

Treasure the Chesapeake: Maintaining the Chesapeake Bay Agreement TMDL Requirements Under the Clean Water Act in a Hostile Regulatory Environment

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I. INTRODUCTION

The Chesapeake Bay is an iconic body of water whose tides and shores have provided life to generations dating back well before the American Revolution and the founding of our nation.¹ Native American tribes built thriving societies in the marshes and along tributaries before white settlers arrived to Jamestown in 1607.² The Powhatan, Piscataway, and Nanticoke tribes sustained themselves on abundant crab and oyster harvests as well as flocks of duck and geese so plentiful they seemed to block out the sun.³ In contrast, the Chesapeake’s bogs and marshes pushed early colonists to the brink.⁴ Eventually, though, mid-Atlantic colonial

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1. *Chesapeake Bay: History and Culture*, THE NAT’L PARK SERV. (Aug. 1, 2018), <https://www.nps.gov/chba/learn/historyculture/index.htm> [<https://perma.cc/V6P6-KKLJ?type=image>].

2. *See id.*

3. Oliver A. Houck, *The Clean Water Act Returns (Again): Part 1, TMDLs and the Chesapeake Bay*, 41 ENV’T L. REP. 10208, 10213 (Mar. 2011).

4. *Chesapeake Bay: History and Culture*, *supra* note 1.

society began to flourish in the Chesapeake. Its tributaries, coves, and inlets mesmerized Captain John Smith when he first meandered the region.⁵ I grew up along the shores of one of the Bay's many tributaries and enjoyed many a day on its waters. My earliest memories are on the Chesapeake. Today, development around nearby cities and along the shores has brought millions of people closer to the Bay, and has also placed increased pressure on its once bountiful waters.⁶ Commercial watermen and outdoor enthusiasts alike continue to make a living and find immense joy along the Chesapeake today.⁷ In close proximity to our nation's capital in Washington, D.C., the Bay sits in iconic juxtaposition to the hustle and bustle of the District and the often frustratingly clogged cogs of our government. Environmental issues that threaten the Chesapeake are not new.⁸ The Bay has been under siege for decades and flows on, having been pushed to the precipice of decimation and desolation before.⁹

As the largest estuary in the country, fed by waters in six states and the District of Columbia,¹⁰ the solutions to the threats faced by the Bay require a great deal of cooperation between a diverse array of political and industrial landscapes. Conservative and industrial states, such as Pennsylvania and West Virginia, have adverse effects on the Bay's waters, as does the progressive population of the District of Columbia. Coal mines and paper mills at the headwaters of the Potomac in West Virginia and western Maryland release mercury and other pollutants down the Great Falls of the nation's river and into the Bay.¹¹ Industrial poultry farms in Delaware, Virginia, and the eastern shore of Maryland (sometimes a world away from the suburbs of Washington and Baltimore on the western shore) release fertilizers and sediments directly into the Bay's waters.¹² Aging

5. *Id.*

6. *Id.*

7. *Id.*

8. See *The History of Chesapeake Bay Cleanup Efforts*, CHESAPEAKE BAY FOUND., <https://www.cbf.org/how-we-save-the-bay/chesapeake-clean-water-blueprint/the-history-of-bay-cleanup-efforts.html> [<https://perma.cc/77GV-VFRZ?type=image>] (“The Chesapeake Bay has been on EPA’s ‘dirty waters’ list for decade.”)

9. *Id.*

10. New York, Pennsylvania, Delaware, Maryland, Virginia, West Virginia, and Washington, D.C.

11. See Scott Dance, *Environmentalists: Shuttered Luke Paper Mill is Leaking Black Liquor, a Controversial Renewable Energy Source*, BALT. SUN (Nov. 19, 2019); *Acid Mine Drainage to the Chesapeake Bay Watershed-Literature Synthesis*, CHESAPEAKE BAY PROGRAM, (Jan. 11, 2011) https://www.chesapeakebay.net/what/publications/acid_mine_drainage_to_the_chesapeake_bay_watershed_-_literature_synthesis [<https://perma.cc/83YH-ERJT?type=image>].

12. See, e.g., Rachel McDevitt, *Report: Poultry Farming Sends More Pollution to Chesapeake Bay Than Previously Thought*, THE ALLEGHENY FRONT (May 1, 2020), <https://www.>

wastewater systems in D.C. and Baltimore dump untreated sewage that reaches the Bay through its tributaries when hard rains fall.¹³ Excess fertilizer from our beloved suburban yards flow into city drains and out into the Bay.¹⁴ Air pollution from vehicles sitting in stagnant rush hour traffic along two beltway systems fuels the growth of algae blooms and creates dead zones in nearby waters.¹⁵ Additionally, farms in the breadbasket of central Pennsylvania and the capital city of Harrisburg release pollutants into the Chesapeake down the mighty Susquehanna River.¹⁶ These pollutants flow through Pennsylvania, such that those within the commonwealth may ignore its effects, while the populations of Maryland and Virginia downstream deal with the consequences.¹⁷ No real solution can be achieved by one state acting alone.

All of these different regions and their industries affect the Bay. The question is: How can these states cooperate to save such a valuable resource? How enforceable is a multistate agreement to clean up the Bay and ensure its healthy future? Then, how can citizens and states compel others in charge to hold up their end of the bargain? This Comment provides background on the Clean Water Act and the Chesapeake Bay Agreement, details the use of Total Maximum Daily Loads in cleaning up the Bay, examines the history of those laws and agreements, and analyzes their enforceability in the face of a political climate that seeks to abandon them and leave the Bay for dead once again.

alleghenyfront.org/report-poultry-farming-sends-more-pollution-to-chesapeake-bay-than-previously-thought/ [https://perma.cc/5BLY-7APD?type=image]; Ian Urbina, In Maryland, Focus on Poultry Industry Pollution, N.Y. Times (Nov. 28, 2008), https://www.nytimes.com/2008/11/29/us/29poultry.html?_r=1&pagewanted=all [https://perma.cc/B2Y2-GV5V?type=image].

13. See, e.g., Scott Dance, *It's Not Just Baltimore: Another City is Sending Much More Sewage into the Chesapeake Bay*, BALTIMORE SUN (Aug. 22, 2019), <https://www.baltimoresun.com/news/environment/bs-md-harrisburg-sewage-20190822-ayxnvjvegbglhojgcrtoyxcemq-story.html>.

14. See *Report Details Effects of Pollution from Lawn Fertilizer on Chesapeake Bay*, CHESAPEAKE BAY PROGRAM (Mar. 29, 2011), https://www.chesapeakebay.net/news/blog/report_details_effects_of_pollution_from_lawn_fertilizer_on_chesapeake_bay [https://perma.cc/?type=image].

15. See, e.g., *Stopping Upwind Air Pollution*, CHESAPEAKE BAY FOUND., <https://www.cbef.org/how-we-save-the-bay/in-the-courtroom/upwind-ozone-pollution.html> [https://perma.cc/V7AX-62DY?type=image].

16. See, e.g., Dance, *It's Not Just Baltimore: Another City is Sending Much More Sewage into the Chesapeake Bay*, *supra* note 13.

17. *Id.*

II. THE CLEAN WATER ACT AND TOTAL MAXIMUM DAILY LOADS

The Clean Water Act (CWA or the Act) was enacted in 1948 but did not become what it is today until its amendment in 1972. The 1972 CWA amendments “were intended to restore and maintain the chemical, physical, and biological integrity of the nation’s water, and eliminating the discharge of pollutants into navigable waters by 1985.”¹⁸ The Act tasked the Administrator of the Environmental Protection Agency (EPA) with achieving the goals of the Act.¹⁹ The CWA additionally requires “each state to adopt or maintain water quality standards and grants to the EPA administrator the authority to review and, if necessary, amend those standards.”²⁰ The 1972 CWA lists the use of Total Maximum Daily Loads (TMDLs) as a possible method for regulating water quality, but does not set limits for states.

Under the CWA, states must identify and designate waters that the National Pollution Discharge Elimination System (NPDES) Permit Process fails to clean up as “water quality limited sections” (WQLS).²¹ States must then calculate levels of permissible pollution in the form of TMDLs for waters listed as WQLS.²² A TMDL is triggered by the identification of a state body of water on the state’s Section 303(d) list of impaired waters.²³ A TMDL is “a calculation of the maximum amount of a pollutant allowed to enter a waterbody so that the waterbody will meet and continue to meet water quality standards for that particular pollutant.”²⁴ This calculation “determines a pollutant reduction target and allocates load reductions necessary to the source(s) of the pollutant.”²⁵ TMDLs are developed based on a number of factors, including “waterbody type, complexity of flow conditions and pollutant causing the impairment.”²⁶

18. Eric M. Larsson & Jill M. Marks, *Construction and Application of Clean Water Act’s Total Maximum Daily Loads (TMDLs) Requirement for Waters Failing to Achieve Water Quality Standards Under 33 U.S.C.A. § 1313(d)*, 53 A.L.R. Fed. 2d 1, § 2 (2011); 33 U.S.C. § 1251(a).

19. 33 U.S.C. § 1251(d) (1987).

20. 33 U.S.C. § 1251 (1987).

21. Larsson & Marks, *supra* note 18.

22. *See id.*

23. *What Triggers the Need for a TMDL*, EPA, <https://www.epa.gov/tmdl/overview-total-maximum-daily-loads-tmdls> [<https://perma.cc/D4YB-BDXN?type=image>].

24. *What Is a TMDL*, EPA, <https://www.epa.gov/tmdl/overview-total-maximum-daily-loads-tmdls> [<https://perma.cc/9DS2-8VXT?type=image>].

25. *Id.*

26. *Id.*

TMDLs only apply to nonpoint sources of pollution, pollution that is not emitted from a single identifiable source.²⁷ Much of the major pollution in the Chesapeake Bay comes from nonpoint sources such as fertilizers, herbicides, insecticides, and sediments used in the agriculture industry.²⁸ In limiting TMDLs to nonpoint sources, the CWA focuses on the big picture of pollution in our nation's waterways.

The EPA's approval or disapproval of a state TMDL "does not constitute rulemaking under the Administrative Procedure Act, and thus notice and comment is not required prior to such approval or disapproval."²⁹ When the EPA does step in and "promulgate a TMDL for a state, it must comply with the notice and comment requirements applicable for agency rulemaking."³⁰ The APA notice and comment requirement provides an opportunity to force the EPA to act to protect the Chesapeake.

III. OUR NATION'S ESTUARY

The Chesapeake Bay is the largest estuary in the United States, fed by at least 100,000 streams, creeks, and rivers.³¹ More than 18 million people live in the Chesapeake Bay watershed in the states of Maryland, Virginia, Delaware, New York, Pennsylvania, West Virginia, and the District of Columbia.³² Nearly 10,000 years ago, a melted glacier formed the Bay by flooding the Susquehanna River.³³ The Susquehanna River begins in the southern tier of New York, meanders through central Pennsylvania, and then meets the Bay at Havre de Grace, Maryland.³⁴ The Susquehanna is "the Bay's largest tributary, and contributes about half of

27. *Nonpoint*, MERRIAM-WEBSTER DICTIONARY, <https://www.merriam-webster.com/dictionary/nonpoint> [<https://perma.cc/99LW-9599?type=image>]. In contrast, specific factories, power plants, sewer systems, or farms that can be identified as a single source of pollution would be considered point sources of pollution.

28. *See Agriculture*, CHESAPEAKE BAY PROGRAM, <https://www.chesapeakebay.net/issues/agriculture> [<https://perma.cc/YZD3-M9WE?type=image>].

29. Larsson & Marks, *supra* note 18; *see* *Sierra Club v. U.S. EPA*, 162 F. Supp. 2d 406, 420 (D. Md. 2001).

30. *Id.* (citing 33 U.S.C. § 1313(c)(4)).

31. *See Watershed*, CHESAPEAKE BAY PROGRAM, <https://www.chesapeakebay.net/discover/watershed> [<https://perma.cc/697W-6PZD?type=image>].

32. *Id.*

33. *Geography and Facts*, CHESAPEAKE BAY FOUND., <https://www.cbf.org/about-the-bay/chesapeake-bay-watershed-geography-and-facts.html> [<https://perma.cc/FMS3-Y5W6?type=image>].

34. *See Watershed*, *supra* note 31.

the Bay's freshwater (about 19 million gallons per minute)."³⁵ Other major tributaries are the Potomac, Patuxent, James, Rappahannock, Choptank, Chickahominy, Nanticoke, and York Rivers.³⁶

The Chesapeake is home to unique and diverse flora and fauna. Nearly one-third of the Atlantic Coast's migratory waterfowl population winters along the Bay.³⁷ The Bay's flora and fauna have also created an industry to the watermen who make a living on the waters.³⁸ The Bay produces 500 million pounds of seafood each year.³⁹ Fishermen harvest oysters, striped bass (locally known as rockfish), and the famed blue crab.⁴⁰ The seafood industry depends on the water quality of the estuary. The blue crab harvest declined from 1.6 billion pounds in the 1990s to a twenty-five-year low of 35 million pounds in 2014.⁴¹ Major pollution sources in the Bay are municipal water treatment systems, stormwater runoff, and air emissions.⁴² The most impactful pollution comes from agriculture along the shores of the Bay proper and its tributaries.⁴³

In Maryland and Delaware, the politically entrenched and profitable poultry industry plays an outsized role in polluting the Chesapeake. Agriculture is the largest contributor to the three primary pollutants of nitrogen, phosphorous, and sediments. Of the nitrogen pollution that comes from the agriculture industry, nearly eighty percent comes from manure and commercial fertilizer, while approximately fifteen percent comes from agricultural air emissions.⁴⁴ With regards to phosphorous, twenty-six percent of inputs come from livestock and nineteen percent from fertilizers.⁴⁵ Additionally, sixty percent of sediment pollution enters the Bay as a result of the agricultural sector.⁴⁶ The 2000 Chesapeake Bay Agreement promised to cut these pollutants down to levels low enough to "remove the Bay and its tributaries from the list of impaired waters under

35. *Facts and Figures*, CHESAPEAKE BAY PROGRAM, <https://www.chesapeakebay.net/discover/facts> [<https://perma.cc/BVM6-FE6B?type=image>].

36. *Major Tributaries of the Chesapeake Bay*, CHESAPEAKE BAY FOUND., <https://www.cbf.org/about-the-bay/maps/geography/major-tributaries-of-the-chesapeake-bay.html> [<https://perma.cc/5FK3-48XA?type=image>].

37. *Facts and Figures*, *supra* note 35.

38. *Id.*

39. *Id.*

40. *Id.*

41. *Id.*

42. *Learn the Issues*, CHESAPEAKE BAY PROGRAM, <https://www.chesapeakebay.net/issues> [<https://perma.cc/FR9L-H5D4?type=image>].

43. *Id.*

44. Houck, *supra* note 3, at 10214.

45. *Id.*

46. *Id.*

the Clean Water Act by the year 2010.”⁴⁷ Bay states refused to implement and enforce stricter regulations on the agricultural sector for fear of “putting farmers under . . . even at the cost of losing the Bay.”⁴⁸

IV. THE CHESAPEAKE BAY AGREEMENT

Litigation opened the gates to empowering enforcement of TMDL requirements in the Chesapeake Bay Agreement.⁴⁹ Revisions to the Clean Water Act further empowered the EPA to take action rather than remain on the sidelines. CWA § 1267(g) now states that the EPA Administrator in coordination with other member states “shall ensure that management plans are developed and implementation is begun by signatories . . . to achieve and maintain the nutrient goals of the Chesapeake Bay Agreement.”⁵⁰ This new language morphed the EPA’s role from “supporter of the Agreement signatories to ‘ensurer’ of their actions.”⁵¹ In 2008, the Chesapeake Bay Foundation, along with a former governor of Maryland, sued the EPA for violating § 1267(g) (formerly § 117(g)). Their lawsuit halted when the Obama Administration stepped in and reached a settlement with “some assurance that its initiatives would not be rendered a dead letter by current or later actors.”⁵² President Obama issued an Executive Order designating the Chesapeake as a “national treasure,” and tasked a Federal Leadership Committee with the cleanup.⁵³ The Federal Leadership Committee included the EPA as well as the Departments of Agriculture, Transportation, Commerce, and Defense.⁵⁴ Senator Ben Cardin of Maryland proposed legislation in Senate Bill 1816 to insulate the initiative from “the inevitable blowback from affected pollution sources and future administrations.”⁵⁵ Opposition led by Senator James Inhofe (R-Okla.) worked to gut the proposed legislation. Republicans “eliminated the endorsement of the Chesapeake Bay TMDL, made state submission of watershed improvement plans voluntary, limited EPA

47. *Id.*

48. *Id.*

49. *See Concluded Cases*, CHESAPEAKE BAY FOUND., <https://www.cbf.org/how-we-save-the-bay/in-the-courtroom/concluded-cases.html> (last visited Sept. 14, 2020); *see, e.g.*, *Fowler v. EPA*, No. 09-005 (CKK), 2009 U.S. Dist. LEXIS 132084 (Sept. 29, 2009); *Am. Farm Bureau Fed’n v. EPA*, 792 F.3d 281 (3d Cir. 2015).

50. 33 U.S.C. § 1267(g) (2016).

51. Houck, *supra* note 3, at 10215.

52. *Id.* at 10216.

53. *Id.*; Exec. Order No. 13508, § 201 (May 12, 2009), <https://www.govinfo.gov/content/pkg/FR-2010-05-11/pdf/2010-11143.pdf> [<https://perma.cc/GS9J-CRJX?type=image>].

54. *Id.*

55. Houck, *supra* note 3, at 10218.

authority to enforce them, and keyed them to the achievement of water quality standards.”⁵⁶ Senator Inhofe, an anti-environmental politician from a landlocked state 1,400 miles away, spearheaded efforts to dismantle a proposal to protect the most vital water resource in the mid-Atlantic and most of the East Coast. The power of the agriculture industry made its presence known through the voting record of southern Democrats and midwestern politicians who feared application of similar regulations outside the Chesapeake watershed.⁵⁷

The EPA’s final TMDL for the Chesapeake, issued in the waning days of 2010, committed states to one another and provided that they “were committed in law to EPA and the public at large.”⁵⁸ It set “specific reduction requirements for nitrogen (twenty-five percent), phosphorus (twenty-four percent) and sediments (twenty percent).”⁵⁹ These reduction benchmarks were decreased from initial goals, but still represented an effort to make significant reductions.⁶⁰ Additionally, the final TMDL tied TMDLs to state watershed implementation plans (WIPs).⁶¹ These WIPs are part of a management strategy dictated by section 1267(g) of the Clean Water Act.⁶² Tying these two management programs together strengthened the agreement as “WIPs were the ‘cornerstone of the accountability framework’ tool for making projected load reductions happen.”⁶³ The outlook for the Chesapeake Bay Agreement remained optimistic in 2010. The Obama Administration, despite great resistance from interested industries and political opponents, dedicated itself to protection of the Chesapeake. This initial optimistic outlook, however, was soon tempered by fear of “[b]lowback from the expected quarters . . . block[s] by legislation, litigation, budget cuts, appropriations riders, investigation, oversight hearings, defecting states, or compromises traded

56. *Id.*

57. *Id.*; see S. 1816, 111th Cong. § 117(h)(i), remarks of Senators John Barrasso (R-Wyo.) and David Vitter (R-La.).

58. Houck, *supra* note 3, at 10221.

59. *Id.*

60. See TMDL EXECUTIVE SUMMARY, EPA (Dec. 29, 2010), https://www.epa.gov/sites/production/files/2014-12/documents/bay_tmdl_executive_summary_final_12.29.10_final_1.pdf [<https://perma.cc/2UTN-TQGF?type=image>] (“The TMDL is designed to ensure that all pollution control measures needed to fully restore the Bay and its tidal rivers are in place by 2025, with at least sixty percent of the actions completed by 2017.”).

61. Houck, *supra* note 3, at 10221.

62. 33 U.S.C. § 1267(g) (2016).

63. Houck, *supra* note 3, at 10221.

for progress on other Administration priorities,” and the effects each would have on efforts to bring back the Bay.⁶⁴

V. STATE OF THE BAY AND THE NEW ADMINISTRATION

In 2020, the EPA was no longer led by environmental protectionists but rather by those tasked to dismantle environmental regulations from within the Trump administration.⁶⁵ States party to the agreement thus virtually had free reign to ignore their end of the bargain, though this may change under the Biden Administration as Michael Regan takes over as administrator of the EPA.

The Chesapeake Bay Foundation gives the Bay a yearly report card based on three major indicators: pollution, habitat, and fisheries.⁶⁶ The Foundation uses a grading scale from A to F based on the average score of the three categories.⁶⁷ The measured levels are compared to the healthiest theoretical Chesapeake imaginable. That would be the “Bay Captain John Smith depicted in his exploration narratives from the early 1600s, a theoretical 100.”⁶⁸ The waterway’s marks have consistently fallen below the hefty center of the bell curve. Were the Chesapeake to attend law school, it would have certainly lost any scholarships and likely been kindly asked to end its studies. In 2014, the Bay received a grade of 32, or a D+; in 2016 this rose to a 34, or a C-.⁶⁹ In 2018, this grade dropped to a 33 and back to D+.⁷⁰ While fisheries’ grades remained relatively steady and solid, pollution marks took a nosedive.⁷¹ Nitrogen, phosphorus, and water clarity grades dropped five, nine, and four points respectively in 2018, dropping the Bay into the F range.⁷² These numbers came after modest but noticeable improvements to pollution levels in 2014 and 2016.

64. *Id.* at 10228.

65. *Pro-Polluter Andrew Wheeler Gets Tapped to Head the EPA*, NRDC (Jan. 9, 2019), <https://www.nrdc.org/experts/nrdc/pro-polluter-andrew-wheeler-gets-tapped-head-epa> [<https://perma.cc/UB8G-55A7?type=image>].

66. 2018 STATE OF THE BAY REPORT, CHESAPEAKE BAY FOUND. 3 (2018), <https://www.cbf.org/document-library/cbf-reports/2018-state-of-the-bay-report.pdf> [<https://perma.cc/L8FH-4DUH?type=image>].

67. *Id.*

68. *Id.* at 2.

69. 2014 STATE OF THE BAY REPORT, CHESAPEAKE BAY FOUND. (2014), <https://www.cbf.org/document-library/cbf-reports/2014-STOB-web-201501025443.pdf>; 2016 STATE OF THE BAY REPORT, CHESAPEAKE BAY FOUND. (2016), <https://www.cbf.org/document-library/cbf-reports/2016-state-of-the-bay-report.pdf> [<https://perma.cc/8LMM-XLSX?type=image>].

70. *Id.*

71. *Id.*

72. 2018 STATE OF THE BAY REPORT, *supra* note 66.

The drastic losses on the pollution front may be somewhat of an anomaly as the region received record-setting rainfall in the summer of 2018.⁷³ However, with climate change, higher rainfalls and record-setting storms may become the new normal for the Chesapeake.⁷⁴ More rain means that more phosphorus and nitrogen “running off farm fields and city streets into the Bay.”⁷⁵ The additional nutrients and sediment runoff create algae blooms and diminish water clarity.⁷⁶

Despite these pollution concerns, promising reports on the fishery—with the exception of oyster populations—are positives for the waterway.⁷⁷ Additionally, the survival of grass beds in the Susquehanna through the heavy summer storms may indicate that the Bay is becoming more resilient.⁷⁸ This promise, however, was threatened by federal rollbacks of efforts that would reduce nitrogen pollution.⁷⁹

The Chesapeake Clean Water Blueprint calls for states party to the Chesapeake Bay Agreement to “have in place, by 2025, the practices and policies necessary to meet the Bay’s pollution limits.”⁸⁰ Last year, the Chesapeake Bay Foundation studied the programs of Maryland, Virginia, and Pennsylvania (the Big Three)—which together account for ninety percent of Bay pollution—and their progress toward meeting the 2025 goals. The Foundation found that while no state is perfectly on track, Pennsylvania was particularly “far off track.”⁸¹ Though Pennsylvania has made strides in reducing municipal wastewater pollution, it has “repeatedly failed to meet goals to reduce pollution. Moreover, the Commonwealth’s latest draft Blueprint comes up woefully short of what it will take to save the Bay.”⁸² Despite these shortcomings, in December 2019, the EPA signed off on Pennsylvania’s plan to “improve water quality over the next five years.”⁸³

73. *Id.*

74. *Id.*

75. *Id.* at 4.

76. *Id.*

77. *Id.*

78. *Id.*

79. *Id.*

80. *2019 State of the Chesapeake Clean Water Blueprint*, CHESAPEAKE BAY FOUND. (2019), <https://www.cbf.org/how-we-save-the-bay/chesapeake-clean-water-blueprint/2019-state-of-the-blueprint.html> [<https://perma.cc/L9HT-MAPF?type=image>].

81. *Id.*

82. *Id.*

83. Scott Dance, *Maryland Gov. Hogan Seeks Lawsuit Against Pennsylvania, EPA over Lagging Chesapeake Bay Cleanup Efforts*, BALTIMORE SUN (Jan. 8, 2020), <https://www.baltimoresun.com/news/environment/bs-md-chesapeake-epa-enforcement-lawsuit-20200108-td2bhcbkkanvdwo4azqv6mey-story.html>.

The state of Maryland has made strides in wastewater treatment and phosphorus pollution from the agricultural industry. Upgrades to sewage treatment plants and improvements in farm management have brought the state on track to meet overall nutrient reduction by 2025.⁸⁴ Maryland's nitrogen levels from agriculture are still not at desired levels but remain closer (within twenty percent) to target levels than Virginia's or Pennsylvania's nitrogen levels. Pollution from urban and suburban runoff and septic systems are not within attainment range and continue to threaten Maryland waterways.⁸⁵

Virginia, the other commonwealth, has made substantial progress toward achieving its 2025 goals. In the 2000s and early 2010s, Virginia was one of the most reluctant and recalcitrant of the Bay states when it came to implementing the TMDL and working toward a healthier Bay.⁸⁶ As we move into the 2020s, however, Virginia's political landscape has drastically changed from a Republican-led Southern state with strong rural interests to a growing Democratic stronghold with the Northern suburbs of Washington, D.C., dominating in population.⁸⁷ Suburbs of Richmond and the Tidewater Region also continue to grow while rural counties suffer significant population loss.⁸⁸ According to the Foundation, Virginia is on track to achieve its 2025 goals as long as they can be implemented with consideration to rapidly growing urban and suburban populations.⁸⁹ While Pennsylvania lags behind, Virginia "has a strong roadmap for success."⁹⁰

In 2017, Delaware, West Virginia, and the District of Columbia—with much smaller pollution impacts on the Bay when compared to the Big Three—had made significant progress toward 2025 pollution reduction goals. West Virginia had achieved all but one of its 2017 midpoint assessment goals.⁹¹ While Virginia has been a relative success story, Pennsylvania has failed to uphold its end of the bargain. A depressed agricultural market "is a significant barrier stopping farms from adopting

84. *Id.*

85. *2019 State of the Chesapeake Clean Water Blueprint*, *supra* note 80.

86. *Virginia's Blueprint for Clean Water*, CHESAPEAKE BAY FOUND., <https://www.cbf.org/how-we-save-the-bay/chesapeake-clean-water-blueprint/2019-state-of-the-blueprint/blueprint-for-clean-water-va.html> [<https://perma.cc/L2UD-HPXY?type=image>].

87. *Id.*

88. *Id.*

89. *Id.*

90. *Id.*

91. *2017 Chesapeake Clean Water Blueprint Midpoint Assessment*, CHESAPEAKE BAY FOUND. (2017), <https://www.cbf.org/how-we-save-the-bay/chesapeake-clean-water-blueprint/blueprint-progress-midpoint-assessment.html> [<https://perma.cc/CV3S-YTNG?type=image>].

the conservation measures needed to reduce pollution.”⁹² The Pennsylvania state legislature has proven incapable of or unwilling to approve “proposed funding sources identified in the draft blueprint, leaving an estimated shortfall of \$257 million through 2025.”⁹³ In such failure, Pennsylvania “runs the risk of increased federal enforcement, such as increased regulations for livestock operations, industrial and municipal stormwater sources, and wastewater treatment plants. EPA could also shift or withhold grant funding.”⁹⁴ The EPA could take such actions against Pennsylvania under the Biden Administration. Such participation by the EPA is essential. As the Chesapeake Bay Agreement is a program that depends on the efforts of a diverse array of states, it is naïve to think that everyone will cooperate in perfect harmony. The effect of increased rainfall in 2018 on the state of the Bay—and likely increased significant rainfall events in the future due to climate change on the horizon—highlight the fragility of the Chesapeake’s progress. This fragile balance makes enforcement of the TMDL and achievement of pollution reduction in all agreeing states a vital issue of national policy.

VI. WHAT TO DO WITH PENNSYLVANIA AND THE EPA?

The Bay Agreement needs the EPA to hold states accountable for their failures to meet pollution reduction goals. The Bay itself is depending on the EPA for its continued survival and vitality. The EPA under the Trump Administration, however, failed to take any action to force Pennsylvania to do more to reach the 2025 TMDL goals. The EPA is not subject to notice and comment requirements of the APA when it merely approves or disapproves of a TMDL program.⁹⁵ It does, however, become subject to those requirements when it steps in and “promulgate[s] a TMDL for a state.”⁹⁶ While the Trump EPA did nothing to intervene and promulgate a TMDL for Pennsylvania, the Obama-era administration made its involvement known. President Obama’s 2009 Executive Order led to the “issuance of detailed letters from EPA to the Chair and Members of the Chesapeake Bay program that, while characterized as the Agency’s ‘expectations’ read equally as orders from HQ.”⁹⁷ A letter from

92. 2019 *Pennsylvania Clean Water Blueprint Midpoint Assessment*, CHESAPEAKE BAY FOUND. (2019), <https://www.cbf.org/how-we-save-the-bay/chesapeake-clean-water-blueprint/blueprint-for-clean-water-pa.html> [<https://perma.cc/WS2F-5JNV?type=image>].

93. *Id.*

94. *Id.*

95. EPA, *supra* note 23.

96. *Id.*

97. Houck, *supra* note 3, at 10216; *see* Exec. Order No. 13508, *supra* note 53.

November 3, 2009 “set basin wide goals for the two dominant pollutants: 200 million pounds of nitrogen . . . and 15 million pounds of phosphorous, each necessary in order to meet dissolved oxygen standards in the Bay.”⁹⁸ The letter also “laid out the preparation of a total Bay TMDL on a very tight schedule . . . and the incorporation of TMDL target loads into state plans within the following year.”⁹⁹

The EPA under the Obama presidency brought about a shift from the Administration’s role of a passive referee into that of an active enforcer. The EPA’s draft TMDL and WIPs did go through the notice and comment process and received comments from the Federal Water Quality Coalition. The Coalition turned out to be a “who’s who” of the nation’s least environmentally-friendly industries. Ironically, it included the American Coke and Chemicals Institute, the American Forest and Paper Association, the American Iron and Steel Institute, the American Petroleum Institute, Ford Motor Company, Freeport-McMoRan Copper and Gold, Mid America Crop Life, among others.¹⁰⁰ In abdicating its § 1267(g) duty to “ensure that management plans are developed and implementation is begun by signatories to the Chesapeake Bay Agreement,” the EPA has de facto repealed the TMDL without proper notice and comment procedures.¹⁰¹ This could constitute a violation of the Administrative Procedure Act and provide standing to sue the administration for its failure to act.¹⁰² Additionally, the Trump Administration’s lack of action occurred nearly ten years after the original TMDL notice and comment period. This significant period of elapsed time precludes any argument that such action could be a logical outgrowth from the previous rulemaking.¹⁰³

Maryland Governor Larry Hogan demanded in January 2020 that State Attorney General Brian Frosh file lawsuits against the EPA and the Commonwealth of Pennsylvania to reduce pollution into the Bay. The

98. Letter of William C. Early, Acting Reg’l Adm’r, Region III, EPA, to the Honorable L. Preston Bryant Jr., Sec’y of Nat. Res., Richmond, Virginia (Nov. 3, 2009), http://www.epa.gov/reg3wapd/pdf/pdf_chesbay/Bay_TMDL_Loads_Letter.pdf [<https://perma.cc/GKU6-FXPZ?type=image>].

99. *Id.*

100. Houck, *supra* note 3, at 10226.

101. 33 U.S.C. § 1267(g) (2016).

102. 5 U.S.C. § 553(b) (“General notice of proposed rule making shall be published in the Federal Register.”); 5 U.S.C. § 553(c) (“After notice required by this section, the agency shall give interested persons an opportunity to participate in rule making through submission of written data, views, or arguments.”).

103. *See* Time Warner Cable v. FCC, 729 F.3d 137, 169-170 (2d Cir. 2013) (“[W]e have generally interpreted this to mean that the final rule the agency adopts must be a ‘logical outgrowth’ of the rule proposed.”).

popular and moderate Republican Governor tasked Frosh with filing this lawsuit because the state “simply c[ould] not afford to fall short of these shared obligations” outlined in the TMDL 2025 goals.¹⁰⁴ EPA officials had recently suggested that pollution reduction targets outlined in the 2010 TMDL and agreed upon by the six states and District of Columbia were “merely ‘aspirational’ goals and not ‘enforceable’ standards.”¹⁰⁵ The EPA defended those comments by explaining that the agency’s position was “that blueprints like the one established to restore the Chesapeake ‘are not enforceable by EPA or by states,’ but are ‘planning tools that are used to develop implementation plans and enforceable permit limits that reflect the targets’ laid out in those plans.”¹⁰⁶

The EPA must act as a backstop to the program meant to reverse the decades of declining water quality in the Bay. The EPA is supposed to be made up of scientists. While the Trump EPA was led by an attorney who represented coal companies in suing the Obama Administration, the agency is still largely composed of scientists. State lawmakers are generally just that, politicians. The Chesapeake Bay TMDL does have backing from the judiciary, but the EPA contends that the “court ruling did not suggest the cleanup plan was enforceable.”¹⁰⁷ It is imperative that the EPA play a leadership role in enforcing the TMDL and other environmental laws. Under the Obama Administration, the EPA shifted its role from mere referee and agreed to undertake “a role of oversight, reviewing those strategies and guiding state and local governments toward those scientists find most effective.”¹⁰⁸

In 2015, the United States Court of Appeals for the Third Circuit ruled that the EPA was acting within the bounds of the federal Clean Water Act by imposing the TMDL on pollutants in the Bay.¹⁰⁹ Analyzing the merits under *Chevron*, the court found that “establishing a comprehensive, watershed-wide TMDL—complete with allocations among different kinds of sources, a timetable, and reasonable assurance that it will actually be implemented is reasonable and reflects a legitimate policy choice.”¹¹⁰ In its conclusion, the court took consideration of the goal of the TMDL to “restore health to the Bay—to make it once again a part of our ‘land of

104. Dance, *Maryland Gov. Hogan Seeks Lawsuit Against Pennsylvania, EPA over Lagging Chesapeake Bay Cleanup Efforts*, *supra* note 83.

105. *Id.*

106. *Id.*

107. *Id.*

108. *Id.*

109. *Id.*; see *Am. Farm Bureau Fed’n v. E.P.A.*, 792 F.3d 281, 310 (3d Cir. 2015).

110. *Am. Farm Bureau Fed’n*, 792 F.3d at 309.

living.”¹¹¹ This is reflected in the goals repeatedly endorsed by elected representatives.¹¹² In order to bring the Bay back and protect it for future generations, the TMDL needs to be enforceable. Without the EPA as a backstop, the TMDL is not going to be enforceable. As the Maryland State Environmental Secretary put it: the TMDL is meant to be “not just aspirational; it’s enforceable. And it’s not just informational; it’s integral to our success.”¹¹³ For the EPA and the states, the cleanup plan is not “an optional goal for the bay watershed.”¹¹⁴

The court also noted that any solution to pollution in the Chesapeake will involve winners and losers.¹¹⁵ As explained by arguments and *amici* briefs filed, “the winners are environmental groups, the states that border the Bay, tourists, fishermen, municipal wastewater treatment works, and urban centers. The losers are rural counties with farming operations, nonpoint source polluters, the agricultural industry, and those states that would prefer a lighter touch from the EPA.”¹¹⁶ Congress determined in writing the Clean Water Act that, in order to “best allocate the benefits and burdens of lowering pollution,” the EPA and states needed to work together.¹¹⁷ Currently, the agency needs to get Pennsylvania to uphold its end of the bargain.

Attorney General Frosh has sued the current EPA repeatedly “to protest rollbacks to regulations regarding power plant emissions, pesticide use, and wildlife protection.”¹¹⁸ These actions have often been undertaken in coordination with other states. As Virginia has also made similar progress in Bay cleanup and is similarly affected by its pollution, a lawsuit argued by the two states working together could be particularly effective. With Virginia under more progressive governance, it is possible that it would be willing to join Maryland. However, there is an issue of optics with the state lawsuit. Although Maryland and Virginia have progressed toward the 2025 TMDL pollution reduction goals, they are not perfect. Virginia is currently failing to meet agricultural runoff goals and both states are struggling with urban and suburban pollution runoff.¹¹⁹ As states

111. *Id.* (quoting Robert Frost, *The Gift Outright*, line 10).

112. *Id.*

113. Dance, *Maryland Gov. Hogan Seeks Lawsuit Against Pennsylvania, EPA over Lagging Chesapeake Bay Cleanup Efforts*, *supra* note 83.

114. *Id.*

115. *Am. Farm Bureau Fed’n*, 792 F.3d at 309.

116. Dance, *Maryland Gov. Hogan Seeks Lawsuit Against Pennsylvania, EPA over Lagging Chesapeake Bay Cleanup Efforts*, *supra* note 83.

117. *Id.*

118. *Id.*

119. *2019 State of the Chesapeake Clean Water Blueprint*, *supra* note 80.

with rapidly growing suburban areas, there is still much work to be done. They may worry about airing too much dirty laundry. However, the overall health of the Bay depends dearly on coordination between the states in its watershed.

Another argument Maryland could make is that the EPA has acted in an arbitrary and capricious manner in failing to exercise its responsibilities under the TMDL. A court may set aside a federal agency's action "whenever the challenged act is 'arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law.'"¹²⁰ An agency's decision is arbitrary and capricious when it: relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference of view or the product of agency expertise.¹²¹

In failing to exercise its responsibilities under the TMDL, the EPA is entirely failing to consider an important aspect of the problem. The agency has arbitrarily made an about-face regarding the enforceability of the TMDL and has done so in opposition to the goal of the pollution reduction program under the Clean Water Act. If the goal is to ensure the cleanup of the waters of the Chesapeake Bay watershed, failing to hold states accountable for their obligations runs counter to that goal. The current EPA's signature on Pennsylvania's "woefully inadequate" Blueprint plan is arbitrary and capricious because it flies in the face of the Agreement's goals of pollution reduction. The EPA's approval is antithetical to the stated goals of the plan.

Section 706(1) of the Administrative Procedure Act grants federal courts authority to "compel agency action unlawfully withheld or unreasonably delayed."¹²² The U.S. Supreme Court held that the Bureau of Land Management's stewardship of public lands for the use of off-road vehicle use did not rise to the level of action appropriate for such review.¹²³ This decision, however, took quite a bit of legal and mental gymnastics to come to such a conclusion and deny courts the power to compel agency action under the APA. The court stated that while it is not always the case,

120. *Sierra Club, Inc. v. Forest Serv.*, 897 F.3d 582, 589-90 (4th Cir. 2018).

121. *Id.* (quoting *Def. of Wildlife v. N.C. Dep't of Transp.*, 762 F.3d 374, 396 (4th Cir. 2018)).

122. 5 U.S.C. § 706(1) (1966).

123. *Norton v. S. Utah Wilderness All.*, 542 U.S. 55, 57 (2004).

“[f]ailures to act are sometimes remediable under the APA.”¹²⁴ The Act defines agency action as “the whole or part of an agency rule, order, license, sanction, relief, or the equivalent or denial thereof.”¹²⁵ Additionally, the only agency action that may be compelled is one legally required. This limits the APA grant of review for a failure to act in; APA review only applies where the agency action was *unlawfully* withheld.¹²⁶ According to Justice Scalia, “a claim under § 706(1) can proceed only where a plaintiff asserts that an agency failed to take discrete agency action that it is required to take.”¹²⁷

Under the TMDL, “if the Administrator determines that any such standards are not consistent with the applicable requirements of this Act . . . he shall, not later than the ninetieth day after the date of submission of such standards, notify the state and specify the changes to meet such requirements.”¹²⁸ The EPA Administrator, under the current Chesapeake Bay TMDL, “in coordination with other members of the Chesapeake Executive Council, shall ensure that management plans are developed and implementation is begun by signatories to the Chesapeake Bay Agreement.”¹²⁹ This implementation requirement directs the agency to assist states to “achieve and maintain the nutrient goals of the Chesapeake Bay Agreement for the quantity of nitrogen and phosphorus entering the Chesapeake Bay and its watershed, [and] the water quality requirements necessary to restore living resources in the Chesapeake Bay ecosystem.”¹³⁰ This is what Pennsylvania has failed to do with regards to the TMDL. The Chesapeake Bay Foundation reports show that Pennsylvania has failed to meet the water quality requirements necessary to restore the Bay’s ecosystem, and the reports further show that there is little time to ignore this failure. The EPA must ensure that signatories implement management plans developed under the TMDL if there is to be any hope of meeting the Agreement’s pollution goals. The Commonwealth has failed to implement the requirements of the program. The Supreme Court’s decision in *Norton v. Southern Utah Wilderness Alliance* has allowed federal land managers to “successfully insulate from

124. *Id.* at 62.

125. 5 U.S.C. § 551(13) (2011).

126. *Norton*, 542 U.S. at 63.

127. *Id.*

128. 33 U.S.C. § 1313(a)(3)(C) (2000).

129. 33 U.S.C. § 1267(g)(1) (2016).

130. *Id.*

judicial review a wide variety of federal actions as well as inactions.”¹³¹ If the EPA has no lawful role or direction by which to exercise its responsibilities under the TMDL, the plan is not even aspirational. The TMDL is left completely without teeth and the Chesapeake is left to rot. A failure to abide by the command that the EPA “shall ensure that management plans are developed and implementation begun” reasonably constitutes a federal action.¹³² The arbitrary and capricious approval of Pennsylvania’s inadequate pollution reduction plan thus constitutes a federal action subject to review under the APA.

Pennsylvania is led by Democratic Governor Tom Wolf, who is currently “pushing for more investment in clean water, including a tax on natural gas extraction.”¹³³ The governor appears completely willing to make necessary efforts to fund clean water in his state.¹³⁴ While the governor may support this, the Republican-led General Assembly does not.¹³⁵ Governor Wolf has suggested that “instead of protracted litigation that will take resources away from our efforts to improve water quality in the watershed and undermine the partnership that has helped make progress, Governor Hogan’s time would be better spent convincing his Republican counterparts in Pennsylvania to support Governor Wolf’s plan.”¹³⁶ Pennsylvania has never been the frontrunner in efforts to clean up the Chesapeake, a body of water that technically is not within its state borders. Governor Wolf’s plans may be a tall order when put up against a Republican state assembly in a state with huge natural gas and agricultural interests. Real progress will only be possible if the Pennsylvania legislature appropriates the funds to properly invest in the cleanup program. Maryland and Virginia need to take legal action to protect the integrity of the TMDL and follow through on cleanup of the Chesapeake.

VII. CONCLUSION

Maryland and other states need to take action in order to compel the EPA to enforce the TMDL and force Pennsylvania to meet its 2025 pollution reduction goals. Time is of the essence. The incoming Biden

131. Michael C. Blumm & Sherry L. Bosse, *Norton v. SUWA and the Unraveling of Federal Public Land Planning*, 18 DUKE ENV’T L. & POL’Y F. 105, 105 (2007).

132. 33 U.S.C. § 1267(g)(1) (2016).

133. Dance, *Maryland Gov. Hogan Seeks Lawsuit Against Pennsylvania, EPA over Lagging Chesapeake Bay Cleanup Efforts*, *supra* note 83.

134. *See id.*

135. *See id.*

136. *Id.*

Administration brings some hope of a return to a more robust EPA, as that under President Obama.¹³⁷ The Chesapeake Bay must be strengthened against future attacks from hostile politicians. Failure to meet overall pollution reduction goals threatens to sink the Chesapeake further back toward the degradation of the past. Additionally, the protections in place for the Bay must be reinforced and strengthened for the future. On September 10, 2020, the State of Maryland took a great step forward in protecting the Chesapeake and filed suit against the EPA along with the states of Virginia, Delaware, and the District of Columbia.¹³⁸ The suit seeks to force the EPA to fulfil its obligation to uphold and “enforce the Total Maximum Daily Load pollution reduction standards and ensure that everyone is doing their part.”¹³⁹

Additionally, the Chesapeake is a proving ground for multistate agreements on water quality elsewhere in the nation. The Mississippi River is an example of a much more immense magnitude.¹⁴⁰ The River has similar issues with regards to agricultural and industrial pollution as well as sediments affecting water quality. While the Bay is a large estuary with a vast watershed, the Mississippi drainage basin covers more than one-million square miles and is the fourth longest river in the world. The river is bordered by ten different states, from Minnesota at the Canadian border to Louisiana at the Gulf of Mexico. As in the Chesapeake, nutrient pollution from the Mississippi causes large-scale dead zones in the Gulf of Mexico.¹⁴¹ With the diversity of political and environmental landscapes along the Mississippi, holding the EPA accountable for ensuring that water quality protections are rigorously enforced is crucial. The success of Maryland’s legal battle with the EPA and Pennsylvania will be of great consequence far beyond the reaches of the Chesapeake. Due to the jurisprudential relevance to impaired water bodies throughout the nation,

137. See *The Biden Plan for a Clean Energy Revolution and Environmental Justice*, BIDEN-HARRIS CAMPAIGN, <https://joebiden.com/climate-plan/> [<https://perma.cc/7643-9DCP?type=image>].

138. *Maryland Sues EPA over Pollution in Chesapeake Bay*, WBALTV (Sept. 10, 2020), <https://www.wbaltv.com/article/maryland-sues-environmental-protection-agency-epa-chesapeake-bay-pollution/33981952> [<https://perma.cc/KV8Z-WPU3?type=image>].

139. *Id.*

140. For a broader discussion of potential approaches to this issue of nutrient runoff in the Mississippi River, see Chiara Kalogjera-Sackellares, *Reviving the Mississippi River: Riparianism and Equitable Remedies*, 34 TUL. ENV'T L.J. 63 (2021).

141. COMM. ON THE MISSISSIPPI RIVER & THE CLEAN WATER ACT, NAT'L RSCH. COUNCIL, MISSISSIPPI RIVER QUALITY AND THE CLEAN WATER ACT: PROGRESS, CHALLENGES, AND OPPORTUNITIES, <https://biotech.law.lsu.edu/climate/docs/mississippi-pollution.pdf> [<https://perma.cc/JTV2-C8ZM?type=image>].

the states should file suit against the EPA and possibly the state of Pennsylvania. When the EPA has failed to meet its duty to protect the environment, others must step in to hold the agency accountable.