

ANTIDEGRADATION IN SOUTH CAROLINA UNDER THE CLEAN WATER ACT

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I. Introduction and the CWA Scheme:

In 1972, Congress enacted what would become known¹ as the Clean Water Act (CWA) to protect and restore the Nation's water resources.² The objective of the CWA is twofold: to clean up polluted waters and to keep clean waters clean.³ Specifically, the Acts' goals are "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters"⁴ and to attain "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water"⁵ To facilitate pollution clean-up, the Act requires that each state institute federally-approved comprehensive water quality standards that establish goals for intrastate waters.⁶ Congress charged the Environmental Protection Agency (EPA) to enforce and administer the CWA.⁷ If a state fails to develop adequate water quality standards, the EPA must step in and develop standards that provide the protection required by the Act.⁸

¹ In 1972, the Act was entitled the Federal Water Pollution Control Act. It was not until it was amended in 1977 that short-hand name, Clean Water Act, came into being. *See* EPA, LAWS AND REGULATIONS *at* <http://www.epa.gov/region5/water/cwa.htm> (last visited Apr. 22, 2005).

² 33 U.S.C. § 1251(a) (2000).

³ *Id.*

⁴ *Id.*

⁵ 33 U.S.C. § 1251(a)(2).

⁶ *See* 33 U.S.C. § 1251(a).

⁷ 33 U.S.C. § 1251(d). Note that other aspects of the Clean Water Act administration may be shared with other agencies, such as implementation of Section 404 which is shared with the United States Army Corps of Engineers. 33 U.S.C. § 1344.

⁸ 33 U.S.C. § 1313(a).

The CWA requires that “state standards be sufficient to maintain existing beneficial uses of navigable waters, preventing their further degradation.”⁹ The EPA’s implementing regulations promulgate a federal antidegradation policy and require state water quality standards to include “a statewide antidegradation policy” to ensure that the “level of water quality necessary to protect the existing uses shall be protected.”¹⁰ Any time a state revises or adopts new standards, the EPA must review the new or revised standards to ensure compliance with the Act.¹¹

This paper argues that the South Carolina antidegradation regulations¹² are ineffective for designating Outstanding National Resource Waters (ONRWs)¹³ as mandated by the CWA¹⁴ because: (1) the State’s interpretation of the ONRW definition is overbroad and fails to distinguish from less protective classifications; (2) the regulations do not require an economic analysis of potential costs and benefits associated with ONRW designations; and (3) the regulations fail to include a provision allowing for an initial public petition for an ONRW designation.¹⁵ Part I of this paper sets forth the implementation of the CWA; Part II explains the CWA’s antidegradation policy as it

⁹ *PUD No. 1 of Jefferson County v. Washington Dep’t of Ecology*, 511 U.S. 700, 705 (1994) (citing 33 U.S.C 1313(c)(2)(A)).

¹⁰ 40 C.F.R. § 131.12(a)(1)-(3) (1996).

¹¹ 33 U.S.C. § 1313(c)(2)(A).

¹² BUREAU OF WATER, S.C. DEP’T OF HEALTH AND ENV’T CONTROL, ANTIDEGRADATION IMPLEMENTATION FOR WATER QUALITY PROTECTION IN SOUTH CAROLINA at 6 (July 1998).

¹³ *See* 40 C.F.R. § 131.12

¹⁴ 33 U.S.C. § 1251(a) (2000).

¹⁵ *See* discussion *infra* Part III.

applies to the states; and Part III analyzes the antidegradation regulations as they have been applied in South Carolina.

II. Antidegradation Policy:

“The antidegradation provision is of certain provenance but of uncertain meaning.”¹⁶ First announced in 1966, the policy was later adopted as a requirement of the water quality standards program under the CWA.¹⁷ Antidegradation refers to the second objective of the CWA—keeping clean waters clean. The EPA’s antidegradation regulations specify the framework states must use when making decisions regarding changes in water quality.¹⁸ The regulation delineates three “tiers” of water. Each tier provides for a different degree of water quality protection.¹⁹ A state’s implementation procedure must be designed to achieve the different degrees of protection by prohibiting any degradation in some waters, minimizing the impacts of degrading activities in other waters, and assuring that existing uses are protected in all water bodies.²⁰ The existing uses of a water body are its state determined “designated uses,” such as recreation, water supply, aquatic life, and agriculture as required of the states by the CWA.²¹ “Designated

¹⁶ Jeffrey M. Gaba, *New Sources, New Growth and the Clean Water Act*, 55 ALA. L. REV. 651, 671 (Spring 2004).

¹⁷ *Id.* (citing 40 C.F.R. § 131.12).

¹⁸ 40 C.F.R. § 131.12.

¹⁹ *Id.*; see generally JUDITH M. BRAWER & RICHARD LEVITT, ANTIDegradation Policy and Outstanding National Resource Waters in the Northern Rocky Mountains (USA) (1998), <http://www.wildlands.org/greenpapers/onrw.html> (last visited Apr. 9, 2005).

²⁰ *Id.*

²¹ See EPA INTRODUCTION TO WATER QUALITY STANDARDS at <http://www.epa.gov/Region8/water/wqs/wqsintro.html> (last visited Apr. 9, 2005).

uses form the basis for establishing water quality criteria.”²² Criteria identify the specific, usually maximum, concentration of a pollutant that may exist in a water body while still allowing the designated use to be attained.²³

The EPA’s implementing regulations include a pyramid-style antidegradation structure²⁴ with three general levels of protection for water bodies.²⁵ Tier I establishes the minimum level of water quality that a State must maintain in every body of water.²⁶ Specifically, Tier I provides for the protection and maintenance of the water quality necessary to preserve all existing uses of a water body.²⁷ For example, a lake used for fishing, boating, and drinking water must maintain qualities which preserve each of these uses.

Tier II provides the protection “necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water” to waters whose quality exceeds Tier I. Tier II permits a reduction in water quality only when “necessary to accommodate important economic or social development.”²⁸ Tier II waters receive more protection than Tier I in order to maintain their higher quality.²⁹ A state, may however, determine

²² Gaba, *supra* note 16, at 658.

²³ *Id.* (citing The Water Quality Standards Handbook: Second Edition, EPA-823B-94-005a (Aug. 1994)).

²⁴ *See* 40 C.F.R. § 131.10-.12 (1996).

²⁵ *See* 40 C.F.R. § 131.12(a)(1)-(3).

²⁶ *See* 40 C.F.R. § 131.12(a)(1).

²⁷ *Id.*

²⁸ *See* 40 C.F.R. § 131.12(a)(2). Interest which might be considered important for economic or social development include attracting or retaining industry along the banks of a lake and developing a new lake side condominium complex.

²⁹ *Id.*

during a water quality standards review that it needs to reduce water quality to foster some type of important development.³⁰ Jeffrey M. Gaba provides further explanation when he states:³¹

A determination that a facility will cause “degradation” of a Tier II water is the “trigger” that launches antidegradation review. It does not, in itself, provide that a discharge is prohibited; it does not, in itself, establish a substantive standard of control. Those questions are answered in the context of the antidegradation review process that should involve an assessment of, among other things, whether the proposed discharge is justified by “important” economic and social factors.

The highest level of protection, Tier III, applies to select water bodies of very high quality. The Tier III designation, referred to as Outstanding National Resource Waters (ONRW)³², prohibits any degradation of existing water quality standards, except on a temporary basis.³³ “Where high quality waters constitute an outstanding National resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.”³⁴ Through ONRW designations, sensitive or highly valued water bodies can be identified and protected from any degradation.³⁵ In order to meet the antidegradation policy’s objective to maintain and protect existing water quality of ONRWs, a state may not issue a permit for an activity that will permanently lower the water quality of an ONRW.³⁶

³⁰ Id.

³¹ Gaba, *supra* note 16, at 676.

³² 40 C.F.R. § 131.12

³³ Id.

³⁴ 40 C.F.R. § 131.12(a)(3).

³⁵ *See* Id.

³⁶ Id.

The EPA's antidegradation regulation also requires public participation in any decisions by the state to change water quality.³⁷ The EPA permits a state to decide how best to receive public comment: a state may either hold a public hearing, or it may provide public notice and the opportunity for the public to request a hearing.³⁸ Public participation in antidegradation decisions helps to ensure the public will be aware of, and can provide comment on, any lowering of water quality before the changes are implemented.³⁹ Through public comment and hearings, citizens can pressure the state to implement an aggressive antidegradation policy to prevent the lowering of water quality.⁴⁰ Public participation is a crucial element to successfully providing a water body with the highest level of protection.⁴¹

Although much attention has centered on the effort to clean up polluted waters since the passage of the CWA,⁴² the statute's mandate to preserve the quality of clean waters has been largely ignored.⁴³ "The federal antidegradation policy's procedure has failed because states have designated fewer than one-half of one percent of America's

³⁷ *Id.*; *see also* EPA, Water Quality Standards Handbook INT-2 (2d ed. 1994) [hereinafter handbook].

³⁸ Handbook at 4-13.

³⁹ *Id.*

⁴⁰ JUDITH M. BRAWER & RICHARD LEVITT, ANTIDEGRADATION POLICY AND OUSTANDING NATIONAL RESOURCE WATERS IN THE NORTHERN ROCKY MOUNTAINS (USA), 8 (1998), <http://www.wildlands.org/greenpapers/onrw.html> (last visited Apr. 9, 2005).

⁴¹ *See generally* *Id.*

⁴² *See, e.g.*, Vice President Launches New Strategy to Protect America's Waters at <http://clinton4.nara.gov/CEQ/19971118-2999.html> (last visited Apr. 8, 2005).

⁴³ John A. Chilson, Note, *Keeping Clean Waters Clean: Making the Clean Water Act's Antidegradation Policy Work*, 32 U. Mich. J.L. Ref. 545, 447 (1999).

river miles as ONRWs.”⁴⁴ Without ONRW protection, some of our Nation’s highest quality waters have been allowed to deteriorate.⁴⁵ The remaining pristine waters need immediate protection to prevent their deterioration.⁴⁶ As the EPA has stated, “the antidegradation policy is significantly underused as a tool to attain and maintain water quality and plan for and channel important economic and social development that can impact water quality.”⁴⁷ The EPA has, however, given limited guidance on “proper implementation.”⁴⁸

The federal regulatory framework is very weak as a result of three interrelated problems with the current antidegradation policy.⁴⁹ First, the EPA’s antidegradation policy fails to adequately define ONRW, which creates implementation problems for state agencies tasked with managing the antidegradation policy and permits states such as South Carolina to prioritize economic development over designation, maintenance, and protection of ONRWs.⁵⁰ Second, although the CWA establishes the right of citizen interest groups to petition state environmental agencies to designate water bodies as ONRWs, it does not require agencies to respond to those requests.⁵¹ A third problem is

⁴⁴ Id. (citing National Wildlife Federation, *Waters at Risk: Keeping Clean Waters Clean*, 1 (1992)). (explaining that the EPA and state environmental agencies have spent billions of dollars on the clean-up effort while ignoring the equally important goal of antidegradation).

⁴⁵ See id.

⁴⁶ See id.

⁴⁷ 1998 ANPRM, 63 Fed Reg. 36,742, 36780 (proposed July 7, 1998) (codified at 40 C.F.R pt. 131).

⁴⁸ Gaba, *supra* note 16, at 676.

⁴⁹ Chilson, *supra* note 43, at 547.

⁵⁰ Id.

⁵¹ Id.

that in addition to the mandatory review of state water quality standards every third year,⁵² the EPA is only required to review new or revised state policies.⁵³ Thus, “[t]he current policy creates a strong incentive for state administrators to maintain the status quo in order to avoid involvement by the EPA. As a result, states too often fail to revise their standards when their water bodies deserve a higher designation.”⁵⁴ These three regulatory weaknesses have resulted in unworkable and ineffective management of the CWA’s antidegradation policy.⁵⁵ However, “[c]oherent or not, the antidegradation requirements establish potentially significant constraints on new or expanded discharges.”⁵⁶ And as further explored below, “[t]he significance of these constraints hinge on a number of issues.”⁵⁷

III. Antidegradation Regulations in South Carolina:

The South Carolina Department of Health and Environmental Control (DHEC) is the agency charged with implementing the State’s Antidegradation Policy, included as Antidegradation Rules in Section D of S.C. Regulation 61-68, *Water Classification and Standards*.⁵⁸ In South Carolina, as well as in many other states, a fourth level of protection has been added to the three Tiers required under the CWA.⁵⁹ This additional,

⁵² 1313(c)(1).

⁵³ See 1313(c)(2)(A), (c)(3).

⁵⁴ Chilson, *supra* note 43, at 549.

⁵⁵ *Id.*

⁵⁶ Gaba, *supra* note 16, at 674.

⁵⁷ *Id.*

⁵⁸ BUREAU OF WATER, S.C. DEP’T OF HEALTH AND ENV’T CONTROL, ANTIDEGRADATION IMPLEMENTATION FOR WATER QUALITY PROTECTION IN SOUTH CAROLINA at 6 (July 1998).

⁵⁹ *Id.*

intermediate level was developed to incorporate waters which do not meet the requirements of Tier III ONRWs, but should be afforded a higher level of protection than Tier II.⁶⁰ South Carolina's Antidegradation Implementation plan includes an intermediate level of protection designated as Tier II½. When DHEC determines through its "classification process that a water body is of significant ecological or recreational value, then it is classified as a [Tier II½] Outstanding Resource Water (ORW) of the State."⁶¹ As such, the Tier II½ level of protection applies and "allows no discharges from . . . waste treatment facilities . . . and requires the maintenance of existing water quality. Tier II ½ designations prevent all point source pollution, but provides a large exception that generally allows for non-point source pollution."⁶² Point source pollution refers to pollution that can be traced back to its point of origin, usually from a specific discharge point, such as a pipe from industry or wastewater treatment plant.⁶³ In contrast, nonpoint source pollution is from many different sources, usually associated with rainfall runoff moving over and through the ground, carrying natural and manmade pollutants into lakes, streams, and rivers.⁶⁴ In South Carolina, Tier II½ designations specifically require that "[s]tormwater and other nonpoint source runoff including that from agricultural or

⁶⁰ Id. at 2.

⁶¹ Id at 6.

⁶² BUREAU OF WATER, *supra* note 58, at 6.

⁶³ NonPoint Source Pollution Issue at <http://www.jsasd.k12.pa.us/mhopper/nature/nonpointsource.htm> (last visited Apr. 21, 2005).

⁶⁴ Id.

permitted discharge from aquaculture facilities are allowed in these waters provided no significant adverse effect to water quality will occur.”⁶⁵

In comparison, Tier III designations provide the added protection of disallowing all permanent discharges of any kind—including non-point discharges. Tier III provides the highest level of protection to water bodies by prohibiting any lowering of water quality.⁶⁶ Thus, for Tier III waters, “[n]o permanent permitted discharges of any kind would be allowed and the exceptions listed for the State’s ORW waters would not apply”⁶⁷ Tier III provides additional protection for “high quality waters [that] constitute an outstanding National Resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance.”⁶⁸ DHEC is responsible for determining if some ORWs of the State are nationally significant and may be classified as ONRWs. “ONRWs are protected by applying the standards of the Class ORW which require maintenance of existing water quality and additionally would not allow any [non-]point source discharges.”⁶⁹

The southeastern EPA Region IV includes Alabama, Florida, Georgia, Kentucky, Mississippi, Tennessee, and South Carolina.⁷⁰ South Carolina currently has no water

⁶⁵ BUREAU OF WATER, *supra* note 58, at 6.

⁶⁶ 40 C.F.R. § 131.12(a)(3).

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ BUREAU OF WATER, *supra* note 58, at 6.

⁷⁰ *See generally* EPA, Water Quality Standards, Where You Live, at <http://www.epa.gov/waterscience/standards/regions.htm> (last visited Apr. 9, 2005).

bodies designated as Tier III ONRW.⁷¹ Only two of the eight states included in EPA Region IV have any water bodies designated as ONRWs.⁷² Kentucky has designated three⁷³ and Tennessee has designated six water bodies as Tier III ONRWs.⁷⁴ In 1992, twenty years after the creation of the federal antidegradation regulations, a survey of state environmental agencies discovered that states have designated approximately 0.37 percent (.37%) of the Nation's river miles as ONRWs within the federal classification and another 3.16 percent (3.16%) under state ORW designations.⁷⁵ Since the 1992 survey, these numbers have yet to significantly improve.⁷⁶ The widespread reluctance of states across the nation to designate Tier III ONRWs is due in large part to the negative economic impact that potentially arises from the high level protection provided by the classification.⁷⁷

Significant economic opportunity costs may accompany the ONRW classification because its beneficial protection arises from a total or near total ban on new or increased

⁷¹River Network, *A State by State Look at the Clean Water Act*, at http://www.rivernetwork.org/cleanwater/cwa_info.asp?searchid=3014&stateid=40&querytype=simple&display=0 (last visited Apr. 8, 2005).

⁷² *Id.*

⁷³ See Antidegradation Implementation Methodology at <http://www.lrc.state.ky.us/kar/401/005/030.htm> (last visited Apr. 21, 2005).

⁷⁴ See RULES OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, TENNESSEE WATER QUALITY CONTROL BOARD, DIVISION OF WATER POLLUTION CONTROL, CHAPTER 1200-4-3, GENERAL WATER QUALITY CRITERIA 22 available at <http://www.state.tn.us/sos/rules/1200/1200-04/1200-04-03.pdf> (last visited Apr. 21, 2005).

⁷⁵ See Chilson, *supra* note 43, at 556, (citing National Wildlife Federation, *Waters at Risk: Keeping Clean Waters Clean 1* (1992) (on file with the University of Michigan Journal of Law Reform)).

⁷⁶ See generally River Network, *supra* note 71.

⁷⁷ See EPA, *Water Quality Standards, Policy and Guidance, Interim Economic Guidance for Water Quality Standards*, 5. Antidegradation: Role of Economic Analysis, available at <http://www.epa.gov/waterscience/econ/chaptr5.html> (last visited Apr. 21, 2005).

discharges.⁷⁸ As a result, the ONRW classification constructively prevents new industry from locating along a water's shores and prohibits existing industries from expanding their output.⁷⁹ This ban on discharges is perceived to create an economic disincentive for state regulators to advocate the ONRW classification in South Carolina. In a 1991 EPA Memorandum, the Director of the Standards and Applied Science Division has observed that "[i]t is because of this stricture against new or increased discharges that States are reluctant to designate waters as ONRW and have begun to create what is becoming known as Tier II½. . . . [P]rotection more stringent than the provisions of Tier II but would allow some added pollution that ONRW would not."⁸⁰

By adopting a midpoint designation that is more protective than the federal Tier II standard and less protective than the federal Tier III standard, South Carolina effectively avoids the potential economic hamstring of a Tier III designation.⁸¹ The exceptions in Tier II½ allowing for non-point source runoff gives state regulators the security that future development is not entirely prohibited and dispels much of the fear of missing future economic opportunities. The result is that State regulators prefer the lesser protection provided by Tier II½.

Tier II½ proposals place water quality advocates in difficult situations. On the one hand, it is possible to obtain such a designation for more water bodies than will likely

⁷⁸ See 40 C.F.R. § 131.12(a)(3).

⁷⁹ Chilson, *supra* note 43, at 556.

⁸⁰ Memorandum from William R. Diamond, Director, Standards and Applied Science Division, U.S. EPA, to Victoria Binnetti, Chief, Program Support Branch, Region III, U.S. EPA (June 13, 1991), at <http://www.epa.gov/waterscience/library/wqstandards/antideg3.pdf> (last visited Apr. 8, 2005).

⁸¹ Chilson, *supra* note 43, at 554.

ever be considered for ONRW.⁸² Additionally, Tier II½ provides greater protection than would ordinarily be provided water bodies that would merely qualify for a Tier II designation in a state without a fourth standard. On the other hand, some water bodies will not be afforded the strict Tier III protection that they both need and deserve when they are placed in a Tier II½ classification, which in general are significantly less protective than ONRW.⁸³

Consequently, Tier II½ classifications present the possibility of a slippery slope for water quality advocates. Public interests groups, which can assist in developing the necessary public support for Tier III designations must keep this in mind. Public interest groups should: (1) develop the strongest case possible for designating at least some state water bodies as ONRW; and (2) refuse to settle for Tier II½ classifications for water bodies that clearly meet the qualifications for Tier III protection.⁸⁴

A. Adopt a Clear and Specific Definition of ONRW:

While ONRWs are often regarded as having the highest quality water, this not a requirement. Waters that are of exceptional recreational and/or ecological significance need not have particularly high water quality to be provided status as an ONRW.⁸⁵ Environmental groups should encourage South Carolina to add specific criteria to state regulations for what qualifies as an ONRW. Additional language should be adopted to provide a clear definition of ONRWs by expanding upon the language in the EPA

⁸² RIVER NETWORK, UNDERSTANDING THE CLEAN WATER ACT: TAKE THE COURSE, WATER QUALITY STANDARDS: TIER III, at <http://www.cleanwateract.org/pages/Tier3.htm> (last visited Apr. 8, 2005).

⁸³ Id.

⁸⁴ RIVER NETWORK, *supra* note 71.

⁸⁵ 48 Fed. Reg. 51400, 51403 (1983); Handbook at 4-10.

regulation's preamble.⁸⁶ The preamble advises that ONRWs may include "waters of ecological significance . . . which are important, unique, or sensitive ecologically, but whose water quality as measured by the traditional parameters (dissolved oxygen and pH, etc.) may not be particularly high or whose character cannot be adequately described by these parameters."⁸⁷ While the preamble's criteria guidelines theoretically increase the number of waters that may qualify for ONRW designation, they lack specificity because the terms "important, unique, and sensitive" are also vague. Through adopting a specific and clear definition of what qualifies as Tier III water by expanding upon the spirit of the preamble's language, South Carolina can empower DHEC to identify and distinguish ONRWs from ORWs.

The failure to classify any water body as Tier III in South Carolina is due in major part to the adoption of both an overly narrow and overly broad interpretation of the ONRW definition. First, Tier III is defined too broadly under South Carolina's regulations because it entirely overlaps the qualifications of Tier II½ ORWs. This is a result of the particularly destructive interpretation of the term "high quality" in the ONRW regulation originating within EPA's regional office. EPA Region IV, the southeastern region including South Carolina, interprets the term "high quality water"⁸⁸ for ONRW purposes to have the same level of water quality as Tier II½ waters.⁸⁹ This definition not only undermines the rationale behind a pyramid antidegradation structure,

⁸⁶ Chilson, *supra* note 43, at 554.

⁸⁷ *Id.*

⁸⁸ 40 C.F.R § 131.12.

⁸⁹ See EPA REGION IV, QUESTIONS AND ANSWERS ON IMPLEMENTATION OF TIER III OF THE FEDERAL ANTIDEGRADATION POLICY: PROTECTION OF OUTSTANDING NATIONAL RESOURCE WATERS 1 (1989), available at <http://www.epa.gov/epahome/locate2.htm> (last visited Apr. 21, 2005).

but also renders the ONRW designation insignificant because states are likely to choose, all things equal, to place a water body in the lower tier which imposes fewer restrictions on the future use of that water body.⁹⁰ Such a broad interpretation effectively eliminates the EPA's highest level of protection entirely.

Both the structure and wording of the EPA's general ONRW regulation contradict this regional interpretation.⁹¹ It is clearly redundant and not the intent of the EPA to classify Tier III waters as equivalent to Tier II½ waters. "Certainly the EPA, which drafted the CWA implementation regulations, would have either referred to Tier II½ waters in its ONRW provision or incorporated the Tier II½ language into the ONRW subsection had it intended the two antidegradation categories to be equivalent."⁹² The pinnacle position that ONRWs occupy in the antidegradation pyramid, combined with the regulation's mandate that states implement federally compliant antidegradation schemes, indicates that the ONRWs' "high [water] quality" requirement both be honored and maintained at a level above that of Tier II½ waters.⁹³

A clear indication of South Carolina's misinterpretation of the ONRW definition is demonstrated by pointing out that in South Carolina, the primary document for providing the public with information on water protection excludes the ONRW classification entirely.⁹⁴ The *Citizens Guide to Clean Water* provided by the Palmetto

⁹⁰ Chilson, *supra* note 43, at 555.

⁹¹ *Id.*

⁹² *Id.*

⁹³ *Id.*

⁹⁴ PALMETTO CONSERVATION FOUNDATION, S.C. DEP'T OF HEALTH AND ENV'T CONTROL, CITIZEN'S GUIDE TO CLEAN WATER, 12 (1999), *available at* <http://www.scdhec.gov/eqc/water/pubs/citgd.pdf#xml=http://www.scdhec.gov/cgi->

Conservation Foundation and DHEC provides the classifications for surface waters beginning with the highest level of Tier II½ ORWs and fails to mention ONRWs⁹⁵ and provides that ORWs receive the “highest level of protection.”⁹⁶ The Guide goes on to define ORWs as identical to that of ONRWs.⁹⁷ This is clearly inconsistent with the EPA’s federal guidelines and demonstrates how states in Region IV have misinterpreted ONRWs and effectively eliminated Tier III Classifications.

Region IV further misinterprets “high quality waters” by defining waters that exceed Tier II½ qualifications so narrowly as to exclude nearly all existing water bodies. By narrowly defining Tier III to include only waters of extraordinary quality, South Carolina is allowed to circumvent federal EPA guidelines by designating waters meeting the Tier III classification as Tier II½, providing for fewer restrictions on future development.⁹⁸ This narrow interpretation of “high quality water” is flawed and one primary reason that very few states have yet designated many ONRWs. Many states, including South Carolina, have interpreted the term “high quality” as meaning pristine—and then have claimed that they had few if any waters that met this impossibly high standard.⁹⁹ This is despite the EPA’s federal guidance that at least some waters should be considered for ONRW, including those of exceptional recreational or ecological value,

bin/texis.exe/Webinator/search/xml.txt?query=Citizens+Guide+to+Clean+Water&pr=www&prox=page&rorder=500&rprox=500&rdfreq=500&rwfreq=500&rlead=500&sufs=1&order=r&cq=&id=422b56647
(last visited Apr. 9, 2005).

⁹⁵ Id at 13.

⁹⁶ Id.

⁹⁷ Id.

⁹⁸ See EPA REGION IV, *supra* note 89, at 1.

⁹⁹ RIVER NETWORK, *supra* note 71, at 2.

whether or not their existing quality is “particularly high.”¹⁰⁰ The state’s ONRW definition should emphasize ecological significance by defining specific water quality standard parameters that, if met, automatically qualify a water body for consideration of the top tier protection.¹⁰¹

B. Require an Analysis of Economic Considerations:

The only two states in EPA Region IV successful in designating water bodies as Tier III include a common feature within their antidegradation regulations that other states, such as South Carolina, are lacking¹⁰². Both Kentucky¹⁰³ and Tennessee¹⁰⁴ include provisions requiring an economic impact analysis as part of the ONRW designation process.¹⁰⁵ Together, the two states have successfully designated over 100 miles of water bodies as Tier III ONRW.¹⁰⁶ Kentucky, with the highest number of water bodies (six)¹⁰⁷ designated as ONRW in Region IV, provides a detailed summary of what the economic analysis must include and could serve as guidance for any state needing to implement

¹⁰⁰ Id.

¹⁰¹ Chilson, *supra* note 43, at 555.

¹⁰² See BUREAU OF WATER, *supra* note 58, at 6.

¹⁰³ See Antidegradation Implementation Methodology at <http://www.lrc.state.ky.us/kar/401/005/030.htm> (last visited Apr. 8, 2005).

¹⁰⁴ See RULES OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, TENNESSEE WATER QUALITY CONTROL BOARD, DIVISION OF WATER POLLUTION CONTROL, CHAPTER 1200-4-3, GENERAL WATER QUALITY CRITERIA 22 available at <http://www.state.tn.us/sos/rules/1200/1200-04/1200-04-03.pdf> (last visited Apr. 8, 2005).

¹⁰⁵ Id; see also Fla, Admin. Code Ann. r.62-302.200(11). Florida regulations also require an ONRW designation to contain a favorable cost-benefit analysis which weighs environmental, social, and economic benefits against related costs.

¹⁰⁶ See Antidegradation Implementation Methodology, *supra* note 103; RULES OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, *supra* note 104.

¹⁰⁷ See RULES OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, *supra* note 104, at 6.

such a provision.¹⁰⁸ First, the Kentucky regulations provide the general requirement by demanding that “[a]n assessment of environmental, economic, and social impacts will be prepared for each stream or stream segment proposed for Tier 3 ONRW designation.”¹⁰⁹ The Kentucky regulations then set out a base-line requirement for what is to be included in the analysis, but largely defers to its state agency for how to best determine the details.¹¹⁰ Specifically the regulations provide that “[t]he assessment content and process will be determined by the Division of Water Pollution Control but will contain sufficient data and information to inform the Water Quality Control Board about environmental, economic, and social impact of ONRW designation.”¹¹¹ By deferring to the state regulatory agency for the details of the economic analysis, the provision allows for environmental professionals to determine how best to qualify the costs and benefits associated with designating a water body as an ONRW. By requiring a detailed economic analysis of the impact of a Tier III designation, state regulators can weigh environmental, social, and economic benefits against related costs.¹¹² Therefore, this requirement allows for full disclosure and balancing of future impacts of an ONRW designation. With full disclosure provided by the state agency, the opportunity exists to demonstrate to state legislators that where a water body meets Tier III standards, the highest level of protection may outweigh related costs.

¹⁰⁸ Id.

¹⁰⁹ Id.

¹¹⁰ See id.

¹¹¹ Id.

¹¹² See, e.g., Fla, Admin. Code Ann. r.62-302.200(11).

Additionally, the state of Florida, despite not yet designating any water bodies as Tier III, has improved upon the EPA's presumption against new or expanded discharges into ONRWs. Florida's regulations create incentives for aspiring industrial leaders to develop and utilize technology that improves water quality.¹¹³ By including a discharge exception that allows increased or new discharges if water quality is enhanced by those discharges, Florida regulations would allow development along a Tier III shoreline if it enhances the quality of water.¹¹⁴ This provision encourages the development of water quality enhancing technology and dispels some of the economic fears of legislators when faced with a proposal for Tier III classification.

South Carolina should add provisions to its existing antidegradation regulations in order to make them fully operable and thus, meet the intention of the CWA.¹¹⁵ South Carolina should look to the existing models of its fellow Region IV states of Florida, Kentucky, and Tennessee and adopt their most beneficial provisions in order to structure a successful antidegradation regulation. South Carolina should first provide an expanded definition of ONRW by clarifying how a water body classified as Tier II½ further meets the criterion for Tier III.¹¹⁶ The classifications of ORWs and ONRWs should be clearly distinguished and should provide for specific characteristics that trigger a water body as a

¹¹³ Id.

¹¹⁴ See id; see also Chilson, *supra* note 43, at 567.

¹¹⁵ See 33 U.S.C. § 1251(a).

¹¹⁶ See generally EPA REGION IV, QUESTIONS AND ANSWERS ON IMPLEMENTATION OF TIER III OF THE FEDERAL ANTIDEGRADATION POLICY: PROTECTION OF OUTSTANDING NATIONAL RESOURCE WATERS I (1989), available at <http://www.epa.gov/epahome/locate2.htm> (last visited Apr. 9, 2005).

potential ONRW.¹¹⁷ Second, South Carolina should require for a full economic analysis of costs and benefits associated with a Tier III designation.¹¹⁸ Third, South Carolina should include a discharge exception for allowing increased or new discharges if they enhance water quality.¹¹⁹ As a result, South Carolina will empower DHEC with the ability to designate ONRWs as intended by the CWA.¹²⁰

C. Public Participation:

“[P]erhaps of greatest significance, the antidegradation requirements contemplate a process of public participation.”¹²¹ The ONRW designation process is important because it involves the public in the protection of water quality.¹²² It is the only provision of the CWA to provide for proactive citizen action in the protection of water quality.¹²³ While other provisions allow for public comment and review of water quality management decisions, such as changes to water quality standards, the ONRW petitioning process requires direct public action to protect those water bodies most

¹¹⁷ *But see* PALMETTO CONSERVATION FOUNDATION, S.C. DEP’T OF HEALTH AND ENV’T CONTROL, CITIZEN’S GUIDE TO CLEAN WATER, 12 (1999), available at <http://www.scdhec.gov/eqc/water/pubs/citgd.pdf#xml=http://www.scdhec.gov/cgi-bin/texis.exe/Webinator/search/xml.txt?query=Citizens+Guide+to+Clean+Water&pr=www&prox=page&rorder=500&rprox=500&rdfreq=500&rwfreq=500&rlead=500&sufs=1&order=r&cq=&id=422b56647> (last visited Apr. 8, 2005); *see also* Chilson, *supra* note 43, at 555.

¹¹⁸ *See* Antidegradation Implementation Methodology, *supra* note 103; RULES OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, *supra* note 104.

¹¹⁹ *See, e.g.*, Fla, Admin. Code Ann. r.62-302.200(11).

¹²⁰ *See* 33 U.S.C. § 1251(a); *see cf.* Chilson, *Supra* note 43, at 568.

¹²¹ Gaba, *supra* note 12, at 684.

¹²² JUDITH M. BRAWER & RICHARD LEVITT, ANTIDEGRADATION POLICY AND OUSTANDING NATIONAL RESOURCE WATERS IN THE NORTHERN ROCKY MOUNTAINS (USA) (1998), <http://www.wildlands.org/greenpapers/onrw.html> (last visited Apr. 9, 2005).

¹²³ *Id.*

important to them.¹²⁴ Public participation in antidegradation decisions ensures the public will be aware of, and can provide comment on, any lowering of water quality before the changes are made.¹²⁵ Through public comment and hearings, citizens can pressure the state to implement an aggressive antidegradation policy to prevent the lowering of water quality.¹²⁶ This intention was made clear in 1998, when the EPA stated that the “current thinking is that determining the social and economic importance of a proposed activity is an important public question[,] best addressed by State, Tribal or local interests.”¹²⁷

However, the use of this important water quality protection tool in South Carolina is limited by the lack of state implementation procedures for ONRW designation and the difficulty of state petitioning procedures.¹²⁸ South Carolina’s antidegradation regulations provide virtually no public guidance on implementation procedures for ONRW designations.¹²⁹ South Carolina regulations provide that the DHEC will implement the State’s Antidegradation Policy.¹³⁰ The South Carolina Administrative Procedures Act¹³¹ sets out the process by which DHEC drafts, amends, adopts or repeals regulations.¹³² “The process begins when DHEC decides it must draft regulations to manage an

¹²⁴ *Id.*

¹²⁵ *Id.* at 3.

¹²⁶ *Id.*

¹²⁷ 1998 ANPRM, 63 Fed. Reg. 36,742, 36,784 (proposed July 7, 1998) (codified at 40 C.F.R. 131).

¹²⁸ *Cf.* BRAWER, *supra* note 122, at 4.

¹²⁹ *See* S.C. Reg. 61-68, s. D.

¹³⁰ BUREAU OF WATER, *supra* note 30, at 1.

¹³¹ 2004 S.C. Acts t49c021, available at <http://www.scstatehouse.net/code/t49c021.htm> (last visited Apr. 21, 2005).

¹³² PALMETTO CONSERVATION FOUNDATION, S.C. DEP’T OF HEALTH AND ENV’T CONTROL, CITIZEN’S GUIDE TO CLEAN WATER, 12 (1999).

environmental problem that currently is not covered by regulations.”¹³³ Thus, there are no provisions providing for a public petitioning process of an ONRW designation in South Carolina. The South Carolina regulations should be changed to incorporate a public petitioning process so as not to leave the entire burden of the petition process on DHEC. Therefore, South Carolina should look to the Rocky Mountain region, which has public processes for citizen designation of ONRWs,¹³⁴ for guidance on the issue.

EPA Region VIII, which includes Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming, does provide some guidance for designation of ONRWs, which includes public participation.¹³⁵ The guidance is merely recommendations from the EPA Regional office and each state is free to provide their own ONRW designation process as long as it is consistent with the federal regulations.¹³⁶ In Region VIII, both Montana and Idaho regulations follow the EPA guidance and outline a process for citizen designations of ONRWs.¹³⁷ Region VIII guidance provides that the public may nominate any state water for ONRW protection at any time by written request, which should explain why ONRW designation is warranted base on one or more of the following factors: (1) location—is the water body on federal land; (2) previous special designations;

¹³³ Id.

¹³⁴ EPA Region VIII Guidance: Antidegradation Implementation (Aug., 1993) *available at* http://www.rivernetwork.org/library/index.cfm?doc_id=108 (last visited Apr. 8, 2005).

¹³⁵ BRAWER, *supra* note 122, at 4.

¹³⁶ Id at 5.

¹³⁷ Id.

(3) existing water quality; (4) ecological value; (5) recreational or aesthetic value; and (6) other factors indicating outstanding ecological or recreational resource value.¹³⁸

South Carolina should not wait for guidance from its EPA Region, but should look to Region VIII and change its regulations to allow for a public petitioning process. Allowing the public to initiate the petition process is important because a request for an ONRW designation originating from the public is more likely to command the attention of legislators than a petition originating from a government agency. Once the public has initiated the petitioning process, DHEC should then begin its process of addressing the environmental concern and see to it that the concern is brought before the legislature.¹³⁹

1. The Need for Public Support:

Widespread public support is the crucial element for successfully designating a water body as an ONRW in South Carolina. Otherwise, DHEC will continue to ignore Tier III ONRW designations entirely and force South Carolina to settle for Tier II½ ORW designations.¹⁴⁰ DHEC must take it upon itself to lead a campaign of widespread public support by developing the strongest case possible for designating a water body as Tier III.¹⁴¹ Public support must be large and encompass a wide array of public interest groups in order to create a resounding voice that the legislature cannot ignore. The case must be made that the ONRW designation contains a favorable cost-benefit benefits analysis when weighing environmental, social, and economic benefits against related

¹³⁸ *Id.* at 5.

¹³⁹ *See* PALMETTO CONSERVATION FOUNDATION *supra* note 132, at 12.

¹⁴⁰ *See* RIVER NETWORK, *supra* note 71, at 3.

¹⁴¹ *Id.*

costs.¹⁴² The fear that ONRW classification will unreasonably restrict economic activity must be overcome by a powerful public voice.¹⁴³ Widespread and overwhelming public support is a powerful way to overcome the state's reluctance by establishing that in some cases, the benefits of the highest level of protection outweigh related costs.

2. "Low Hanging Fruit"—Upper Three Runs Creek:

ONRWs are nationally defined as "waters of exceptional recreational or ecological significance."¹⁴⁴ Additionally, EPA Region IV, which includes South Carolina, delineates ONRWs from other high quality waters as offering "special protection for waters of ecological significance."¹⁴⁵ South Carolina is home to one of the most ecologically diverse water bodies on the face of the planet. Upper Three Runs Creek is a blackwater stream on the Savannah River Site near Aiken South Carolina.¹⁴⁶ Scientists have recorded more than 575 species of aquatic insects in Upper Three Runs, probably giving it the second highest level of aquatic insect biodiversity in the world.¹⁴⁷ Altogether, the stream may contain as many as 700 invertebrate species.¹⁴⁸ Additionally, eight plant species that are listed on federal and/or state lists of species of special status are found in this area.¹⁴⁹

¹⁴² See Chilson, *supra* note 43, at 567.

¹⁴³ See BRAWER, *supra* note 122, at 10.

¹⁴⁴ 40 C.F.R. § 131.12(a)(3).

¹⁴⁵ EPA REGION IV, *supra* note 89, at 1.

¹⁴⁶ SAVANNAH RIVER ECOLOGY LABORATORY, U. OF GA., UPPER THREE RUNS FACT SHEET, at <http://www.uga.edu/srel/utr.htm> (last visited Apr. 9, 2005).

¹⁴⁷ *Id.*

¹⁴⁸ *Id.*

¹⁴⁹ *Id.*

The Upper Three Runs clearly qualifies as a “high quality water” as it is “important, unique, [and] sensitive ecologically.”¹⁵⁰ The Upper Three Runs exemplifies the very characteristics provided by EPA Region IV that “delineate ONRWs from other high quality waters.”¹⁵¹ Yet, this water body of extraordinary national and world significance has failed to be designated as an ONRW to allow it to be provided the highest level of protection. In 1997, DHEC began the petitioning process to have the Upper Three Runs designated as Tier III. However, despite gaining significant public support, it was not widespread and the voice of the opposition overpowered public support and the re-classification lost all hope.¹⁵² The United States Department of Energy (DOE), who owns the Savannah River Site and land surrounding the Upper Three Runs, made a successful campaign of turning the public voice into opposition for the re-classification.¹⁵³ DOE successfully presented the Tier III designation as a “taking” by the Government because of its limit on future development of the shoreline.¹⁵⁴ DOE argued for public opposition of an ONRW designation of the Upper Three Runs so that it could prevent any impediments to the future construction of test sites along the creeks banks.

Without widespread public support, the State regulators were able to continually ignore the Tier III classification because the issue never even made rose to consideration before the legislature. South Carolina’s failure to provide the highest level of protection

¹⁵⁰ EPA REGION IV, *supra* note 89, at 1.

¹⁵¹ *Id.*

¹⁵² Telephone Interview with Gina Kirkland, Bureau of Water, S.C. Dept. of Health & Env’t Control (Mar. 18, 2005).

¹⁵³ *Id.*

¹⁵⁴ *Id.*

to Upper Three Runs Creek demonstrates how crucial widespread public support is to the success of an ONRW designation. If overwhelming public support is not heard by the state regulators, the unfounded fear of hampering economic development persistently kill the EPA's highest level of protection.

3. A Blue Print for Public Support—The S.C. Conservation Bank:

Local support for any proposed environmental action is nearly always a key element leading to its promulgation. Proponents of Tier III classifications should look to other successful environmental proposals in the state for how to best structure a campaign for public support. One such example is the South Carolina Conservation Bank Act, proposed “to improve the quality of life in South Carolina through the conservation of significant natural resource lands, wetlands, historical properties, and archeological sites.”¹⁵⁵

The campaign for public support for the S.C. Conservation Bank was hugely successful—as a result, the Act won the approval of the South Carolina legislature. This was a grass roots coalition of thousands of supporters who believe South Carolina should develop a program similar to other states in our region who are experiencing these issues. The successful passage of this act was due to a collaborative effort involving many organizations and individuals. Conservation groups, environmental organizations, and many business groups joined the bi-partisan effort of many members of the General Assembly and the Governor to pass this legislation.”¹⁵⁶ The Act was supported by thirty

¹⁵⁵ THE S.C. CONSERVATION BANK ACT, *available at* <http://sccbank.sc.gov/index.htm>. (last visited Apr. 21, 2005).

¹⁵⁶ *Id.*

four organizations and public interest groups.¹⁵⁷ Involvement and support from a wide array of public interest groups is a necessary element to a successful grassroots campaign. The Acts promulgation was led by Representative Chip Campsen from Charleston.¹⁵⁸ Having a leader of the community personally spearhead the charge of public support is another crucial factor leading to a successful campaign for public support on important environmental issues.

IV. Conclusion:

Maintaining the quality of America's most pristine bodies of water is a national priority.¹⁵⁹ Yet, evidence shows that the CWA's antidegradation policy is not keeping clean waters clean.¹⁶⁰ Despite the incoherence of the federal guidelines provided by the EPA, South Carolina must implement changes in its antidegradation regulations to prevent the deterioration of its nationally significant water bodies.¹⁶¹ South Carolina should revise its state regulations in order to meet the intent of the CWA and make effective the highest level of protection for the state's most valuable water bodies.¹⁶²

By implementing three changes to its antidegradation regulations, South Carolina can successfully designate its most valuable water bodies as Tier III ONRWs. First, a revision of the regulations is required to provide a very specific ONRW definition that

¹⁵⁷ *See id.*

¹⁵⁸ *Id.*

¹⁵⁹ *See* 33 U.S.C. 1251(a) (1994).

¹⁶⁰ *See* discussion *supra* Part II.

¹⁶¹ *Id.*

¹⁶² *See* discussion *supra* Part III.

clearly distinguishes from Tier II½ ORWs.¹⁶³ Second, the regulations should be changed to incorporate a cost-benefit analysis into the antidegradation process—especially where a water body possibly qualifies for the Tier III ONRW designation.¹⁶⁴ Third, a provision should be added to the state regulations to allow for an initial public petition for the designation of a water body as a Tier III ONRW¹⁶⁵ preceding a grass roots campaign for widespread public support. Implementing these changes will empower DHEC to successfully designate water bodies deserving the highest level of protection as ONRWs.

¹⁶³ See discussion *supra* Part III.A.

¹⁶⁴ See discussion *supra* Part III.B.

¹⁶⁵ See discussions *supra* Part III.C.1-3.