

Assessment of Public Comment (APC)

Adoption of Saline Water Quality Standards Rule

Revisions to Parts 701 and 703 of Title 6 of the New York Code of Rules and Regulations

Comment Period April 12, 2023 – June 20, 2023

On April 12, 2023, the New York State Department of Environmental Conservation (DEC) proposed amendments to 6 NYCRR Parts 701 and 703. The proposed regulatory updates include amended water quality standards (WQS) to protect the shellfishing best use in Class SA waters; protect the primary contact recreation best use in Class SA and SB waters; maintain water quality suitable for primary contact recreation in Class SC waters; protect the secondary contact recreation best use in Class I waters; and add a wet weather (WW) limited use designation for waters impacted by combined sewer overflow (CSO) discharges.

The public comment period for this proposal was open from April 12, 2023, to June 20, 2023. Two public hearings were held on the proposed rule making. The first hearing was held in-person on June 13, 2023, at the NYSDEC Region 2 offices in Long Island City, NY. The second hearing was via webinar on June 15, 2023. Written comments for this rule making were received from approximately 700 parties. In addition, 13 people spoke at the public hearings. Parties who submitted public comments are listed in the Commenter Indexes.

Having reviewed the public comments, DEC has made on minor change to the Part 701 portion of the express terms. The change allows both CSO and municipal separate stormwater sewer systems (MS4) loads to be considered in setting a (WW) limited use designation.

Section I – General Comments on Rule Making Proposal

Comment I.1: General support and opposition

(Commenters 1-6, 8-9, 11-12, 14, 16, 18-22, 25-27, 29, 31-36, 38-40, 42-47, 49-707)

Some commenters provided statements of support for all or part of the proposed rule. Certain commenters within this group cited the Class SA water quality standards (WQS) for protection of shellfishing and the addition of the Enterococci WQS to non-coastal SA, non-coastal SB, and all SC waters as positive improvements. Other supportive comments focused on New York State Department of Environmental Conservation (DEC) using kayaking as the threshold ingestion rate to set the secondary contract recreation (SCR) criteria.

Numerous commenters voiced general opposition to the proposed rule, falling into two distinct groups of commenters. One group opposed the proposed regulations on the basis they do not advance water quality goals and improvements far enough (See related Comments II.1, IV.1, IV.2, and V.1). The second group opposed the proposed regulations on the basis the regulatory impact associated with them is too high (See related Comments II.6, V.4, V.5, and V.12).

Response to Comment I.1:

The New York State Department of Environmental Conservation (DEC) appreciates comments related to this rule, providing both support and critique. DEC thanks all commenters for providing insightful comments on the proposed rule.

Comment I.2: DEC did not perform sufficient public engagement

(Commenters 15, 17, 43)

One commenter wrote, “We are concerned that outreach from NYS DEC to stakeholders, community members, and elected officials was insufficient. We therefore ask that the agency consider improving outreach and engagement going forward on this vital issue.” (43)

Other commenters were critical of the lack of information presented at the Rule Making Hearings, the inability to ask questions of DEC and hear responses at the Hearings, and the short timeframe from the Hearing to the close of public comments.

Response to Comment I.2:

The process for this rule making, and the classification rule making to follow, started with DEC’s Advanced Notice of Proposed Rule Making (ANPRM), released July 27, 2022. The ANPRM was publicly announced in the State Register, DEC’s Environmental Notice Bulletin (ENB), and on the DEC website. Two public information meetings were held in support of the ANPRM on August 31, 2022, and September 29, 2022. During those informational meetings DEC provided ample time for questions and answers from the public, elected officials, and stakeholders. The ANPRM (https://www.dec.ny.gov/docs/water_pdf/anprmnycwaters.pdf) also laid out many of the planned actions for the current rule making prior to those public information meetings and provided an extended comment period, from July 27, 2022 to November 28, 2022 (125 days).

A good example of DEC’s stakeholder engagement and its effectiveness was the information provided in the ANPRM on the proposed Enterococci geometric mean (GM) of 100 colony-forming units (CFU)/100mL and statistical threshold value (STV) = 370 CFU/100mL for the protection of SCR. Because of feedback received from stakeholders during the ANPRM process, DEC adjusted the SCR WQS to be ultimately protective of the kayaking best use, resulting in the more stringent Enterococci GM 72 CFU/100mL and STV 266 CFU/100mL (72/266 WQS) included in the actual proposed rule making.

Article 2 of the State Administrative Procedures Act (SAPA) does not require public information meetings in connection with a rule making. With prior rule makings, DEC has held such meetings; however, the bulk of the information included in this rule making was previewed in the ANPRM and the ANPRM included two public meetings to discuss concerns from the public.

Comment I.3: Standing definitions of primary and secondary contact recreation are inaccurate

(Commenters 27, 29, 45)

Some commenters disagreed with DEC’s standing definitions of primary and secondary contact recreation, citing specific recreational practices:

“...kayak rolling should be considered a primary contact recreation, and we have previously documented several saline waterways where kayak instruction, including frequent rolling, is an existing use that should be protected with a classification that applies primary contact criteria.” (27)

“Jet-skiing is a primary contact recreation, as jet-skiing typically involves extensive spray resulting in ingestion.” (29)

“...the definition of secondary contact recreation that the D.E.C. is using, which is based on the E.P.A.s definition. It is not appropriate for New York Harbor, particularly for kayakers on New York Harbor.” (45) Additionally stating that beginner kayakers often capsize accidentally, and more advanced kayakers perform self-rescue practices that involve full-body immersion.

Response to Comment I.3:

DEC used the “All activities” ingestion rate for kayaking from the United States Environmental Protection Agency’s (USEPA’s) “Update for Chapter 3 of the Exposure Factors Handbook: Ingestion of Water and Other Select Liquids” (USEPA, 2019) to set the proposed SCR WQS. The “All activities” ingestion rate includes average of measurements of water ingested during kayaking trips that involve capsizing and trips without capsizing. DEC recognizes that capsizing may be an intended or unintended aspect of some kayak trips, but capsizing is not a certainty of all kayaking trips. Using the kayaking with capsize ingestion rate exclusively is not representative of the practiced use.

Water ingestion rates associated with personal watercraft (PWC) use are not documented in the Exposure Factors Handbook or other resources known to DEC. The commenter did not provide data showing ingestion rates for individuals engaged in PWC activities to compare to other ingestion rates. This information is necessary for DEC to consider setting a WQS protective of PWC activities or modifying existing regulatory definitions.

Comment I.4: Request for extension of the public comment period

(Commenter 1)

Commenters requested that DEC extend the public comment period for the rule making: “The Committee also requests an extension to the public comment period, namely because it is a tight turn-around (less than one week) between the public meetings (June 13th and 15th) and the closing date (June 20th). An extension would allow proper time for digesting information from the public meetings, preparing meaningful comments, and circulating for Committee review before submission to NYSDEC.”

Response to Comment I.4:

DEC replied to this request for extension of the comment deadline in a letter dated June 9, 2023. This request was denied on the basis that the Public Hearings held June 13th and June 15th were not public information meetings and no new data beyond what was already included in the rule making package was being disseminated on those dates.

Comment I.5: Availability of funding to facilitate swimming in certain waters

(Commenter 1)

DEC received the following comment:

“However, unilaterally raising areas to swimming standards that have not been swimmable for decades does impose an additional program and responsibility. Additionally, applying the SB standard to SC waterbodies seems to create an inherent conflict because the new standard (primary contact recreation) does not match up with the “applicable best uses” that are published (secondary contact recreation). Does the State plan to provide financial aid to municipalities that may not have the personnel or equipment?”

Response to Comment I.5:

Beyond any State Pollutant Discharge Elimination System (SPDES) or long-term control plan (LTCP) impacts detailed in the Regulatory Impact Statement (RIS), changes in the WQS do not impose additional programs and/or responsibility, with associated needs in personnel and equipment.

Section II – Comments on Process and Data Used to Set WQS

Comment II.1: DEC should use the lowest risk level to set new WQS

(Commenters 2, 12, 20, 25, 27, 29, 34, 44, 49, 86-707)

Commenters urged DEC to use the criteria associated with the lower 32/1000 risk level (32 illnesses per 1000 instances of swimming) (GM = 30 CFU/100mL, STV = 110 CFU/100mL) allowed by the USEPA's 2012 Recreational Water Quality Criteria (RWQC). DEC's current (for coastal waters) and proposed WQS rely on the 36/1000 risk level criteria (36 illnesses per 1000 instances of swimming) (GM = 35 CFU/100mL, STV = 130 CFU/100mL).

Response to Comment II.1:

During the 2019 Beach Act rule making for coastal recreation waters, DEC selected the 36/1000 risk level (estimated illness rate), as opposed to the 32/1000 risk level (estimated illness rate) to be consistent with the USEPA promulgated standards found under 40 C.F.R. § 131.41 (Bacteriological criteria for those states not complying with Clean Water Act section 303(i)(1)(A)). This regulation sets forth the standards that USEPA adopted in 2004 for coastal recreation waters in certain states, including New York. USEPA's 2012 RWQC provide two different estimated illness rates, or risk levels, with corresponding recommended criteria, both of which USEPA asserts are protective of public health. By using the 36/1000 risk level (estimated illness rate) in the proposed rule, DEC is consistent with both the prior USEPA rule and NYS's own 2019 rule.

Comment II.2: Commenters requested data on illness rates and public recreation practices

(Commenters 5, 9, 11, 14, 18, 21)

A group of commenters requested the following data on illness rates from water-based recreation and statistics on people participating in water-based recreation:

- “Based on the methodology used to determine the impact on primary contact waters,
 - What is the rate of anticipated illness?
 - How many people use the river in the manners indicated?
 - How many people on average and peak times are expected to be affected on a daily, monthly and annual basis?
 - The information is requested to be supplied by class affected by these amendments - Classes SA, SB, SC and I.
- Is this criterion purely for public health or is it water quality based as well such as dissolved oxygen, nutrient, etc.? If other than public health: it is requested that this data be provided as well.
- Over the past five years, how many health warnings or closures have been issued and why with regards to the new standards being proposed? The information is requested to be supplied by class affected by these amendments - Classes SA, SB, SC and I.”

And (Committer 14 only)

- “What is the number of cases seasonally of affected recreationists that report illness due to contact with pathogens and pathogenic indicators that are mentioned in the rule making report?”
- What is the number of active recreationists that will benefit from the proposed rules?”

Response to Comment II.2:

The rate of anticipated illness is not examined for individual waterbodies to set WQS. The USEPA 2012 RWQC used a 36/1000 risk level (36 illnesses per 1000 instances of swimming) to set the GM = 35 CFU/100mL and STV = 130 CFU/100mL (35/130 WQS) criteria used by DEC.

DEC does not utilize recreational usage data (number of people participating, dates/times, and peak/off-peak usage) to set a WQS. The WQS are set using procedures in 6 NYCRR Part 702 based on the best available science and/or USEPA recommended criteria. The WQS included in the proposed rule are based off the USEPA 2012 RWQC and “An Approach for Applying EPA’s 2012 Recreational Water Quality Criteria Recommendation to Non-primary Contact Exposure Scenarios White Paper” (USEPA 2022).

DEC would examine instances of recreational use when considering reclassification of a waterbody. In such cases, DEC would want to know if the existing uses of the waterbody match the best uses assigned to the current classification. For example, the Hudson River bordering Rockland County is currently classified as an SB waterbody with best uses of primary contact recreation, secondary contact recreation, and fishing. DEC has no reason to believe the existing uses in that portion of the Hudson River are different from those assigned by the Class, but if the existing uses were disputed, DEC would seek data to confirm what existing uses are currently practiced.

WQS to protect primary contact recreation (PCR) and SCR best uses are based on the protection of human health. Data to support the proposed WQS can be found in the USEPA 2012 RWQC and “An Approach for Applying EPA’s 2012 Recreational Water Quality Criteria Recommendation to Non-primary Contact Exposure Scenarios White Paper” (USEPA 2022).

DEC does not track data on beach closures, beach usage, or swimming related illnesses. Beach closures are administered by State and local health departments using criteria that is similar, but not the same as, DEC’s WQS. Other statistics related to beach usage and incidents may also be tracked by State and local Health Departments.

Comment II.3: Risk/benefit analysis of proposed WQS

(Commenters 5, 9, 11, 18, 21)

"Has a risk/benefit analysis been conducted, and are there any negative environmental impacts due to the additional chemical dosing and the resulting reactions?"

Response to Comment II.3:

A risk/benefit is not a requirement of the SAPA or other State regulations. With the potential for additional chemical dosing of chlorine to manage Enterococci, dechlorination may be required to reduce toxicity of effluents or a facility may opt to switch to ultra-violet (UV) disinfection. This mitigates much of the risk associated with the proposed WQS.

Comment II.4: Request a study of Enterococci loading

(Commenters 5, 9, 11, 18, 21)

Some commenters questioned sources of Enterococci loading and a need for studies: "Has a study been done to determine where the majority of the enterococci originates such as runoff, farmland, municipalities, wildlife, etc.? If so, how can municipalities review this study? If not, it is requested that a study be performed."

Response to Comment II.4:

This comment is outside the scope of the current rule making.

Comment II.5: SCR fact sheet error

(Commenters 5, 9, 11, 18)

Commenters pointed out that the definitions for variables "C/FIB/Primary" and "C/FIB/non-Primary" appear to be reversed in the fact sheet.

Response to Comment II.5:

DEC appreciates this being brought to our attention and DEC corrected the typographical error in the final version of the fact sheet. DEC examined the fact sheet and the calculations performed within it and all were performed correctly per the USEPA guidance. Despite the typographical error, the final values presented in the draft fact sheet are correct.

Comment II.6: Application of Enterococci standards to Class SC waters

(Commenter 1)

Commentor opposes the application of the Enterococci 35/130 WQS to Class SC waters. Stating, "Protecting the 'primary contact recreation suitability' of Class SC waters is too stringent a standard for waters classified for fishing... What was the rationale for maintaining the 'water quality suitable for primary contact recreation' language for Class SC waters, but removing that language for Class I waters in the May 2020 ruling? The Committee finds this stricter standard to be an unnecessary burden which will lead to tougher regulations, namely a Total Maximum Daily Load (TMDL)."

Response to Comment II.6:

Class SC waters are assigned a best use of fishing in 6 NYCRR 701.12. Additionally, as a means to drive water quality improvements toward the swimmable goal of the Clean Water Act (CWA), 701.12 stipulates, "The water quality shall be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes."

That language in 701.12 is not a best use; however, based on that language, DEC applies the same pathogen criteria to SC waters as those waters with an assigned PCR best use. Most SC

waters have physical characteristics that make them less than ideal for PCR, but that does not lessen DEC's efforts to drive water quality toward the CWA 'swimmable' goal.

When DEC removed the suitability language from Part 701 descriptions in the May 2020 rule making, DEC corrected a misunderstanding about the best uses of Class I and SD waters. There are no disputes or misunderstandings about the best uses and water quality goals for Class SC waters.

Comment II.7: Class SC waters should be protected only for SCR

(Commenter 1)

Commenter requested, "...the Class SC waters standard be that for secondary contact recreation along with Class I waters."

Response to Comment II.7:

See response to Comment II.6 regarding best uses and water quality goals for Class SC waters.

Comment II.8: DEC should retain certain site-specific WQS

(Commenter 27)

Commenter stated, "...the proposal would remove Enterococci GM criteria for certain Class SD waters that DEC had found attainable in its 2021 rulemaking. As discussed below (see Part V[b] of this letter), the state's proposed criteria for Class SD waters would not protect designated or existing uses of Class SD waters"

Response to Comment II.8:

DEC's analysis of baseline water quality showed the new Enterococci 72/266 WQS were more protective (data showed more exceedances) than the site-specific GMs alone, even when the GM was 35 CFU/100 mL. Additionally, with the new Class I WQS protective of SCR, the retention of the 2021 site-specific WQS would cause undue confusion among the public and regulated community. DEC recognizes that the removal of the site-specific WQS causes Class SD waters to lose some protections, but as stated above, it is DEC's long-term plan to propose potential upgrades, where necessary, to SD waters.

The best usage of Class SD waters is fishing (6 NY-CRR § 701.14). SD waters do not have a primary contact recreation 'designated use' as the commenter states, and the status of the existing uses for individual Class SD waters is still under review. As stated by DEC in the RIS, the proposed rule making is the first in a series of two rule makings for saline waters of the State. The second rulemaking will examine classifications of saline waters and propose potential upgrades, where necessary. Class SD waters only have a limited fishing best use¹ and do not meet the fishable or swimmable goals of the CWA.

¹ The fishing use for Class SD waters only supports fish survival, but not fish propagation. A full fishing best use must support survival and propagation.

Comment II.9: SCR WQS should be applied seasonally

(Commenter 37)

Commenter requested, “the proposed enterococci standards should apply seasonally for all class I waters as part of the Proposed Rule.”

Response to Comment II.9:

In 2019, DEC set the seasonal limits for Enterococci and *E. Coli* PCR WQS based on the average operating schedules for Department of Health permitted swimming beaches. Most permitted beaches within the State open in late May and close in September. With buffer time added to each end of the season, this resulted in the May 1 to October 31 application dates for the PCR WQS. DEC could not settle on a similar rationale for SCR. New York City (NYC) Department of Parks and Recreation’s canoe and kayak launch sites are open from April 1 to December 1, but based on DEC’s current knowledge there are still many other locations and opportunities beyond those months where SCR can occur in the State’s saline waters. As with other WQS, the application of the WQS serves to set water quality goals protective of a use, but does not endorse that use at all times, under all circumstances. Those participating in SCR in cold weather/cold water must still take additional precautions to avoid hypothermia and other dangers related to winter operation of small watercraft.

DEC also relied upon Federal guidance to limit the application of the PCR WQS, but that same guidance is not applicable to SCR. Chapter 2 of USEPA’s Water Quality Standards Handbook (EPA-823-B-12-002, 2012) states that, “in many northern areas, *body contact recreation* is possible only a few months out of the year. Several States have adopted primary contact recreation uses, and the associated microbiological criteria, for only those months when primary contact recreation actually occurs.” (Emphasis added)

Section III – Comments on Wet Weather (WW) Limited Use Designation

Comment III.1: (WW) limited use designation needs detailed specifications

(Commenters 2, 7, 12, 20, 27, 29, 34, 38, 43-44, 49, 86-707)

Commenters opposed the (WW) limited use designation on the basis that the proposed Express Terms did not provide enough details about what exceedances would and would not be allowed for (WW) waterbodies. They urged DEC to adopt ‘regulatory guardrails’ for the (WW) limited use designation. Other commenters claimed they could not form an opinion on the (WW) designation because not enough details were provided in the Express Terms and supporting documents.

Response to Comment III.1:

The addition of the detailed requirements requested by the commenters would limit flexibility for statewide application of the (WW) regulations. Detailed specifications for what exceedances would be allowed in a New York Harbor waterbody may not be applicable to waters in and around other areas of the State where DEC may apply the (WW) designation. Since a UAA is

required for all (WW) waterbodies, having details of allowed exceedances in the required UAA, which will be reviewed by USEPA, is the most effective option that reflects the reality of each waterbody. Each UAA associated with (WW) reclassifications will be made available for public review. This will afford ample opportunity for public consideration of the details surrounding each proposed (WW) reclassification decision.

Comment III.2: Support for (WW) limited use designation

(Commenters 6, 22, 37, 40, 46)

Commenters supported use of the (WW) limited use designation if applied to upgrade waterbodies in Class SB with a baseline PCR best use assigned.

Response to Comment III.2:

DEC's intention with the (WW) limited use designation is to upgrade waters to a PCR best use, even if that best use can only be attained partially, during periods of dry weather. DEC does not intend to downgrade any waters to a lesser classification that does not include PCR using the (WW) designation. Reclassifying current Class I or SD waterbodies, which do not have a PCR best use assigned to them, to SB (WW) represents an incremental improvement for that waterbody towards full-time attainment of PCR.

Comment III.3: (WW) designation should also apply to stormwater impacted waterbodies

(Commenter 37)

Commenter requested, "The (WW) standard designation definition in the Proposed Rule should not be limited to wet weather impacts from combined sewer overflows and should include stormwater."

Response to Comment III.3:

DEC agrees that there may be some instances where water quality could be improved by application of the (WW) designation to waterbodies impacted by stormwater, and recognizes that many waterbodies are impacted by both combined sewer overflow (CSO) and municipal separate stormwater sewer systems (MS4) inputs. The adopted Express Terms for 701.26 have been modified to include stormwater flows as a condition where the (WW) designation may be applied. Consistent with other applications of the (WW) designation, it will be applied to waterbodies where water quality is protective of all best uses during dry weather, but attainment is limited during wet weather events.

As with the CSO-driven application of the (WW) limited use designation, it is a tool to drive MS4 impacted waterbodies toward improvements. MS4 permittees are not relieved of any regulatory obligations required by their applicable MS4 SPDES permit and will still be expected to minimize stormwater volume and pollutants.

Comment III.4: (WW) designation should also apply to SCR

(Commenter 37)

Commenter suggested that the (WW) limited use designation should be applied to Class I waterbodies where the SCR GM and STV are not currently, or projected to be, in attainment.

Response to Comment III.4:

Data received in response to DEC's ANPRM showed many waters currently classified as I or SD had an existing use of SCR. DEC also acknowledges that not all current Class I and SD waterbodies meet the proposed SCR WQS. The CWA requires DEC to protect these existing uses and the Class I SCR WQS in this rule are the minimum protections that protect these existing uses.

Section IV – Comments on Classifications, UAAs, and Variances

Comment IV.1: Protection of all waters for PCR

(Commenters 2, 4, 6, 8, 10, 12-13, 15-16, 20, 23, 25-36, 37-44, 49-717)

Commenters urged DEC to set water quality standards (WQS) protective of PCR in all saline waters, including those currently assigned Class I and Class SD. Similar comments requested DEC “set a goal of safe swimming” (2, 87-717) and generically to “set stronger water quality standards” (2, 29, 44, 87-717) regarding recreation.

One commenter opposed application of the PCR best use to all saline waterbodies stating, “It is important to recognize, however, that many of the waters in and around the city, particularly the small urban tributaries, have characteristics that make primary contact recreation unsafe or infeasible and can also limit secondary contact recreation.” (37)

Response to Comment IV.1:

CWA Section 101(a)(2) sets the goal of achieving, “wherever attainable,” water quality “which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water.” DEC evaluated application of the Enterococci PCR standards to all saline waters of the State, in conjunction with the “wherever attainable” clause, and decided against such an action for a variety of reasons.

As stated in previous rule making efforts and in the ANPRM for Saline Waters, released July 27, 2022, DEC does not consider all saline waters to be safe or appropriate for PCR. The ANPRM included an extensive process to obtain data on recreational usage to verify what waterbody uses may be “existing” as defined by the CWA and, specifically, if PCR is occurring in certain waters with constructed and natural access restrictions, shipping and ferry traffic, strong currents, and other safety concerns. Waters identified during the ANPRM process with potential PCR uses are now being investigated by DEC and are subject to possible classification upgrades in DEC's next rule making on this subject.

Application of any new WQS, including those currently proposed, also carries with it a regulatory impact to dischargers. In addition to health and safety, protection of existing uses, and the goal

of achieving the aspirational goals of the CWA, new WQS are also evaluated against their regulatory impact, and in cases where regulatory impact is excessively high, DEC must also weigh the benefits of more stringent goals versus the costs. In the case of Class I and SD waters, where a PCR best use has not been assigned and the PCR existing use is still being determined, benefits must be substantial compared to the very large regulatory burden. In this instance the regulatory impact is extremely high, estimated at \$69 Billion. Regulatory impact is not a determinate deciding factor and in cases where upgrades to classifications are necessary, DEC will upgrade Class I and Class SD waters to higher classifications where warranted.

Comment IV.2: Waters not meeting CWA goals need UAAs

(Commenter 2, 12, 25, 27, 29, 34, 44, 49, 86-707)

Many commenters suggested that DEC should include UAAs with the current rule making: "If waterways cannot be made safe for swimming, prove it. Please complete scientific and economic 'Use Attainability Analyses' for any waters that the state believes cannot support primary contact recreation. The public should be robustly involved in any such decision."

Response to Comment IV.2:

DEC agrees and fully intends to comply with the requirement for completing UAA's for those waters not meeting CWA goals. DEC has been very transparent about the need for UAAs and/or variances in certain waters and our intention to draft them, as stated in the RIS for the proposed rule making:

"Following a decision to adopt this rule, the Department will immediately begin work on a second planned rule making, with the goal to be publicly noticed no later than December 2024, that will modify classifications of the State's saline waters to better align with existing uses and water quality improvement goals for those waters. Due to present uncertainties regarding waters that will be reclassified to Class SC or higher in the second rule, and may not require a UAA and/or variance, the necessary UAAs and/or variances will be part of that latter rule making. The combined content of both rule makings along with the UAAs/variances will bring the saline waters of the State into compliance with the CWA goals."

UAAs were not included with this rule making because it is limited to modification of the WQS and does not include any changes to waterbody classifications. The second rule making involving changes to classification or determinations to preserve present classifications is more appropriate for the inclusion of UAAs and/or variances.

DEC will follow the relevant USEPA and/or State regulations and guidance in drafting and processing UAAs and/or variances.

Comment IV.3: Requests for reclassification

(Commenters 4, 6, 8, 10, 12-13, 16, 19-20, 23-24, 27-30, 32-41, 43, 49-50)

Commenters requested certain waterbodies receive new classifications from DEC to shift water quality goals or reflect claimed existing uses. Some commenters specifically requested the (WW) limited designated use be applied to certain waterbodies.

Response to Comment IV.3:

These requests are outside the scope of the current rule making. Please see the response to Comments IV.1 and IV.2 regarding reclassification. Data submitted by commenters may be useful in the reclassification effort and DEC will make use of commenter submitted data as appropriate.

Comment IV.4: DEC should pursue variances over UAAs for Class I and SD waters

(Commenter 27)

Commenter opposed the use of UAAs and requested, “DEC should maintain a primary contact designated use, and apply corresponding primary contact criteria, but propose a time-limited water quality standards ‘variance’ (if legally supportable) for those waters, pursuant to EPA’s variance regulations.”

Response to Comment IV.4:

The commenter’s “(if legally supportable)” caveat acknowledges that variances may not be feasible. DEC has not ruled out the use of water quality standards variances and notes in the RIS that “UAAs and/or variances” may be used to satisfy certain CWA requirements. Said variances would need to be within the boundaries of State and Federal law, and would be applied where improvements and benefits to water quality greater than those realized through a UAA are possible.

Variances/UAAs were not included with this rule making because it is limited to modification of the WQS and does not include any changes to waterbody classifications. The second rule making, involving changes to classification or determinations to preserve present classifications is more appropriate the inclusion of UAAs and/or variances.

Comment IV.5: Oppose the use of UAAs to achieve CWA compliance

(Commenter 38)

A commenter stated regarding Gowanus Canal and other Class SD waters, “...NYS instead will seek EPA variants for such waters under a Use Standard & Attainment process, to allow known and continuous high levels of pathogen impairment from planned sewage dumping during rain events.”

Response to Comment IV.5:

DEC assumes the commenter’s reference to “variants” and “Use Standard & Attainment process” is a reference to UAAs. UAAs are not a means to allow pollution, but an approach to set meaningful and attainable goals that can improve water quality. However, as stated in 40 CFR 131.10(i), “[w]here existing water quality standards specify designated uses less than

those which are presently being attained, the State shall revise its standards to reflect the uses actually being attained.”

40 CFR 131.10(j) requires a state to conduct a UAA when:

- (1) The State designates for the first time, or has previously designated for a water body, uses that do not include the uses specified in section 101(a)(2) of the Act; or
- (2) The State wishes to remove a designated use that is specified in section 101(a)(2) of the Act, to remove a sub-category of such a use, or to designate a sub-category of such a use that requires criteria less stringent than previously applicable.

The UAAs and the water quality goals within them are periodically evaluated and modified to further improve water quality per 40 CFR 131.20. UAAs completed by DEC will be included with the public notice of any reclassification rule making where UAAs are required. See also the response to Comment IV.2.

Section V – Comments on Regulatory Implications of Proposed WQS (SPDES/LTCP/MS4)

Comment V.1: Modifications to LTCPs and SPDES permits based on the proposed WQS

(Commenter 2, 12-13, 15-16, 19-20, 24-25, 27, 29, 34, 37, 42-44, 49, 86-707)

Multiple commenters requested updates to infrastructure and sewer systems resulting from the proposed WQS. Commenters believe the proposed WQS should prompt immediate CSO reductions and modifications to the approved LTCPs. Commenters disagreed with DEC’s approach to have the LTCPs proceed as planned through the post-construction compliance monitoring (PCCM) phase before applying new limits based on the proposed WQS. There were also requests that the approved LTCPs be opened, reviewed, modified, and reapproved every five years.

One commenter opposed modification of the approved LTCPs stating, “The City supports DEC’s decision to not revisit the LTCPs at this time as part of the Proposed Rule and instead to plan to assess compliance with the new proposed water quality standards after completion of the LTCP and validation of LTCP controls through post-construction compliance monitoring.” (37)

Response to Comment V.1:

Newly adopted WQS do not prompt immediate changes to any current DEC regulatory mechanism.

As is standard practice, when a SPDES permit is renewed, any changes to WQS that have occurred since the issuance/last renewal of the permit are reviewed and applied to modify effluent limits as necessary. New WQS are a factor used by DEC to update the Environmental Benefit Permit Strategy (EBPS) scores for facilities in the State to reflect the revisions required to their SPDES permit. Once the facility reaches priority status under EBPS, per Technical and

Operational Guidance Series (TOGS) 1.2.2, DEC will conduct a full technical review and propose any appropriate modifications to the permit.

Both the USEPA *CSO Control Policy* (1994) and USEPA *Guidance: Coordinating CSO Long-Term Planning with Water Quality Standards Reviews* (2001) do not address LTCP modifications with respect to revised WQS. In the case of the currently proposed WQS, DEC is going beyond minimum requirements by setting WQS that are more stringent than LTCP endpoints in many cases.

LTCP have complex completion schedules that extend out many years due to planning, sampling, modeling, engineering, land acquisition, and construction. The planning-to-approval timeframe for the average NYC LTCP is just over four years, with some of the plans taking over eight years from inception to approval. The estimated planning-to-completion timeframe for the average NYC LTCP is almost 19 years. Requiring the LTCPs to be opened for review, modification, and reapproval every five years would result in a planning process that is nearly continuous. If such a continuous planning process were in place, almost no time would be available to perform the actual construction projects that effect improved water quality. Overall water quality would suffer and the timeframe to achieve water quality improvements would grow.

DECs approach to wait until post construction compliance monitoring (PCCM) is completed, recognizes that LTCP endpoints are modeled projections and actual water quality improvements to be achieved are unknown for most projects. More informed decisions on water quality improvements can be made after PCCM results have been assessed.

Comment V.2: Raising chlorine effluent limits

(Commenters 5, 9, 11, 18, 21)

"Would the NYSDEC be willing to raise the total chlorine residual discharge limits to reduce the increase in chemical costs?"

Response to Comment V.2:

As explained in the RIS, the cost estimates associated with the proposed WQS assume that dechlorination will be required to meet both the Enterococci and Total Residual Chlorine (TRC) WQS.

Raising TRC limits is not a viable alternative because doing so would cause violation of the TRC WQS, which are not being modified by this rule making.

Additionally, TRC effluent limits are facility-specific and dependent upon the dilution applicable to each facility's discharge. No increases to TRC effluent limits are anticipated with the proposed WQS.

Comment V.3: Timing of WQS adoption into SPDES permits

(Commenters 5, 9, 11, 18, 21)

Some comments question when the proposed WQS would be applied in SPDES permits:

"When is it anticipated that these new amendments would go into effect if passed with the understanding that they would not be applied to a facility until the SPDES permit is to be renewed?"

Response to Comment V.3:

As stated in the RIS, the Notice of Adoption will specify the effective date of the new WQS. See also response to Comment V.1 regarding timeline of WQS adoption within SPDES permits.

Comment V.4: No estimates of MS4 financial impacts provided

(Commenter 1)

Some commenters question why DEC did not estimate MS4 cost impacts in the JIS or RFA: "These new standards would impact MS4 permit holders (not just SPDES permit holders) and those subject to pathogen TMDLs. Neither the Job Impact Statement (JIS) nor the Regulatory Flexibility Analysis for Small Businesses and Local Governments (RFA) offers a financial analysis for this burden."

Response to Comment V.4:

The overall goal of the MS4 program is to reduce the discharge of pollutants in stormwater to surface waters of the State. As it flows, stormwater runoff collects and transports pollutants to surface waters. The best way to control contamination to stormwater is usually at the source, where the contaminants can be identified, reduced, or contained before being conveyed to surface water. The proposed WQS do not change the overall goals of the MS4 program or its permits; no new costs need to be detailed in the RIS, JIS, or RFA.

Once a Total Maximum Daily Load (TMDL) is approved, it remains as issued unless it is revised. If waterbodies were found to violate a new WQS based on data that meet the quality and quantity requirements of the Consolidated Assessment and Listing Methodology (CALM), then those waterbodies would be added to DEC's 303(d) List of Impaired Waters and may eventually be subject to a new TMDL, or revision to an existing TMDL.

Comment V.5: Ambient monitoring cost not accounted for

(Commenter 1)

"...the RFA estimates laboratory costs for SPDES permit holders, but not for those who do ambient water quality monitoring. This rule adds the requirement for multiple-dilution techniques for Class SA waters. While we agree that it makes sense to align this standard with that of the Division of Marine Resources for the certification of shellfish lands, this cost needs to be recognized."

Response to Comment V.5:

DEC is required to account for monitoring costs required under regulatory programs in the RIS. The cost of voluntary ambient monitoring is outside the scope of the current rule making and does not need to be accounted for in the RIS.

Comment V.6: Disinfection rates needed to meet proposed WQS

(Commenter 14)

"What studies have been done to show that the disinfection rates that are currently implemented by the town (Orangeburg) do not meet the WQS that are proposed?"

Response to Comment V.6:

The costs cited in the RIS do not assume whether particular dischargers will meet effluent limits based on the new WQS, but does assume most dischargers will need to make adjustments to treatment and dosing.

The effluent limits in SPDES permits are based on the applicable WQS. It is the responsibility of the permittee to determine disinfection rates needed to meet those effluent limits. Most new/renewed permits for discharges to coastal recreation waters, where the Enterococci WQS were first implemented, are prescribed Bacterial Assessment Studies to determine optimal disinfectant dosing levels prior to enforceable limits taking effect.

Comment V.7: Estimation of CSO volume for all waterbodies

(Commenter 27)

"Note that Commenters are aware of several estimates of CSO volume, and request that DEC provide in response to comments its best estimates of CSO volumes for each water body, both under current existing conditions and under projected conditions absent the WQS revisions (accounting for CSO control projects that New York City is currently obligated to construct)."

Response to Comment V.7:

This request is outside the scope of the current rule making. See Comment V.12 for additional discussion on the difficulties of establishing CSO regulatory impact.

Comment V.8: Omission of certain SPDES facilities from RIS

(Commenter 27)

"...the RIS omitted significant CSO pollution contributors from its analysis without adequate justification. Specifically, DEC omitted nine facilities owned by the New York City Department of Environmental Protection ("DEP") "because they already have an Entero WQBEL [water quality based effluent limitation] included in their SPDES permit."

Response to Comment V.8:

See responses to Comments V.1 and V.12 for discussion on how regulatory impact for SPDES facilities are calculated and modifications proposed. If the new WQS do not result in a change in effluent limits, regulatory impact cannot be calculated and should not be included in the analysis.

Comment V.9: Westchester County impacts understated/unassessed

(Commenter 27)

“DEC has identified Westchester County’s Yonkers WWTP SPDES permit (NY0026689) for full technical review. Despite that, the facility’s 2009 permit was last modified in 2013, and has received administrative renewals since expiring in 2014. As with NYC’s LTCPs, commenters request a detailed analysis of this CSO control plan, relative to the proposed updated criteria, the state’s environmental justice policies, and the disproportionate impact that CSO discharges to the lower Hudson Valley have on the Yonkers community. Based on DEC’s RIS, the status quo would be reinforced for Westchester County’s CSOs, and would result in no reduction in raw sewage discharges.”

Response to Comment V.9:

See responses to Comments V.1 and V.12 for discussion on how regulatory impact for SPDES facilities are calculated and modifications proposed. When the Westchester County wastewater treatment plant (WWTP) permit (NY0026689) undergoes full technical review, all aspects of the permit will be assessed against current WQS and other DEC requirements. If Water Quality Based Effluent Limit (WQBELs) or pollution controls associated with the permit need update to meet WQS, DEC will propose the appropriate modifications.

Comment V.10: Control of CSOs near bathing beaches

(Commenter 34)

“Our primary request is that Combined Sewer Overflows (CSOs) be limited near swimming beaches.”

Response to Comment V.10:

This comment is outside the scope of the current rule making.

Comment V.11: Estimated costs in DEC’s RIS are erroneously low

(Commenter 37)

The commenter believes that the cost estimates provided by DEC in the RIS for the proposed rule are too low. They are specifically concerned that cost to NYC’s wastewater resource recovery facilities (WRRFs) may be higher than estimated because a sampling study to determine the WQBEL for those plants is currently under way and until the WQBEL is known a true cost cannot be assessed. The commenter also had issue with the rates used by DEC to calculate the design and construction, and operations and maintenance (O&M) costs. The commenter also questioned if 100% CSO capture in the NYC tributaries would be sufficient to meet the proposed WQS, noting additional measures may be necessary. They also noted that CSO-control project costs have escalated, and the cost estimates taken from the LTCPs to calculate 100% capture costs may be inaccurate.

Response to Comment V.11:

DEC makes every effort to ensure the costs estimated in the RIS are accurate and appropriate for the WQS being proposed. That said, they are still estimates based on many assumptions and normalizations used to generally assess the fiscal burden associated with a proposed rule.

DEC summarizes the calculation of regulatory impact in the RIS. For SPDES permits, these calculations include examining the delta between current effluent limits and effluent limits expected under the proposed WQS. DEC then establish per million gallons per day (MGD) rates for both design and construction, and O&M to reduce pollutants by that delta. Those rates are then multiplied by the average MGD flow rates for each affected permittee to determine regulatory impact. In the case of some of the WRRFs, they already have Enterococci limits, even if those limits are subject sampling studies and a formal WQBEL is yet to be established. In those cases, there is no delta, and costs cannot be estimated. The 'cost per MGD' rates used by DEC are based on recently completed projects, USEPA estimation tools, and best professional judgement. These rates represent the average cost per million gallons of daily flow to reduce pollutants by the delta of the effluent limit. It is acknowledged that these rates may be higher or lower at certain wastewater facilities under certain circumstances.

Unlike the SPDES scenario described above, there is no effluent limit delta and no known flow rates to multiply by for LTCPs. DEC used a conservative approach of applying the 100% capture cost from the approved LTCP, adjusted for inflation, to all waterbodies where proposed Enterococci WQS were not met. Some of these waters had a large gap to reach compliance, while others had a much smaller gap, where perhaps a lesser capture rate would result in attainment. DEC believes this estimate was the best approach based on the tools and available data.

Section VI – Miscellaneous Comments

Comment VI.1: Limits on water/waterfront access

(Commenters 20, 22, 25, 41, 45, 49)

Several commenters requested DEC improve or facilitate waterfront access, noting the negative social, health, economic, and climate impacts that limited waterfront access may cause.

Response to Comment VI.1:

These comments are outside the scope of the current rule making. The WQS set pollutant goals and standards for classes of waterbodies, but do not control how access to waterbodies is administered.

Comment VI.2: Support of +Pool Project

(Commenters 10, 40, 46, 48)

Some commenters provided statements of general support for the +Pool floating pool project that may be sited in waters subject to the proposed WQS.

Response to Comment VI.2:

These comments are outside the scope of the current rule making.

Comment VI.3: Providing DEC with water quality monitoring data

(Commenters 19, 40)

Some commenters provided DEC with water quality monitoring data showing Enterococci concentrations in various waterbodies.

Response to Comment VI.3:

DEC appreciates the submittal of this data, but it is outside the scope of the current rule making. DEC will review the data submitted, and may use it, to aid in reclassification decisions in subsequent rule makings provided it meets DEC quality control and New York State's laboratory certification requirements.

Comment VI.4: Opposition to the aeration of Newtown Creek

(Commenter 20)

"While we appreciate the need for baseline amounts of dissolved oxygen within the waterway to support marine life, the aeration project has not addressed the cause of the DO problem, rather sought to use an energy extensive mechanical system to treat the symptom and achieve a numerical standard. Furthermore, the aeration project has created additional problems by potentially aerosolizing both bacteria and harmful chemicals that exist within this superfund site, which has actually restricted people's ability to engage with and recreate on the waterway for fear of exposure to the aerosolizing bacteria./chemicals."

Response to Comment VI.4:

This comment is outside the scope of the current rule making.

Commenter Index 1 – Original Emails and Spoken Testimony

Commenter Number	Name	Method of Submission	Affiliation
1	Sarah Deonarine	Email	Manhasset Bay Protection Committee
2	Sierra Townsend	Spoken (Hearing)	Riverkeeper
3	Noelle King	Email	NA
4	Lily Meyer	Email	NA
5	Michael Saber	Email	Rockland County Sewer District No. 1
6	Joan Rodriguez	Email	NA
7	Ingrid Staats	Email	NA
8	Ralph Scerbo Jr	Email	NA
9	Jean Langan (George Hoehmann)	Email	Rockland County Sewer District No. 1
10	Tammy Meltzer	Email/Spoken (Hearing)	Manhattan Community Board 1
11	Allison Kardon	Email	Rockland County Sewer District No. 1
12	Rondi Davies/Mia Borrelli	Email/Spoken (Hearing)	New York Open Water
13	Patterson Beckwith	Email	North Brooklyn Community Boathouse
14	Eamon Reilly	Email	Rockland County Sewer District No. 1
15	Carol DiPaolo	Email	Coalition to Save Hempstead Harbor
16	Scott Croft (Daniel Croft)	Email/Spoken (Hearing)	Hudson River Boat & Yacht Club Association
17	Eric Swenson	Email	Hempstead Harbor
18	Jean Langan (Michael Specht)	Email	Rockland County Sewer District No. 1
19	Ryan Palmer	Email	Center for the Urban River at Beczak
20	Willis Elkins	Email/Spoken (Hearing)	Newtown Creek Alliance
21	Patrick Brady	Email	Haverstraw Joint Regional Sewerage Board
22	Nan Richardson	Email	School Expansion & Advocacy
23	Marcha Johnson	Email	NA
24	Corinne Brenner	Email	NA
25	Christopher Girgenti	Email	NA
26	Tonya Hendrix	Email	NA
27	Todd D. Ommen	Email	Pace Environmental Litigation Clinic
28	Charles Denson	Email	Coney Island History Project
29	Rebecca Pryor	Email	Guardians of Flushing Bay
30	Anna Leah Jacobson	Email	NA
31	Mark Hellermann	Email	NA
32	Laura Hofmann	Email	NA
33	Vincent Vespole	Email	NA
34	Ryan Brenner	Email	NYC H2O

35	Andrew Kapochunas	Email	NA
36	Katherine Conkling Thompson	Email	Friends of Bushwick Inlet Park
37	Marcella R. Eckels	Email	NYCDEP
38	Marlene Donnelly	Email	Friends and Residents of Greater Gowanus
39	Shanjana Mahmud	Email	NA
40	Kara Meyer	Email/Spoken (Hearing)	+Pool
41	Sarah E. Durand	Email	LaGuardia Community College (Biology professor)
42	Scott Middleton	Email	Gateway National Recreation Area
43	Dan Wiley	Email	North Brooklyn and Queens Elected Officials
44	Sarah Sanchala (Leonel Ponce)/ Holly Porter-Morgan	Email/Spoken (Hearing)	SWIM Coalition
45	Graeme Birchall	Spoken (Hearing)	Downtown Community Boathouse
46	Fleur Santz	Spoken (Hearing)	+Pool board member
47	Jacob Underwod	Spoken (Hearing)	NA
48	Wendy Chapman	Spoken (Hearing)	NA/Community Board One member
49	Deanne Draeger	Spoken (Hearing)	Urban Swim
50	Ida Sanoff	Spoken (Hearing)	Natural Resources Protective Association

Commenter Index 2 – New York Harbor School Form Emails

Commenter Number	Name
51	Susan L. Ciccotti
52	Veronica Torres
53	Cathleen Purrazzella
54	Julie O'Donnell
55	Renee Alevras
56	Peter Orłowsky
57	Edward Smith
58	Elisabete Duarte
59	Andrea Hidalgo
60	Courtney Vishawadia
61	Caraid O'brien
62	Lara Bursor
63	Jill Bernstein
64	Patricia Madsen
65	Ana Nery Fragoso
66	Tamar Cohn
67	Francis E. McCarton
68	Jaimin Vishawadia
69	Bryant Keisha
70	Sandy Perez
71	Brenda Kelly-Guest
72	Hewitt Pratt
73	Lingxu Yan
74	Daragh Russell
75	Kathleen L. Mulgrew
76	Jenn Arzberger
77	Esther Dilone
78	Mike Poindexter
79	Lola Popkin
80	Alicia Perez-Quirke
81	Maia Nuku
82	Nilma Quiros
83	Michael Sullivan
84	Tatiana Goloborodko
85	Brenda Robles-Elias

Commenter Index 3 – Riverkeeper Form Emails

Commenter Number	Name
86	Scott Wilkolaski
87	Arlene Zuckerman
88	Irene Franck
89	Jordan Glass
90	Fern Schlesinger
91	Arthur Schurr
92	John Greenfield
93	Beth Connor
94	Robert Fursich
95	Kahlil Goodwyn
96	Deborah Carroll
97	Liz Keefe
98	Laura Bassi
99	Donna Robin Lippman
100	Alexander Goasdoue
101	Marta Renzi
102	Christopher Kohlman
103	Christopher Clement
104	Alexandra Elson
105	Jeffrey Silman
106	Martina Eng
107	Celines Veras
108	Peter Bull
109	Briar Winters
110	Nick Patterson
111	Ned Milligan
112	Tami Swartz
113	Melanie Thrive
114	Chryssa Tsakiris
115	Peter Madison
116	Michael Andrea
117	Sheila Dempsey
118	Bernadette Rossfletcher
119	Barbara Lewin
120	Karen Shatz
121	Timon Malloy
122	Cal Mendelsohn
123	Lisa Pisano

Commenter Number	Name
124	Ben Bryant
125	Andrea Taylor
126	Janet E. Vetter
127	Yvonne Simmons
128	Ed Malone
129	Mara Lopez
130	Gunnel Rydstrom
131	Lara Liberstein
132	Maria Miranda
133	Harvey Spears
134	Mikki Baloy
135	David Rosenfeld
136	Ingrid Dyott
137	Nora Gaines
138	Thomas Comiskey
139	Cave Man
140	Jacob Weber
141	Judith Fletcher
142	Susan Baxter
143	Frank Diaz
144	Fredi G-P
145	Clifford Provost
146	Celia Ackerman
147	Ed Dillon
148	Megan Boone
149	Pat Tyra
150	Sarah Lange
151	Amelia DeMarco
152	Thebig Funck
153	Lise Prown
154	Katharine Skolnick
155	Robert McMann
156	Abraham Freidin
157	Elizabeth Maxwell
158	Jennifer Ha
159	Marc Ward
160	Kimmich Erlend
161	Roger Muzii

162	Allison Ward
163	Gail Hovey
164	Christine Pittet
165	Linda Agoston
166	Aaron Mittman
167	Amanda Alcamo
168	Stephanie Zaiantz
169	Pablo Garcia
170	Alex Zackrone
171	Nadja Lazansky
172	Louis Esposito
173	Tom Harris
174	Melissa Rinzler
175	Fernanda Senger
176	Melissa McCanter
177	Julie Hollar
178	Taffy Williams
179	J.Patricia Connolly
180	Susan Brown-Mandel
181	Jessica Thompson
182	Art Bartosch
183	Mimi Bluestone
184	Lindsay Soto
185	Mary Dunne
186	Joseph Lawson
187	Michael Savage
188	Michael Sweeney
189	Hope Carr
190	Jan Blaire
191	Maria Ragucci
192	Alan Roberts
193	Shyama Orum
194	Stephanie Rugoff
195	Marian Ronan
196	Alen Douda
197	James Curtin
198	Kate Petley
199	Tara Scheller
200	Robin K. Elkman
201	Lilli Ross
202	Anita Brandariz

203	Christine Bratton
204	Beth McCormick
205	Andrew Joncus
206	Katherine O'Sullivan
207	George Stadnik
208	Kathleen Wall
209	Ronda Small
210	Karen Sorensen
211	Jan Emerson
212	Katie Leung
213	Hamilton Regen
214	Mara Leverett
215	Sasha Silverstein
216	Glen Lawrence
217	Pamela Gruen
218	Elizabeth Peterson
219	Christian Holland
220	Alyson Shotz
221	S. Nam
222	Stephanie Kob
223	Francisco Martin
224	Edward Butler
225	Chris Washington
226	Freya Goldstein
227	Judith Weis
228	Rona Armillas
229	Banjo Ettinger
230	Mark Schwartz
231	Edward DuBeau
232	Laura Anastasio
233	Alix Keast
234	Richard Guier
235	Jonathan Levine
236	Samuel Simon
237	Stephanie Cuellar
238	Thomas Hughes
239	Elsie Santo
240	Stephen Hopkins
241	Suzannah Glidden
242	Paige Harrison RN
243	Resa Tylim

244	Amy Heinrich
245	Ruth Gitto
246	Nancy Scheck
247	JoAnn Fernandez
248	Jack David Marcus
249	John Maclean
250	Elizabeth Hegarty
251	Michael Heimbinder
252	Rizal Tupaz
253	Matthew Chapman
254	Terence Hughes
255	Geraldine Martin
256	Kirsten Hopkins
257	LiLi Jackson
258	Ryan Brenner
259	Bill Fioravanti
260	George Jackman
261	Joan Gussow
262	Jane Chuang
263	kay connolly
264	Jane Curtis
265	Sherry Bender
266	Rondane Hollar
267	Marianne Dietrich
268	Persis Puello
269	Melanie Miller
270	Aishah Sales
271	Todd Wassmer
272	Carol Bloom
273	Alison Sky
274	Sharon Goel
275	Felicity Faulkner
276	Karen Cotterell
277	Kara Huberman
278	Jacalyn Dinhofer
279	Bill Purdue
280	Anne Bjornson
281	Lisa McTernan
282	Ronald Lemmert
283	Mary Beth Kooper
284	Caroline DePalma

285	Anita Bartsch
286	Mitchell Miller
287	Yanxi Cain
288	Alan Hoffner
289	S. Pat Horan
290	Janice Rost
291	Roni Rodman
292	Suzanne Buchauer
293	Liz Mostov
294	Mary J Kennedy
295	Allan Leventhal
296	Regina Gavlick
297	Michele Temple
298	Lorine Bamberg
299	Peter Reich
300	Catherine Mulhern
301	Douglas Cooke
302	Daniel Hanggi
303	Samantha Harvey
304	Laura Silverman
305	Elena Busani
306	Martin Schaub
307	Nathanel Williams Jr.
308	Bobbi Siegelbaum
309	Jill Greenberg
310	J. C.
311	Katherine Cooke
312	Lisa Jablow
313	Anne Ryan
314	Margaret Saich
315	Ellen Mandel
316	G. Paxton
317	T. Mitchell
318	Marcy Gordon
319	Donald Boyce
320	Jacqueline Birnbaum
321	William Hui
322	Neil Glaser
323	Allyn Greenfield
324	Abigail Caro
325	Marilyn Kaggen

326	Elizabeth Mellen
327	Janet Duran
328	Maureen Hayes
329	William Gibbons
330	Judith Simek
331	Pascal Akesson
332	Suzanne DeChillo
333	Cleta Ciulla
334	Rob Put
335	Jessica Smith
336	Alice Shields
337	Marjorie Vandenberg
338	French Conway
339	Steven Goldman
340	Gisela Gamper
341	Paul S. Lipton
342	Barbara Nackman
343	Barbara Stoloff
344	Lisa Coash
345	Virginia Johnson
346	Gretchen Metzloff
347	Susan Esposito
348	Michael Madden
349	Judith Zingher
350	Joe Schuder
351	Kenneth Krynicki
352	Mary Loomba
353	Robert Jones
354	Cardona Kay
355	Katherine Harris
356	Melvin Siegel
357	Simin Minou
358	Kate Boicourt
359	Rob You
360	Joshua Heffron
361	Anthony Costantino
362	Glenn Dornfeld
363	Sandra Zimmerman
364	Thomas Boman
365	Lynne Boehm
366	Nick Vivian

367	Rita Jaskowitz
368	Nathalie Camus
369	David Brenner
370	Emily Seay
371	Michael F. Kolasa
372	Edward Poian
373	K. P-Britt
374	Mary Anne Tanner
375	Maria Clair-Howard
376	Zoraya Flor
377	Eileen Gannon
378	Marisa Beutel
379	Sara Beam
380	George Y. Bramwell
381	Mary Krieger
382	Sarah Street
383	Kathleen Tunnell
384	Ron Wish
385	Kathy Mohan
386	Jack Polonka
387	Annie Katzman
388	Richard Stern
389	Barbara Brasel
390	Harriet Shalat
391	Lois S
392	Monica Rangne
393	Deborah Dolan
394	Kathy Byrnes
395	Walter Terrell
396	David Bruny
397	Laura Taylor
398	Denise Cameron
399	Phyllis Spiegel
400	Aaron Moulin
401	Fred Koster
402	Lincoln Baerga
403	N Refes
404	Gertrude Battaly
405	Andrew Wittenborn
406	Lily Mleczeko
407	Melinda Alfano

408	Marion Lakatos
409	Colleen Duffy Céile Leidy
410	Nadine Godwin
411	Michael Kay
412	Nicolas Shearman
413	Harry Alverson
414	Richard Strohenger
415	Marcia Case
416	Laurie Cozza
417	Paul Van Horn
418	Anastasia Connor
419	Roel Hoekstra
420	Ryan Leyble
421	Nancy Tongue
422	Sylvia Kaplan
423	Megan Cowan
424	Jill Berkowitz-Berliner
425	Louise Levesque
426	Rosemarie Pace
427	Hannah Borgeson
428	Eileen Leonard
429	Joseph Collins
430	Laura Pakaln
431	Nick Byrne
432	Jennifer Horowitz
433	Thomas McIntyre
434	Arthur Kunhardt
435	Laurie Puca
436	Alex P. Lamas
437	Alice Jena
438	Phillip Hope
439	Marie Garescher
440	Martha D. Perlmutter
441	David Suarez
442	Terry Hasan
443	Kirsten Andersen
444	Thomas McGrath
445	Naomi Zurcher
446	Ritsuko Higashi
447	Joseph Ferraro
448	Wendy Andringa

449	Phoebe Sonder
450	Henriet Cohen
451	Cynthia Ofer
452	Melanie Carnsew
453	Diane Hawk
454	Gretchen Salcedo
455	Gary Freiberger
456	Beth Birnbaum
457	Rebecca Berlant
458	James Cooper
459	Karen Winer
460	Pamela Brocious
461	Pippa Pearthree
462	Karen Menduni
463	M. Doretta Cornell
464	Vajra Kilgour
465	Ann Marie Schubert
466	Leslye Smith
467	Diane Parmigiani
468	Sandra Martire
469	Roy Ellingsen
470	Teresa Beutel
471	Ellen M Kaufman
472	Patrick Brennan
473	Margaret Dozier
474	Teun Deuling
475	Jason Machowsky
476	Nancy Ward
477	Barbara Merjan
478	Elaine Hartel
479	Judith Ackerman
480	Donna Sharrett
481	Bozena Grossman
482	Gerard Curran
483	Marlene Steiner
484	Nancy Vann
485	Peter Bannon
486	G Douglas Ray
487	Michael Machado
488	Dennis Knaack
489	Claudia Greco

490	Evy Mayer
491	Victoria Oltarsh
492	Janet Forman
493	N D
494	Richard Polgar
495	Beverly Simone
496	Lara Frater
497	Ljubica Sefer-Stefancic
498	Amelia Cerda
499	Gail Sullivan
500	Gloria Lewit
501	Joseph Salomone
502	Susan Lob
503	Lynne Teplin
504	Grace Gallagher
505	Kathleen P. Harris
506	Harvey Simon
507	Seth Courtwright
508	Conor Berry
509	Crisel Cruz
510	Michael Szeto
511	Diana Marino
512	Kiko Bourne
513	Tahera Doctor
514	Michele Cortese
515	Sharon Longyear
516	Marlon Ramlogan
517	Beth Darlington
518	Carla Davis
519	Jolie Barra
520	Tee Holland
521	Matthew DiFuccia
522	Anita Maldonado
523	Ellen Kozak
524	Joshua Vickery
525	Joshua Tuscan
526	Anne Machado
527	C S
528	Chanda Plitt
529	Kimberly Wade Barcia
530	Peter Koch

531	Billy Zias
532	Lyn Cap
533	Dolores Congdon
534	C Stokes
535	Claudia Sprinkle
536	Jennifer Valentine
537	Thomas Danahy
538	Erich Winkler
539	Lori Morris
540	Jason Gers
541	Amy Benesch
542	Christopher Blyth
543	Janet M Hicks
544	Jean Naples
545	Abbilyn Miller
546	Elena Scilla
547	Rafael Vazquez
548	Hana Palazzo
549	Samantha Ayala
550	Dorothy Calvani
551	Rodney Kooney
552	Laurie Woods
553	Gretchen Begley
554	Dominic Cenatiempo
555	Ruthann McDermott
556	James Scarcella
557	Matt Malina
558	S Dixon
559	Katherine Lowe
560	Thomas McGlinchey
561	Sarah Gallagher
562	Keith Wynne
563	Pamela Pettyjohn
564	Paget Walker
565	Connie Perry
566	Veronica Schweyen
567	Colin Powers
568	Lori Malloy
569	Jennifer Kepler
570	Caroline Craig
571	Nicole Peyrafitte

572	George Riggs
573	Scott Middleton
574	Annie Shepard
575	Kaitlin fitch
576	Campbell Ives
577	Brad Vogel
578	Tobias Luna
579	Skye Ruozzi
580	Sina Hickey
581	Julie DAPRILE
582	Karen Dallett
583	Emily Soule
584	Thomas Mituzas
585	Edyta Pieklo
586	Ella Agoos
587	Patrick Schnell
588	Jordan Paul
589	Katy Moore
590	Sean Adams
591	Stephanie Fox
592	Klaus Schoenwiese
593	Marcha Johnson
594	Derek Rusinek
595	Sunni Tang
596	Damien Archbold
597	Sara Roer
598	Sharon Goodman
599	Mackenzie Murphy
600	Jan Mun
601	Amanda Raker
602	C Baka
603	Frankie Iozzio
604	Nathalie Levey
605	Leigh Klonsky
606	Judith Dieckmann
607	Amy Cheung
608	Warren Cohen
609	Sandy Reiburn
610	Lisa Vasta
611	Janice Kim
612	Raymond Fusco

613	Maddie Woda
614	Steve Marcus
615	Scott Davis
616	Igor Akimushkin
617	Robert Towns
618	David Gellman
619	Kayhan Irani
620	Sandra Taggart
621	Sister Joan Agro
622	Ingrid Staats
623	Clodagh McCloskey
624	Volha Hryshkevich
625	Jaime Weida
626	Susan Castelli-Hill
627	Nora Almeida
628	E. Louis Priem
629	Tracy Brown
630	Rebecca Lamoreaux
631	Larry Divney
632	David Mondejar
633	Amy Matts
634	Naomi Woodard
635	John Keiser
636	Edward Rengers
637	Joshua Spodek
638	Sarita Roy
639	Elaine Livingston
640	Sara Peters
641	Nicholas Rockwell
642	Andrea Ivey
643	Dana Barbato
644	Jurgis Brakas
645	John Del Gaudio
646	Patterson Beckwith
647	Jeffrey Scales
648	Toby Bryce
649	Leslie Quick
650	Ariyeh Maller
651	Ryan Shanley
652	Jennifer Marvin
653	Luke Eddins

654	Paula Crosson
655	Neil Bettez
656	M Gutierrez
657	John Ebert
658	Paul Shaked
659	Edward Rice-Howell
660	Karen Argenti
661	Elizabeth Braswell
662	Wendy Brawer
663	Tamara Gubernat
664	Will Eno
665	Blake Darling
666	Lori Vroegindewey
667	Lori Doyon
668	Pernell Celestine
669	Erin Thelen
670	Robert McEntee
671	Akello Thomas
672	Carl Meissner
673	Timothy Houlihan
674	Kiri Oliver
675	Deborah Herdan
676	Samantha Lee
677	Michelle Staehling
678	Mike Schade
679	Carla Yuen
680	Luke O'Brien
681	Stephanie Vevers
682	Jamie Newman
683	Emily Fano
684	Karen Frillmann
685	Priscilla Stadler
686	Leah Archibald
687	Zow Logan
688	Lauran Rothstein
689	Barbara Burke
690	Deanne Draeger
691	Julia Sarasola
692	Christina Love
693	Liz Beeson
694	Meghan Canale

695	Barbara Etzel
696	Melissa Bieri
697	Laura Hofmann
698	charles mercado
699	Ulrike Nischan
700	Danielle Barkoski
701	Lucia Fuentes
702	Evelyn Mikicic
703	Kimberly Wright
704	Kyle Turner
705	Jonathan Belair
706	Natalia Biani
707	Elizabeth Long

