

A. INTRODUCTION AND METHODOLOGY

This chapter analyzes potential impacts to wetlands, surface waters, primary/principal aquifers, and flooding. Published maps of potential federal- and State-mapped wetlands, streams, floodplains, and aquifers were examined. In addition, a presence/absence field inspection was conducted within areas of the Project Site proposed for redevelopment by a trained wetland ecologist.

REGULATORY CONTEXT*WETLANDS AND STREAMS*

Surface water resources and wetlands are subject to a number of federal, State, and local laws. Disturbance to regulated wetlands and waters, or their regulated adjacent areas (buffers), requires permitting from the regulating agencies. The purpose of wetland and stream regulation is to protect their unique functions and values. Wetlands, streams and their associated buffers absorb stormwater runoff and improve water quality. Many species of plants and animals are endemic to wetlands, and many additional animals rely on wetlands as a source of food, shelter, or breeding habitat.

Wetlands, streams, and other surface water resources are regulated at the federal level by the USACE if they meet the criteria of “waters of the United States,” pursuant to Section 404 of the Clean Water Act (33 U.S.C. § 1344) and its implementing regulations. Wetlands are defined at the federal level as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas” (33 CFR § 328.3(b)).

The New York State Department of Environmental Conservation (NYSDEC) regulates freshwater wetlands and streams that have been mapped and classified by the State. The Protection of Waters Permit Program (Article 15, Title 5 of the NYS Environmental Conservation Law [ECL]) regulates disturbance to surface waters and streams including construction, reconstruction, or repair of dams and other impoundment structures, docking and mooring facilities, and excavation or placement of fill in navigable waters. The NYSDEC also regulates State-mapped freshwater wetlands in accordance with the State’s Freshwater Wetlands Act (Article 24 of the ECL) and its implementing regulations (6 NYCRR Part 663). The Act protects those wetlands larger than 12.4 acres (5 hectares) in size, and certain smaller wetlands of unusual local importance. A permit is required for activities that would alter wetlands or lands within the 100-foot wetland adjacent area.

The City of Saratoga Springs does not have a municipal wetland or stream protection ordinance.

AQUIFERS AND FLOODPLAINS

“Sole Source Aquifer” designation is a tool to protect drinking water supplies in areas with few or no alternative sources to the ground water resource. The designation protects an area's ground water resource by requiring the US Environmental Protection Agency (EPA) to review all proposed projects within the designated area that will receive federal financial assistance. EPA defines a sole or principal source aquifer as one that supplies at least fifty percent (50%) of the drinking water consumed in the area overlying the aquifer. These areas can have no alternative drinking water source(s) that could physically, legally, and economically supply all those who depend upon the aquifer for drinking water (42 U.S.C. § 300 et seq.).

In order to enhance regulatory protection in areas where groundwater resources are most productive and most vulnerable in New York, in 1980 the Department of Health identified 18 Primary Water Supply Aquifers (also referred to simply as “Primary Aquifers”) across the state. These are defined in the Division of Water Technical & Operational Guidance Series (TOGS) 2.1.3 as “highly productive aquifers presently utilized as sources of water supply by major municipal water supply systems.” Another category designated by New York State is “Principal Aquifers.” These are “aquifers known to be highly productive or whose geology suggests abundant potential water supply, but which are not intensively used as sources of water supply by major municipal systems at the present time.”

The National Flood Insurance Program (NFIP) is overseen by the Federal Emergency Management Agency (FEMA). Flood-prone areas are mapped for several purposes: to regulate new flood prone construction; for flood insurance policy rating purposes; and to determine when flood insurance must be purchased as a condition of a loan or financial assistance. In addition to mapping flood prone areas, floodplain management includes requirements for zoning, subdivision or building, and special-purpose floodplain ordinances at the local level (42 U.S.C. § 50 et seq). The City of Saratoga Springs regulates areas subject to flooding in Chapter 120: Flood Damage Prevention of the City Code.

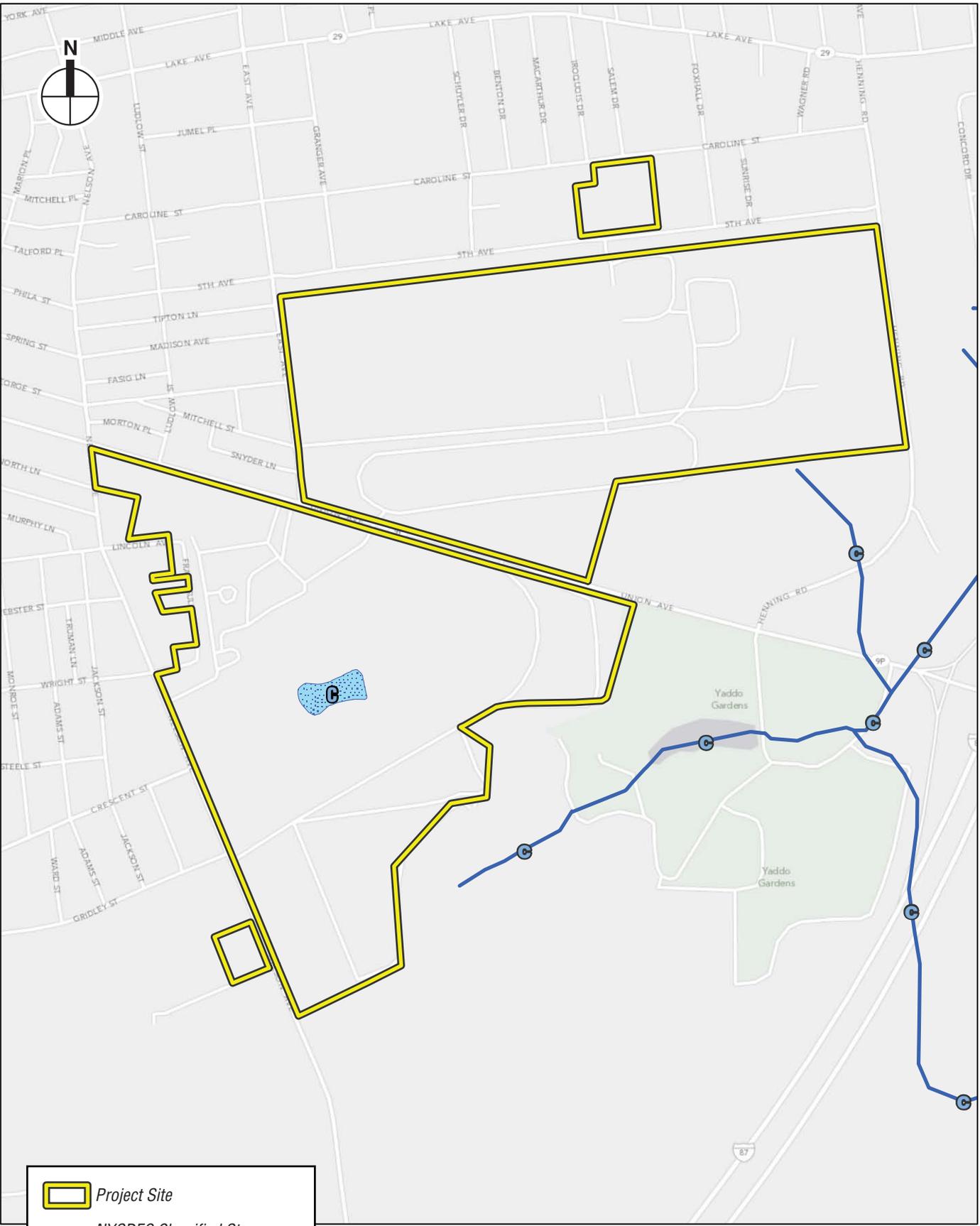
PRINCIPAL CONCLUSIONS

The Proposed Project is not expected to result in any modifications to the existing artificial pond located in the Main Race Course Infield subarea within the Saratoga Race Course’s Frontside and no potential disturbance or new building construction is proposed in the easternmost portion of the Project Site where wetlands are mapped by U.S. Fish and Wildlife Service’s National Wetlands Inventory (NWI). Further, it is expected that all stormwater practices can be located and constructed onsite without disturbance to onsite wetlands. Since the Proposed Project is not expected to result in disturbance to onsite surface water resources or wetlands, and no Sole Source, Primary or Principal Aquifers, or mapped 100-year or 500-year floodplains occur onsite or in the vicinity, the Proposed Project would not be expected to adversely affect surface water resources or wetlands. In addition, the proposed development would not divert existing flows away from wetland areas.

B. EXISTING CONDITIONS

SURFACE WATERS

As shown in **Figure 6-1**, the water feature located in the Main Race Course Infield subarea within the Saratoga Race Course’s Frontside is designated as a Class “C” water body by New



NYSDEC Classified Water
Figure 6-1

York State. It is approximately 1.62 acres in size. The State has indicated that the best usage of Class C waters is fishing, and that they shall be suitable for fish, shellfish, and wildlife propagation and survival, and for primary and secondary contact recreation, although other factors may limit the use for these purposes. The onsite pond is a water feature used for capturing and managing the quality and quantity of a portion of the stormwater runoff from the site. It discharges subsurface in piped conveyances to the east, eventually contributing to the wetlands and streams located on the adjacent Yaddo property offsite. Within the adjacent Yaddo property, an unnamed stream classified by NYSDEC as Class “C” conveys surface runoff eastwards to Spring Run creek, which is eventually tributary to Saratoga Lake and the Hudson River.

Class “C” water bodies that are not considered ‘navigable’ by the State are not subject to the NYSDEC Protection of Waters Program (Article 15 of the ECL). Therefore, disturbance to the bed/banks of such streams to a distance of 50 feet from the high-water mark is not regulated at the State level. However, direct disturbance to these water bodies would be regulated by the US Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (33 U.S.C. § 1344).

AQUIFERS

SOLE SOURCE AQUIFERS

The closest mapped Sole Source Aquifer to the Project Site is the Schenectady-Niskayuna Sole Source Aquifer, which is centered between the Alplaus and Mohawk Rivers between East Glenville and Schenectady (see **Figure 6-2**). The portion of this mapped aquifer closest to the Project Site is roughly 8 miles to the southwest. No sole source aquifers underlie the Saratoga Race Course site. Therefore, this federal groundwater protection program does not apply to the Proposed Project.

PRIMARY AND PRINCIPAL AQUIFERS IN NEW YORK STATE

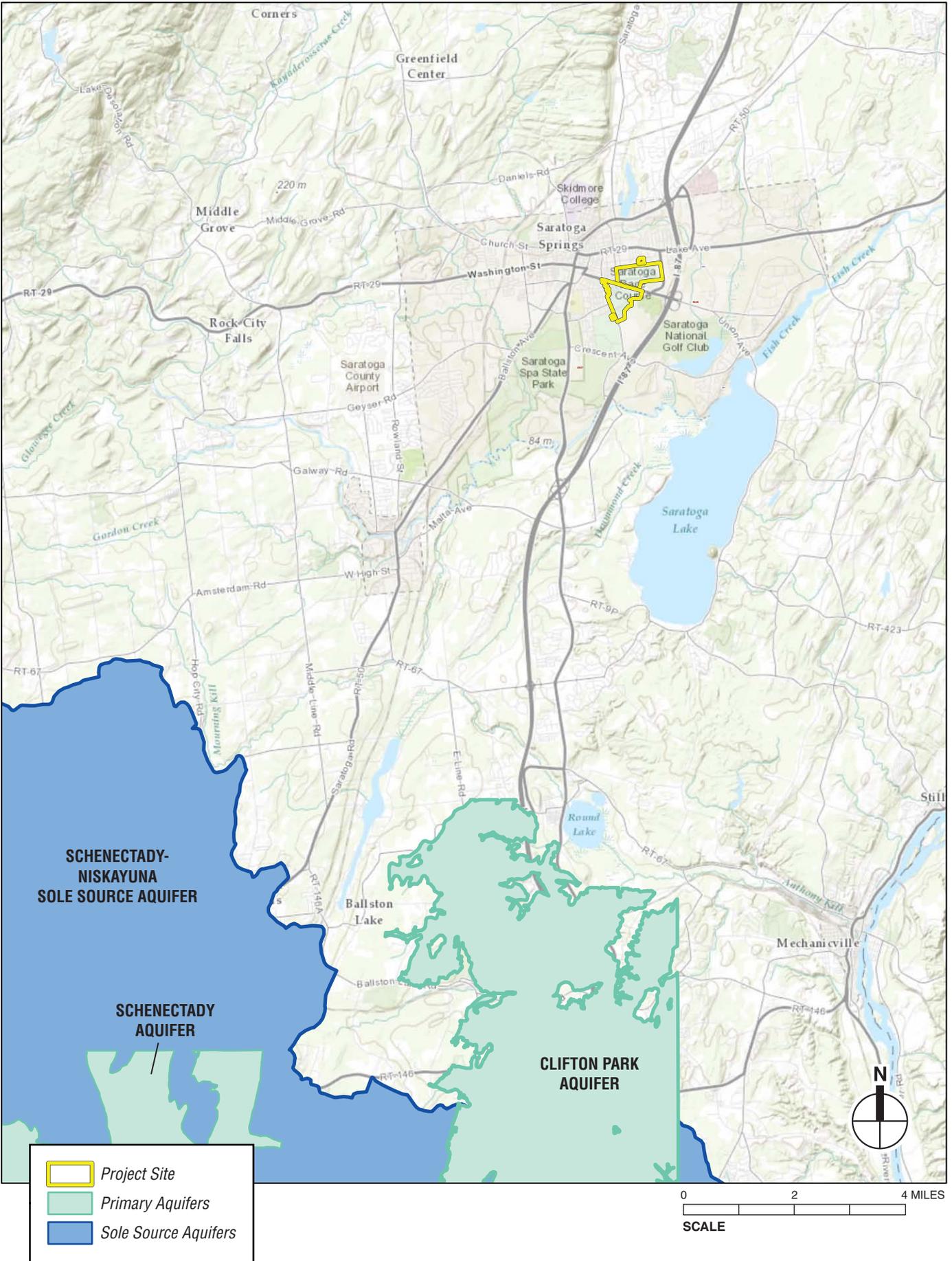
The Clifton Park Primary Aquifer is located approximately 10 miles south of the Saratoga Race Course. No primary or principal aquifers underlie the Saratoga Race Course site. Therefore, this New York State groundwater protection program does not apply to the proposed project.

As discussed in Chapter 8, “Water Supply,” the Saratoga Race Course site obtains its drinking water from the City of Saratoga through fifteen (15) metered connections. The City receives its water from three sources; surface water from the Loughberry Lake Watershed and ground water from the Geyser Crest and Interlaken well systems. These are not within the mapped boundaries of the Schenectady-Niskayuna Sole Source or the Clifton Park Primary aquifer.

FLOODPLAINS

The Project Site is not within a FEMA-mapped 100-year or 500-year floodplain. The closest regions of mapped 100-year floodplain are located within the Spring Run Valley, approximately one-half mile north of the Project Site, and within Kayaderosseras Creek/Bear Swamp valley located three-quarters of a mile southeast of the Project Site. Therefore, the NFIP and the City of Saratoga Spring’s local flood management regulations do not apply to the Project Site.

Source: US Environmental Protection Agency



Primary and Sole Source Aquifers
Figure 6-2

WETLANDS

The U.S. Fish and Wildlife Service National Wetlands Inventory (NWI) mapped three (3) wetlands on the Project Site.¹ One site is the artificial open water pond within the Main Race Course Infield, which is unvegetated and maintained as an aesthetic amenity and stormwater retention pond. In addition, within the undeveloped eastern portion of the Project Site (in a subarea of the Backstretch known as the Lowlands), NWI has mapped two forested wetlands. **Figure 6-3** shows the location of these three potential federal wetlands on the Project Site. The classification of these wetland areas is as follows:

- PUSCh: palustrine unconsolidated shore, seasonally flooded, diked/impounded
- PFO1E: palustrine forested, broad-leaved deciduous, seasonally flooded/saturated
- PFO4E: palustrine forested, needle-leaved evergreen, seasonally flooded/saturated

Site inspection confirms the location of these three wetlands on the Project Site. No other wetland or potentially regulated wetland areas occur within the portions of the Project Site for which physical changes are proposed.

Drainage from these onsite wetlands flows eastward, following the surface topography, which descends towards the adjacent, wooded Yaddo property. From the Yaddo property, unnamed streams convey surface runoff to Bear Swamp and Spring Run east of site. Bear Swamp is a large wetland system through which Kayaderosseras Creek conveys surface water to Saratoga Lake, which in turn is ultimately tributary to the Hudson River. Bear Swamp is mapped as NYSDEC Wetland Q-11, and is therefore subject to State Freshwater Wetlands regulation (Article 24 of the ECL). However, this wetland is entirely offsite. No NYSDEC-mapped wetlands or regulated adjacent areas occur on the Project Site.

Recently, NYRA was required to implement onsite and offsite mitigation for stormwater impacts to the adjacent Yaddo property. Through an agreement with the USACE, NYRA created a stormwater pond system on the Yaddo property to handle runoff and capture silt from the Saratoga Race Course. In addition, NYRA built earthen dams with geotextile fabric and created zones to dewater sediment dredged from the Yaddo pond systems all for the purpose of managing stormwater and mitigating past disturbance. Lastly, one acre of wetland mitigation (wetland creation) was required to be built on the Race Course property. These mitigation actions occurred between 2010 and 2013, and are not part of the Proposed Project.

C. FUTURE WITHOUT THE PROPOSED PROJECT

In the future without the Proposed Project, no changes to the onsite wetlands and watercourses are expected to occur.

D. PROBABLE IMPACTS OF THE PROPOSED PROJECT

NWI mapped wetlands occur at the center of the Main Race Course Infield and in the easternmost portions of the property. No modifications are proposed to the Infield pond and no disturbance or new building construction is proposed in the easternmost portion of the Project Site where wetlands are mapped by the NWI. As the site-specific stormwater management

¹ The NWI maps do not show the boundaries of federally regulated wetlands. Rather, they are indicator maps. The boundaries of federally-regulated wetlands must be field verified.



	Project Site
NWI Wetland	
	Freshwater Emergent Wetland
	Freshwater Forested/Shrub Wetland
	Freshwater Pond
	Other



National Wetland Inventory
Mapped Wetlands
Figure 6-3

infrastructure is designed and located for each component of the Proposed Project, the effects to onsite wetlands would be revisited on a phase-by-phase basis. This work may require a federal wetland delineation performed in accordance with USACE requirements to demarcate the boundaries and avoid impacts and the need for permitting. However, based on the conceptual building locations and the locations of NWI-mapped wetlands, it is expected that all stormwater practices can be located and constructed onsite without disturbance to, and indirect impacts on, wetlands.

AQUIFERS AND FLOODPLAIN IMPACTS

No Sole Source, Primary or Principal Aquifers, or mapped 100-year or 500-year floodplains occur onsite or in the vicinity. Therefore, the Proposed Project would have no impact to these resources.

MITIGATION

It is not expected that any direct (fill) or indirect (water quality) impacts to onsite or offsite wetlands and waters would occur with the Proposed Project. All areas of new building and new impervious surfaces would provide for stormwater runoff treatment within new management practices, as described in Chapter 7, “Stormwater Management.” In this way, indirect water quality impacts to onsite and offsite waters and wetlands would be avoided. *