



## SOUTH FLORIDA WATER MANAGEMENT DISTRICT

April 28, 2010

Water Docket  
United States Environmental Protection Agency  
Mail Code: 2822T  
1200 Pennsylvania Ave. NW  
Washington, D.C. 20460

**SUBJECT: Docket ID No. EPA-HQ-OW-2009-0596**

The South Florida Water Management District (District) appreciates the opportunity to provide feedback and technical comments to the U.S. Environmental Protection Agency (EPA) on its Proposed 40 CFR Part 131—Water Quality Standards for the State of Florida's Lakes and Flowing Waters, published on January 26, 2010. The District offers these written comments on the proposed rule in addition to the input provided at EPA's public hearings on this topic.

As a regional governmental agency, the South Florida Water Management District has a 60-year history in managing and protecting the water resources and ecosystems of South Florida. The agency's multi-faceted mission is to balance and improve water quality, flood control, natural systems and water supply. Originally formed as a flood control agency, the District manages more than 2,600 miles of canals and levees, 64 pump stations and about 1,300 water control structures that were constructed under the federal Central and Southern Florida (C&SF) project to provide conveyance and flood control. Today, a key agency priority is also the restoration of America's Everglades—the largest environmental restoration project in the nation's history. In addition, the District is actively improving the Kissimmee River and its floodplain, Lake Okeechobee and its watershed and South Florida's coastal estuaries.

The District's technical expertise has been invaluable in developing the sound science needed for effective numeric nutrient criteria in the State of Florida. District scientists were intimately involved in development of Florida's first numeric nutrient standard: the Total Phosphorus criterion for the Everglades Protection Area. This agency invested 11 years and millions of dollars to ensure that the final criterion was scientifically defensible and protective of that unique ecosystem. During the last decade, the District also fully participated in the Florida Department of Environmental Protection's Technical Advisory Committee that led to the development of draft numeric nutrient criteria by the State in July 2009 and provided technical review for EPA's guidance documents on numeric nutrient criteria development, published in 2000-2001.

This extensive experience has shaped the District's firm position that while numeric nutrient criteria are important for protecting Florida's water resources, successful numeric nutrient criteria must be developed through a science-based process. Further, any criteria must address Florida's remarkable ecological diversity in order to achieve appropriate and protective water quality standards.

With this in mind, the District offers the following technical comments along with ready access to the expertise of our scientists and staff plus several decades of South Florida water quality data. We believe that shared resources, sound science and reasonable timeframes can be used to formulate a Final Rule that is technically defensible and achieves our mutual goal of protecting and improving the water quality of Florida's rivers, lakes and streams.

### **Comments Overview**

The District respectfully recommends reconstruction of the proposed rule to achieve a scientifically defensible Final Rule that provides the right level of protection for the diverse water bodies of Florida. The attached comments demonstrate that the current state of the science, particularly scientific data for canals, requires a realistic timeframe for development rather than the timelines currently proposed. Specifically for canals, the District requests that EPA defer numeric criteria for Florida's canal systems until such time that defensible criteria for downstream water bodies are established. Policy decisions must address classification of these heavily impacted, highly managed conveyance systems so that protection for their designated uses of flood control and water supply is achieved while also balancing potential impacts downstream.

After extensive review of EPA's proposed rule, the District submits these key comments:

- Lakes: The District is concerned with utilizing total nitrogen (TN) as a criterion for all Florida lakes and recommends more work be undertaken to understand the significant regional, biological and ecological differences throughout the State.
- Streams and Rivers: With no scientifically established relationship between nutrient levels and biological response, coupled with unreliable scientific results, utilization of the reference approach raises concerns.
  - Many other factors in the stream environment influence biological communities within the water body, and the District recommends a thorough investigation of these factors.
  - Should EPA adopt a reference approach, the District reiterates its support for the Florida Department of Environmental Protection's 90<sup>th</sup> percentile reference-based approach and accompanying biological validation process. The State's technical methodologies were developed through 14 years of study and should prevail over any other reference approach.

- South Florida Canals: Scientific studies of canals and canal ecology are very limited. The attached Canal Science Inventory demonstrates that minimal research exists on these complex, managed systems, which are currently classified as Class III water bodies. Protection for a healthy population of fish and wildlife in a natural stream, also classified as Class III, is fundamentally different than for a flood control canal.
  - The District is concerned with how a “one-size-fits-all” approach would affect operation of the regional flood control system. Adoption of an appropriate methodology and consideration of all available science and research is necessary to set scientifically valid criteria and demonstrate the exact nature of the relationship between nutrients and biological conditions in the more than 2,600 miles of canals that comprise the system.
  - When canal criteria are appropriately developed, the District strongly recommends that sub-regionalization be considered, given the extensive variability in types of canals and their influencing factors, such as soils and groundwater.
- Statistics: Many statistical assumptions are not tested or shown in the proposed rule. The District respectfully asks that EPA provide data demonstrating how statistical assumptions were tested.

The District further recommends that EPA engage in a thorough and transparent peer review process, utilizing the expertise of the EPA’s own Scientific Advisory Board, the National Academy of Sciences, National Research Council or other nationally recognized scientific panels to determine the validity of the technical and scientific underpinnings of the proposed criteria. Statewide numeric nutrient criteria that are not scientifically valid have the real potential to disrupt Everglades restoration progress, including the 50:50 cost-share relationship established in the Water Resources Development Act of 2000 with the U.S. Army Corps of Engineers for the implementation of the Comprehensive Everglades Restoration Plan. Additionally, basin management plans, now under way to improve Florida’s water bodies, may be delayed, and South Florida’s recent successes in wastewater reuse to protect freshwater resources may be unintentionally hindered if nutrient criteria are poorly matched to the water bodies they were designed to protect.

Finally, given the far-reaching implications of the proposed rule and in the interest of open government, the District respectfully requests that EPA resubmit any change to the final rule to the public for additional analysis and comment. The District’s attached comments have analyzed EPA’s currently proposed methodology, and any alternative chosen as the basis for a Final Rule would not necessarily be a “logical outgrowth” of the proposed rule.

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The District continues to review the proposed rule and will expand on the attached comments with further written submissions. Thank you again for the opportunity to provide this feedback. If you have questions or concerns, please contact Kevin Carter at (561) 682-6949 or [kcarter@sfwmd.gov](mailto:kcarter@sfwmd.gov).

Sincerely,



Carol Ann Wehle  
Executive Director  
South Florida Water Management District

CAW/kc

Attachment

c: Kevin Carter, SFWMD