Section 3.2: Water Resources

A. INTRODUCTION

This section describes the existing water resources onsite and in the vicinity of the Nation's four properties.

As described more fully in Section 3.6: Living Resources, the four subject properties were inspected by a trained ecologist on June 1st 2006 to document habitat conditions, confirm the presence of water features and wetlands, and to inventory the primary species of vegetation and cover types. The federal regulatory boundaries of onsite wetlands were not field-delineated in accordance with the requirements of the Corps of Engineers Wetlands Delineation Manual (TR Y-87-1). Instead, site inspection noted the presence or absence of wetland conditions meeting the federal vegetation or hydrologic criteria.

As described below, based on the initial site inspection completed for this environmental assessment, wetland conditions occur on the Union Springs and Montezuma properties and immediately adjacent to the Seneca Falls and Springport properties. Some of these areas exhibiting wetland conditions conform to the wetlands mapped by the National Wetland Inventory (NWI).² It is anticipated that these potential wetland areas would likely fall within the jurisdiction of the ACOE. The majority of each of the four subject parcels consists of upland habitat.

B. AFFECTED ENVIRONMENT

SENECA FALLS

TOPOGRAPHY

The topography of the Nation's property in Seneca Falls, as indicated by the 1978 USGS map, is generally level at an elevation of 460 feet above sea level. There are wooded wetlands to the west of the property and to the south, both north and south of Garden Street. Since the parcel is flat, runoff is held by the land onsite and drains to the wet woods to the west. No culvert is known to exist connecting these two offsite wetland areas under Garden Street. However, both sides of the roadway have grassed swales to carry roadway surface flows. Onsite topography is shown in Figure 3.1-1 in Section 3.1 "Land Resources".

3.2-1 May 2009

¹ Available at http://el.erdc.usace.armv.mil/wetlands/pdfs/wlman87.pdf

² Available at http://www.fws.gov/wetlands/Data/Mapper.html.

WATER QUALITY CLASSIFICATION¹

All waters in New York State are assigned a letter classification that denotes their best uses. Best uses include: source of drinking water, swimming, boating, fishing, and shellfishing. The letter classifications and their best uses are described in regulation at 6 NYCRR Part 701, last amended in March of 1998. Standards of the appropriate Type are adopted as needed to protect the best uses of the waters. These standards are in regulation at 6 NYCRR Part 703, last amended in August of 1999.²

There are no mapped, regulated waterbodies on the Nation's property in Seneca Falls. As shown in Figure 3.2-1, the nearest New York State Department of Environmental Conservation (NYSDEC) mapped streams is Class "C", located approximately 200 feet west of the property. Class C streams are not considered New York State protected waterbodies unless they are determined to be navigable. Cayuga Lake, at its closest point, is approximately 800 feet east of the property and is classified as A(T) which means its best use is as a source of water for drinking, culinary or food processing, primary and secondary contact recreation, fishing, and fish propagation and survival. The (T) designates that the water supports a trout population with dissolved oxygen levels and temperatures suitable for trout survival.

MAPPED WETLANDS

Both the NYSDEC and the U.S. Fish and Wildlife Service ("USFWS") have mapped freshwater wetlands in New York State. Those wetlands mapped by NYSDEC are generally 12.4 acres in size or greater, or have other special characteristics warranting their mapping by the State. Once mapped, they are subject to protection under NYS regulations at 6 NYCRR Part 663. The USFWS's National Wetlands Inventory (NWI) has mapped wetlands using aerial photo interpretation regardless of wetland size or regulatory status. NWI mapped wetlands are classified according to differences in vegetation cover and hydrologic characteristics.

The Nation's property in Seneca Falls contains no New York State Freshwater Wetlands ("NYS Wetlands"). As shown in Figure 3.2-1, the nearest NYS Wetland, SF 31, is located approximately 1,000 feet southwest of the subject property. The NYSDEC separates freshwater wetlands into four separate classes that rank wetlands according to their ability to perform wetland functions and provide wetland benefits [6 NYCRR Part 664]. The ability of wetlands to provide benefits depends on their vegetative cover, ecological associations, special features, hydrological and pollution control feature, distribution, and location. Class 1 wetlands have the highest value and Class 4 wetlands have the lowest value. Wetland SF 31 is a Class 2 wetland which means it could contain the following features: a marsh in which purple loosestrife and reed constitutes less than two-thirds of the covertype; two or more wetland structural groups; location adjacent to or contiguous to streams classified as C(T) or higher; habitat of an animal species vulnerable in the state; or supporting animal species in abundance or diversity unusual for the county in which it is found.

The Nation's property in Seneca Falls contains no wetlands mapped by the National Wetlands Inventory Wetlands ("NWI Wetlands"). As shown in Figure 3.2-2, NWI maps indicate that the

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¹ NYSDEC mapped streams and wetlands can be viewed using the Environmental Resource Mapper at http://www.dec.ny.gov/imsmaps/ERM/viewer.htm.

² 6 NYCRR regulations are available at http://www.dec.ny.gov/regulations/regulations.html.

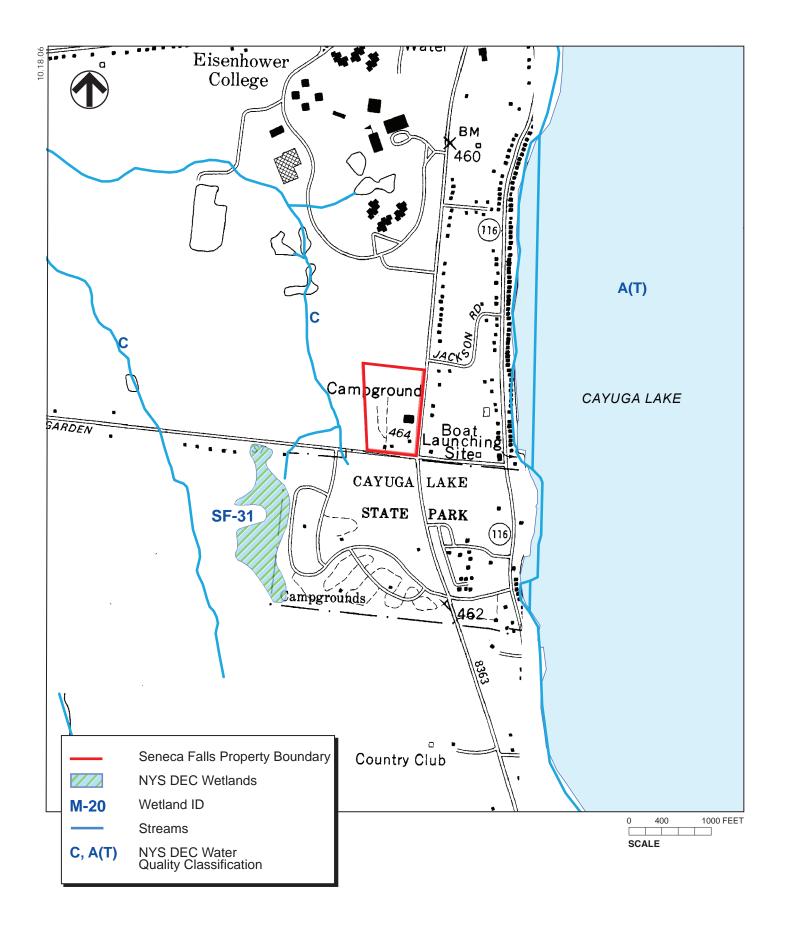
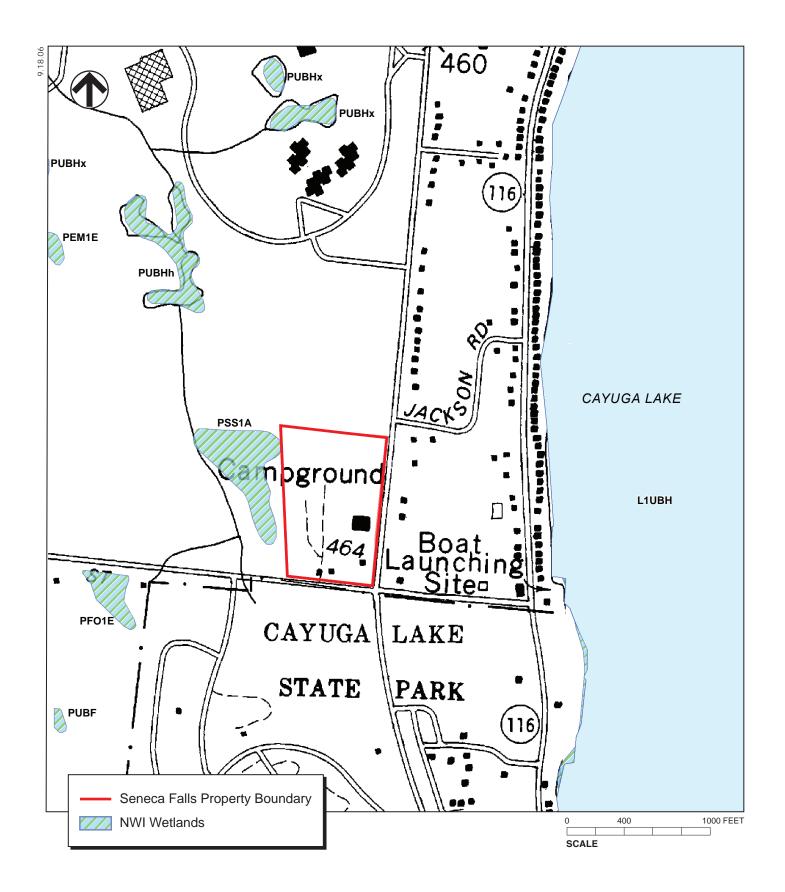


Figure 3.2-1
Seneca Falls NYS DEC
Mapped Streams and Wetlands



wetland bordering the subject parcel to the west is a PSS1A wetland - meaning a palustrine, scrub-shrub, broad-leaved deciduous, temporarily flooded wetland. Site inspection confirms this wetland type, and finds that it is developing to a more mature, forested wetland over time. The vegetation composition of this adjacent wetland area is described in Section 3.6: Living Resources. The boundary of this wetland may extend onto the subject property to a small degree. A formal wetland delineation and federal jurisdictional determination would be necessary to verify its extent on the project site and its regulatory status pursuant to Section 404 of the Clean Water Act. As with all four subject properties, a federal wetland delineation would be required in the future if any land disturbance/development activity is proposed.

UNION SPRINGS

TOPOGRAPHY

The topography of the Nation's property in Union Springs, as indicated in the 1978 USGS topographic map, slopes to the west toward Cayuga Lake with a depression around the two ponds on the property. The highest point is at the eastern border of the property adjacent to Route 90 with an elevation of 450 feet above sea level. The lowest point is at the western border of the property with an elevation of 400 feet above sea level. Surface runoff generally flows west toward Cayuga Lake and also flows westward along the northern property boundary in a depression occupied by hedgerow habitat. Onsite topography is shown in Figure 3.1-2 in Section 3.1 "Land Resources".

WATER QUALITY CLASSIFICATION

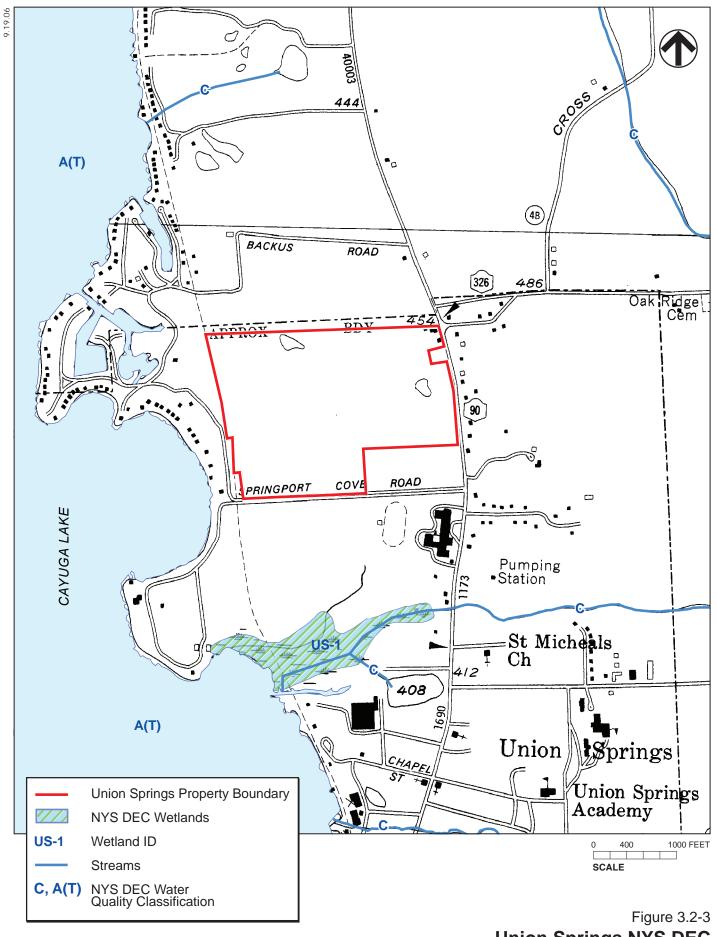
There are no NYSDEC mapped streams or waterbodies on the Nation's property in Union Springs. As shown in Figure 3.2-3, the two nearest NYSDEC mapped streams are class "C", located approximately 1/4 mile south of the property. These streams are suitable for fishing, fish propagation and survival, and primary and secondary contact recreation, but uses could be restricted due to intermittent flow and other factors. Cayuga Lake, at its closest point, is approximately 500 feet west of the property and is classified as A(T) which means its best use is as a source of water for drinking, culinary or food processing, primary and secondary contact recreation, fishing, and fish propagation and survival. The (T) designates that the water supports a trout population with dissolved oxygen levels and temperatures suitable for trout survival.

MAPPED WETLANDS

As shown in Figure 3.2-4, there are two open water pond features within the Union Springs property, one on the north side of the property and one on the eastern side of the property. Both are mapped by the National Wetlands Inventory (NWI) as PUBHx - palustrine, unconsolidated bottom, permanently flooded, excavated wetlands. Site inspections verify the location and condition of these wetlands, likely created through excavation for farming purposes. As described in Section 3.6: Living Resources, the more northerly NWI-mapped wetland pond is located adjacent to an unmapped wooded wetland stream. In addition, the westernmost portions of the Union Springs property contain areas dominated by facultative wetland trees and shrubs. These two regions exhibiting wetland vegetation are not mapped by the NWI but may contain federally regulated wetland pursuant to Section 404 of the Clean Water Act. Nevertheless, the

3.2-3 May 2009

¹ Available at http://www.gpoaccess.gov under 33 USC 1344.



Union Springs NYS DEC Mapped Streams and Wetlands

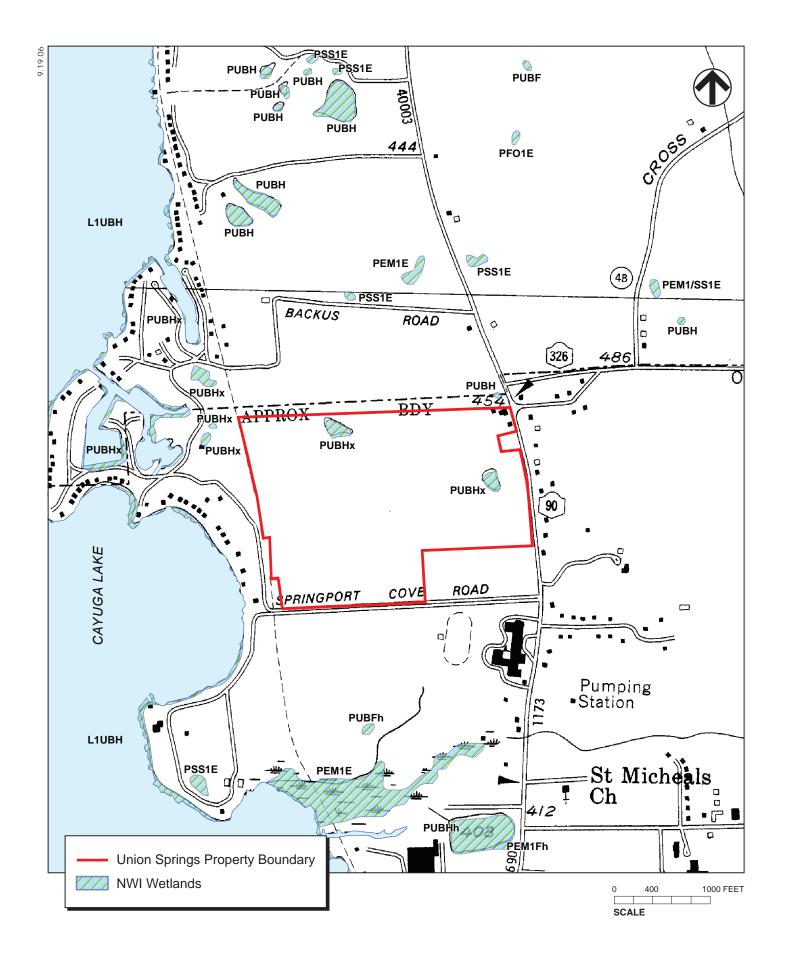


Figure 3.2-4 **Union Springs NWI Mapped Wetlands**

vast majority of the Union Springs property, including the open field conditions that predominate throughout, consists of upland habitat.

No NYS Wetlands occur on the project site. As shown in Figure 3.2-3, NYS Wetland US-1 lies south of Union Springs High School, approximately ½ mile from the Nation's property. This Class 2 wetland runs from Route 90 west all the way to the shore of Cayuga Lake.

SPRINGPORT

TOPOGRAPHY

The topography of the Nation's property in Springport, as indicated in the 1978 USGS topographic map, slopes gradually to the west toward Cayuga Lake. The highest elevation is between 420 and 430 feet closest to Route 90 and the lowest is between 390 and 400 feet above sea level. Surface water runoff flows west towards Cayuga Lake. Onsite topography is shown in Figure 3.1-3 in Section 3.1 "Land Resources".

WATER QUALITY CLASSIFICATION

There are no NYSDEC mapped water bodies located within the Nation's property in Springport. There is one NYSDEC mapped stream nearby as shown in Figure 3.2-5. This stream is a Class "C" waterbody which means it is suitable for fishing, fish propagation and survival, and primary and secondary contact recreational uses. This stream flows northwest and then west into Cayuga Lake, approximately 1,000 feet north of the property. Cayuga Lake, located 600 feet northwest of the property, is classified as A(T) which means its best use is as a source of water for drinking, culinary or food processing, primary and secondary contact recreation, fishing, and fish propagation and survival. The (T) designates the water as supporting trout populations with dissolved oxygen levels and temperatures suitable for trout survival.

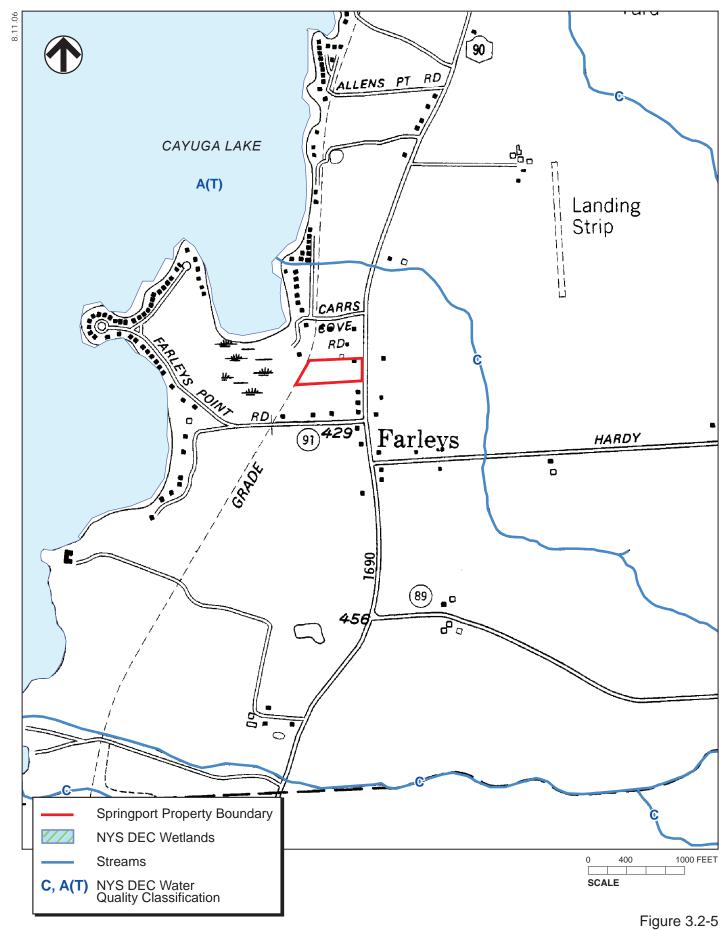
MAPPED WETLANDS

There are no NYS Wetlands or NWI Wetlands mapped on the Nation's property in Springport. West of the Springport property, across from the dirt access road marking the site's western boundary, mapped wetlands occur. As shown in Figure 3.2-6, the NWI has mapped these offsite wetlands as Palustrine Forested (PFO1E) and Palustrine Scrub-Shrub (PSS1E) wetlands both seasonally flooded and saturated. These mapped wetlands are located within and south of Carr's Cove. A small portion of the mapped scrub-shrub wetland extends into the western edge of the subject property itself. However, this area is currently cleared of vegetation, has been maintained as lawn for some time, and is separated from the bulk of the wetland to the west by the dirt access roadway defining the property's western boundary. As such, it is unlikely to constitute federally regulated wetland pursuant to Section 404 of the Clean Water Act.

MONTEZUMA

TOPOGRAPHY

The topography of the Nation's property in Montezuma, as indicated in the 1978 USGS topographic map, is mostly level at approximately 400 feet above sea level. The property slopes slightly upward to the southeast. The NYS Thruway (I-90) runs along the southern border of the property and has a higher elevation than the surrounding land. As a result, surface-water runoff



Springport NYS DEC Mapped Streams and Wetlands

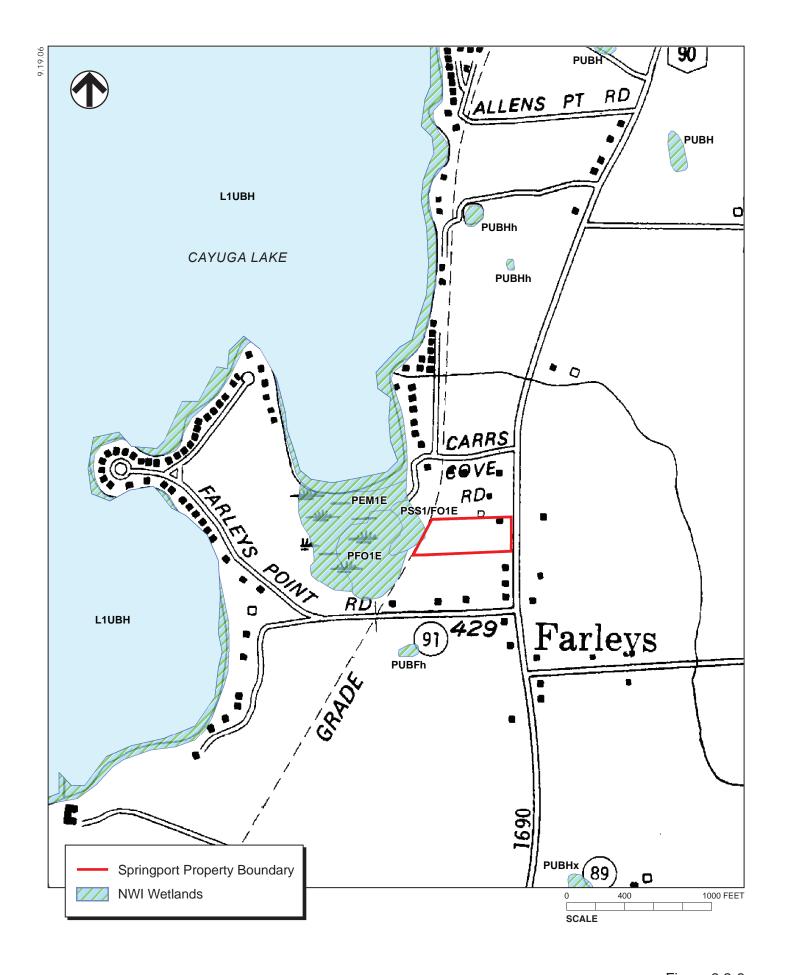
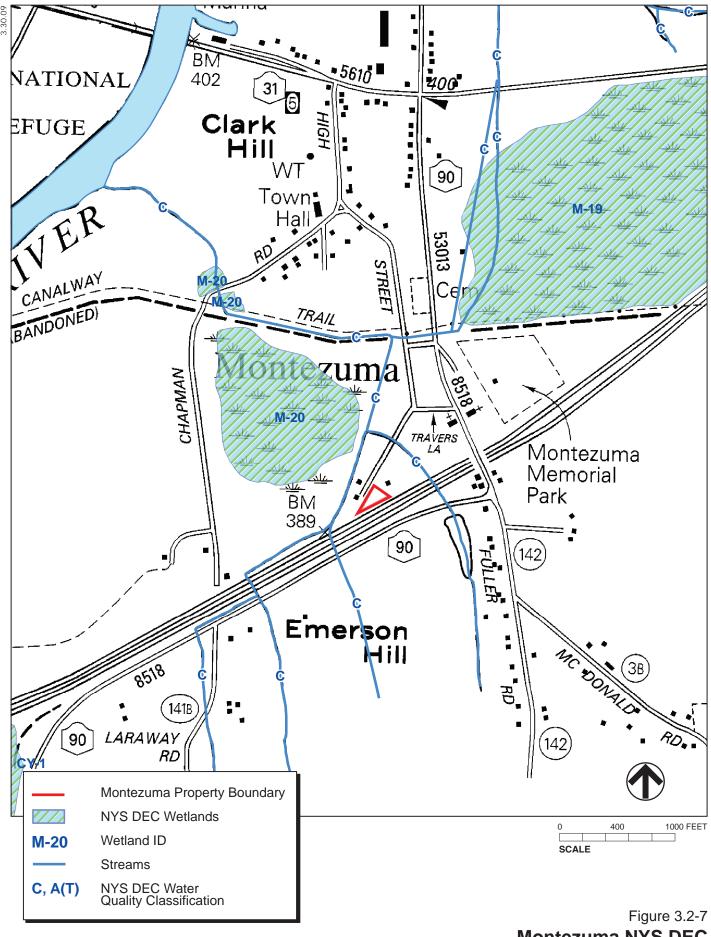


Figure 3.2-6 **Springport NWI Mapped Wetlands**



travels away from the Thruway in a northwesterly direction. Onsite topography is shown in Figure 3.1-4 in Section 3.1 "Land Resources".

WATER QUALITY CLASSIFICATION

The Montezuma site contains no mapped streams or waterbodies. There are three NYSDEC mapped streams in the immediate vicinity (within 500 feet) of the Nation's property in Montezuma, as shown in Figure 3.2-7. These Class "C" streams originate south of the Montezuma property, traverse Intersate-90 (New York State Thruway), and connect with the abandoned Cayuga-Seneca canal way north of the Nation's property. The streams also contribute to the large NYS Wetland M-20, also north of the Nation's Montezuma property. The abandoned canal running near the property also has a water classification of C. The best use of Class C waters is fishing and for fish propagation and survival. The water is also suitable for primary and secondary contact recreation, but other factors could limit its use for these purposes.

MAPPED WETLANDS

There are no NYS Wetlands or NWI Wetlands mapped on the Nation's Montezuma property itself. The subject property is generally higher in elevation than the system of wetlands in and around the Montezuma Marsh in the site environs. As shown in Figure 3.2-8, NWI Wetlands mapped as palustrine forested, broad leaved deciduous, seasonally flooded, saturated (PFO1E) occur to the north. The nearest NYS Wetland, M-20, is immediately north of High Road, across the street from the property, as shown in Figure 3.2-7. Also located in proximity to the subject property is NYS Wetlands M-19. Both are Class 2 wetlands that are part of the historic marsh system bordering the Seneca River and its meandering tributaries at the north end of Cayuga Lake.

A small portion of the Montezuma property adjacent to High Street contains facultative wetland plants as described in Section 3.6: Living Resources. This area is separated from the adjacent offsite wetlands by the roadway, but may be regulated at the federal level pursuant to Section 404 of the Clean Water Act. However, the majority of this property consists of upland habitat.