FEMA
FINDING OF NO SIGNIFICANT IMPACT
BAY PARK CONVEYANCE PROJECT
NASSAU COUNTY, NEW YORK
FEMA-4085-DR-NY

BACKGROUND

On October 29, 2012, Hurricane Sandy caused storm damage to several areas of New York State, including portions of Nassau County, New York. President Barack Obama declared Hurricane Sandy a major disaster on October 30, 2012. The declaration authorized federal public assistance to affected communities and certain non-profit organizations through the Federal Emergency Management Agency (FEMA) and in accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1974 (42 U.S.C. 5172) as amended, the Sandy Recovery Improvement Act (SRIA) of 2013, and the accompanying Disaster Relief Appropriations Act of 2013. The Recipient for the Proposed Action is the New York State Division of Homeland Security and Emergency Services (NYSDHSES), and Nassau County is the Subrecipient.

An Environmental Assessment (EA) was prepared in accordance with Section 102 of the National Environmental Policy Act (NEPA) of 1969, as amended; the Council on Environmental Quality (CEQ) Regulations for Implementation of NEPA (40 Code of Federal Regulations [CFR] Parts 1500 to 1508); FEMA Directive 108-1-1; and the DHS Instruction Manual 023-1-1. The EA analyzed the potential environmental impacts of the Proposed Action and alternatives, including a no action alternative.

The purpose of the Proposed Action is to reduce damage from flooding and coastal storm surge through effective floodplain management and saltmarsh health through improved water quality. The Proposed Action is needed to improve the resiliency of the southern shore of Long Island and to meet compliance with New York State permits.

ALTERNATIVES

FEMA considered multiple alternatives in the EA based on engineering constraints, environmental impacts, and the purpose and need for the project. As detailed in the EA, the Subrecipient had initially considered, but ultimately dismissed, an alternative to extend the current outfall from Bay Park Sewage Treatment Plant (STP), bypass Reynolds Channel, and discharge directly into the Atlantic Ocean. Nassau County determined this alternative to be technically feasible but was not confident that environmental review could be completed and permits could be granted in the time to demonstrate compliance with water quality-based effluent limitations in its State Pollutant Discharge Elimination System (SPDES) permit and with the 2017 Bay Park Agreement.

The Subrecipient had also initially considered, but ultimately dismissed, an alternative to implement several technologies at Bay Park STP to achieve a total nitrogen limit in the Bay Park STP effluent of 3 to 5 milligrams per liter. Nassau County determined this alternative to be technically infeasible, due to the lack of available land and high cost that would be needed to construct facilities required to achieve the nitrogen limit.

A third alternative that the Subrecipient had initially considered, but ultimately also dismissed was to upgrade the existing Bay Park STP outfall pipe. Nassau County determined this alternative to be infeasible because it would not meet the project purpose and need of reducing damage from flooding and coastal storm surge through effective floodplain management to improve the resilience of the Western Bays.

The alternatives evaluated in the EA included: 1) the No Action Alternative; and 2) the Proposed Action. Under the No Action Alternative FEMA would not provide federal funding to reduce damage from flooding and coastal storm surge along the southern shore of Long Island. Even with additional nutrient removal and other improvements already funded, the No Action Alternative would not bring the Bay Park STP into compliance with the 2017 Bay Park Agreement. Without the removal of the largest source of the nitrogen being discharged into the Western Bays, the saltmarshes would continue to degrade, leaving the inland areas of Nassau County at increased risk for coastal storm surge and wave damage. The Proposed Action will construct a new dedicated pump station at the Bay Park STP, rehabilitate an existing aqueduct under Sunrise Highway, construct new 72 inch diameter force mains between each of the two treatment plants and the existing aqueduct, and construct a standpipe receiving tank connection at the existing Cedar Creek Water Pollution Control Plant (WPCP) pump station.

PROJECT DESCRIPTION

The Subrecipient's Proposed Action is comprised of the following elements:

New Bay Park STP Effluent Diversion Pump Station—The Subrecipient would construct a new dedicated pump station at the Bay Park STP that would be capable of pumping up to 75 Million Gallons per Day (MGD) of treated water to the Cedar Creek WPCP. The existing Bay Park effluent pump station would remain in place for periodic maintenance use compliant with its SPDES permit and to transfer any flow above 75 MGD to the existing 84-inch diameter pipe Reynolds Channel outfall in Hempstead Bay.

New Force Main between the Bay Park STP and Sunrise Highway—The Subrecipient would construct a new underground force main, approximately 2 miles long, from the new Bay Park STP effluent pump station to the existing aqueduct under Sunrise Highway. The Subrecipient would construct nine construction access shafts along the Bay Park route to build the force main between Bay Park STP and Sunrise Highway. The tunnel for the pipeline would then be drilled between the shafts using a microtunnel boring machine at depths ranging from approximately 20 feet to approximately 60 feet below current ground surface. Shafts 1 and 9 would remain as permanent access shafts that would allow for future maintenance activities.

Rehabilitated Sunrise Highway Aqueduct—The force mains would connect to an approximately 7.2-mile-long portion of an existing 72-inch diameter aqueduct pipe underneath NY State Route 27, Sunrise Highway, in the Town of Hempstead, the Village of Rockville Centre, and the Village of Freeport. The Subrecipient would install a smaller pipe within the aqueduct, a process known as "slip-lining," and provide air valves at various points to release pressure. To allow for removal of existing infrastructure within the aqueduct and construction of the new force main within the aqueduct, the Subrecipient would excavate approximately 23 aqueduct work pits in the roadway. The Subrecipient would use sheet piling to establish a secure and dry work zone within the work pits.

New Force Main between Sunrise Highway and the Cedar Creek WPCP—The Subrecipient would construct a new underground force main, approximately 1.6 miles long, from the rehabilitated aqueduct under Sunrise Highway to the Cedar Creek WPCP. The Subrecipient would construct six construction access shafts along the Cedar Creek route. The tunnel for the pipeline would then be constructed between the shafts using a microtunnel boring machine at depths ranging from approximately 20 feet to approximately 60 feet below current ground surface. Shafts 2 and 6 would remain as permanent access shafts that would allow for future maintenance activities.

New Cedar Creek Standpipe Receiving Tank and Upgraded Effluent Pump Station—The Cedar Creek force main would terminate at the Cedar Creek WPCP, connecting to a new 70-foot tall standpipe receiving tank. This tank would connect to the existing Cedar Creek pump station to join Bay Park's effluent with Cedar Creek's effluent. The Cedar Creek WPCP currently discharges treated water through an existing 84-inch diameter outfall pipe to 120 diffuser ports located approximately 2.5 miles into the Atlantic Ocean. The Subrecipient would also upgrade pumps, valves, and other control infrastructure at Cedar Creek as part of the project.

The Subrecipient anticipates construction would last approximately three years, with several construction activities taking place concurrently.

The EA evaluated the Proposed Action as described in the Final Design Criteria Report, which provides a basis of design for a yet to be selected design-build contractor. The design-build contractor will be overseen by New York State Department of Environmental Conservation (NYSDEC) and will be responsible for developing and advancing the project through to final design and construction. Should the design developed by the design-build contractor deviate substantially from the Proposed Action evaluated in the EA, then additional environmental review may be required. The design-build contractor is responsible for obtaining the applicable federal, state, and local permits and other authorizations on behalf of the Subrecipient.

SUMMARY OF POTENTIAL IMPACTS AND MITIGATION

The Proposed Action as described in the EA would have no impacts on geology, sole source aquifers, architectural resources, or aesthetic resources. The Proposed Action would have no short-term impacts on water quality in the Atlantic Ocean, floodplains, aquatic resources in the Western Bays, or aquatic resources in the Atlantic Ocean. The Proposed Action would have no long-term impacts on air quality, groundwater, noise, transportation, or cause issues with hazardous materials.

The Proposed Action may have temporary but negligible adverse impacts on water quality in the Western Bays, groundwater, wetlands, coastal resources, and from hazardous materials. The Proposed Action may have long-term but negligible adverse impacts on water quality in the Atlantic Ocean, vegetation, aquatic resources in the Atlantic Ocean, and on land use and planning.

The Proposed Action may have temporary minor adverse impacts on topography and soils, air quality, vegetation, terrestrial wildlife, archaeological resources, environmental justice, land use and planning, noise, transportation, public services and utilities, and public health and safety. The Proposed Action may have long-term minor adverse impacts on terrestrial wildlife and archaeological resources.

The Proposed Action should have long-term minor beneficial impacts on public services and utilities and long-term moderate beneficial impacts on topography and soils, water quality in the Western Bays, wetlands, floodplains, coastal resources, aquatic resources in the Western Bays, environmental justice, and public health and safety.

PUBLIC INVOLVEMENT

FEMA issued a public notice in the ***Newsday*** newspaper, on July 3, 2020, to notify the public of the thirty-day public review and comment period. Accordingly, FEMA posted an electronic version of the EA to the FEMA website at https://www.fema.gov/media-library/assets/documents/188712 and the Subrecipient also posted an electronic version of the EA to http://www.bayparkconveyance.org. The Subrecipient also made printed copies of the EA available for public review at Nassau County Department of Public Works, 1194 Prospect Avenue, Westbury, NY 11590. Public comments were received during the 30-day comment period. Substantive comments were addressed in a Final Environmental Assessment, which was recirculated by posting at https://www.fema.gov/emergency-managers/practitioners/environmental-historic/region/2 and http://www.bayparkconveyance.org and publication of a notice of availability in the ***Newsday*** newspaper on October 16, 2020.

FEMA has taken into consideration the comments received during the public review period to inform the final decision regarding grant approval and project implementation. The Final Environmental Assessment reflects the evaluation and assessment of the federal government, the decision maker for the federal action.

PERMITS AND PROJECT CONDITIONS

The Subrecipient is directly or indirectly responsible for obtaining and adhering to all applicable federal, state, and local permits, permit conditions, regulatory compliance, and authorizations for project implementation. Any substantive change to the approved scope of work will require re-evaluation by FEMA for compliance with NEPA and other environmental and historic preservation laws and Executive Orders. The Subrecipient must also adhere to the following conditions during project implementation:

1. The Subrecipient must coordinate with the Town of Hempstead and the Villages of East Rockaway, Rockville Centre, and Freeport to obtain applicable local permits and necessary approvals.

2. The Subrecipient must submit an application for a modified SPDES permit to NYSDEC for the Cedar Creek WPCP and Bay Park STP.

3. A Health and Safety Plan must be developed, and standards specified in Occupational Safety and Health Administration (OSHA) regulations must be followed during construction to avoid adverse impacts on worker health and safety. Procedures will be established in the Health and Safety Plan for the proper handling and treatment of any unforeseen soil contamination in the case of soil excavation.

4. All construction activities must be performed using qualified personnel trained in the proper use of the appropriate equipment, including all applicable safety precautions, to minimize risks to safety and human health.

5. All equipment and machinery must comply with applicable U.S. Environmental Protection Agency (USEPA) standards and NYSDEC regulations. All units must use ultra-low-sulfur diesel (ULSD) per USEPA regulations. Adequate maintenance of equipment must be ensured, including proper engine maintenance, adequate tire inflation, and proper maintenance of pollution control devices.

6. Best Management Practices that prevent the introduction, establishment, and spread of invasive plant species must be implemented. Invasive species must be removed when encountered, per U.S. Department of Agriculture and state agency guidelines, and suppression or removal practices to prevent their introduction, establishment, and spread must be implemented. Treatment to remove any invasive species that may become established after construction will be conducted. To limit the spread or introduction of invasive plant species, construction equipment will be thoroughly cleaned prior to leaving a work location where vegetation has been disturbed.

7. The Subrecipient must consult with the United States Army Corps of Engineers and NYSDEC to determine jurisdiction and permit requirements for the installation of the pipeline under all mapped wetlands.

8. To minimize the potential for deposition of sediment to Mill River, NYSDEC littoral zone tidal wetlands, and tidal wetland-adjacent areas during construction, the Subrecipient must use Best Management Practices at shaft locations and staging areas in accordance with the New York State Standards and Specifications for Erosion and Sediment Control.

9. Best Management Practices must be used to minimize the extent of temporary soil erosion impacts. The Subrecipient must backfill all temporary excavation sites and restore surfaces per New York State Department of Transportation (NYSDOT) standards.

10. Tree removal must be conducted according to local regulations and only occur between November 1 and March 31, which is outside the bat roosting season and migratory bird breeding season. Active sites must be surrounded by silt fencing that would prevent reptiles and amphibians from entering the area while construction is ongoing. Vegetation removed during construction will be restored through a post-construction landscaping plan and must utilize native herbaceous and/or woody species or turf grass as appropriate.

11. The Subrecipient must conduct archaeological monitoring during construction at selected shaft locations per the results of the Phase IA Archaeological Documentary Study (AKRF 2020) and FEMA consultation with the New York State Historic Preservation Officer (SHPO) and Tribal Nations dated February 2020. As part of this condition, an archaeological monitoring plan must be prepared and approved by FEMA, SHPO, and participating Tribal Nations. At the completion of archaeological monitoring, a final archaeological monitoring report is to be submitted and approved by FEMA, SHPO, and participating Tribal Nations. As Lead Federal agency, all project correspondence and reporting must come through FEMA and submitted to SHPO and Tribal Nations for concurrence. No construction may begin prior to FEMA and SHPO/Tribal Nation concurrence on the archaeological monitoring plan. In accordance with Section 106 of the National Historic Preservation Act, if National Register of Historic Places eligible archaeological resources are encountered during monitoring that would be adversely affected by the Proposed Action, the

Subrecipient must immediately stop construction in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the property until FEMA, in consultation with the SHPO and Tribal Nations, identifies ways to avoid or mitigate such effects.

12. The Subrecipient must implement a noise mitigation program that reduces noise impacts at nearby noise-sensitive receptor locations and must include real-time noise monitoring. Construction equipment must be equipped with well-maintained mufflers, noisy portable equipment must be located away from sensitive receptors, and equipment idling time must be kept to a minimum to reduce noise-related impacts.

13. The Subrecipient must provide appropriate signage and barriers prior to construction activities to alert pedestrians and motorists of project activities. The Subrecipient must also restrict access to unsafe areas and heavy equipment during construction and post signage to warn of unsafe conditions.

14. The Subrecipient must develop work zone traffic control plans that NYSDOT should review and approve. The Subrecipient must also develop plans to retain access to businesses and must also ensure adequate access to sites for the safe ingress and egress of fire and emergency vehicles.

15. Excavated soils and waste materials, including hazardous waste, must be managed and disposed of in accordance with applicable federal, state, and local regulations. Solid waste haulers will be required to have a NYSDEC waste transporter permit and all waste will need to be disposed of or processed at a permitted solid waste management facility.

16. The Subrecipient must manage and dispose of contaminated soils and groundwater recovered during dewatering in accordance with environmental regulations under a Soil Management Plan and a Dewatering Plan prepared in accordance with NYSDEC standards. The Subrecipient must dispose of excavated soils that are not suitable for reuse in accordance with 6 NYCRR Part 375 at the proper permitted receiving facilities. The Subrecipient must treat groundwater recovered during dewatering to remove suspended sediment and dissolved contaminants in accordance with permit requirements prior to discharge.

17. In the event of an unexpected discovery of threatened or endangered species, the Subrecipient must immediately stop construction until consultation by FEMA with the United States Fish and Wildlife Service has been completed.

18. All equipment within the new Bay Park STP effluent diversion pump station not rated for submerged operation must be located at or above the design flood elevation.

19. The Cedar Creek Upgraded Effluent Pump Station and the Bay Park STP Effluent Diversion Pump Station fuel tank designs must include adequate secondary containment, leak detection, and overfill alarms.

20. Areas of the project that pass within 250 feet of a Public Supply Well must have watertight construction to ensure adequate protection of the wells.

21. The Subrecipient is required to evaluate the potential for ground settlement and develop mitigation measures to minimize settlement. Special care must be taken to ensure the integrity of the joints between pipe segments and to ensure that the piping would not be subject to potentially crushing loads from vehicular traffic or other sources.

22. The Subrecipient must implement a pre-construction inspection and vibration monitoring program for the tunneling activity. Instrumentation that measures movement must be placed at or near properties and buildings so that movement can be monitored, and any corrective actions can be taken.

23. The Subrecipient must not initiate construction activities until fifteen (15) days after the date that the Finding of No Significant Impact (FONSI) has been signed as "APPROVED."

PUBLIC COMMENTS

FEMA received comments on the EA during the 30-day public comment period that ended August 2, 2020. The table below summarizes the Commenter, the Comments made, and FEMA's response. Any comment regarding formatting and grammar is not addressed in the table, but those edits were addressed in the Final Environmental Assessment.

Commenter	Comment	FEMA's Response
USEPA	Nassau County has been designated as serious nonattainment for the 8-hour ozone standard and is a maintenance area for PM 2.5; therefore, a general conformity applicability analysis must be prepared for this project. While the EA concludes that the general conformity *de minimis* thresholds are not exceeded during construction, it does not provide a quantitative analysis for PM 2.5 and ozone precursors. Please provide a quantitative analysis of direct and indirect construction emissions in the final EA.	FEMA has revised the EA to include a quantitative analysis of direct and indirect construction emissions. The analysis supports the conclusion that the general conformity *de minimis* thresholds are not exceeded.
USEPA	While EPA concurs with FEMA that the Point Lookout Sewer Collection Feasibility Study and the Long Beach Water Pollution Control Plant Consolidation Project have independent utility, EPA recommends that the projects be described early in the EA to ensure the public's understanding of Nassau County's long-term plans. The EA should document that any expected increase in the volume of wastewater to be brought to the Bay Park STP can be accommodated by the Bay Park Conveyance Project.	FEMA has revised the EA to include a discussion of the Point Lookout Sewer Collection Feasibility Study and the Long Beach Water Pollution Control Plant Consolidation Project earlier in the EA and has described how the Bay Park Conveyance Project would be able to accommodate any expected increase in the volume of wastewater conveyed to the Bay Park STP under these separate projects.
USEPA	The Cedar Creek Upgraded Effluent Pump Station and Bay Park STP Effluent Diversion Pump Station fuel tank designs should include adequate secondary containment, leak detection and an overfill alarm.	FEMA has included this requirement as a FONSI condition.

Commenter	Comment	FEMA's Response
USEPA	Several Public Supply Wells are located within ½ mile of the project. Areas of the project that pass within 250 feet of a Public Supply Well must have watertight construction to ensure adequate protection of the wells.	FEMA has included this requirement as a FONSI condition.
USEPA	Contractors must take special care to ensure the integrity of the joints between pipe segments and to ensure that the piping would not be subject to potentially crushing loads, for example, from vehicular traffic.	FEMA has included this requirement as a FONSI condition.
Mandalay Homeowners' Association, Inc.	There have been no assurances that the subterranean excavation will not jeopardize private properties (homes, garages, outbuildings, and yards) of possible collapse. It is also claimed that there would be no disruption to the involved private properties during the construction phase because of the depth this work will be conducted.	FEMA understands that Nassau County and NYSDEC have thoroughly investigated the site conditions within the project area through geotechnical investigations and engineering analyses. Noise and vibration from the microtunneling machine will be minimal. FEMA has included the requirement for instrumentation to measure movement near properties and buildings and implement corrective action as necessary as a FONSI condition.
Mandalay Homeowners' Association, Inc.	There are questions about the aqueduct's structural integrity to sustain the projected amount of wastewater. There has been no indication regarding the aqueduct's current state, needed repairs, or whether it will be fit with a liner to maintain its viability for this project. Another concern is the possible collapse of the aqueduct along Sunrise Highway.	As stated in the second paragraph on Page 5 of the EA, the aqueduct would be fit with a liner. The current design of the pipe segments and joints within the Sunrise Highway aqueduct would provide adequate load-bearing from above.
Mandalay Homeowners' Association, Inc.; David Stern, Ph.D.; Gary T. Smith	The EA fails to present information on the ability for the Cedar Creek Outfall to handle the proposed combined discharge from both Cedar Creek and Bay Park Wastewater plants (WWTPs). While information is provided for average discharge, the EA fails to address the storm flow volumes that include Inflow and Infiltration (I&I). No information is provided on current integrity of the outfall which was installed over 50 years ago. A similar aged outfall was installed for the Bergen Point Wastewater pipe and has been found in need of replacement.	FEMA understands that the Cedar Creek outfall has the capacity to convey the combined discharge from Bay Park and Cedar Creek. Nassau County is committed to performing routine inspections on the structural integrity of the pipe on a routine basis to confirm it can continue to perform as designed over the coming decades. Also, as FEMA understands it, only a portion of the Bergen Point outfall required replacement.
Mandalay Homeowners' Association, Inc.	Where will the additional pumping stations required to convey the treated water be located? Will they cause a noise problem in residential neighborhoods? Will any odors emanate from these pumping stations? How would they handle issues with leaks or overflows from these pumping stations?	As stated in the last paragraph on Page 4 of the EA, only one new pump station would be required for the project and it would be located within the Bay Park STP property. The EA evaluated potential noise impacts from the new pump station at Bay Park STP and concluded that it would have no impact on ambient noise levels outside of the Bay Park STP property. Flows would be constantly monitored so as not to exceed the 75 million gallon per day diversion limit.

Commenter	Comment	FEMA's Response
Mandalay Homeowners' Association, Inc.; Alice Smith; Gary T. Smith	Nassau County should upgrade the Bay Park STP and build an outfall from the Bay Park STP to the Atlantic Ocean rather than continue with the Bay Park Conveyance Project. With new micro tunneling the cost of a new ocean outflow at Bay Park or Long Beach has been greatly reduced. Bergen Point STP has used micro tunneling for an Ocean Outflow Pipe at a cost of 209 million. If the government would probably not give permits for this a new Bay Park ocean outfall, why then would they allow 52 MGD added to the Cedar Creek Ocean Outflow which already transports 72 MGD?	Under NEPA, FEMA is not obligated to consider alternatives that would not be otherwise approvable. FEMA understands that the extension of the existing Bay Park outfall to the Atlantic Ocean may not allow Nassau County to complete environmental review and secure the required permits in time to demonstrate compliance with water quality-based effluent limitations in its SPDES permit and with the 2018 Bay Park Agreement. The Cedar Creek outfall has a capacity of 150 MGD. It can carry the 72 MGD of treated water from Cedar Creek WPCP and the 70 MGD from Bay Park STP. Also, as FEMA understands it, only a portion of the Bergen Point outfall was replaced, accounting for the relatively lower cost
Mandalay Homeowners' Association, Inc.; Gary T. Smith	The potential for the COVID-19 virus to pass through sewage should be studied before this project is allowed to proceed.	FEMA understands that while certain municipalities are conducting tests on sewage for the purpose of tracking the COVID-19 virus, this testing is not within the scope of the Bay Park Conveyance Project, which aims to increase the resilience of the southern shoreline of Long Island to withstand coastal storm surge and waves.
David Stern, Ph.D.; Gary T. Smith; Alice Smith	The virtual meeting was not a proper meeting. The format prohibited participants from hearing the concerns and comments from other participants. An additional meeting that allows for transparency must be held prior to further determinations on the environmental impacts of the project.	FEMA understands that the Subrecipient held a virtual public meeting to provide information about the Bay Park Conveyance Project and the opportunity to comment, while ensuring the public's safety during a pandemic. Under NEPA, there is no requirement that a public meeting be held to provide comments on an EA. FEMA provided the public with the opportunity to submit comments in writing and has addressed comments received in the final EA. Furthermore, while a second public meeting has not been scheduled at this time, FEMA further understands that Nassau County and NYSDEC continue to conduct public outreach regarding the project.
David Stern, Ph.D.; Gary T. Smith; Mandalay Homeowners' Association, Inc.	The EA should include the impact to drinking water supply due to the loss of the potential of the original intent of the aqueduct for drinking water. Many south shore communities have been severely impacted by the years of contamination of Nassau County's aquifers. The Grumman plume is causing havoc in the drinking water wells down-gradient. The southwest part of the county is experiencing saltwater intrusion. A less expensive source of drinking water will be to use the Brooklyn aquifer to bring New York City reservoir waters to the southern communities of Nassau County should drinking water aquifers become contaminated.	The Sunrise Highway aqueduct no longer conveys surface waters to New York City, and has not been used since the 1960s. Drinking water on Long Island comes from below-ground aquifers, and New York City receives its drinking water from upstate reservoirs. Through an analysis of five alternatives, Nassau County and NYSDEC determined that incorporating the aqueduct into the project design was the preferred alternative.

Commenter	Comment	FEMA's Response
Gerald Ottavino, Beach to Bay Environmental Committee	Will the project affect the groundwater table? Is purifying at least some of this wastewater to the point where it can be recharged back to the groundwater system feasible?	The EA evaluated the potential for the proposed project to affect groundwater and concluded that it would not have the potential to affect aquifer recharge or the Nassau-Suffolk Counties' sole source aquifer. Treating wastewater to a level that would be safe for recharge to the aquifer is not a feasible alternative.
David Stern, Ph.D.	Contrary to the extremely brief assessment of the No Action Alternative, the current Bay Park STP can meet current discharge standards with the nutrient reduction technology already installed at the plant if a portion of the secondary treated effluent was diverted to the branch of the Brooklyn Aqueduct that is connected to the Hempstead Lake gate house. From this location, treated effluent can be used to augment pond and lake levels along with stream flows that have been significantly diminished by the lowering of the water table as a result of sewering	Discharging 75 MGD of Bay Park effluent to Hempstead Lake would not be in compliance with NYSDEC or Federal EPA standards for receiving waters. Moreover, the negative effect of discharging such a large quantity of treated water regularly into a relatively small Hempstead Lake ecosystem would have far greater ecological impacts than the current discharge in Reynolds Channel. If effluent were discharged into Hempstead Lake, it would ultimately flow southward down the series of ponds and into Mill River and then into the Western Bays, negatively affecting all of these downstream waterbodies and features. Additionally, because New York State has already identified the Western Bays as impaired due to nitrogen, the issue is how best to remove the nitrogen from that ecosystem.
Alice Smith; Gary T. Smith; Gerald Ottavino, Beach to Bay Environmental Committee; Mandalay Homeowners' Association, Inc.; David Stern, Ph.D.	The Cedar Creek Ocean Outflow pipe discharges into the Atlantic Ocean at Jones Beach and could negatively affect water quality at Jones Beach, swimmers and boaters, and marine life along the south shore. Adding 52 million gallons of treated sewerage per day to the Cedar Creek Ocean Outflow pipe is not the answer to the environmental problem at the Bay Park Plant. The EA fails to provide information on the impact from the additional pollutant loading for the receiving waters. No TMDL analyses are provided. SUNY Stony Brook's ongoing studies that indicate the current discharge at the Cedar Creek WPCP diffuser has negligible and localized impact on water quality. What does localized mean here?	The Western Bays have incurred measurable damage from increased nitrogen over the years. Ongoing studies by SUNY Stony Brook have shown that is not the case for the Atlantic Ocean near Cedar Creek's outfall. Additionally, the Bay Park STP will continue to treat wastewater to meet the SPDES permit requirements and will not transport solids and sludge through the aqueduct to Cedar Creek. FEMA understands that NYSDEC permits will ensure that conveying the treated water from Bay Park will continue to meet water quality standards in the Atlantic Ocean established to protect water quality at Jones Beach and nearshore areas. Localized effects may occur in the immediate vicinity of the outfall diffuser which is approximately 2.5 miles offshore. The Atlantic Ocean is not an impaired water body. Therefore, no Total Maximum Daily Load has been established.
Gary T. Smith; Gerald Ottavino, Beach to Bay Environmental Committee	Alternative 4, reducing nitrogen to an acceptable level at the Bay Park STP should be evaluated further to meet the requirements of the 2018 Agreement. This process is done at a number of STP on the Long Island Sound. BPCP states "there is no room at plant site for this process." If so, bring that process to another close by location.	Under NEPA, FEMA is not obligated to consider alternatives that would not be otherwise approvable. Alternative 4, as described in Section 4.3 of the EA, was infeasible due to high costs in addition to lack of available land. Nitrogen reduction of treated effluent needs to occur within the Bay Park STP boundary.

Commenter	Comment	FEMA's Response
Alice Smith	Are there scientific facts to support transporting partially cleaned sewage in an aqueduct that would be about 12 miles from Bay Park to Cedar Creek?	Water conveyed from Bay Park STP to Cedar Creek WPCP would be fully treated to meet the Bay Park STP SPDES permit. FEMA understands that Nassau County and NYSDEC have thoroughly investigated the site conditions within the project area through geotechnical investigations and engineering analyses to determine the feasibility of conveying this treated water from Bay Park to Cedar Creek. The EA evaluates the proposed project's potential to affect the environment and concludes that it would not result in any significant adverse impacts.
Gerald Ottavino, Beach to Bay Environmental Committee	No Appendices were included in the FEMA report that was downloaded, nor could they be accessed elsewhere. Where/how can they be accessed?	Appendices were provided on FEMA's website during the 30-day public comment period that ended on August 2, 2020. FEMA did not receive comments from the Beach to Bay Environmental Committee during the public comment period. The EA and its appendices are still available on the project website, https://www.bayparkconveyance.org/nepa-ea.
Gerald Ottavino, Beach to Bay Environmental Committee	Why only a FEMA EA and not a NYSDEC full environmental impact statement?	FEMA is the lead agency conducting NEPA review and the project is subject to a consent order from NYSDEC that makes it a Type II (or exempt) action under SEQRA.
Gerald Ottavino, Beach to Bay Environmental Committee	What amount of effluent does the Cedar Creek WPCP, on average, currently discharge to the Atlantic Ocean? How was this amount determined?	For the period of 2015 to 2019, the average daily flow from the Cedar Creek WPCP was 58 MGD. Hourly flow from Cedar Creek is captured by a flow meter.
Gerald Ottavino, Beach to Bay Environmental Committee	How was the amount of treated water discharging into Reynolds Channel from the Bay Part STP, 50 MGD, determined? Are both FEMA and NYSDEC convinced this discharge amount is correct? How is the amount of average discharge at Cedar Creek WPCP determined	Wastewater treatment plants are required to monitor and report discharge flow values to NYSDEC on Discharge Monitoring Reports to ensure compliance with SPDES limits. Discharge Monitoring Report data for the Bay Park STP are available at: https://echo.epa.gov/trends/loading-tool/reports/dmr-pollutant-loading?year=2020&permit_id=NY0026450. Discharge Monitoring Report data for the Cedar Creek WPCP are available at: https://echo.epa.gov/trends/loading-tool/reports/dmr-pollutant-loading?year=2020&permit_id=NY0026859
Gerald Ottavino, Beach to Bay Environmental Committee	How does the EA account for the additional influent loads that will be pumped to Bay Park for treatment, including from Long Beach and the Five-Towns (and possibly parts of western Suffolk and eventually Point Lookout), before being conveyed to Cedar Creek for discharge to the Atlantic Ocean?	The additional 3 to 5 MGD of wastewater that may be pumped from the Long Beach WPCP and the potential future sewering of Point Lookout was included in the calculations of diverted flow for the Bay Park Conveyance Project. The sewage previously treated at the Lawrence and Cedarhurst plants is currently treated at Bay Park, and so is accounted for as existing Bay Park influent.

Commenter	Comment	FEMA's Response
Gerald Ottavino, Beach to Bay Environmental Committee	How will removing unregulated, SPDES-ignored, contaminants, such as toxins/VOCs, trace heavy metals, pharmaceuticals, probable human carcinogens (e.g., 1,4-dioxane) and emerging contaminants/carcinogens (e.g., PFAS), etc. be accomplished? As a minimum, under Alternative 2, much stricter SPDES permits – addressing a far greater range of contaminants and carcinogens – will have to be issued.	FEMA is not a regulatory agency and thus defers to those entities to establish what constitutes appropriate effluent limits. FEMA understands that NYSDEC permits will ensure that conveying the treated water from Bay Park will continue to meet water quality standards in the Atlantic Ocean.
Gerald Ottavino, Beach to Bay Environmental Committee	How was the "74 to 90 percent" range in the following statement computed: "The diversion of treated water from Bay Park STP to Cedar Creek WPCP would remove between 74 to 90 percent of the nitrogen currently discharged into the Western Bays?" Will the same percentage be removed before discharging to the Atlantic Ocean?	Conveyance of treated wastewater from Bay Park STP to Cedar Creek WPCP would result in a reduction of nitrogen loading to the Western Bays by approximately 75 to 90 percent based on preliminary water quality modeling. This range of removal refers to the diversion of effluent out of the Western Bays, not the removal of nitrogen within the wastewater that would be discharged to the Atlantic Ocean. The range takes into account different potential operating scenarios for the Bay Park STP.
Gerald Ottavino, Beach to Bay Environmental Committee	How will this "Alternative 2: Proposed Action" meet the NAAQS for sulfur dioxide and/or other noxious/unhealthy compounds, and the respective odors related inadequately treated sewage effluent and the (decomposing and stranding) Ulva and other algae growth it often generates?	As evaluated in the EA, the proposed project would divert treated water from Bay Park STP to Cedar Creek WPCP, removing the largest source of nitrogen currently discharged into the Western Bays. Excess nitrogen accelerates macroalgae growth, such as Ulva. Under the existing condition, Ulva mats die and sink to the bottom of the Western Bays where they currently decompose, depleting dissolved oxygen in the water. Reducing nitrogen discharge to the Western Bays would promote natural rejuvenation of saltmarshes and reduce growth of Ulva.
Gerald Ottavino, Beach to Bay Environmental Committee	At some point in the near future the effects of the Barrett Power Station on the Western Bays, which uses as much as 294 MGD from Barnum's Channel to cool its systems, and then discharges the heated water back into the Channel, should also be assessed.	The purpose of this project is not to address the effects of the E.F. Barrett Generating Station on water quality within the Western Bays. FEMA understands that the water quality effects of the E.F. Barrett Generating Station relicensing, were evaluated as part of that relicensing process. The pollutant of concern for E.F. Barrett is temperature, which is not a pollutant of concern at Bay Park STP; thus, there is no potential cumulative impact.

Commenter	Comment	FEMA's Response
Gerald Ottavino, Beach to Bay Environmental Committee	Has the effect of eliminating 55+ MGD from the Western Bays on water temperature and circulation been assessed? Is the current effluent being discharged from the Bay Park and Long Beach STPs actually serving an unnatural, but now quite necessary, purpose, perhaps as a groundwater/water table substitute now supporting an unnatural equilibrium? How will this unnatural Western Bays equilibrium, if any, and the local groundwater/water table be affected by this loss of unnatural addition of Bay Park STP effluent?	The Western Bays are a large estuarine water body whose circulation is primarily affected by meteorological processes and its connections to the Atlantic Ocean through inlets which are Federal navigation projects and are maintained by the US Army Corps of Engineers to support navigation. The aquifers used as water supply are deep and would have no potential to be recharged by treated water from the Bay Park STP. Furthermore, surficial groundwater discharges to the Western Bays and contributes to the nutrient enrichment.
Gerald Ottavino, Beach to Bay Environmental Committee	Are the SoMAS Western Bays conclusions noted in the EA based upon data taken directly from the Western Bays; or are they based upon studies of other Long Island south shore bays, the results and conclusions of which have been extrapolated to include the Western Bays?	The studies cited in the EA that were used to provide a description of current conditions within the Western Bays used data and information from the Western Bays and were not extrapolated.
Gerald Ottavino, Beach to Bay Environmental Committee	Is there no "Significant Coastal Fish Habitat" in the Atlantic Ocean, located near or close to the Cedar Creek WPCP outfall diffuser that could be negatively affected by unregulated, SPDES-ignored, contaminants, similar to the way such habitat is being affected in the Western Bays?	The Atlantic Ocean in the vicinity of the project site is not a designated Significant Coastal Fish and Wildlife Habitat by NYSDEC.
Gerald Ottavino, Beach to Bay Environmental Committee	How can the public access information on the nutrient removal system at the Bay Park STP and construction upgrades and modifications to the Cedar Creek WPCP?	Information regarding construction repairs and mitigation due to Hurricane Sandy can be found at the Bay Park STP website at: https://bayparknc.com/home/wastewater-treatment-processes/ Information regarding the Cedar Creek WPCP treatment processes and system upgrades and modifications can be found at: https://www.mysuezwater.com/long-island/informational-home
Gerald Ottavino, Beach to Bay Environmental Committee	What is the status of the Point Lookout Sewer Collection Feasibility Study? How can the public view the completed or ongoing study?	FEMA understands that Nassau County is currently in the procurement process to retain a consultant to prepare the Point Lookout Sewer Collection Feasibility Study.

Commenter	Comment	FEMA's Response
Gerald Ottavino, Beach to Bay Environmental Committee	Reasons Why Improved Western Bays Water Quality May Be Overly Optimistic: • Even if both STP effluent loads are discharge to the ocean, nitrogen-rich storm water runoff (e.g., from fertilizers) will still find its way to the Western Bays. • Continually degrading groundwater, containing nitrogen-rich compounds and other contaminants, will continue to discharge to the Bays. •Four decades of particulate effluent has accumulated on the Bay bottom; and is reported to be five feet deep in some places. • Massive amounts of sand have accumulated on the Bay bottom, which is very much a contributing factor to water stagnating or sloshing around in the northernmost Bays; and neither flushing nor exchanging readily with the ocean tides.	As discussed in the EA, the Bay Park STP contributes more than 80% of the excess nitrogen entering the Western Bays. Removal of this largest source of nitrogen, would result in a significant reduction in nitrogen discharge to the Western Bays and result in subsequent improvements in water quality.

FINDINGS

Based on the conditions and information contained in the Hazard Mitigation Grant Program application, the Final EA, and in accordance with NEPA and its implementing regulations at 40 CFR Parts 1500-1508, FEMA's Directive 108-1-1, *Environmental Planning and Historic Preservation Responsibilities and Program Requirements*; Executive Orders (EOs) addressing floodplains (EO 11988), wetlands (EO 11990), and environmental justice (EO 12898); the DHS Instruction Manual 023-1-1; and the CEQ regulations in Title 40 Code of Federal Regulations, Chapter V for implementing NEPA;, FEMA has determined that the Proposed Action will have no significant adverse impact on the quality of the natural and human environment. As a result of this FONSI, an environmental impact statement will not be prepared, and the project as described in the Final Environmental Assessment may proceed.

APPROVED:

JOHN J MCKEE

Digitally signed by JOHN J MCKEE
Date: 2020.10.29 09:13:07 -04'00'

JOHN McKEE
Regional Environmental Officer
Federal Emergency Management Agency, Region II Date:

MICHAEL F MORIARTY

Digitally signed by MICHAEL F MORIARTY
Date: 2020.10.29 10:04:56 -04'00'

MICHAEL MORIARTY
Mitigation Division Director
Federal Emergency Management Agency, Region II Date: