

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF FLORIDA
TALLAHASSEE DIVISION**

**FLORIDA CLEAN WATER NETWORK,
INC., et al.,**

Plaintiffs,

v.

Case No. 4:09cv165/MCR/WCS

**UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY, et al.,**

Defendants.

_____ /

ORDER

The plaintiffs, Florida Clean Water Network, Inc.; Conservancy of Southwest Florida; St. Johns Riverkeeper; and Linda L. Young, filed this lawsuit against the defendants, United States Environmental Protection Agency; Lisa P. Jackson, in her official capacity as Administrator of the United States Environmental Protection Agency; United States Environmental Protection Agency Region 4; and A. Stanley Meiberg, Acting Regional Administrator, Environmental Protection Agency Region IV (collectively, "EPA"), challenging the EPA's determination that certain provisions of Florida's amended Impaired Waters Rule ("IWR"), which was submitted to the EPA for review, are not new or revised water quality standards and thus do not require approval by the EPA and that other provisions constitute new or revised water quality standards but are consistent with federal regulations and the Clean Water Act ("CWA").¹ Before the court are the parties' cross motions for summary judgment (docs. 73, 88). Having carefully reviewed the record, considered the parties' motions, and heard oral argument from counsel, the court finds that

¹ The plaintiffs brought this action under the Administrative Procedures Act, 5 U.S.C. § 701, *et seq.* ("APA").

both motions should be granted in part and denied in part.

BACKGROUND

In an effort to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters,” Congress adopted the Clean Water Act in 1972. 33 U.S.C. § 1251(a). Under the CWA, the federal and state governments share duties to monitor and regulate water pollution, with the states bearing primary responsibility for implementing pollution control mechanisms and the federal government overseeing the states’ actions in that regard. As a threshold matter, states are required to establish water quality standards to define the level of water quality for each waterbody within their borders. Water quality standards consist of three components: (1) the designated uses of the waterbody, see 33 U.S.C. § 1313(c)(2)(A); 40 C.F.R. §§ 131.3(f), 131.10;² (2) the water quality criteria necessary to support the designated uses, expressed as constituent concentrations, levels, or narrative statements, see 33 U.S.C. § 1313(c)(2)(A); 40 C.F.R. §§ 131.3(b) and (i), 131.11;³ and (3) an anti-degradation policy that is consistent with the

² “Designated uses are those uses specified in water quality standards for each water body or segment whether or not they are being attained,” 40 C.F.R. § 131.3(f), and include uses such as public water supply, propagation of fish and wildlife, recreation, agricultural, industrial, and navigation, see 33 U.S.C. § 1313(c)(2)(A); 40 C.F.R. § 131.10.

³ According to the EPA,

[w]ater quality criteria for protection of aquatic life also usually have three components. The first component is “magnitude” . . . of a pollutant or pollutant indicator than can occur in the ambient water without adversely affecting the designated use the criteria is intended to support. The second component is “duration,” or the period of time over which the instream concentration is averaged for comparison with criteria concentrations. . . . The third component is “frequency,” or how often the magnitude/duration condition can be exceeded within a specified duration period and still protect the designated use.

AR EPA001043.08. As the EPA explained,

“[b]ecause of variation in the flows of the effluent and the upstream receiving water as well as variation in the concentrations of pollutants in the upstream effluent and in the receiving water, a simple format, such as specifying concentration that must not be exceeded at any time or place, is not realistic. Furthermore, such a simple format does not take into account the fact that aquatic organisms can tolerate higher concentrations of pollutants

EPA's anti-degradation regulation and specifies the circumstances under which the state may authorize the lowering of water quality criteria, see 40 C.F.R. § 131.12(a)(2); *Am. Wildlands v. Browner*, 260 F.3d 1192, 1194 (10th Cir. 2001).⁴ Once water quality standards have been established, states must monitor waterbodies to determine whether the standards are being met and develop mechanisms to either maintain or restore water quality, depending on the circumstances.

States also are required to review and, if appropriate, revise their water quality standards at least once every three years and submit any new or revised water quality standards to the EPA for approval. See 33 U.S.C. § 1313(c)(1), (2)(A). The EPA reviews a new or revised water quality standard to determine whether the state has adopted criteria that are consistent with the requirements of the CWA and protect the designated water uses, whether the state has followed its legal procedures for revising or adopting standards, and whether any designated uses not specified in 33 U.S.C. § 1251(a)(2) are based on appropriate technical and scientific data and analyses. See 40 C.F.R. § 131.5. Revisions also must comply with the state's anti-degradation policy and must maintain the existing quality of each of the state's waterbodies. See 33 U.S.C. § 1313(d)(4)(B); 40 C.F.R. § 131.12. If the EPA determines that a new or revised water quality standard is consistent with the CWA, it must approve the standard within sixty days, which then becomes effective. See 33 U.S.C. § 1313(c)(3); 40 C.F.R. § 131.21(a)(1). If, on the other hand, the EPA determines that a new or revised water quality standard is not consistent with the CWA, it must notify the state within ninety days and specify the changes that need to be made in order to bring the standard into compliance. See 33 U.S.C. § 1313(c)(3); 40 C.F.R. § 131.21(a)(2). If the state does not adopt the EPA's changes within ninety

for short periods of time than they can tolerate throughout a complete life cycle. . . . Use of this concentration-duration-frequency format allows water quality criteria for aquatic life to be adequately protective without being as overprotective as would be necessary if criteria were expressed using a simpler format.

Id.

⁴ States also are required to identify methods for implementing their anti-degradation policies. See 40 C.F.R. § 131.12.

days, the EPA must “promptly prepare and publish proposed regulations setting forth a revised or new water quality standard.” 33 U.S.C. § 1313(c)(3), (4)(A). Unless the state cures the defect within ninety days thereafter, the EPA must promulgate the standard itself.⁵ See 33 U.S.C. § 1313(c)(3); 40 C.F.R. § 131.22(a).

The Florida legislature authorized the Florida Department of Environmental Protection (“FDEP”) to promulgate water quality standards for the state. See Fla. Stat. § 403.061(11). Exercising that authority, on May 29, 1990, the FDEP promulgated chapter 62-302 of the Florida Administrative Code, which sets forth the water quality standards for all of the state’s surface waters. See Fla. Admin. Code r. 62-302.200-.800. Because water quality standards are essential to ensure the safety and integrity of the nation’s waterbodies, the CWA requires that states identify and compile a list of the waters within their boundaries that do not meet the applicable water quality standards and thus are not safe for their designated purposes. See 33 U.S.C. § 1313(d)(1)(A); 40 C.F.R. § 130.7(b), (d)(1). The list is known as the “Impaired Waters List” or “section 303(d) list.” For each waterbody included on the section 303(d) list, the state must calculate a Total Maximum Daily Load (“TMDL”) for every pollutant causing the waterbody not to meet the applicable standards; as the phrase suggests, the TMDL establishes the maximum quantity of the pollutant that can be received on a daily basis without exceeding the standard.⁶ See 33 U.S.C. § 1313(d)(1)(C); 40 C.F.R. § 130.7(c).

⁵ The EPA also has discretionary authority to promulgate water quality standards for a state when necessary to meet the requirements of the CWA. See 33 U.S.C. § 1313(c)(4)(B).

⁶ According to Fla. Admin. Code. r. 62-303.200(24), the TMDL

for an impaired water body or water body segment shall mean the sum of the individual wasteload allocations for point sources and the load allocations for nonpoint sources and natural background. Prior to determining individual wasteload allocations and load allocations, the maximum amount of a pollutant that a water body or water segment can assimilate from all sources without exceeding water quality standards must first be calculated. A TMDL shall include either an implicit or an explicit margin of safety and a consideration of seasonal variations.

On May 26, 1999, the Florida legislature adopted the Florida Watershed Restoration Act, directing the FDEP to “adopt by rule a methodology for determining those waters which are impaired.” See Fla. Stat. § 403.067(3)(b). The legislature also instructed that, in applying water quality standards, the EPA was to “take into account the variability occurring in nature” and “recognize the statistical variability inherent in sampling and testing procedures that are used to express water quality standards.” Fla. Stat. § 403.021(11). Accordingly, on April 26, 2001, the FDEP adopted chapter 62-303 of the Florida Administrative Code, entitled “Identification of Impaired Surface Waters” (known as the “Impaired Waters Rule” or “IWR”), which sets forth a

methodology to identify surface waters of the state that will be included on the state’s planning list of waters that will be assessed . . . and a methodology to identify impaired waters based on representative data that will be included on the state’s verified list of impaired waters, for which the [FDEP] will calculate [TMDLs] . . . and which will be submitted to the [EPA]

. . . .

Fla. Admin. Code r. 62-303.100(1).⁷ States are required to submit their section 303(d) list and TMDLs to the EPA for review and approval every two years. See 33 U.S.C. § 1313(d)(2); 40 C.F.R. § 130.7(d)(1). In reviewing the list and TMDLs, the EPA must consider whether the state’s methodologies for identifying impaired waters result in listing decisions consistent with the state’s water quality standards. If the EPA approves the section 303(d) list, the state must incorporate the list and TMDLs into its “continuing planning process.” See 33 U.S.C. § 1313(d)(2), (e). If the EPA disapproves the section 303(d) list, it must establish one for the state. See 33 U.S.C. § 1313(d)(2). On October 1, 2002, Florida submitted to the EPA its first section 303(d) list using the methodology set forth in the IWR.

⁷ The IWR was signed into law by the governor and became effective on June 10, 2002. It was “intended to evaluate attainment of water quality standards as set forth in Chapter 62-302, F.A.C., for the purposes of identifying water bodies or segments for which TMDLs w[ould] be established.” Fla. Admin. Code r. 62-303.100(3).

On December 2, 2002, a number of parties, including Linda Young, a plaintiff in this case, filed a citizen suit in this court against the EPA, alleging that the EPA failed to perform a nondiscretionary duty under § 303(c) of the CWA to review Florida's IWR as establishing new or revised water quality standards.⁸ See *Fla. Pub. Interest Research Group Citizen Lobby, Inc. v. E.P.A. ("FPIRG I")*, No. 4:02cv408 (N.D. Fla. filed Dec. 2, 2002) (doc. 1). The EPA filed a motion for summary judgment in which it argued, among other things, that the State of Florida did not submit – and the EPA did not approve – the IWR and that the IWR therefore did not constitute a change to Florida's existing water quality standards requiring the EPA's review and approval. See *id.*, at doc. 29. The Honorable William Stafford, writing for the court, agreed with the EPA's position and found that the IWR did not establish new or revised water quality standards and that the EPA thus had no nondiscretionary duty to review and approve it. See *id.*, at doc. 64. The Eleventh Circuit reversed Judge Stafford, holding that the fact that the state did not characterize the IWR as new or revised water quality standards and engage in formal rulemaking proceedings did not mean that the IWR did not constitute a change to Florida's existing water quality standards, if the standards in fact were modified. See *Fla. Pub. Interest Research Group Citizen Lobby, Inc. v. E.P.A. ("FPIRG II")*, 386 F.3d 1070 (11th Cir. 2004). According to the Eleventh Circuit, in determining whether the IWR constituted new or revised water quality standards, the district court was required to conduct an independent review of the effect of the IWR on Florida's existing water quality standards. *Id.* at 1088-89. If "waterbodies that under pre-existing testing methodologies would have been included on the list were left off the list because of the Impaired Waters Rule, then *in effect* the Rule would have created new or revised water quality standards" *Id.* at 1090. In other words, the district court should have "examine[d] whether there were waterbodies that were equally polluted both before and after the Impaired Waters Rule took effect, but that were classified differently depending on whether or not the Rule was used." *Id.* Because Judge Stafford failed to perform the pertinent analysis, the Eleventh

⁸ Pursuant to 33 U.S.C. § 1365(a)(2), citizens may sue the EPA in federal district court for alleged failures "to perform any act or duty under [the CWA] which is not discretionary with the Administrator."

Circuit remanded the case for additional fact finding and a determination of “whether the Impaired Waters Rule, as applied, was an effective change to . . . Florida’s existing water quality standards, as applied.”⁹ *Id.* Pursuant to the EPA’s request, Judge Stafford referred the matter to the EPA so it could conduct an examination of whether the IWR, as applied, revised or modified Florida’s existing water quality standards.

The EPA issued a determination on July 6, 2005 (“2005 Determination”), finding that many portions of the IWR did not constitute new or revised water quality standards but that other portions did, requiring the EPA’s review and approval. AR EPA001041-43.18; see also *FPIRG I*, at doc. 110. In order to determine whether a provision constituted a new or revised water quality standard, the EPA engaged in a two-part analysis, considering (1) whether the provision related to an attainment decision;¹⁰ and, if so, (2) whether the provision defined, changed, or established the magnitude, duration, or frequency related to water quality criteria necessary to support a designated use. AR EPA001043.09. According to the EPA, “[p]rovisions that affect attainment decisions made by the State and that define, change, or establish the level of protection to be applied in those attainment decisions, affect existing standards implemented under section 303(c) of the Act” and thus “constitute new or revised water quality standards.” *Id.*

On the other hand, provisions that merely describe the sufficiency or reliability of information necessary for the State to make an attainment decision, and do not change a level of protection, are methodologies under section 303(d) of the Act. These provisions set out the circumstances that must exist for the State to make an attainment decision in the first instance and contain policy choices about the reliability of data, . . . [but]

⁹ The court noted that, based on the record, it was unable “to determine, with any confidence, whether the de-listing of these waterbodies resulted from the application of more rigorous statistical methods contained in the Impaired Waters Rule, or whether these waterbodies were removed from the Impaired Waters List because their pollution levels really did drop.” *Id.* at 1091.

¹⁰ An attainment decision, according to the EPA, is “one where a State decides what it means to attain or to not attain any ‘water quality standard applicable to such waters’ for purposes of establishing total maximum daily loads (TMDLs) under section 303(d)(1)(A) of the Act, 33 U.S.C. § 1313(d)(1)(A).” AR EPA001043.09.

do not describe the condition of the water body assessed.¹¹

AR EPA001043.09-.10. “Primary examples of provisions of the IWR that are only section 303(d) methodologies include minimum sample size requirements, age of data requirements, and the requirement that FDEP know the pollutant causing a water quality impairment before that water may be included on the section 303(d) list.” AR EPA001043.11. Such provisions, according to the EPA, “do not relate to the ambient condition in the waterbody, i.e., what level of pollutant (or pollutant indicator) may be in the waterbody before determining that the waterbody is not meeting all applicable water quality standards. Instead, these provisions may relate to the information necessary to conduct an attainment decision pursuant to section 303(d) of the Act and 40 C.F.R. § 130.7(b)(5)-(6) (as compared to section 303(c) of the Act) and, as such, do not constitute water quality standards.” AR EPA001043.11. Accordingly, the EPA determined that it had no duty to review those provisions of the IWR.¹²

¹¹ The EPA acknowledged, however, that such provisions may have affected Florida’s section 303(d) list. AR EPA001043.17.

¹² The EPA noted that

[t]he fact that a provision of the IWR is not reviewed by EPA as a new or revised water quality standard does not remove that provision from EPA’s oversight responsibilities. To the extent that such provisions do not comply with the requirements for developing impaired water lists pursuant to section 303(d) of the Act and its implementing regulations at 40 C.F.R. § 130.7(b), EPA has taken and will continue to take action as necessary when reviewing Florida’s section 303(d) list submittals.”

AR EPA001043.12. For example,

[a]fter reviewing Florida’s Group 1 Update, EPA decided that the IWR provision prohibiting the listing of any water based on less than 20 samples was not reasonable in all situations. EPA disapproved the State’s failure to list certain waters based on this provision and added those waters to the State 303(d) list. EPA also decided that the IWR provision prohibiting the listing of any water where the pollutant causing an impairment is unknown was not reasonable. EPA disapproved the State’s failure to list certain waters based on this provision and added those waters to the State list.

Id.

With regard to the portions of the IWR that constituted new or revised water quality standards, the EPA found that the FDEP was required to engage in rulemaking procedures under Florida's Administrative Procedure Act and that, because the FDEP had failed to do so, the EPA could not approve the provisions. AR EPA001041-42. The EPA also expressed disagreement with the test set forth by the Eleventh Circuit, declaring that "it is not appropriate simply to look at whether a water was no longer listed or added to Florida's section 303(d) list after application of the IWR in order to determine whether the IWR provision constitutes a new or revised water quality standard." AR EPA001043.16. According to the EPA, "such an 'effects test' presumes that the first or original section 303(d) list correctly identified all impaired waterbodies" when, "[w]ithout a methodology, . . . it is often impossible to determine the basis for or validity of the initial listing decisions. Thus, more recent changes to the list may actually correct a mistake from a previous list, or may reflect a lack of certainty as to the basis for listing a water in the first instance." *Id.* Application of the "effects test," in the EPA's view, "could result in a situation where any state provision which causes a different result than that of a previous list would be classified as a water quality standard subject to EPA's mandatory duty to review . . . , even if the provision clearly does not meet the definition of water quality standard under the CWA and its implementing regulations." AR EPA001043.16-.17. In other words, in the EPA's opinion, "[a] strict application of the 'effects' test . . . would inappropriately expand the scope of water quality standards beyond use, criteria and antidegradation in a manner not contemplated by the CWA and its implementing regulations. . . . and contravene the principle that mandatory duties be narrowly construed." AR EPA001043.17. The EPA thus rejected the "effects test" and indicated its intent to apply the "level of protection test pursuant to section 303(c) of the [CWA] and its implementing regulations at 40 C.F.R. Part 131," which it considered to be "the appropriate interpretation of the term 'water quality standard' as that term is used in the CWA and its implementing regulations." AR EPA001043.18.

The plaintiffs challenged the EPA's determination that certain provisions of the IWR did not constitute new or revised water quality standards based on the EPA's failure to

apply the “effects test.” See *FPIRG I*, at doc. 157. Focusing on what he considered to be the Eleventh Circuit’s “ultimate instruction” – to “determine whether the Impaired Waters Rule, as applied, was an effective change to [] Florida’s *existing water quality standards*, as applied” – rather than on the “effects text,” Judge Stafford again granted summary judgment in favor of the EPA, finding that its “review of the IWR was meticulous” and that “its conclusions were reasoned, based on a consideration of relevant factors.” *Id.* at doc. 185 (emphasis in original). According to Judge Stafford, focusing solely on the fact that waterbodies had been removed from the state’s 303(d) list without evidence of the pollution levels in those waterbodies would “conflat[e] the IWR’s effect on the State’s listing decisions with the IWR’s effect on Florida’s water quality standards.” *Id.* Thus, like the EPA, Judge Stafford rejected the “effects test” as applied to water quality standards.

After the EPA issued its determination on remand from the Eleventh Circuit, Florida amended its IWR several times to address procedural deficiencies identified by the EPA and to make other substantive and editorial changes.¹³ The FDEP submitted the amended IWR to the EPA for review on September 14, 2007. AR EPA001191.01. On February 19, 2008, the EPA issued its determination on the amended IWR (“2008 Determination”), finding that some portions constituted new or revised water quality standards, which it approved, and that other portions did not constitute new or revised water quality standards and thus did not require review or approval by the EPA.¹⁴ AR EPA 001191.01-.50. In so finding, the EPA “applied the same analytical framework that it used in the 2005 Determination.” AR EPA001191.04. Thus, the EPA’s findings were based on the premise that only provisions relating to an attainment decision – *i.e.*, provisions defining, changing, or establishing a designated use or the magnitude, duration, or frequency related to water quality criteria – constitute new or revised water quality standards. The EPA did not focus on the effect the amended IWR had on the state’s listing decisions; in others words, it did

¹³ Specifically, the IWR was amended on September 28, 2006; December 5, 2006; and June 26, 2007.

¹⁴ The EPA examined only the portions of the rule that were amended in 2007, leaving its 2005 Determination otherwise in tact.

not apply the “effects test” espoused by the Eleventh Circuit.¹⁵

The plaintiffs filed this lawsuit on May 6, 2009, alleging, in Counts I through V, that the EPA’s determination that several provisions of the IWR are not new or revised water quality standards is arbitrary and capricious. The plaintiffs seek a declaration that the provisions, in fact, constitute new or revised water quality standards and remand to the EPA to determine whether the standards are consistent with the CWA and approval or disapproval thereof. In Counts VI and VII, the plaintiffs challenge the EPA’s approval of other provisions of the IWR. The plaintiffs seek a declaration that the approved standards are inconsistent with the CWA and an order directing the EPA to disapprove the standards and specify the changes that need to be made in order for the standards to comply with the CWA.

DISCUSSION

A. Standard of Review

Summary judgment is appropriate where “the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a). “Under the APA, a court shall ‘set aside agency action, findings, and conclusions found to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.’” *Sierra Club, Inc. v. Leavitt*, 488 F.3d 904, 911 (11th Cir. 2007) (quoting 5 U.S.C. § 706(2)(A)). Agency action is considered arbitrary or capricious where the agency has

relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

Id. (quoting *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43

¹⁵ The EPA did, however, add waterbodies to the state’s 303(d) List.

(1983)). In other words, “[t]he arbitrary and capricious standard is exceedingly deferential,” and the court is “not authorized to substitute [its] judgment for the agency’s as long as [the agency’s] conclusions are rational.” *Miccosukee Tribe of Indians of Fla. v. U.S.*, 566 F.3d 1257, 1264-65 (11th Cir. 2009) (internal marks omitted); see *Leal v. Sec’y, U.S. Dep’t of Health and Human Servs.*, 620 F.3d 1280, 1282 (11th Cir. 2010) (noting that the court has “very limited discretion to reverse an agency decision”) (internal marks omitted). However, the court must not accept an agency’s “*post hoc* rationalizations” for its action; indeed, “[i]t is well-established that an agency’s action must be upheld, if at all, on the basis articulated by the agency itself.” *Motor Vehicle Mfrs. Ass’n*, 463 U.S. at 50. In considering an agency’s action, “the court must . . . look beyond the scope of the decision itself to the relevant factors that the agency considered. Its duty is to ensure that the agency took a ‘hard look’ at the environmental consequences of the proposed action.” *Sierra Club v. U.S. Army Corps of Engineers*, 295 F.3d 1209, 1216 (11th Cir. 2002) (quoting *Motor Vehicle Mfrs. Ass’n*, 463 U.S. at 43 (internal citation omitted). “An agency has met its ‘hard look’ requirement if it has ‘examine[d] the relevant data and articulate[d] a satisfactory explanation for its action including a ‘rational connection between the facts found and the choice made.’” *Id.* (quoting *Motor Vehicle Mfrs. Ass’n*, 463 U.S. at 43). “If the court finds deficiencies in the agency’s reasoning, it may not rectify them or provide a reasoned basis for the agency decision which the agency itself has not articulated. Instead, it must remand to the agency so that it may reconsider its own reasoning and decision.” *Id.* (internal citation omitted).

B. The Plaintiffs’ Challenges¹⁶

1. Counts I through V: EPA’s Failure to Apply the “Effects Test”

In Counts I through V of their Complaint, the plaintiffs challenge the EPA’s determination that certain provisions of the amended IWR do not constitute new or revised

¹⁶ Although the plaintiffs have devoted a portion of their memorandum to the issue of standing, the defendants have not challenged their standing to bring this action, and it is clear to the court, based on the allegations in the plaintiffs’ complaint, that the plaintiffs have standing to maintain the claims they have asserted in this matter. See *FPIRG II*, 386 F.3d at 1083-87.

water quality standards because, in so finding, the EPA failed to apply the Eleventh Circuit's "effects test." Although the EPA argues convincingly that application of the "effects test" in the context of this matter is impractical and even ill-advised, the court is bound by the Eleventh Circuit's decision in *FPIRG II*. See, e.g., *Cornett v. Carrithers*, No. 11-14242, 2012 WL 687011, at *2 (11th Cir. March 2, 2012) (noting that district courts in the Eleventh Circuit are bound by the Eleventh Circuit's decisions) (unpublished op.).¹⁷ Accordingly, in order to determine whether the EPA acted arbitrarily or capriciously or otherwise not in accordance with the law in finding that the provisions at issue do not constitute new or revised water quality standards, the court must determine whether application of those provisions resulted in waterbodies being left off of or removed from the state's section 303(d) list. Because the EPA failed to consider the effect of the amended IWR on the state's listing decisions, there is insufficient evidence in the record from which the court can make such a determination. The court therefore finds that this matter should be remanded to the EPA for further development of the administrative record so the court can determine whether there were waterbodies that were equally polluted before and after the amended IWR but that were classified differently based on application of the provisions at issue in Counts I through V of the plaintiffs' complaint. The court notes, however, that when it espoused the "effects test," the Eleventh Circuit did not have the benefit of the EPA's position with regard to its applicability to water quality standards. The undersigned agrees with Judge Stafford that focusing solely on whether or not the amended IWR resulted in changes to the state's listing decisions conflates the amended IWR's effect on listing decisions, which are not at issue in this case, with its effect on water quality standards, which serve as the sole basis of this action. Nevertheless, given the breadth of the decision in *FPIRG II*, the court is constrained to apply the "effects test" in this case, but it looks to the Eleventh Circuit in the event of an appeal for clarification as to the circumstances and manner in which it should be applied henceforth.

¹⁷ While unpublished opinions are not considered binding, they may be considered as persuasive authority. See 11th Cir. R. 36-2; see also *United States v. Futrell*, 209 F.3d 1286, 1289 (11th Cir. 2000).

2. Count VI - Approval of the Binomial Distribution Method

The plaintiffs contend in Count VI of their complaint that, by approving Fla. Admin. Code r. 62-303.420(6) as a new or revised water quality standard, the EPA approved the binomial distribution method set forth in Fla. Admin. Code r. 62-303.420(2) yet provided no explanation for its decision in that regard.¹⁸ As the plaintiffs point out, the EPA identified Fla. Admin. Code r. 62-303.420(6) as a revision of Florida's existing water quality standards "because it changes or further defines the frequency of exceedance of Florida's currently approved water quality criteria." AR EPA001267. The EPA approved the provision on the same basis upon which it approved Fla. Admin. Code r. 62-303.320(6)(b), which relates to the frequency for acute toxicity-based criteria exceedances. AR EPA001191.27-.28. Although the plaintiffs acknowledge that the EPA may have considered only Fla. Admin. Code r. 62-303.320(6)(b) as constituting a revision to Florida's existing water quality standards, they argue that the EPA's determination is ambiguous in that regard and needs to be clarified. The plaintiffs thus request that the court set aside the EPA's approval of Fla. Admin. Code r. 62-303.420(6) and remand the matter to the EPA for further development of the administrative record. The court finds no ambiguity with regard to the provision at issue in Count VI and thus declines to remand the matter to the EPA on that basis.

As the EPA points out, although Fla. Admin. Code r. 62-303.420(6) references Fla. Admin. Code r. 62-303.420(2), it does not incorporate Fla. Admin. Code r. 62-303.420(2) or express approval of it. To the contrary, in its 2008 Determination, the EPA stated that it was approving only those provisions of chapter 62-303 of the Florida Administrative Code that it determined were new or revised water quality standards. AR EPA001191.01. The EPA identified all such provisions, as well as those it found not to constitute new or revised water quality standards. While Fla. Admin. Code r. 62-303.420(6) is identified as a new or revised water quality standard, Fla. Admin. Code r. 62-303.420(2) is not; in fact, Fla.

¹⁸ Fla. Admin. Code. r. 62-303.420(6) provides that "[o]nce the additional data review is completed pursuant to subsections (1) through (5), the [FDEP] shall re-evaluate the data and shall include waters on the verified list that meet the criteria in subsection 62-303.420(2) or paragraph 62-303.320(6)(b), F.A.C."

Admin. Code r. 62-303.420(2) is expressly identified as a provision that does not constitute a new or revised water quality standard. AR EPA001191.17-.18. Moreover, Appendix D sets forth the EPA's analysis and conclusion with regard to Fla. Admin. Code r. 62-303.420(6) and makes it plain that the EPA's decision to approve the rule was based on its analysis of the planning list provision set forth therein, which the EPA found constituted a new or revised water quality standard, and not the binomial distribution method. AR EPA001266-67. Because it is clear from the record that the EPA did not approve Fla. Admin. Code r. 62-303.420(2) as a new or revised water quality standard, there is no need to remand the matter to the EPA for further development of the administrative record in that regard.

3. Count VII - Numeric Nutrient Thresholds

In Count VII of their complaint, the plaintiffs challenge the EPA's approval of numeric nutrient thresholds as new or revised water quality standards. Florida's existing water quality criterion for nutrients is narrative and 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." Fla. Admin. Code r. 62-302.530(47)(b). The amended IWR incorporates numeric nutrient thresholds, which establish quantitative levels of impairment above which a waterbody is considered impaired for purposes of the CWA. See Fla. Admin. Code rs. 62-303.350-.353, 62-303.450, 62-303.720(2)(j). Because the numeric nutrient thresholds include magnitude and duration components, the EPA concluded that they constitute new or revised water quality standards. AR EPA001191.35-.41; EPA001207-12; EPA001246-52; EPA001289-90. In order to approve a new or revised water quality standard, the EPA must find that it is consistent with federal regulations and the CWA; in making such a determination, the EPA must consider whether the new or revised standard adequately protects the designated uses of the state's waterbodies and is based on a sound scientific rationale. See 40 C.F.R. §§ 131.5, 131.11(a). The EPA concluded that the numeric nutrient thresholds set forth in the amended IWR are consistent with federal regulations and the CWA, are scientifically supported, and, when considered along with other provisions of the IWR, enhance the function of the narrative

criteria in protecting the designated uses of the state's waterbodies. It thus approved them. In Count VII of their complaint, the plaintiffs challenge the EPA's action in that regard, arguing that it is arbitrary and capricious because the FDEP established numeric nutrient thresholds only for chlorophyll-a – and not for total nitrogen or total phosphorus, which the plaintiffs maintain are essential aspects of numeric nutrient criteria – and based the numeric thresholds on annual, rather than seasonal, averaging, thereby failing to adequately protect the state's water bodies.¹⁹ For the reasons set forth below, the court finds that the EPA acted neither arbitrarily nor capriciously in approving the state's adoption of numeric nutrient thresholds.

As the EPA explained, the quantitative thresholds adopted by the FDEP “represent a ‘translator’ of the narrative criterion for certain applications of the state's water quality standards”²⁰ *Id.* If a state decides to supplement its narrative criteria with quantitative translators, the EPA expects the translators “to adequately perform the tasks expressed

¹⁹ In particular, the plaintiffs allege that the numeric thresholds are inadequate to protect the designated uses of fish consumption; recreation, propagation, and maintenance of a healthy, well-balanced population of fish and wildlife, see Fla. Admin. Code r. 62-302.400(1), and prevent an imbalance in natural populations of aquatic flora or fauna, see Fla. Admin. Code r. 62-302.530(47)(b).

The plaintiffs also emphasize that the EPA concluded in January 2009 that the State of Florida is required to adopt numeric nutrient criteria. However, the fact that the EPA subsequently made such a determination does not render its in decision in February 2008 arbitrary and capricious. And, even though the EPA found that Florida is required to adopt numeric nutrient criteria, it did not disapprove the state's numeric nutrient thresholds for chlorophyll-a.

²⁰ The EPA further explained that,

[i]n water quality standards, a translator identifies a process, methodology, or guidance that states or tribes will use to quantitatively interpret narrative criteria statements. Different translators may serve to quantitatively interpret narrative criteria as they are applied for different purposes as long as they share the same intended level of protection. In addition, translator mechanisms can be used to make appropriate interpretations of narrative criteria where there is uncertainty in determining a specific threshold of protection. Translators may consist of biological assessment methods (e.g., field measures of the biological community), biological monitoring methods (e.g., laboratory toxicity tests), models or formulae that use input of site-specific information/data, or other scientifically defensible methods.

AR EPA001207.

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by the words of the narrative for the specific functions identified.” AR EPA001210. Moreover, if one-sided thresholds are implemented for assessment purposes, the translator must

- (1) [h]ave a basis in science that relates the measurements specified by the procedure to the desired condition or adverse condition to be avoided, as described by the narrative;
- (2) [e]ffectively separate waters into groups where (a) protection of the use is clearly threatened or impaired and (b) where protection of the use is uncertain . . . ;²¹
[and]
- (3) [u]tilize the proper parameters and constituents to achieve the objectives set forth above.

Id. The numeric thresholds in the amended IWR are expressed as an increasing annual trend in trophic state index (“TSI”) for lakes and chlorophyll-a mean values for streams, estuaries, and open coastal waters which demonstrate imbalances in flora and fauna causing waterbodies not to attain the narrative nutrient criterion.²² AR EPA001207-08. As an example of the manner in which the numeric nutrient thresholds are applied, the EPA described a waterbody whose chlorophyll-a concentration or TSI value clearly indicates an imbalance in the natural populations of aquatic flora and fauna. The numeric nutrient thresholds allow the FDEP to place such a waterbody on the state’s section 303(d) list without further site-specific analysis. See Fla. Admin. Code r. 62-303.350-.353. According to the EPA, the numeric nutrient thresholds therefore supplement the state’s existing

²¹ According to the EPA, “thresholds set too high may not be effective because they exclude waters that are clearly threatened or impaired and call into question the remaining applicability of the narrative. AR EPA001210. “[O]n the other hand, thresholds set too low may ultimately be deemed protective, yet serve no useful purpose in discriminating data or waters into appropriate categories in the State/Tribal Integrated Report.” *Id.*

²² The trophic state of lakes is indicative of their biological productivity – that is, the amount of living material support within them, primarily in the form of algae. Chlorophyll-a concentrations are a measurement of algal biomass. See <http://www.epa.gov/bioiweb1/aquatic/carlson.html>. As the EPA noted, in the amended IWR, “Florida . . . established a threshold of impairment based on an increasing trend in TSI” for identification of clearly impaired lakes; “[f]or nutrients in streams, Florida . . . establish[ed] a combination of a narrative threshold . . . and two chlorophyll-a thresholds;” and, for estuarine and open coastal waters, Florida used a chlorophyll-a threshold. AR EPA001210-12.

narrative nutrient criterion rather than supplant it, as the plaintiffs allege, and the FDEP's failure to establish numeric thresholds for total nitrogen and total phosphorus does not lessen the state's ability to protect designated uses because the narrative nutrient criteria remain in tact. Moreover, although Fla. Admin. Code r. 62-303.350(1) provides that TSI and annual mean chlorophyll-a values are to be the primary means through which to determine whether a waterbody should be assessed further for nutrient impairment, it allows for consideration of "[o]ther information indicating an imbalance in flora or fauna due to nutrient enrichment, including, but not limited to, algal blooms, excessive macrophyte growth, decrease in the distribution (either in density or areal coverage) of seagrasses or other submerged aquatic vegetation, changes in algal species richness, and excessive diel oxygen swings." *Id.* Also noted by the EPA was the fact that the IWR's verified list methodology allows for the development of site-specific thresholds that better represent the levels at which nutrient impairments occur.²³ According to the EPA, taken together, the numeric nutrients thresholds and the provisions allowing for other information and site-specific thresholds provide the state "sufficient flexibility to utilize additional information where available, maintain the flexibility inherent in the narrative criterion statement, and ensure that water bodies not meeting their water quality standards for nutrients are properly identified, regardless of whether or not the impairment threshold is exceeded,"

²³ According to Fla. Admin. Code r. 62-303.450,

A water shall be placed on the verified list for impairment due to nutrients if there are sufficient data from the last five years preceding the planning list assessment, combined with historical data (if needed to establish historical chlorophyll a levels or historical TSIs), to meet the data sufficiency requirements of subsection 62-303.350(2), F.A.C. If there are insufficient data, additional data shall be collected as needed to meet the requirements. Once these additional data are collected, the Department shall determine if there is sufficient information to develop a site-specific threshold that better reflects conditions beyond which an imbalance in flora or fauna occurs in the water segment. If there is sufficient information, the Department shall re-evaluate the data using the site-specific thresholds. If there is insufficient information, the Department shall re-evaluate the data using the thresholds provided in Rules 62-303.351-.353, F.A.C., for streams, lakes, and estuaries, respectively. . . .

thereby better protecting the designated uses of the state's waterbodies.²⁴ AR EPA001209. It is clear from the record that, in approving provisions of the IWR establishing numeric nutrient thresholds only for chlorophyll-a, the EPA considered the relevant factors and data and provided a rational basis for its decision. As a result, even if the EPA subsequently determined that the state must develop numeric nutrient criteria that include total nitrogen and total phosphorus, the court cannot say that the EPA acted arbitrarily or capriciously in approving the adoption of numeric nutrient thresholds for chlorophyll-a.

The fact that the numeric nutrient thresholds are based on an annual average also does not render the EPA's approval of the provisions arbitrary or capricious. The amended IWR provides that where there are multiple chlorophyll-a or TSI values within a season for a given year, "the average value for that season shall be calculated from the individual values and the four (4) quarterly values shall be averaged to calculate the annual mean for that calendar year"²⁵ Fla. Admin. Code r. 62-303.350(2)(c). As the EPA explained, this rule works in conjunction with the nutrient thresholds for lakes, streams, and estuarine and coastal waters that establish "annual mean" magnitude and duration values to interpret the narrative nutrient criterion. See Fla. Admin. Code rs. 62-303.351-.353. The plaintiffs argue that annual averaging disguises seasonal variations in nutrients and can result in continuing imbalance in aquatic flora and fauna and that it is best to either use an index period sample or estimate a composite from several determinations during the growing season. According to the EPA, in so arguing, the plaintiffs overlook the fact that rule 62-

²⁴ The EPA further noted that, because the thresholds are one-sided, other information may provide the basis for listing a waterbody as impaired and a waterbody is not automatically deemed to be attaining the narrative water quality criterion simply because conditions are below the thresholds. AR EPA001208-09. Such a waterbody is considered unassessed unless and until a site-specific analysis is conducted or numeric water quality criteria are promulgated for that waterbody. AR EPA001191.35, EPA001208. The EPA found the one-sided numeric thresholds acceptable because they were based on sound scientific rationale and contained sufficient parameters or constituents to protect designated uses and thus complied with the requirements set forth at 40 C.F.R. § 131.11. AR EPA001210, EPA001212.

²⁵ Under the rule, the seasons are January 1 through March 31, April 1 through June 30, July 1 through September 30, and October 1 through December 31. See Fla. Admin. Code r. 62-303.350(2)(b).

303.350(2)(c) translated the narrative criterion by including a duration value or period of time over which the in-stream concentration is averaged. Indeed, in approving rule 62-303.350(2)(c), the EPA specifically noted that the provision “specifies how seasonal representation shall be determined independently for purposes of comparison to the established thresholds” so that each of the four seasons will be represented in the annual average and testing results will not be skewed if, for example, there are more water samples for the drier parts of the year than the wetter parts of the year. AR EPA001191.36. Moreover, according to the EPA, “[t]he thresholds themselves represent conditions across all seasons in a comparable manner and this rule ensures appropriate comparison with measured data.”²⁶ AR EPA001191.36. Even if the plaintiffs are correct that an annual average is not the best method of ensuring that there are no imbalances in natural populations of flora or fauna, that fact alone does not render the EPA’s approval of the numeric nutrient thresholds arbitrary and capricious, particularly considering that the plaintiffs have adduced no scientific evidence that using an annual average results in a failure to adequately protect the designated uses of the state’s waterbodies. See *Miccosukee Tribe of Indians of Fla. v. U.S.*, No. 04-21448, 2008 WL 2967654, at *34-35 (S.D. Fla. July 29, 2008) (upholding the use of an annual geometric mean in the absence of “compelling scientific evidence that use of a geometric mean is not protective of the designated use” and finding it “a conventional way of determining numeric criteria and elements in water quality standards that govern ambient water quality”).

CONCLUSION

For the foregoing reasons, the plaintiffs’ motion for summary judgment (doc. 73) is **GRANTED** with respect to Counts I through V of their complaint and **DENIED** with respect to Counts VI and VII and the defendants’ motion for summary judgment (doc. 88) is **DENIED** with respect to Counts I through V of the plaintiffs’ complaint and **GRANTED** with respect to Counts VI and VII. This matter is remanded to the EPA for 120 days for further

²⁶ The EPA also found that, by establishing thresholds for estuaries and open waters based on an annual mean rather than a median, the FDEP ensured that the thresholds will be more environmentally protective because an average is more sensitive to algal blooms than a median. AR EPA001212.

development of the administrative record with regard to the effect of the provisions of the amended IWR at issue in Counts I through V of the plaintiffs' complaint on the state's listing decisions according to the test prescribed by the Eleventh Circuit in *FPIRG II*. The Clerk of Court is directed to enter summary final judgment consistent with this order. The parties shall have fourteen (14) days in which to submit requests for attorneys' fees and costs.

DONE AND ORDERED this 30th day of March, 2012.

sl M. Casey Rodgers

M. CASEY RODGERS
CHIEF UNITED STATES DISTRICT JUDGE