

**New York City  
Department of Environmental Protection**



**Enhanced Wildlife Management Plan  
For Hillview Reservoir**

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Prepared by Water Quality

Vincent Sapienza, P.E., Commissioner  
Paul V. Rush, P.E., Deputy Commissioner, Bureau of Water Supply  
Steven C. Schindler, Director of Water Quality

### Revision History

<b>Revision Number</b>	<b>Revision Date</b>	<b>Revisions made (Such as the section that was changed, the reason for the change, etc., as appropriate.)</b>
01	1/1/2019	

# Enhanced Wildlife Management Plan for Hillview Reservoir

## 1. Background

In January of 2006, the United States Environmental Protection Agency (EPA) promulgated the Long Term 2 Enhanced Surface Water Treatment Rule of the Federal Safe Drinking Water Act (LT2ESWTR). The purpose of the LT2ESWTR is to reduce illness linked to *Cryptosporidium* and other pathogens in drinking water. The Rule supplements existing regulations by requiring additional *Cryptosporidium* treatment for high-risk systems, and also contains provisions to reduce risks from uncovered finished water reservoirs like New York City's Hillview Reservoir. Specifically, the LT2ESWTR requires that uncovered finished water reservoirs must either be covered, or the water from them be treated to provide 4-log virus inactivation, 3-log *Giardia* inactivation, and 2-log *Cryptosporidium* inactivation before entering the distribution system. The New York City Department of Environmental Protection (DEP) meets the treatment requirements through chlorination at Delaware Shaft 18 and ultra violet disinfection at Eastview, however since these facilities are upstream of the uncovered Hillview Reservoir in Yonkers, New York, DEP has developed a comprehensive risk mitigation plan to ensure the delivery of high quality drinking water to protect public health.

## 2. Objective

The objective of this Plan is to summarize the enhanced wildlife management strategies that DEP has implemented to protect public health at Hillview Reservoir.

## 3. Strategies

3.1 Waterfowl Management Program (WMP) – The Waterfowl Management Program (WMP) is an ongoing FAD mandate. See Revised 2007 FAD, Section 4.1 (NYSDOH 2014). The WMP was implemented in 1993 for Kensico Reservoir to identify potential effects of fecal pollution from waterbirds. In addition, an environmentally sensitive bird mitigation program was implemented to eliminate birds and prevent fecal coliform bacteria inputs which could impact water quality (DEP 2018). While DEP had been performing waterbird monitoring and mitigation since 1993 at Hillview, the 2007 FAD formally required the expansion of the WMP to include Hillview Reservoir.

3.2 Enhanced Wildlife Management – On May 24, 2010, EPA issued an Administrative Order on Consent (AOC) requiring DEP to design and construct a cover for Hillview Reservoir, and implement an enhanced wildlife management program at Hillview Reservoir to provide even greater protection (EPA 2010). Pursuant to the terms of the AOC, DEP developed, and continues to implement the following enhancements:

3.2.1 The frequency of bird census and dispersal efforts increased to daily pre-dawn to post-dusk surveys.

3.2.2 DEP and contractor personnel perform periodic sanitation inspections of the dividing wall, catwalks, rooftops, and the grassy buffer immediately around the reservoir perimeter for wildlife droppings. In addition, binoculars and spotting scopes are used to inspect shaft buildings for bird droppings. Fecal matter observed is visually identified to species where possible, before being collected and disposed of off reservoir property.

3.2.3 DEP identifies areas on reservoir property which may be susceptible to wildlife intrusion and develops enhanced wildlife management plans as needed (e.g., mammal trapping along the reservoir perimeter, continued management of woodchucks along reservoir perimeter and on dikes, addition of bird deterrent wires on hand railings and use of night cameras to monitor for wildlife).

3.2.4 DEP develops and implements targeted wildlife management programs as needed (e.g., fish entrainment monitoring and removal, deterring and eliminating Cliff Swallow nests and removal of Ruddy Duck populations).

3.2.5 DEP conducts daily inspections of the bird wire systems, and conducts maintenance and repairs as needed.

3.2.6 DEP submits monthly reports to New York State Department of Health (NYSDOH) and EPA that summarize wildlife monitoring and management efforts including bird census data, a summary of pyrotechnic usage, bird wire status and the results of additional wildlife management activities at Hillview.

### **References**

NYSDOH. 2014. New York City Filtration Avoidance Determination. Final Revised 2007 FAD. May 2014.

DEP. 2018. Watershed Water Quality Monitoring Plan. December 2018.

EPA. 2010. Administrative Order on Consent, Docket No. SDWA-02-2010-8027  
Catskill/Delaware System, PWS ID: NY7003493