

Participating Organizations

Alliance for a Living Ocean
American Littoral Society
Arthur Kill Coalition
Asbury Park Fishing Club
Bayberry Garden Club
Bayshore Regional Watershed Council
Bayshore Saltwater Flyrodders
Belford Seafood Co-op
Belmar Fishing Club
Beneath The Sea
Bergen Save the Watershed Action Network
Berkeley Shores Homeowners Civic Association
Cape May Environmental Commission
Central Jersey Anglers
Citizens Conservation Council of Ocean County
Clean Air Campaign, NY
Coalition Against Toxics
Coalition for Peace & Justice/Unplug Salem
Coast Alliance
Coastal Jersey Parrot Head Club
Communication Workers of America, Local 1034
Concerned Businesses of COA
Concerned Citizens of Bensenville
Concerned Citizens of COA
Concerned Citizens of Montauk
Concerned Students and Educators of COA
Eastern Monmouth Chamber of Commerce
Fisher's Island Conservancy
Fishermen's Conservation Association, NJ Chapter
Fishermen's Conservation Association, NY Chapter
Fishermen's Dock Cooperative, Pt. Pleasant
Friends of Island Beach State Park
Friends of Liberty State Park, NJ
Friends of the Boardwalk, NY
Garden Club of Englewood
Garden Club of Fair Haven
Garden Club of Long Beach Island
Garden Club of RFD Middletown
Garden Club of Morristown
Garden Club of Navesink
Garden Club of New Jersey
Garden Club of New Vernon
Garden Club of Oceanport
Garden Club of Princeton
Garden Club of Rumson
Garden Club of Short Hills
Garden Club of Shrewsbury
Garden Club of Spring Lake
Garden Club of Washington Valley
Great Egg Harbor Watershed Association
Green Party of Monmouth County
Green Party of New Jersey
Highlands Business Partnership
Holly Club of Sea Girt
Hudson River Fishermen's Association
Jersey Shore Captains Association
Jersey Shore Parrot Head Club
Jersey Shore Running Club
Junior League of Monmouth County
Keyport Environmental Commission
Kiwanis Club of Manasquan
Kiwanis Club of Shadow Lake Village
Leonardo Party & Pleasure Boat Association
Leonardo Tax Payers Association
Main Street Wildwood
Mantoloking Environmental Commission
Marine Trades Association of NJ
Monmouth Conservation Foundation
Monmouth County Association of Realtors
Monmouth County Audubon Society
Monmouth County Friends of Clearwater
National Coalition for Marine Conservation
Natural Resources Protective Association, NY
NJ Beach Buggy Association
NJ Commercial Fishermen's Association
NJ Environmental Federation
NJ Environmental Lobby
NJ Main Ship Owners Group
NJ Marine Education Association
NJ PIRG Citizen Lobby
Nottingham Hunting & Fishing Club, NJ
NYC Sea Gypsies
NY State Marine Education Association
NY/NJ Baykeeper
Ocean Wreck Divers, NJ
PaddleOut.org
Piscataway Saltwater Sportsmen Club
Raritan Riverkeeper
Religious on Water
Riverside Drive Association
Rotary Club of Long Branch
Rotary District #7510-Interact
Saltwater Anglers of Bergen County
Sandy Hook Bay Anglers
Save Barnegat Bay
Save the Bay, NJ
SEAS Monmouth
Seaweeders Garden Club
Shark Research Institute
Shark River Cleanup Coalition
Shark River Surf Anglers
Shore Adventure Club
Sierra Club, NJ Shore Chapter
Sisters of Charity, Maris Stella
Sons of Ireland of Monmouth County
Soroptimist Club of Cape May County
South Jersey Dive Club
South Monmouth Board of Realtors
Staten Island Tuna Club
Strathmere Fishing & Environmental Club
Surfers' Environmental Alliance
Surfrider Foundation, Jersey Shore Chapter
TACK I, MA
Terra Nova Garden Club
Three Harbors Garden Club
Unitarian Universalist Congregation/Monmouth County
United Boatmen of NY/NJ
Village Garden Club
Volunteer Friends of Boaters, NJ
WATERSPIRIT
Women's Club of Brick Township
Women's Club of Keyport
Women's Club of Long Branch
Women's Club of Merchantville
Women's Club of Spring Lake
Women Gardeners of Ridgewood
Zen Society



Ocean Advocacy
Since 1984

Clean Ocean Action

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February 18, 2010

Gary J. Brower, Esq.
Attn. DEP Docket Number 21-09-11/754
Office of Legal Affairs
New Jersey Department of Environmental Protection
401 East State Street, Floor 4
P.O. Box 402
Trenton, NJ 08625-0402

RE: Surface Water Quality Standards; Proposed Amendments to Nutrient Policies

Dear Mr. Brower,

Clean Ocean Action (COA) is a broad-based coalition of 125 conservation, environmental, fishing, boating, diving, student, surfing, women's, business, service, and community groups, and also represents concerned citizens and businesses. Our goal is to improve the degraded water quality of the marine waters off the New Jersey/New York coast. COA has reviewed the proposed amendments to nutrient policies and submits the following comments.

COA strongly supports the extension of Narrative Nutrient Water Quality Criterion to Marine Waters. We are pleased that the proposed amendments address our previously submitted comments to New Jersey Department of Environmental Protection (NJDEP) requesting this extension of the criterion to all state waters. It was disappointing that the extension of the nutrient narrative criterion had not been included in the April 2009 proposed amendments to the state's Surface Water Quality Standards. We trust that once this extension of narrative nutrient criterion is adopted, assessment methods for coastal and near-shore ocean waters will be included in the 2012 Methods Document for the New Jersey Integrated Water Quality Monitoring and Assessment Report. Again, we strongly support the extension of the existing narrative nutrient criterion to marine waters.

COA is very concerned about how the narrative nutrient criterion will be assessed and implemented and the timeframe in which this will happen. The proposal's section titled "Assessment Methods and Implementation" refers to the Nutrient Criteria Enhancement Plan (NCEP) and ongoing programs to develop aquatic life indices for marine waters. The NJDEP is working in cooperation with Rutgers University and the U.S. Environmental Protection Agency (EPA) on these indices. The proposal also states that,

“The Department will develop appropriate methods to assess compliance with the narrative nutrient criterion for the near-shore ocean and estuarine waters.”

However, neither this proposal nor the NCEP have provided a sufficient plan that explains how the methods to assess compliance with the narrative nutrient criterion for all state marine waters will be developed. This is essential because the criterion cannot be implemented without adequate assessment methods. Also, further study appears to be needed that will require more funding and more time before the methods under development can be used to assess nutrient impacts. In the meantime, nutrient impacts in marine waters will likely continue to harm marine life and not be formally recognized.

Nearshore ocean waters. What are the next steps that need to be taken to determine whether low dissolved oxygen (DO) conditions and benthic impacts in nearshore ocean waters are nutrient-related? What other sources of impairment will be considered? What further studies will be needed? How will NJDEP determine whether nutrient-related impacts are due to pollution and not natural conditions? Why has the full process for assessing nutrient impacts in nearshore ocean waters not been explained in the NCEP or this proposal?

Estuaries. The multimetric indices underdevelopment for estuaries will apply only to the Barnegat Bay-Little Egg Harbor Estuary system, where the indices are being studied, and not all of NJ’s estuarine waters as suggested in this proposal. Once developed for this estuarine system, additional investigation will likely be needed to extend the biotic indicators to other estuaries and back bays as the indices may have geographically specific considerations. The state dollars must maximize the effectiveness of the current study effort so that the developed indices can serve as a model and be applied to other estuaries in a timely manner.

While COA does support the proposed multimetric approach for nutrient assessments that will allow for a more comprehensive evaluation of marine waters, it is unclear how and where this approach will be implemented based on the proposal. The proposal states that,

“In addition, the Department is working with the USEPA and Rutgers University to develop a benthic indicator for estuarine waters, similar to the benthic macroinvertebrate indicator used for freshwater wadeable streams, by 2012 and is also developing other metrics for submerged aquatic vegetation, phytoplankton and macroalgae to allow for a more comprehensive evaluation in near-shore ocean waters.”

Will multimetric methods be developed and applied for both estuaries and near-shore waters? We are only aware of efforts to develop such an approach for the Barnegat Bay estuary system.

We have previously recommended using NOAA’s Assessment of Estuarine Trophic Status (ASSETS) methods for assessing nutrient impairments in estuarine waters.^{1,2} The Assessment of Estuarine Trophic Status (ASSETS) tool was developed by NOAA for use in the National

¹ Bricker, S., B. Longstaff, W. Dennison, A. Jones, K. Boicourt, C. Wicks, and J. Woerner. 2007. Effects of Nutrient Enrichment in the Nation’s Estuaries: A Decade of Change. NOAA Coastal Ocean Program.

² Bricker, S.B., J.G. Ferreira, and T. Simas, 2003. An integrated methodology for assessment of estuarine trophic status Ecological Modelling 169: 39–60

Estuarine Eutrophication Assessment Program.³ It includes random sampling locations within pre-designated salinity zones (high, medium, and low) and assesses influencing factors, such as physical, hydrologic, and anthropogenic dynamics and pressures. It is well known that the nitrogen loadings to a system are more critical for evaluating biotic response than nitrogen concentrations within a system.⁴ The overall eutrophic condition is determined from data for five primary and secondary symptoms. Primary symptoms: excessive concentrations of chlorophyll a (phytoplankton), macroalgae and epiphytes. Secondary symptoms: low DO, loss of submerged aquatic vegetation, and occurrence of nuisance/toxic blooms. Additional information from the local studies and assessments of relevant nutrient-tolerant biota should also be included in assessing the overall eutrophic condition once completed.

We recognize that for nearshore ocean waters or deep estuaries not all of the ASSETs indicators and methods would be applicable. For example, submerged vegetation may not be common in deep waters or in high wave energy environments. However, the overall comprehensive nutrient assessment approach of ASSETs is also needed for deep estuaries and ocean waters.

In conclusion, COA supports the extension of the narrative nutrient criterion to all state waters. We also support a multimetric approach for nutrient assessments. However, the proposed “Assessment Methods and Implementation” section and NCEP raise several critical concerns. The method development and implementation of the criterion appear to be overstated and not adequately planned, or at least explained, for statewide implementation. We request a meeting with NJDEP to discuss these concerns and ask that Heather Saffert at 732-872-0111 be contacted to arrange a meeting date.

We thank you in advance and look forward to your written response and meeting with you.

Sincerely,



Cindy Zipf
Executive Director



Heather Saffert, Ph.D.
Staff Scientist

³ S.B. Bricker, J.G. Ferreira, and T. Simas, 2003. An integrated methodology for assessment of estuarine trophic status, *Ecological Modeling* 169: 9–60

⁴ Heisler, J. et al. in press, 2008. Eutrophication and harmful algal blooms: A scientific consensus. *Harmful Algae* <http://www.whoi.edu/science/cohh/whcohh/publications/index.htm>

