



December 4, 2015

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Dear Dr. Young and Mr. Sweeney:

Enclosed is the DEP Response to the NYSDOH/USEPA Comments on Revised 2007 FAD Deliverables submitted through September 2015.

As always, if you have any questions about these comment responses or other aspects of the City's watershed protection efforts, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink, appearing to read 'D. S. Warne', with a long horizontal flourish extending to the right.

David S. Warne
Assistant Commissioner

**DEP Response to NYSDOH/USEPA Comments on the FAD Deliverable Reports
Submitted September 30, 2015
Response Date December 04, 2015**

2. SWTR Objective Criteria Compliance

As required by the Revised 2007 FAD, DEP submitted a scope of work for an expert panel review of the City's Watershed Protection Programs.

DEP Response:

Comment noted.

4.1 Waterfowl Management Program

The annual report on the Waterfowl Management Program was submitted as required by the Revised 2007 FAD.

DEP Response:

Comment noted.

West Branch Reservoir (page 31) is one of five reservoirs in the New York City system in which bird management is performed on an "as needed" basis. Waterbird surveys were conducted during the month of April 2014 and from August 1, 2014 through April 15, 2015 on a biweekly schedule. A high count of waterbirds occurred at West Branch Reservoir on December 5, 2014 when 3,132 birds were observed. One of the criteria for implementation of avian management measures is "fecal coliform bacteria concentrations approaching or exceeding 20 colony-forming units per 100 milliliters [CFU/100 mL] at reservoir effluent structures coincident with elevated bird populations." Another is "current bird populations, including roosting or staging locations relative to water intakes." Fecal coliform levels remained less than 20 CFU/100 mL at site CWB1.5 at the time of the high count, and bird dispersal was not initiated. It would be helpful to the reader to clarify that fecal coliform levels are the primary trigger that would lead to further assessment of the need for bird management measures.

DEP Response:

Agreed. The primary trigger is the fecal coliform bacteria concentrations. The change was incorporated into a revised 2015 submission of the Annual FAD Report.

Large numbers of roosting birds might add nitrogen and phosphorus to the water column, which could contribute to algal blooms the following summer. Has NYCDEP explored, or does NYCDEP have data that show, the potential for nutrient contributions from roosting birds? NYCDEP's monthly operation reports indicate that West Branch Reservoir has been operating on bypass mode for much of the period covered by the Waterfowl Management Program report. When operating under bypass mode, does sample site CWB1.5 adequately represent the water that would enter the water system if operations were changed to reservoir mode?

DEP Response:

Question 1: DEP received a Safe Drinking Water Act grant from the EPA FY' 2000 GRANT 3.6b to conduct research on nutrient loadings from waterbirds and water

mammals titled: Estimating Waterbird and Aquatic Mammal Nutrient Loads to Cannonsville Reservoir to investigate the nutrient contributions from birds and water mammals. The summary report included results of Nitrogen and Phosphorus analyzed from the feces of Canada Geese, Ring-billed Gulls, Mallards, beaver and muskrat. Question 2: DEP firmly believes sampling site CWB1.5 adequately represents the water entering the water system.

On page 49, the report states, “*E. coli* (grab samples) levels remained relatively unchanged entering Hillview at water quality sampling locations Site 2 when compared with samples leaving the reservoir at sampling Site 58.” This statement, combined with Figures 27 and 29, suggest that a link is being explored between nocturnal counts of total waterbirds in Zone 2 of Hillview Reservoir and positive *E. coli* grab samples at Site 58 (Downtake 2). This relationship is unclear, as water in the Delaware Aqueduct travels directly from Site 2 to Site 58, and does not enter the Hillview east basin. Is the attempt to find an influence of Zone 2 waterbirds on Site 58 via the South Connecting Conduit?

DEP Response:

There was an oversight in reference to the statement “*E. coli* (grab samples) levels remained relatively unchanged entering Hillview at water quality sampling locations Site 2 when compared with samples leaving the reservoir at sampling Site 58” on page 53. The statement should have read “*E. coli* (grab samples) levels indicated a slight *E. coli* elevation from May to July 2014 entering Hillview at water quality sampling locations Site 1 when compared with samples leaving the reservoir at sampling Site 3”. Overnight bird count averages for May, June and July 2014 were only presented for Bird Zone 2 whereas averages should have been presented for reservoir-wide counts. Total reservoir-wide nightly bird averages for the three months are as follows: May 2014 = 2.18 birds/night; June 2014 = 3.82 birds/night, and July 2014 = 0.77 birds/night. Due to the relatively low numbers of birds/night reported at Hillview it remains unlikely that the waterbirds impacted the *E. coli* levels.

The DEP FAD report for the Waterfowl Management Program has been revised and reissued based on the corrections listed above (see attached).

4.2 Land Acquisition

The Revised 2007 FAD requires DEP to annually consult with NYSDOH/USEPA and NYSDEC regarding the potential need for any additional monies beyond that already committed to land acquisition. The regulators agree that the program has adequate funding at this time.

DEP Response:

Comment noted.

4.11 Catskill Turbidity Control Program

The Revised 2007 FAD requires DEP to convene a progress meeting by September 30 of each year. NYSDOH agrees that, due to a scheduling conflict, it was necessary to schedule this year’s meeting on October 20, 2015.

DEP Response:

Comment noted.

5.1 Watershed Monitoring Program

The Revised 2007 FAD requires DEP to annually participate in education seminars on watershed monitoring. On September 9, 2015, the NYC Watershed Science and Technical Conference was held. DEP was a conference sponsor, and DEP staff attended and presented at the conference.

DEP Response:

Comment noted.

7. Catskill/Delaware Filtration and UV Disinfection Facilities

The Revised 2007 FAD requires DEP to biennially update the preliminary design for the Catskill/Delaware Filtration Facilities, beginning September 30, 2015. Upon review, DEP has concluded that no design revisions are necessary at this time. NYSDOH/USEPA agree with this conclusion.

DEP Response:

Comment noted.

9. Administration

The annual report on FAD budget and staffing was submitted as required by the Revised 2007 FAD. The deliverable has been met.

DEP Response:

Comment noted.

NYSDOH notes that several programs have been moved, such as Early Warning Remote Monitoring, and Distribution Science and Planning. Please explain the realignments that have occurred, and how these changes support the FAD programs.

DEP Response:

In February of 2015, a number of organizational changes were implemented to increase efficiency, quality control, technology sharing, and functional alignment within the BWS Water Quality Directorate.

The Early Warning Remote Monitoring (EWRM) Section was separated and consolidated into Distribution Water Quality Operations (DWQO) and Watershed Water Quality Operations (WWQO). Specifically, the EWRM North Section was integrated into East of Hudson WQ Operations, the EWRM South was integrated into Distribution WQ Field Operations. Additionally, Western Operations staff responsible for continuous monitoring instrumentation West of Hudson was integrated into West of Hudson WQ Operations. As part of the EWRM restructuring, two computer titles that were formerly within EWRM were consolidated into the respective Data Management Sections within DWQO and WWQO. These changes will help to standardize water quality instrumentation procedures and data management within the Water Quality Directorate, and will

maximize resources to support our growing robotic water quality monitoring program.

In addition, Distribution Science and Planning (DSP) staff have been consolidated within DWQO and Health Assessment and Policy Coordination (HAPC) has been consolidated into Water Quality Science and Research (formally named Watershed Water Quality Science and Research). These changes resulted in improved functional realignment of these sections. DSP is responsible for SDWA and LCR compliance reporting which is closely aligned with DWQO distribution water quality monitoring functions, and HAPC manages the Waterborne Disease Risk Assessment Program which is a key FAD program and falls within our science and research function.

There are significant decreases in the FY15 budgeted positions for Early Warning Remote Monitoring (loss of 8 positions from FY14), Instrumentation and SCADA (loss of 2 positions), and Operations – Eastern Cat Del UV (loss of 16 positions). Please explain these changes (it is acknowledged that this may be related to the previous comment).

DEP Response:

The Early Warning Remote Monitoring losses were part of the realignment listed above, so the function is still being performed in the same capacity however now just under different direction. The Cat Del UV plant positions are the correct numbers. We reviewed previous year's organizational charts and confirmed the numbers were correct. There must of have been an addition error in compiling the previous report.

The positions in the pipeline for the Upstate Police Force should total 27, not 37.

DEP Response:

This is correct, we will make the adjustment.

Thirteen positions are budgeted for Hydroelectric, under Operations – Western. This item was not in the previous FY14 budget. Are the positions associated with work at the Cannonsville Reservoir?

DEP Response:

These positions are a combination of factors. First, these positions are not associated with the work at Cannonsville Reservoir. We first consolidated all of our electricians and electrician helpers within Western Operations in order to improve support and they report directly to the engineer in charge of hydroelectric operations. Also, we have established a HVAC team to support our facility requirements. This team is made up of two stationary engineer electric, one engineer intern, and two watershed maintainers. This team will report to the hydroelectric engineer as well. That accounts for the 13 positions.

The total positions provided in Table 1 for the Bureau of Water Supply are incorrect. The table states 866 budgeted positions, 819 filled positions, and 47 in the pipeline, and shows the percentage of filled positions as 94.6%. However, adding the subtotals in the table produces 1120 budgeted, 1045 filled, and 75 in the pipeline, with a filled percentage of 93.3%.

DEP Response:

We will clarify the report in the future so that the report states Total Watershed Personnel (BWS & BPS), because we were only looking at Water Supply personnel and the Police and Security Staff do not work for the Bureau of Water Supply.