



The New York Water Environment Association, Inc.
The Water Quality Management Professionals

525 Plum Street • Suite 102
Syracuse, New York 13204
(315) 422-7811 • Fax: 422-3851
www.nywea.org • e-mail: pcr@nywea.org

May 31, 2013

Assemblyman Robert Sweeney
NY State Assembly, Legislative Office Building, Room 625
Albany, NY 12248

Senator Kenneth Lavalle
NYS Senate - Legislative Office Building, Room 806
Albany, NY 12247

RE: Bill No. A1047/S4857 – An Act to amend the environmental conservation law, in relation to special groundwater and surface water protection areas – NYWEA’s Comments

Dear Assemblyman Sweeney and Senator Lavalle,

The New York Water Environment Association (NYWEA) is a statewide nonprofit organization of 2,500 water professionals dedicated to the preservation, protection and enhancement of New York’s water resources. NYWEA has reviewed proposed Bill A1047/S4857, which had recently passed the Assembly and was referred to the Senate Environmental Conservation Committee, and offers the following comments for your consideration.

NYWEA commends both of you and your colleagues for taking initiative to enhance water quality on Long Island. We generally support the proposed modification of the special groundwater protection areas on Long Island reaffirming existing designation of nine special groundwater protection areas and including additional three areas – the Peconic Estuary Watershed, the South Shore Estuary Reserve Watershed and the Long Island Sound Watershed – as special surface water protection areas. As you know, two of these areas – Peconic Estuary and Long Island Sound – are part of the EPA’s National Estuary Program established by Congress to improve the quality of estuaries of national importance and the South Shore Estuary Reserve area is being managed by the South Shore Estuary Reserve Council created by the New York State Legislature.

We, however, have two important comments related to the Bill:

A. The Bill proposes in §2(C) amending Section 55-0113 of the Environmental Conservation Law (ECL), to define the Long Island Sound Watershed to include "...only towns, villages, and Counties adjoining the Long Island Sound." We recommend deleting the word "Counties" from the aforementioned definition, because, as it is currently written, all of Nassau and Suffolk Counties, including areas adjacent and draining into the waters of the South Shore Estuary (rather than into the Sound) would be considered part of the Long Island Sound Watershed.

B. NYWEA also has concerns regarding proposed §3 amending Section 55-0117 of the ECL by requiring a planning entity to submit a plan to the Commissioner certifying that "...the plan when implemented will achieve [its stated water quality objectives] an ambient groundwater standard of two milligrams per liter for nitrogen"

With respect to the proposed groundwater standard of two milligrams per liter of nitrogen, this standard, as it is currently proposed in the Bill, is arbitrary and lacks scientific basis and justification. Our detailed concerns related to this proposed standard are as follows:

1. Lack of rulemaking process and regulatory review and analyses. Introduction of the new numerical groundwater nitrogen standard through a legislative action, instead of a proper rulemaking process by an expert regulatory agency (NYS DEC) and without a proper regulatory review and analyses, sets a dangerous precedent. Currently, scientifically defensible water quality standards constitute one of the key principles of both the Clean Water Act and the Environmental Conservation Law. Article 17-0301 of the ECL sets out the procedure for the "Classification of Waters and Adoption of Standards" and DEC has a scientifically defensible set of procedure for the "Derivation and Use of Standards and Guidance Values" in Part 702 of DEC's Regulations. The rulemaking process also includes a regulatory impact analysis which includes among others factors, economic impact of the proposed new rule. Setting defensible numeric water quality standards for nutrients, such as nitrogen, usually entails a multi-year transparent process – to avoid potential detrimental cost and environmental implications if the standards are set wrong.

2. The proposed standard is below the limit of available nitrogen removal technology and may lead to significant cost implications. While the NY State effluent limit for wastewater treatment plants discharging to groundwater is 20 mg/l for nitrate-nitrogen (a subset of Total Nitrogen), most of the Nassau and Suffolk plants discharging to groundwater have a more stringent effluent permit limit of 10 mg/l for total nitrogen. Even assuming a costly upgrade to the best conventional nitrogen removal technology in the Long Island area, these treatment plants would only be able to achieve, on a year-round basis,

effluent concentration of approximately 5 mg/l of total nitrogen, which is significantly higher than the groundwater standard of 2 mg/l proposed by the Bill.¹ This underscores a concern that the proposed groundwater standard may be hard if not impossible to meet and would require significant capital investments by municipalities in order to attempt to attain the standard. As a reference point, the current federal and state (New York State Department of Health) drinking water standard, developed based on the results of extensive epidemiological studies, is 10 mg/l for nitrate-nitrogen.

3. A single nitrogen groundwater standard for Long Island may not be a solution. The science shows that the nitrogen standards should be developed on a site-specific basis to account for variability of nitrogen loadings (point vs. nonpoint and other sources) contributing to the surface waters. Such standards should be developed on a watershed basis. Acknowledging this concern, in her March 16, 2011 memorandum to EPA Regional Administrators, Acting Assistant Administrator of the EPA Office of Water Nancy Stoner stated that “States need room to innovate and respond to local water quality needs, so a one-size-fits-all solution to nitrogen and phosphorus pollution is neither desirable nor necessary.”

If the major purpose of the Bill is to limit nitrogen levels in Long Island estuaries (i.e., surface waters), this goal is currently being addressed by the NYS DEC through the development of the numeric nutrient criteria to protect flowing and ponded freshwaters and estuaries from excessive nutrients, for which the Department has New York State Nutrients Standards Plan in place http://www.dec.ny.gov/docs/water_pdf/nutrientstds2011.pdf.

4. Other Issues. Among the other issues of concern are the potential impact of the proposed standard on a number of green technology and best management practices for managing stormwater, as well as water reuse applications (golf course irrigation, etc.) which rely on groundwater infiltration.

NYWEA Recommendations:

1. For the reasons discussed above, the definition of the Long Island Sound Watershed in proposed Paragraph 2 (C) of the Bill should not include the word “Counties”.
2. Given the aforementioned concerns, we strongly recommend deleting the two milligram per liter requirement for nitrogen from the Bill. At most, the Bill should direct NYS DEC to propose numeric Total Nitrogen groundwater standards for Long Island through the application of NYS

¹ Moreover, properly operating cesspools or septic tanks with leach fields can only reduce nitrogen concentration to 35-45 mg/l of total nitrogen.

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DEC's detailed water quality standard derivation procedures which are included in 6 NYCRR Part 702.

NYWEA would further like to offer our scientific and engineering expertise to assist you and your colleagues in reviewing the nitrogen issue. NYWEA has a Nutrient Task Force consisting of experts who specialize in nitrogen and phosphorus removal technology and water quality standards. If you would like to discuss this issue further, please contact our Executive Director Patricia Cerro-Reehil to schedule a meeting.

We look forward to continue working with both of you, Senator Grisanti and other Senate and the Assembly Environmental Conservation Committees' members on any of the future water related bills for which you and your colleagues may require input of the water quality professionals.

Sincerely,

A handwritten signature in black ink, appearing to be 'Mark Koester', with a long horizontal line extending to the left.

Mark Koester
President

cc: Senator Mark Grisanti
Commissioner Joe Martens, NYS DEC
Assistant Commissioner James Tierney, NYS DEC
NYWEA Board
NYWEA Government Affairs Committee