



MEMORANDUM

To: David Smith
Hampshire Club, Inc.
Delivered via email

From: Max Ojserkis, PWS
Kimley-Horn and Associates, Inc.
50 S. 16th Street, Suite 3300
Philadelphia, PA 19102

Date: May 2, 2023

Wetland Assessment

Subject: Hampshire Country Club
Mamaroneck, Westchester County, New York

Introduction

The focus of this wetland investigation is a human-made water feature within the Hampshire Country Club golf course in Mamaroneck, Westchester County, New York. This feature is used to store pumped groundwater, which, in turn, is used to irrigate the golf course. Due to storm events (including Hurricane Sandy) and nearby trees, sediment and organic matter have accumulated in the feature, decreasing the storage volume available. As such, Hampshire Country Club proposes to remove accumulated debris and sediments from this feature to maintain its proper function as irrigation water storage.

Methods

The water feature was investigated by a Kimley-Horn wetland scientist on May 2, 2023. Dominant vegetation and hydrology were observed, and soil samples were taken with a hand auger at several accessible places around the perimeter.

Results

Upon inspection, the feature in question contained several feet of standing water. Chris, the golf course superintendent, noted that water levels were higher than normal due to heavy rain received over the preceding few days. Nonetheless, it is believed that this feature is perennially inundated (mainly due to pumped groundwater).

Vegetation observed includes cattail (*Typha sp.*) and pondweed (*Potamogeton sp.*). These plants are obligate hydrophytes. There are areas of this feature which are vegetated and others which are not. Vegetated areas meet the criteria for wetland vegetation.

Soil near the edge of the feature generally consist of an approximately two- to six-inch layer of sand and gravel and organic matter. This accumulation may be thicker toward the center of the feature, but that area was not accessible for sampling. Below that is a layer of grey clay (approximately 2.5Y 6/1 in color) with prominent redoximorphic features. This soil exhibits a depleted matrix and is considered hydric.

Photographs are provided on the following page.

Conclusions

In my professional opinion, this feature meets the definition of a wetland under the Village of Mamaroneck Code §192-2. Nonetheless, it is noted that this feature was constructed in an upland as part of the golf course and, without input of pumped groundwater, would likely cease to exhibit wetland characteristics.

Given the lack of connectivity to navigable waters and the fact that this feature was excavated from an upland, Kimley-Horn does not believe that the U.S. Army Corps of Engineers will consider this a jurisdictional feature under Section 404 of the Clean Water Act. The wetland does not meet the size threshold to be considered a state-regulated wetland under the NYSDEC Freshwater Wetlands Program.

As a manmade feature designed for pumped groundwater storage, it is recommended that this feature be maintained so that it can continue to be used for its intended purpose. Further, without the proposed maintenance, the continued accumulation of organic matter and other sediment as well as the dense growth of aquatic vegetation may provide ideal breeding habitat for mosquitos.

Preparer's Experience

Max Ojserkis is a certified Professional Wetland Scientist with over 10 years of professional experience. He holds a B.A in Environmental Science from Northwestern University and a M.S. in Environmental Science from Drexel University, with coursework in botany, ecology, hydrology, soils, and aquatic macroinvertebrates. He has performed over 100 wetland delineations, botanical surveys, and threatened and endangered species surveys throughout the Mid-Atlantic and Northeast. Max has permitted projects of various sizes under the jurisdictions of USACE, NYSDEC, NJDEP, PADEP, DNREC, and more.



View from the northeast end. Cattails visible in portions of the feature. Pump house in background.



View from the southwest end.



Pondweed visible below the surface.



Typical soils along the shallow edge of the feature. Soils exhibit hydric characteristics. Note first layer is accumulated sand, gravel, and organic matter.