For the reasons set forth above, Amicus Curiae the Chesapeake Bay Foundation respectfully requests that the Court affirm the decisions of the Sixth Circuit.

RESPECTFULLY SUBMITTED,

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