Westchester Joint Water Works

State Environmental Quality Review Act Findings

Rye Lake Filtration Plant
Purchase Street, Harrison, New York

Westchester Joint Water Works
1625 Mamaroneck Ave
Mamaroneck, NY 10543
(914) 698-3500

Date Adopted: October 12, 2022

1. SUMMARY AND INTRODUCTION

This Statement of Findings is issued by Westchester Joint Water Works ("WJWW") pursuant to the State Environmental Quality Review Act ("SEQRA"), N.Y. Environmental Conservation Law Article 8, and its implementing regulations codified at Title 6 of the New York Code of Rules and Regulations Part 617 (the "SEQRA Regulations") with respect to the Rye Lake Filtration Plant proposed to be located on Purchase Street in Harrison, New York (the "Project") and related actions after consideration of the Final Environmental Impact Statement approved on September 28, 2022 (the "FEIS"). The Project and the related actions are collectively referred to as the "Proposed Action." WJWW is the lead agency for the Proposed Action under SEQRA.

The Draft Environmental Impact Statement accepted on April 12, 2022 (the "DEIS") and the FEIS are incorporated herein by reference.

2. PROCEDURAL HISTORY

The chronology of the SEQRA review process is as follows:

1/12/21	Lead Agency Declared/Positive Declaration Issued
3/23/21	Draft Scope Adopted
4/13/21	Public Scoping Session Held on Draft Scope
5/10/21	Public Comment Period Closed on Draft Scope
10/26/21	Final Scope Adopted
4/12/22	DEIS Accepted as Adequate and Complete for Public Review
5/26/22	Public Hearing Held on DEIS
6/6/22	Public Comment Accepted on DEIS
9/28/22	FEIS Accepted as Complete

3. PROJECT DESCRIPTION

The Proposed Action includes the construction and operation of a 30 million gallon per day ("MGD") Dissolved Air Flotation/Filtration ("DAFF") plant ("filtration plant" or "plant") for WJWW's nearby Rye Lake water source. The plant is necessary to maintain the health and safety of WJWW customers and to comply with a United States Environmental Protection Agency ("USEPA") Administrative Order, a New York State Supreme Court Order, and the USEPA and New York State Sanitary Code surface water filtration requirements. The filtration plant would use enhanced coagulation to remove disinfection byproduct precursors of total trihalomethanes ("TTHM") and haloacetic acids ("HAA5") and would give WJWW more control over the removal of these chemicals to routinely comply with the USEPA's Stage 2 Disinfectants and Disinfection Byproducts Rule Maximum Contaminant Levels ("MCLs").

The plant would have the capacity to filter the maximum day water supply demand of WJWW's entire water distribution system. The Proposed Action would include the construction of the filtration plant building, driveway, parking lot, installation of supporting ancillary facilities, utilities including water and sewer, and stormwater management features on 13.4-acres of land (the "Project Site") currently owned by Westchester County and managed by the Westchester County Airport. The sewer line for the Project would tie into the airport collection system on Westchester County Airport property pursuant to an easement that would be granted by the County. As proposed, the filtration plant would be designed to treat water pumped from the Rye Lake Pump Station ("RLPS") and to supply finished water to the Purchase Street Storage Tanks. The Project Site would be accessed from Purchase Street, also known as Route 120 and would require relocation of the existing Airport secondary fence line separating the Project Site and Westchester County Airport. The filtration plant building would be less than one acre. Proposed impervious features, including the plant building, a driveway, parking lot, walkways and supporting utilities and ancillary facilities, would total approximately 2.4 acres.

As part of the Proposed Action, WJWW would acquire the 13.4-acre Project Site, which is currently part of the Westchester County Airport property, from Westchester County. The County has advised WJWW that the best course of action would be a proposed equal land swap to result in no net loss of airport property. The 13.4-acre parcel of land for the filtration plant would be apportioned from the County Airport property and deeded to WJWW in exchange for WJWW deeding a contiguous 13.4-acre parcel (Parcel ID 0961.1 and Exchange Parcel) in its ownership to the County for incorporation into the airport property.

3.1. PROJECT BACKGROUND, NEED, OBJECTIVES AND BENEFITS

Project Background

WJWW is a non-profit public benefit corporation formed by an Act of the NYS Legislature[1] at the request of the three member municipalities of the Village of Mamaroneck, the Town of Mamaroneck, and the Town/Village of Harrison for the purpose of cooperatively operating a public water works system. WJWW supplies water to its member municipalities for retail sale to their resident consumers and to portions of the City of Rye and the City of New Rochelle, serving a total retail population of over 59,000 persons from over 14,600 service connections. WJWW provides water on a wholesale basis to the for-profit water company Veolia Water New York, Rate District 2 (formerly known as Suez Water Westchester), which sells water to the City of Rye, Village of Rye Brook, and Village of Port Chester. WJWW also supplies water to the Village of Larchmont on a wholesale basis. In all, WJWW provides drinking water to up to 100,000 residents and other consumers in Westchester County.

The water supply for the WJWW system is obtained from the upstate Catskill and Delaware watersheds of the New York City ("NYC") water system. WJWW draws its water from two connections to the NYC system: (i) Shaft 22 of the NYCDEP Delaware Aqueduct in Yonkers and (ii) Rye Lake WJWW water source, the eastern portion of Kensico Reservoir, in Harrison. The Proposed Action is related to the water drawn from Rye Lake WJWW water source.

[1] Chapter 654 of the Laws of New York, 1927 entitled "An Act to authorize two or more municipalities, excepting cities but including water districts, jointly to acquire, construct, lease and maintain a water works system, to provide for the method of financing therefor, to provide for the management, operation, sale and disposition thereof, and otherwise to act jointly concerning the obtaining and distributing of a supply of water."

The Rye Lake WJWW water source is currently treated with chlorine, fluoride, corrosion inhibitor, and ultraviolet ("UV") light treatment at the Rye Lake Pump Station site. The water is pumped from the RLPS to the Purchase Street Storage Tanks where pH adjustment occurs via the addition of sodium hydroxide. The water transmission main from the RLPS to the Purchase Street Storage Tanks runs beneath Purchase Street, adjacent the Project Site.

In 1993, New York State Department of Health ("NYSDOH") determined that WJWW'S source from Rye Lake does not meet the criteria established by the State for filtration avoidance. In response to this determination, WJWW moved its raw water intake farther into Rye Lake and placed the intake at a greater depth to access higher quality water from the lake. WJWW also installed a turbidity curtain where stormwater runoff from Interstate 684 and the County Airport enters Rye Lake in an effort to protect the raw water quality at the intake. In addition, WJWW made improvements to its chlorination disinfection system and constructed additional water storage tanks to provide additional disinfection contact time.

In an action brought by NYSDOH pursuant to section 12 of the Public Health Law, the State Supreme Court for Westchester issued an Order, entered on January 23, 2002, that granted NYSDOH's motion for summary judgment, holding that WJWW violated the State Sanitary Code by failing to construct and operate a water filtration plant. The State Supreme Court's Order was affirmed on appeal in 2003. Upon remand, on June 9, 2004, the Supreme Court issued a Court Order requiring WJWW to construct a filtration plant (Judgment and Order of New York State Supreme Court Index No. 13364-99, Justice Louis A. Barone). The Order was upheld on appeal in 2005. It remains in effect today.

To comply with the Court Order, which established a schedule and milestones toward compliance with the mandatory filtration requirement, WJWW prepared to proceed with construction of a membrane filtration plant. The plant was proposed to be located on a 13.4-acre parcel of property it had acquired in the Town of Harrison adjacent to the County Airport. The project was identified as a Type II action under the Type II category that is today codified at 6 N.Y.C.R.R. § 617.5(c)(35) ("a particular course of action specifically required to be undertaken pursuant to a judgment or order"). WJWW determined that it would submit for local approvals and follow the Town/Village of Harrison Planning Board process. Applications for local site plan and special exception use permits were submitted to the Planning Board, which issued a negative declaration under SEQRA and granted approvals on June 21, 2005. The final design of WJWW's original water treatment plant was completed and approved by NYSDOH and the County Department of Health in 2006.

As a result of lawsuits brought by a third party challenging certain permits and approvals for the facility, the Planning Board rescinded its prior approvals and, notwithstanding the prior classification of the action as Type II and negative declaration, issued a positive declaration on June 11, 2007. In accordance with a scope adopted by the Planning Board, WJWW proceeded to prepare a Draft Environmental Impact Statement, which the Planning Board certified as complete on September 25, 2007. A public hearing was conducted on November 15, 2007, and WJWW prepared and submitted a draft Final Environmental Impact Statement to the Planning Board in July 2008.

As part of the EIS process, WJWW explored alternatives to filtration including regional water treatment and conveyance options. After submission of the draft Final Environmental Impact Statement, there was significant interest among the Planning Board and other project stakeholders in a County-lead regional water treatment and conveyance alternative. These options were further evaluated by WJWW, but

ultimately, the regional water utilities pursued treatment options that did not provide any option for WJWW to obtain treated water. With regional water treatment and conveyance options no longer available, WJWW then investigated the viability of another alternative to filtration of Rye Lake consisting of the construction of a pipeline for conveyance of treated water directly from New York City's Shaft 20 in Greenburgh. In 2016, the alternative was rejected due to its exorbitant cost and the identified potential significant impacts.

During this time period, the USEPA adopted on January 4, 2006, a Stage 2 Disinfectants and Disinfection Byproducts ("DBPs") Rule to provide increased public health protection against the potential risks associated with these compounds. DBPs are formed when natural organic matter in the raw water source interacts with disinfectants such as chlorine. Stage 2 DBP byproduct chemicals include trihalomethanes and haloacetic acids. Because WJWW serves a retail population of between 50,000 to 99,999 people, compliance with these new provisions is mandatory. Starting October 1, 2012, WJWW was required to monitor the MCLs for TTHM and HAA5. The MCLs for TTHM and HAA5 are 0.080 milligram per liter (mg/L) and 0.060 mg/L, respectively, on a Locational Running Annual Average basis. The results submitted for the first, second, and third quarters of 2019 exceeded the MCL for HAA5.

On November 26, 2019, the USEPA issued a superseding Administrative Order (Index No. SDWA-02-2020-8001) (the "AO") which now, in addition to the Corrective Action Plan for the violation of the DBPs Rule, included an obligation to commence design of the proposed Rye Lake Water Filtration Plant and begin the SEQRA process by January 31, 2020, with the Filtration Plant to be operational by October 15, 2024.

By letter dated April 29, 2021, the U.S. Department of Justice ("DOJ") notified WJWW that the USEPA had referred "certain violations of the Safe Drinking Water Act" to the "U.S. Attorney's Office for the Southern District of New York for litigation in the U.S. District Court for the Southern District of New York." The letter stated that the "violations relate to the failure of Westchester Joint Water Works and its constituent municipalities, the Town/Village of Harrison, the Town of Mamaroneck, and the Village of Mamaroneck … to comply with the SDWA and an administrative order issued by EPA dated November 26, 2019. WJWW failed to comply with the … MCL … for … HAA5 … and, in particular, exceeded the MCL for HAA5 during the first, second, and third quarters of 2019. While WJWW has implemented interim measures to prevent HAA5 MCL exceedances in the short term, it is presently in violation of the SDWA and the AO, including the requirement that it construct a filtration plant at Rye Lake." DOJ sent a similar notification letter dated May 26, 2021, directly to each of the member municipalities, the Town/Village of Harrison, the Town of Mamaroneck, and the Village of Mamaroneck. Appendix B of the DEIS, Legal Documentation, includes the AO issued, the State Court Order, and the Department of Justice letters discussed above.

Public Need and Objectives

Ensuring WJWW has effective infrastructure to comply with State and Federal regulations is imperative, as the organization is responsible for providing safe and reliable drinking water to its customers. The Proposed Action is designed for the protection of public health and safety along with compliance with the AO issued by the USEPA and the Court Order issued by the New York State Supreme Court.

As population and human activity continue to increase surface water sources can be adversely affected by increasing levels of organic matter. DBPs are formed when natural organic matter in the raw water

source, such as leaf fall and aquatic vegetation, interact with disinfectants such as chlorine. Examples of DBP byproduct chemicals include HAA5 and TTHM. While the presence of these HAA5 and TTHM that have been detected in WJWW's water system are at concentrations that do not constitute an immediate health hazard, the USEPA warns that long-term exposure to HAA5 and TTHM above federal regulatory standards may lead to an increased risk of cancer and pose liver, kidney, or central nervous system problems.[2]

The USEPA adopted a Stage 2 Disinfectants and DBPs Rule on January 4, 2006. The rule requires more stringent regulations to provide for better public health protection against the risks associated with DBPs. The USEPA's Stage 2 Rule is mandatory for public water systems serving between 50,000 and 99,999 retail customers, which includes WJWW. Starting October 1, 2012, WJWW was required to monitor the MCLS for total TTHM and HAA5. The results submitted for the first, second, and third quarters of 2019 exceeded these MCLs. In response, the USEPA issued two administrative orders[3], resulting in an obligation to commence design of the proposed Rye Lake Filtration Plant and a Corrective Action Plan that outlines provisions to be taken to achieve compliance with MCLs standards. The Proposed Action would address the health concerns posed by DBPs through the construction and operation of a water filtration plant.

In addition to the USEPA Administrative Orders, on January 23, 2002, the New York State Supreme Court issued a Court Order requiring WJWW to construct a filtration plant. The Court found WJWW in violation of 10 N.Y.C.R.R. § 5-1.30 "by failing to construct and operate a filtration plant to filter the potable water that it sells to its customers from the Rye Lake System". Upon remand, on June 9, 2004, the Supreme Court issued a Court Order requiring WJWW to construct the filtration plant (Judgment and Order of New York State Supreme Court Index No. 13364-99, Justice Louis A. Barone). The Order was upheld on appeal in 2005. It remains in effect today.

Construction of the 30-MGD DAFF water filtration plant is designed to meet obligations now required of WJWW by the New York State Supreme Court and the EPA. Additionally, the Proposed Action would benefit the public by decreasing the risks of long-term exposure to DBPs. The filtration plant would include enhanced coagulation to remove disinfection byproduct precursors to TTHM and HAA5, which would give WJWW a greater ability to routinely comply with the MCLs for TTHM and HAA5 as required by the USEPA Stage 2 Disinfectants and Disinfection Byproducts Rule.

Benefits of Proposed Action

The Proposed Action fulfills legal requirements with the USEPA and the State of New York regarding the construction of a filtration plant. WJWW was issued two administrative orders from the USEPA requiring the construction of a water filtration plant and the implementation of a Corrective Action Plan ensuring strict compliance with the USEPA's Stage 2 Disinfectants and Disinfection Byproducts Rule. Construction of the 30-MGD Dissolved Air Flotation/Filtration (DAFF) water filtration plant is designed to comply with these regulations. In addition, the Proposed Action fulfills the requirement outlined in the Judgement and Order issued by New York State Supreme Court (Index No. 13364-99), dated June 9, 2004, to construct a water filtration plant. The Proposed Action would address both requirements for the USEPA and New York State.

[2] See https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations.
[3] See superseding Administrative Order No. SDWA-02-2020-8001.

In addition to satisfying existing legal obligations, the Proposed Action is a long-term solution to remove organic matter naturally occurring in Rye Lake which are precursors for disinfection by-products, including HAA5. The construction of a water filtration plant provides a vital safeguard for WJWW's water source at Rye Lake and its residents and other consumers in Westchester County that WJWW serves.

The Proposed Action is the most economical solution to fulfilling the legal requirements with the USEPA and the State of New York without posing significant disruptions to its service during construction and providing safe drinking water to its current and future customers. Due to the filtration plant's proximity to the Rye Lake Pump Station and Purchase Street Storage Tanks, the current proposal avoids the need for additional infrastructure and therefore excessively high project cost and significant community disruptions during construction and impacts to the natural environment.

3.2. LOCATION AND SITE CONDITIONS

The proposed Project Site is 13.4 acres located on the east side of Purchase Street and west of the Westchester County Airport. Access to the Project Site would be directly from Purchase Street. The Project Site of the proposed filtration plant is currently undeveloped and composed of trees and vegetation. The grade of the site slopes from south to north at an approximate 2.5 percent slope. There are 1.4 acres of wetland under New York State Department of Conservation ("NYSDEC") jurisdiction, surrounding an unnamed and unclassified stream. The northeastern portion of the exterior footprint of the Filtration Plant would be located within the 100-foot regulated adjacent area of the wetland; however, no construction is proposed within the actual wetland.

The Project Site is currently owned by Westchester County and managed by Westchester County Airport. The Project Site is in an area that is adjoining single-family residences and the Purchase Friends Meeting House directly to the north and west along Purchase Street and is surrounded by Westchester County Airport to the south, east, and northeast. The Project Site is also located approximately 500 feet south and east of Interstate 684 and Rye Lake.

3.3. PROJECT DESIGN AND LAYOUT

Overall Site Layout

The Project Site is located adjacent to the Westchester County Airport, and site access would be obtained from Purchase Street. The proposed building footprint would be less than one acre in area. The proposed impervious features, including the filtration plant building, a driveway, parking lot, walkways, and supporting utilities and ancillary facilities, would total approximately 2.4 acres. The plant would be set back approximately 155 feet from Purchase Street and 288 feet from its northern neighboring property. The plant would be setback at a minimum of 100 feet from the airport property, meeting the local rear and side yard setback zoning requirements. A six foot retaining wall would be located on the southern side of the plant. An eight foot-high fence, as required by NYSDOH, would surround the filtration plant and separate the plant from the airport property. Since the publication of the DEIS, the portion of the security fence on the north side of the facility has been moved closer to the facility and further away from the northern property line to minimize the visual impacts of the fence. To minimize any potential visual impact of the security fence, an effort has been made to set back the security fence from the property line. Along Purchase Street, the fence is setback from the property line by approximately 100 feet. Along the northern property boundary facing the House of Worship property,

the fence is setback by approximately 230 feet from the property line. Area variances for the height of the fence and encroachment of the access gate into the 100-foot buffer along Purchase Street would need to be obtained from the Town of Harrison Zoning Board of Appeals.

Land Apportionment and Property Transfer Process

The proposed filtration plant would be constructed on land now owned by Westchester County. It is anticipated that the County would convey the 13.4 acres to WJWW in exchange for another property of equal size, Exchange Parcel (Parcel ID 0961.1) from WJWW, resulting in no net loss of airport property. The Exchange Parcel would benefit the County because it is adjacent to the Westchester County Airport and would be left in its existing condition or used for airport stormwater management or wetland restoration projects undertaken by the County.

Clearing, Grading and Drainage

While the grade of the Project Site slopes from south to north at an approximate 2.5 percent slope, regrading would primarily need to take place on the central portion of the site. Grading would occur within the limits of disturbance at the Project Site, which generally includes the footprint of the plant itself, stormwater management practices, associated paving, and ancillary equipment structures. Within the limits of disturbance, the Project Site would be leveled off to provide appropriate roadway slopes ranging from approximately three feet of cut to five feet of fill.

Reuse of excavated soils on site would take place to the maximum extent practicable. However, approximately 49,900 cubic yards of fill would be removed from the Project Site. Stormwater runoff and site drainage would include the installation of a dry swale and bioretention cell. Both stormwater management practices would be sized to treat stormwater runoff for water quality and volume reduction generated from the Project Site's impervious area for the 100-year storm. Stormwater would be collected from the developed area via drain inlets and directed to a diversion structure. The diversion structure would direct the water quality volume to the stormwater management practice area for quality treatment and bypasses the larger storms to an underground detention system for quantity control.

Parking, Vehicle Access, and Road System

Driveway access would be provided from Purchase Street and located along the western property line. There are four proposed parking spaces located on porous pavement, which would be located in the Project Site's southern side yard. The driveway would consist of asphalt material, and an access drive would surround the plant to meet Appendix D of the New York State Fire Code access regulations.

Water Supply and Sanitary System

The proposed plant would have the capacity to filter the maximum day water supply demand of WJWW's entire water distribution system. Potable water for the operation of the plant would be provided by WJWW and connected to the 20-inch upper high service pipeline in Purchase Street. A new sewer line for the plant would be constructed and tied into the airport collection system on Westchester County Airport property pursuant to an easement that would be granted by the County. As proposed, the filtration plant would be designed to treat water pumped from the Rye Lake Pumping Station and supply filtered water to the existing Purchase Street Storage Tanks.

Site Lighting, and Landscaping

All site lighting would remain within the property boundary and not encroach onto the neighboring properties. All site lighting would be limited to securing the plant and plant operations. The landscaping has been designed to assist with the visual screening of the filtration plant, replace some of the existing trees that would be removed during construction of the plant, and provide visual enhancement to the Project Site.

Construction Schedule and Operations

Construction is estimated to span 36 months and include 12 phases, some of which would take place concurrently. **Table 1, Construction Schedule,** shows a breakdown of each phase and how many months each phase would take. The estimated duration of each phase is weather dependent and subject to change.

Table 1: Conceptual Construction Schedule

Construction Phase	Month	Truck Trips (~#/day)
Procurement	1-2	0
Mobilization	3-4	1
Site Work	5-8	17
Site Work, Filtration Building Excavation	9-11	70
Site Work, Filtration Building Substructure, Waste Washwater Tank Excavation	12-13	10
Site Work, Filtration Building and Waste Washwater Tank Substructure	14-19	6-7
Site Work, Filtration Building Superstructure and Interior, Waste Washwater Tank Substructure	20-21	9
Site Work, Filtration Building Superstructure and Interior	22-31	2-8
Site Work, Filtration Building Interior, Startup and Commissioning	32	4
Site Work, Startup and Commissioning	33-34	3
Startup and Commissioning	35-36	1
Procurement	1-2	0

Notes: Number of months are subject to change

All construction staging and workers' parking would take place on the Project Site. Construction vehicles would access the site from Purchase Street, and no queuing of construction vehicles would occur on Purchase Street. Construction traffic would access Purchase Street from Interstate-684, reducing the use

of local roads to access the Project Site. As required by Chapter 177, Noise, of the Town Code, no construction would take place after 8:00 p.m. or before 7:30 a.m. on weekdays or before 10:00 a.m. on weekends and national and state holidays. Further, no construction would occur on Sundays.

Design Changes Between Publication of the DEIS and FEIS

After the publication of the DEIS, the security fence on the north side of the facility was moved closer to the facility and further away from the northern property line to minimize the visual impacts of the fence. Along the northern property boundary facing the House of Worship property, the fence is set back by approximately 240 feet from the property line. There were no other changes to the design of the proposed project.

While there are no anticipated changes to stormwater management facilities at this time, WJWW is currently coordinating with NYSDEC, the Watershed Inspector General and New York City Department of Environmental Protection ("NYCDEP") for approval of the Stormwater Pollution Prevention Plan ("SWPPP") for the filtration plant's construction and operation. Any changes to stormwater management facilities or the SWPPP would be completed in accordance with conditions agreed upon by the regulators.

3.4. ALTERNATIVES CONSIDERED

The DEIS analyzed nine alternatives that were included in the Final Scope. Additional alternatives that were evaluated in a prior draft final environmental impact statement in 2008 (the "2008 FEIS"), which examined the option of building the proposed water filtration plant on the WJWW-owned Exchange Parcel that is the subject of the land swap under the current Proposed Action. The nine alternatives analyzed fell into five broad categories, as follows:

- **No Action** – This alternative provides a baseline for evaluating the anticipated impacts of the Proposed Action.

- **Alternative Sites** – These development scenarios involve construction of the proposed filtration plant at a location other than the proposed Project Site on Purchase Street at the Airport.

- **Filtration Technology Alternatives** – These development scenarios involve technologies other than the presently proposed Dissolved Air Flotation/ Filtration (DAFF) technology. The Filtration Technology Alternatives, collectively discussed as Alternative 3 in the DEIS, are identified in the 2008 FEIS, and include the then-proposed Immersed Filter Membrane, as well as three other technologies: Dissolved Air Flotation ("DAF")/ Ozone/ Filtration; Ozone/ Direct Filtration; and Pressurized Membrane Filtration. The currently proposed DAFF system was one of the four technology alternatives examined in the 2008 FEIS.

- **Design Alternatives** – These development scenarios involve modifications to the presently proposed plant on the Project Site at the Airport. This includes "Alternative Façade Treatments" (Alternative 4,) and alternative access to Tower Road (Alternative 5) as per the Final Scope for the DEIS. The 2008 FEIS included a discussion of several access alternatives for the then-proposed use of the Exchange Parcel for the proposed plant, which are discussed as variants of Alternative 2 in the DEIS.

- **Other Potential Alternatives** – These scenarios involve potential options for actions other than the construction of a filtration plant, such as utilizing water supplies other than Rye Lake (e.g., other New York City sources or groundwater wells), other types of water treatment (i.e., ultraviolet treatment), and a regional water system in lieu of WJWW continuing to supply drinking water to its customers. A connection to Shaft 20 for New York City's Delaware Aqueduct is identified per the Final Scope as Alternative 9 for analysis in the DEIS. Several other, miscellaneous alternatives that were addressed in the 2008 FEIS are discussed in the DEIS.

A summary comparison of the environmental impacts associated with each Alternative can be found in DEIS Table 5-1.

3.4.1. ALTERNATIVE 1: NO ACTION

Under the No Action scenario, WJWW would continue operating its water supply system as at present, including the recently completed UV treatment facility at the Rye Lake Pump Station parcel, but without any filtration as would be provided under the Proposed Action. The Project Site would not be conveyed by Westchester County to WJWW for development of the water filtration plant and the Exchange Parcel currently owned by WJWW would not be conveyed to the County. There would be no change in conditions on the Project Site, which would remain as an undeveloped woodland area of Westchester County airport, interspersed with remnants of prior uses. This Alternative would not meet the purpose, needs and objectives of the Proposed Action.

3.4.2. ALTERNATIVE 2: ALTERNATIVE SITE PLAN

This development scenario examined the option of building the proposed water filtration plant on the WJWW-owned Exchange Parcel that is the subject of the land swap under the Proposed Action. This parcel was the location of the proposed action described in the 2008 FEIS.

Alternative 2 involves the construction of a water filtration plant that is analogous to the Proposed Action, but on a different site, consistent with the description of the then-proposed action set forth in the 2008 FEIS. This includes construction of an access roadway connection between the plant and Purchase Street through the easement within the adjacent Sylvan residential subdivision to the west, as well as construction of the filtration plant itself on the 13.4-acre Exchange Parcel.

Although there are many similarities between the Proposed Action and Alternative 2 as detailed in Chapter 5 of the DEIS, the Proposed Action is the preferred Alternative from a SEQRA perspective based on several important factors including, but not limited to, the location of the Project Site on a SB-0-zoned parcel which presently is part of the County Airport property, and which also is characterized by fewer environmental constraints as compared to the prior proposal for plant construction on the Exchange Parcel. The reasons explaining why the Project Site is the preferred location to the Exchange Parcel are listed below.

Land Use and Zoning

- Development of the Exchange Parcel with the proposed filtration plant would involve similar dimensional characteristics as would occur on the Project Site under the Proposed Action. However, the Exchange Parcel is located in an R-2, One-Family Residence zoning district. The Project Site is located in the Special Business District (SB-0), which is classified as a business (i.e.,

non-residence) district and is a more appropriate location for the proposed filtration plant based on zoning.

- The Project Site is located on Westchester County Airport land between the existing Rye Lake Pump Station and UV facility, and Purchase Street Water Storage Tanks located south of the Project Site on Purchase Street. The Project Site is not in use by the Airport and remains undeveloped. The Project Site is bordered to the north and east by Airport facilities, an access road, and airplane hangars. These uses are classified as transportation and communication. The Project Site is bordered to the west by Purchase Street, and residential land uses are found along and to the west of Purchase Street. A residential land use and the Purchase Friends Meeting House (an institutional and public assembly use) border the Project Site directly to the north.

- Within a ½-mile from the Project Site there are several water supply facilities including the Rye Lake Pump Station and UV facility, and Purchase Street Water Storage Tanks, all owned and managed by WJWW. Rye Lake WJWW water source is also within a ½ mile from the Project Site. Interstate 684, a major transportation corridor, runs north and southwest, approximately 500 feet from the Project Site, and Westchester County Airport, a transportation utility, is contiguous to the Project Site. Therefore, development of the filtration plant on the Project Site would be consistent with the surrounding utility land uses.

- The Exchange Parcel which would be the site of the proposed plant under Alternative 2 is vacant land that is adjacent to the Airport property to the east but is adjacent to existing residential uses to the north and a golf course to the south. The Exchange Parcel also adjoins the presently undeveloped but approved Sylvan residential subdivision to the west. The Exchange Parcel is surrounded by less utility land uses and more residential land uses than the Project Site.

As described above, based on the zoning and the surrounding land uses of the Project Site compared to the Exchange parcel, WJWW finds the Project Site the preferred location for the construction of the filtration plant.

Geology, Soils and Topography

- According to the 2008 FEIS, the disturbance area for the construction of the filtration plant on the Exchange Parcel would be approximately 12.77 acres. This area includes clearing necessary for the construction of the filtration plant and the access roadway through an easement connecting this parcel to Purchase Street. The 12.77 acres of disturbance on the Exchange Parcel is more than double the approximately 6.16 acres of disturbance it is estimated would occur on the Project Site (with direct driveway connection to Purchase Street). The 12.77 acres of disturbance on the Exchange Parcel is a conservative estimate, because the 2008 FEIS assessed the disturbance required for a 20-MGD water treatment plant, rather than the 30-MGD water treatment plant that WJWW is proposing at this time.

Based on the amount of disturbance required for the construction of the filtration plant on the Exchange Parcel compared to the amount of disturbance on the Project Site, WJWW finds the Project Site the preferred location for the construction of the filtration plant.

Wetlands and Floodplains

- Alternative 2 involves the construction of the proposed water treatment plant on the Exchange Parcel, which is located just outside the Kensico Reservoir drainage basin, whereas the Proposed

Action Project Site is situated within this drainage basin, at a linear distance of approximately 800 feet from Rye Lake. Stormwater runoff from onsite impervious surfaces at the Project Site would be captured via curb inlets and roof drains and conveyed through the piped stormwater system. Flow would be conveyed to a proposed constructed wetland for water quality volume treatment, and then discharged to a bioretention cell. Following the bioretention cell, flow would be conveyed through a piped system to the underground stormwater detention structure to reduce the peak flow during storm events. A diversion structure would divert larger flows from larger stormwater events around the bioretention cell. Runoff from these larger storm events would be piped directly to underground stormwater detention structures. Flow from the project site would be discharged to a stabilized swale via the Project Area Discharge Point (outfall), which flows to the unnamed stream, and ultimately flows to Rye Lake.

The Project complies with all local and State stormwater management regulations to protect the health of the Kensico watershed. The location of a water filtration plant within a New York City watershed is not a unique situation. The NYCDEP has requirements for developing this type of facility within a NYC watershed. The Project requires review and approval from NYCDEP for its Stormwater Pollution Prevention Plan which control for water quantity and quality.

Other examples of surface water treatment plants located within a NYC watershed are as follows:

- Carmel Water Treatment Plant
  - Water Source: Lake Gleneida
  - Watershed Location: Croton Watershed
  - Location: Carmel, NY

- Bedford Water Treatment Plant (Cross River Reservoir)
  - Water Source: Delaware Aqueduct, Backup: Cross River Reservoir
  - Watershed Location: Croton Watershed
  - Location: Katonah, NY

- Amawalk Water Treatment Plant (Amawalk Reservoir)
  - Water Source: Amawalk Reservoir
  - Watershed Location: Croton Watershed
  - Location: Katonah, NY

- Shaft 18 Chemical Addition Facilities
  - Watershed Location: Kensico Reservoir
  - Location: Valhalla, NY

- Rye Lake Pump Station
  - Water Source: Kensico Reservoir
  - Watershed Location: Rye Lake (Kensico Reservoir)
  - Location: Purchase, NY

- Town of New Castle Millwood Water Treatment Plant
  - Water Sources: Catskill Aqueduct, Backup: New Croton Aqueduct
  - Watershed Location: Outside of Watershed
  - Location: Millwood, NY

- Northern Westchester Joint Water Works Catskill Water Treatment Plant
  - Water Source: Catskill Aqueduct
  - Watershed Location: Outside of Watershed
  - Location: Cortlandt, NY

- Development under Alternative 2 would include disturbance of approximately 0.49 acre of regulated freshwater wetlands, for which approximately 0.67 acre of wetland enhancement would be undertaken as mitigation. By contrast, the Proposed Action would not encroach into regulated wetlands.

The Exchange Parcel would require wetland disturbance; the Project Site does not require any disturbance to wetlands. By this criterion, WJWW finds the Project Site to be the preferred location for the construction of the filtration plant.

While the Project Site, unlike the Exchange Parcel, is located within the Kensico Reservoir watershed, the Project's SWPPP imposes controls for water quantity and quality to prevent harm to the Kensico Reservoir. The Project's SWPPP is subject to NYCDEP's review and approval. As stated in NYCDEP's guidance for SWPPPs:

> The 2019 "Rules and Regulations for the Protection from Contamination, Degradation, and Pollution of the New York City Water Supply and Its Sources" (Watershed Regulations) … provide standards to ensure that stormwater discharges from certain construction activities within the New York City watershed do not degrade the quality of the City's water supply. To that end, the Watershed Regulations require that a Stormwater Pollution Prevention Plan (SWPPP) be reviewed and approved by the New York City Department of Environmental Protection … before certain activities may commence.[4]

The location of the Project Site within the watershed of the Kensico Reservoir will not result in a significant adverse impact to the Kensico Reservoir and does not warrant selecting the Exchange Parcel or another alternative as the preferred location for the filtration plant.

Stormwater/Utilities

- Development on the Exchange Parcel would result in approximately double the extent of impervious surfaces (at 4.6 acres, including the access roadway connection to Purchase Street), as compared to the 2.4 acres of impervious surfaces that would be constructed under the Proposed Action. Therefore, Alternative 2 would involve a significant increase in the volume of stormwater runoff generated and would also be required to provide on-site stormwater management in accordance with applicable regulations.

- Both Alternative 2 and the Proposed Action would involve the preparation and implementation of a SWPPP and associated Erosion and Sediment Control Plan to control stormwater during

[4] NYCDEP, Applicant's Guide to Stormwater Pollution Prevent Plans (Jan. 2022), page 1 (available at https://www1.nyc.gov/assets/dep/downloads/pdf/watershed-protection/regulations/applicants-guide-to-swppp.pdf).

construction and to provide for long-term stormwater management during plant operation. However, because Alternative 2 would involve more than double the area of land disturbance in comparison to the Proposed Action, the potential for stormwater-related impacts during construction would be increased.

- Alternative 2 would involve more extensive construction to provide the requisite utility connections than would be necessary for the Proposed Action, as the Exchange Parcel is not situated proximate to existing utility lines. All utilities would have to run along the proposed 2,700-foot long access road within the easement from Purchase Street. Whereas the proposed Project Site has more convenient connections to existing utilities due to its location with frontage on Purchase Street.

- For construction and operation of the filtration plan under Alternative 2, an elevated power line would be installed above the access road to the proposed facility. This aboveground power line would go underground before connecting to the proposed facility. The Proposed Action would require connecting to electric utilities by way of existing overhead powerlines located along Purchase Street, which would be in close proximity to the Project Site.

As described above, based on the amount of additional disturbance and installation required for the stormwater management facilities, and water and electric facilities required in Alternative 2 compared to the Proposed Action, WJWW finds the Project Site the preferred location for the construction of the filtration plant.

Vegetation and Wildlife

- The 2008 FEIS indicates that the ecological communities within the development area for construction of the proposed filtration plant on the Exchange Parcel are dominated by an Oak-Tulip Tree Forest, with smaller areas of various freshwater wetland communities. This contrasts with the Project Site, which contains a much higher proportion of invasive species and previously disturbed area and is dominated by the less ecologically valuable Successional Southern Hardwood Forest community (Chapter 3H, Vegetation and Wildlife of the DEIS). According to the New York Flora Atlas of the New York Floral Association a Successional Southern Hardwood Forest is characterized by "hardwood or mixed forest that occurs on sites that have been cleared or otherwise disturbed. Canopy trees are usually relatively young in age (25-50 years old) and signs of earlier forest disturbance are often evident." [5] An Oak-Tulip Tree Forest is a "hardwood forest that occurs on moist, well-drained sites in southeastern New York." This difference in existing ecological characteristics would magnify the impact that would result from the more extensive area of disturbance that would occur on under Alternative 2 as compared to the Proposed Action.

- The 2008 FEIS indicates that an estimated 642 trees of eight-inch DBH or greater would be removed under the development plan proposed at that time for the Exchange Parcel, which is approximately 36 percent greater than the estimated 408 eight-inch DBH trees to be removed under the Proposed Action on the Project Site. Approximately 276 trees were previously removed from the Exchange Parcel and road access area, leaving approximately 366 still to be removed. However, tree removal for development of the Exchange Parcel under Alternative 2 would generally impact more ecologically valuable Oak-Tulip Tree Forest species than would

[5] https://newyork.plantatlas.usf.edu/EcologicalCommunities.aspx, last accessed August 19, 2022.

occur with the Successional Southern Hardwood Forest species that characterize the Project Site, of which 56 percent of the tree species surveyed on site are invasive. For both Alternative 2 and the Proposed Action, tree removal to accommodate the filtration plant would require a permit from the Town/Village of Harrison and would be required to comply with the Town/Village Tree Ordinance.

Based on the quality of the forests on the Exchange Parcel and the additional tree removal in an Oak-Tulip Tree Forest required in Alternative 2, WJWW finds the Project Site the preferred location for the construction of the filtration plant.

Construction

- As with the Proposed Action, Alternative 2 would include best management practices and other suitable measures to avoid or minimize construction-related impacts. However, because Alternative 2 would involve approximately double the area of disturbance in comparison to the Proposed Action, the potential for construction-related impacts would be increased.

Based on the potential for the increase in construction-related impacts of Alternative 2 to the Proposed Action, WJWW finds the Project Site as the preferred location for the construction of the filtration plant.

To summarize, Alternative 2 is less protective of surface water and ecological resources than the Proposed Action, considering that this alternative would encroach into wetlands, would involve more than double the area of site disturbance, and would involve clearing of higher value ecological communities than would occur under the Proposed Action. While Alternative 2 would be located outside the Kensico Basin, the Proposed Action would comply with the stringent NYCDEP regulations promulgated to protect the reservoir. Alternative 2 is also inferior to the Proposed Action in terms of the zoning and land use setting. These advantages of the Proposed Action outweigh any benefits that may be associated with a decreased potential under Alternative 2 for impacts with respect to visual/aesthetic resources given the location of the Exchange Parcel away from publicly accessible viewing locations, particularly when considering the setbacks and other mitigation that are included in the Proposed Action to minimize the Project's visibility from Purchase Street and the residential and house of worship uses to the north as detailed in the DEIS Chapter 3.B, Community Character and Visual Impacts.

Agency decisions were not made on WJWW's prior proposal to construct the proposed water filtration plant on the WJWW owned Exchange Parcel, since the SEQRA process at that time did not proceed to a findings statement. A key impediment to the completion of action on that prior application was perceived conflicts and concerns regarding project consistency with surrounding land uses, especially nearby residential development, given that the Exchange Parcel is situated in the Town/Village of Harrison's R-2 One-Family Residence District.

WJWW's identification of the Project Site as the preferred site has been identified in past studies as well. A 1994 study (see Appendix C of the FEIS) was undertaken by WJWW on seven different sites. Site 3 is the Project Site, and Site 5 is the Exchange Parcel. The study concludes that Site 3, the Project Site, is the preferred site for the construction of the filtration plant due to the following reasons:

- Close proximity to the existing water mains on Purchase Street, which will minimize the cost of connecting mains;
- Zoning of airport property;
- Sufficient land available and a relatively level site; and
- Existing trees will likely be sufficient to provide adequate buffer to local residents.

3.4.3. ALTERNATIVE 3: ALTERNATIVE FILTRATION TECHNOLOGY

Overview

At the time of the 2008 FEIS, Immersed Membrane Filtration (IMF) was the proposed technology, with the following four alternative technologies also analyzed in the 2008 FEIS:

- Dissolved Air Flotation (DAF)/Ozone/Filtration
- DAF/Filtration (DAFF)
- Ozone/Direct Filtration
- Pressurized Membrane Filtration

Subsequently, WJWW has undertaken a detailed, comparative analysis of IMF versus DAFF, and has decided that the latter technology should be used in the Proposed Action. Therefore, DAFF was analyzed as the Proposed Action. The DEIS examined the following alternate technologies:

- IMF – studied as the proposed action in the 2008 FEIS
- DAF/Ozone/Filtration – studied as an alternative in the 2008 FEIS
- Ozone/Direct Filtration – studied as an alternative in the 2008 FEIS
- Pressurized Membrane Filtration – studied as an alternative in the 2008 FEIS

Description of Alternatives

Immersed Membrane Filtration (IMF)

IMF was selected as the proposed technology at the time of the 2008 FEIS. The decision involved in selecting IMF at that time included a screening analysis of all five technologies (*Rye Lake Water Treatment Plant, Process Evaluation Report*, Hazen and Sawyer, Final Report, June 2001). This was followed by a pilot study conducted to confirm the performance of immersed membranes on Rye Lake water, and to obtain necessary design data (*Rye Lake Water Treatment Plant, Process Design Criteria Report*, Hazen and Sawyer, May 2004). The design criteria for an IMF plant were endorsed by the NYSDOH in June of 2004 and the final design documents were subsequently endorsed by NYSDOH and the Westchester County Department of Health.

With the decision to reactivate the filtration proposal to address the regulatory compliance issues pertaining to WJWW's Rye Lake water source, the potential availability of the Project Site at the Westchester County Airport, and the significant time since that application was unable to advance beyond the 2008 FEIS, the available filtration processes were re-evaluated. In the original IMF design, an additional/optional coagulation treatment step was included as part of the base membrane filtration design to promote organic carbon removal, if the organic carbon level reached a certain threshold. At the time of treatment selection in the early 2000s, the organic carbon levels were lower in the Rye Lake supply, and it was anticipated that the coagulation step might not be necessary under all conditions. Under current regulations and organic carbon levels, DAFF would consistently provide organics removal under all treatment conditions and has become the preferred option.

Dissolved Air Flotation/Ozone/Filtration

The major components of this treatment process are rapid mix, flocculation, dissolved air flotation (DAF) clarification, intermediate ozonation, filtration, residuals handling (waste backwash water tanks, filter-to-waste tanks, and DAF floated solids tanks), chemical feed systems and finished water pumping. The treatment plant for this alternative would have required a basement, first floor and upper floor.

Ozone/Direct Filtration

The major components of this treatment process are pre-ozonation, rapid mix, flocculation, filtration, residuals handling (waste backwash water tanks, filter-to-waste tanks, settler/ thickeners, solids disposal tanks), chemical feed systems and finished water pumping. The treatment plant for this alternative would have required a basement, first floor and upper floor.

Pressurized Membrane Filtration

In this treatment process, raw water is pumped through self-cleaning strainers and into the membrane modules at approximately 30 pounds per square inch gauge. Hollow fiber membranes with a nominal pore size of less than 0.01 micrometers (µm) would operate with an inside-out dead-end mode. The hollow fiber membranes are housed within cartridges (modules) and the modules are mounted on racks that are contained within separate skids. The treatment plant for this alternative would have a basement with booster pumps, pump dry wells, finished water pumps and wetwell, waste transfer pumps, waste backwash tanks, solids disposal tanks, and spent chemical tanks. It would also have a ground floor for the main process equipment, settler/thickeners and chemicals.

WJWW finds that none of the available alternative technologies would result in a significant environmental benefit as compared to the Proposed Action using DAFF technology. Accordingly, there is no rationale under SEQRA to support the selection of one of the filtration technology alternatives over the proposed use of DAFF technology.

DAFF technology was selected due to its successful treatment in similar water supplies, compact footprint, ease and reliability of operations, and lower comparative construction and operations costs.

3.4.4. ALTERNATIVE 4: ALTERNATIVE FAÇADE TREATMENTS

The Proposed Action's facade has been designed with sensitivity to the neighbors in the vicinity of the Project Site. More specifically, this design includes architectural features and treatments to enhance the building exterior's aesthetic appeal and help it blend in with its surroundings, thereby minimizing the resulting effect on visual resources and community character. The proposed design, subject to review and approval by the Town/Village of Harrison Architectural Board of Review, includes a stone masonry veneer base in a cut pattern to match the existing stone walls on the Project Site, ground-face concrete blocks, board-and-batten metal siding, ribbed metal roofing, aluminum windows, translucent exterior panels, glazed entries, and architectural louvers. In addition, landscaping is proposed that is strategically placed to provide additional mitigation to the visual impacts of the proposed filtration plant.

Implementation of the features identified above entails additional costs to WJWW as compared to a more standard industrial façade which would typically be applied to such utility uses and landscaping around the perimeter of the building. In order to place this aspect of the Proposed Action in the proper perspective, to assist in SEQRA decision-making, it is appropriate to evaluate the costs and benefits associated with the current proposal for superior architectural design in comparison to an alternative design that meets the basic functional requirements of the Proposed Action. Therefore, the Alternative Design – Alternative Façade Treatment development scenario entails a basic exterior appearance, reflective of the utility use of the plant, which includes metal siding without special façade treatments, minimal glazing, simple gable and/or flat roof, and basic louvers.

The only substantive differences between Alternative 4 and the Proposed Action are in the more basic architectural design/treatment of the building exterior and perimeter fencing, a reduced planting plan, and elimination of the solar panels that has been incorporated into the current proposal. This would result in a cost savings to WJWW. However, WJWW has decided that the increased cost of the proposed design is worth the additional investment to provide for enhanced visual/aesthetic mitigation and the Proposed Action is preferred over Alternative 4.

3.4.5. ALTERNATIVE 5: THE USE OF TOWER ROAD

This alternative involves a modified layout of the Project at its currently proposed location, to provide southward driveway connection to Tower Road, for the intended purpose of reducing potential impacts to neighboring uses that may be associated with the current proposal for direct vehicular access onto Purchase Street. All other aspects of the design of the filtration plant under Alternative 5 would be identical to the Proposed Action. The access driveway under this alternative would follow the course of an existing gravel roadway that is currently used by Airport personnel. The existing gravel roadway has a width varying between 11 and 17 feet. In order to provide for two-way traffic safety for fire, emergency and delivery vehicles to serve the proposed water filtration plant, the driveway would be widened to a uniform 26 feet, per the requirements of the Purchase Fire Department, thereby entailing disturbance outside the footprint of the existing gravel roadway. The new driveway also would be paved and would include stormwater drainage infrastructure. The disturbance for the reconfigured access driveway for this alternative would occur within existing mapped NYSDEC wetlands that are situated between the proposed filtration plant and Tower Road.

A conceptual design for the proposed plant at the Project Site with a driveway connection to Tower Road is presented in *Rye Lake Filtration Plant Basis of Design Report*, Hazen and Sawyer, May 22, 2020, that can be found in Appendix Q of the DEIS.

A modified access driveway for the Project Site connecting to Tower Road under Alternative 5, in lieu of the proposed driveway along the site's Purchase Street frontage, is not a reasonable or feasible alternative because the re-routed driveway would pass through land in which WJWW does not have ownership interest; and the current owner, Westchester County, has indicated that this land cannot be made available for such use because of federal funding restrictions; and this alternative also may interrupt the utility corridor along the north side of Tower Road which serves the Airport. Furthermore, even if Alternative 5 were practical, it would not render significant environmental benefits or mitigative enhancements in comparison to the Proposed Action, particularly considering the increased potential for impacts associated with the expanded area of site disturbance and impervious surface coverage that would result from the re-routed access driveway. Therefore, WJWW finds Alternative 5 is not a feasible alternative.

3.4.6. ALTERNATIVE 6: ALTERNATIVE SITE PLAN TOWER ROAD

This alternative involves relocating the proposed plant onto a parcel to the south, fronting on Tower Road (Tower Road Site). Alternative 6 is intended to serve the same purpose as Alternative 5 in reducing potential impacts to neighboring uses that may be associated with the current proposal for vehicular access directly onto Purchase Street. The general design of the filtration plant and its accessory improvements under Alternative 6 would be similar to the Proposed Action.

A conceptual design for the placement of the proposed filtration plant on the Tower Road Site is presented in *Rye Lake Filtration Plant Tower Road Site Viability Report*, Hazen and Sawyer, March 29, 2019, which can be found in Appendix Q of the DEIS. However, as with Alternative 5, in response to input from Westchester County indicating that any layout with access to Tower Road was not approvable, this design was abandoned and replaced with the current proposal for the Project Site on an Airport parcel having a driveway access at Purchase Street. Therefore, WJWW finds Alternative 6 is not a feasible alternative.

3.4.7. ALTERNATIVE 7: ALTERNATIVE SITE PLAN AT RYE LAKE PUMP STATION

This alternative involves siting the proposed filtration plant on a parcel owned by the NYCDEP, for which WJWW has a Land Use Permit for the Rye Lake Pump Station and other existing public water service facilities, located at 900 Lake Street on the west side of Interstate 684. This parcel (Pump Station Parcel) comprises a portion of the overall NYCEDP-owned property fronting on Rye Lake, which forms a peninsula that extends into the southern end of the lake. The approximately 3.36-acre Pump Station Parcel currently contains three main buildings, which pump water from Rye Lake and provide chemical and UV treatment, as well as ancillary facilities such as electrical equipment and emergency backup generators.

Alternative 7 would add a fourth main building and appurtenances (including another emergency backup generator) to the Pump Station Parcel. It is assumed that the general design of the filtration plant and its accessory improvements under The Rye Lake Pump Station Parcel is a highly constrained site by various factors, including its small size, configuration, location, environmental setting, and degree of existing development. Much of the area on this parcel contains existing WJWW development, which would not allow sufficient space for the addition of a filtration building. Furthermore, because of its frontage on Rye Lake on three sides, the Pump Station Parcel is largely located within the 100-foot freshwater wetland adjacent area extending landward from the lake shoreline.

There is no realistic probability that a viable development plan can be formulated under Alternative 7 to site the proposed filtration plant on the Pump Station Parcel. Furthermore, NYCDEP has indicated on a video call in July of 2021 that this alternative is not approvable, as it is located too close to the water supply. While WJWW has constructed facilities in the past on this peninsula with NYCDEP approval, the depth and spatial extent of construction that is necessary for the proposed filtration plant is greater than the existing improvements and would not be permitted. Therefore, WJWW finds the potential use of the Pump Station Parcel for the proposed Project does not satisfy the basic threshold under SEQRA to establish that this is a reasonable and feasible alternative to the Proposed Action.

3.4.8. ALTERNATIVE 8: ALTERNATIVE SITE PLAN HARRISON SBL 0097.-1

Under this alternative, the proposed filtration plant would be constructed on an approximately 9.9-acre, lens-shaped parcel owned by the New York State Department of Transportation (“NYSDOT Parcel”) located between Purchase Street and Interstate 684, opposite New King Street, to the north of the proposed Project Site. A portion of the NYSDOT Parcel fronting on Purchase Street is actively used for New York State highway maintenance operations (e.g., vehicle and equipment storage), but the parcel is otherwise vacant. WJWW does not own or control the NYSDOT Parcel, and it is uncertain whether arrangements could be made for WJWW to construct a filtration plant there.

Unlike the five other site plan/location alternatives discussed in the DEIS, Alternative 8 has not been subject to feasibility analysis or conceptual planning by WJWW, so available information is much more limited regarding technical design issues and similar considerations for Alternative 8. However, GIS analysis of the NYSDOT Parcel indicates that approximately 47 percent of its area comprises freshwater wetlands. Assuming that the intent would be to avoid disturbance of this wetland area, since the Proposed Action does not encroach into wetlands, only about 5.2 acres of the NYSDOT Parcel would remain available for potential development. This non-wetland area on the NYSDOT Parcel is less than the approximately 6.16 acres that would be disturbed on the Project Site under the Proposed Action, not accounting for any protection of 100-foot-wide wetland buffers that are likely to account for substantial additional area surrounding the wetlands on the NYSDOT Parcel. Thus, WJWW finds the construction of Alternative 8 also to be infeasible based on the physical and environmental constraints of the site.

3.4.9. ALTERNATIVE 9: SHAFT 20 ALTERNATIVE

Although the USEPA Administrative Order and New York State Court Order each requires filtration, WJWW did explore possible alternatives to filtration. This alternative was explored after the earlier SEQRA process did not result in a findings statement following submission of the 2008 FEIS. A conceptual design analysis of an alternative to connect to Shaft 20 on NYCDEP's Delaware Aqueduct System is presented in a December 2014 draft report prepared by HDR, Woodward & Curran, Gannett Fleming, and D&B Engineers & Architects, titled *Draft Conceptual Design of an Alternative to the Rye Lake Source Using Shafts 20 & 22 of the Delaware Aqueduct* (2014 Draft Conceptual Design Report). This report can be found in Appendix Q of the DEIS.

At the time of the 2014 Draft Conceptual Design Report, the project concept included three components: (a) establishing a new connection for WJWW at Shaft 20 on NYCDEP's Delaware Aqueduct System; (b) improvements to WJWW's existing connection to Shaft 22 on NYCDEP's Delaware Aqueduct System to maximize the use of this source during the October-through-May non-peak period; and (c) a separate, backup connection to NYCDEP's Catskill Aqueduct System. Once completed, this project would allow WJWW to eliminate its use of the Rye Lake water source. Water from the Delaware and Catskill Aqueduct Systems meets the regulatory standards for a waiver from the filtration requirements which apply to water from Rye Lake. At that time, NYCDEP confirmed the availability of capacity to meet WJWW's 50-year water demand projections.

The new connection to Shaft 20 alone, combined with the existing supply from Shaft 22, would be adequate to serve WJWW's needs. However, at the time of the 2014 Draft Conceptual Design Report this project was not expected to be completed until 2020. The Shaft 22 improvements were planned for completion in 2017 as an interim measure to decrease WJWW's reliance on Rye Lake as a water source and, thereby, to improve WJWW's compliance with its regulatory requirements while awaiting the additional supply from Shaft 20 to come on-line. If Alternative 9 were to be implemented at this time, it would not include the transitional improvements at Shaft 22.

In summary, Alternative 9 does not meet the objectives of WJWW. Alternative 9 would result in an increased range of more extensive potential impacts over a much wider geographic area than the Proposed Action, including additional costs to WJWW's customers. These unfavorable consequences of Alternative 9 include, but are not limited to: the potential for visual/aesthetic effects from the

construction of three new buildings, as compared to a single building under the Proposed Action; increased potential impacts to water courses and wetlands, which are present at numerous locations along the 7.5-mile-long pipeline route for Alternative 9, whereas direct encroachment into wetland areas would be avoided under the Proposed Action; and impacts related to the significant increase in land disturbance and related potential impacts (e.g., erosion and sediment transport) that would occur along the Alternative 9 pipeline route.

Alternative 9 also suffers from a critical shortcoming in its reliance on NYCDEP's ability to maintain its waiver from filtration requirements for the Delaware and Catskill Aqueduct Systems, which is not guaranteed over the long term. If this waiver is not renewed at some point in the future, filtration would be mandated for these water supplies; and if Alternative 9 were to be implemented, WJWW would then have to undertake supplemental treatment in the form of the type of plant that is currently proposed for the Rye Lake water source. Under these circumstances, WJWW would be burdened with the additional cost to address this contingency despite having already expended significant capital in excess of this amount to connect to the Delaware and Catskill Aqueduct Systems with the express intent of avoiding the need to provide such filtration. Alternative 9 would also cost approximately $214 million (August 2022 estimate) and, if it could be implemented, would delay WJWW's compliance with Safe Drinking Water Act regulations.

3.4.10. OTHER ALTERNATIVES CONSIDERED

Other Airport Properties

The DEIS summarized sites that were examined in the 2008 FEIS. This included three parcels located on the grounds of Westchester County Airport as alternatives to the then-proposed use of the Exchange Parcel for WJWW's filtration plant. Two of these alternate parcels (identified as Site No. 1 and Site No. 2 in the 2008 FEIS) are situated to the north of the current location of the Proposed Action, while the third parcel (identified as Site No. 4 in the 2008 FEIS) spans between the current location of the Proposed Action and Tower Road to the south. A public comment on the Draft Scope requested that a site at the Airport with frontage on Tower Road be revisited. This alternative location, which is similar to Site No. 4 in the 2008 FEIS, was analyzed in detail as Alternative 6 in the DEIS.

As with development scenarios discussed above involving alternate roadway connections to the Exchange Parcel which were analyzed in the 2008 FEIS and alternatives with roadway access to Tower Road, any scenario involving use of the Airport property would necessitate proprietary approval from Westchester County. However, to reiterate, the County has indicated that it is only amenable to entertaining the WJWW's proposal for the current Project Site. Furthermore, the remaining two Airport parcels examined in the 2008 FEIS (Site Nos. 1 and 2) were described as suffering from significant constraints, including the presence of steep slopes, protected soils and wetlands, proximity to and drainage towards Rye Lake, and limited availability for development. Further, it should be noted that Sites 1 and 2 are also under the control of Westchester County and based on recent conversations with Westchester County the potential for development of these sites is not an option at this time.

Other Non-Airport Properties

The 2008 FEIS examined three additional alternate sites located outside of the Airport property, which are discussed below:

- Site No. 3 – This approximately 2.2-acre, NYCDEP-owned parcel is located directly on the south shore of Rye Lake and is bound by New Lake Street to the south and Interstate 684 to the east. While this site is located close to the existing transmission mains, it is very small, and the available area is not adequate to accommodate the proposed plant. Furthermore, NYCDEP generally regulations prohibit construction of an impervious surface within 100 feet of a wetland or within 300 feet of a reservoir or controlled lake, and it also lies within a NYCDEP-designated no-build zone. WJWW finds that these constraints prevent NYCDEP from allowing the proposed water filtration plant to be placed here, making this alternative infeasible.

- Site No. 5 – This approximately 6.0-acre parcel is located on the west side of Purchase Street approximately 150 feet south of Kempner Lane. Drainage from this site is directed away from Rye Lake (i.e., it is located outside the Kensico Reservoir basin), and it is located in close proximity to the existing transmission main, and it rated favorably on technical aspects. However, during the analysis of the prior application, this site rated low based on social limitations, particularly with respect to the presence of adjacent residential units on three sides. Furthermore, this parcel experienced subsequent residential development, such that no portion of its area is available for the Proposed Action and, therefore, WJWW finds that it is not a feasible alternative.

- Site No. 6 – This approximately 8.0-acre parcel is located on the east side of Purchase Street, to the east of WJWW's water storage tanks. This site is also located outside the Kensico Reservoir basin, and it is located in close proximity to the existing transmission main. However, at the time of the prior application reflected in the 2008 FEIS, this site was located within a residential subdivision, and it was determined that acquisition from the property owner would be difficult based on WJWW's experiences with the same developer. Furthermore, this site is part of a major development including a golf course, a country club and residential units; and this parcel has seen continued development of the residential subdivision, such that no portion of its area is available for the Proposed Action and, therefore, WJWW finds it is not a feasible alternative.

Ultraviolet treatment

WJWW pursued UV treatment as a substitute to filtration prior to the 2008 FEIS because the capital costs for a UV plant are approximately one-tenth the cost of a filtration plant, operation and maintenance costs are also significantly less for UV treatment than for filtration, and a UV plant involves a smaller development footprint than a filtration plant. However, NYSDOH denied WJWW's petition for UV treatment in lieu of filtration, concluding that filtration is the only option that meets the current and anticipated treatment requirements for Rye Lake source water.

As discussed previously, WJWW recently installed a new UV disinfection plant at the Rye Lake Pump Station Parcel to provide enhanced treatment of the Rye Lake water supply, which is operating in conjunction with the chlorination facility to provide greater inactivation efficiencies of pathogenic organisms and to improve protection of public health. However, this would not meet the filtration requirements of the EPA Administrative Order, the Supreme Court Judgment and Order, and current federal drinking water standards and, therefore, would not accomplish WJWW's objectives for the Proposed Action.

Other New York City Water Sources

This alternative, identified in the 2008 FEIS, involves various means of acquiring additional water from the New York City system, to replace the current supply drawn from Rye Lake, whereby a filtration plant would not be constructed. More specifically, the 2008 FEIS examined three such scenarios:

(a) Water from Shaft 17, conveyed through Kensico Reservoir, with UV treatment
(b) Water from Shaft 17, conveyed along Interstate 684, with UV treatment
(c) UV-treated water from Shaft 19, conveyed to WJWW's Purchase Street Storage Tanks

The 2008 FEIS eliminated these scenarios as not viable based on the considerations discussed below.

Water from Shaft 17, Conveyed through Kensico Reservoir, with UV treatment

A connection to NYC's Delaware Aqueduct could provide WJWW with water that meets USEPA Filtration Avoidance Determination requirements. Implementation of this scenario requires the construction and operation of a UV treatment plant for additional treatment (which recently was completed at WJWW's Rye Lake Pump Station Parcel). This scenario was identified and evaluated in the 2008 FEIS to transmit Delaware Aqueduct water from Shaft 17 to the WJWW storage tanks on Purchase Street.

It is extremely unlikely that NYCDEP would approve construction under this scenario because of its anticipated impact on Kensico Reservoir and Shaft 17, as well as being within the 300-foot NYCDEP watershed buffer. Installing a major water main through the reservoir has the potential to create turbidity and cause other disruptions during construction. This would negatively affect the water supplies of both WJWW and NYCDEP. Tying into Shaft 17 could put the shaft at risk, leading to a water continuity supply risk to New York City itself.

Based on the foregoing, WJWW finds this scenario would not meet WJWW's objectives for the Proposed Action and, thus, is not a viable alternative.

Water from Shaft 17, Conveyed along Interstate 684, with UV treatment

This scenario would involve pumping water from Shaft 17 overland to the WJWW Purchase Street Storage Tanks and a new UV treatment plant and would require a water main from a new pump station located at Shaft 17 to an existing transmission main near the Rye Lake Pump Station.

It is extremely unlikely that NYCDEP would approve another utility constructing a pump station so close to Shaft 17 or connecting into the shaft. If NYCDEP approval was given, there are space constraints at Shaft 17 that would make it very difficult to site the required pump station. The design and construction of a new pump station and new transmission main and discontinuing the use of the existing Rye Lake Pump Station, would require significant capital expenditure. (The Rye Lake Pump Station would be available for emergency use only.) The cost of constructing this alternative would be comparable to the then-proposed action, but without the water quality benefits gained by filtration.

Based on the foregoing, WJWW finds this scenario would not meet WJWW's objectives for the Proposed Action and, thus, is not a viable alternative.

UV-treated Water from Shaft 19, conveyed to WJWW's Purchase Street Storage Tanks

This scenario would involve purchasing UV-treated water from New York City and pumping and conveying this water from NYCDEP's Delaware Aqueduct Shaft 19 to the Purchase Street Storage Tanks. Under this this scenario, a pump station at the Shaft 19 site would be required to transmit water from Grasslands Road.

Significant capital expenditure would be necessary to construct a new pump station at Eastview, and it would mean abandoning (available for emergency use only) the existing Rye Lake Pump Station. A land use permit would be needed to construct this pump station at the Eastview site on land owned by NYCDEP.

Since WJWW does not own or control this land, there is no guarantee that it could be obtained for a pipeline. Pipe jacking would be required to cross the Bronx River Parkway and significant rock removal is expected along the length of pipe. The cost of constructing this alternative would be comparable to, if not more than, the then-proposed action.

Based on the foregoing, WJWW finds this scenario would not meet WJWW's objectives for the Proposed Action and, thus, is not a viable alternative.

Construction Groundwater wells

This alternative, identified in the 2008 FEIS, involves the installation of groundwater wells as a means of acquiring additional water to replace the current supply drawn from Rye Lake, whereby the proposed filtration plan would not be constructed. In order to replace the then-proposed 20-mgd output for the filtration plant, approximately 174 wells would be needed with an output of 80 gpm per well. With the current filtration plant capacity increased by 50 percent (to 30 mgd), approximately 261 wells would be needed. Even the original production capacity of 80 gpm was believed to be highly optimistic because it reflects best-case conditions in glacial till soils in other areas of Westchester County. WJWW's service area does not include such deposits, so it is highly likely that more than 261 wells would be necessary after comprehensive study. Siting this number of wells within the WJWW service area would require a substantial area of land above productive aquifers.

Based on the poor availability of groundwater and the large number of wells that would be needed to support the service area, extensive development of groundwater as a dependable source of supply for WJWW is infeasible. Furthermore, siting 174 or more wells along with the necessary infrastructure for water supply purposes could result in potentially larger impacts than the proposed project in terms of water resources, natural resources and land use.

Based on the foregoing, WJWW finds this scenario would not be reasonable or feasible and, thus, is not a viable alternative.

Westchester County Regional Water System

This alternative, discussed in the 2008 FEIS, involves the acquisition of additional water by WJWW via a regional water system overseen by Westchester County, to replace the current supply drawn from Rye Lake.

At the time of the 2008 FEIS, Westchester County Department of Environmental Facilities (WCDEF) was in the process of developing and considering two regional approaches for providing water to their service areas. One option involved connection to NYCDEP's Catskill/Delaware UV Plant at the Eastview property and pumping water to the County's service areas. The second option involved construction of a new County UV plant near the Kensico Dam. WJWW worked in conjunction with the County to explore sharing the new NYCDEP connection or the new UV plant to provide treated water to its service area. At the time of the issuance of the 2008 FEIS, Westchester County had not concluded its investigation into these approaches, but had advanced them to the point that they could be discussed and evaluated in the FEIS.

To provide water to WJWW's distribution system, a new 20-mgd pump station specifically dedicated to meet WJWW's hydraulic conditions would be needed in the vicinity of the new UV plant and a new

pipeline would have to be constructed through the Quarry Heights region of North Castle to convey this flow to WJWW's Park Lane Storage Tanks, with a gravity main to the Purchase Street Storage Tanks via Park Lane, Lake Street and Purchase Street. The pump station would require chemical addition for disinfection and corrosion control.

Approximately 1.4 miles of transmission main would be required in the Town of North Castle and 3.1 miles of transmission main would be needed in the Town of Harrison. Land easements would have to be acquired and permitted between Kensico Dam and the Purchase Street Storage Tanks. Since WJWW does not own or control most of this land, there is no guarantee that it could be obtained for a pipeline. Pipe jacking or hanging pipe would be required to cross Interstate 684, along with significant rock removal along the length of pipe. Extensive permitting would be required to cross the interstate highway.

After the 2008 FEIS was issued, there was significant interest among project stakeholders in a County-led regional water treatment and conveyance alternative. These options were further evaluated by WJWW but, ultimately, the regional water utilities pursued options that did not provide any means for WJWW to obtain treated water, thereby increasing the uncertainty in the timing of possible action on a Westchester County Regional Water System, and even whether this scenario ultimately would ever come to fruition. Furthermore, WJWW was a secondary partner in this endeavor, with Westchester County primarily controlling project development and advancement. However, WJWW alone is subject to the EPA Administrative Order and the Supreme Court Judgment and Order; and these directives, and the associated penalties, are not incumbent upon Westchester County or other potential partners. In September 2013, WJWW became aware Westchester County would no longer be pursuing a new Regional Water System and would instead be developing a plan to evaluate other options that did not include WJWW. Therefore, WJWW finds it is no longer practicable for WJWW to pursue this option in lieu of the proposed filtration plant; accordingly, this scenario is not reasonable or feasible and, thus, is not a viable alternative.

---

4. FINDINGS CONCERNING ENVIRONMENTAL IMPACTS

WJWW has analyzed the potential environmental impacts of the Proposed Action, as set forth in this Findings Statement. WJWW, acting as the Lead Agency has given due and thorough consideration to the DEIS and FEIS, the transcript of the public hearing, all written agency and public comments received, all comments submitted by WJWW staff and its professional consultants, and all plans and other information that are part of the record of this application. The Lead Agency considered all of the aforementioned information with regard to the potentially significant adverse environmental impacts that may be expected from the Proposed Action, as well as the measures proposed to mitigate such impacts. These findings show that the Lead Agency has taken a hard look at the potential environmental impacts of the construction and operation of a 30 million gallon per day Dissolved Air Flotation/Filtration plant for the Rye Lake water source and has considered and addressed each significant potential negative environmental impact.

The DEIS and FEIS (together, the "EIS") include an environmental evaluation of the following resource issues:

- Land Use, Zoning, and Public Policy

- Community Character and Visual Impacts
- Fiscal and Economic Impacts
- Community Service
- Utilities
- Stormwater
- Geology- Soils and Topography
- Vegetation and Wetlands
- Archaeological and Historical Resources
- Traffic and Transportation
- Noise
- Air
- Public Health
- Construction
- Other Environmental Impacts

The WJWW findings based on the EIS analysis are presented below.

4.1. LAND USE, ZONING, AND PUBLIC POLICY

Land Use

Within the ½-mile study area, there are several water supply facilities including the Rye Lake Pump Station and UV facility, and Purchase Street Water Storage Tanks, all owned and managed by WJWW. The Rye Lake WJWW water source is also within the ½ mile study area. Interstate 684, a major transportation corridor, runs north and southwest, approximately 500 feet from the Project Site, and Westchester County Airport, a transportation utility, is contiguous to the Project Site. The Proposed Action is consistent with the surrounding utility land uses or land associated with utility land uses, which encompasses 58 percent (432 acres) of the ½ mile study area (735 acres). The Proposed Action would convert land categorized as a transportation utility (Airport) to a water utility use.

The Exchange Parcel, currently vacant and contiguous to the Westchester County Airport, would become part of the Westchester County Airport property. There are no plans by Westchester County to develop this parcel for any land use beyond wetland restoration or stormwater management.

Zoning

The Project would comply with the use and dimensional requirements for the SB-O district, Special Exception Use permit, and special conditions for a utility facility. As the Project Site is bordered to the north and west by a residential district, a front and side yard buffer of 100 feet is observed. The Project would require two variances from the Zoning Board of Appeals for the height of the security fence, which must be eight feet in height to meet NYSDOH security requirements; and to locate a gate at the entrance of the site, within the 100-foot buffer along Purchase Street. This gate is also required to ensure the safety and security of the Project Site.

Public Policy

2013 Town/Village of Harrison Comprehensive Plan

The Proposed Action is consistent with the recommendations of the Town/Village of Harrison Comprehensive Plan. The building and site design components of the Project support the following objectives of the Comprehensive Plan:

- "*Seek ways to use energy-efficient products and incorporate green building practices in new municipal projects and consider updating the Town ordinance to encourage sustainable design practices." (Page 7)*
- "*Retain mature trees, stone walls, and other natural and built features which contribute to the character of the [Purchase] area, and limit curb cuts along Anderson Hill Road, Lincoln Avenue, and Purchase Street." (Page 7)*

Westchester County 2017 Airport Master Plan

The Project Site is not considered a critical area of expansion within the *Westchester County 2017 Airport Master Plan.* In addition*,* the Airport Master Plan is currently being updated by Westchester County and the County has provided WJWW with a non-binding Memorandum of Understanding for the Proposed Action included in DEIS Appendix B**.**

Summary

WJWW finds that the WJWW Filtration Plant would add a water supply utility use to an area that is currently owned and managed by Westchester County Airport, a transportation utility. WJWW further finds the WJWW filtration plant is a use permitted by Special Exception Permit in the SB-O zoning district. The Proposed Action complies with the zoning in terms of use and bulk and seeks two minor area variances, for the height of the fence and locating the entrance gate within the 100-foot buffer. Both requested variances are required for the safety and security of the Project Site. WJWW finds that the Proposed Action is consistent with the Town/Village zoning and the Comprehensive Plan. The Proposed Action would not impact any proposed Airport improvement projects, and it would incorporate landscaping and design that are contextual with the surrounding neighborhood.

Given the consistency of the Project Site's current and proposed utility land use and the non-intrusive operations required for the Project, the Proposed Action's overall conformity to the zoning requirements of the SB-O, and its consistency with the Comprehensive Plan, WJWW finds that no significant adverse impacts are anticipated.

4.2. COMMUNITY CHARACTER AND VISUAL IMPACTS

There are no state or federally designated landmarks and no designated visual resources onsite, contiguous to or in the immediate area of the site that would be significantly affected by the Project. A visual impact analysis of the filtration plant was undertaken from 11 different viewpoints. The results are presented in Appendix D of the DEIS. Views of the filtration plant would primarily be seen during the winter months and in close proximity of the Project Site. Careful consideration was made to strategically landscape the site to minimize the visual impacts of the filtration plant. This includes the planting of approximately 300 new trees. The outdoor lighting plan is designed to provide a safe and secure site and

prevent light trespass, excessive glare, light pollution, and restricted visibility of the night sky (skyglow), adverse effects on nocturnal wildlife, and inefficient use of energy resources.

The proposed building would include exterior granite and quartzite stone veneer on part of the facade to match the stone walls along Purchase Street and stone pier accents would be constructed next to the property gate consistent with other development along the street. Neutral or muted building colors (cadet grey and almond suede siding) would be used to help the structure blend in and be more compatible with its surroundings. A gabled roof line would be provided, and front façade glazing, and translucent panels would be installed to improve architectural quality and reduce visual monotony.

Based upon public feedback, the security fence on the north side of the facility has been moved closer to the facility and further away from the northern property line to minimize the visual impacts of the fence. Along the northern property boundary facing the House of Worship property, the fence is set back by approximately 240 feet from the property line.

Various mitigation measures are proposed to reduce the visibility of the facility from offsite locations while at the same time improving the appearance of the Project. They include the following:

- As depicted on the site plan in Appendix C of the DEIS, the Project would restrict the area of clearing to only what is necessary to provide the space needed for essential equipment, project infrastructure, and suitable indoor and outdoor workspaces that ensure a safe and fully functional facility.
- A landscaping plan, including the installation of approximately 300 trees, is proposed to replace some of the vegetation that would be cleared, enhance the visual quality of the development with diverse indigenous species, screen man-made structures from the street and other public vantage points, while retaining natural vegetation along the street as a buffer.
- The proposed building would comply with the dimensional zoning standards of the SB-0 District including yard setbacks, building height, and building lot coverage, so that the building is contained within the requisite zoning envelope. Variances would be sought from the Zoning Board of Appeals for the height of the security fence, which must be eight feet in height to meet NYSDOH requirements for security purposes; and to locate a gate at the entrance of the site, within the 100-foot buffer along Purchase Street. This gate is also required to ensure the safety and security of the Project Site.
- An exterior lighting plan was prepared. The purpose of the plan was to provide the necessary outdoor lighting to ensure a safe and secure environment without unnecessary and wasteful illumination or negative impacts on the visual character of the area. Walkways, building entrances, access ways, and critical emergency and security areas are among those locations that must be lit.
- Lighting shall be shielded and directed downward, energy efficient, and not illuminate off-site areas or parts of the site that do not require or need to be lit. Exterior fixtures would be provided with motion sensors, photoelectric sensors, and automatic timers. LED lighting would be installed, and all lighting would comply with NYS Energy Code standards.
- The façade of the building would include a partial stone veneer that resembles the stone used in walls along the street and the building would be of muted colors to blend into its surroundings. A gable roof would be provided rather than a flat roof to make the building look less commercial, and the building would comply with applicable zoning standards

including maximum building height and maximum building coverage. The front façade would include windows and translucent panels to provide visual interest.

- Coordination would continue with the Federal Aviation Administration ("FAA") to ensure that the proposed facility would not obstruct visibility, impede, or otherwise adversely affect normal flight operations, and if an issue is identified, WJWW would address that concern to the satisfaction of the FAA prior to construction.

Summary

WJWW finds that the mitigation measures, summarized above, would reduce the visibility of the facility from offsite locations and improve the appearance of the Project. WJWW further finds that with the implementation of the required mitigation measures outlined above, no significant adverse impacts to visual resources and community character are expected from the project based on project siting and design.

4.3. FISCAL AND ECONOMIC IMPACTS

The Proposed Action would not result in a material change in taxation for Westchester County Airport property as a result of the land swap because the land swap would entail an equal exchange of land, and both properties involved in the swap do not currently contain any on-site structures or infrastructure. Therefore, the Westchester County Airport property's assessed value and taxes owed would not materially change as a result of the Proposed Action.

Once developed, the Project Site would increase in its assessed value beyond what WJWW is currently paying on the Exchange Parcel because the Exchange Parcel is now assessed as vacant land. The Proposed Action would not result in any changes to other local, county, and school tax revenue, as both the Project Site and Exchange Parcel are exempt from paying these taxes due to the tax-exempt status of Westchester County and WJWW. Both the County and WJWW would be exempt from paying these taxes when the land swap is finalized, and the Project is complete.

WJWW estimated in the DEIS that the total construction cost of the filtration plant would be $108 million. This was based upon escalation factors taking into consideration the original construction timeline which anticipated completion of the project by 2025. Now that the timeline for construction has been pushed out to early 2027 and assumptions regarding inflation, etc. have changed significantly, the new estimated total cost of the project is $138 million. This cost includes all costs associated with the current project: design, permitting, engineering, legal, environmental consulting, construction, etc.

Water Fund surplus may potentially be used to spread out and flatten retail water rate increases but will not affect the total project cost.

It is anticipated that the total estimated cost of the Rye Lake Filter Plant project of $138 million will ultimately be financed with 30-year bonds. Based on expectations regarding interest rates, the annual debt service is expected to be about $9 million annually. The annual debt service amount will carry forward for the duration of the term of the bonds and will be part of the billing for water service.

Retail water rates would need to increase by approximately 50 percent over the next five years to cover the incremental debt service cost directly associated with the project, all other factors kept constant. This would increase the current retail treated water cost per gallon from $0.00944 to $0.01416 in five

years. When factoring in expected increases in NYC water rates, WJWW operating costs, and debt service on other capital projects along with the debt service associated with the Rye Lake Filtration Plant, retail water rates are expected to rise by approximately 75 percent over the next five years. This would increase the current retail treated water cost per gallon from $0.00944 to $0.01652 in five years.

For a household using water primarily for domestic purposes with minimal irrigation (approximately 100 thousand gallons annually), the current average annual billing is approximately $944. In five years, the amount of this average annual billing would increase to approximately $1,652. There are potential grant opportunities available that could provide in excess of $30 million to offset project costs. If the full grant amount were to be realized, the total increase in retail water rates over a five-year period would be reduced from approximately 75 percent to about 60 percent.

The Project would not generate a robust employee population that would significantly contribute to the local economy through direct or indirect spending. Once fully operational, the Project would have at most two employees during the day shift and one employee during the evening and night shifts.

Summary

WJWW finds that the Proposed Action would result in a net positive impact for the Purchase Fire District #4 and the Blind Brook Sewer District taxing districts. The Project Site is anticipated to generate a higher amount of taxes than the current taxes at the Exchange Parcel. The final assessed value would be determined by the Assessor of the Town/Village of Harrison. WJWW further finds that no significant adverse fiscal and economic impacts are anticipated as a result of the Proposed Action.

Based on the foregoing considerations, WJWW finds that the Project would not result in significant adverse fiscal and economic impacts. Water rates would increase substantially, but the rate increases will be required to pay for the cost of the Project and are therefore unavoidable. WJWW will also be pursuing grant opportunities that could lessen overall increases in water rates necessary to support the Project.

4.4. COMMUNITY SERVICE

Demographics

The Project would include the construction of a 30-MGD Dissolved Air Flotation/Filtration plant to serve the WJWW's water source from Rye Lake. The filtration plant would have the capacity to meet the maximum day water supply-demand of the WJWW's entire water distribution system. The Proposed Action would not induce an increase in the population in any of the municipalities in WJWW's service area or to the Town/Village of Harrison. The Proposed Action would be implemented to address existing water quality issues along with compliance with the Administrative Order issued by the USEPA and the Court Order issued by the New York State Supreme Court.

Police Fire and Emergency Medical Services

The maximum of three WJWW employees at the filtration plant would not significantly impact Emergency Medical Services ("EMS") based on the number of calls received per year. According to a phone conversation with Executive Director Robert Calandruccio, the EMS can easily accommodate an increase of three persons. The Fire Department has a response time of six to seven minutes.

The fire suppression systems for the filtration plant would be designed to comply with the rules and regulations of the NYS Building and Fire Codes. The Project would meet NYS Building and Fire Codes. Neither the filtration plant nor the addition of three employees at the filtration plant would significantly impact services to be provided by the Fire Department.

The additional three WJWW employees at the filtration plant would not significantly impact the services to be provided by the Police Department.

Solid Waste

The anticipated on-site sewage discharge from the Proposed Action includes sanitary waste, water collected from floor drains, and centrate from the residuals dewatering process. The sewage would be primarily liquid sewage with low solids and would be conveyed to the Blind Brook Wastewater Treatment Plant. The average solids produced would be less than six cubic yards (CY) per day, with a maximum of 22 CY per day. The average solids collected would be equivalent to two or three dumpsters per week.

Construction activities from the Proposed Action would generate 33 tons of solid waste per month, and the operation of the Proposed Action would generate an average of 113-135 tons of solid waste per month under average operating conditions. The construction waste would be disposed of at the Charles Point Resource Recovery Plant in Peekskill, NY.

Summary

WJWW finds that the Proposed Action is necessary to protect public health and to comply with regulatory requirements, a State Court Order and a USEPA Administrative Order. The Proposed Action is not expected to generate an increase in the population of any communities in WJWW's service area, and no significant demography-related adverse impacts to community services are anticipated. WJWW further finds that there would be no significant adverse impacts on the services to be provided by the Harrison EMS, Police, or Fire Departments and the amount of new solid waste is not anticipated to overburden municipal facilities or create adverse impacts.

4.5. UTILITIES

Water Supply

The construction of a filtration plant is necessary for WJWW to continue serving residents with high quality drinking water on a long-term basis. The USEPA issued two administrative orders, resulting in an obligation to commence design of the proposed Rye Lake Filtration Plant. WJWW had previously been issued a Court Order in 2004 from the New York State Supreme Court to construct a filtration plant. The Court Order was upheld on appeal in 2005 and remains in effect today. For the protection of public health and safety and to comply with New York State's Court Order, the Safe Drinking Water Act and the USEPA Administrative Order, WJWW proposes to construct and operate a 30-MGD Dissolved Air Flotation/Filtration water filtration plant for WJWW's Rye Lake water source.

In addition to meeting the obligations required of WJWW by New York State and USEPA, construction of a water filtration plant is a long-term solution to the issue of DBPs affecting WJWW's Rye Lake water source. The filtration plant would include enhanced coagulation to remove disinfection byproduct precursors to TTHM and HAA5, giving WJWW a greater ability to routinely comply with the maximum

contaminant levels for TTHM and HAA5 as required by USEPA standards. The Proposed Action would ensure a safe and reliable drinking water source for the WJWW customer base and would benefit the public by significantly reducing the risks of long-term exposure to DBPs.

Water Service

To operate the water filtration plant, the Proposed Action would result in an increase in total water demand by an average of 3,300 gpd but an increase in population or construction is not anticipated as a result of the proposed water filtration plant.

Sanitary Service

A sanitary sewer line connection is proposed from the Subject Property to the existing Westchester County Airport (WCA) Sewer Collection System on the WCA property. The proposed four inch diameter force main would connect to the east side of the proposed filtration plant and extend in a northerly and then easterly direction over a total distance of approximately 2,000 feet within the airport before connecting to the existing WCA Sewer Collection System. Construction of the proposed sanitary force main from the Project Site to the Westchester County Airport would include open cut trenching and installation of a bypass system for an existing culvert crossing. This crossing would be located within the freshwater wetland adjacent area between two delineated wetland areas on the northeast side of the Project Site but is not anticipated to disturb the wetlands because it would run across the existing culvert.

The anticipated discharge from the Project Site would include sanitary waste, water collected from floor drains, and centrate from the residuals dewatering process (centrifuge dewatering). The four inch force main would accommodate the projected average sewage flow rate from the facility of approximately 9,000 gpd and the projected maximum flow rate of approximately 12,000 gpd. Sewage from the site would be primarily liquid sewage with low solids.

Overall, the proposed sanitary main, WCA collection system, Westchester County trunk line, and Blind Brook Wastewater Treatment Plant would be accepting liquid sanitary waste from the filtration plant, and the Passaic Valley Sewerage Commission would be receiving dewatered solids from the site.

Electric, Telephone, and Cellular Data

The type of electrical service that would be provided would be determined by Con Edison upon review of the final load letter to be submitted during final project design.

The finished operating facility is projected to consume an estimated 7,210,000 kWh/yr. of energy and 20,000 gal./yr. of propane which equates to a specific energy consumption of approximately 700 kWh per MG of treated water. Propane would be stored in two on-site above ground 2,000-gallon storage tanks (total of 4,000 gallons of storage) and be used to heat the facility.

The Project would also include the installation of an approximately 18,900 sq. ft., 340-kilowatt (kW) roof-mounted photovoltaic system to partially offset the energy needs of the site with clean and renewable energy that would be generated on-site.

As a backup to the electric system, two diesel-fueled standby power generators would also be installed on the site for emergency purposes and uninterrupted water treatment during power outages once the

construction is completed and the facility is operating. The fuel tank for each generator would have the capacity to provide at least 24 hours of continuous, full-load plant operation. Generator switchgear would be provided to distribute power from the emergency generators to the motor control centers located in the facility's electrical rooms. One 1,250 kilovolt-ampere (KVA) load bank would be provided to exercise (test) each generator for no more than one hour per week.

Mitigation measures to reduce impacts on utilities are already proposed in the Project design as follows:

- Non-invasive, native, and well adapted plants for site conditions would be used as part of the proposed landscaping plan to reduce the demand for seasonal irrigation and fertilization.
- Install modern water efficient fixtures in restrooms to conserve water at the facility.
- The Proposed Project would connect to an existing sanitary main on the airport property via a four-inch force main to the Westchester County Airport Sewer Collection System to eliminate the need for onsite sewage discharge. Treatment of the wastewater would occur at the Blind Brook Wastewater Treatment Plant, which is outside of the Kensico Watershed.
- Photovoltaic arrays would be installed on the roof of the proposed building to reduce demand for nonrenewable energy resources and partially offset related energy and climate related impacts.
- Energy conservation techniques would be universally implemented in the facility's design and operation and would comply with the 2020 Energy Conservation Code of New York State.
- Means for monitoring and managing energy use would be built into major electrical equipment and computer control systems to ensure consistent and reliable energy conservation and opportunities for system adjustments and rapid responses to system inefficiencies.

Summary

WJWW finds that the primary purpose of the Proposed Project is to improve the quality of the public drinking water system and to meet obligations now required of WJWW by the New York State Supreme Court and the USEPA. Considering the above mitigations already proposed in the Project design, no significant adverse impacts on public utilities or from proposed infrastructure would result from the Proposed Action.

4.6. STORMWATER

Stormwater runoff from onsite impervious surfaces would be captured via curb inlets and roof drains and conveyed through the piped stormwater system. Flow would be conveyed to a proposed constructed wetland for water quality volume treatment, and then discharged to a bioretention cell. Following the bioretention cell, flow would be conveyed through a piped system to the underground stormwater detention structure to reduce the peak flow during storm events. A diversion structure would divert larger flows from larger stormwater events around the bioretention cell. Runoff from these larger storm events would be piped directly to underground stormwater detention structures. Flow from the project site would be discharged to a stabilized swale via the Project Area Discharge Point (outfall), which flows to the unnamed stream, and ultimately flows to Rye Lake.

The Project would require a NYSDEC State Pollutant Discharge Elimination System ("SPDES") General Permit for Stormwater Discharges from Construction Activity. Stormwater management facilities for the proposed project are designed in accordance with the applicable NYSDEC regulations and *Rules and Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water Supply and Its Sources* and would manage the 1-, 10-, and 100-year design storm. The 500-year storm was also modeled.

The Project would only result in an increase in the peak runoff rate for the 500-year storm event. This increase of 5.33 cubic feet per second (cfs) in the peak runoff rate post-development is a five percent increase over the pre-construction peak runoff rate. This increase in peak flow for the 500-year storm would result in a minimal increase in depth (approximately 0.3-inches) within the unnamed stream at the Project Site.

All construction activities would be performed in accordance with NYSDEC's technical standards for erosion and sediment control to minimize potential adverse effects to surface waters, including Kensico Reservoir. Sediment and erosion control measures, including silt fencing, inlet (catch basin) protection, and covering stockpiled fill and/or excavated materials, would be implemented in accordance with an approved SWPPP. The most recent version of the SWPPP can be found in Appendix B of the FEIS. These measures would reduce erosion or runoff potential in the event of a storm and would provide dust control in dry weather. In addition, all construction activities that would take place adjacent to regulated NYSDEC freshwater wetlands would be completed in accordance with any conditions required by NYSDEC under Articles 15 and 25 of the NY Environmental Conservation Law, or through equivalent approvals.

As the Project would construct a new facility (i.e., the Rye Lake Water Filtration Plant) used in connection with the operation of a public water supply system, prohibitions on the construction impervious surfaces within limiting distances to watercourses, wetlands, reservoirs, reservoir stems, or controlled lakes would not apply. It should be noted that the project proposes limited impervious surfaces within the limiting distances to watercourses and wetlands.[6] WJWW has been coordinating with NYCDEP throughout the course of this Project because the Project Site is located within the New York City's water supply watershed. WJWW is committed to continuing this coordination to ensure protection of the high-quality waters from which the City's water supply is drawn and preserve it from degradation.

Summary

WJWW finds that the Project's proposed stormwater control system, which will reduce post-development peak runoff volumes from the one-, ten-, 25- and 100-year design storms, will adequately address the potential for Project-related water quality and quantity impacts. The drainage design provides for temporary detention, settling of solids, biological uptake, surface evaporation, subsurface filtration, and components for temporary overflow storage and delayed discharge to provide a high-quality discharge into the stream channel via the Project Area Discharge Point. This proposed drainage system, along with the facilities maintenance requirements, are expected to suitably address potential adverse environmental impacts on water quality and ensure that runoff from the proposed project is

[6] New York City Water Supply Rules and Regulations Section 18-39(a) Stormwater Pollution Prevention Plans and Impervious Surfaces limits construction of impervious surfaces within the limiting distance of 100 feet of a watercourse or wetland, unless it is made necessary by the construction of a new facility or alteration of an existing facility used in connection with the operation of a public water supply system.

properly controlled to prevent flooding. WJWW further finds that there would be a minimal increase in depth of the unnamed stream in a 500-year flood condition that would be comparable to existing conditions; therefore no significant adverse impacts would result from the Proposed Action. WJWW will continue to coordinate with NYCDEP with respect to its review and approval of the Project's SWPPP and sewer line.

4.7. GEOLOGY

The maximum depth of excavation would be 35 feet in the area in which the washwater tanks would be installed. The total volume of net material anticipated to be removed from the Project Site would be approximately 49,900 CY.

A Phase I Environmental Site Assessment ("ESA") of the site was conducted in 2019 to identify any soil or groundwater contamination at the site. Two Recognized Environmental Conditions, an Historic Recognized Environmental Condition, and two Business Environmental Risks were identified on or near the airport property.

In addition, a preliminary subsurface exploration program was completed on November 22, 2019, and groundwater samples were collected on December 13, 2019, for the Preliminary Geotechnical Report. Soil samples were tested for a number of compounds which were all detected below NYSDEC Environmental Remediation Program criteria for unrestricted use soil cleanup objectives; therefore, there are no restrictions for the reuse of excavated subsoil and glacial till on- or off-site. Groundwater was also tested for volatile organic compounds and semi-volatile organic compounds as well as perfluorinated alkyl acid (PFAA) compounds, which are a sub-set of per- and polyfluoroalkyl substances (PFAS). None of these compounds were detected above laboratory detection limits; therefore, no treatment for these compounds is warranted.

A Phase I reassessment was conducted in August 2021 and included information on additional groundwater testing conducted in July 2021. The groundwater samples resulted in no detected volatile organic compounds, pesticides, or PCBs. However, several semi-volatile organic compounds and metals were detected in separate groundwater samples that exceeded their respective NYSDEC TOGS 1.1.1 Water Quality Standards for class GA (fresh) groundwater. These results would not affect the water that would be treated by the proposed filtration plant because the WJWW water source is from Rye Lake and processed at the Proposed Site in a closed loop system.

The existing soil material on-site would be evaluated for suitability as fill material to be re-used. Clean material would be properly compacted and proof-rolled with a loaded dump truck or other heavy, wheeled equipment. Excess soil and earth materials that cannot be re-used would be disposed off-site in accordance with Town/Village of Harrison, New York State and federal regulations and the recommendations of Phase I and Geotechnical Engineering report, and summarized below.

The northeastern portion of the Project Site has a small area that is classified as steep slopes which is located outside of the limits of disturbance for the construction of the facility and would only be slightly impacted during the installation of the new sewer line.

The Project would include the following mitigation measures:

- Identify limits of clearing prior to site preparation and construction. Limit total site clearing to only what is necessary for building construction, parking, access, staging, equipment, and space for required operations.

- Install temporary fencing (limits of disturbance) as needed to prevent encroachment of clearing and other work into areas that are to remain natural/undisturbed and utilize silt fencing to prevent soil from being transported off the development site, on to streets, private properties, into drainage structures, or into the stream and wetlands.
- Grade or stabilize cleared slopes as soon as possible after clearing and grubbing by developing the site (paving and building construction) and/or seeding and landscaping as soon as possible after disturbance.
- Incorporate any clean and suitably textured soils from excavations back into the site as possible to ensure suitable grades for development while reducing the need for off-site shipments and disposal.
- Prepare and implement a SWPPP that meets the standards and requirements of the State, NYCDEP, and Town/Village pursuant to Chapter 130, Stormwater Management and Erosion Control.
- All erosion and sediment control measures would be installed as appropriate per the SWPPP.
- Utilize dust control practices including stabilized construction entrance, applying water and or calcium chloride to bare soil periodically if and as necessary and maintaining low onsite construction vehicle speeds (posting an onsite speed limit of ten mph).
- Ensure that dump trucks are covered when exporting from the site.
- Designate material staging areas and designated temporary stockpile locations onsite as needed and measures taken to prevent erosion and sedimentation from stockpiles as warranted.
- Provisions would be made during the construction phase to have excavated water and sediments pumped, containerized, and disposed of in accordance with applicable regulations and guidelines, including hazardous waste management policies and procedures, if applicable. All excavated materials and water from the Project Site would meet all regulatory requirements including the requirements of 6 NYCRR Part 360 for off-site disposal facilities. All analytical results developed during the project development stage would be used to facilitate selection of a suitable disposal facility. If excavated materials require additional characterization depending on the acceptance requirements of the selected disposal facility permit, such additional characterization would be conducted at that time.
- Solid wastes or miscellaneous debris encountered during the construction process would be isolated/ segregated, characterized, recycled, or salvaged where possible. All remaining materials or wastes or debris would be excavated, removed, and transported offsite for proper disposal.
- Install drainage infrastructure that meets the design and capacity requirements necessary to serve the site, ensure proper drainage and prevent flooding, and protect slopes, wetlands, and watercourses in accordance with Chapter 130 of the Town/Village Code. Proposed drainage management practices currently include green infrastructure such as a constructed wetland, bioretention area, and an underground stormwater detention structure.

Summary

WJWW finds that with the incorporation of the required mitigation measures listed above, no significant adverse impacts to the soils, topography, or steep slopes on the Project Site are anticipated to result from the implementation of the Project.

4.8. VEGETATION AND WILDLIFE

Approximately 6.16 acres would be cleared and developed including the building footprint, driveway, a small parking lot, walkways, and supporting utilities and ancillary features. Of the 1,896 trees found on the Project Site, 56 percent are invasive. Approximately 579 trees would be removed from the Project Site. A Tree Removal Permit would be obtained from the Town/Village of Harrison Building Department before any clearing activity would occur and or any clearing of a regulated tree on the Project Site. No designated critical habitats would be disturbed or altered by the Proposed Action, as USFWS confirmed the Project Site does not contain any designated critical habitats. Proposed clearing would be limited to only what is necessary to accommodate the proposed facility and its essential structures and features, so that the remaining existing vegetation is left intact. Areas of greater environmental sensitivity, including the freshwater wetlands, stream corridor, and fringing forest line to the east would be avoided to the maximum extent practical.

A total of approximately 302 new trees would be planted. Identified species include mostly native species as well as some ornamental species that are suitably adapted to Site conditions.

The Project proposes to include the following mitigation measures:

- Delineate tree clearing limits and install tree protection fencing at the Project Site prior to construction to avoid inadvertent clearing and encroachment into wetlands or areas that are intended to remain natural.
- Disturbance would be minimized to the maximum extent practicable by limiting it to those areas that are essential to accommodate the facility and the limited open areas needed for facility parking, essential equipment, and space for site operations.
- Areas that are cleared but not physically developed would be stabilized as soon as possible after disturbance. These areas would be reseeded and replanted or landscaped as soon as construction activities allow per the landscape plan. Approximately 300 native trees are proposed to be planted.
- The landscape plan would introduce to the formerly disturbed site over 55 native and site appropriate species to rebuild the local ecosystem which would begin to restore the habitat and soil health and outcompete invasive and noxious vegetation. This would reduce the need for fertilizers, pesticides, and additional irrigation. Invasive plant species that are listed under 6 NYCRR Part 575, Sections 575.3, Prohibited invasive species and 575.4, Regulated invasive species would not be utilized in the proposed landscaping plan.
- Compliance with the standards and conditions of a Town/Village of Harrison Tree Removal Permit.

Summary

WJWW finds that no significant adverse impacts to ecological resources on or adjacent to the Project Site are anticipated to result from the Proposed Action with the implementation of the required mitigation measures listed above.

4.9. WETLANDS, WATERBODIES, WATERCOURSES, AND FLOODPLAINS

NYSDEC, USACE, and Town/Village regulated freshwater wetlands are present on-site, including an intermittent/ephemeral stream that runs north and south along the easterly property boundary of the Site. NYSDEC validated the wetland delineation map on August 10, 2021, and confirmed the Project Site contains 1.2 acres of delineated wetlands and 4.7 acres of regulated wetland adjacent area (100-foot buffer). The Project Site is not within any FEMA designated floodways, 100-year floodplains, Special Flood Hazard Areas, or 500-year floodplains. Review of Federal Emergency Management Agency Flood Insurance Rate Map shows the Proposed Site is located in an area of minimal flood hazard (X Zone) which is considered an upland area.

There would be no direct disturbance to any wetland on or adjacent to the Project Site. The proposed limits of clearing for construction of the Project would result in temporary disturbance to approximately 1.7 acres of wetland adjacent area (i.e., within 100 feet of regulated wetlands). Disturbance would be associated with construction of the facility building, installation of Site utilities, and infrastructure, paving around the facility, grassed walkways (to reduce impervious cover where practical), and sewer line installation. Proposed impervious features on the property, including the plant building, a driveway, parking lot, walkways and supporting utilities and ancillary facilities, would total approximately 2.4 acres. Permanent impervious areas (building, equipment pad, and paving) within the freshwater wetland adjacent area would cover approximately 0.26 acres. Approximately 0.4 acres within the adjacent area would be permanently disturbed; however, this area would be used to construct a green stormwater management practice (SMP), such as a constructed wetland or bioretention area to provide the required water quality volume (WQv) needed to treat the projected stormwater runoff from the requisite design storms.

During construction, the following best practices would be implemented to ensure that any disturbance or construction activities would not result in the degradation of wetlands or waterbodies at or near the Project Site:

- Delineate by temporary fencing areas of clearing prior to disturbance to prevent accidental encroachment into wetlands or areas that are not to be disturbed.
- Minimize the area of wetland disturbance required to install the new sewer main and immediately restore the area of disturbance with indigenous wetland and facultative plant species.
- Prepare and implement a SWPPP that includes an Erosion and Sedimentation Control Plan to prevent discharges of construction-related pollutants including soil into surface waters, dry or wet stream channel, and wetlands.
- Plans shall comply with all applicable standards and requirements set forth in Town/Village Code Chapter 130, Stormwater Management and Erosion and Sediment Control, Chapter 146, Flood Damage Prevention, and Chapter 149, Freshwater Wetlands, of the Town/Village of Harrison code.
- Strictly adhere to any and all wetland permit requirements from the Town/Village, NYSDEC and USACE.
- Install the proposed sewer main within a culvert rather than directly through wetlands thereby eliminating the need to remove wetlands vegetation and disturb habitat and hydrology.

- Construction debris and solid waste generated during the construction process and future operations shall be collected, contained, and safely disposed at a facility that is approved for acceptance of these materials to prevent impacts to adjacent wetlands from debris.

The design of the plant itself, as well as anticipated operations, incorporate several measures to ensure the protection of wetlands and waterbodies and avoid adverse impacts. These measures include:

- Retain as much existing vegetation onsite as possible and revegetate disturbed areas with native species appropriate to the site, reducing the need for regular watering, maintenance, and pesticide and fertilizer application once established.
- Drainage infrastructure would be installed to manage the projected volume of stormwater runoff from the required design storms and provide pretreatment prior to discharge/to protect onsite surface water and wetlands, as well as shallow groundwater to the maximum extent practicable.
- All applicable spill prevention and chemical containment measures would be incorporated into Project Site operations, which offers further protections to on-site wetlands. Regarding on-site hazardous materials, the facility would be constructed to Federal and State standards, and safety protocols would be instituted for operators on-site.

Summary

WJWW finds that with the required mitigation measures detailed above, the Proposed Action would have no significant adverse impact on the existing stream, stream channel, area wetlands or floodplains.

4.10. ARCHAEOLOGICAL AND HISTORICAL RESOURCES

A Phase 1 Archaeological Survey of the Project Site was prepared in December of 2019 (see DEIS Appendix K). The Phase 1 Survey resulted in the recovery of 130 historic artifacts, which were primarily found in two clusters. The Phase 1 Survey concluded that the artifacts recovered likely represented a mixture of secondary deposition and refuse disposal, possibly associated with the former Sutton house occupation, which stood to the south of the Project Site and was demolished in the 1940s. The Phase 1 Study also found material deposited that was a result of agricultural fertilization practices, and late nineteenth- through twenty-first-century refuse disposal practices. The Phase 1 Study noted that some of the material was also likely the result of construction activities associated with Westchester County Airport during the 1940s. Based upon the field investigations, the study recommended that the historic artifact assemblage did not constitute a potentially significant archaeological resource.

The Phase 1 Study also identified two isolated prehistoric flake fragments. Additional testing did not yield any prehistoric cultural material. The study concluded that the two isolated prehistoric artifacts did not constitute a potentially significant archaeological resource. Therefore, no further archaeological review was recommended within the Project Site.

The New York State Office of Parks, Recreation and Historic Preservation (“NYSOPRHP”) reviewed the Phase 1 Survey and concluded in a letter dated December 30, 2019, that the Project Site “contained no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places that would be impacted by the Proposed Action.”

The installation of a new sewer line is also proposed for the Project Site. A request was made to NYSOPRHP for comments on the proposed additional disturbance areas and comments were received from NYSOPRHP on April 12, 2021 (see DEIS Appendix K. After review of the Phase 1 Study and other submitted information, NYSOPRHP concluded that no historic properties, including archaeological or historic resources, would be affected by the Proposed Action.

Summary

WJWW finds that the Proposed Action would not have a significant adverse impact on historical or archaeological resources.

4.11. TRAFFIC AND TRANSPORTATION

Project traffic is the estimated number of vehicular trips to be generated by the Project. When completed, the Project would have no perceptible traffic impacts, as WJWW estimates that the Project Site would be staffed by two WJWW employees during the day shift, and would generate, at most, two vehicles during peak hours. This would have no impact on traffic operating conditions. In addition, it is estimated that operations would require two to three trucks per week to remove solid waste and nine trucks per month for delivery of water treatment chemicals. Thus, the "Build" traffic volume/capacity analysis focuses on traffic impacts during the construction phase of the Project. The Traffic Impact Study can be found in Appendix L of the DEIS.

The Traffic Impact Study estimated trip generation during construction of the Project. It is projected that during the a.m. peak hour (8:00 a.m. to 9:00 a.m.), there would be 18 construction personnel trips in and 34 construction truck trips in, for a total of 52 trips in. In the p.m. peak hour (4:15 p.m. to 5:15 p.m.), it is estimated that there would be 18 construction personnel trips out and 34 construction truck trips out for a total of 52 trips out. It was assumed that construction truck trips would be required to take I-684 and travel on Purchase Street to the Project Site. For construction personnel trips, it was assumed that 50 percent would travel to and from the north on Purchase Street, and 50 percent would travel to and from the south. **Table 2** displays the build traffic conditions.

Table 2: Peak Period Construction Traffic Conditions

Intersection	Turning Movement	Morning Peak Traffic Count (8:00-9:00 a.m.)	Evening Peak Traffic Count (4:15-5:15 p.m.)
Lake Street & Purchase Street	Lake Street - continue straight	161	173
	Lake Street - right turn	41	23
	Purchase Street (northbound) - right turn	90	322
	Purchase Street (northbound) - left turn	11	42
	Purchase Street (westbound) - continue straight	183	146
	Purchase Street (westbound) - left turn	342	96

Table 2: Peak Period Construction Traffic Conditions			
Intersection	**Turning Movement**	**Morning Peak Traffic Count (8:00-9:00 a.m.)**	**Evening Peak Traffic Count (4:15-5:15 p.m.)**
Proposed Site Driveway & Purchase Street	Proposed Site Driveway - right turn	17	26
	Proposed Site Driveway - left turn	0	9
	Purchase Street (northbound) - continue straight	84	349
	Purchase Street (northbound) - right turn	9	Not Applicable
	Purchase Street (southbound) - continue straight	357	103
	Purchase Street (southbound) - left turn	26	117
Purchase Street & Tower Road	Tower Road - right turn	21	36
	Tower Road - left turn	32	31
	Purchase Street (northbound) - continue straight	71	313
	Purchase Street (northbound) - right turn	51	51
	Purchase Street (southbound) - continue straight	313	83
	Purchase Street (southbound) - left turn	45	29

Source: Traffic Impact Study: Proposed Rye Lake Filtration Facility 2021

Purchase Street & Tower Road Intersection

Under existing conditions, all major street movements operate at a LOS "A" during the weekday a.m. and p.m. peak hours. In addition, the minor street movements operate at LOS "B" during the weekday a.m. and p.m. peak hours. Under future No-Build conditions, the individual movements would continue to operate at the existing LOS for both peak hour periods, while changes in individual movement delays would be 1.3 seconds or less. Under future Build conditions, which account for the potential impact of peak period construction traffic, the individual movements would continue to operate within the No-Build LOS during both peak hour periods. Changes in the individual movement delays would be minimally affected, at 0.2 seconds or less.

Purchase Street & Lake Street Intersection

Under existing conditions, all major street movements operate at a LOS "A" during the weekday a.m. and p.m. peak hours. In addition, the minor street movements Operate at LOS "B" during the weekday a.m. and p.m. peak hour periods. Under future No-Build conditions, which account for the potential impact of peak period construction traffic, the individual movements would continue to operate at the existing LOS for both peak hour periods, while changes in individual movement delays would be 2.1

seconds or less. Under future Build conditions, the individual movements would continue to operate within the No-Build LOS during both peak hour periods. Minor street movements would begin to operate at acceptable LOS "C" conditions, while changes to individual movement delays would be minimally affected, at 2.1 seconds or less.

Purchase Street & Site Driveway

Under future Build conditions, which account for the potential impact of peak period construction traffic, the major street approaches would experience LOS "A" conditions during weekday a.m. and p.m. peak hour periods. The proposed driveway would experience LOS "A" during the a.m. peak hour, and LOS "B" during the p.m. peak hour period. Furthermore, the delays to main traffic on Purchase Street would be minimal, at 1.6 seconds or less.

Site Access and Sightlines

Site access is provided from a proposed driveway on the eastern side of Purchase Street located approximately 150 feet south of Kempner Lane. Vehicles would enter and exit the Project Site via the proposed driveway. Vehicles would circulate the Project Site along paved roads around the filtration plant. There are four proposed parking spaces located on porous pavement, which would be located in the Project Site's southern side yard. The driveway would consist of asphalt material, and an access drive would surround the plant.

The Traffic Impact Study conducted sightline measurements at the proposed driveway intersection with Purchase Street. The recommended sight distances were calculated based on the 85th percentile speeds observed during the study at the driveway location, which was 56 MPH. For northbound and southbound movements on Purchase Street, the 85th percentile speed was 57 MPH.

The proposed driveway has adequate sight distances that accommodate exiting and entering vehicles and trucks without interfering with passing traffic. All sight distances for turning movements for trucks and vehicles comply with American Association of State Highway and Transportation Officials (AASHTO) requirements, with the exception of trucks turning left from the Proposed Site onto Purchase Street. Trucks coming out of the Project Site and turning left are required to have 800 feet of sight distance. The Project Site allows for 725 feet of sight distance for this turning movement, which is slightly less than the AASHTO requirement. As mitigation, construction trucks will be prohibited from making a left turn out of the Site during the construction phase, which effectively mitigates this issue. After construction, there would be limited truck traffic, and what truck traffic is anticipated for deliveries would not unduly interfere with road traffic.

Parking

There are four proposed parking spaces in the parking area, which would be located in the Project Site's southern side yard. During the Site's normal operations, the facility would be staffed by up to two employees during the day shift and generate, at most, two trips in the busiest hour.

Summary

WJWW finds that based on the evaluation of existing conditions and potential impacts of the Project and with implementation of the required mitigation measure of prohibiting a left turn for construction trucks exiting from the Project Site onto Purchase Street, no significant adverse traffic or parking impacts are anticipated as a result of the Project construction or operation.

4.12. NOISE

The Purchase Friends Meeting House is located just north of the proposed Project location. Noise impacts were evaluated in consideration of the Purchase Friends Meeting house, residents to the west and the single resident to the north (see Appendix M of the DEIS). Due to the minimal, anticipated generated trips for the project during facility operations, no significant traffic-related noise impact is anticipated to the house of worship or the residences in the area.

A majority of the operation units, including air scour blowers, and certain mechanical equipment would be located inside of the plant. Sound/noise sources that would be outside of the plant include air conditioning units, generators, and on-site activities such as the loading and unloading of trucks.

Using the NYSDEC impact criterion discussed in the DEIS noise assessment, no significant adverse noise impacts would be expected from the proposed Project or operations at the Project site.

Two 1,000 kW emergency generators are proposed on the south side of the proposed filtration plant. Sound barriers consisting of sound attenuated enclosures and exhaust silencers would be provided to mitigate noise from these generators. Given the distance of the HVAC equipment to the receptors to the north and west and the 100-foot buffer from Purchase Street and 100-foot side yard setback to the north, no noticeable sound impact is anticipated from the mechanical units.

Intermittent operational sounds produced by the Project could consist of backup beepers from loading trucks and garbage trucks. Backup beepers/alarms would be sporadic in terms of garbage pick-up and potential loading/ unloading of box trucks and therefore sound levels may intermittently exceed ambient levels.

Temporary noise impacts may occur during the construction of the proposed facility. However, it should be noted that existing, ambient levels are already amplified due to interstate traffic and adjacent Westchester County Airport. Ambient conditions at the most adjacent residential locations, when the maximum construction equipment is in use, would significantly exceed the existing ambient noise conditions at times. However, construction activities are limited to fixed hours per the Town/Village ordinance and would be temporary. The proposed construction schedule includes 12 phases spanning a period of 36 months from notice to proceed (NTP) to completion once all permits and approvals are granted. Per the construction schedule, month five would be the launch of outdoor equipment operations.

The following mitigation measures have been incorporated into the Project to reduce the potential for adverse noise impacts:

- Most operational equipment and activities would be indoors and certain indoor equipment such as air scour blowers would be contained within acoustical noise reducing enclosures.

- Cooling would be provided via DX air conditioning systems, which consist of indoor cooling coils and outdoor condensing units that are designed to reduce noise.
- Two emergency generators would be installed on the south side of the building, which is as far as possible from the residence and Purchase Friends Meeting House properties to the north.
- Sound barriers consisting of sound attenuated enclosures and exhaust silencers would mitigate noise from the generators and 100-foot front and side setback buffers would further reduce impacts from noise on the surrounding neighborhood.
- All construction equipment would be turned off when not in use, as New York State law requires no idling of unused equipment in excess of five minutes.
- When feasible, construction equipment would be kept as far from the site boundaries as possible.
- Use ambient sensitive self-adjusting back up alarms.
- Air compressors would have critical environmental silencers with maximum noise attenuation.
- Mufflers would be required on all equipment.
- The Project would adhere to the Town/Village of Harrison Noise Ordinance limits when construction activities can occur to reduce the effects of any unavoidable noise. This includes no construction taking place on Sundays

Summary

The Project Site's exterior perimeter encompasses an already amplified ambient noise level due to traffic activity from Purchase Street, I-684, and Westchester County Airport. Construction activity from the Project Site would be at or close to the existing ambient noise levels for off-site receptor locations for the majority of the construction phases; due to the limited duration of any elevated construction noise at receptor locations, such construction noise would not result in a significant adverse noise impact. WJWW finds that due to numerous factors such as the distance between noise sources and receptors, the siting of noise sources, the influence of the Westchester County Airport on ambient noise levels, and identified Project design and mitigation, there will be no significant adverse impacts from noise due to the Project.

4.13. AIR

The Project would generate construction vehicle trips during site preparation and construction activities and vehicles and equipment would be operating onsite during workdays, but these activities would be temporary and intermittent during the construction process and would occur during normal working hours and are not expected to have a significant adverse impact on air quality. Dust may be periodically generated during construction; however, mitigation will be required to address this potential and temporary air quality impact (see mitigations below). In addition, the construction contractor would be required to develop and comply with a dust mitigation plan as part of the construction contract. Air quality impacts from operation traffic would be negligible.

Two diesel-fueled standby power generators that would burn ultra-low sulfur diesel fuel would be provided for emergency use. The generators would each be rated at 1,250 KW, 480V, 3PH, 3W, 60HZ. The emergency generators would only operate in the event of a utility power failure, and for

"exercising" purposes to keep the generators in good working order. Emissions related to the running of the emergency generators would be temporary in nature either for exercising purposes for no more than one hour per week or for the duration of an emergency power outage. The use of emergency generators is not expected to have a significant adverse impact on air quality.

The power system for the filtration plan would be electric and solar. However, propane would be used for heating of the plant building. It is estimated that a total of 20,000 gallons of heating fuel per year would be used at the Project Site. Modeling analysis was performed using the United States Environmental Protection Agency's (EPA) AERSCREEN screening dispersion model, to determine whether the proposed project could potentially cause any significant adverse impacts with respect to the 1-hour average nitrogen dioxide (NO_2) and $PM_{2.5}$ National Ambient Air Quality Standard ("NAAQS"), which are the critical pollutants of concern (see Appendix N of the DEIS). Receptors were modeled at the five residences closest to the facility and the nearest facility to the boiler vents, which would be located on the south side of the proposed structure. An air quality analysis can be found in Appendix N of the DEIS.

The maximum predicted 1-hour NO_2 concentration from the heating of the plant, when added to the background concentration, is predicted to be below the NAAQS. In addition, the maximum predicted 24-hour and annual $PM_{2.5}$ concentrations, when added to the background concentrations, are also predicted to be below the NAAQS.

The construction contractor would be required to develop and comply with a dust mitigation plan as part of the construction contract. The plan would include the following mitigation strategies:

- Provide a temporary truck wash off station onsite to remove dust from construction vehicles and equipment before exiting the site.
- Install a stabilized construction entrance with rumble strips to remove sediment from truck tires before vehicles exit the site.
- Wetting bare soils if dust from the soils becomes an issue.
- Control onsite construction vehicle speeds to prevent the raising of dust.
- Limit prolonged truck and equipment idling times when possible.
- Stabilize exposed soils as soon as possible after clearing and grading by seeding, mulching, landscaping, building on, and/or paving bare ground as soon as possible after site disturbance.
- Cover or seed stockpiles if they are to remain for more than a few days.

Summary

WJWW finds that significant adverse air quality impacts would not occur as a result of the Project. WJWW further finds that there are methods to reduce any small impacts, particularly those that may occur during the construction process. These include the required mitigation measures detailed above that would be incorporated into a dust mitigation plan as part of the construction contract.

4.14. PUBLIC HEALTH

Drinking Water

WJWW is subject to Westchester County Department of Health, NYSDOH, and USEPA water quality regulations. In 1993, NYSDOH determined that WJWW's source from Rye Lake does not meet the

criteria established by the State for filtration avoidance. In response to this determination, WJWW's raw water intake was moved farther into Rye Lake and placed at a greater depth to access higher quality water from Rye Lake. In addition, a turbidity curtain was installed in Rye Lake in the area where storm water runoff from Interstate 684 and the County Airport enters Rye Lake in an effort to protect the raw water quality of the intake. In addition, WJWW improved its chlorination disinfection system and constructed additional water storage tanks to provide additional disinfection contact time.

In an action brought by NYSDOH pursuant to Section 12 of the Public Health Law, the State Supreme Court for Westchester issued an Order, entered on January 23, 2002, that granted NYSDOH's motion for summary judgment, holding that WJWW violated the State Sanitary Code by failing to construct and operate a water filtration plant. The State Supreme Court's Order was affirmed on appeal in 2003. Upon remand, on June 9, 2004, the Supreme Court issued a Court Order requiring WJWW to construct a filtration plant (Judgment and Order of New York State Supreme Court Index No. 13364-99, Justice Louis A. Barone). The Court Order was upheld on appeal in 2005. It remains in effect today.

On January 4, 2006, the USEPA adopted a Stage 2 Disinfectants and Disinfection Byproducts Rule to provide increased public health protection against the potential risks associated with these compounds. DBPs are formed when natural organic matter in the raw water source interacts with disinfectants such as chlorine. Stage 2 DBP Rule regulated contaminants include trihalomethanes and haloacetic acids. Because WJWW serves a retail population of between 50,000 to 99,999 people, compliance with these new provisions is mandatory. Starting October 1, 2012, WJWW was required to monitor the MCL for total TTHM and HAA5.

The results submitted for the first, second, and third quarters of 2019 exceeded the MCL for HAA5. The 2019 Water Quality Report issued by WJWW indicates that, of the contaminants tested, only two tested at a level higher than New York State allows: total coliform and HAA5. Three MCL violations were issued by Westchester County Department of Health for the HAA5 violations, and notices were mailed to customers on March 15, May 24, and September 3, 2019, to alert them of the violation. Additionally, on March 28, 2019, WJWW was issued an Administrative Order by the USEPA requiring a Corrective Action Plan (CAP) to address the violations for HAA5, and on July 11, 2019, a certified letter was issued by the EPA requiring WJWW to submit an updated CAP detailing interim and long-term measures to mitigate these violations. Beginning in late 2019, WJWW implemented interim mitigation measures for these violations, including a water main flushing program. The proposed long-term measures for mitigation include the construction and operation of a water filtration facility, the Proposed Action.

On November 26, 2019, USEPA issued another Administrative Order, requiring WJWW to commence design of the proposed Rye Lake Filtration Plant and begin the SEQRA process by January 31, 2020, with construction commencing by January 1, 2022, and the facility operational by October 15, 2024. These milestones, for construction and operation, are not achievable and will not be met.

For the protection of public health and safety and to comply with New York State's Court's Order, the Safe Drinking Water Act and the USEPA Administrative Order, WJWW proposes to construct and operate a 30-MGD Dissolved Air Flotation/Filtration water filtration plant at WJWW's Rye Lake (Kensico Reservoir) water source. The Proposed Action would improve drinking water quality and would not result in any adverse impacts on public health with regards to drinking water.

Hazardous Materials

The 2019 Phase I Environmental Site Assessment concluded that the Project Site was not identified on any of the environmental database listings that were searched. Two Recognized Environmental Conditions, an Historic Recognized Environmental Condition, and two Business Environmental Risks were identified on or near the airport property.

A preliminary subsurface exploration program was completed on November 22, 2019, and groundwater samples were collected on December 13, 2019, for the Preliminary Geotechnical Report (see Appendix O of the DEIS). Soil samples were tested for a number of compounds which were all detected below NYSDEC Environmental Remediation Program criteria for unrestricted use soil cleanup objectives; therefore, there are no restrictions for the reuse of excavated subsoil and glacial till on- or off-site. Finally, groundwater was tested for volatile organic compounds and semi-volatile organic compounds as well as perfluorinated alkyl acid (PFAA) compounds, which are a sub-set of per- and polyfluoroalkyl substances (PFAS). None of these compounds were detected above laboratory detection limits; therefore, no treatment for these compounds is warranted.

A Phase I reassessment was conducted in August 2021 and included information on additional groundwater testing conducted in July 2021 (see Appendix O of the DEIS). The reassessment agreed with the opinions, conclusions, and recommendations issued within the initial Phase I ESA, and no deficiencies or absence of information were found that would necessitate further inquiry. As a result, the reassessment concluded that the preparation of a new Phase I ESA is not necessary at this time. In addition, the three groundwater samples were collected to assess the groundwater quality at the Site. No volatile organic compounds, pesticides, or PCBs were detected in the samples. However, several semi-volatile organic compounds and metals were detected in separate groundwater samples that exceeded their respective NYSDEC TOGS 1.1.1 Water Quality Standards for class GA (fresh) groundwater. These results would not affect the water that would be treated by the proposed filtration plant because its water source is from Rye Lake and processed at the Proposed Site in a closed loop system.

Six chemicals would be stored inside the filtration plant and used onsite for operations: hydrofluosilicic acid (23 percent), alum coagulant, sodium hydroxide (25 percent), sodium hypochlorite (12.5 percent), orthophosphate (corrosion inhibitor) and a dewatering polymer. These chemicals are required for the operation of the water filtration plant to enhance filtration, control corrosion, prevent dental decay and provide secondary disinfection and are commonly used for water treatment. All chemicals would be stored and handled in a manner that would prevent releases to the environment and/or exposure to site workers, according to applicable Federal, state, and local regulations. Based on measurements from inside the plant, the closest bulk storage tank (hydrofluosilicic acid) is located approximately 300 feet from the northern property line. The fill station is located approximately 500 feet from the northern property line. These distances, combined with the placement of the storage tanks within the plant building and the implementation of containment measures, monitoring, and spill cleanup procedures required by state and federal regulations, adequately address concerns related to chemical storage.

For chemical delivery, a dedicated area (fill station) would be provided for tanker trucks to safely deliver chemicals with emergency containment to prevent a delivery spill from entering the environment. The fill station would contain designated hose connections for filling each specific chemical. Each chemical would have a dedicated fill line leading to an interior bulk storage tank.

All chemicals would be fully utilized on-site, the only waste from the treatment process would be from dewatered solids. These would be piped through the filtration plant to centrifuges, with the dewatered solids cake being discharged to a trailer in the dewatering room. For removal, a truck would connect to the trailer, remove it from the building, and deliver it to an approved facility for disposal. It is anticipated that approximately two to three trailers a week would be removed from site.

No environmental contaminants were found on-site that would necessitate remediation or abatement, or otherwise limit the use of the Project Site.

The facility is being constructed to Federal and State standards to ensure the safety of employees, users, and the environment. No significant adverse impacts are anticipated as a result of hazardous materials on the Project Site. Based on the Phase I ESA, no environmental contaminants were found on the Project Site that would necessitate remediation or abatement. However the following mitigation measures will be included:

- Regarding on-site hazardous materials, the facility would be constructed to Federal and State standards, and safety protocols would be instituted for operators on-site.
- The above ground propane storage tank and diesel generator tanks would be equipped with overflow fill protections and meet all applicable requirements of Federal, State, and local agencies. The diesel generator tanks would be provided with secondary containment.

Summary

Ensuring WJWW has effective infrastructure to comply with State and Federal regulations is imperative, as WJWW is responsible for providing safe and reliable drinking water to its consumers in Westchester County. WJWW finds that the Proposed Action would have a positive impact on public health, and is itself a mitigation, as it is designed to address water quality issues along with compliance with the AO issued by the USEPA and the Court Order issued by the New York State Supreme Court. WJWW further finds that there are no environmental contaminants were found on the Project Site that would necessitate remediation or abatement. The Project would not result in a significant adverse impact to public health.

4.15. CONSTRUCTION

Construction Schedule and Parking

Construction activities would take place during typical work hours and fully comply with § 177-2(F) of the Town/ Village of Harrison Noise chapter, which limits construction activities to the hours of 7:30 a.m. to 8:00 p.m. Monday through Friday and after 10:00 a.m. on weekends and national and state holidays unless the Town/Village Building Inspector determines that there is an imminent danger to life or property. No work would be conducted on Sundays.

The proposed construction schedule includes 12 phases spanning a period of 36 months from notice to proceed (NTP) to completion once all permits and approvals are granted. Many of the construction phases overlap and all require a varying number of trucks on-site. The three-month period when excavation work would occur for the filtration building is the most active phase in terms of the daily average number of trucks required at the Project Site. The reasonable worst case scenario estimate is that a daily average of 70 truck trips would be needed for the three-month phase. The next most-intensive phase, the site work and site prep phase, would involve clearing, grubbing, stump extraction,

removal of materials from the Project Site, and preliminary grading. This phase would last four months and require a daily average of 17 truck trips. The remainder of the phases would not require more than a daily average of five trucks.

Construction Related Air Quality Impacts

The operation of construction vehicles, heavy equipment, and gas-powered tools would be temporary and intermittent during the construction process and would vary in intensity depending on phase of construction and types of work being performed. Nevertheless, adverse impacts on air quality from vehicle and equipment emissions from a single construction project of this type and scale would not result in any significant short-term, long-term, regional, or localized air quality impacts. All diesel equipment would use ultra-low sulfur diesel fuel and large diesel equipment would be required to have a diesel particulate filter.

Another potential air quality issue during construction is dust; however, various techniques are available to mitigate this potential localized and temporary air quality impact. The contractor will be required to prepare and adhere to a dust mitigation plan that is described under Section 4.13 (“Air”) above.

Additionally, the Project would adhere to an approved SWPPP (including its Sediment and Erosion Control Plan).

Construction Noise Related Impacts

Noise would be generated by vehicles, equipment, tools, and personnel during the construction process. Noise receptors in the area include primarily the Westchester County Airport which periodically generates noise above ambient levels and is not expected to be adversely affected, and a few single-family residential homes located on the west side of Purchase Street, opposite the Project Site, and the single-family home and Purchase Friends Meeting House north of the Project Site on the east side of Purchase Street. Construction activities would be conducted during typical construction work hours and in any case would comply with § 177-2(F) of the Town/Village of Harrison Noise ordinance, which limits construction activities to the hours of 7:30 a.m. to 8:00 p.m. Monday through Friday and after 10:00 a.m. on weekends and national and state holidays, unless the Town/Village Building Inspector determines that there is an imminent danger to life or property. No construction would take place on Sunday. Noise is expected to be temporary and intermittent during the construction process, depending on project phase and type of work activity, and with identified mitigation would not result in a significant adverse impact.

Construction Related Traffic Impacts

During the busiest phase of construction, which would last approximately 3 months, a total worst-case maximum of 70 truck trips would be required daily to complete removal of spoils associated with the necessary excavation for building construction.

Traffic generated during the excavation phase would primarily be associated with heavy truck traffic, particularly dump trucks that would transport soil off-site for disposal or use at another location and return to the Site for another load and personnel vehicles. During peak weekday traffic hours (8:00 a.m. to 9:00 a.m. and 4:15 p.m. to 5:15 p.m.), it was projected that 18 workers and 34 truck trips would enter or exit the Project Site.

Access to the Project Site is proposed from a driveway located off Purchase Street, a road designated as a New York State highway (NYS Route 120). Trucks would be prohibited from turning left out of the Project Site during the construction process.

Construction-Related Vibrations

A geotechnical exploration program was conducted at the Project Site from May 13 through June 4 of 2021 (see Appendix H of the DEIS). During this period, a total of 28 test borings were advanced. These data establish that the depth of decomposed rock beneath the Project Site is between 18.5 feet and 43.5 feet below ground surface. Based on this depth to decomposed rock and bedrock, no blasting or chipping is anticipated for this project. Therefore, potentially significant impacts from blasting, chipping, and associated vibrations are not expected.

Construction would be conducted in accordance with an approved site plan and in accordance with all applicable Federal, State, and local codes. Impacts from construction would be temporary (during the 36-month construction period) and would conclude when the Project is completed. Any construction-related vibrations are not expected to be significant and would be an unavoidable impact.

In addition to the implementation of controls and sequencing as described above, the following mitigation measures would be adhered to for construction:

- Clearing and rough grading of the Project Site would be conducted in accordance with the approved Site Plan and under the supervision of the Town/Village Building Department.
- An NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity and SWPPP would be prepared for the Project to ensure proper control of stormwater runoff during construction. The SWPPP would be reviewed and approved by the Town/Village Engineer and NYCDEP.
- Construction activities would meet the requirements of the Rules and Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water Supply and Its Sources.
- An Erosion and Sediment Control Plan would be included in the SWPPP to address the potential for erosion and sedimentation, including siltation of on-site and off-site wetlands, existing and proposed drainage infrastructure, and the movement and deposition of soils on and off-site.
- Erosion controls would include work perimeter silt fencing, erosion control matting, and drainage inlet protection around all grated drainage inlets that may be affected to prevent sediment from entering and settling within any subsurface drainage structures.
- Identify and fence areas to remain undisturbed on-site to prevent inadvertent encroachment.
- Provide a stabilized construction entrance and install “rumble strips” to reduce the possibility of tracking soil and pebbles onto the public streets.
- Utilize dust control techniques such as soil wetting and/or application of calcium chloride to stabilize soil along the driveway and in work areas as needed and keep on-site construction vehicle speeds at or below ten mph to minimize dust generation.

- Cover or stabilize soil stockpiles that would remain for more than a few days to prevent erosion, sedimentation, and airborne dust.
- Reseed and landscape areas that are disturbed or begin construction as soon as possible after clearing and ground disturbance to stabilize exposed soils and reduce the time that soil is loose and bare.
- Limit prolonged truck and equipment idling times when possible.
- Identify suitable places on-site for vehicle and heavy equipment parking and prohibit the parking of trucks or prolonged idling on public streets or within the shoulder area of public streets.
- Direct truck drivers to use major roads and highways where possible to avoid the use of residential roads and back streets and that all construction truck traffic be required to approach and depart the Site from and to the north. This includes a no left turn onto Purchase Street from the Project Site for construction trucks.
- Construction activities would be restricted to permissible hours of the day and days of the week as prescribed by Chapter 177, Noise, of the Town/Village Code. No construction would take place on Sunday.
- Construction vehicles and equipment would be properly maintained to prevent excessive noise from faulty or damaged mufflers, as well as prevention of oil, fuel, and hydraulic leaks. All diesel equipment would use ultra-low sulfur diesel fuel and large diesel equipment would have a diesel particulate filter.
- Require contractors to follow maintenance and protection of traffic (MPT) plans for work in Purchase Street.

Summary

WJWW finds that with implementation of the required mitigation measures detailed above, the construction of the Project would have no significant adverse impact on the environment and all impacts would be temporary and cease once construction is complete.

4.16. ENERGY USE AND CONSERVATION

Site Preparation and Construction

The filtration plant would be constructed on an undeveloped wooded site that does not currently utilize energy resources and has no existing on-site utility connections; therefore, an increase in energy use and Greenhouse Gas ("GHG") emissions is expected. Clearing, grading, driveway, and parking lot construction; installation of utilities and site infrastructure; and construction of the filtration plant would require the use of construction vehicles, heavy equipment, and power tools such as chainsaws that utilize nonrenewable fossil fuels. This work would take place over a twelve-phase 36-month construction schedule and involve various levels of activity and energy demand, depending on the phase. During the construction period, energy use and GHG impacts would occur on-site, as well as off-site along roadways from construction vehicle traffic and manufacturing of building materials and equipment. Once an electrical connection is made, additional but minor indirect/off-site emissions are expected at electric generating stations that provide non-renewable electricity to the Con Edison transmission network.

Tree Removal

The removal of trees and other vegetation that absorb carbon dioxide (CO_2) and generate oxygen would also have an impact; albeit a small impact with a single project of this type and scale. Nevertheless, the Project has been designed to minimize clearing to only what is necessary to construct and operate the filtration plant and protect natural resources and wildlife habitat by retaining the remainder of the Site in its natural condition.

Of the 1,896 trees found on the Project Site, 56 percent are invasive. The Project would require the removal of 579 trees. Approximately 300 new trees would be planted. Tree species would include mostly native species as well as some ornamental species that are suitably adapted to site conditions.

Construction Vehicle Traffic

Operation of construction vehicles and equipment during construction would utilize energy resources, particularly diesel fuel and gasoline, and in turn release GHGs. During the busiest three-month phase of construction, a maximum of 70 truck trips would be required daily to complete the necessary excavation and material transport for building construction, and heavy equipment (e.g., excavators, backhoes, bulldozers) would be used to excavate, push, and grade soil and load dump trucks. Traffic generated during the excavation phase would primarily be associated with heavy truck traffic, particularly dump trucks that would transport soil off-site for recycling or reuse at another location and return to the Project Site for another load. During this phase, an estimated 70 truck trips and 22 to 34 construction personnel would visit the Project Site per day. During peak weekday traffic hours (8:00 a.m.to 9:00 a.m. and 4:15 p.m. to 5:15 p.m.), it was projected that 18 construction personnel and 34 truck trips would enter or exit the Site. This temporary increase in traffic and operation of construction equipment is unavoidable.

Construction and Demolition Debris Management

The Project Site is undeveloped and is considered to be a “greenfield” based on the Phase I Environmental Site Assessment which did not identify potentially hazardous materials on-site above threshold levels. Therefore, all Construction and Demolition (C&D) waste and earth materials are assumed to be nonhazardous and feasible for diversion to a local recycling facility or to be reused at alternative locations. Diversion of wastes from landfills and other disposal facilities by reusing and recycling salvageable C&D can also help to reduce GHG emissions.

It is estimated that project construction would generate over 1,600 tons of demolition waste, 530 tons of construction waste, and 59,000 tons of excavated soil for a total of 61,130 tons of total C&D waste. Of the 59,000 tons of excavated soil, 12,600 tons is expected to be reused on-site and therefore would not have to be shipped off-site by large diesel-powered trucks, while 46,400 tons would be removed from the Project Site. Other than soil, the next largest waste streams are asphalt, concrete, and wood which are readily recyclable at local facilities.

Contract documents would require that the future contractor submit a Construction Waste Management Plan to the engineer for approval prior to commencement of construction.

Facilities Operations

The filtration plant would require energy to power the facility and treatment processes; heat, cool, and ventilate the building; and provide indoor and outdoor lighting once the facility is operating. The heating, ventilation and air conditioning ("HVAC") system is necessary to provide WJWW with a suitable environment for facility staff and operation and maintenance of essential equipment. The proposed HVAC system would consist of air handling units, supply/ exhaust fans, dehumidification units, boiler, hot water pumps, hot water unit heaters, electric unit heaters, air conditioning units, and associated control systems. Propane fuel would be used to heat the facility. As a result, an increase in energy demand and associated GHG emissions can be expected during project facility operation.

Indoor and outdoor lighting is also an important factor in terms of energy use and conservation; therefore, LED lighting would be used for all indoor, outdoor, and emergency lighting. Lighting plans would be designed to reduce light-related impacts such as excessive lighting, light trespass, glare, impacts on nocturnal wildlife, as well as excess energy demand. Exterior fixtures would be provided with motion sensors, photoelectric sensors, and automatic timers.

To power the facility, the proposed filtration plant would connect to electric utilities provided by Con Edison Company of New York by way of existing overhead powerlines located along Purchase Street and would utilize liquid propane to be stored onsite in two 2,000-gallon above ground storage tanks to heat the facility.

The finished operating facility is projected to consume an estimated 7,210,000 kWh/yr. of electrical energy, 9,100 gal/yr. of diesel fuel, and 20,000 gal./yr. of propane. This equates to specific energy consumption of approximately 700 kWh per million gallons treated, which compares favorably to other surface water treatment facilities. The corresponding carbon footprint of the facility is projected to be approximately 3,300 MT CO_{2e}/yr. which includes a 5.5 percent reduction in GHG emissions achieved by the photovoltaic system.

Emergency Standby Generators

Two diesel-fueled standby power generators would also be installed on the Site for emergency use and uninterrupted water treatment during power outages once the construction is completed and the facility is operating. Each of the proposed generators is rated at 1,250 kW, 480V, 3PH, 3W, 60HZ. The generators would have a combined capacity to energize the entire plant. One 1,250 KVA load bank would be provided to exercise each generator individually on a regular basis. It is anticipated that the emergency generators would run no more than one hour per week.

Operational Traffic

Once construction is completed and the facility is operating, just one to two employee vehicles would be added to the surrounding road network in any given hour based on an anticipated maximum of two facility operators during the day shift and one operator each during the evening and night shifts. This level of trip generation is negligible compared to most commercial, industrial, institutional, and multi-family residential land uses. In addition, there would be approximately eight visits per month by a treatment process sludge removal truck, approximately five plant chemical deliveries per month, an occasional garbage truck to pick up trash (possibly contractor that already serves the area), or other rare or occasional visitor.

Sea Level Rise

The Project Site is located within a FEMA X Flood Zone which is an upland area having less than a 0.2 percent chance of flooding during any given year, adequate on-site drainage infrastructure would be provided to prevent potential drainage issues, and the property is not located in an area that would be affected by sea-level rise. Most importantly, the Project would have no significant adverse effect on the climate based on project type, scale, best management practices and proposed mitigations.

Measures to Avoid or Reduce Impacts on Climate Change

The following measures to avoid or reduce impacts on climate change would be incorporated into the Project:

Energy Conservation

- Three photovoltaic arrays would be installed on the roof of the proposed building to reduce demand for nonrenewable energy resources and partially offset related energy and climate related impacts.
- Energy conservation techniques would be universally implemented in the design and operation of the facility and facility design would comply with the 2020 Energy Conservation Code of New York State.
- Exterior lighting would be limited to only what is necessary to ensure a safe and secure indoor and outdoor work environment.
- Proposed indoor, outdoor, and emergency lighting systems would consist of LED fixtures to reduce energy demands.
- Illumination levels and conservation strategies would be based on the NYS energy conservation code, electrical code, and recommendations of the Illuminating Engineers Society of North America.
- Energy conservation measures would be instituted to ensure lights are shut off when and where they are not needed.
- The lighting systems would be designed to include the following energy conservation strategies:
    - Minimize energy consumption to the extent practicable to reduce potential environmental impacts.
    - Use long-life fixtures requiring low maintenance.
    - Provide instant relight or dimming capability in certain areas.
    - Use fixtures with low life-cycle and operations and maintenance costs.
    - Exterior fixtures would be equipped with motion sensors, photoelectric sensors, and automatic timers.

Construction Related Energy Conservation

- Limit the area of disturbance and removal of existing trees and shrubs to the extent practicable on the 13.4-acre property and landscape to help retain oxygen-producing/CO_2 absorbing vegetation, including the replanting of approximately 300 trees.
- Maintain a relatively small development footprint and reduce the proportion of impervious paved surfaces by utilizing vegetated pathways to and from outside equipment and structures

and parking areas rather than concrete or pavement, to help reduce the urban heat island effect and any additional need for building cooling.

- Construction and demolition waste disposal contracts would include a requirement that all waste materials that are reusable or recyclable be diverted from landfills.
- Promote and facilitate recycling of garbage and other wastes at the facility as part of routine operations.
- Limit prolonged construction vehicle and equipment idling times when possible. Keep large trucks on-site at the end of each day rather than returning them to contractor headquarters for overnight storage.
- Retain reusable soil on-site to the extent practical to reduce off-site shipments/truck trips.

Summary

WJWW finds that with the mitigation measures incorporated into the Project, listed above, the Project would not result in a significant adverse impact on energy usage and greenhouse gas emissions.

---

5. CERTIFICATION OF FINDINGS

Having considered the relevant environmental impacts, facts, and conclusions disclosed in the DEIS and FEIS and information derived from the public review during the course of the SEQRA review process, and having weighed and balanced relevant environmental impacts with social, economic and other considerations, WJWW, as Lead Agency, finds and certifies that: (a) the requirements of SEQRA and the SEQRA Regulations have been met; (b) consistent with social, economic and other essential considerations from among the reasonable alternatives available, the Proposed Action is one that avoids or minimizes adverse environmental effects to the maximum extent practicable; and (c) adverse environmental impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to WJWW's decision to approve the Proposed Action those impact avoidance and mitigation measures that have been identified herein as practicable.