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COMMENT

Federal Numeric Nutrient Criteria in Florida: When Cooperative Federalism Goes Rogue

ADAM WEISS*

I. INTRODUCTION

Surface water nutrient pollution is the process by which too many nutrients, primarily nitrogen and phosphorus, are added to bodies of water from natural weathering of rocks and soil in the watershed, wastewater treatment facilities, storm water runoff, and farming. When concentrated beyond a certain threshold, nutrients cause deleterious impairments to the environment and threaten public health. The Oxford Dictionary defines the word nutrient as; “a substance that provides nourishment essential for growth and the maintenance of life.”\(^1\) While organisms need these vital chemicals to grow strong, there can always be too much of a good thing. Much of the globalized world is faced with this paradox every day when they come home from a long day of work too tired to exercise, sit in front of the television, and eat fast food or microwavable dinners. This form of overconsumption of nutrients has led to skyrocketing obesity rates, threatening public health. Similarly, nutrient pollution of our nation’s surface waters is a marked example of the poison is in the dose.

The process of adding excessive nutrients, known as eutrophication, can cause excessive growth of algae, pH increases,

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drinking water taste and odor problems, and in extreme cases, fish kills.² Severe algae growth blocks light essential for plants to grow, such as sea grass, causing them to die and decay.³ During this decaying process, the oxygen in the water is consumed, leading to low levels of dissolved oxygen in the water, which in turn kills fish, crabs, oysters, and other aquatic animals that rely on the oxygen to survive.⁴

The goal of the Clean Water Act (CWA) is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters” by regulating the “discharges of pollutants into navigable waters.”⁵ The issue is that nutrients, primarily nitrogen and phosphorus, are unlike any other “pollutant” regulated by the CWA. Nutrients are not only present naturally in aquatic systems, but are also absolutely necessary for the proper functioning of biological communities. Therefore, the key is to find the right balance, just enough nutrients for each water body to sustain aquatic life, without adding excessive nutrients that will impair the aquatic ecosystem.

This Comment contends that the tall task of finding this equilibrium can only be achieved by maintaining a balanced federal/state partnership in the cooperative federalist system upon which the CWA was built. This partnership, however, has slowly eroded during the United States Environmental Protection Agency’s (EPA) attempts to regulate nutrient pollution through numeric nutrient criteria in the State of Florida. In a perfect world with unlimited resources, the EPA would work with the states to develop and implement controls necessary to prevent nutrient pollution entirely. However, due to limited resources, the EPA must set out a priority to balance both preventative and detective methods to diagnose and mitigate pollution. An

⁴ Id.
overreliance on preventative measures will be too resource
intensive and may actually inflict the damage it is trying to
prevent by requiring regulation of all waters rather than a
strategic focus on impaired water bodies. The EPA’s desire to
implement independently applicable numeric nutrient criteria, a
numeric threshold triggering regulation which applies regardless
of water impairment, is a prime example that will be explored in
this Comment.

After years of research, planning, and litigation that has
eroded the state/federal cooperative balance, EPA’s battle against
nutrient pollution in Florida has currently reached a critical
juncture. In order to evaluate the implications for the future of
surface water quality and cooperative federalism, this Comment
will: first, briefly discuss the magnitude of nutrient over-
enrichment in Florida and the State’s widely recognized efforts to
manage nutrients; second, trace the history of EPA’s fight against
excessive nutrients in Florida’s waters; and finally, examine the
erosion of the federal/state partnership and the future for surface
water protection nationwide during a time of strained state
economies and devastating budget cuts. This Comment concludes
by contending that the future success of CWA programs hinge on
the reinvigoration of the federal/state partnership, where
environmental programs are tailored to local conditions, utilize
state innovative approaches, and have EPA oversight to help
guide states to make the right decisions.

II. FLORIDA’S NUTRIENT PROBLEMS AND
SOLUTIONS

Water quality degradation due to nutrient pollution in
Florida has been well documented. According to Florida’s
Department of Environmental Protection (FDEP), in 2008,
approximately 1,000 miles of rivers and streams, 350,000 acres of
lakes, and 900 square miles of estuaries were listed as impaired
for nutrients.6 In fact, of the 823 waters listed as impaired by
Florida in 2002, over 60% were impaired because of excessive

Fla.: 2008 305(b) Report and 303(d) List Update 81 (Oct. 2008), available at
nutrients. As a result, recurrent harmful algal blooms that threaten flora and fauna, recreational use, and consumption of these waters have victimized Florida. Simply stated, when water treatment facilities shut down, waterfront property values plummet, and tourism declines as fishing and swimming in the waters are prohibited.

In order to manage their nutrient pollution, Florida has invested over $20 million to collect and analyze data on the relationship between nutrient levels and biological impacts. As a result of this investment, greater than 30% of all water quality data in the EPA’s national water quality database comes from Florida. Prior to the EPA stepping in and declaring that Florida must implement numeric criteria, Florida relied on a site-specific narrative criterion to establish its water quality standards and assessment procedures. Florida’s narrative water quality criterion for nutrients provides that “[i]n no case shall nutrient concentrations of a body of water be altered so as to cause an imbalance in natural populations of aquatic flora or fauna.” Florida’s implementation of the narrative criteria is based on site-specific detailed biological assessments and analyses together with site-by-site outreach and stakeholder


8. Cyanobacterial Harmful Algal Blooms (CyanoHABs) produce toxins that are among the most powerful natural poisons known. These toxins have no known antidotes and can cause skin irritations, diarrhea, vomiting, and also cause neurologic symptoms, including weakness, staggering, difficulty breathing, convulsions, and death. Facts About Cyanobacteria And Cyanobacterial Harmful Algal Blooms, CTRS. FOR DISEASE CONTROL & PREVENTION, http://www.cdc.gov/nceh/hsb/hab/default.htm (last visited Oct. 24, 2012).


10. Letter from Herschel Vinyard Jr., Sec’y, Fla. Dep’t of Envtl. Prot., to Lisa P. Jackson, Adm’r, U.S. EPA 3 (Apr. 22, 2011) (on file with author). Furthermore, in the letter, FDEP contends that “it doesn't substitute quantity of sampling for the quality of those samples. Rather than accepting any collected sample, FDEP requires stringent quality assurance for water quality samples to be used for regulatory purposes.” Id. at n.1. For the quality assurance procedures, see Fla. ADMIN. CODE ANN. r. 62-160.100 – 62-160.800 (2010).

These efforts were accomplished through National Pollutant Discharge Elimination System (NPDES) permits, total maximum daily loads (TMDLs), and assessment and listing decisions.

Florida, as well as the majority of states, utilize narrative criteria as well as site-specific weight-of-the-evidence approaches, and reject a one-size-fits-all numeric standard because ecosystems can be healthy under a wide variety of nutrient levels. The extent to which nutrients’ adverse effects occur within a water body depends on a wide range of other critical factors such as sunlight, optimal stream substrate, stream flow, temperature, and background water chemistry—factors that are very site-specific. Therefore, nutrient levels that may cause impairments in one stream under one set of conditions will not necessarily have the same negative impact in a different stream. Accordingly, one-size-fits-all numeric nutrient criteria could contribute to the environmental problems it is trying to solve, as well as create unnecessary and additional costs by requiring nutrient mitigation efforts on unimpaired streams.

Florida’s natural physical factors are especially conducive to nutrient over-enrichment. Florida’s flat topography, numerous wetlands, warm and humid climate, nutrient-rich soils, hydrology, and erosion caused by tropical storms and hurricanes make controlling nutrient pollution particularly challenging. Recognizing the variation across regions of its state and across types of water bodies, Florida’s $20 million dollar investment allowed it to obtain large amounts of site-specific data and develop reliable measures for each water body’s biological condition and then develop thresholds to sustain a healthy aquatic environment. Florida undertook these initiatives with the goal of establishing its own state numeric nutrient criteria.
that would incorporate site-specific considerations. Yet, despite EPA recognizing Florida as a leader for “implementing some of the most progressive nutrient management strategies in the Nation,” EPA remained dissatisfied and stepped in.

III. THE EPA STEPS IN AND SETS NUMERIC WATER QUALITY CRITERIA FOR FLORIDA

After twenty-five years of CWA regulation, the Administrator of the EPA, together with the Secretary of the United States Department of Agriculture, reported in 1998 that approximately 40% of the waters assessed by the various states across the nation did not meet the CWA’s water-quality goals. As a result, the Administrator and the Secretary adopted a Clean Water Action Plan intended to enhance protection from public health threats posed by water pollution, effectively control polluted runoff, and promote water quality protection on a watershed basis. Consequently, as part of the effort to implement the Clean Water Action Plan, the EPA Administrator issued a report entitled, National Strategy for the Development of Regional Nutrient Criteria. In this 1998 report, EPA first made known their intent to assist states to adopt numerical nutrient criteria into state water quality standards. This plan established EPA’s position that states are required “to adopt and implement numerical nutrient criteria” by December 31, 2003. Therefore, states were given five years to adopt numeric criteria which would be independently applicable and thus apply regardless of actual observed impairments due to a cause and effect relationship from nutrient levels and irrespective of achievement.

19. Id.
20. Grumbles, supra note 7, at 1.
24. Id.
25. Id. at 9 (emphasis added).
of designated uses such as recreational use, support for fisheries, or for the public water supply. While five years may seem like a reasonable timeframe to adopt and implement numeric criteria, thirteen years later, not one state has adopted and implemented nitrogen and phosphorus criteria for all water bodies in its borders.26

A. The Citizen Suit

In 2001, FDEP began conducting studies and holding meetings in conjunction with Florida’s Water Management Districts to develop their own numeric nutrient standards.27 In July 2004, FDEP entered into a development plan with EPA to establish numeric nutrient criteria and later revised the plan in 2007 to more accurately reflect their evolved strategies and technical approaches. Then in 2008, five years after the EPA’s deadline to the states to adopt numeric criteria, Florida Wildlife Federation, along with four other environmental groups, filed a lawsuit against the EPA seeking to require EPA to promulgate federal numeric nutrient water quality standards for Florida’s waters.28

The CWA establishes that the states, not the federal government, have the primary responsibility to implement the CWA programs to prevent and reduce pollution.29 The Act thus encourages states to adopt their own water-quality standards, subject to the EPA Administrator’s approval. However, if the Administrator determines that a state standard is not “consistent with” the Act’s requirements, or that “a revised or new standard is necessary” to meet the Act’s requirements, then the Administrator must “promptly prepare and publish proposed

28. Plaintiffs were 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.
regulations setting forth a revised or new” standard.\textsuperscript{30} The Administrator must adopt the revised or new standard within ninety days after publication, unless by that time the state has adopted a revised or new standard that is approved by the Administrator.\textsuperscript{31}

Relying on the CWA’s statutory language, the plaintiffs filed suit under the CWA’s citizen-suit provision, which allows a citizen to sue the Administrator to compel her to perform a duty that the Act makes nondiscretionary.\textsuperscript{32} The plaintiffs contended that the EPA’s Clean Water Action Plan, or the National Strategy report, “constituted a ‘determination’ that Florida’s narrative nutrient standard was inadequate, thus imposing on the Administrator the nondiscretionary duty to ‘promptly’ publish proposed new standards, and the further nondiscretionary duty to adopt new standards within 90 days after the publication.”\textsuperscript{33} Thirteen entities intervened as defendants,\textsuperscript{34} and along with the Administrator, denied that the 1998 documents constituted a formal “determination.”\textsuperscript{35}

However, before the court had an opportunity to resolve the issue, the EPA, despite their previous denials, made “an explicit and unequivocal determination”\textsuperscript{36} on January 14, 2009 that Florida’s existing narrative criteria on nutrients in water were insufficient to ensure protection of the state’s water bodies as required under the CWA.\textsuperscript{37} While the plaintiffs’ original claim remained valid—that they were entitled to relief if the court determined that the 1998 documents were a formal

\textsuperscript{30} Id. § 1313(c)(4).
\textsuperscript{31} Id.
\textsuperscript{32} Id. § 1365(a)(2).
\textsuperscript{33} Florida Wildlife Fed’n, 2009 WL 5217062, at *2.
\textsuperscript{34} The intervenors are 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. Id. at *2 n.2.
\textsuperscript{35} Id. at *2.
\textsuperscript{36} Id.
\textsuperscript{37} Grumbles, supra note 7, at 1.
determination pursuant to which the Administrator failed to promptly publish new standards—the 2009 determination made the original issue less important.\(^{38}\)

There is a strong argument that EPA should have proceeded in the litigation rather than making an unequivocal determination so soon in the process. Instead the EPA went forward with independently applicable numeric criteria—a concept many argue is too legally rigid and not practical. Independently applicable criteria do not provide for the use of human judgment, allowing the Agency to wear blinders in an attempt to make the process more efficient. Yet the result thus far has not been efficient at all considering the multitudes of proceedings that followed.

B. “A Lean Compromise Is Better Than A Fat Lawsuit”\(^{39}\)

On August 25, 2009, the plaintiffs and the Administrator moved for entry of a consent decree, without consulting the State of Florida.\(^{40}\) The consent decree required the Administrator to promulgate numeric standards by January 14, 2010, one year after the 2009 determination that numeric nutrient standards for Florida lakes and flowing waters were necessary.\(^{41}\) The decree then required the Administrator to adopt standards by October 15, 2010 and imposed analogous deadlines for coastal and estuarine waters—January 14, 2011 for promulgation and October 15, 2011 for adoption of the numeric nutrient standards.\(^{42}\) However, if by the same deadlines Florida proposed its own numeric standards and the Administrator approved them, the federal standards would not apply.\(^{43}\) The proposed decree would allow an extension of the deadline.\(^{44}\) The decree also allowed an extension of the deadlines by agreement between the plaintiffs and the Administrator, with notice to the court or by a

\(^{39}\) George Herbert (1593 – 1633), an English poet, orator, and priest.
\(^{40}\) Florida Wildlife Fed’n, 2009 WL 5217062, at *3.
\(^{41}\) Id.
\(^{42}\) Id.
\(^{43}\) Id.
\(^{44}\) Id.
motion of the Administrator, without the plaintiffs’ consent, and in the court’s discretion.\textsuperscript{45}

While only binding on Florida, the consent decree for all practical purposes usurped Florida’s ongoing efforts to develop its own standards and thus has the potential to set important precedents in every other state, hence beginning to strain the federal/state partnership. In response to state concern over independently applicable numeric nutrient criteria, EPA sent out a March 16, 2011 memorandum that detailed the elements EPA considers “necessary for effective programs to manage nitrogen and phosphorus pollution.”\textsuperscript{46} Moreover, the memo stated that “states need room to innovate and respond to local water quality needs, so a one-size-fits-all solution to nitrogen and phosphorus pollution is neither desirable nor necessary.”\textsuperscript{47} However, despite this assertion, states remain concerned that EPA still expects states to establish numeric nitrogen and phosphorus criteria, and EPA has affirmed this expectation from Florida.

In response to the March 16 memorandum, FDEP submitted a letter to EPA on April 22, 2011, asking EPA to withdraw its January 2009 determination that numeric nutrient criteria are necessary in Florida, initiate repeal of EPA’s promulgation of numeric criteria for Florida’s lakes and streams,\textsuperscript{48} and discontinue proposing or promulgating further numeric nutrient criteria in Florida. FDEP supported its request by measuring its program against each element EPA identified as necessary for effective programs to manage nitrogen and phosphorus pollution.

In doing so, Florida demonstrated that it is a “national leader in developing innovative and comprehensive tools and programs to detect, assess, prevent and/or remedy nutrient problems in the State’s waters.”\textsuperscript{49}

On June 13, 2011, EPA issued a preliminary response to FDEP in which they asserted that if FDEP adopts and EPA

\textsuperscript{45} Id.


\textsuperscript{47} Id.

\textsuperscript{48} 40 C.F.R. § 131.43 (2012).

\textsuperscript{49} Vinyard, supra note 10, at 2.
approves numeric criteria, and such criteria becomes law, EPA will promptly repeal the corresponding federal rule. The critical issue is whether EPA will approve FDEP’s approach, which clashes with the one-size-fits-all model. According to the EPA, numeric nutrient criteria in Florida would enhance the effectiveness of NPDES permits and TMDLs by allowing the limitations to be derived without the resource intensive and burdensome process of conducting site-specific analyses to determine the appropriate numeric target value. In contrast, Florida and many other states believe that it is crucial to use this weight-of-the-evidence approach to link numeric criteria with an assessment of the biological health of a water body before requiring the implementation of costly nutrient reduction strategies. “Without this linkage, implementation of the EPA criteria would have Florida businesses, wastewater and storm water utilities, and agricultural producers spending time and money attempting to reduce nutrient concentrations, in some cases, to levels below natural background.” If humans were to reduce nutrients in healthy water bodies below the levels that natural aquatic systems are accustomed to, adverse biological effects would occur, as organisms would be deprived of the essential chemicals they need to prosper. Therefore, in addition to upsetting the balance in the federal/state partnership, EPA’s one-size-fits-all solution in Florida could contribute to the environmental problems it is trying to solve.

C. The Intervenors Appeal

Although all thirteen intervenors who challenged the consent decree were left unsatisfied when the court approved the consent decree over their objections, only two of the intervenors

51. Grumbles, supra note 7, at 4.
52. Sullins, supra note 2, at 172, 175.
However, on August 2, 2011, the appeal was dismissed for lack of standing. In order to establish constitutional standing to bring a suit:

a plaintiff must show (1) it has suffered an “injury in fact” that is (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical; (2) the injury is fairly traceable to the challenged action of the defendant; and (3) it is likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision.

The court found that appellants lacked standing because their harms were not traceable to the consent decree, but rather to the EPA’s 2009 Determination, which triggered a non-discretionary duty for the EPA to promulgate new numeric water-quality criteria. Furthermore, the validity of the 2009 Determination was not before the court. Therefore, the court suggested that appellants’ proper avenue for recourse is to challenge the 2009 Determination directly, because the consent decree “did nothing to change the effect of the 2009 Determination.” Accordingly, appellants and others have since challenged the 2009 Determination.

D. Everyone Agrees to Disagree

In the aftermath of the consent decree, the EPA has been busy promulgating the rules as prescribed in the consent decree, as well as preparing to defend the rules in litigation. Over thirty parties filed legal challenges to the rule including the State of Florida Wildlife Fed’n v. S. Florida Water Mgmt. Dist., 647 F.3d 1296 (11th Cir. 2011). While the case is pending in the district court, there is a live case or controversy between the plaintiff and defendant, so the intervenors are free to challenge the proposed consent decree without having to prove standing independently. Once the district court approves the consent decree, however, the original case or controversy evaporates, and an intervenor appealing the decree must assert an independent case or controversy in order to maintain standing. Id. at 1302 (citing Diamond v. Charles, 476 U.S. 54, 68 (1986)).


Id.
Florida, private industry, utilities, agricultural interest, and environmental organizations. Judge Robert Hinkle of the U.S. District Court for the Northern District of Florida consolidated the cases, and on January 9, 2012 heard oral arguments on every pending motion before the court in *Florida Wildlife Federation, et al. v. EPA*. In oral arguments on the summary judgment motions, industry and the state argued that the necessity determination upon which the criteria were based was arbitrary and capricious because it was a consequence of litigation and not based on a preponderance of scientific evidence. Furthermore, they contended that the State of Florida was being used as a precedent for similar suits elsewhere in other states. Environmentalists, while maintaining that EPA had the authority to develop the criteria, contended that the requirements for monitoring water bodies to ensure they meet the numeric limits were too lax and should be made more stringent. In EPA’s cross motion for summary judgment, the Agency said that its determination to promulgate numeric nutrient criteria for Florida’s waters was rational and supported by the administrative record. Furthermore, EPA argued that the criteria are protective of water bodies’ designated uses, based on sound science and arrived at through rational scientific means and should therefore be granted deference by the court.

**IV. EPA DENIES PETITION FOR NUMERIC CRITERIA RULEMAKING IN THE MISSISSIPPI-ATCHAFALAYA RIVER BASIN**

On July 29, 2011, the EPA denied a petition for rulemaking filed in July 2008, by thirteen environmental organizations in the

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61. *Id.*
62. *Id.*
63. *Id.*
64. *Id.*
Mississippi-Atchafalaya River Basin (MARB). The petition urged EPA to use their authority under the CWA to develop and promulgate numeric nutrient water quality standards for all navigable waters in all fifty states, but at a minimum promulgate numeric standards for the ten states along the mainstem of the Mississippi River and the northern Gulf of Mexico. Following the petition, EPA Spokeswoman Enesta Jones said it would “review the petition and respond in a timely manner.” Three short years later, EPA denied the petition for rulemaking. Despite displaying their authority to promulgate federal numeric nutrient criteria in Florida, EPA denied developing federal water quality standards in the ten mainstem states because working cooperatively with states to strengthen nutrient management programs is “preferable to undertaking an unprecedented and complex set of rulemakings to promulgate federal [numeric nutrient criteria] for a large region (or even the entire country).”

Specifically, the EPA stated:


68. Id. at 4.
The development of numeric nutrient criteria for 50, 31, or 10 states at one time would be highly resource and time intensive and involve the EPA staff across the entire Agency, as well as support from technical experts outside the Agency. The Agency would need to develop a technical record for each affected state, a task of substantial magnitude in light of the need for a thorough review and analysis of state water quality data and the frequency and severity of nutrient-related impacts. Completing the rulemaking process would pose a daunting management challenge given the complexity of technical issues, large volume of comments from stakeholders and local government, and the need for the Agency to respond to the array of comments filed. Following rulemaking, implementation of federal standards simultaneously would likewise place sizeable regulatory and oversight burdens on the EPA, as well as affected states. Therefore, the Agency believes that the use of its rulemaking authority, especially in light of the sweeping scope of the petition, is not a practical or efficient way to address nutrients at a national or regional scale.69

Rather than promulgating federal numeric criteria, the Agency contended that the most effective and sustainable way to address widespread nitrogen and phosphorus pollution in the MARB is to build on existing efforts, including providing technical assistance and collaborating with states to achieve near-term reductions, supporting states on development and implementation of numeric criteria, and working cooperatively with states and tribes to strengthen management programs.70 The EPA supported the determination with their March 16, 2011, framework memorandum on “Working in Partnership with States to Address Phosphorus and Nitrogen Pollution through Use of a Framework for State Nutrient Reductions.”71 Yet, when Florida relied on this document to petition EPA to repeal their federal numeric nutrient criteria, the EPA stated:

While an important statement of Agency policy, the Framework Memo does not constitute a set of decision-making criteria to be applied by the Agency when evaluating whether to determine,
pursuant to CWA section 303(c)(4)(B), that new or revised water quality standards, such as numeric nutrient criteria, are necessary in a particular state in order to meet the requirements of the CWA.\footnote{Id.}

V. FLORIDA GOES FORWARD WITH STATE CRITERIA, EPA MAY WITHDRAW, AND LITIGATION CONTINUES

Relying on EPA’s assurance to repeal the federal rules if Florida develops its own satisfactory standards, FDEP continued their rulemaking effort. On October 24, 2011, FDEP submitted language to the Florida Administrative Weekly for publication as a proposed rule.\footnote{Letter from Nancy Stoner, Assistant Adm’r, EPA Office of Water, to Herschel Vinyard, Sec’y, Fla. Dep’t of Envtl. Prot. 1 (Nov. 2, 2011), available at http://www.dep.state.fl.us/secretary/files/stoner.pdf.} Additionally, FDEP submitted a copy of the proposed rule to EPA for review.\footnote{Id.} In a November 2, 2011 response letter, EPA stated that their “review of the October 24, 2011 draft rule, guidance, and other scientific and technical information supporting the draft rule, leads us to the preliminary conclusion that EPA would be able to approve the draft rule under the CWA.”\footnote{Id.} Accordingly, on December 9, 2011, FDEP submitted the proposed rule to the Florida Legislature for ratification.\footnote{Letter from Herschel Vinyard Jr., Sec’y, Fla. Dep’t of Envtl. Prot., to Mike Haridopolos, President, Fla. Senate & Dean Cannon, Speaker, Fla. House of Representatives (Dec. 9, 2011) (discussing Legislative Ratification of Amendments to Chapters 62-302 & 62-303, F.A.C. (Numeric Nutrient Standards)).} Both the Florida Senate and House of Representatives passed the rules unanimously.\footnote{Virginia Chamlee, Florida Senate Unanimously Passes Bill Approving State-drafted Water Rules, Fla. INDEP., Feb. 10, 2012, http://floridaindependent.com/68861/florida-senate-unanimously-passes-bill-approving-state-drafted-water-rules.} Governor Rick Scott signed the legislation on February 16, 2012, and FDEP
submitted the rules to EPA for final approval. On the same day, Senator Marco Rubio introduced a bill in the Senate which would require the EPA to dispose of their rule and, instead, accept the state rules. In the press release that accompanied the Bill, Rubio stated “[t]his legislation simply reaffirms that states and the federal government should be partners in making sure our water is clean, and prevents Washington overreaches from harming our economy.” Representative Steve Southerland introduced a similar bill in the House of Representatives in January. However, under the statutory framework of the CWA, the EPA must formally approve FDEP’s final nutrient criteria as consistent with the Act before the Agency can initiate rulemaking to withdraw the federal numeric nutrient criteria for any waters covered by the new and approved state water quality standards.

Despite the submission of the state rule to EPA for approval, environmentalists also filed an initial petition with the Florida Department of Administrative Hearings (DAH) on December 1, 2011, challenging the state’s proposed rule that would establish numeric nutrient criteria on the grounds that they are less protective of water quality than the state’s existing approach, which EPA has declared insufficient. On June 7, 2012, Judge Bram Canter of the DAH entered a final order in the matter. Judge Canter held that the petitioners failed to prove by a preponderance of evidence that Florida’s narrative nutrient criteria adopted by the State of Florida was an invalid exercise of delegated legislative authority and that FDEP did prove by a

79. Id.
80. Id.
81. Id.
preponderance of the evidence that the proposed rules are not invalid exercises of delegated legislative authority.\textsuperscript{84}

While the petition before the DAH hung in the balance, and before Judge Canter ruled on matter, the litigation in the federal district court continued. After hearing that the State had submitted the proposed rule to the Florida Legislature and EPA’s informal approval of the standards, Judge Hinkle offered to stay the proceedings.\textsuperscript{85} If the EPA withdraws their federal standards then, in essence, the litigation becomes moot. Yet, none of the parties wanted to stay the litigation because of the multitude of unknowns on the horizon. Additionally, both the environmental activists and industry had something to gain from allowing the litigation to proceed to conclusion. If the judge ruled in industry’s favor, EPA’s criteria would be invalid. However, if the judge ruled in the environmentalists’ favor, their claim that EPA has the authority to issue numeric nutrient criteria for states would be affirmed\textsuperscript{86} and due deference in future Agency decisions under the \textit{Chevron} standard.\textsuperscript{87} Additionally, allowing the challenge to EPA’s criteria to move forward prevented the environmental activists from suing EPA over their approval of the state-developed criteria if their DAH challenge fails.\textsuperscript{88}

On February 18, 2012, the litigation in the District Court for the Northern District of Florida came to a head as Judge Hinkle

\begin{itemize}
\item \textsuperscript{84} Id.
\item \textsuperscript{85} Heltman, \textit{supra} note 60.
\item \textsuperscript{86} Id.
\item \textsuperscript{87} Chevron, U.S.A. v. Natural Res. Def. Council, 467 U.S. 837, 842-44 (1984) ("When a court reviews an agency’s construction of the statute which it administers, it is confronted with two questions. First, always, is the question whether Congress has directly spoken to the precise question at issue. If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress. If, however, the court determines Congress has not directly addressed the precise question at issue, the court does not simply impose its own construction on the statute, as would be necessary in the absence of an administrative interpretation. Rather, if the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency's answer is based on a permissible construction of the statute . . . We have long recognized that considerable weight should be accorded to an executive department’s construction of a statutory scheme it is entrusted to administer, and the principle of deference to administrative interpretations.").
\item \textsuperscript{88} Heltman, \textit{supra} note 60.
\end{itemize}
issued his order on the merits of the challenge to the EPA criteria. Judge Hinkle concluded the Administrator’s determination that numeric criteria were necessary was not arbitrary, capricious, or an abuse of discretion—the standard of reviewing agency action. The Judge then upheld the EPA’s criteria for lakes and springs as they were based in sound science. However, the Judge did strike down the EPA’s criteria for streams because the Administrator used a different modeling technique to support the stream criteria and did not support the standards with sufficient scientific evidence. Therefore, the EPA can choose either to start from scratch with the stream criteria or to find sufficient evidence to support the methodology, which was struck down. Despite striking down the stream criteria, Judge Hinkle’s order largely deferred to the EPA on technical issues, as EPA is the agency with the expertise in the matter and due deference under the Chevron standard. Therefore, Judge Hinkle’s decision likely boosts the Agency’s authority to force independently applicable numeric nutrient criteria on other states that fail to develop their own, but also bolsters EPA’s discretion to determine the adequacy of state-crafted numeric water quality standards. Now that the litigation has run its course, we must patiently wait to see whether EPA will accept FDEP’s rule and withdraw the federal rules.

VI. COOPERATIVE FEDERALISM AND QUESTIONS FOR THE FUTURE

The CWA is one of several federal environmental statutes that embody cooperative federalism as their foundation. Under the CWA’s cooperative federalist system, state water pollution control agencies are primarily responsible for the statute’s

90. Id. at 1143.
91. Id.
92. Id. at 1143-44.
implementation.\textsuperscript{94} Congress has seen fit to promote cooperative federalism for at least three reasons: “(1) to allow states to tailor federal regulatory programs to local conditions; (2) to promote competition within a federal regulatory framework; and (3) to permit experimentation with different approaches that may assist in determining the optimal regulatory strategy.”\textsuperscript{95}

EPA’s regulations provide that states shall “adopt those water quality criteria that protect the designated use” and that “[s]uch criteria must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use.”\textsuperscript{96} States are then required to submit these new or revised water quality standards to EPA for review and approval or disapproval.\textsuperscript{97} However, the CWA authorizes the Administrator to determine at any point, that a new or revised standard is needed to meet the CWA’s requirements.\textsuperscript{98} Therefore, EPA’s promulgation of numeric nutrient criteria in Florida was sanctioned by the CWA and fully lawful. But, was it a wise decision?

When the EPA entered into the 2009 settlement agreement and usurped Florida’s efforts to establish their own numeric nutrient criteria, the cooperative element of cooperative federalism began to erode. EPA established numeric standards similar to the criteria FDEP was developing, using a majority of the scientific data that Florida accumulated years earlier with their $20 million investment in monitoring and analysis. Florida’s state rule, as currently proposed, incorporates the EPA-developed numeric nutrient criteria into the state standards, but also includes a provision requiring FDEP to demonstrate that nutrients are impacting aquatic life before a water body can be listed as impaired. Drew Bartlett, Director of the Florida’s Division of Environmental Assessment and Restoration, stated

\begin{itemize}
\item \textsuperscript{94} See 33 U.S.C. § 1251(b) (2006) (acknowledging that it is the states’ “primary responsibilit[y] . . . to prevent, reduce, and eliminate pollution . . . ”).
\item \textsuperscript{96} 40 C.F.R. § 131.11(a)(1) (2012).
\item \textsuperscript{97} 33 U.S.C. § 1313(c)(2)(A) (2006).
\item \textsuperscript{98} Id. § 1313(c)(4)(B). EPA has never utilized its CWA § 303(c)(4)(B) authority to promulgate numeric nutrient criteria elsewhere.
\end{itemize}
that “[e]ssentially, if you look at the numbers in EPA’s rule and the numbers in DEP’s rule, they are the same. The main difference is that we included a lot more provisions and language that explains how everyone needs to implement the criteria.”

Nonetheless, environmental groups are not satisfied and contend that the biological impairment verification clause renders the standards less protective of water bodies than the narrative criteria that they replace because FDEP will only acknowledge pollution after the waters have been degraded. However, Bartlett counters contending that the rule’s site-specific verification provisions, which the EPA did not include, will help detect trends in nutrient pollution, and therefore the state’s rules are “absolutely more comprehensive” than those drawn up by the EPA.

Another source of tension straining the federal/state partnership is the cost of implementing Florida’s federal numeric standards for phosphorus and nitrogen. By not consulting Florida during the litigation settlement, the EPA agreed to promulgate a rule without consideration of how Florida will be able to implement it. The EPA has estimated the range of total cost to implement the federal nutrient criteria at between $135 million and $236 million annually. In contrast, the FDEP currently estimates the cost of compliance for the state’s proposed rule to be between $50 and $130 million per year. According to Mr. Bartlett, Florida’s rule has “a lot of check and balances” that will provide “certainty and speed” in the implementation process which will reduce costs. Therefore, in addition to the Florida rules’ compliance being most comprehensive, it also appears to be most cost effective.

100. Id.
101. Id.
102. Budell, supra note 53, at 123.
103. Id.
104. Chamlee, supra note 99.
105. Id.
However, because of a private study that showed implementation costs for the federal rules of up to $8 billion, Senator Bill Nelson requested the National Research Council to initiate an independent review of the EPA Rule’s economic analysis. After many months of research into the matter, the National Research Council released the final report and concluded the costs of switching from narrative to numeric criteria will exceed the EPA’s estimates. The National Academies, composed of the independent National Academy of Sciences, National Academy of Engineering, Institute of Medicine, and National Research Council issued a press release with a brief summary of the report’s findings and stated “[t]he committee concluded that EPA was correct in its approach to calculating the cost of the rule change. However, the agency underestimated both the number of newly impaired waters and the mitigation costs for the stormwater, agricultural, septic system, and government sectors.” The report also reasoned that in the future, EPA’s cost analyses of rules would be significantly improved if they described in explicit terms how the rule would be implemented over time and how the application will affect costs.

106. This study commissioned by a large coalition of Florida based public and private entities estimated cost of implementation of the federal rule at between $1 billion and $8.4 billion annually. See Budell, supra note 53, at 123. One example of this discrepancy is that EPA has estimated that domestic wastewater utilities will spend $22 to $38 million annually to comply with the Rule, while FDEP and a consortium of wastewater utilities estimate it will cost over $400 million annually. Mohammad O. Jazil & David W. Childs, EPA Imposes Strict Numeric Nutrient Criteria in Florida: Background and Implications, 43 A.B.A. Sec. Env’t, Energy, & Res. 6, 7 (Nov./Dec. 2011).

107. Jazil & Childs, supra note 106. The Council has convened a panel of engineers, economists, and one lawyer to review the costs of implementation. The panel intends to conclude its review before the Rules go into effect. Id.


110. Id.
The huge disparity between cost of implementation estimates between the state and federal rule exemplifies the lack of communication between the two parties during a process that is built on cooperation. However, even disregarding the billion-dollar estimate, it is foreseeable Florida will struggle to absorb the cost of implementing these numeric standards. Moreover, of greatest consequence is that the millions of dollars spent on turning the cooperative federalist system into an adversarial one could have been used to support Florida with additional resources to develop and implement their own standards more aggressively.

Although the evidence is clear that Florida needs numeric criteria, Florida was unwavering in their support of developing the standards. In upholding the EPA established standards, Judge Hinkle noted, “FDEP spent millions of dollars studying not whether numeric criteria were needed, but what the numeric criteria should be. FDEP’s work produced not a hint that the narrative criterion was working and should be retained.”

Therefore, although Florida’s process of developing their own state criteria was long and arduous, the EPA used Florida’s years of research and compiled data to develop the federal standards. It is hard to comprehend how Florida or the EPA could have developed numeric nutrient criteria that are protective of the environment and the State’s economy much faster but-for Florida’s wealth of water quality data. Accordingly, it is understandable that the EPA was unwilling to promulgate numeric criteria in the Mississippi-Atchafalaya River Basin and favored a cooperative approach.

Despite the EPA’s change of policy direction, the litigation in Florida set a dangerous precedent for the Agency. On March 13, 2012, a coalition of environmental advocacy groups filed suit against the EPA in the U.S. District Court for the Eastern District of Louisiana seeking to compel EPA to adopt numeric nutrient criteria in the MARB states. The plaintiffs allege

113. Plaintiffs are Gulf Restoration Network, Missouri Coalition for the Environment, Iowa Environmental Council, Tennessee Clean Water Network,
in the complaint that EPA’s denial of the Petition violates the Administrative Procedure Act (APA) for two separate reasons:

(A) The denial violates the APA because it fails to provide reasons for the denial that conform to the relevant statutory factors in Section 303(c)(4)(B) of the CWA. EPA’s denial was based on the administrative burden of granting the Petition and EPA’s purported policy of working collaboratively with states, but EPA’s denial does not provide a reasoned explanation as to why revised or new water quality standards to address excessive nutrient pollution in Mississippi River Basin and northern Gulf of Mexico waters are not “necessary to meet the requirements of the [CWA]” within the meaning of Section 303(c)(4)(B).

(B) EPA’s denial of the Petition alternatively violates the APA because it is contrary to the undisputed evidence in the Petition that numeric nutrient water quality standards are necessary pursuant to Section 303(c)(4)(B) of the CWA to implement the CWA’s requirements for Mississippi River Basin and northern Gulf of Mexico waters.114

Thus it appears the litigation in Florida to establish numeric nutrient criteria was just the tip of the iceberg. The precedent set in Florida will also prove important in the future as Colorado, Maine, Ohio, and other states draft their own nutrient criteria and seek EPA approval for them.115 Only time will tell how the EPA responds to the challenges ahead, but one can only hope the Agency supports the states in their efforts, utilizes dwindling Agency funds to combat nutrient pollution in the field and not in the courtroom, and restores the cooperative federal/state balance.

The cooperative federalism issues that have arisen in the process of promulgating numeric nutrient criteria in Florida have been further compounded by recently proposed legislation with severe anti-EPA sentiments. H.R. 2018, the “Clean Water Cooperative Federalism Act of 2011,” passed the House on July

114. Id. at 2-3.
115. Heltman, supra note 93.
Although left on hold in the Senate, if passed, the law would amend the CWA to prohibit the Administrator of the EPA from promulgating a revised or new water quality standard for a pollutant when the Administrator has approved a state water quality standard for such pollutant unless the state concurs with the Administrator’s determination that the revised or new standard is necessary to meet the requirements of such Act. The goal of the bill is to preserve the authority of each state to make determinations relating to the state’s water quality standards. However, if enacted, the effects would be wide-ranging and likely detrimental to environmental protection.

Additionally, the House debated huge funding cuts to state grant programs in the EPA budget for the Department of the Interior, Environment, and Related Agencies Appropriations Act, 2012—an act which contains multiple legislative riders which would stop EPA, the Army Corps of Engineers, and the Department of Interior from implementing numeric nutrient criteria in Florida, carrying out any enhanced scrutiny of coal mining permits, bar finalization of the stream buffer zone rule pertaining to coal mining waste in Appalachian streams, as well as prevent any alteration of the definition of navigable waters under the CWA, regulation of coal ash as hazardous waste, and further regulation of stormwater pending a Congressional study. However, on December 23, 2011, President Obama signed H.R. 2055, “The Consolidated Appropriations Act, 2012,” into law, which resulted in a decrease in EPA appropriations for the third straight year. Thus, while the original appropriations act was never passed, the scope of the antagonistic legislative riders illustrated the congressional backlash to the erosion of cooperative federalism under the CWA and other environmental statutes. Moreover, without adequate funding to

117. Id.
118. Id.
120. FY13 Funding Chart, ASS’N OF CLEAN WATER ADM’RS (Mar. 5, 2012), http://www.acwa-us.org/. The President’s proposed FY2013 budget reflects yet another decrease. Id.
properly implement the new standards, the distrust and uncertainty in the federal/state partnership will only intensify. Senator Edmund Muskie, one of the preeminent pioneers of environmental law in Congress and the most influential supporter of the 1972 CWA, once stated:

beyond the action of the Congress, beyond the recommendations of the President, the final responsibility for achieving our goals will rest with you who must labor in the field, helping to develop water quality standards to meet your local and regional needs, developing the specific sewage treatment systems, and administering control and abatement programs at the State and local level.\textsuperscript{121}

The federal/state partnership upon which the CWA was founded must be reinvigorated. Senator Muskie’s message underscores the fact that the states are on the frontlines of environmental regulation and are best suited to diagnose and remedy local problems. The actions of the EPA in Florida upset the proper cooperative balance of the CWA regulatory framework and damaged the EPA’s credibility in Florida and nationwide. By offsetting this balance, EPA prompted legislation that could severely compromise EPA’s authority and frustrate state efforts to protect our nation’s surface waters. Successful environmental programs need to be tailored to local conditions, utilize state innovative approaches, and have EPA oversight to help guide states to make the right decisions—this is what cooperative federalism is. While the past remains behind us, the current task is to restore the right balance in the federal/state partnership, ensure cooperative federalism is not simply a façade, and sustain the longevity of the CWA programs.