

ARTICLE

TESTING COOPERATIVE FEDERALISM: WATER QUALITY STANDARDS UNDER THE CLEAN WATER ACT

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INTRODUCTION

“A nation that fails to plan intelligently for the development and protection of its precious waters will be condemned to wither because of its shortsightedness.”¹ Over forty years after this prophetic statement by Lyndon B. Johnson, many countries are experiencing severe water quality problems, including the U.S.² The Clean Water Act (“CWA”), which aims to restore and maintain the integrity of the nation’s waters,³ is the main regulatory structure for protecting water quality in the U.S. and may require modification. Although not in express terms, the CWA’s objective embraces the sustainability principle by seeking to preserve clean water for future generations and rejects the myopic mentality warned of by President Johnson. To accomplish this goal, the CWA utilizes a cooperative federalism structure to ensure all waters receive prompt protection. The CWA’s failsafe system gives the states the primary obligation to set water quality standards, but in the case they fail, mandates that the federal government take control.⁴ This guarantees that standards are set, which is the first step towards protecting water quality. As the U.S. struggles to clean up its waters, it would be wise to analyze whether the CWA’s structure and implementation measure up to its sustainability goals.

The next world war will likely be fought over water⁵—something most Americans may find unbelievable. Clean water from the kitchen faucet is a daily reality in the United States, but this blessing may be obscuring the magnitude of the United States’ water quality problems. Despite the current laws aimed to protect and improve U.S. waters, over half of America’s wells

1. ASSOCIATION OF STATE AND INTERSTATE WATER POLLUTION CONTROL ADMINISTRATORS, CLEAN WATER ACT THIRTY-YEAR RETROSPECTIVE: HISTORY AND DOCUMENTS RELATED TO THE FEDERAL STATUTE xi (2004).

2. See MAUDE BARLOW, BLUE GOLD: THE GLOBAL WATER CRISIS AND THE COMMODIFICATION OF THE WORLD’S WATER SUPPLY 1 (2001). [hereinafter BARLOW, THE GLOBAL WATER CRISIS]; MAUDE BARLOW & TONY CLARKE, BLUE GOLD: THE BATTLE AGAINST CORPORATE THEFT OF THE WORLD’S WATER xi (2002) [hereinafter BARLOW & CLARKE, THE BATTLE]; BLUE GOLD: WORLD WATER WARS (Purple Turtle Productions 2008).

3. Clean Water Act, 33 U.S.C. § 1251 (1972).

4. 33 U.S.C. § 1313 (2000); 40 C.F.R. § 131.22 (2009).

5. See BARLOW, THE GLOBAL WATER CRISIS, *supra* note 2 for an explanation of this concept and citation to former Vice-President of the World Bank Ismail Serageldin’s famous statement that “[t]he wars of the next century will be about water.” Specifically, increasing privatization of drinking water sources and over pumping of ground water is leaving many poorer countries to the mercy of profit-seeking corporations for clean, drinking water. *Id.* High prices are causing civil unrest within countries and the reduced availability of drinking water is forcing countries to think strategically on where they can obtain clean water supplies in the future. *Id.* Conflict will stem from the competing nations’ water needs and dwindling supplies.

are contaminated with carcinogenic pesticides and nitrates,⁶ and most of America's waters contain man-made chemicals and toxins.⁷ According to estimates by the Centers for Disease Control, 900 people die and 900,000 experience illness each year due to pathogenic organisms in drinking water.⁸ In addition to misconceptions about quality, water is not as abundant or renewable as many believe.⁹ This reduction in overall supply exacerbates water quality because there is less water to dilute pollutants. Although water quantity raises equally important concerns, this article focuses on the CWA's ability to create sustainable water quality measures.

In 2004, the U.S. Environmental Protection Agency ("EPA") reported that 44% of assessed rivers and 64% of assessed lakes were impaired.¹⁰ One of the top contributors to impaired water quality in the United States is nitrogen and phosphorus pollution ("nutrient pollution"), which mainly comes from wastewater discharge and agricultural runoff.¹¹ In fact, EPA has determined that it is the leading cause of impairment for lakes

6. BARLOW & CLARKE, *THE BATTLE*, *supra* note 2, at 55.

7. Jill Baron & LeRoy Poff, *Sustaining Healthy Freshwater Ecosystems*, 127 *WATER RES. UPDATE* 52, 55 (2004).

8. GLICKSMAN ET AL., *ENVIRONMENTAL PROTECTION: LAW AND POLICY* 801 (2007); S. Rep. No. 104-169, at 6 (1995).

9. Less than 3% of the world's water is freshwater, and 70% of that is inaccessibly trapped in glaciers and polar ice caps. BARLOW & CLARKE, *THE BATTLE*, *supra* note 2, at 6; U.S. Geological Survey, *Water Distribution*, <http://ga.water.usgs.gov/edu/waterdistribution.html> (last visited Mar. 26, 2011). The remaining 1% of available freshwater is mostly under our feet, known as groundwater, and depends on rainfall for replenishment or recharge. BARLOW & CLARKE, *THE BATTLE*, *supra* note 2, at 6. Groundwater recharge, however, is not occurring at normal rates due to over-pumping and increasing impervious surfaces like paved roads that block the rain from penetrating the ground and send the water back out to sea, which depletes the overall freshwater supply. BLUE GOLD: *WORLD WATER WARS*, *supra* note 2. Other obstacles, such as destruction of wetlands, are also contributing to reduced freshwater supplies and needed filtration services. BARLOW & CLARKE, *THE BATTLE*, *supra* note 2, at 50.

10. U.S. ENVTL. PROT. AGENCY, 2004 NATIONAL WATER QUALITY INVENTORY: REPORT TO CONGRESS 13 (2004), *available at* <http://www.epa.gov/owow/305b/2004report/report2004pt3.pdf> [hereinafter U.S. ENVTL. PROT. AGENCY, NATIONAL WATER QUALITY] (The report grouped rivers and streams together and lakes, ponds, and reservoirs together. Under the Clean Water Act, impaired waters are those that fail to meet its designated use, such as swimmable and fishable.)

11. U.S. ENVTL. PROT. AGENCY, EPA-821-F-08-007, STATE ADOPTION OF NUMERIC NUTRIENT STANDARDS 4 (2008), [hereinafter U.S. ENVTL. PROT. AGENCY, 2008 STATE ADOPTION], *available at* <http://www.epa.gov/waterscience/criteria/nutrient/files/report1998-2008.pdf>. Sources of nutrients include "fertilizer, sewage treatment plants, septic systems, animal manure, urban runoff, and atmospheric deposition." U.S. ENVTL. PROT. AGENCY, NO. 009-P-0223, EPA NEEDS TO ACCELERATE ADOPTION OF NUMERIC NUTRIENT WATER QUALITY STANDARDS 14 (2009), *available at* http://www.epa.gov/oig/reports/2009/20090826-09-P-0223_glance.pdf [hereinafter U.S. ENVTL. PROT. AGENCY, EPA NEEDS].

and coastal waters and second leading cause for rivers and streams.¹²

Nutrient pollution is responsible for dead zones and harmful algal blooms¹³ that can cause skin irritation, staph infections, allergic reactions, gastrointestinal upset, liver damage, and even death.¹⁴ Besides being a public health threat, algal blooms can also cause fish kills, close down water treatment plants,¹⁵ and devastate tourist-based economies due to beach closures and reduced freshwater recreation. Algal blooms deplete the oxygen in the water, which then leads to a dead or hypoxic zone where no living creature can survive.¹⁶ Nutrients, described more aptly by Earthjustice attorney David Guest as “fertilizer and cow poop,”¹⁷ degrade water quality, destroy fish habitat and fisheries, and can even be toxic to people. Dead zones are frequently occurring around the U.S. from the Gulf of Mexico to Long Island Sound to Washington State and severely hurting tourism and fishing based economies along its path.¹⁸ Surprisingly, nutrient pollution, which affects our health and economy, has managed to escape most states’ strictest water quality standards.¹⁹

A prime example is in Florida where several environmental groups sued EPA for not setting stricter nutrient standards after Florida failed to act for over ten years.²⁰ Specifically, plaintiffs argued that EPA had made a determination in 1998 that numeric nutrient criteria were necessary to meet the goals of the CWA thereby placing a

12. See U.S. ENVTL. PROT. AGENCY, NATIONAL STRATEGY FOR THE DEVELOPMENT OF REGIONAL NUTRIENT CRITERIA EPA-822-R-98-002 iii (1998) (noticed in the Federal Register on June 25, 1998 at 63 Fed. Reg. 34648) [hereinafter U.S. ENVTL. PROT. AGENCY, NATIONAL STRATEGY].

13. U.S. ENVTL. PROT. AGENCY, 2008 STATE ADOPTION, *supra* note 11, at 4.

14. CRAIG PITTMAN & MATTHEW WAITE, PAVING PARADISE 238-39 (2009).

15. For example, in 2008 a toxic blue-green algae bloom that occurred on the Caloosahatchee River forced the Olga Water Treatment Plant, which provided drinking water for 30,000 people, to shut down. Plaintiff’s First Amended Complaint at 7, *Fla. Wildlife Fed’n v. Jackson*, No. 4:08cv324-RH/WCS (N.D. Fla. Dec. 30, 2009), 2009 WL 5217062.

16. ECOLOGICAL SOC. AM., HYPOXIA 1, *available at* http://www.esa.org/education_diversity/pdfDocs/hypoxia.pdf.

17. David Guest, Managing Attorney, Earthjustice, Environmental Forum at the Florida State University College of Law: Florida Agriculture and the Environment (Oct. 14, 2009), *available at*

http://www.law.fsu.edu/academic_programs/environmental/video.html.

18. U.S. ENVTL. PROT. AGENCY, 2008 STATE ADOPTION, *supra* note 11, at 4.

19. *Id.* at 7. Only a handful of states have adopted numeric standards for nutrients for certain water bodies, opposed to relying on narrative standards. Narrative standards are hard to enforce and measure because there is no measurable baselines given, whereas narrative standards provide a maximum amount—a number—that cannot be surpassed.

20. Plaintiff’s First Amended Complaint, *supra* note 15 at 24.

mandatory duty on EPA to set standards if Florida did not. Increasingly frequent toxic algae blooms throughout Florida from the “St. Johns River in the Northeast Region, the Caloosahatchee River in the Southwest Region, and the Peace and Kissimmee Rivers in the Central Region” prompted this lawsuit.²¹ For example, in 2005 the St. Johns River in Jacksonville, Florida had an algae bloom known as toxic blue-green algae.²² Due to public health concerns, the County recommended no contact with the river until the bloom disappeared, which took over three months.²³ Recently, EPA signed a consent decree to set numeric criteria and agreed that these tougher standards were necessary.²⁴ Some Florida agencies, however, found EPA’s intrusion unwarranted and appealed.²⁵ This conflict provides an ideal opportunity to critique the CWA’s structure and its efficacy.

As clean water becomes scarce, Congress will need to enact new laws if the CWA cannot generate sustainable water management practices. In particular, the CWA’s structure for setting water quality standards must include safeguards to guarantee clean water for future generations. This article assesses the role of federalism in achieving sustainable water quality measures under the CWA. After considering the potential for cooperative federalism in this regard, the article focuses on the recent litigation in Florida to analyze whether the CWA’s structure has enabled or hindered the states’ and EPA’s ability to respond to this emerging problem. Specifically, the Florida litigation offers an imperfect, but effective example of cooperative federalism in practice that has far-reaching implications and lessons. While cooperative federalism under the CWA provides vital checks and balances, I argue that the states have been non-responsive or too slow to respond to federal mandates for action, which impedes the maintenance and improvement of water quality. I suggest that the federal government needs to consistently utilize its authority to rectify state inaction by setting water quality standards to ensure sustainable water quality.

21. Press Release, *Earthjustice Files Federal lawsuit to Stop Toxic Algae Blooms*, EARTHJUSTICE.ORG, available at <http://www.earthjustice.org/news/press/2008/earthjustice-files-federal-lawsuit-to-stop-toxic-algae-blooms.html>.

22. PITTMAN & WAITE, *supra* note 14, at 238-39.

23. *Id.* at 238.

24. Consent Decree, *Fla. Wildlife Fed’n*, 2009 WL 5217062 (No. 4:08cv324-RH/WCS).

25. Intervenor South Florida Water Management District’s Motion for Summary Judgment at 10-11, *Fla. Wildlife Fed’n*, 2009 WL 5217062 (No. 4:08cv324-RH/WCS).

Part I of this article examines the history behind the CWA and water quality standards (“WQS”) to uncover Congress’ vision of how WQS should operate. The article then describes WQS, the CWA’s cooperative federalism structure, and how the Supreme Court has interpreted the federal branch’s authority. Understanding the foundation of the current structure helps uncover some of the problems that arise when the federal government plays a lesser role and discredits arguments in favor of a more decentralized structure.²⁶

Part II explains cooperative federalism and its resulting constitutional dilemmas. This section then introduces the concept of sustainability and explores how cooperative federalism can help achieve sustainable water quality measures. In discussing the arguments for and against cooperative federalism through a sustainability lens, I argue that cooperative federalism overwhelmingly increases the chances of realizing sustainable WQS.

In Part III, the article evaluates whether cooperative federalism is being implemented under the CWA, and if so, if it is successfully creating sustainable water quality measures by looking at the recent numeric nutrient criteria litigation between Florida and the EPA. This part provides a brief overview of the litigation and addresses whether the EPA usurped state authority by setting numeric nutrient criteria for Florida or merely followed the CWA’s structural mandates. I conclude that this case exemplifies the CWA’s intended structure and illustrates the benefits of having cooperative federalism.

Lastly, Part III discusses the implications of EPA’s and the states’ actions during the Florida litigation. I also propose recommendations on how the CWA’s implementation can be improved to better attain sustainable water quality standards. Essentially, EPA must follow through on its promises and enforce timelines on states or take control in the face of their inaction. EPA and citizen groups across the United States can use the Florida litigation as a prototype for setting water quality standards in the future.

I. THE CLEAN WATER ACT

The CWA was enacted in 1972 to “restore and maintain the chemical, physical, and biological integrity of the nation’s

26. See Robert A. Schapiro, *Not Old or Borrowed: The Truly New Blue Federalism*, 3 HARV. L. & POL’Y REV. 33 (2009) (discussing the recent arguments in favor of a more decentralized approach towards environmental regulation).

waters.”²⁷ In order to meet this end, the CWA utilizes effluent standards that limit how much pollution a source can discharge into a water body and ambient water quality standards that limit how much pollution can exist in a water body.²⁸ The CWA’s effluent standards require permits for the discharge of pollutants from a point source and for the discharge of dredged or fill material into navigable waters.²⁹ EPA administers the National Pollutant Discharge Elimination System (“NPDES”) permits for point sources,³⁰ and the U.S. Army Corps of Engineers (“Corps”) jointly administers dredge and fill permits with EPA.³¹ Ambient water quality standards (“WQS”) on the other hand do not require permits and are implemented primarily by the states.³² WQS are narrative or numeric criteria that describe or set the maximum contamination a water body can receive and still achieve or exceed its intended or designated use.³³

A. *The History Behind Water Quality Standards*

The first governmental regulation of water pollution was in 1899 under the Rivers and Harbors Act (“RHA”), also known as the Refuse Act, which banned discharges of any refuse into navigable waters.³⁴ Although the Refuse Act’s purpose was to preserve navigation,³⁵ it created two federal permit programs for discharges that the CWA later incorporated.³⁶ It was not until 1948 that Congress specifically enacted water quality regulations under the Federal Water Pollution Control Act (“FWPCA”), but even then, the statute’s main purpose was to give federal loans to states for constructing publicly owned treatment works or sewage treatment facilities—not to directly regulate water quality.³⁷

27. 33 U.S.C. § 1251 (2009).

28. See GLICKSMAN ET AL., *supra* note 8, at 589-593.

29. 33 U.S.C. §§ 1311, 1342, 1344 (2009). Exemptions to the dredge and fill permit requirement include farming, silviculture, and ranching activities, but not “mechanized equipment used in land clearing.” MICHAEL T. OLEXA ET AL., HANDBOOKS OF FLORIDA WATER REGULATION: ACTIVITIES IN WETLANDS AND WATERSHEDS 2 (Inst. Of Food and Agricultural Science Univ. of Fla., 2005), *available at* <http://edis.ifas.ufl.edu/pdffiles/FE/FE60600.pdf>.

30. 33 U.S.C. §1342.

31. Lawrence R. Liebesman & Philip T. Hundemann, *Regulatory Standards for Permits Under the Clean Water Act Section 404 Permit Program*, in THE NATURAL RESOURCES LAW MANUAL 3 (Richard J. Frink ed., 1995).

32. GLICKSMAN ET AL., *supra* note 8, at 653.

33. 40 C.F.R. § 131.11(a)-(b) (2009).

34. 33 U.S.C. § 407 (2009); Robin Kundis Craig, *Adapting Water Federalism to Climate Change Impacts: Energy Policy, Food Security, and the Allocation of Water Resources*, 5 ENVTL & ENERGY L. & POL’Y J. 183, 189-90 (2010).

35. CRAIG, *supra* note 34, at 190.

36. *Id.*

37. Federal Water Pollution Control Act, Pub. L. No. 80-845, 62 Stat. 1158 (1948).

Over the next two decades horrific environmental devastations like the Cuyahoga River fire of 1969, increased media attention, and landmark books like Rachel Carson's *Silent Spring*, led to a growing environmental awareness about the Industrial Age's anthropogenic impacts on nature.³⁸ A decade after enacting the FWPCA, a series of articles by Professor William Hines described many U.S. waters as "so contaminated as to be offensive to sight and smell."³⁹ This increase in public awareness and obvious inadequacy of pollution regulations caught Congress' attention by 1965. Congress was dissatisfied with the States' slow progress towards ridding water pollution and created a new component within the FWPCA called water quality standards.⁴⁰

Congress envisioned that WQS would allow measurement of performance and provide a means for legal action for violations.⁴¹ Congress gave each state the authority to set WQS for water bodies within its jurisdiction. In order to ensure states complied with the new mandates, Congress conditioned receipt of federal funds for each state upon the setting of WQS and gave the Secretary of State the authority to set the standards in the event a state failed or refused.⁴² Consequently, the states still had primary authority for controlling pollution, but the federal government was now a safety net for inaction. The financial incentives and federal involvement had little effect, however, and almost half of the states still had not adopted WQS four years past the statutory deadline.⁴³ Enforcement was also infrequent and the federal government could not abate pollution activities in

38. See GLICKSMAN ET AL., *supra* note 8, at 64; Ohio History Central, Cuyahoga River Fire, <http://www.ohiohistorycentral.org/entry.php?rec=1642> (last visited Mar. 22, 2011).

39. N. William Hines, *Nor Any Drop to Drink: Public Regulation of Water Quality, Part I: State Pollution Control Programs*, 52 IOWA L. REV. 186, 189 (1966).

40. CRAIG, *supra* note 34, at 202-04; Amendment to Federal Water Pollution Control Act, Pub. L. No. 89-234, 79 Stat. 903 (Oct. 2, 1965). The states had made some success in reducing certain, clearly identified pollutants like organic matter and bacteria. Robert Glicksman & Matthew Batzel, *Science, Politics, Law and the Arc of the Clean Water Act: The Role of Assumptions in the Adoption of a Pollution Control Landmark*, WASH. U. J.L. & POL'Y (Forthcoming 2010), available at http://works.bepress.com/robert_glicksman/10/.

41. GLICKSMAN ET AL., *supra* note 8, at 652.

42. CRAIG, *supra* note 34, at 233.

43. CRAIG, *supra* note 34 at 205; S. Rep. No. 92-414 (Oct. 28, 1971), reprinted in 1972 U.S.C.A.N. 3668, 3671.

intrastate waters without the state's consent.⁴⁴ As further evidence of the states' sluggishness, only seven states had adopted phosphorus criteria for interstate streams despite Congress' insistence that it was necessary to prevent eutrophication—nutrient pollution.⁴⁵

By 1972, Congress could no longer ignore America's degrading water quality and became impatient with the states' efforts to control water pollution. In light of these failures, the Senate wanted to abandon the ambient WQS in favor of a new approach with clearer standards and greater enforcement potential called technology-based effluent limitations that the federal government, and not the states, would set.⁴⁶ However, a compromise was reached and Congress kept WQS as a safety net⁴⁷ to the new limits, despite their finding that the "national effort to abate and control water pollution h[ad] been inadequate in every vital respect."⁴⁸ These amendments to the FWPCA marked an abrupt change in the U.S. approach to water quality and the entire act became known as the Clean Water Act.

With these changes, technology-based effluent limitations became the heart of the CWA's efforts to combat pollution and for enforcement.⁴⁹ WQS were now solely "a measure for program effectiveness and performance."⁵⁰ Although demoted in a sense, WQS remain an integral part to achieving the CWA's goals. Although enforcement is based on individual permit violations,

44. Glicksman & Batzel, *supra* note 40; CRAIG, *supra* note 34, at 16. Prior to 1972, the federal government could only abate interstate pollution activities. *Id.*; Scott D. Anderson, *Watershed Management and Nonpoint Source Pollution: The Massachusetts Approach*, 26 B.C. ENVTL. AFF. L. REV. 339, 342 (1999) (Before 1972, the states pollution control actions were not resulting in "noticeable improvements." . . . "[N]ot only were few states setting specific water quality standards, but many problems arose when states implemented these standards – including problems of determining when a discharge violated an established standard, and with identifying ways to allocate effluent limitations among different polluters. Moreover, industry commonly pressured states to reclassify their waterways to allow a greater pollutant load.").

45. CRAIG, *supra* note 34, at 23; S. Rep. No. 92-414, at 43 (1971), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3710. In addition, even the states that did adopt standards often faced difficulty in enforcing their standards due to a lack of scientific information, which the discharger would attack on causation grounds and proof problems. JAMES SALZMAN & BARTON THOMPSON, ENVIRONMENTAL LAW AND POLICY 141 (2007).

46. SALZMAN & THOMPSON, *supra* note 45, at 158.

47. *Id.*

48. CRAIG, *supra* note 34, at 206; S. REP. NO. 92-414, at 6 (1972), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3674.

49. CRAIG, *supra* note 34, at 205.

50. *Id.* at 24.

WQS affect the discharge limits set within the permits.⁵¹ Moreover, during the late 80's and early 90's, the CWA administration broadened their focus from concentrating on major point sources to a more integrated and holistic approach.⁵² Realizing that targeting major polluters was not having the expected impact on water quality, efforts were directed towards watershed management, restoration, and ecological baselines.⁵³ This indirectly strengthened the role of WQS because WQS are a means to set ecological baselines, assess what is occurring within an entire watershed, and identify which water bodies need restoration. Nonetheless, according to EPA, effluent limitations by themselves are not capable of ensuring fishable-swimmable water quality for all waters, and WQS are the basic means to achieve that goal.⁵⁴

B. The Operation of Water Quality Standards

The CWA has two primary goals: (1) to eliminate all discharges of pollutants by 1985 (which has obviously been missed) and (2) to maintain or restore all waters to a fishable-swimmable level of water quality, protective of propagation of fish, shellfish, and wildlife and of recreation in and on the water.⁵⁵ To help achieve this feat, Congress gave the states the primary responsibility to set WQS with the aid of EPA's guidance and water quality criteria developed by using the best scientific information.⁵⁶ The first step in the process is for the state to designate a specific use for each water body, such as "protection and propagation of fish."⁵⁷ The designated use must comply with the fishable-swimmable standard—that was supposed to be met by 1983 anyway—unless the state can show it is unattainable due to "naturally occurring pollution, low water flows, or other factors" EPA may deem sufficient to downgrade the water body.⁵⁸

Second, the state must set WQS necessary to support and protect the designated uses.⁵⁹ While states have primary

51. Specifically, a WQS states an overall level of pollution that a water body can handle while still maintaining its designated use. NPDES permit limitations must take this overall limit into consideration when being set. In addition, if a water body fails to meet its WQS, individual NPDES permits may be adjusted—lowered—until it can be reached. 33 U.S.C.A. § 1311.

52. GLICKSMAN ET AL., *supra* note 8, at 684-87.

53. *Id.*

54. Water Quality Standards, 57 Fed. Reg. 60848, 60856 (Dec. 22, 1992).

55. 33 U.S.C. § 1251.

56. CRAIG, *supra* note 34, at 203.

57. SALZMAN & THOMPSON, *supra* note 45, at 159.

58. *Id.* States must review their designated uses every three years. *Id.*

59. *Id.*

authority to set the WQS, they must comply with the CWA standard to “protect the public health or welfare, enhance the quality of water, and serve purposes” of the Act.⁶⁰ States also must consider the water body’s “use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes . . . [and] their use and value for navigation.”⁶¹ States may set quantitative or qualitative standards except for toxic pollutants, which require quantitative standards per the CWA.⁶² WQS must include “an antidegradation policy that protects existing uses and high water quality.”⁶³ EPA provides guidance on the “minimum physical, chemical, and biological parameters required to support the various designated uses” to aid the states preparation.⁶⁴ If a state fails to set adequate standards and subsequently fails to make the necessary changes dictated by EPA, EPA *must* set new or revised standards for the state.⁶⁵ EPA considers five factors when reviewing a state’s WQS, and if all are satisfied EPA must approve the standard.⁶⁶ These factors are stated very broadly and leave room for discretion, although case law has limited that discretion somewhat.⁶⁷

Third, states must identify waters not attaining their designated use and rank them by priority, known as a “303d List.”⁶⁸ For all waters on a 303d List, states must then establish the total maximum daily load (“TMDL”) of pollutants that can be discharged on a daily basis into the water body with the water body still able to obtain its WQS, taking into consideration “seasonal variations and a margin of safety.”⁶⁹ The states must

60. 33 U.S.C. § 1313(c)(2)(A) (2006); 40 C.F.R. §§ 130.3, 131.2 (2010); U.S. ENVTL. PROT. AGENCY, EPA 823-B-94-005, INT-8, WATER QUALITY STANDARDS HANDBOOK, (2nd Ed., 1994) [hereinafter U.S. ENVTL. PROT. AGENCY, WATER QUALITY STANDARDS HANDBOOK].

61. 33 U.S.C. § 1313(c)(2)(A); 40 C.F.R. §§ 130.3, 131.2; U.S. ENVTL. PROT. AGENCY, WATER QUALITY STANDARDS HANDBOOK, *supra* note 60.

62. SALZMAN & THOMPSON, *supra* note 45, at 159.

63. U.S. ENVTL. PROT. AGENCY, WATER QUALITY STANDARDS HANDBOOK, *supra* note 60, at INT-8; 40 C.F.R. § 131.12.

64. SALZMAN & THOMPSON, *supra* note 45, at 159.

65. 33 U.S.C. § 1313(c)(3)-(4); 40 C.F.R. § 131.22.

66. 40 C.F.R. § 131.5.

67. *Id.*; Craig, *supra* note 34, at 203. The factors are: (1) are the uses consistent with CWA requirements; (2) did the state follow its legal procedures for revising or adopting the standard; (3) did the state adopt criteria that protects the use; (4) are State standards which do not include the uses specified in Section 101(a)(2) of the Act based on appropriate technical and scientific data and analyses; and (5) does the State submission meet the requirements included in § 131.6 and, for Great Lakes States or Great Lakes Tribes § 188, and § 132. 40 C.F.R. § 131.5.

68. 33 U.S.C. § 1313(d)(1).

69. *Id.*

submit their 303d List and TMDLs to EPA for approval.⁷⁰ Whether EPA approves the states' submittal or disapproves and issues its own 303d List and/or TMDLs, the TMDLs are then allocated among dischargers along the impaired water body. If the TMDLs are insufficient to bring the water body into compliance, the state must continue to lower the allowable discharges until such standard is met.⁷¹ At any time if EPA determines that TMDLs or a WQS is insufficient to meet the requirements of the CWA, EPA has authority to revise or set new WQS for the state or set effluent limitations for point sources in the area.⁷²

C. Cooperative Federalism

The historical foundation and operating features of WQS illustrate the cooperative relationship between the states and EPA, with the states carrying out specified duties under EPA oversight. The CWA's statutory mandates and legislative history make clear that although Congress sent some confusing signals, their intent to establish collaborative management of WQS was unmistakable. Beginning with the CWA's policies, the statutory language unambiguously preserves and protects "the primary responsibilities and rights of the States to prevent, reduce, and eliminate pollution[;]" to use land and water resources; and to allocate water resources.⁷³ This savings clause is not an operative clause mandating certain actions, but courts utilized it to resolve conflicts.⁷⁴ However, the legislative history and increased federal control after the 1965 and 1972 amendments plainly established a check-and-balance scheme: if states did not exercise their rights correctly, or at all, then the federal government would step in and do it for them.⁷⁵

By 1972, Congress' desire to expedite the implementation of WQS and improve enforcement led them to create a new structure for eradicating pollution. Congress openly expressed their dissatisfaction with the states' progress and cited this as a rationale for adopting a different approach.⁷⁶ Importantly, this discontent did not lead to more state-controlled programs. Instead, Congress enacted two federal permit programs that a

70. SALZMAN & THOMPSON, *supra* note 45, at 159.

71. 33 U.S.C. § 1313(d)(4).

72. 33 U.S.C. § 1312(a); 33 U.S.C. § 1313(c)(4)(B).

73. 33 U.S.C. § 1251(b), (g).

74. GLICKSMAN ET AL., *supra* note 8, at 123.

75. See CRAIG, *supra* note 34, at 203.

76. *Id.* at 206.

federal agency would administer and created minimum levels of protection that the states could not abrogate.⁷⁷ Congress gave EPA the task of commanding the new effluent limitations program that was to supplant the emphasis on state-controlled WQS.

Likewise, within the WQS program itself, the states' lone ranger days had ended. States now had to comply with federal protection requirements, obtain EPA approval of their standards, and adhere to EPA's suggested revisions or new standards in the event that EPA found the states' insufficient.⁷⁸ Congress also granted EPA the authority to enact new or revised WQS for a state at any time it determined it was necessary to meet the requirements of the CWA.⁷⁹ Moreover, Congress went even further by authorizing EPA to set "water quality related effluent limitations" if point sources interfered with the "attainment or maintenance of that water quality . . . which shall assure protection of public health, public water supplies, agricultural and industrial uses," fish, wildlife, and recreation.⁸⁰ Although the states were charged with ensuring their waters complied with WQS and preparing 303d Lists and TMDLs, EPA was again given authority to step in and set TMDLs if the states' plans were inadequate.⁸¹ All of this new-fangled federal authority undermined the states' supremacy for controlling pollution by giving EPA the last word—and the first word in some instances.

To complicate matters, Congress frequently contradicted itself by declaring the states' primacy and at the same time referring to a "national interest" that needed a uniform response.⁸² In order to achieve the desired consistency, Congress again granted the federal government more powers. Specifically, although the states were charged with setting WQS, EPA was asked to "develop comprehensive programs for preventing" pollution and to encourage uniform state laws by providing research and guidance to the states.⁸³ This goal of national uniformity diluted the states' discretion in establishing WQS and utilizing innovative methods.⁸⁴

The 1965 and 1972 amendments appeared to erode a significant portion of the "initiative and flexibility of the States in

77. *Id.* at 204.

78. 33 U.S.C. § 1313(a)(2)-(3), (c)(3).

79. *Id.* § 1313(c)(4)(B).

80. *Id.* § 1312(a) (2001).

81. *Id.* § 1313(d)(2).

82. CRAIG, *supra* note 34, at 206-207.

83. 33 U.S.C. §§ 1252(a), 1253(a) (2010).

84. *See* CRAIG, *supra* note 34, at 204.

exercising their primary responsibilities and rights” to abate pollution.⁸⁵ However, the only right lost was the ability of the states to drag their feet in setting standards. Now, the federal government was required to step in. While the increased federal control may lead one to conclude that EPA was now the states’ boss, the states still retained the primary duty of administering WQS. As long as the states acted at a reasonable pace and non-arbitrarily, they had little to fear from EPA. It is important to note that even after EPA has set standards, the states may re-submit their own (corrected or new) standards for EPA’s approval (and subsequent withdrawal of the federal standards). For instance, states can always enact WQS that are more stringent than the federal standards.⁸⁶ Despite these flexibilities, the courts have often reiterated the states’ primary role as a warning against EPA encroaching states’ rights.

D. *The Judiciary’s Limitations*

The Supreme Court has bolstered states’ rights in several decisions that could be understood as limiting the federal government’s authority within the WQS context. At a minimum, the Court’s willingness to emphasize the states’ primacy and uphold state actions that limit or change federally-set standards may send a message to federal agencies to tread lightly when initiating actions within this area. Although these cases are supportive of state autonomy in land use, they neither expand states’ rights past any right already granted or preserved in the CWA nor abridge federal authority. Some infringement of states’ traditional land use authority will necessarily result any time a federal agency follows the CWA’s mandatory duties to set WQS for states that fail to do so or do so incorrectly.

1. States retained jurisdiction over land-use and water allocation.

The Supreme Court’s decision in *Rapanos*⁸⁷ provides a useful discussion of the underlying federalism concerns that arise in challenges under the CWA. In *Rapanos*, Justice Scalia’s plurality opinion found that isolated wetlands adjacent—but with no “continuous surface connection”—to ditches that occasionally drain into tributaries of navigable waters were not

85. S. Rep. No. 92-414, at 97 (1972), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3767 (quote from Sen. James L. Buckley (C-N.Y.) who discussed his fears of what the 1972 amendments would do to states’ rights).

86. 33 U.S.C. § 1370 (1994).

87. *Rapanos v. United States*, 547 U.S. 715 (2006).

within the Corps' jurisdiction.⁸⁸ Scalia found that the Corps stretched the terms "the waters of the United States" too far when requiring permits for certain wetlands that had no clear, continuous surface connection to ditches that only periodically drained into navigable waters.⁸⁹ Interestingly, Scalia's interpretation was partially founded on the CWA's policy of preserving the rights of states.⁹⁰ In reaching this result, Scalia rejects Justice Kennedy's rationale in a concurring opinion that relied on the CWA's main purpose—cleaning up waters—when interpreting the scope of the Corps' jurisdiction.⁹¹

Specifically, Scalia found that the Corps' interpretation would significantly infringe the states' traditional autonomy over land use and water allocation by subjecting almost all development planning to federal control.⁹² According to Scalia, unprecedented intrusions into traditional state authority and any act that presses the limit of the Congress' constitutional validity, under the Commerce Clause, must have "clear and manifest" congressional approval.⁹³ Here, the mere terms "the waters of the United States" was not enough to allow the federal government to encroach upon a state's land use decisions.

The autonomy of states over land use decisions is a basic tenet of constitutional law, and like Scalia pointed out, the CWA expressly preserved all traditional rights of the states.⁹⁴ Moreover, it is easy to see that as the Corps' jurisdiction expands to more and more wetlands; it increasingly interrupts a state's ability to decide land use issues. While most instances of federal actions under the CWA do not exhibit such extreme infringements on states' rights, this is a constant concern to courts. It is important to keep in mind that any action taken by EPA or the Corps while executing their duties will interfere at some level with these reserved rights.⁹⁵

88. *Id.* at 754.

89. *Id.* at 733-735, 754.

90. *Id.* at 734.

91. *Rapanos*, 547 U.S. at 754.

92. *Id.* at 734.

93. *Id.* at 738.

94. *Id.* at 733. Scalia explained that the preservation of rights could not have covered the new administrative program appointed to states under §1344(g)-(l) because that program was added in 1977, five years after the preservation clause. *Id.*

95. *See, e.g., Riverside Irrigation Dist. v. Andrews*, 758 F.2d 508 (10th Cir. 1985) (Allowing Corps' denial of a nationwide permit despite impairment of state authority to allocate water because it was within the Corps' statutory authority to deny based on its determination that depletion of flow from increased consumptive use of water would adversely affect the whooping crane's critical habitat.).

2. States can condition federal permits under the CWA.

In 2006, Justice Souter delivered the court's opinion in the *S.D. Warren* case, which confronted the issue of whether a state had the authority to condition a federal NPDES license to a hydroelectric dam operator.⁹⁶ After rejecting all of the permittee's arguments, the Court concluded that the dam raised a potential for discharge, which required state approval under Section 401 of the CWA.⁹⁷ The Court found that since a dam is a "man-induced alteration" of a river's flow and circulation it constitutes pollution, and therefore, fell within the states' realm of control.⁹⁸ The Court went further by noting how the CWA explicitly preserved states' rights and respected state concerns by giving them authority to impose stricter standards than EPA.⁹⁹ In the Court's opinion, the CWA's grant of authority to states to enforce "any other appropriate requirement of state law" for discharges was "essential" for preserving state authority to control pollution by preventing permittees from using federal permits as shields from state law.

While the propositions raised by the Court in *S.D. Warren* were not radical, the Court elaborated on the states' primary authority to control pollution despite any direct challenges to this assertion. In fact, the permittee had not raised any issue with respect to its federal permit being sufficient to assure compliance with the CWA or attempt to hide behind their federal permit. Perhaps the Court reasoned this was the real intention behind the permittee's argument; however, the only question before the Court was whether or not the dam would discharge pollution thereby making the permit susceptible to further state requirements. Therefore, the Court's dicta reinforces states' primacy but is limited to the context where states are enforcing stricter standards than EPA's in order to protect their WQS.

An opinion by Justice O'Connor in 1994 also dealt with a state's authority to condition federal permits under the CWA.¹⁰⁰ In *PUD No.1*, a local utility district claimed the state's minimum stream flow conditions placed in its Section 401 certification were unrelated to its two discharges resulting from its hydroelectric power plant and outside the state's authority.¹⁰¹ O'Connor held that the state could condition the project itself—and not just the

96. *S.D. Warren v. Me. Bd. of Env'tl. Prot.*, 547 U.S. 370 (2006).

97. *Id.* at 373. Section 401 requires state approval for activities "which may result in any discharge into the [Nation's] navigable waters." 33 U.S.C. § 1341(a)(4).

98. *S.D. Warren*, 547 U.S. at 385.

99. *Id.* (citing 33 U.S.C. §§ 1251(a), 1370).

100. *PUD No.1 of Jefferson County v. Wash. Dept. of Ecology*, 511 U.S. 700 (1994).

101. *Id.* at 711.

discharges—with any limitation necessary to ensure compliance with the state’s WQS and/or designated use.¹⁰² The major cause of disagreement in *PUD No. 1* was not whether there was a discharge like in *S.D. Warren*, but the scope of the state’s authority under Section 401 of the CWA. The Court found that the minimum stream flow condition, although directed at the activity as a whole and required in order to protect the designated use, was permissible.¹⁰³ O’Connor relied in part on an EPA interpretation to find that Section 401(d) expands the states’ authority to condition an activity generally and need not be linked to the discharge itself.¹⁰⁴

Although *PUD No. 1* provides support for states’ rights in the WQS context, the Court also relies on a federal interpretation in its analysis that holds the same position.¹⁰⁵ The Court also cites to a federal regulation that requires the states to ensure water uses and quality are protected, the antidegradation policy, as support for the states’ actions.¹⁰⁶ Therefore, although the Court is clearly supportive of the state’s authority, it utilizes federal guidance and regulations as well, which moderates the state’s primacy in WQS. In addition, this scenario involves a state attempting to strengthen federal standards—not weaken them—like *S.D. Warren*. The Court also noted that the states’ authority under Section 401 was not “unbounded” and that they could only impose limits in connection with the provisions listed or other appropriate state laws.¹⁰⁷

In sum, the state authority protected in *PUD No. 1* and *S.D. Warren* rests on the same proposition asserted in *Rapanos* that states traditionally control all land use and water allocation matters. In *PUD No. 1* and *S.D. Warren*, however, the state’s action is what is in question and not whether a federal agency has infringed their rights like in *Rapanos*. This may explain the Court’s seemingly less deferential attitude towards states’ rights in *PUD No. 1* when referencing federally imposed duties on the states to take the action in question and warning that the state

102. *Id.* at 723.

103. *Id.* at 719.

104. *PUD No.1*, 511 U.S. at 711. Specifically, the Court held that a state can impose conditions not directly tied to a discharge because §401(d) says states may impose “other limitations” to ensure compliance. *Id.* Here “other limitations” were adopted per §303 that is incorporated by reference into §301, which is specifically listed under §401(d) as an applicable limit. *Id.* In addition, §401(d) states that a state can condition a permit in accordance with “any other appropriate” state law as well. *Id.*

105. *Id.* at 712.

106. *Id.* at 714.

107. *Id.* at 711.

authority is not limitless.¹⁰⁸ Regardless, the Court clearly indicates that cooperative federalism under the CWA provides the states flexibility to exceed federal minimums, but it does not mean states are immune from federal intervention.

II. ENVIRONMENTAL FEDERALISM

Legal uncertainty has plagued the federalism structure of the U.S. Constitution since its inception.¹⁰⁹ Since federalism often acts as a limit on Congress' ability to impose environmental standards on the states,¹¹⁰ it inherently spurs conflicts over whether a particular exertion of power was constitutionally justified. Throughout most of U.S. history, environmental regulation has been within the jurisdiction of local and state control.¹¹¹ It was not until the 1960's that environmental awareness began to sprout, which lead to the enactment or substantial amendment of most of our major environmental laws.¹¹² These new laws, including the CWA, transformed from "relatively modest federal research and financial assistance programs" to "comprehensive, national regulatory programs."¹¹³ This increase in federal oversight and control reduced the states' ability to exercise their rights as freely as they once had.¹¹⁴

Environmental federalism refers to the allocation of responsibilities between federal, state, and local governments for environmental protection.¹¹⁵ While there are several terms used to describe this distribution of power, this article uses environmental federalism as an umbrella term, which encompasses other terms like dual federalism and cooperative federalism. Dual federalism, which is not the focus of this article, refers to federal and states endeavors that are uncoordinated.¹¹⁶ Cooperative federalism, on the other hand, seeks to achieve a balance of power between the states and

108. *PUD No.1*, 511 U.S. at 712.

109. Robert V. Percival, *Environmental Federalism: Historical Roots and Contemporary Models*, 54 MD. L. REV. 1141, 1143 (1995).

110. James R. May, *The Intersection of Constitutional Law and Environmental Litigation*, in ENVIRONMENTAL LITIGATION: LAW AND STRATEGY 359, 374 (Cary R. Perlman ed., 2009).

111. See Percival, *supra* note 109, at 1147-57.

112. *Id.* at 1157-61.

113. *Id.* at 1161.

114. Specifically, federal control limited the state's ability to regulate less stringently than the federal standards.

115. Percival, *supra* note 109, at 1141.

116. Robert L. Fischman, *Cooperative Federalism and Natural Resources Law*, 14 N.Y.U. ENVTL. L.J. 179, 184 (2005).

federal government where efforts are integrated.¹¹⁷ Common examples of cooperative federalism include conditioning receipt of federal funds upon a state's adoption of regulatory standards or threatening preemption of federal standards if the states do not act.¹¹⁸ The core features of a cooperative federalism structure are compliance incentives, federally set minimum standards, federal oversight and enforcement, and state flexibility in customizing and exceeding federal standards.¹¹⁹

Although the cooperative federalism scheme for WQS was enacted after decades of failed attempts to encourage states to act on their own,¹²⁰ there has been a recent movement towards decentralization in several areas including environmental matters.¹²¹ Climate change in particular has generated many state-level initiatives and innovations in regulation, such as California's vehicle emission standards and numerous states' greenhouse gas emission targets, due to federal inaction.¹²² These recent actions have increased the states' legitimacy for handling environmental ailments that may induce some to desire increased state control over WQS. However, fresh victories cannot be viewed in isolation from past failures.

There is not a one-size-fits-all approach to environmental federalism.¹²³ In fact, studies have shown that people's attitudes regarding what level of government they want in charge is issue-dependent.¹²⁴ A study published this year found that most people preferred the federal government to have primary authority on most environmental issues, including pollution.¹²⁵ Interestingly, political orientation and education level were the biggest indicators of how people made their choices—the more liberal and educated a person, the more they desired federal control.¹²⁶ Public preferences, along with balancing benefits against costs, are necessary considerations when developing a cooperative federalism scheme to ensure its legitimacy is not undermined.¹²⁷ Before discussing the arguments regarding the balance of power

117. *Id.*

118. *Id.* at 189-90.

119. *Id.*

120. Percival, *supra* note 109, at 1142.

121. *See* Schapiro, *supra* note 26, at 33.

122. *Id.* at 40-41.

123. For an interesting and detailed discussion as to why *see* Daniel C. Esty, *Revitalizing Environmental Federalism*, 95 MICH. L. REV. 570 (1996) [hereinafter Esty, *Revitalizing*].

124. David Konisky, *Public Preferences for Environmental Policy Responsibility*, 41 PUBLIUS: J. FEDERALISM 78-80 (2010).

125. *Id.* at 95.

126. *Id.* at 93-95.

127. *Id.* at 97 (discussing how public preferences should be considered).

and its connection to sustainable WQS, this section briefly explains the constitutional basis for the conflicts that arise when governments have to share control.

A. *The 10th and 11th Amendments*

The Constitution fails to explain the relationship between the federal government's enumerated powers and the states' reserved powers, which often leads to conflict.¹²⁸ Environmental federalism concerns derive from the 10th and 11th Amendments, including preemption, the Commerce Clause, and the Dormant Commerce Clause.¹²⁹ When dealing with the CWA's water quality standards, however, the issues mainly revolve around usurpation of traditional state powers reserved by the 10th Amendment and 11th Amendment sovereign immunity.¹³⁰

First, the 10th Amendment reserves to the states all "powers not delegated to the United States by the Constitution, nor prohibited by it to the States."¹³¹ In practice, the 10th Amendment acts as a limit on Congress' authority to enact environmental laws pursuant to the Commerce Clause.¹³² The judiciary uses the 10th Amendment to prevent the federal government from infringing the states' autonomy in traditional areas like land use.¹³³ As mentioned earlier, the Supreme Court has held that Congress cannot "commandeer" state resources when forcing states to adhere to environmental policies.¹³⁴ Likewise, a plurality in *Rapanos* prohibited the Corps from attempting to extend its jurisdiction under Section 404 of the CWA because it would unduly impair the states' control over land use matters.¹³⁵ Thus, the 10th Amendment protects a state's ability to allocate resources and manage its growth.

Next, the 11th Amendment prohibits Congress from abrogating the states' immunity from federal suits by persons other than the federal government, absent state consent.¹³⁶ This

128. Fischman, *supra* note 116, at 183.

129. GLICKSMAN ET AL., *supra* note 8, at 91-136.

130. While preemption may seem to be implicated, the CWA sets minimum standards and allows states to enact stronger laws, which circumvents most preemption issues. Percival, *supra* note 109, at 1144.

131. U.S. CONST. amend. X.

132. May, *supra* note 110, at 374.

133. *Id.*

134. *New York v. United States*, 505 U.S. 144, 175 (1992).

135. *Rapanos v. United States*, 547 U.S. 715, 756 (2006).

136. May, *supra* note 110, at 375. The seminal case for the current interpretation of the 11th Amendment is *Hans v. Louisiana*, wherein the Court extended the 11th Amendment's application in a direction that favored the states. Nathan C. Thomas, Note, *The Withering Doctrine of Ex Parte Young*, 83 CORNELL L. REV. 1068, 1074 (1998).

allows states to avoid repercussions when disregarding federal laws and keeps states from having to redress violations of federal laws that occur within their jurisdiction.¹³⁷ While the state entity is ensured protection, this shield does not unconditionally extend to state officials.¹³⁸ Under the *Ex Parte Young* doctrine, state officials can be forced to comply with federal law.¹³⁹ In *Ex Parte Young*, the Supreme Court reasoned that when officials act outside the bounds of their constitutional authority, they cannot then benefit from its protections.¹⁴⁰ However, nearly ninety years later, the Court limited *Ex Parte Young* by holding that if Congress has prescribed an enforcement remedy against a state of a statutorily created right, then a court should “hesitate” before applying the doctrine.¹⁴¹

Together, both amendments serve to safeguard state decision-making by limiting federal and judicial intrusions into state affairs. For WQS, the 10th Amendment concerns arise when EPA sets WQS, whereas the 11th Amendment will only come into play when a party files suit against a state or state official. Therefore, the 10th Amendment provides the basis for most conflicts under cooperative federalism. While the 10th Amendment limits federal authority, it is important to note that in order for a state to succeed on a claim it must show that the federal regulation is regulating states as “states,” addresses “attributes of state sovereignty,” and would directly impair areas of traditional state functions.¹⁴²

B. How Cooperative Federalism Can Help Achieve Sustainable WQS

Numerous commentators have written about the pros and cons of cooperative federalism in environmental regulation. This article, however, discusses the arguments that are specifically relevant to implementing WQS sustainably. Sustainability or sustainable development has a range of definitions, but the most widely accepted defines it as “meet[ing] the needs of the present without compromising the ability of future generations to meet their own needs.”¹⁴³ In the WQS context, this requires

137. May, *supra* note 110, at 375-76.

138. Thomas, *supra* note 136, at 1070.

139. *Ex Parte Young*, 209 U.S. 123, 167 (1908); May, *supra* note 110, at 376; Thomas, *supra* note 136, at 1076.

140. May, *supra* note 110, at 376.

141. *Seminole Tribe v. Florida*, 517 U.S. 44, 74 (1996).

142. *Hodel v. Va. Surface Mining & Reclamation Ass'n*, 452 U.S. 264, 286-87 (1981).

143. U.N. World Comm'n on Env't and Dev., *Our Common Future*, ¶ 27, U.N. Doc. A/42/427 (1987).

replenishment of water at a rate that matches or exceeds its consumption¹⁴⁴ and restoration of water quality to ensure clean water. Although the principle of sustainability has gained global recognition and appears frequently in policy and laws, the concept has been around for nearly 40 years.¹⁴⁵

The text of the CWA only mentions the term sustainable once,¹⁴⁶ but its spirit and purpose clearly embody the sustainability principle. Specifically, the CWA's purpose to "restore and maintain the . . . integrity of the Nation's waters" would—if achieved—guarantee clean water for future generations.¹⁴⁷ The specific mandates of the WQS program promote sustainability by establishing regulatory floors and anti-backsliding policies. First, designated uses must meet the minimum fishable-swimmable standard.¹⁴⁸ Second, WQS must "enhance the quality of water"¹⁴⁹ and include "an antidegradation policy that protects existing uses and high water quality."¹⁵⁰ These provisions seek to improve water quality and prevent it from falling below the level needed to maintain ecosystems and public health. When successfully implemented, this system satisfies our intergenerational stewardship obligations by each generation leaving behind the same, if not better, water quality.

Adept execution of these mandates is crucial for securing sustainable water quality. As discussed earlier, the CWA currently operates under a cooperative federalism structure. Therefore, this article evaluates the arguments commonly asserted against and for cooperative federalism through a sustainability lens.

1. Decentralization

Due to recent state initiatives in environmental protection,¹⁵¹ this section focuses on the two main rationales behind decentralizing our current system and how it could

144. See Daniel C. Esty, *Sustainable Development and Environmental Federalism*, 3 WIDENER L. SYMP. J. 213, 213 (1998) [hereinafter Esty, *Sustainable Development*].

145. James May, *Not At All: Environmental Sustainability in the Supreme Court*, 10 SUSTAINABLE DEV. LAW & POL'Y 20, 20 (2009).

146. 33 U.S.C. § 1300(i)(1) (2000) (regarding the Pilot Program for Alternative Water Source Projects).

147. 33 U.S.C. § 1251(a).

148. SALZMAN & THOMPSON, *supra* note 45, at 159.

149. 40 C.F.R. § 130.3; 40 C.F.R. § 131.2.

150. U.S. ENVTL. PROT. AGENCY, WATER QUALITY STANDARDS HANDBOOK, *supra* note 60; 40 C.F.R. § 131.12.

151. See Schapiro, *supra* note 26, at 33.

influence the sustainability of WQS.¹⁵² Particularly, would a more decentralized scheme render WQS more sustainable? Since the CWA's express language preserves the traditional rights of the states, the first issue is whether cooperative federalism's effect on a state's ability to decide land use and water allocation hinders sustainable practices in water quality management.

More decentralized decisions can increase experimentation with governmental policies.¹⁵³ Although some may worry that federal oversight and control could erode the states' initiative and flexibility,¹⁵⁴ the WQS program does not prevent states from experimenting or tackling environment pollution tenaciously. In fact, states are supposed to establish their WQS in the first instance. While states must follow some federal guidelines when creating WQS, they can always employ a stricter standard, which preserves their autonomy.¹⁵⁵ States can also choose not to establish WQS, and instead, follow federally set standards. In terms of sustainability, only inadequate—too low—standards would be injurious to future generations. Thus, the federal floor limits some options in a state's decision-making, but only those options that would lead to unsustainable water quality. Removing the federal floors would only allow states to reduce their standards from levels necessary to maintain fishable-swimmable waters—hardly an overbearing standard.

The next big question is whether cooperative federalism prevents states from utilizing their expertise in local matters. Many commentators argue that state government can better reflect local preferences in environmental quality, which facilitates public choice.¹⁵⁶ Since there are geographic variations in preferences, a federal one-size-fits-all approach rids the possibility of having diversity and does not account for differences in priorities.¹⁵⁷ This begs the question whether diversity in environmental regulation—here water quality—is an area the public should be given tailored options below a set minimum. While costs in some areas may end up outweighing

152. Although a wholly centralized system would be another possibility to cooperative federalism, this is not a viable option for many reasons—mainly the lack of resources and efficiency concerns.

153. Richard B. Stewart, *Pyramids of Sacrifice? Problems of Federalism in Mandating State Implementation of National Environmental Policy*, 86 YALE L.J. 1196, 1210 (1977).

154. Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, 1972 U.S.C.A.N. (86 Stat. 816) 3668, 3767 (reference to comment by Sen. James L. Buckley (C-N.Y.)).

155. Percival, *supra* note 109, at 1175.

156. Stewart, *supra* note 153, at 1211.

157. GLICKSMAN ET AL., *supra* note 8, at 88.

local benefits under a federal standard,¹⁵⁸ complete decentralization would result in areas with lower demands or lower resources having poorer water quality. Lower standards would be more likely to attract industry, lower property values, and expose the poor to more pollution than those that can afford to live elsewhere.

On the other hand, some argue that federal pollution standards cause unequal distribution of costs among the poor.¹⁵⁹ They assert that federal standards promote an elitist vision of society that imposes unequal costs across the states like limits on development or higher utility bills.¹⁶⁰ Since the poor have fewer resources, it is argued that the poor should not be asked to make sacrifices for the sake of the environment when they have more pressing needs.¹⁶¹ So which method is more just? At least federal floors provide those with fewer resources the same healthy environment as everyone else. Moreover, increased health costs due to poorer water quality under a more decentralized plan would likely outweigh the economic burdens imposed by a federal floor. The principle of sustainability would also weigh in favor of having a federal floor for WQS because the hydrologic cycle is complex—poorer water quality in one jurisdiction will often affect areas beyond those political borders. Finally, a state's expertise could still reflect local preferences for more stringent standards.

2. Benefits of Cooperative Federalism

When implemented effectively, the cooperative federalism structure for WQS promotes environmental protection, which is a vital part of sustaining water quality. The WQS structure offers a minimum level of protection for a life sustaining resource regardless of where you live.¹⁶² This enables all citizens to have more faith in water quality when traveling and aids states in resisting pressures to deregulate.¹⁶³ No system is perfect, but cooperative federalism provides security and solutions to common problems in resource management and environmental regulation that decentralizing would only exacerbate.

Cooperative federalism generates checks and balances that boost efficiency and success, which correspondingly make WQS more sustainable by securing results. First, WQS have

158. Stewart, *supra* note 153, at 1219-20.

159. *Id.* at 1220-22.

160. *Id.* at 1221.

161. *Id.* at 1221-22.

162. Percival, *supra* note 109, at 1171.

163. *Id.* at 1172.

built-in safety valves to guarantee water quality measures are in place with its minimum federal standards, EPA approval process, and threat of EPA preemption. Second, cooperative federalism combines the advantages of federal minimums and oversight with allowances for state flexibility. This overcomes many of the disadvantages of a centralized system because states can still utilize their local expertise to create WQS within the general confines of available federal guidance and setting advanced standards when needed. Lastly, federal involvement assists efficiency in data collection, funding, and research due to economies of scale.¹⁶⁴ It would be wasteful duplication of effort, for example, to have each state conduct research and collect data on water quality issues that all or most states share.¹⁶⁵ Likewise, variations in state resources could cause some states to rely on shoddy science or refuse to pay the upfront costs of research hoping to eventually rely on another's work.¹⁶⁶

Federal standards are necessary not only because history and theory show that states are often ill equipped to handle a national problem like water quality alone, but also because a "structural mismatch" can result in unsustainable practices.¹⁶⁷ A structural mismatch occurs when a solution does not correspond to the scope and nature of the problem. Water quality, for instance, is a transboundary issue that transports pollution across jurisdictions, and thus, requires an equally pervasive solution. Attempting to control water quality on a state or local level can lead to conflicts, externalities, and diversity in standards that thwart overall success.

First, externalities—good and bad—must be controlled.¹⁶⁸ To do this, an optimal WQS scheme must incorporate all costs and benefits that result from a given activity.¹⁶⁹ Unsustainable practices result when benefits from an action are separated from its costs.¹⁷⁰ In the water quality context, a positive externality occurs when a downstream state enjoys better water quality due to an uncompensated action by another.¹⁷¹ A negative externality, on the other hand, occurs when a downstream state

164. GLICKSMAN ET AL., *supra* note 8, at 86.

165. Esty, *Revitalizing*, *supra* note 123, at 614-15.

166. GLICKSMAN ET AL., *supra* note 8, at 86.

167. See Esty, *Sustainable Development*, *supra* note 144, at 219.

168. This article focuses on true or technological externalities, which generate shifts in resource allocations—clean water. WILLIAM BAUMOL & WALLACE OATES, *THE THEORY OF ENVIRONMENTAL POLICY* 29 (2d ed. 1988).

169. Esty, *Revitalizing*, *supra* note 123, at 593.

170. Esty, *Sustainable Development*, *supra* note 144, at 215.

171. See GLICKSMAN ET AL., *supra* note 8, at 11.

suffers costs or harms that go uncompensated.¹⁷² Thus, negative externalities result from inadequate WQS, and positive externalities stem from sufficient or superior WQS. Although federal control of negative externalities is not always successful, decentralizing environmental regulation is not the answer¹⁷³ because it would leave downstream states with little recourse in the face of negative externalities.¹⁷⁴

When striving for sustainable water quality, the federal government will need to level out externalities because states have little incentive to abate or clean-up pollution that harms others or to pay upstream neighbors for benefits received.¹⁷⁵ In the former instance, states are violating the polluter pays principle¹⁷⁶ and, in the latter, states are acting as free riders.¹⁷⁷ Cooperative federalism under the WQS program offers a clever solution to these problems by avoiding the pitfalls of following an entirely decentralized or centralized system. Particularly, federal floors lessen the occurrence of negative externalities by ensuring a certain level of water quality and federal oversight can help negotiation solutions between states when positive externalities occur.¹⁷⁸ Additionally, cooperative federalism allows states to employ more stringent standards to counteract any remaining negative externalities impacting its jurisdiction. To the extent states still refuse to handle positive externalities missed at the federal level, free riders will still be a possibility. However, unlike with negative externalities, a few uncaught positive externalities should not lead to impaired waters. Thus, this structure creates two layers of protection stemming from

172. *Id.*

173. See Esty, *Revitalizing*, *supra* note 123, at 625; *But see* Wallace Oates, Discussion Paper, A Reconsideration of Environmental Federalism 5 (2001) (arguing that national uniform standards are not the answer).

174. SALZMAN & THOMPSON, *supra* note 45, at 162; *See also* GLICKSMAN ET AL., *supra* note 8, at 11-12 (nuisance claims are hard to prove so states would be left with limited options).

175. GLICKSMAN ET AL., *supra* note 8, at 85.

176. Rio Declaration for the U.N. Conference on Environment and Development, Principle 15-16, June 13, 1992, 31 I.L.M. 874 [hereinafter Rio Declaration]. The polluter pays principle stands for the proposition that the one causing the pollution or harm should pay to fix it.

177. The free rider problem is a situation where parties affected by a harm—here, bad water quality—wait for others to take action and solve the problem. *See* GLICKSMAN ET AL., *supra* note 8, at 11-15. Thus, downstream states wait on upstream states to take stringent actions to stop water pollution or decide to stop taking water quality measures because of benefits from upstream states' actions.

178. *See* Esty, *Revitalizing*, *supra* note 123, at 625 & n.196 (discussing how centralized authority is appropriate for many environmental harms because it can better coordinate efforts—specifically addressing internalities).

each level of government resulting in more sustainable water quality practices.

The next problem is an often-criticized theory called race-to-the-bottom. Race-to-the-bottom posits that, in the absence of federal standards, states will deregulate or lower their standards in order to attract industry and development.¹⁷⁹ The theory claims that in order to expand or maintain a strong economy—produce jobs, increase tax base—states will lower environmental standards. Although it is paradoxical for a state to harm environmental quality, and thus, its resident's health just to improve another area of their life, there is support for this proposition.¹⁸⁰ For example, a 1997 study found that 57 of 65 state regulators considered industry relocation when making environmental decisions and 48% actually lowered standards as a result.¹⁸¹ In addition, many states have enacted laws forbidding environmental regulators from creating stricter standards than federal levels or creating procedural hurdles to prevent it from occurring.¹⁸² This effectively transforms federal floors into ceilings.¹⁸³ What cooperative federalism and its federal floors for WQS bring to the table, however, is preventing the race from spiraling past a certain depth.

Due to constitutional constraints and data collection, it is hard for the federal government to monitor how states allocate resources and enforce WQS, so the effectiveness of programs varies among states.¹⁸⁴ Although EPA can preempt inadequate state standards, it also has limited resources.¹⁸⁵ Therefore, federal floors alleviate some of the worries. For WQS, race-to-the-bottom was real and local pressures and special interests captured state governments. In fact, state foot dragging and the practice of setting WQS that only helped local interests triggered Congress to change the WQS structure from total state control to cooperative federalism.¹⁸⁶ Race-to-the-bottom's biggest threat for sustainability concerns is that lax WQS of some states will outweigh benefits derived from others that results in poor water

179. GLICKSMAN ET AL., *supra* note 8, at 86.

180. See Oates, *supra* note 173, at 5-8; GLICKSMAN ET AL., *supra* note 8, at 87.

181. GLICKSMAN ET AL., *supra* note 8, at 87.

182. Victor Flatt & Paul Collins, Jr., *Environmental Enforcement in Dire Straits: There is No Protection for Nothing and No Data for Free*, 85 Notre Dame L. Rev. 55, 61 (2009); GLICKSMAN ET AL., *supra* note 8, at 87.

183. Flatt & Collins, Jr., *supra* note 182, at 61.

184. See Percival, *supra* note 109, at 1175.

185. *Id.*

186. Robin Kundis Craig, *Adapting Water Federalism to Climate Change Impacts: Energy Policy, Food Security, and the Allocation of Water Resources*, 5 ENVTL & ENERGY L. & POL'Y J. 183, 203 (2010).

quality overall. Corruption, special interest capture, and local pressures lead to unsustainable WQS, and cooperative federalism, with its multi-layer approach, helps counteract these influences and prevent race-to-the-bottom.¹⁸⁷

In sum, a cooperative federalism structure theoretically provides a more solid solution to attaining sustainable WQS by ridding or at least reducing common problems in environmental regulation that occur when only one level of government is in control. After exploring the CWA's intended cooperative federalism structure and how this structure can indeed result in sustainable water quality for future generations, it is important to see how and if this structure works in practice.

III. DOES COOPERATIVE FEDERALISM REALLY WORK?

The CWA's cooperative structure for implementing WQS was recently put to the test when several environmental groups sued EPA for failing to set numeric nutrient criteria for Florida.¹⁸⁸ The case has resulted in EPA utilizing its authority under section 1313(c)(4)(b) of the CWA and proposing numeric nutrient criteria for Florida's lakes and flowing waters, which has aroused many supporters and relentless adversaries. EPA's rule has national implications because it could serve as a prototype for the remaining thirty-one states that only have narrative standards.¹⁸⁹ Over half of the states are anxiously watching this litigation unfold and anticipating its impacts. Not only do municipal, agricultural, and industrial discharges staunchly oppose EPA's decision, but so do state governmental entities like the Florida Department of Environmental Protection ("FDEP"), the Florida Department of Agriculture ("FDOA"),¹⁹⁰ and South Florida Water Management District ("SFWMD").¹⁹¹

187. See Esty, *Sustainable Development*, *supra* note 144, at 223.

188. *Fla. Wildlife Fed'n*, 2009 WL 5217062 (No. 4:08cv324-RH/WCS). Plaintiffs include the Florida Wildlife Federation, Inc.; Sierra Club, Inc.; Conservancy of Southwest Florida, Inc.; Environmental Confederation of Southwest Florida, Inc.; and St. Johns Riverkeeper, Inc. *Id.*

189. U.S. ENVTL. PROT. AGENCY, 2008 STATE ADOPTION, *supra* note 11, at 10.

190. See Jerry Brooks & Chuck Aller, Environmental Forum at the Florida State University College of Law, Florida Agriculture and the Environment: What's on the Horizon (Oct. 14, 2009) (discussing how EPA's imposition of numeric nutrient standards is to hasty and will threaten the survival of the agricultural industry), *available at* <http://mediasite.apps.fsu.edu/Mediasite/Viewer/?peid=073ea752171a447687b742b7802c924d>.

191. See \South Florida Water Management District's Motion to Intervene, *Fla. Wildlife Fed'n*, 2008 WL 5679795 (No. 4:08cv324-RH/WCS).

Although EPA has exercised its authority under the CWA to impose WQS after states failed to adopt them before,¹⁹² this is the first time EPA has set numeric nutrient criteria for any state even though in 1998 EPA recognized the need for such standards.¹⁹³ The EPA determined, for example, that high levels of nitrogen and phosphorus, or nutrient pollution, “results in harmful algal blooms, reduced spawning grounds and nursery habitats, fish kills, oxygen-starved hypoxic or ‘dead’ zones, and public health concerns related to impaired drinking water.”¹⁹⁴ Moreover, almost every state has suffered from “nutrient-related degradation” of water quality.¹⁹⁵ In Florida, eutrophication has been a leading impediment to good water quality and the FDEP has spent nearly twenty million dollars on efforts spanning over ten years to address it.¹⁹⁶ The biggest problem, however, is that FDEP’s efforts have not resulted in any effective actions to abate nutrient pollution.

A prime example of EPA’s mandatory duty under section 1313 of the CWA emerged in the wake of Florida’s inaction. Although commentators disagree on whether or when EPA made a “determination” that numeric nutrient criteria were necessary,¹⁹⁷ EPA eventually agreed to this necessity during litigation.¹⁹⁸ The opponents of EPA’s actions, however, raise concerns as to its constitutionality and provide a glimpse into the mindset of a state government’s resentment towards EPA intrusions. I argue that despite Florida’s past efforts or future

192. For example, EPA used this authority to develop national numeric standards for toxics after the states failed to do so. Water Quality Standards, 57 Fed. Reg. 60848, 60857 (Dec. 22, 1992). In addition, EPA has used this authority on a state-specific level for coastal and Great Lakes Recreation Waters in 2004, Puerto Rico in 2003 (per court order), Kansas in 2003 (per court order), Kentucky in 2002, Alabama in 2002 (per consent decree), California in 2000, and Pennsylvania in 1996 (per court order). U.S. Env’tl. Prot. Agency Regulations and Determinations, Water Quality Standards, http://water.epa.gov/lawsregs/rulesregs/florida_index.cfm (last visited Feb. 23, 2001) [hereinafter U.S. Env’tl. Prot. Agency, Laws].

193. U.S. ENVTL. PROT. AGENCY, NATIONAL STRATEGY, *supra* note 12.

194. Memorandum from Benjamin H. Grumbles, Assistant Adm’r., U.S. Env’tl. Prot. Agency, to Water Dirs., et al., U.S. Env’tl. Prot. Agency, Nutrient Pollution and Numeric Water Quality Standards (May 25, 2007) [hereinafter Memorandum 2007], *available at* www.epa.gov/waterscience/criteria/nutrient/policy20070525.pdf.

195. *Id.* at 1-2.

196. FLA. DEP’T OF ENVTL. PROT., FLORIDA NUMERIC NUTRIENT CRITERIA HISTORY AND STATUS 1, *available at* <http://www.dep.state.fl.us/water/wqssp/nutrients/docs/fl-nnc-summary-100109.pdf>.

197. Some claim EPA made the determination in a 1998 National Strategy published by EPA, others state it occurred in 2001 when it published water quality criteria in the Federal Register or in 2009 when EPA issued a memo regarding Florida’s need for numeric standards. Intervenor’s in the lawsuit, however, claim that none of these qualify.

198. Consent Decree, *supra* note 24.

intent, EPA's action is within its constitutional and statutory authority. Moreover, the Florida debacle proves cooperative federalism is the necessary structure for achieving sustainable water quality mainly because of the federal backstop authority it provides in the event of state failure.

A. *The Numeric Nutrient Criteria Litigation*

In 1998, the EPA and the Department of Agriculture reported that almost forty percent of assessed waters throughout the United States were impaired and over half of the nation's watersheds had water quality problems.¹⁹⁹ To address the situation, EPA adopted a Clean Water Action Plan ("CWAP") that identified the need to reduce nutrient pollution and stated EPA would establish numeric criteria guidance for states.²⁰⁰ In response to the substantial effect excessive nutrients has on water quality, EPA also drafted a strategy plan that expected states to "adopt and implement numerical nutrient criteria" by the end of 2003.²⁰¹ The strategy plan indicated that EPA would promulgate nutrient criteria if a state did not make reasonable progress.²⁰² In 2001, EPA published seventeen Ecoregional Nutrient Criteria Documents and pushed the deadline for states to set numeric nutrient criteria back to 2004, but again indicated that EPA would set standards for the states if they did not comply.²⁰³

By the end of 2001, however, EPA began backpedaling on its request for states to adopt criteria and its promise to establish criteria for slow or idle states.²⁰⁴ Little was heard on the matter until six years later in 2007—and three years past the original deadline—when EPA reported on the states' progress over the past nine years. Unsurprisingly, EPA's report was bleak and indicated that the states had made hardly any progress.²⁰⁵ EPA described the necessity for criteria and the need to accelerate

199. Letter from Carol Browner, Adm'r, U.S. Env'tl. Prot. Agency and Dan Glickman, Sec'y, U.S. Dept. of Agric., to Albert Gore, Jr., Vice President of the U.S. (Feb. 14, 1998).

200. U.S. ENVTL. PROT. AGENCY, NATIONAL STRATEGY, *supra* note 12, at iii.

201. *Id.* at 9.

202. *Id.* at 10.

203. Notice of Ecoregional Nutrient Criteria, 66 Fed. Reg. 1671-01, 1671, 1673-74 (Jan. 9, 2001).

204. Memorandum from Geoffrey Grubbs, Dir. Office of Sci. & Tech., U.S. Env'tl. Prot. Agency, to Water Directors, et al., U.S. Env'tl. Prot. Agency on Dev. And Adoption of Nutrient Criteria into Water Quality Standards (Nov. 14, 2001) [hereinafter Memorandum 2001], *available at*

www.epa.gov/waterscience/criteria/nutrient/guidance/nutrientswqsmemo.pdf.

205. Memorandum 2007, *supra* note 194.

states' progress, but again provided no timeframes for nutrient criteria development.²⁰⁶

Since 2001, the FDEP has been conducting studies and holding meetings on numeric nutrient criteria, but still has yet to propose any. Instead, Florida still relies on a narrative standard for nutrients: "Nutrients: In no case shall nutrient concentrations of a body of water be altered so as to cause an imbalance in natural populations of aquatic flora and fauna."²⁰⁷ The consequence of using narrative standards, instead of numeric, is that there are no measurable or quantifiable baselines for assessing progress or for determining violations of WQS.²⁰⁸ These narrative standards have proven to be inadequate as evidenced by frequent and devastating algae blooms and continued degradation of Florida's waters. A 2008 report on Florida waters found that approximately thirty percent of rivers and streams and sixty percent of lakes and estuaries had poor water quality.²⁰⁹ Nutrients were a leading cause.²¹⁰

Florida and EPA's inaction spurred five environmental groups to file suit in July 2008 against EPA alleging that EPA had failed to fulfill its non-discretionary duty and seeking to force EPA to promptly set numeric nutrient criteria for Florida within a reasonable timeframe.²¹¹ Section 1313 of the CWA requires states to establish WQS "to protect the public health or welfare, enhance the quality of the water and serve the purposes of the [CWA]."²¹² As a safety-net, the CWA also mandates that EPA "promptly prepare and publish" revised or new WQS if the Administrator determines that it is "necessary to meet the requirements of the [CWA]."²¹³ Therefore, Plaintiffs argued that the 1998 Clean Water Action Plan and/or strategy report constituted a determination under section 1313(c)(4) of the CWA, and thus, triggered EPA's duty to publish new standards within ninety days. Plaintiffs asked the court for a declaratory judgment against EPA and injunctive relief requiring EPA to promptly set numeric standards for Florida.²¹⁴ EPA countered that the 1998 CWAP was not a determination because an

206. *Id.*

207. FLA. ADMIN. CODE ANN. r. 62-302-530 (2009).

208. First Amended Complaint for Plaintiffs, *supra* note 15, at 10, 13.

209. FLA. DEP'T OF ENVTL. PROT., 2008 INTEGRATED WATER QUALITY ASSESSMENT FOR FLORIDA x-xi (2008) [hereinafter FLA. DEP'T OF ENVTL. PROT., 2008 ASSESSMENT].

210. *Id.* at xii.

211. First Amended Complaint for Plaintiffs, *supra* note 15, at 13-14.

212. 33 U.S.C. § 1313(c)(2) (2010).

213. 33 U.S.C. § 1313(c)(4)(B) (2010).

214. Third Amended Supplemental Complaint for Plaintiffs at 25, *Fla. Wildlife Fed'n*, 2009 WL 5217062 (No. 4:08cv324-RH/WCS).

authorized official did not specifically review Florida's narrative standards and find them inadequate, which is required under section 1313(c)(4)(B).²¹⁵ Therefore, EPA claimed that the court lacked subject matter jurisdiction because the CWA's citizen suit provision only waives sovereign immunity for enforceable nondiscretionary duties.²¹⁶

While suit was pending, EPA made an "explicit and unequivocal determination that the Florida narrative standard was inadequate and that a revised or new standard was necessary" ("2009 Determination").²¹⁷ EPA declared that "achieving faster and more effective progress in water quality . . . is critical in Florida."²¹⁸ The 2009 Determination stated that numeric nutrient standards were needed for lakes, flowing waters, estuaries, and coastal waters in order to meet the CWA's mandates under section 1313(c). Later, in a Motion for Summary Judgment, EPA argued that even if the 1998 CWAP was a determination, EPA's January 2009 determination provided a reasonable timeframe in which to propose numeric standards so Plaintiff's request for immediate action was unnecessary.²¹⁹

Over the course of the suit, thirteen entities²²⁰ intervened as defendants and essentially alleged that the 1998 CWAP was not a determination triggering new standards.²²¹ Specifically, intervenor-defendants argued that the 1998 CWAP was not a determination because, like EPA had asserted, it was not a formal determination but part of a "patchwork" of planning documents.²²² After the 2009 Determination, Intervenor South Florida Water Management District argued that the 2009 determination was not the subject of this suit and compared it to

215. EPA's Response to Plaintiff's Motion for Summary Judgment at 2, *Fla. Wildlife Fed'n*, 2009 WL 5217062 (No. 4:08cv324-RH/WCS).

216. *Id.*

217. *Fla. Wildlife Fed'n*, 2009 WL 5217062.

218. Letter from Benjamin H. Grumbles, Assistant Adm'r, U.S. Env'tl. Prot. Agency, to Michael Sole, Sec'y, Fla. Dep't of Env'tl. Prot. 8 (Jan. 14, 2009).

219. EPA's Response to Plaintiff's Motion for Summary Judgment, *supra* note 215, at 13-17.

220. The intervenors are the following: Florida Pulp and Paper Association Environmental Affairs, Inc.; the Florida Farm Bureau Federation; Southeast Milk, Inc.; Florida Citrus Mutual, Inc.; Florida Fruit and Vegetable Association; American Farm Bureau Federation; Florida Stormwater Association; Florida Cattleman's Association; Florida Engineering Society; the South Florida Water Management District; the Florida Water Environment Association Utility Council, Inc.; the Florida Minerals and Chemistry Council, Inc.; and the Florida Department of Agriculture and Consumer Services.

221. *See, e.g.*, Intervenor South Florida Water Management District's Motion for Summary Judgment, *supra* note 25, at 13-18.

222. *Id.* at 10-11; Association Intervenors' Memorandum of Law in Opposition to Plaintiffs' Motion for Summary Judgment, *Fla. Wildlife Fed'n*, 2009 WL 5217062 (No. 4:08cv324-RH/WCS).

the 1998 CWAP to illustrate what a real determination would look like.²²³ Moreover, other intervenors argued that the 2009 Determination mooted all of Plaintiffs' claims except for the injunction demanding immediate action by EPA.²²⁴

In response to these allegations and the 2009 Determination, Plaintiffs amended their complaint to allege that their claim was not moot because EPA had still failed to act "promptly" to enact standards since the 1998 CWAP.²²⁵ In addition, Plaintiffs noted that the 2009 Determination failed to set any deadline and, thus, court intervention was still necessary to ensure prompt action.²²⁶ Over the next few months, some intervenor-defendants responded with cross-claims against EPA alleging that its 2009 Determination was arbitrary and capricious under the Administrative Procedure Act because they failed to support it with defensible science.²²⁷ In addition, several intervenors sent Notices of Intent to File Suit to EPA for its inadequate and improper "necessity determination" prior to the 2009 Determination,²²⁸ based on EPA's alleged consideration of pending litigation when forming its 2009 Determination.²²⁹ Intervenors also asserted that EPA failed to "marshal conclusive evidence to justify" its determination, failed to consider all appropriate factors, and that the issue should be left to Florida to handle—especially considering their immense efforts over the past ten years.²³⁰

Subsequent to EPA's 2009 Determination and a day after intervenors' Notices of Intent to File Suit, EPA agreed to a consent decree with Plaintiffs that required EPA to publish numeric nutrient criteria for Florida's lakes and flowing waters by January 14, 2009.²³¹ The consent decree required standards to be finalized and adopted by October 15, 2010, unless Florida

223. Intervenor South Florida Water Management District's Motion for Summary Judgment, *supra* note 25, at 10-11.

224. Association Intervenors' Memorandum of Law in Opposition to Plaintiffs' Motion for Summary Judgment, *supra* note 222.

225. Plaintiffs' Third Amended Complaint at 24, *Fla. Wildlife Fed'n*, 2009 WL 5217062 (No. 4:08cv324-RH/WCS).

226. *Id.*

227. Association Intervenors' Answer and Affirmative Defenses to Plaintiffs' Third Amended Complaint and Cross Claim at 16-18, *Fla. Wildlife Fed'n*, 2009 WL 5217062 (No. 4:08cv324-RH/WCS).

228. Notice of Intent to File Suit from Fla. Water Env't Ass'n Util. Council to Lisa Jackson, Adm'r, U.S. Env'tl. Prot. Agency (Aug. 13, 2009) (on file with author) [hereinafter FWEA Notice]; Notice of Intent to File Suit from Hopping Green & Sams to Lisa Jackson, Adm'r, U.S. Env'tl. Prot. Agency (Aug. 24, 2009) (on file with author) [hereinafter Hopping Notice].

229. FWEA Notice, *supra* note 228; Hopping Notice, *supra* note 228.

230. FWEA Notice, *supra* note 228; Hopping Notice, *supra* note 228.

231. Consent Decree, *supra* note 24; *Fla. Wildlife Fed'n*, 2009 WL 5217062.

submitted its own standards and EPA approved.²³² In addition, EPA had to adopt criteria for Florida's coastal and estuarine waters by January 14, 2011.²³³ All parties were allowed to file briefs in response to the consent decree, and the Court ultimately approved it.²³⁴ Intervenor-defendants' appeals of the consent decree are still pending.²³⁵

EPA published the proposed rule pursuant to the consent decree on January 26, 2010.²³⁶ Pursuant to its 2009 Determination that numeric standards were necessary, EPA proposed numeric nutrient WQS for lakes and flowing waters, including canals, and proposed a framework for Florida's development of "restoration standards."²³⁷ EPA extended the comment period for the proposed rule for a total of three months, and it closed on April 28, 2010.²³⁸

B. Usurpation of State Rights or Cooperative Federalism at its Best?

EPA's proposed rule for setting numeric nutrient standards in Florida is not a usurpation of Florida's traditional rights any more than other federal regulation that combats national harms. Although WQS can be state-specific and require localized variations, especially in the context of nutrients,²³⁹ they address a national problem because water bodies and pollution do not acknowledge state boundaries. The Florida rule illustrates how cooperative federalism operates, even though it took over a decade and a citizen's suit to nudge EPA into action. Cooperative federalism provides security against state inaction and EPA utilized this feature. To properly analyze whether EPA's action usurps Florida's traditional powers, this section explores EPA's constitutional and statutory bases to act and other arguments asserted by displeased constituents of Florida.

232. *Fla. Wildlife Fed'n*, 2009 WL 5217062, at *3.

233. *Id.*

234. *Id.* at *7.

235. Intervenor South Florida Water Management District's Notice of Appeal, *supra* note 25; Intervenor Florida Water Environment Association Utility Council's Notice of Appeal, *supra* note 25.

236. Water Quality Standards for the State of Florida's Lakes and Flowing Waters, 75 Fed. Reg. 4,174 (Jan. 26, 2010) (to be codified at 40 C.F.R. pt. 131).

237. U.S. Env'tl. Prot. Agency, Federal Water Quality Standards for the State of Florida, http://water.epa.gov/lawsregs/rulesregs/florida_index.cfm (last visited February 6, 2011).

238. *Id.*

239. Nutrient criteria are very complex to establish because they depend on many environmental factors, such as amount of sunlight, the depth of the water body, and flow rate or circulation.

Under Article I of the Constitution, Congress has the power to regulate commerce among the states.²⁴⁰ Under *U.S. v. Lopez*, an act by Congress is valid if it regulates channels of interstate commerce, instrumentalities of interstate commerce, or if it involves an activity that substantially affects interstate commerce.²⁴¹ The last prong is still controversial—in *United States v. Morrison* the Supreme Court held that to fall under the last prong, Congress must be regulating economic activity.²⁴² Although the Court has varied its treatment of the Commerce Clause, it presently interprets it narrowly and uses the 10th Amendment as a limit on Congress' power.²⁴³ While the CWA's structure of cooperative federalism is clearly constitutional,²⁴⁴ the extent to which the 10th Amendment restrains federal action can be difficult to decipher.

Unsurprisingly, opponents of the Florida-EPA consent decree argue that EPA overreached its authority. This argument, however, gets no further than the express language of the CWA, which expressly creates this authority for EPA. The CWA's mandates for water quality are simple: states have the primary duty to control and reduce pollution, but if they fail, EPA must step in. Therefore, the CWA grants states the flexibility to establish tailored WQS, based on the assumption that states act promptly and reasonably.²⁴⁵ Accordingly, the EPA can preempt state law regarding WQS when states do not execute their duties. Congress allocated EPA this authority for a reason; the states consistently failed to control water pollution on their own.²⁴⁶ Moreover, it must be emphasized that Florida has *two more* opportunities to take back its rightful responsibility. First, Florida has a 90-day window to submit revised or new standards to EPA for approval before EPA finalizes its proposed standards. Second, at any time after EPA has adopted its final standards, Florida is free to submit revised or new standards for EPA approval.²⁴⁷

Although the judiciary has often touted states' rights, EPA's nutrient criteria do not dictate land uses or other traditional powers of Florida. The Supreme Court has even

240. U.S. CONST. art. 1, § 8.

241. *United States v. Lopez*, 514 U.S. 549, 558-59 (1995).

242. *United States v. Morrison*, 529 U.S. 598 (2000).

243. *See Craig, supra* note 34, at 232.

244. *Craig, supra* note 34, at 195-198.

245. Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants; States' Compliance, 57 Fed. Reg. 60,848, 60,858 (Dec. 22, 1992) (to be codified at 40 C.F.R. pt. 131).

246. *Craig, supra* note 34, at 232-233.

247. 33 U.S.C. § 1313(c)(4).

stated that environmental regulation does not mandate a type of land use, only that land uses comply within a prescribed limit of environmental harm.²⁴⁸ Numeric nutrient criteria will merely place one more obligation on how land is used. Likewise, EPA's actions in Florida are distinguishable from prior cases that seem to bolster states' rights because Florida is not attempting to impose more stringent regulations than federal standards.²⁴⁹ EPA's interference has more to do with timing than stringency of standards. In fact, opponents have argued that federal intervention is unnecessary because Florida was already on track to promulgate numeric criteria by 2011 or that scientifically defensible standards are not yet feasible.²⁵⁰ EPA, however, claims that Florida's past research, coupled with EPA's assistance, can produce defensible standards even faster. FDEP's diligent work will not go to waste because EPA is working collaboratively with Florida to establish the criteria.²⁵¹

Another argument asserted by opponents is that EPA is singling out Florida and unfairly interfering with its economy and policy-making.²⁵² Hinting at a potential equal protection violation, opponents have asserted that EPA is in effect giving other states an economic advantage over industries in Florida.²⁵³ The problem with this theory is that Florida is not the only state with numeric nutrient criteria—just the only one with federally-set standards. Equal protection jurisprudence has also been clear that the government can attack a problem in stages without running afoul of the Fifth Amendment.²⁵⁴ Therefore, although EPA is taking action solely against Florida at this time, they are in pursuit of a larger goal. In addition, Florida will be joining a group of eighteen other states with numeric nutrient criteria.²⁵⁵

Although EPA-set criteria will take some control away from Florida, a system without this structure would effectively give Florida a delay exemption from complying with the CWA. EPA has followed the CWA's mandates to the letter, even giving Florida over a decade to act first. The drafters of the 1972 amendments were well aware of the states' reluctance to set WQS and purposely imposed a structure to ensure action in the face of inaction. Nutrient pollution is a national problem that

248. Cal. Coastal Comm'n v. Granite Rock Co., 480 U.S. 572, 587 (1987).

249. S.D. Warren Co. v. Me. Bd. of Env'tl Prot., 547 U.S. 370 (2006).

250. FWEA Notice, *supra* note 228; Hopping Notice, *supra* note 228.

251. U.S. ENVTL. PROT. AGENCY, EPA NEEDS, *supra* note 11, at 4.

252. Hopping Notice, *supra* note 228, at 6.

253. *Id.*

254. Williamson v. Lee Optical of Okla., 348 U.S. 483 (1955).

255. U.S. ENVTL. PROT. AGENCY, STATE ADOPTION, *supra* note 11, at 10.

requires a broad-based solution. To the extent that Florida's traditional state rights are usurped, it is because of Florida's choice not to fulfill its duties under the CWA within a reasonable time. This is not a situation where the federal government is using state resources to implement a program; it is merely correcting Florida's inaction. Moreover, Florida's limited reduction in control is not permanent if Florida chooses to act.

C. Implications

The Florida-EPA consent decree is the first time EPA has used its CWA authority to promulgate WQS for nutrient pollution. With only eighteen states currently using numeric nutrient criteria, over half of the United States is anxiously watching the Florida litigation unfold.²⁵⁶ EPA's action has far-reaching consequences in the nutrient pollution battle and within the WQS context generally. Specifically, EPA's use of its CWA authority provides momentum to its demand on states to adopt numeric nutrient standards and legitimacy to its future demands in regards to other WQS. Particularly, WQS and nutrient standards impact multitudes of land-use practices and business operations throughout many industries. Coincidentally, not only are agriculture and industry interests tense, but the remaining states are anticipating EPA intrusions as well.

The Florida situation exemplifies how cooperative federalism ought to operate, and illustrates how proper implementation of WQS can ensure its sustainability. This success story can serve as an example or prototype for obtaining nutrient standards in other states, as well as publicize this method for establishing WQS generally. EPA's action may spur states to take the initiative and set nutrient standards from fear of citizen suits or fear of EPA stepping in on its own. EPA has typically utilized this authority only in response to litigation and court orders;²⁵⁷ however, the widespread problems associated with nutrients could cause EPA to change course. Although the

256. The Florida litigation has gained national attention. See Brian Skoloff, *EPA Proposes Water Pollution Legal Limits in Florida*, ABC NEWS, Jan. 15, 2010, <http://abcnews.go.com/print?id=9574260>; Taryn Luntz, *EPA Proposes Freshwater Nutrient Limits for Fla., a National First*, N.Y. TIMES, Jan. 15, 2010, <http://www.nytimes.com/gwire/2010/01/15/15greenwire-epa-proposes-freshwater-nutrient-limits-for-fl-21732.html>.

257. EPA has used this authority on a state-specific level for coastal and Great Lakes Recreation Waters in 2004, Puerto Rico in 2003 (per court order), Kansas in 2003 (per court order), Kentucky in 2002, Alabama in 2002 (per consent decree), California in 2000, and Pennsylvania in 1996 (per court order). Water Quality Standards: Laws & Regulations, *supra* note 192.

Florida consent decree would not control future court decisions, it does expose valid arguments for use in other states.

It is important to acknowledge, however, that a citizen's suit instigated EPA's action for Florida. Therefore, some may claim it was not the result of cooperative federalism but the result of EPA's tactic to avoid judicial precedent that would affirm its duty to set nutrient standards. Despite the initial prodding by environmental groups, the Florida situation nevertheless illustrates how WQS operate with EPA acting as the safety net. States are often slow to implement WQS—as history shows—because they are costly,²⁵⁸ and states are susceptible to local pressures and needs. Even though adoption of EPA's criteria would save states resources, states are reluctant to adopt federal standards because they think they are overly protective.²⁵⁹ Currently, forty-nine states have impaired waters due to nutrients.²⁶⁰ Although EPA has escaped judicial precedent for now, Florida's litigation could encourage future citizen suits if EPA fails to take its duties under the WQS program seriously.

EPA's action provides an example of effective implementation and enforcement of cooperative federalism, which can serve to influence other states in adopting WQS. EPA determined in 1998 that numeric nutrient criteria were necessary—across the U.S.—to combat nutrient pollution, and since then, states have responded unenthusiastically to EPA's encouragement. Although EPA has threatened to take this action for some time, it is not a hollow promise anymore. As established by theory and history, states often need external incentives to follow through on costly and controversial environmental regulations. Since there are no binding federal floors for nutrient pollution, cooperative federalism is the sole guarantee that standards will be set.

Cooperative federalism can ensure better protection and sustainable water quality, but only when implemented correctly. In the case of nutrients, EPA has already indicated it does not intend to take action at this time in the remaining states without numeric criteria.²⁶¹ Essentially, EPA does not plan to properly oversee the WQS program, most likely because of its lack of resources, strong disapprovals from certain interest groups, and

258. U.S. ENVTL. PROT. AGENCY, EPA NEEDS, *supra* note 11, at 6.

259. *Id.*

260. U.S. EPA, Current Status: State Adoption of Numeric Nutrient Standards, <http://water.epa.gov/scitech/swguidance/waterquality/standards/criteria/aqlife/pollutants/nutrient/status.cfm> (last visited Feb. 6, 2011).

261. U.S. ENVTL. PROT. AGENCY, EPA NEEDS, *supra* note 11, at 10.

its preference to allow states to act in the first instance. Without a viable threat of federally-mandated standards, states have little incentive to allocate resources towards WQS and anger strong constituents who fear its effects on the bottom line. For example, agriculture is one of the largest contributors to nutrient pollution, but states have failed to enact stronger regulations on their practices due to pressures from this industry.²⁶² State inaction results in unnecessary delays in achieving the CWA's goals.²⁶³ In order for WQS to be effective and, thus sustainable, EPA cannot be hesitant or passive. EPA needs to be more than a mere cheerleader and actually play its role as an enforcer.

The Inspector General has evaluated EPA's efforts in water quality and found it to be ineffective because of lax management control and accountability.²⁶⁴ This, of course, should not come as a shock considering it took over a decade and a citizen suit for EPA to finally hold Florida accountable to its mandate. The report also recommended that EPA identify priority waters and ensure that nutrient criteria are set even if that means EPA must take control.²⁶⁵ This approach would ensure criteria are set and would allow for efficient use of limited resources. Unfortunately, EPA indicated it disagreed with this approach and would prefer to draft yet another national strategy plan—like the one in 1998. As the report pointed out, EPA's past approach has been insufficient and new measures need to be taken.²⁶⁶ EPA's action in Florida provides a sparkling example of how effective EPA can make the WQS program.

Ideally, EPA will use Florida as a prototype for other states and a warning that EPA is ready to follow through on its promises. In the event they do not, perhaps more citizen groups will bring suit based on the Plaintiffs' reasoning that EPA has failed to fulfill its non-discretionary duty to set numeric standards pursuant to its necessity determination in the 1998 CWAP. Fortunately, some groups have already taken action.²⁶⁷

262. *Id.* at 7.

263. *Id.* at 5.

264. *Id.*

265. U.S. ENVTL. PROT. AGENCY, EPA NEEDS, *supra* note 11, at 6.

266. *Id.* at 10-11.

267. For example, several groups have petitioned EPA for setting numeric nutrient standards for the Mississippi River. Sierra Club Activist Network, Mississippi River Issue Team, http://connect.sierraclub.org/post/team/Mississippi_River_Issue_Team/blog/archives/01-01-2010.html?cons_id=&ts=1271017818&signature=bb3410da4f7b3052049f2320a3309af3 (last visited Feb. 6, 2011); National Sustainable Agriculture Coalition, Clean Water Network's "March Madness" DC Gathering, <http://sustainableagriculture.net/blog/clean-water-network%E2%80%99s-%E2%80%9Cmarch-madness%E2%80%9D-dc-gathering/> (last visited Feb. 6, 2011).

Effective WQS need cooperative federalism to achieve its goal of sustaining good water quality for the current and future generation. Without cooperative federalism, the states can delay their compliance and ignore the mandates of the CWA, which results in unsustainable water quality.

CONCLUSION

The CWA is among the most critical regulatory frameworks for sustainable development in the U.S.²⁶⁸ Its essential objective—to restore and maintain the integrity of the nation's waters²⁶⁹—embraces the sustainability principle of preserving clean water for future generations. To achieve its goals, the CWA relies on cooperative federalism. Cooperative federalism, when implemented effectively, provides the necessary checks and balances to ensure that WQS are instituted. Under its structure, the states bear primary responsibility for setting WQS, but in the event they fail to do so, the CWA requires the federal government to take control. This ensures that standards will be set—the first step towards protecting water quality.

Yet water quality continues to be a pressing concern. People need water, but not just any water—they need clean, drinkable water and water sanitary enough to maintain freshwater ecosystems and carry out other necessities of life, such as fishing and agriculture. Even shabby maintenance of water infrastructure takes its toll on the public's health, with 30% of adults in the U.S. contracting a stomach bacterium, *helicobacter pylori*, from slimy water pipes, which can cause ulcers and cancer.²⁷⁰ With groundwater being depleted at staggering rates in the U.S. and around the world,²⁷¹ it would be prudent to analyze our current water laws to ensure that they can achieve sustainable water quality in the face of diminishing supplies. Since nutrient pollution is the leading cause of impairment for lakes and coastal waters and second leading cause for rivers and streams,²⁷² the recent litigation between Florida and the EPA provides an ideal opportunity to analyze the CWA's structure and its efficacy.

268. 33 U.S.C. § 1251 (2006).

269. 33 U.S.C. § 1251(a).

270. BARLOW & CLARKE, *THE BATTLE*, *supra* note 2, at 55; Expert Review of Clinical Immunology, *Helicobacter pylori May Protect Children From Asthma*, MEDSCAPE TODAY, Nov. 13, 2007, <http://www.medscape.com/viewarticle/565687>.

271. BARLOW & CLARKE, *THE BATTLE*, *supra* note 2, at 16-17, 24.

272. See U.S. ENVTL. PROT. AGENCY, NATIONAL STRATEGY, *supra* note 12, at 9.

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This litigation demonstrates imperfect but effective cooperative federalism in practice—with far-reaching implications. While cooperative federalism under the CWA provides vital checks and balances, the states have been slow to respond to federal mandates for action, which impedes the maintenance and improvement of water quality. This article argues that the federal government needs to consistently utilize its authority to rectify state inaction by setting WQS to ensure sustainability of the nation's waters. Everyone should have a right to clean water, including future generations.