

EPA's Numeric Nutrient Rule—(Partially) Struck Down, But Not Yet Out

On February 18, 2012, Judge Robert Hinkle of the Northern District of Florida invalidated key elements of the Environmental Protection Agency's final rule setting numeric nutrient criteria for Florida's lakes and flowing waters.¹ The controversial rule, in which EPA attempted for the first time to set state wide numeric nutrient criteria using its federal authority, established numeric limits in the state of Florida for nitrogen and phosphorous in lakes and streams and for nitrate plus nitrite in springs.² The state of Florida, multiple industry groups, and local governments jointly challenged the final rule as arbitrary and capricious. In addition, environmental organizations challenged aspects of the Rule as insufficiently protective. After a "searching and careful review,"³ the court invalidated EPA's criteria for streams because the Agency had failed to demonstrate that its criteria were based on the level of nutrients that cause biological harm, as required by Florida's "narrative" nutrient criteria that EPA purported to implement, and because the Agency failed to use sound science to develop its criteria, as required by the Clean Water Act ("CWA" or "the Act"). The court upheld other elements of the rule, including the criteria for lakes and springs and EPA's 2009 determination under Section 303 of the Clean Water Act that federal numeric criteria were necessary to protect Florida's waters. The court also rejected all of the claims of the environmental organizations. [Click here](#) to view the Order.

Background

Prior to EPA's promulgation of the numeric nutrient criteria rule, waters in the state of Florida were subject to the state's narrative criterion: "In no case shall nutrient concentrations of a body of water be altered so as to cause an imbalance in natural populations of aquatic flora or fauna."⁴ While the Clean Water Act allows states to adopt numeric or narrative criteria, over time, the Florida Department of Environmental Protection (FDEP) recognized additional measures were necessary to protect the state's waters and, in collaboration with EPA, started the process of developing numeric nutrient criteria. In July 2008, five environmental organizations (also herein "NGOs") brought suit against EPA to force the Agency to use its Clean Water Act authority to establish numeric nutrient standards for the state.⁵ In 2009, EPA made a determination under Section 303(c)(4) of the Act to exercise

¹ *Florida Wildlife Fed'n Inc. v. Jackson*, No. 4:08-cv-00324, 2012 WL 537529 (N.D. Fla. Feb. 18, 2012).

² 75 Fed. Reg. 75,762 (Dec. 6, 2010).

³ *Florida Wildlife Fed'n Inc. v. Jackson*, at *35.

⁴ Fla. Admin. Code Ann. R. 62-302.530(47)(b).

⁵ *Florida Wildlife Fed'n Inc. v. Jackson*, No. 4:08cv324. The five organizations are The Florida Wildlife

Contacts



Lester Sotsky
+1 202.942.5170



Jeremy Karpatkin
+1 202.942.5564

its independent authority to set numeric nutrient criteria for Florida.⁶ After making the determination, the Agency entered into a consent decree settling the NGO suit which mandated a strict schedule for development of numeric nutrient criteria for Florida. In compliance with this schedule,⁷ EPA proposed the regulations in January 2010⁸ and finalized the rule in December 2010, with an effective date for the applicability of the criteria of March 2012, fifteen months after publication.

The rule sets two different criteria for streams: (i) an “instream protective value” (IPV) for each “Nutrient Watershed Region,”⁹ derived using a statistical analysis of nutrients found in streams that are considered by EPA to be “healthy,” and (ii) a “downstream protective value” (DPV) that would further restrict the nutrient contribution of streams to downstream lakes to insure that the latter achieve compliance with applicable criteria.¹⁰ EPA did not base its stream criteria on a specific “cause and effect” relationship between the level of nutrients and a biological response at any specific nutrient concentrations. Rather, EPA used a “reference stream” method, whereby it identified a population of streams it deemed to be biologically healthy (reference streams), and then set nutrient criteria using percentile cut-offs of nutrient values associated with those selected streams (75th percentile for the West Central region; 90th percentile for all other regions).

Additionally, the final rule divided lakes in Florida according to alkalinity and color, and set nutrient concentration and chlorophyll-*a* limits for each category. Whereas the

criteria for streams rely on statistical analyses of nutrient concentrations without a proxy for or a validation of biological impairment, the lakes’ criteria use chlorophyll-*a* as an indicator of lake health. The rule also sets a limit on nitrate plus nitrite for all springs in Florida.

In June 2011, the state of Florida, local government, and industry plaintiffs challenged the rule, followed shortly thereafter by several environmental organizations.

Key Holdings

Stream Criteria

In developing the rule’s stream criteria, EPA acknowledged that it could not document a cause-and-effect relationship between nutrients and biological impacts, at any specific level of nutrients for any specific stream, and that multiple local environmental conditions or factors affect the relationship between nutrient levels and biological health.¹¹ EPA therefore used the reference method to set criteria using “undisturbed” streams as surrogates for streams where natural biota would be protected, but without any specific link between allowable nutrient levels and adverse biological effects. The state of Florida and industry and local government plaintiffs challenged this fundamental flaw in the rule, contending that EPA’s method was untethered to the Clean Water Act requirement that criteria be based on protecting designated uses, and that EPA’s methodology did not constitute sound science and departed from Agency guidance.¹² EPA responded that although the reference stream approach for IPVs may to some extent be over- or under-inclusive, its broadly protective criteria are appropriate in light of imperfect data and was intended to apply the state’s narrative criterion.¹³

The court found this approach to be arbitrary or capricious. The court rejected EPA’s premise that *any* increase in nutrients from natural conditions constitutes a *harmful*

Federation., Sierra Club, Inc.; Conservancy of Southwest Florida, Inc.; Environmental Confederation of Southwest Florida, Inc.; and St. Johns Riverkeeper, Inc.

6 Under Section 303(c)(4), EPA may intervene when it “determines that a revised or new standard is necessary to meet the requirements of [the Act].”

7 The court granted EPA a 30 day extension for the adoption of the final rule due to the large number of comments the agency received. *Florida Wildlife Fed’n Inc. v. Jackson*, at *28.

8 75 Fed. Reg. 4,174 (Jan. 26, 2010).

9 These regions exclude south Florida. EPA announced in June 2010 that it was delaying proposing criteria for south Florida canals and streams until November 2011.

10 An earlier client advisory discussed the final rule. See Client Advisory, EPA Publishes Final Numeric Nutrient Criteria for Florida’s Surface Waters (Dec. 2010), available at: http://www.arnoldporter.com/public_document.cfm?u=EPAPublishesFinalNumericNutrientCriteriaforFloridasFlowingWaters&id=17033&key=2D1.

11 See 75 Fed. Reg. 4,174, 4,194, 4,196 (Jan. 26, 2010).

12 *Florida Wildlife Fed’n Inc. v. Jackson*, State of Florida, Local Government, and Industry Plaintiff’s Br. at 31-63.

13 *Florida Wildlife Fed’n Inc. v. Jackson*, EPA’s Combined Response Br. at 90-120.

impact on flora and fauna.¹⁴ The court concluded that the reference stream approach, since it was not based on a causal relationship between nutrient levels and harm to flora and fauna, failed to demonstrate the level of nutrients that causes a harmful biological impact to a stream. Although EPA purported to “translate” the state’s narrative criteria, the court found that Florida’s own regulations “never concluded that *any* increase in flora and fauna is harmful or that water-quality criteria should be designated on this basis.”¹⁵ The court found no evidence in the record showing that any change in nutrients necessarily meant a harmful change in stream biology, and accordingly invalidated the stream criteria, even while acknowledging that on matters of scientific judgment a court must be “exceedingly deferential.”¹⁶

Using similar reasoning, the court invalidated EPA’s DPVs for unimpaired lakes. The court found that it was arbitrary or capricious for EPA to deem an entire stream system impaired due to an increase in nutrients at the point at which the stream enters the unimpaired lake, since there is no basis to believe that adding nutrients will cause biological harm to the unimpaired lake.¹⁷ However, for lakes that already have excess nutrients—i.e., *are impaired*, the court found it reasonable to curtail further impairment through limitations on upstream nutrient additions—thus upholding EPA’s DPVs for impaired lakes.¹⁸

Necessity Determination

The state of Florida and industry and local government plaintiffs also challenged EPA’s 2009 “Necessity Determination,” contending that EPA did not adequately justify the extraordinary step of federal intervention where Florida was making progress in setting its own criteria and where water quality was improving.¹⁹ The court rejected

these challenges, holding that the state’s persistent water quality problems and Florida’s delays in developing its own numeric criteria justified EPA’s determination to set federal criteria.²⁰

Lakes and Springs

Unlike its criteria for streams, EPA derived the numeric nutrient criteria for lakes and springs from modeling and field studies which determined the point at which increases in nutrient levels cause harmful biological impacts.²¹ State, industry, and local government plaintiffs and environmental groups challenged the validity of the criteria from different perspectives, claiming the agency improperly classified waterbodies and failed to consider critical factors in setting the criteria. The court rejected these arguments and deferred to EPA’s overall approach and upheld these particular criteria.²²

Implications

The court’s decision to invalidate the stream criteria and uphold other portions of the Rule has numerous implications for Florida entities seeking to comply with nutrient regulations, and for state and federal agencies seeking guidance from the courts on how they can properly regulate nutrients. It also has implications beyond Florida’s borders.

First, the court’s decision may present a challenge to EPA’s effort in the future to set criteria based on its reference stream method. Judge Hinkle rejected the streams criteria at least in part due to EPA’s failure to show that the nutrient criteria correlated with *harmful* level of nutrients. Since the reference stream method sets criteria based on identifying nutrient levels associated with pristine or natural conditions, this approach may be incompatible with a requirement to demonstrate biological harm.

On the other hand, the government might argue that Judge Hinkle’s holding should be construed narrowly. The decision

¹⁴ *Florida Wildlife Fed’n Inc. v. Jackson*, No. 4:08-cv-00324, at *64.

¹⁵ *Id.*, at *66-67.

¹⁶ *Id.*, at *35, *63.

¹⁷ *Id.*, at *70

¹⁸ *Id.*

¹⁹ *Florida Wildlife Fed’n Inc. v. Jackson*, State of Florida, Local Government, and Industry Plaintiff’s Br. at 22.

²⁰ *Florida Wildlife Fed’n Inc. v. Jackson*, No. 4:08-cv-00324, at *36-37.

²¹ *Florida Wildlife Fed’n Inc. v. Jackson*, EPA’s Combined Response Br. at 133-166.

²² *Id.*, at 47-78.

held that EPA's failure to demonstrate that its proposed criteria prevented a harmful increase in nutrients, rather than any increase in nutrients, was fatal in this instance because EPA had explicitly set out to develop criteria based on the state narrative criterion, which requires evidence of biological harm. The Judge suggests that EPA might be able to cure the fatal flaw in its criteria for Florida's streams either (i) by contending that criteria based on preventing any increase in nutrients are required under the Clean Water Act (independent of Florida's narrative standard), or (ii) by providing credible scientific evidence that these criteria are, in fact, needed to prevent biological harm.²³ At the same time, the Judge cautioned that such assertions by EPA would still be subject to challenge as arbitrary and capricious; and surely some of the litigants would challenge either basis for new federal criteria.²⁴

Second, it is unclear to what degree the court's decision affirms EPA's position that it has broad discretion under Section 303(c)(4)(B) to establish water quality criteria for states. In affirming the validity of EPA's Necessity Determination, Judge Hinkle emphasized the specific facts and evidence supporting EPA's conclusion for Florida, characterizing the evidence that numeric criteria were needed as "substantial, indeed overwhelming."²⁵ This decision therefore may not significantly impact the general proposition that EPA action to set federal criteria for a state is an unusual and even extraordinary action requiring special circumstances.

Third, the decision will have an uncertain impact on the next steps for establishing numeric nutrient criteria in Florida. Judge Hinkle ordered EPA to propose new criteria by May 21, 2012, but the Order did not address the numeric nutrient criteria just proposed, adopted and formally submitted by Florida to EPA on February 22, 2012. EPA has previously indicated its general approval of these newly developed

Florida criteria,²⁶ and indicated that EPA approval of the Florida criteria would also mean withdrawal of the federal criteria. The Florida criteria are currently subject to an administrative challenge by the NGOs, and it is unclear whether EPA would take action to approve the Florida criteria before this challenge is resolved. EPA has not yet indicated whether it will attempt to develop new criteria by May 21, 2012 in compliance with Judge Hinkle's order, or wait to see if it can review and approve the Florida criteria in order to meet that deadline. If it does adopt the new Florida criteria as many are urging, the NGOs have indicated they will sue; if EPA adopts new federal criteria, others likely will sue. So, stay tuned!

²⁶ Letter from Nancy Stoner, Acting Assistant Administrator for Office of Water, US EPA, to Herschel Vinyard, Secretary, FDEP, Nov. 2, 2011.

For more information about any of the topics discussed in this Advisory, please feel free to contact your Arnold & Porter attorney or any of the following attorneys:

Lester Sotsky
+1 202.942.5170
Lester.Sotsky@aporter.com

Jeremy Karpatkin
+1 202.942.5564
Jeremy.Karpatkin@aporter.com

Also contributing to this Advisory was:

Sarah Greer*

*Admitted only in California; practicing law in the District of Columbia during the pendency of her application for admission to the DC Bar and under the supervision of lawyers of the firm who are members in good standing of the DC Bar.

²³ *Florida Wildlife Fed'n Inc. v. Jackson*, No. 4:08-cv-00324, at *66.

²⁴ *Id.*

²⁵ *Id.*, at 37.

© 2012 Arnold & Porter LLP. This Advisory is intended to be a general summary of the law and does not constitute legal advice. You should consult with counsel to determine applicable legal requirements in a specific fact situation.