

Kenneth W. Jenkins
County Executive

Department of Health

Dr. Sherlita Amler, M.D., M.S.
Commissioner

Field Activity Report

RE: Nuisance Complaint – Elevated Mosquito Activity in the Shore Acres Peninsula and Otter Creek Area, Village of Mamaroneck

Inspection Dates: July 27–28, 2026

Report Date: August 4, 2026

Prepared by: Bob Bellach, Senior Public Health Sanitarian

Background

In response to multiple nuisance complaints from residents of the Shore Acres Peninsula regarding unusually high mosquito activity, the Westchester County Department of Health conducted a field investigation on July 27 and 28, 2026. The investigation was performed by Senior Public Health Sanitarian Bob Bellach, with assistance from Seasonal Environmental Health Technician John Sarfaty.

The objectives of the inspection were to assess environmental conditions that may be contributing to mosquito breeding, identify potential larval habitats, evaluate standing water conditions, and collect water quality samples for laboratory analysis. Wetland areas associated with Otter Creek, Guion Creek, and McGid's Pond were inspected on July 27, while catch basins throughout the Shore Acres Peninsula were inspected on July 28.

Field Investigation

July 27, 2026

Approximately 10:15 AM – Sample Site 2 (Otter Creek Preserve)

The inspection team entered Otter Creek Preserve on foot via the access road to evaluate marsh habitat adjacent to Otter Creek. An extensive stand of *Phragmites australis* (common reed) was observed throughout the wetland area.

Upon entering the preserve, inspectors immediately encountered extremely high mosquito activity. Mosquito density was sufficient to interfere with the inspection, resulting in numerous bites within a short period. Due to the intensity of mosquito activity, the inspection team withdrew to the vehicle and continued the investigation from accessible roadways.

The area between Soundview Drive and Taylor Lane was surveyed visually for standing water, potential mosquito breeding habitat, and drainage issues. While dense stands of *Phragmites* were observed throughout the wetland, no significant mosquito breeding conditions were identified within adjacent residential properties. The inspection team also evaluated available aerial imagery and surrounding road access in an effort to identify an appropriate access point to the protected wetland known locally as McGid's Pond.

Approximately 11:00 AM – Sample Site 1 (McGid's Pond)

Access to the pond was obtained from the northern terminus of Soundview Drive where a small section of shoreline was accessible through the surrounding *Phragmites*.

The pond surface was extensively covered with duckweed (*Lemna* spp.). Intermittent gas bubbles were observed rising through the duckweed, suggesting anaerobic decomposition within bottom sediments. Water adjacent to the shoreline appeared shallow, with black-colored water visible during sample collection. A strong organic odor was present.

Mosquito activity at the shoreline was extremely heavy. Notably, inspectors did not observe or hear wildlife typically associated with freshwater pond ecosystems, including fish, amphibians, reptiles, waterfowl, or aquatic insects other than mosquitoes.

A surface water sample was collected using a clean plastic sampling bucket for subsequent laboratory analysis.

Approximately 12:00 PM – Sample Site 3 (Otter Creek)

A surface water sample was collected from the shoreline of Otter Creek. Dense *Phragmites* growth was present along the shoreline, and mosquito activity remained significant throughout the sampling area.

Approximately 1:10 PM – Sample Site 4 (Tributary to Guion Creek)

A small, slow-moving tributary entering Guion Creek, located west of approximately 925 Shore Acres Drive, was identified and inspected. Mosquito activity remained elevated throughout this location. A surface water sample was collected for laboratory analysis.

Sample Collection

Surface water samples were collected from each sampling location using a clean plastic bucket and transferred into laboratory sample containers. Samples were immediately placed in an ice-water bath and maintained under appropriate chain-of-custody conditions prior to delivery for laboratory analysis.

Samples were submitted for analysis of the following parameters:

- Dissolved Oxygen
- pH
- Sodium (Na⁺)
- Chloride (Cl⁻)

Laboratory Status of Samples

As of August 4, 2026, complete laboratory analytical results for the collected water samples were pending. Upon receipt, the results will be evaluated in conjunction with field observations to determine whether environmental conditions are contributing to the elevated mosquito activity reported by area residents.

July 28, 2026

Sixteen catch basins located throughout the Shore Acres Peninsula were inspected for evidence of standing water, mosquito larvae, and other conditions conducive to mosquito breeding. Inspection findings are documented below.

#	Address	Observations
1	Adj. Guion Creek & Route 1 Parkway	4 catch basins. 3 holding water. Mosquitoes and larvae present. A few adult mosquitoes observed flying adjacent to the catch basins.
2	Parkway & Creek Rd.	4 catch basins. No standing water. No mosquito activity observed.
3	732 The Parkway	4 catch basins. No standing water.
4	580 The Parkway	1 catch basin holding water. Water depth varies from 12–16 inches. No mosquitoes observed.
5	560 the Parkway	1 catch basin holding approximately 1 foot of water, with a buildup of leaves on the grate and in the water.
6	The Parkway & Shore Acres	Catch basin holding approximately 1 foot of water. No adult mosquitoes observed. No larvae observed. Leaves present on the
7	Across from 506 Shore Acres	1 catch basin with approximately 1 foot of standing water. No movement on the water surface. No adult mosquitoes observed.
8	521 Shore Acres	2 catch basins, 1 foot of water. Spoke with a resident walking a dog who stated that multiple neighbors have been treating catch
9	Shore Acres & Oakhurst Rd.	Standing water approximately 6 feet deep. No leaves or seeds covering the water surface at this time. Water visibility was poor.
10	611 Shore Acre Drive	2 catch basins. West catch basin holding water. No larvae observed.
11	941 Shore Acre Drive	3 catch basins: 1 dry; 1 holding approximately 3 inches of water with leaves; 1 holding approximately 6 inches of water with no larvae
12	936 Soundview Drive	2 catch basins: 1 dry; 1 holding 1–3 inches of water. A few larvae observed.
13	10 Soundview Drive	No larvae observed.
14	10 Soundview Drive	Catch basin holding approximately 1 foot of water. No larvae observed.
15	10 Soundview Drive	Catch basin holding approximately 6 feet of water. Grass clippings and floating plastic bottles present.
16	10 Soundview Drive	Catch basin holding approximately 1 foot of water. Some larvae observed.

Synopsis

The field investigation identified several environmental conditions that are likely contributing to elevated adult mosquito activity within the Shore Acres Peninsula, particularly in and around the Otter Creek Preserve, McGid's Pond, and Guion Creek.

Extensive stands of *Phragmites australis* were observed throughout the wetland system. This invasive species is commonly associated with permanently or seasonally saturated soils and dense vegetative growth. The extensive stands of phragmites create sheltered microhabitats that reduce wind movement, limit predator access, and promote the formation of stagnant or slow-moving water, all of which provide favorable resting and breeding habitat for adult mosquitoes.

Despite the exceptionally high number of adult mosquitoes encountered during the investigation, inspectors did not observe mosquito eggs or larvae within the wetland sampling locations on July 27, 2026. On July 28, inspections of sixteen catch basins throughout the Shore Acres Peninsula revealed only minimal mosquito activity, with mosquito larvae identified in only one catch basin. During the course of these inspections, area residents reported that several homeowners have been independently treating nearby catch basins with *Bacillus thuringiensis israelensis* (Bti), which may have contributed to the limited larval activity observed within the stormwater infrastructure.

Mosquito densities at each wetland sampling location were sufficiently high that inspectors sustained numerous mosquito bites despite minimizing exposure. Adult mosquitoes entered the inspection vehicle during each site visit, requiring the vehicle to be ventilated before travel could continue. These observations are consistent with the nuisance complaints received from area residents and demonstrate a significant adult mosquito population within the wetland areas.

A review of historical aerial imagery and GIS mapping was conducted to better understand changes in hydrology between McGid's Pond and Otter Creek. Historic aerial photographs from 1947 indicate that the current pond did not exist and that Otter Creek historically occupied what is now the pond basin. By 1960, aerial imagery showed the construction of a swimming pool within the former creek channel and the presence of an apparent earthen or structural barrier immediately north of the pool, creating what appears to be the present-day pond. These observations suggest that historical alterations to the drainage pattern may have reduced tidal exchange and water circulation within the pond. Additional engineering or hydrologic evaluation would be necessary to confirm this observation.

Field observations indicate that McGid's Pond may currently function as a stagnant, low-oxygen (hypoxic) or anaerobic water body. The pond exhibited dense duckweed coverage, black-colored surface water, continuous gas bubbles rising through bottom sediments, and a pronounced septic or organic odor, all of which are commonly associated with anaerobic decomposition of accumulated organic material.

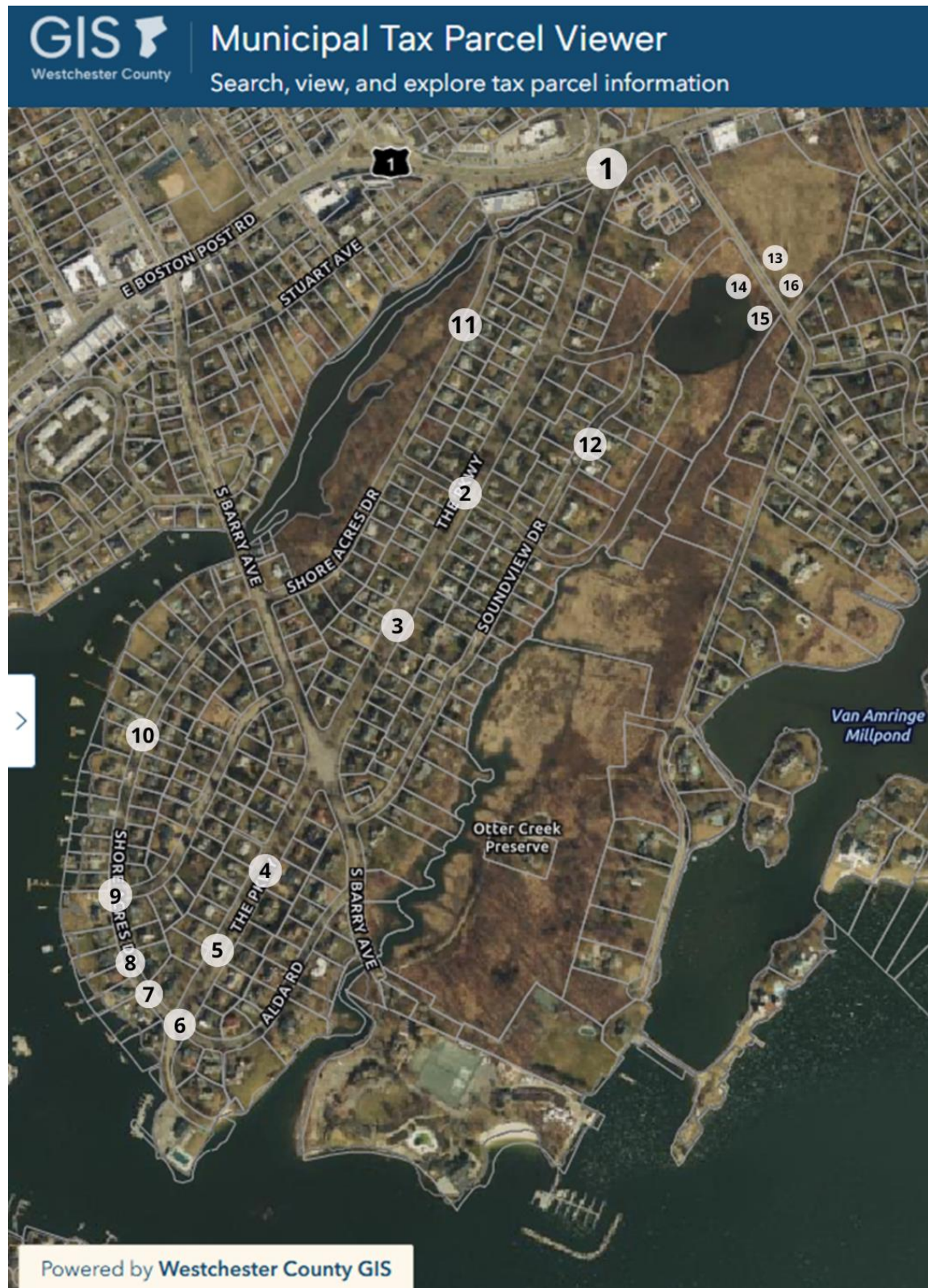
Such environmental conditions may reduce or eliminate fish and other aquatic organisms that naturally prey upon mosquito eggs, larvae, and pupae. During the inspection, no fish, amphibians, reptiles, waterfowl, or aquatic insects were observed within the pond. Mosquito larvae, however, are capable of surviving in oxygen-deficient waters because they obtain atmospheric oxygen through a respiratory siphon at the water's surface. Consequently, stagnant, nutrient-rich wetlands with limited biological predation can continue to support mosquito production even when other aquatic species are absent.

Water samples collected from McGid's Pond, Otter Creek, and the tributary to Guion Creek were submitted for laboratory analysis to further evaluate water quality characteristics, including dissolved oxygen, pH,

sodium, and chloride concentrations. Laboratory results should be interpreted in conjunction with the field observations to better characterize the environmental conditions present within these wetlands.

One catch basin located adjacent to the protected wetland and across from the site of a former landfill was found to contain approximately six feet of standing water. Although only limited mosquito activity was observed during the inspection, the depth and persistent presence of standing water warrant continued monitoring as a potential mosquito habitat.

Catch Basins Inspection Locations



Water Sample and Observation Sites



Sample Site #1 – Wetland Pond









July 27, 2026 10:16 AM



July 27, 2026 11:42 AM





July 27, 2026 11:44 AM

Sign Posted Near Sample Site #2 in Otter Creek Preserve

MOSQUITO TREATMENT

Westchester Land Trust is
undertaking mosquito treatment at
Otter Creek Preserve as of July 1.

We received a NYSDEC permit for the
application of Bti, a naturally occurring
bacterial larvicide, and contracted with a
NYS-licensed applicator.

Thank you for your patience!

Questions? Please contact Janelle Robbins
at janelle@westchesterlandtrust.org.



Westchester Land Trust

July 27, 2026 10:16 AM

Sample Site #3 – Otter Creek







Sample Site #4 Guion Creek









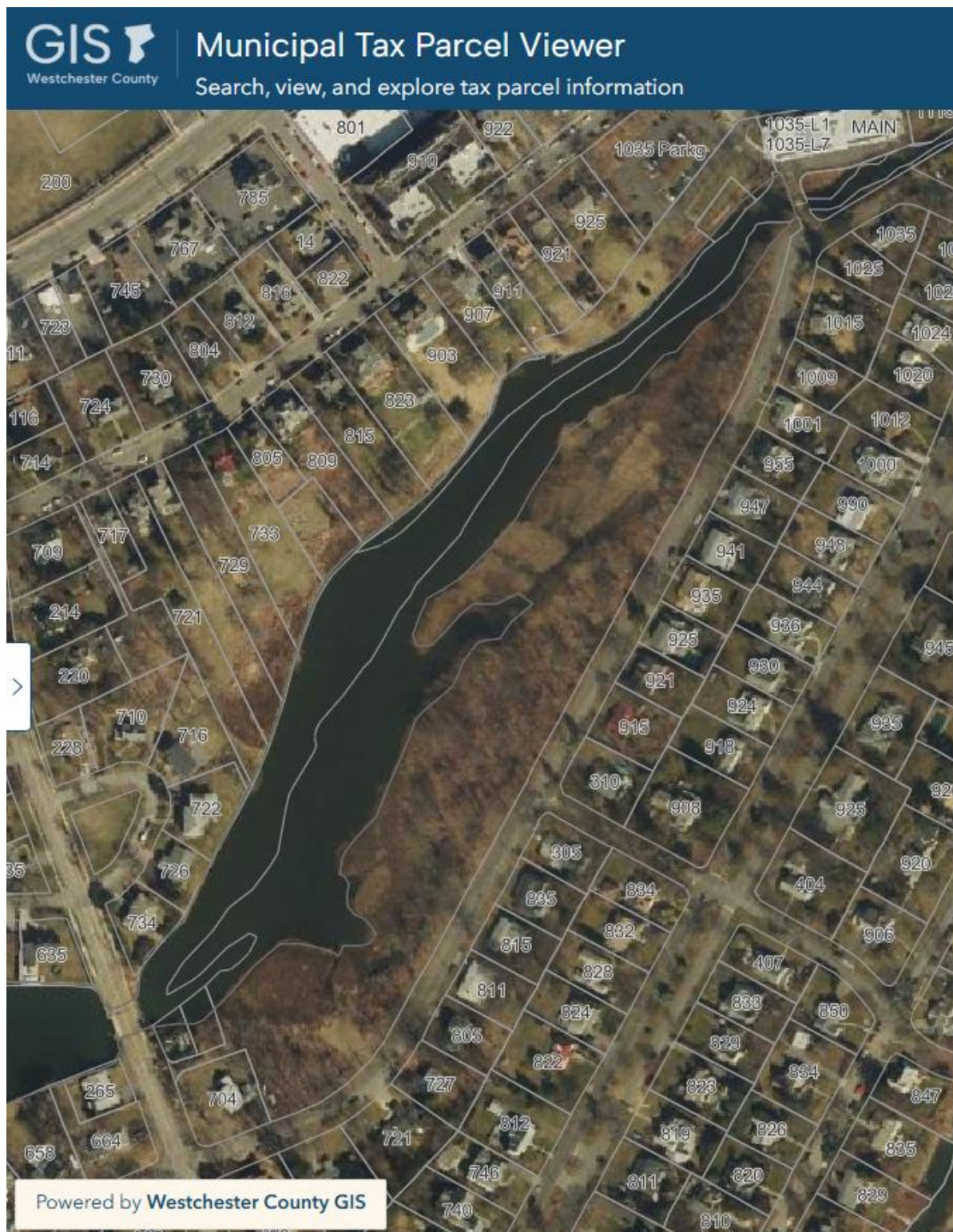






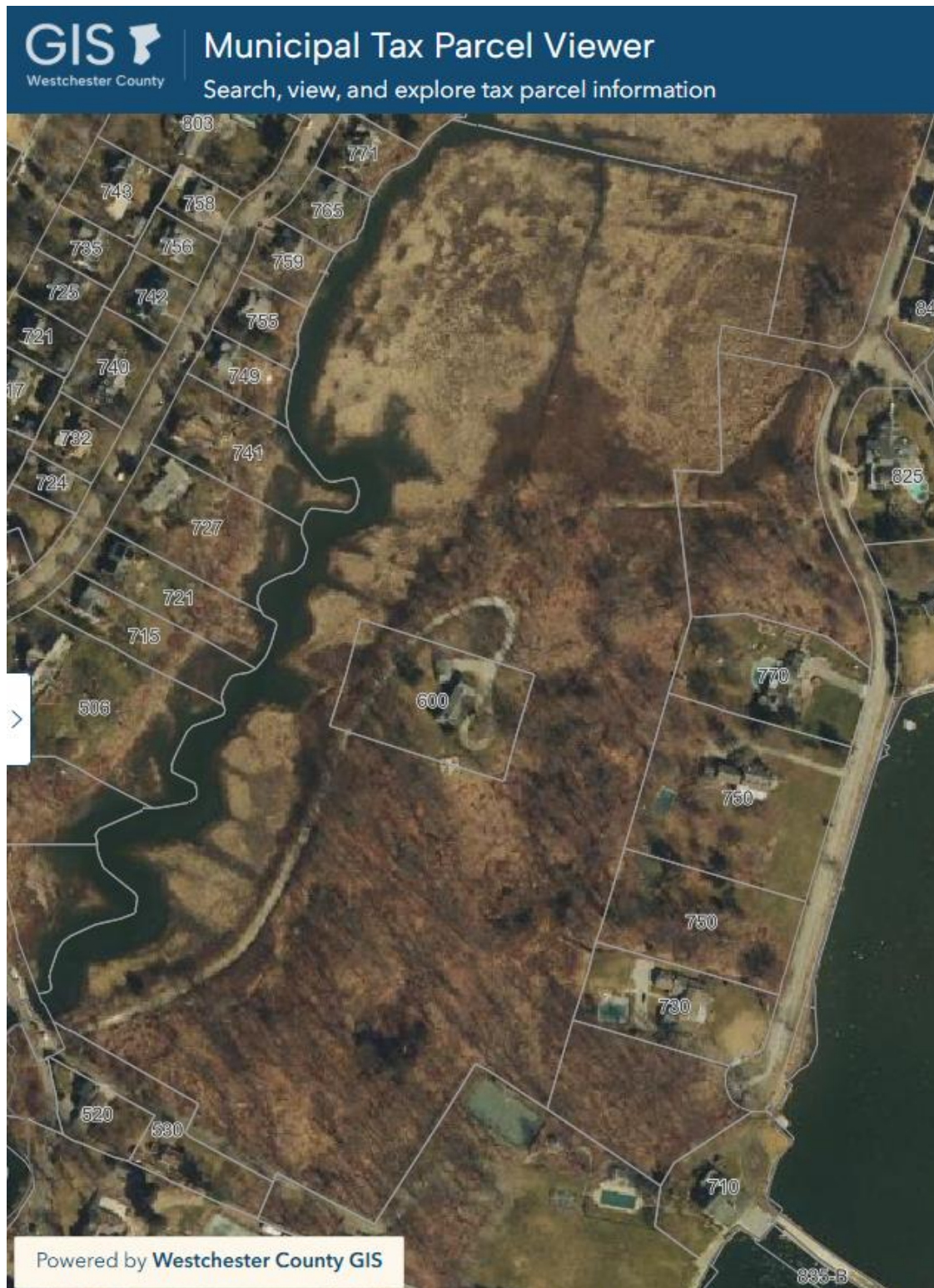


Westchester GIS – Guion Creek – 2023 Satellite View

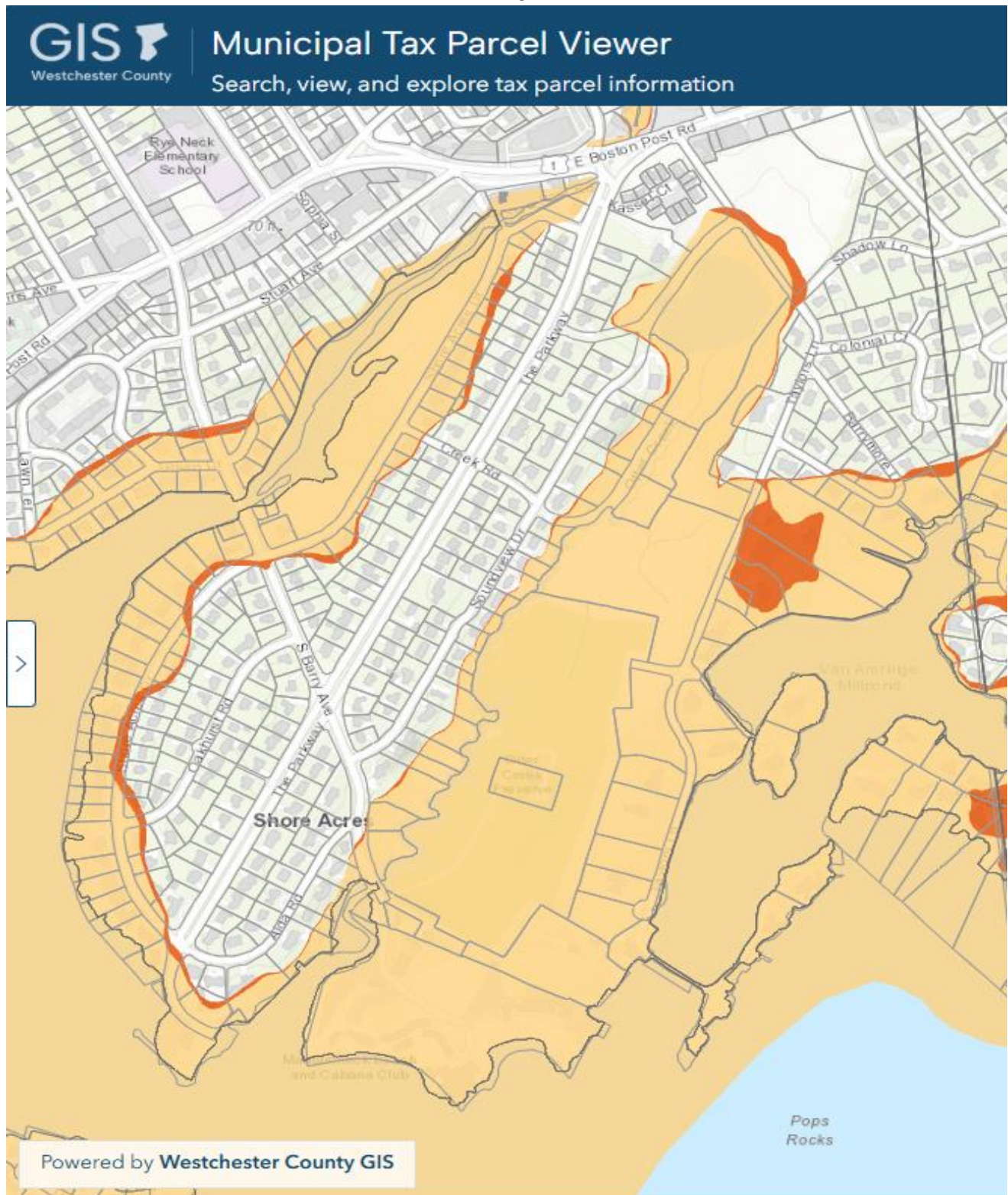


Westchester GIS – Otter Creek Preserve – 2023

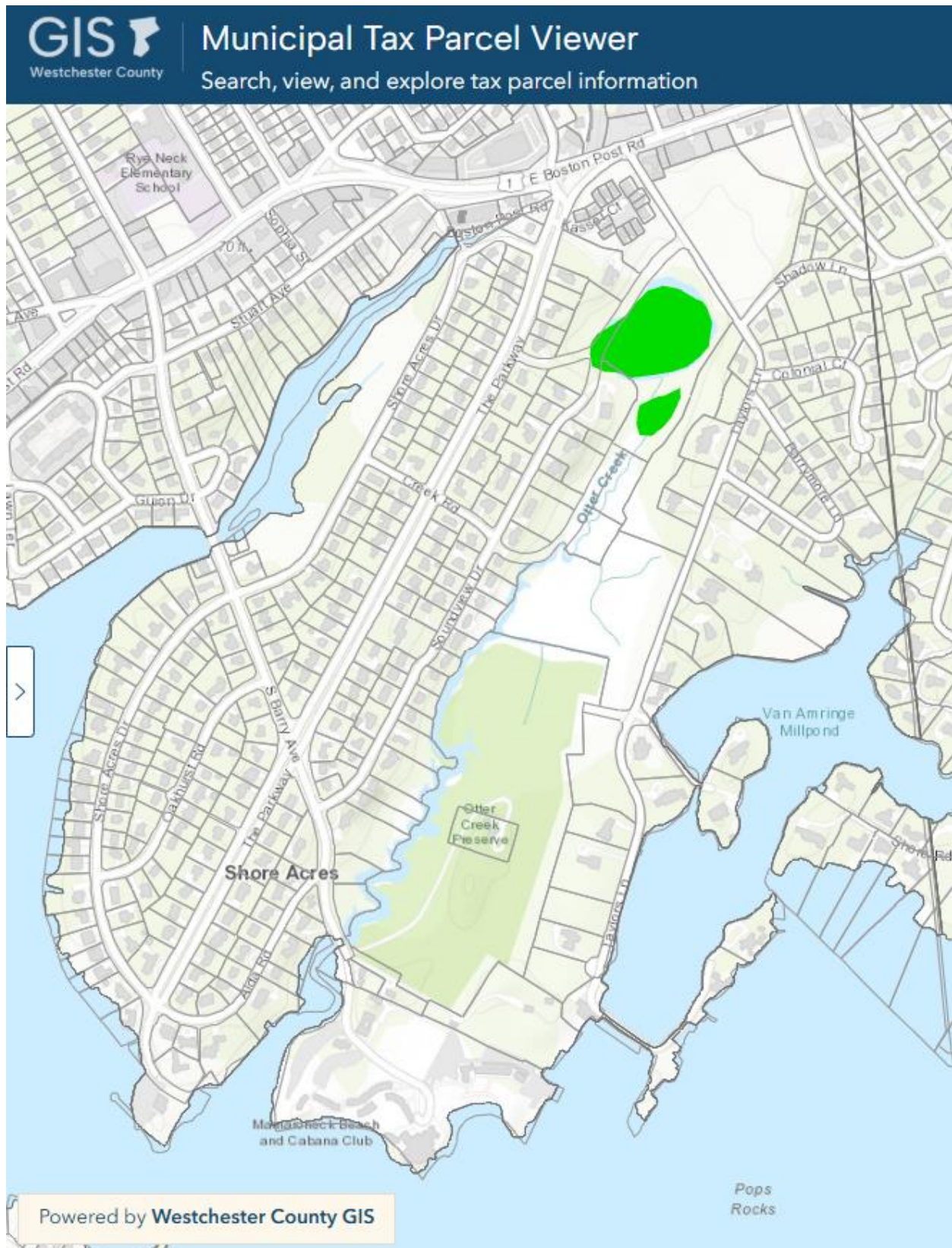
Satellite View



Westchester GIS – Shore Acres Peninsula Floodplain



Westchester GIS - Shore Acres Peninsula Protected Wetland



Westchester GIS - Shore Acres Peninsula Protected Wetland Pond 1960



Westchester GIS - Shore Acres Peninsula

Upper Portion of Otter Creek in 1947 Before Creation of Pond

