Environmental Assessment
Bay Park Conveyance Project

Appendix E

FEMA's Responses to Summarized Public Comments

1.0 Introduction

During the 30-day public comment period that ended August 2, 2020, FEMA received public comments on the EA. The table below states who made the comment, what their comment was, and FEMA's response.

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 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.
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.

Commenter	Comment	FEMA's Response
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.

Commenter	Comment	FEMA's Response
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.
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.

Commenter	Comment	FEMA's Response
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.
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 via a link on the project website, https://www.bayparkconveyance.org/nepa-ea.

Commenter	Comment	FEMA's Response
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.
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.

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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.
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.

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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.
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.