



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OCT 26 2011

THE ADMINISTRATOR

Deborah L. Swackhamer, Ph.D.
Chairwoman
Science Advisory Board
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Dear Dr. Swackhamer:

Thank you very much for the Science Advisory Board's recommendations on the U.S. Environmental Protection Agency's draft document *Methods and Approaches for Deriving Numeric Criteria for Nitrogen/Phosphorus Pollution in Florida's Estuaries, Coastal Waters, and Southern Inland Flowing Waters*. We at the EPA are committed to using sound science as the basis for our actions, and we appreciate your thorough review of the methods we plan to use to derive numeric nutrient criteria for Florida's waters. Following many of your suggestions, we are currently modifying our methods and approaches and have considered our work on these proposed criteria a priority since we first presented them to you in December 2010.

We are pleased to know that the SAB's generally supports our methods and approaches as valid, scientifically based methods for developing numeric nutrient criteria. Additionally, we agree with your conclusion that a dual nutrient strategy that calls for developing both numeric nitrogen and phosphorus criteria is warranted. We also agree with your encouragement that the EPA continue to develop numeric nutrient criteria using a combination of our three general approaches: reference conditions, stressor-response and mechanistic modeling where data and models are available to give greater confidence in the resulting criteria values. Further, we plan to explain in more detail the link between nitrogen and phosphorus pollution and the assessment endpoints in the different waterbody types.

With regard to estuaries, we understand your concerns about the time available to develop mechanistic models for Florida's estuaries. As we indicated in December, we were well on our way in the development of these models, and we are currently conducting calibration and sensitivity analyses on them. We are pleased that you support our use of healthy seagrass communities as a biological endpoint for Florida estuaries. On the issue of additional measures to determine the health of seagrass and faunal communities to translate Florida's narrative nutrient criterion, the EPA has conducted a thorough literature review to evaluate the appropriate assessment endpoints to protect aquatic flora and fauna populations from nitrogen and phosphorus pollution. Although we continue to explore additional endpoints such as macroalgae, epiphytes, benthic macroinvertebrates, fish, harmful algal blooms and coral indices, it is not clear that there are sufficient data available now to support an assessment analysis based on these endpoints.

For coastal waters, the EPA appreciates your support of the use of satellite imagery to derive numeric nutrient criteria for these waters. The EPA plans to investigate how we can validate satellite data with expanded use of field observations beyond the three-nautical-mile limit as the SAB recommended. We agree with, and are following up on, your suggestion to cross-calibrate data to ensure that data from future sensors can be used if existing platforms are retired.

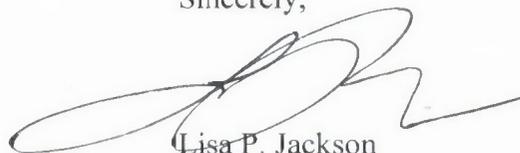
For South Florida inland flowing waters, the EPA understands your concerns about the challenges associated with deriving numeric nutrient criteria that would be protective within man-made and managed Class III canals. Because Florida has designated the uses of these waters no differently than other flowing waters within the state, state regulation currently requires these waters to meet the same water-quality goals and the same level of protection as other Class III waters across the state. In response to your suggestions, the EPA is exploring the use of natural factors for South Florida inland flowing waters in the derivation of numeric nutrient criteria. The EPA is also evaluating options to characterize aquatic life in canals and other South Florida inland flowing waters, including the use of chlorophyll-a and periphyton data as well as the use of multiple lines of evidence. We agree with the SAB that nutrients in canals should be managed to ensure the attainment and maintenance of downstream water-quality standards.

Finally, the EPA will be taking into account the SAB's comments on our proposed approach to develop downstream protective values to provide assurance that proposed water-quality standards for downstream estuaries will be attained and maintained by nutrient inputs from upstream sources. There is a distinct difference between establishing a water-quality standard to proactively protect designated uses and establishing a total maximum daily load to restore conditions in degraded waterbodies, even though the tools to develop each might be very similar. We understand your concerns about the need to maintain flexibility for nutrient allocation across tributaries to achieve necessary estuarine load reductions. Setting downstream protective values does not preclude any allocation option, including the use of trading scenarios, which may be available to the state to implement these water-quality standards.

Nitrogen and phosphorus pollution poses a significant water-quality problem in our nation's waters, including those in Florida. Your considered advice and expert recommendations are greatly appreciated and will strengthen the scientific basis and analytical methodologies. We at the EPA rely on our partnership with Florida to develop scientifically sound and defensible numeric nutrient criteria for estuarine, coastal and South Florida inland flowing waters.

I thank you once more for your hard work and expertise.

Sincerely,

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Lisa P. Jackson



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

OCT 26 2011

THE ADMINISTRATOR

Judith L. Meyer, Ph.D.
Chairwoman
Nutrient Criteria Review Panel
Science Advisory Board
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

Dear Dr. Meyer:

Thank you very much for the Science Advisory Board's recommendations on the U.S. Environmental Protection Agency's draft document *Methods and Approaches for Deriving Numeric Criteria for Nitrogen/Phosphorus Pollution in Florida's Estuaries, Coastal Waters, and Southern Inland Flowing Waters*. We at the EPA are committed to using sound science as the basis for our actions, and we appreciate your thorough review of the methods we plan to use to derive numeric nutrient criteria for Florida's waters. Following many of your suggestions, we are currently modifying our methods and approaches and have considered our work on these proposed criteria a priority since we first presented them to you in December 2010.

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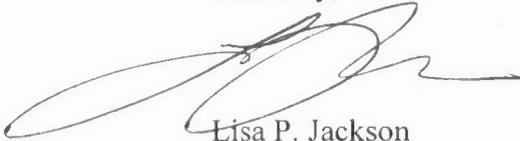
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Lisa P. Jackson