

**OFFICE OF THE COMMISSIONER**

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**STATE OF NEW YORK  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
CERTIFICATE OF ADOPTION**

**AGENCY ACTION:** Amend 6 NYCRR 703.4, Application of Site-Specific Criteria to Class I & Class SD Waters

Pursuant to the provisions of Sections 3-0301 and 17-0301 of the Environmental Conservation Law, I, Basil Seggos, Commissioner of the Department of Environmental Conservation (DEC), hereby certify that the amendments to 703.4 of Title 6 of the Official Compilation of Codes, Rules and Regulations be adopted to read as on the attached original, and certify that this is the original thereof, as adopted by me on 9/16/21, to be effective upon publication in the State Register.

I further certify that prior notice, as required under the State Administrative Procedure Act, was published in the State Register on January 20, 2021 under Notice No. ENV-03-21-00010-P. I also further certify that prior notice of a public hearing, scheduled for and held on March 23, 2021 via webinar, was published in the State Register on January 20, 2021 and DEC's Environmental Notice Bulletin on January 20, 2021. Furthermore, I certify that prior notice of a public hearing was published in the following local newspaper on the following dates, with no additional publication of prior notice of hearing required by statute:

Newspaper	Dates of Publication
New York Post	January 20 & 27, 2021



Basil Seggos  
Commissioner  
Department of Environmental Conservation

DATED: 9/16/21  
Albany, New York

**EXPRESS TERMS**  
**APPLICATION OF SITE-SPECIFIC CRITERIA TO CLASS I & CLASS SD WATERS**  
**Amendments to 6 NYCRR § 703.4**

Title 6 of the New York Codes, Rules, and Regulations (NYCRR) § 703.4, entitled “Water quality standards for coliforms, enterococci, and E. coli.” is amended as follows:

A new subdivision (g) within section 703.4 is adopted to read as follows:

(g) Site-Specific Enterococci

Standards in the table below will be assessed as a geometric mean of samples collected over a 30-day period during the recreational season of May 1st through October 31st. The recreational season may be expanded in any instance where the department determines it necessary to protect human health or the best usages of the waters, or where required by State or Federal law or interstate compact. Units for the standard are number per 100 mL (colony-forming units or most probable number).

<u>Waterbody Name</u>	<u>Regulatory Segment ID</u>	<u>Waterbody Classification</u>	<u>Site-Specific Standard Boundaries</u>	<u>Standard</u>
<u>Hudson River (portion)</u>	<u>864-1</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Coney Island Creek</u>	<u>890-5</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>315</u>
<u>Erie Basin</u>	<u>890-6.1</u>	<u>SD</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Gowanus Canal</u>	<u>890-7</u>	<u>SD</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Raritan Bay Portion</u>	<u>890.11</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Arthur Kill (portion)</u>	<u>890-12</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>115</u>
<u>Arthur Kill (portion)</u>	<u>890-13</u>	<u>SD</u>	<u>Entire Regulatory Segment</u>	<u>70</u>
<u>Newark Bay</u>	<u>890-14</u>	<u>SD</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Kill Van Kull</u>	<u>890-15</u>	<u>SD</u>	<u>Entire Regulatory Segment</u>	<u>115</u>
<u>New Creek</u>	<u>890-18</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Great Kill Creek</u>	<u>890-19</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Oakwood Creek</u>	<u>890-20</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Bedell Avenue Creek</u>	<u>890-27</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Mill Creek</u>	<u>890-28</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Tribs. of Arthur Kill</u>	<u>890-30</u>	<u>SD</u>	<u>Entire Regulatory Segment</u>	<u>115</u>
<u>Fresh Kills</u>	<u>890-34</u>	<u>SD</u>	<u>Entire Regulatory Segment</u>	<u>115</u>
<u>Tribs. of Arthur Kill</u>	<u>890-41</u>	<u>SD</u>	<u>Entire Regulatory Segment</u>	<u>115</u>

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<u>Trib. of Arthur Kill</u>	<u>890-42</u>	<u>SD</u>	<u>Entire Regulatory Segment</u>	<u>115</u>
<u>Bridge Creek</u>	<u>890-44</u>	<u>SD</u>	<u>Entire Regulatory Segment</u>	<u>115</u>
<u>Bodine Creek</u>	<u>890-45</u>	<u>SD</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Trib. of Kill Van Kull</u>	<u>890-49</u>	<u>SD</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Trib. of Kill Van Kull</u>	<u>890-50</u>	<u>SD</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>East River</u>	<u>890-52</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>East River</u>	<u>890-53</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Lower Newtown Creek, Whale Creek, Dutch Kills, and Maspeth Creek</u>	<u>890-54</u>	<u>SD</u>	<u>From the mouth at East River upstream to the head of the turning basin, just north of Maspeth Ave. Includes all of Whale Creek, Dutch Kills and Maspeth Creek.</u>	<u>35</u>
<u>Upper Newtown Creek and English Kills</u>	<u>890-54</u>	<u>SD</u>	<u>From the head of the turning basin, just north of Maspeth Ave, upstream to terminus of the main stem of the Creek and all other upstream tribs. Includes all of English Kills.</u>	<u>115</u>
<u>Harlem River, Little Hell Gate, Bronx Kill</u>	<u>890-56</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Harlem River</u>	<u>890-56.1</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Tribs. of Jamaica Bay</u>	<u>891-2</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Hook Creek</u>	<u>891-3</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>115</u>
<u>Trib. of Hook Creek</u>	<u>891-4</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>115</u>
<u>Thurston Basin</u>	<u>891-8</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>115</u>
<u>Bergen Basin</u>	<u>891-12</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>150</u>
<u>Hawtree Basin</u>	<u>891-13</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Shellbank Basin</u>	<u>891-14</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Trib. of Jamaica Bay</u>	<u>891-15</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Old Mill Creek</u>	<u>891-16</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Tribs. of Jamaica Bay</u>	<u>891-17</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Sheepshead Bay</u>	<u>891-21</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>

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<u>East River (10.1-12.3)</u>	<u>935-1</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>East River (12.3-14.5)</u>	<u>935-2</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Steinway Creek</u>	<u>935-4</u>	<u>SD</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Trib. of East River</u>	<u>935-5</u>	<u>SD</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Flushing Creek</u>	<u>935-6</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>115</u>
<u>Tribs. of East River</u>	<u>935-11</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Alley Creek</u>	<u>935-13</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>70</u>
<u>Trib of Little Neck Bay</u>	<u>935-17</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Bronx River</u>	<u>935-18</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>35</u>
<u>Westchester Creek and Pugsley Creek</u>	<u>935-47</u>	<u>I</u>	<u>Entire Regulatory Segment</u>	<u>70</u>

REVISED REGULATORY IMPACT STATEMENT (RIS)  
APPLICATION OF SITE-SPECIFIC CRITERIA TO CLASS I & CLASS SD WATERS  
Amendments to 6 NYCRR § 703.4

The waters of New York State (both freshwater and saline) are grouped into classes and, within those classes, criteria are assigned to protect their best usages. There are five classes of marine waters defined in Title 6 of the New York Codes, Rules, and Regulations (NYCRR) Part 701: SA, SB, SC, I, and SD.

The New York State Department of Environmental Conservation (NYSDEC) is proposing amendments to 6 NYCRR § 703.4 to improve protection of the secondary contact recreation and fishing best uses in Class I and Class SD waters. Through this proposed rule making, NYSDEC is adding site-specific fecal indicator bacteria (FIB) for select Class I and Class SD waters. The proposed site-specific FIB criteria are based on measurements of enterococcus bacteria and would supplement the current total and fecal coliform FIB criteria for these waters.

The proposed rule making would add a new paragraph (g) to 6 NYCRR § 703.4. The proposed rule making does not make any changes to 6 NYCRR § 701.13 or 701.14. The best uses of the Class I and SD waters were, and remain, “secondary contact recreation and fishing” and “fishing,” respectively.

The proposed rule making would impact limited waters of the State; the affected Class I and SD waters are located in and around New York City (NYC).

1. Statutory authority:

The general authority to promulgate regulations is found in New York State Environmental Conservation Law (ECL) § 3-0301(2)(a). ECL § 3-0301(2)(a) provides that the Commissioner of NYSDEC may adopt regulations to carry out the purposes of the ECL in general.

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ECL § 17-0301(5)(c)(3) requires NYSDEC to adopt basic criteria for coliform FIB to protect for “Sources of water for bathing, fishing, boating, and any other usages except shellfishing for market purposes in tidal salt waters...” ECL § 17-0301(5)(c)(7) further authorizes NYSDEC to “adopt and assign more restrictive standards for the best usages of the waters of the state.” Using that authority, the proposed rule making adds site-specific FIB criteria to provide additional protections for the I Class I and SD waters but does not alter or modify the existing FIB criteria (total and fecal coliform). The proposed site-specific FIB criteria are for enterococcus criteria.

2. Legislative objectives:

ECL § 3-0301(2)(a) was enacted with the purpose of providing NYSDEC the authority to “adopt, amend, or repeal environmental standards, criteria, and those rules and regulations having the force and effect of standards and criteria...”

ECL § 17-0301(5)(c) provides more specific requirements on how FIB criteria shall be regulated in NYS waters to protect, among other things, recreational uses.

ECL § 17-0301(5)(c)(7) provides the authority to impose more restrictive criteria.

3. Needs and benefits:

The current FIB criteria that protect secondary contact recreation and fishing best uses in the Class I waters are fecal and total coliform criteria, as per ECL § 17-0301(5)(c)(3) and 6 NYCRR § 703.4 (as amended in 2015). Those same FIB criteria are also used to protect the fishing best use in the Class SD waters. Pursuant to ECL § 17-0301(5)(c)(7) the Department has the authority to impose more restrictive criteria. The

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proposed site-specific FIB enterococcus criteria are more restrictive than the current criteria and are a better indicator of fecal pollution in marine waters.

NYC is currently under an administrative consent order with NYSDEC to abate and control combined sewer overflows (CSOs) which discharge raw sewage to the waters in and around NYC during wet weather events. A key component of the consent order is that NYC must draft and submit Long Term Control Plans (LTCPs) to NYSDEC for approval, and then implement such approved LTCPs. The LTCPs detail the CSO loads to the waters, the impacts those loads have on water quality, recommended plans to eliminate or reduce the CSO loads, and identify practices to implement based on a cost-benefit analysis. LTCPs include a Financial Capability Analysis performed according to the “Combined Sewer Overflows: Guidance for Financial Capability Assessment and Schedule Development” (USEPA, 1997). In these analyses, NYC is required to assess the cost of CSO abatement measures for water quality improvement against the median household income of ratepayers (the “Residential Indicator” or “RI”) and the “Financial Capability Indicators” (FCI) of the City as a whole, considering among other things municipal bond rating, unemployment rates, and tax revenues. The scores of these analyses are combined into a matrix to determine overall impact, and most of the NYC CSO projects are classified as a “medium-burden” financially. This is ideal, as a “high-burden” project would mean NYC is overextending financial capability, and a “low-burden” score means NYC is not maximizing available resources. The United States Environmental Protection Agency (USEPA) Region 2 reviewed all the LTCPs, including the financial capability components, and did not object to the approval of the

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LTCPs. Additionally, USEPA and their consultants performed independent financial capability analyses concluding that the current plans are reasonable with respect to financial burden, and other plans, such as 100% CSO capture, are overly burdensome.

The current NYC LTCPs also include evaluations of enterococcus levels in the subject waters. This includes modeling of enterococcus levels following construction of the practices included in the LTCPs. The proposed rule making takes the modeled enterococcus attainment levels and memorializes them in NYS regulations as site-specific FIB criteria to provide a better measure of the health of the waterbodies.

The proposed standards are scientifically rational and protective of the best uses based on data found in the Exposure Factor Handbook (USEPA, 2019), which publishes estimated water ingestion rates during various activities. The Handbook suggests secondary contact recreation carries approximately one-tenth the risk of water ingestion of that of primary contact. Extrapolating this level of risk based on USEPA's estimated ingestion rates to their 2012 Recreational Water Quality Criteria (RWQC) for primary contact recreation (35 cfu/100mL) suggests enterococci criteria  $\leq 350$  cfu/100mL will be protective of secondary contact recreation. All proposed site-specific criteria are below this concentration.

4. Costs to NYSDEC, the State, and local governments:

The proposed rule making does not impose additional costs upon NYSDEC, the State, or local governments.

The proposed rule making memorializes water quality attainment levels projected to be reached by completion of LTCPs, which NYC is currently obligated to complete

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under an administrative consent order. Funds to complete those LTCPs have already been committed and are not affected by the proposed rule making.

A) New York City

In NYC, there are numerous municipal wastewater treatment plants and several other regulated parties that discharge into Class I and SD waters. All current dischargers are required to disinfect their effluent, as such, no significant additional costs will be incurred by these facilities. As mentioned above, NYC is already obligated through an administrative consent order to implement its LTCPs, and therefore, the proposed rule making does not impose costs on regulated persons or local governments in NYC above and beyond costs that are currently required.

5. Local government mandates:

The proposed rule making does not impose mandates on local governments. As discussed in Section 4 of this statement, the proposed rule making also does not impose any mandates that are not already required.

6. Paperwork

No paperwork - record keeping or reporting - will be imposed.

7. Duplication:

The amendments to 6 NYCRR § 703.4 cause no duplication, overlap or conflict with any other state or federal government programs or rules.

8. Alternative:

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Alternatives to this proposal include: (1) No action, or not amending 6 NYCRR § 703.4 and (2) applying water quality standards to the Class I and SD water more stringent than those proposed.

No Action – Although NYC is under an administrative consent order to complete the LTCPs, there is no regulatory mechanism in place to ensure that the water quality end goals, including enterococcus levels, projected by the LTCPs are attained.

More Stringent Standards – Applying water quality standards to the Class I and SD waters more stringent than those proposed (e.g., wholesale application of the 2012 RWQC to all Class I and Class SD waters) could result in dangerous and improper use of the subject waters, financial hardship for NYC, and postponement or abandonment of current water quality improvement projects that would lead to potential decrease in water quality.

To achieve, or come close to achieving, the 2012 RWQC, NYC would need to capture 100% of all CSO discharges for treatment. The investments to achieve that level of capture exceed \$20 billion. These costs would be passed onto rate payers in NYC and cause a significant financial burden. Even with 100% CSO capture, water quality modeling suggests some waters would still not be in compliance with the 2012 RWQC.

The Class I and SD waters are mostly industrial waterways, not safe for many types of recreation, particularly swimming. If DEC were to adopt the 2012 RWQC, it would send a misleading message that these waters are safe for swimming. More stringent criteria do not directly improve water quality and could cause swimmer exposure to harmful bacteria under certain conditions. Physical hazards such as swift currents, commercial

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boat traffic, and rocky/bulkheaded shorelines also exist in these waters that could lead to personal injury or death for those choosing to swim in them.

The current project commitments were agreed upon by NYC and DEC based on existing water quality standards. Required compliance with the 2012 RWQC would necessitate a significant reevaluation and restructuring of the CSO abatement program currently underway by NYC, causing immediate loss of environmental benefits and jobs due to the delay or complete stoppage of work.

9. Federal standards:

There are currently no federal FIB criteria required or recommended for the protection of secondary contact recreation and fishing best uses.

10. Compliance schedule:

The proposed rule making does not require a compliance schedule.

RURAL AREA FLEXIBILITY ANALYSIS (RAFA)  
APPLICATION OF SITE-SPECIFIC CRITERIA TO CLASS I & CLASS SD WATERS  
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The proposed rule making does not impact any rural areas as defined in New York State Administrative Procedure Act Section 102(10). The proposed rule making would impact limited waters of the state, the affected Class I and SD waters are located in and around New York City. There are no designated rural areas in New York City. Therefore, the New York State Department of Environmental Conservation has determined that a Rural Area Flexibility Analysis is not required.

REGULATORY FLEXIBILITY ANALYSIS FOR SMALL BUSINESS AND LOCAL  
GOVERNMENT (RFA)  
APPLICATION OF SITE-SPECIFIC CRITERIA TO CLASS I & CLASS SD WATERS  
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1. Effect of Rule:

The proposed rule making applies to any local governments and/or small businesses that have permitted discharges of treated and untreated sanitary sewage into Class I or Class SD waters (I/SD waters). The affected I/SD waters are located in and around New York City (NYC).

2. Compliance Requirements:

In NYC, there are numerous municipal wastewater treatment plants and several other regulated parties that discharge into I/SD waters. All current dischargers are required to disinfect their effluent, as such, no significant additional costs will be incurred by these facilities. NYC is already obligated, through an administrative consent order, to implement its Long Term Control Plans (LTCPs), and therefore, the proposed rule making does not impose any costs on regulated entities or local governments beyond those costs that are currently required.

The proposed rule making does not require a compliance schedule.

3. Professional Services:

NYC is already obligated to implement its LTCPs, and therefore, the proposed rule making does not require professional services beyond those costs that are currently required. As part of the previously obligated work, professional services of consulting engineers would likely be needed for the design and construction management of pollution abatement facilities. Consulting engineers provide the sampling and analysis, modeling, engineering, facilities planning, project development and management expertise to assist NYC in implementation of future projects.

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4. Compliance Cost:

The Regulatory Impact Statement (RIS) discusses the costs of complying with the proposed rule making. However, as discussed above and in the RIS, there are no new costs to regulated parties, small businesses, or local and state governments associated with the proposed rule making. The regulated parties are currently required by legal consent orders to implement LTCPs. Upon completion of construction projects prescribed by the LTCPs, the site-specific FIB criteria established in the rule making are projected to be attained.

5. Economic and Technological Feasibility:

The proposed rule making further protects the existing secondary contact recreation and fishing best uses in the I/SD waters by creating site-specific FIB criteria based on measurements of enterococcus. The site-specific FIB criteria are more stringent criteria than currently is required for these waters. However, various technologies exist that can be used for pollution abatement to comply with the site-specific criteria. NYC is already obligated, through implementation of their LTCPs, to make certain infrastructure upgrade investments, and therefore, the proposed rule making does not require technologies beyond those already required.

6. Minimizing Adverse Impacts:

As discussed above and in the RIS, there are no new costs to regulated parties, small businesses, or local and state governments associated with the proposed rule making. The proposed rule making takes the modeled enterococcus attainment levels from the LTCPs and memorializes them in NYS regulations as site-specific

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FIB criteria. NYC is already obligated to develop and implement the LTCPs under an administrative consent order.

LTCPs includes a Financial Capability Analysis performed according to the “Combined Sewer Overflows: Guidance for Financial Capability Assessment and Schedule Development” (USEPA, 1997). In these analyses, NYC is required to assess the cost of CSO abatement measures for water quality improvement against the median household income of ratepayers (the “Residential Indicator” or “RI”) and the “Financial Capability Indicators” (FCI) of the City as a whole, considering among other things municipal bond rating, unemployment rates, and tax revenues. The scores of these analyses are combined into a matrix to determine overall impact, and most of the NYC CSO projects are classified as a “medium-burden” financially. This is ideal, as a “high-burden” project would mean NYC is overextending financial capability, and a “low-burden” score means NYC is not maximizing available resources.

7. Small Business and Local Government Participation:

The proposed rule making relies upon ECL §§ 3-0301 and 17-0301 for statutory authority, both of which require NYSDEC to hold a public hearing to receive comments from stakeholders on the proposed rule making.

8. Cure Period or Other Opportunity for Ameliorative Action:

The proposed rule making does not modify or establish violations or penalties, therefore no cure period is required.

JOB IMPACT STATEMENT (JIS)  
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A job impact statement is not required for the proposed rule making because it does not have a substantial adverse impact on jobs and employment opportunities. The New York State Department of Environmental Conservation (NYSDEC) is proposing amendments to 6 NYCRR § 703.4 to add site-specific fecal indicator bacteria (FIB) criteria to Class I and Class SD waters (I/SD waters) to protect the secondary contact recreation and fishing best usages. The proposed site-specific FIB criteria are based on measurements of enterococcus bacteria and would supplement the current total and fecal coliform FIB criteria for these waters.

The proposed rule making would impact limited waters of the state; the affected I/SD waters are located in and around New York City (NYC).

The proposed rule making does not result in the loss of any jobs in New York State. Therefore, NYSDEC has determined that a Job Impact Statement is not required.

**Assessment of Public Comment (APC)**  
Adoption of Class I and SD Site-Specific Criteria in section 703.4  
of Title 6 of the New York Codes, Rules and Regulations  
Comment Period January 20, 2021 – April 28, 2021

1. **Comment:** New York State Department of Environmental Conservation (NYSDEC) has not provided significant scientific rationale for setting the site-specific standards at the proposed values and demonstrating how they are protective of the fishing and secondary contact recreation best uses. Additionally, NYSDEC set certain site-specific standards too high to protect the best uses, particularly in Coney Island Creek. (Commenters 1, 2, 3, 4, 7, 10, 11, 12, 13, 14, 15, 16, 17, 20, 21, 22, 23, 25, 26, 28, 32 & 34)

**Response:** The proposed Class I and SD site-specific criteria improve protection of the fishing and secondary contact recreation best uses by supplementing the baseline total<sup>1</sup> and fecal<sup>2</sup> coliform criteria with the addition of enterococci criteria. New York State Environmental Conservation Law (ECL) § 17-0301(5)(c)(7) grants NYSDEC authority to “adopt and assign more restrictive standards for the best usages of the waters of the state.” In 2015, NYSDEC increased protection for the fishing and secondary contact recreation best uses in the Class I and SD waters by adding the more stringent fecal coliform standard. Those fecal coliform criteria, which remain in place for the waters, are already protective of the designated best uses. The current proposal adds enterococci criteria to the Class I and SD waters using the same ECL authority.

The scientific rationale for the proposed enterococci criteria aligns with the United States Environmental Protection Agency’s (USEPA) Exposure Factor Handbook,<sup>3</sup> which publishes estimated water ingestion rates during various activities. The Handbook suggests secondary contact recreation carries approximately one-tenth the risk of water ingestion of that of primary contact. Extrapolating this level of risk based on EPA’s estimated ingestion rates to their 2012 Recreational Water Quality Criteria (RWQC) for primary contact recreation (35 cfu/100mL) suggests enterococci criteria ≤ 350 cfu/100mL will be protective of secondary contact recreation (See Appendix I for additional detail). All proposed site-specific criteria are below this concentration, including that of Coney Island Creek. NYSDEC prepared a revised Regulatory Impact Statement which includes this additional scientific justification.

2. **Comment:** The proposed site-specific standards are not protective of primary contact recreation and not in compliance with USEPA’s 2012 Recreational Water Quality Criteria (RWQC) recommendations. Additionally, NYSDEC has failed to set an enterococcus statistical threshold value (STV) for the subject Class I and SD waters, as

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<sup>1</sup> Total Coliform water quality standards is established in NYS ECL § 17-0301(5)(c)(3) and in 6 NYCRR § 703.4(a) and consists of 2400 cfu/100mL (median) and 5000 cfu/100mL (20% max), applicable on a year-round basis.

<sup>2</sup> Fecal Coliform water quality standards is established in 6 NYCRR § 703.4(a) and consists of 200 cfu/100mL (geometric mean of 5 samples).

<sup>3</sup> USEPA, 2019. Update for Chapter 3 of the Exposure Factors Handbook, Ingestion of Water and Other Select Liquids. United States Environmental Protection Agency. 157 pgs. 600-R-18-259F

required by the 2012 RWQC. (Commenters 1, 2, 3, 4, 7, 10, 11, 12, 13, 14, 16, 17, 20, 21, 22, 25, 26, 27, 29, 32 & 34)

**Response:** The best uses of Class I and Class SD waters are fishing and secondary contact recreation, and fishing, respectively, not primary contact recreation. It was affirmed that the best uses of the Class I and Class SD waters did not include primary contact recreation when the Albany Supreme Court issued a decision dismissing a NYCPLR Article 78 petition brought against NYSDEC for the adoption of its 2020 Class I and SD water quality amendments (*Riverkeeper, Inc. v. NYSDEC*, Sup. Ct. Albany County, March 19, 2021, Bartlett, J., index No. 905345-20). Pursuant to ECL § 17-0301(5)(c)(7), NYSDEC has the authority to “adopt and assign more restrictive standards for the best usages of the waters of the state.” As the best uses of Class I and Class SD waters are fishing and secondary contact recreation, and fishing, respectively, the proposed site-specific criteria for Class I and Class SD waters are not required to protect a best use of primary contact recreation or to comply with USEPA’s 2012 RWQC. The STV is a component of the 2012 RWQC for primary contact recreation and is therefore not applicable to this rule making. Additionally, NYSDEC prepared a revised Regulatory Impact Statement which includes further discussion why the proposed criteria are scientifically rational whereas applying more stringent criteria is not a viable alternative.

3. **Comment:** “The State’s proposed January 2021 amendments... do not align with the City’s 2030 goals represented in the CSO Consent Order...” (Commenters: 1, 2, 13, 17, 22, 24, 25, 26, 32 & 34)

**Response:** This comment is outside of the scope of the current rule making. NYSDEC believes this reference is to the City of New York’s 2030 goals for Citywide Green Infrastructure implementation, which would be unaffected by the proposed rule.

4. **Comment:** NYSDEC did not provide sufficient public outreach on the proposed rule and the rule making hearing was mislabeled as a "webinar." (Commenters 1, 2, 13, 17, 22, 25, 26 & 33)

**Response:** NYSDEC adhered to the appropriate public notice requirements under the State Administrative Procedures Act (SAPA) and the ECL. Pursuant to the SAPA § 202(1)(ii), notice of the proposed rule was published at least sixty days prior to the scheduled public hearing. Specifically, on January 20, 2021, notice of the proposed rule and notice of the public hearing was published in the New York State Register, The New York Post, NYSDEC’s Environmental Notice Bulletin, and on NYSDEC’s website. An additional notice of the public hearing was published in The New York Post on January 27, 2021 pursuant to ECL § 17-0301(10). The announcement documents were clear that the purpose of the event was to conduct a public hearing on the proposed rule, as required by the ECL § 17-0301(4). Due to Executive Order 202.15, requirements to hold in-person public hearings were suspended as a result of the COVID-19 pandemic. The virtual hearing conducted on March 23, 2021 was labeled as a public hearing “webinar” in the hearing announcement documents to convey the format of the event, since it was not in-person. Although public information meetings are sometimes conducted as part of NYSDEC rule making efforts, they are not a requirement of the ECL or SAPA.

5. **Comment:** New York City Department of Environmental Protection's (NYCDEP) long term control plans (LTCPs) do not adequately control CSO discharges to the subject waters. (Commenters: 7, 10, 11, 12, 14, 15 & 16)

**Response:** This comment is outside of the scope of the current rule making, however as explained in the revised Regulatory Impact Statement, the LTCPs detail the CSO loads to the waters, the impacts those loads have on water quality, recommended plans to eliminate or reduce the CSO loads, and identify practices to implement based on a cost-benefit analysis. The current NYC LTCPs also include evaluations of enterococcus levels in the subject waters. This includes modeling of enterococcus levels following construction of the practices included in the LTCPs.

6. **Comment:** NYSDEC is lowering the water quality standards for the subject Class I and Class SD waterbodies. (Commenters: 18, 23 & 29)

**Response:** See response to comments #1 and #2.

7. **Comment:** NYSDEC needs to perform a use attainability analysis (UAA) if the true designated uses of the Class I and Class SD waters are not primary contact recreation. (Commenters: 27 & 28)

**Response:** NYSDEC has consistently maintained that the best uses of Class I and Class SD waters are and were fishing and secondary contact recreation, and fishing, respectively. Additionally, NYSDEC has continually conveyed that the best uses of the Class I and SD waters were never changed to primary contact recreation. Since NYSDEC is not designating a new best use or removing a use that is not an existing use, a UAA is not required per 40 C.F.R. 131.10(g).

8. **Comment:** "Although reducing CSO volume is a means of improving water quality, it is the pathogen standard that must be used as the regulatory criteria in verifying that CSO volumes are appropriately restricted to protect health and the environment." (Commenters: 8 & 9)

**Response:** NYSDEC uses its water quality standards for fecal indicator bacteria to evaluate reductions in pollutant concentrations projected by LTCPs. Although the concentration reductions are largely driven by reductions in CSO volume, the water quality standards themselves do not restrict CSO or wastewater volume. The current proposed rule memorializes the anticipated results of NYCDEP's previously agreed upon commitments of the LTCPs and uses the proposed enterococci water quality criteria to ensure their eventual completion.

9. **Comment:** The proposed site-specific standards are a health threat to human consumers of fish. (Commenter 23)

**Response:** There are no enterococci water quality standards or USEPA recommended criteria that protect the health of human consumers of fish. Anyone that takes and eats any marine species from any NYS waters should familiarize themselves with the New York State Department of Health's Fish Consumption Advisories.

10. **Comment:** “Please explain why the proposed enterococci criteria only apply May 1st to October 31st, and how this proposed application is fully protective of the applicable designated use(s).” (Commenter 28)

**Response:** As mentioned in the response to Comment #1, the proposed site-specific criteria are additional standards to improve protection of the best uses. The existing total and fecal coliform water quality standards will continue to be applied per the requirements of 6 NYCRR § 703.4(c) providing year-round protection of the best uses of most Class I and Class SD waters. Application of the proposed site-specific enterococci water quality standards will improve protection of the best usages NYSDEC expects to occur during the period of greatest secondary contact recreation and fishing in NYS waters (May 1<sup>st</sup> – October 31<sup>st</sup>). This is consistent with the application of the enterococci criteria for Class SA and SB coastal recreation waters during the period of May 1<sup>st</sup> – October 31<sup>st</sup>. 6 NYCRR § 703.4(f)(1)(i).

11. **Comment:** “NYSDEC’s proposal indicates that the site-specific criteria are intended to provide additional protections beyond the fecal and total coliform-based criteria. However, on March 7, 2018, EPA disapproved NYSDEC’s 2015 revised fecal and total coliform-based criteria for these waters, rendering those criteria inapplicable under the CWA for protection of any designated use including PCR, SCR, or fishing.” (Commenter 28)

**Response:** USEPA’s March 7, 2018 letter cited above<sup>4</sup> disapproved NYSDEC’s more stringent coliform criteria<sup>5</sup> specific to primary contact recreation and made no mention of other best uses. From the subject letter: “...the EPA hereby disapproves the revised water quality criteria at 6 NYCRR §§ 703.4(a) and (b) because they are not scientifically defensible and not protective of the primary contact recreation designated use of Class I and Class SD saline surface waters.” USEPA’s disapproval was based on USEPA’s inaccurate assertion that NYSDEC changed the best usages of Class I and Class SD waters to primary contact recreation, which it did not. Therefore, the March 7, 2018 letter has no bearing on the current rule making. As described in the response to comment #2, the best uses of Class I and Class SD waters are fishing and secondary contact recreation, and fishing, respectively; not primary contact recreation. A fact that was affirmed in a recent state court decision *Riverkeeper, Inc. v. NYSDEC*. Regardless of the status of the fecal and total coliform-based criteria under federal law, those criteria apply to the Class I and Class SD waters and are valid under state law. Furthermore, regardless of the status of the fecal and total coliform-based criteria under federal law, that is separate from the status of the proposed enterococci criteria.

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<sup>4</sup> March 7, 2018. Letter correspondence on USEPA’s disapproval of NYSDEC’s revised criteria for Class I and Class SD saline surface waters at 6 NYCRR § 703.4(a) and (b).

<sup>5</sup> Notice of Adoption, Water Quality Standards for Class I and Class SD Waters in New York City and Suffolk County. November 4, 2015. I.D. No. ENV-48-14-00005-A. New York State Register. Pg. 15.

12. **Comment:** “By adopting site-specific FIB criteria for enterococcus during the recreational season in addition to the existing FIB criteria for total and fecal coliform that also apply on an annual basis, DEC is taking appropriate steps to protect the uses of the Class I and SD waters to which the Proposed Criteria will apply.” (Commenter 31)

**Response:** NYSDEC acknowledges this comment.

Commenter List

Commenter #	Name	Affiliation
1	Tom McGlinchey	None
2	Danny Stiener	None
3	Sarah Gallagher	Upper Green Side
4	James Scarella	Natural Resources Protective Association
5	Janet McKee	None
6	Anthony Rose	Natural Resources Protective Association, Kayak Staten Island
7	Marlene Donnelly	None
8	Margaret Maugenest	None
9	Miranda Sielaff	None
10	Brad Vogel	none
11	Jack Riccobono	none
12	Penn Rhodeen	none
13	Matt Malina	NYC H2O
14	Katia Kelly	none
15	Andrew Cichon	none
16	Susan Yung	none
17	Julie Welch	SWIM
18	Charles Denson	Coney Island History Project
19	Catherine Skopic	none
20	Linda Cohen	none
21	Erin Palmer	Pace Environmental Law Clinic
22	Antonio Reynoso	NYC Council Member, 34th District
23	Ida Sandoff	Natural Resources Protective Association
24	Beryl Thurman	North Shore Waterfront Conservancy of Staten Island, Inc., Environmental Justice and North Shore Waterfront Communities
25	Stephen Levin	NYC Council Member, 33th District
26	Ira Gershenthorn	none
27	Jonathan Skalski	none
28	Javier Laureano	USEPA R2
29	Greg Remaud	NY/NJ Baykeeper
30	Gowanus CAG	n/a
31	Marcella Eckels	NYC DEP
32	Amy Motzny	Gowanus Canal Conservancy
33	Willis Elkins	Newtown Creek Alliance
34	Merry Camhi	New York Aquarium

**Appendix I. Additional rationale demonstrating the site-specific criteria at the proposed values are protective of the best uses**

The present site-specific rule improves existing protections of the secondary contact recreation and fishing best usages by adding Enterococci criteria as a Fecal Indicator Bacteria (FIB) protective of these uses in select Class I and Class SD waters. Secondary contact recreation, as defined in 6 NYCRR § 700.1(a)(56), “means recreational activities where contact with the water is minimal and where ingestion of the water is not probable. Secondary contact recreation includes, but is not limited to, fishing and boating.”

The United States Environmental Protection Agency (USEPA) has yet to provide guidance on the appropriate concentration of FIB, such as Enterococci, to protect secondary contact recreation. In the absence of such guidance, New York State Department of Environmental Conservation (NYSDEC) relied upon modeled Enterococci levels included in New York City’s (NYC) Long Term Control Plans (LTCP) for combined sewer overflow control and abatement to project attainment of the site-specific Enterococci criteria in these waters. The resulting site-specific Enterococci criteria are a better indicator of fecal pollution in marine waters.

To provide additional assurance that the proposed site-specific criteria would be protective of the best uses of Class I and Class SD waters, NYSDEC evaluated them against extrapolated Enterococci values derived from USEPA’s published water ingestion rates for secondary contact recreation. USEPA publishes water ingestion values in its Exposure Factors Handbook (EFH) (USEPA 2019) for both swimming and non-swimming (limited contact) activities. This information can be used to estimate the potential risk of contaminant exposure through water ingestion. Chapter 3, Section 3.7.2 of the EFH provides information on “Relevant Studies on Water Ingestion While Swimming, Diving, or Engaging in Recreational Water Activities.” Table 3-7 (Figure 1) of the EFH suggests an average ingestion rate of 36 mL/hr. across all age groups involved in primary contact recreation.

Age Group years	Mean	Upper Percentile
	mL/hour	mL/hour
6 to <11	38	96
11 to <16	44	152
16 to <21	33	105
21+	28	92

Source: Dufour (2017); based on data provided to L. Phillips by A. Dufour by personal communication, 6/21/2017.

Figure 1. USEPA Exposure Factors Handbook, Chapter 3, Table 3-7. Recommended values for water ingestion while swimming. To calculate average water ingestion during primary contact recreation we calculated the mean of means from across all age groups.

The EFH suggests a much lower ingestion rate of water during participation in secondary contact recreation activities when compared with primary contact recreation. For secondary contact, or as referenced in the EFH “limited contact,” USEPA relies primarily upon the work of Dorevitch et al. (2011) in providing estimates of water ingestion (see USEPA 2019, Section 3.7.2.3). Other work referenced in the EFH support the estimates of Dorevitch et al. (2011) as well. Table 3-96 (Figure 2) of the EFH suggests an average ingestion rate of 4.0 mL/hr. for those activities which fall within the definition of secondary contact recreation in 6 NYCRR § 700.1(a)(56). Comparing these average ingestion rates from the EFH (Figures 1 and 2), it can be

assumed that humans ingest nearly 10 times more water on average during primary contact recreation than during secondary. Using the difference in average water ingestion rates (USEPA 2019, Figures 1 and 2), NYSDEC suggests Enterococci criteria protective of secondary contact recreation is  $\leq 350$  cfu/100mL (2012 RWQC of 35 cfu/100mL X 10).

The magnitude of this extrapolation is in keeping with a previous recommendation by the Federal Government on secondary contact recreation which suggested secondary contact recreation carries with it a risk that is 1/10<sup>th</sup> that of primary contact recreation. The Federal Water Pollution Control Administration (FWPCA) suggested fecal coliform criteria protective of a recreation use other than primary contact should not exceed 2,000 cfu/100mL, a value 10 times higher than their recommended primary contact recreation criteria of 200 cfu/100mL (FWPCA 1968). Unfortunately, this earlier work is the only instance in which guidance has been provided on FIB criteria protective of secondary contact recreation. USEPA’s subsequent revisions to FIB criteria in 1976, 1986, and again in 2012 only focused on bathing waters and the protection of primary contact recreation (USEPA 1976; 1986; 2012). However, all of the iterations of FIB criteria suggest that the incidence of illness is substantially greater among swimmers in comparison to non-swimmers. While still not providing guidance on specific criteria, more recent investigation by USEPA on the health risks associated with exposure during recreational activities found “non-significant elevation of gastrointestinal illness” and “no elevation of

Table 3-96. Estimated Water Ingestion during Water Recreation Activities (mL/hr)								
Activity	N	Surface Water Study			N	Swimming Pool Study		
		Median	Mean	UCL		Median	Mean	UCL
Limited Contact Scenarios								
Boating	316	2.1	3.7	11.2	0	-	-	-
Canoeing	766				76			
No capsized		2.2	3.8	11.4		2.1	3.6	11.0
With capsized		3.6	6.0	19.9		3.9	6.6	22.4
All activities		2.3	3.9	11.8		2.6	4.4	14.1
Fishing	600	2.0	3.6	10.8	121	2.0	3.5	10.6
Kayaking	801				104			
No capsized		2.2	3.8	11.4		2.1	3.6	10.9
With capsized		2.9	5.0	16.5		4.8	7.9	26.8
All activities		2.3	3.8	11.6		3.1	5.2	17.0
Rowing	222				0			
No capsized		2.3	3.9	11.8		-	-	-
With capsized		2.0	3.5	10.6		-	-	-
All activities		2.3	3.9	11.8		-	-	-
Wading/splashing	0	-	-	-	112	2.2	3.7	11.2
Walking	0	-	-	-	23	2.0	3.5	10.6
Full Contact Scenarios								
Immersion	0	-	-	-	112	3.2	5.1	15.3
Swimming	0	-	-	-	114	6.0	10.0	34.8
<b>TOTAL</b>	<b>2,705</b>				<b>662</b>			
<i>N</i> = Number of participants. UCL = Upper confidence limit (i.e., mean + 1.96 × SD). - = No data.								
Source: Dorevitch et al. (2011).								

Figure 2. USEPA Exposure Factors Handbook, Chapter 3, Table 3-96. Recommended values for water ingestion while participating in water recreation activities. To calculate average water ingestion during secondary contact recreation we calculated the mean of means from the “surface water study.”

respiratory illness” with minimal contact forms of recreation (Russo 2020). The activities categorized as minimal contact in Russo et al. (2020) are consistent with those defined as secondary contact recreation in 6 NYCRR § 700.1(a)(56).

## **References**

Dorevitch, S., Panthi, S., Huang, Y., Li, H., Michalek, A., Pratrapp, P., Wroblewski, M., Lui, L., Scheff, P., and Li., A. 2011. Water Ingestion during water recreation. *Water Research* 45(5):2020-2028.

FWPCA, 1968. *Water Quality Criteria*. Report of the National Technical Advisory Committee to the Secretary of the Interior. Federal Water Pollution Control Administration, Washington, D.C. 251 pages.

Russo, G.S., Eftim, S.E., Goldstone, A.E., Dufour, A.P., Nappier, S.P., and Wade, T.J. 2020. Evaluating health risks associated with exposure to ambient surface waters during recreational activities: A systematic review and meta-analysis. *Water Research* 176(2020): 115729.

USEPA, 1976. *Quality Criteria for Water*. United States Environmental Protection Agency, Office of Water and Hazardous Materials, Washington D.C. EPA-440-9-76-023. 533 pages.

USEPA, 1986. *Ambient Water Quality Criteria for Bacteria*. United States Environmental Protection Agency, Office of Water, Washington D.C. EPA-440-5-84-002. 25 pages.

USEPA, 2012. *Recreational Water Quality Criteria*. United States Environmental Protection Agency, Office of Water, Washington D.C. EPA-820-F-12-058. 69 pages.

USEPA, 2019. *Update for Chapter 3 of the Exposure Factors Handbook, Ingestion of Water and Other Select Liquids*. United States Environmental Protection Agency, Office of Research and Development, Washington D.C. EPA-600-R-18-259F. 157 pages.