Forge River Watershed Sewer Project  
Town of Brookhaven, Suffolk County, NY  
STATE ENVIRONMENTAL QUALITY REVIEW ACT STATEMENT OF FINDINGS

Pursuant to Article 8 of the New York State Environmental Conservation Law (State Environmental Quality Review Act - SEQRA) and its implementing regulations at 6 New York Codes, Rules and Regulations (NYCRR) Part 617, the New York State Governor’s Office of Storm Recovery (GOSR) hereby renders its findings for the Proposed Action known as Forge River Watershed Sewer Project.

Name of Action  
Forge River Watershed Sewer Project

Description & Location of Action  
Forge River is located within the hamlets of Mastic, Shirley, and Mastic Beach in the Town of Brookhaven. The project area encompasses approximately 1,600 acres in the densely developed residential and commercial area bounded by Sunrise Highway to the north, Home Creek to the south, William Floyd Parkway to the west, and Forge River and its tributaries to the east. The project area also includes a 13.7-acre undeveloped parcel and a 17-acre undeveloped parcel, both of which are located on the Brookhaven Calabro Airport, which is situated north of Sunrise Highway (New York State Route 27).

The project area is subject to heavy rainfall events that lead to regular surface and groundwater flooding and a combination of both ground and surface water flooding, with varying intensity and frequency. The project area has experienced intense flooding during events such as Hurricane Sandy in 2012, Hurricane Irene in 2011, and other unnamed seasonal storms, nor’easters, and hurricanes.

Sub-performing and non-performing on-site wastewater treatment and disposal systems (OWTS) provide sanitary wastewater disposal in the project area. While the exact number of system failures cannot be quantified, many of the OWTS in the project area failed during Hurricane Sandy and will continue to be subject to failures during future storm events. The failure of OWTS causes public health risks associated with uncontrolled sewage discharges.

The primary purpose of the Proposed Action is to mitigate short-term, repetitive, adverse impacts on human life and property associated with OWTS failures in the Forge River watershed in Suffolk County, New York, caused by natural hazards. The secondary purpose is to mitigate
long-term, adverse impacts associated with such failures on surface waters and coastal wetlands that reduce the ability of these waters and wetlands to provide natural protection against storm surge.

The Proposed Action would establish a Mastic-Shirley Sewer District and construct and operate a collection system connected to up to approximately 3,400 parcels. The system would include an exclusively low-pressure conveyance system and an Advanced Wastewater Treatment Facility (AWTF) on the Brookhaven Calabro Airport site. The AWTF would use either a Membrane Bioreactor (MBR) or Sequencing Batch Reactor (SBR) treatment process. The Proposed Action would result in combined average daily flows of approximately 1.4 million gallons per day (mgd), which, after treatment, would flow to subsurface leaching fields.

**Agency Jurisdiction**
GOSR, operating under the auspices of the New York State Homes and Community Renewal’s Housing Trust Fund Corporation (HTFC), a public benefit corporation and subsidiary of the New York State Housing Finance Agency, 99 Washington Avenue, Suite 1224, Albany, New York 12260, is the Grantee of Community Development Disaster Recovery (CDBG-DR) funds. These funds were appropriated by the Disaster Relief Appropriations Act, 2013 (Pub. L. 113-2, approved January 29, 2013) related to disaster relief, long-term recovery, restoration of infrastructure and housing, and economic revitalization in the most impacted and distressed areas resulting from a major disaster declared pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1974 (Stafford Act) in calendar years 2011, 2012, and 2013. GOSR implements the State’s obligations, as they pertain to CDBG-DR funding, under the State Environmental Quality Review Act (SEQRA) through duly authorized Certifying Officers, and is the lead agency responsible for the preparation of the environmental impact statement for the Forge River Watershed Sewer Project.

**Final Environmental Impact Statement**
GOSR issued a Final Environmental Impact Statement (FEIS) prepared for the Proposed Action pursuant to SEQRA, codified at Article 8 of the New York Environmental Conservation Law (ECL), and its implementing regulations, promulgated at Part 617 of Title 6 of the NYCRR, which collectively contain the requirements for the SEQRA process. The FEIS was signed by GOSR on June 26, 2018, and notice of completion of the FEIS was published in the Environmental Notice Bulletin (ENB) on June 27, 2018.

The Federal Emergency Management Agency (FEMA) is the lead agency under the National Environmental Policy Act (NEPA) and related laws for the federal environmental review of the Proposed Action. A separate NEPA environmental assessment is underway for federal environmental review of the Proposed Action.
Facts and Conclusions Relied Upon to Support the Decision

1. **Documents Reviewed**
GOSR has reviewed the following documents:

- FEMA-DR-4085-NY HMGP Application State #2486; Sub-applicant: Suffolk County; Project Title: Suffolk County Coastal Resilience Initiative
- Forge River Watershed Sewer Project Final Environmental Impact Statement; Town of Brookhaven, Suffolk County, New York (June 2018)
- Draft Feasibility Study Map & Plan for Mastic/Shirley; Suffolk County, New York; Suffolk County Sewer District Capacity Study, CP8189 (September 2013)
- Feasibility Study Map & Plan for Mastic/Shirley; Suffolk County, New York; Suffolk County Sewer District Capacity Study (March 2014)
- Forge River Watershed Sewer Project Map & Plan (May 2018)

2. **Purpose and Need for the Proposed Action**
The FEIS analyzes the environmental impacts along with the social and economic benefits that would be derived from the proposed establishment of the Mastic-Shirley Sewer District:

- The Proposed Action would mitigate short-term, repetitive, adverse impacts on human life and property associated with OWTS failures in the Forge River watershed in Suffolk County, New York, caused by natural hazards.
- The Proposed Action would mitigate long-term, adverse impacts associated with such failures on surface waters and coastal wetlands that reduce the ability of these waters and wetlands to provide natural protection against storm surge.

3. **Alternatives and the Proposed Action**
GOSR considered five project alternatives: No Build; On-site Treatment and Disposal—Replacing Existing On-Site Wastewater Treatment and Disposal Systems with Innovative/Alternative On-Site Wastewater Treatment and Disposal Systems (I/A OWTS); Centralized System with Different Wastewater Treatment Technology; Centralized System with Different Collection System Infrastructure; and Centralized System with Alternative Location(s) for the AWTF. The last three alternatives did not sufficiently meet the purpose and need for the Proposed Action. Accordingly, the FEIS analyzes two alternatives to the Proposed Action: No Action and I/A OWTS.

The No Action Alternative would involve the continued operation of the existing and in-place conventional OWTS and would continue to contribute to sewage backups during storm events. No measures to reduce nitrogen and pathogen pollution would be pursued, and no efforts would be undertaken to prevent untreated wastewater from entering waterbodies via shallow groundwater and tidal flooding. The No Action Alternative would not include large-scale replacement of existing OWTS.

Under the I/A OWTS Alternative, all cesspools and conventional OWTS in the project area would be upgraded with modern I/A OWTS pursuant to the Suffolk County Septic Demonstration Program. I/A OWTS are miniature variations of typical wastewater treatment
processes found in large-scale treatment plants. They can be attached-growth processes or suspended-growth processes or a mix. First, wastewater is directed to a primary clarifier where solids are settled. Afterwards, in a separate tank(s), suspended-growth microorganisms are applied to the wastewater to break down wastes into carbon dioxide, water, and other inorganic compounds. Aeration, such as spraying liquid in the air or diffusing air into the liquid, is used to speed the reactions. Secondary clarifiers then remove any biological growth that results from the activated sludge treatment, and the treated effluent is disposed from the system.

4. **Environmental Impacts**

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**Topography and Soils**

Construction would result in negligible impacts on topography from the changes in land elevation outside the footprint of the AWTF. Impacts from construction of the proposed sewer district collection and conveyance systems would be negligible. Construction would also result in minor, adverse impacts on soils from erosion and compaction and an increase in impermeable surfaces. Replacement of permeable land with impermeable surfaces (e.g., buildings and parking lots associated with the AWTF) would have a minor, adverse impact on soils. These impacts would be mitigated by implementation of construction best management practices (BMPs) for soil erosion and stormwater protection, as well as design measures and engineering controls for operational stormwater.

**Air Quality**

Construction of the sewer district facilities would result in short-term, minor adverse impacts from emissions associated with equipment and vehicles. These impacts would be mitigated by adhering to U.S. Environmental Protection Agency (EPA) equipment compliance measures and performance standards, minimizing idling times, and implementing a dust control plan. Post-construction, the AWTF would result in negligible impacts from volatile organic compounds associated with treatment operations, and minor, adverse impacts would result from backup power generator use. Operational impacts would be minimized by following EPA equipment compliance measures and performance standards.

**Water Quality**

Construction of the sewer district facilities would result in short-term, minor, adverse impacts on water quality from soil erosion. Short-term, negligible impacts related to hazardous materials associated with the removal of the existing OWTS would also occur. Negligible impacts from construction activities would result from fuel handling, excavated soils, and potential to uncover hazardous materials. Adverse impacts from construction activities would be minimized by implementing BMPs for soil erosion, stormwater protection, hazardous materials handling, and OWTS removal; adhering to hazardous materials discovery and handling compliance measures; and following standard operating procedures.

Potential long-term, operational adverse impacts on groundwater quality would result from the discharge of small quantities of pharmaceuticals and personal care products in local waters. The Proposed Action would also result in significant, long-term, beneficial effects on groundwater
quality and surface waters from nitrogen removal and increased pollution treatment levels achieved by the AWTF. Long-term effects on water quality would be beneficial from the improved sewer system and substantial reduction of the risk of sanitary wastewater releases. Operational adverse impacts would be addressed through standard post-construction stormwater BMPs, installation of low-flow fixtures at the AWTF, and possible rainwater storage and reuse at the AWTF.

**Wetlands and Coastal Resources**

Construction of the sewer district has the potential to result in indirect, short-term, negligible, minor impacts on downstream wetlands and surface water from soil erosion and sedimentation. The Proposed Action could also result in short-term, negligible, adverse impacts on coastal resources. Adverse impacts would be minimized by implementing BMPs and adhering to hazardous materials discovery and handling compliance measures.

The Proposed Action would result in long-term, beneficial effects on freshwater and tidal wetlands and open waters from a reduction in storm-related sanitary wastewater discharges and high nitrogen concentrations in groundwater and surface water.

**Floodplains**

The Proposed Action could result in short-term, minor, adverse impacts from disturbance of floodplain functions, reduction of natural floodplain values, and increases in stormwater runoff from construction if floodplains cannot be avoided. In the long term, the Proposed Action would have indirect impacts on floodplains from increased runoff resulting from an increase in impervious surfaces. Reduced degradation by pollutants and decreased risks of flood loss and flood impacts on human life and property would have long-term, indirect, beneficial effects. Impacts on the operation of the sewer system from flooding could be short term and adverse. Adverse impacts would be minimized by avoiding and minimizing impacts where possible, adhering to hazardous materials discovery and handling compliance measures, implementing BMPs for soil erosion and stormwater protection, and employing flood proofing and design elements.

**Vegetation**

The Proposed Action would result in long-term, moderate, localized, adverse impacts on vegetation from the permanent loss of up to 30.7 acres of pine-oak forest vegetation from the construction of the AWTF and leaching structure. Potential impacts from soil erosion and ground disturbance could damage vegetation and allow non-native invasive plant species to spread or become established. Adverse impacts would be minimized through construction BMPs for soil erosion and stormwater protection, adherence to hazardous materials discovery and handling compliance measures, limits on tree removal according to Town Code Chapters 70 and 490, and measures requiring clean equipment to reduce the spread of invasive species.

The prevention of sanitary wastewater overflow during future flood events and reduction in groundwater nitrogen concentrations would have long-term, beneficial effects on the health of upland and wetland vegetation.
Wildlife and Fish
The Proposed Action would result in short-term, minor, adverse impacts on wildlife from noise and construction activities. Minor, adverse impacts on migratory bird species would occur from the removal of 30.7 acres of trees associated with the AWTF and leaching fields. The Proposed Action could result in impacts on fish and aquatic resources from short-term increases in turbidity and sedimentation in local surface waters. Adverse impacts would be minimized through implementation of BMPs for soil erosion and stormwater protection, adherence to hazardous materials discovery and handling compliance measures, and maintenance of leaching field landscaping.

Operationally, there would be no impacts on terrestrial wildlife. The Proposed Action would result in long-term, beneficial effects on fish and aquatic resources from improved water and sediment quality. There would also be a long-term, beneficial effect on the airport area from tree removal that would reduce the risk of wildlife hazards to aircraft.

Threatened and Endangered Species
Construction of the sewer district facilities could result in short-term, minor, adverse impacts on northern long-eared bats from noise and tree removal associated with construction activities. Construction could also result in potential impacts on silvery aster from increased sedimentation. Adverse impacts would be minimized by conducting tree removal activities outside active northern long-eared bat roosting seasons (i.e., limiting tree removal activities to November 1 through March 31) and by conducting a biological survey prior to construction activities to observe presence or absence of silvery aster.

The Proposed Action would result in long-term, beneficial effects on water quality from reducing storm-related sanitary wastewater discharges and high nitrogen concentrations in wetlands and surface water.

Cultural Resources
Construction of the sewer district facilities would have no effect on archaeological resources, depending on location of excavation. There could be negligible impacts on historic architectural resources from minor landscape disturbance. There would be no operational impacts on these resources.

Aesthetic Resources
Construction activities would result in short-term, minor adverse impacts on viewsheds from tree removal and the presence of construction equipment. In the long term, project facilities would result in minor, adverse impacts on aesthetic resources.

Land Use and Planning
If land acquisition is required, the Proposed Action would result in short-term, negligible impacts on land use. Zoning changes would be required. Impacts could be mitigated or minimized in the event of a Town-approved amendment to the zoning code to allow for utility/infrastructure within any of the zones in which new infrastructure is proposed.
Findings Statement
Forge River Watershed Sewer Project, Town of Brookhaven, NY

Socioeconomics
Construction activities would result in short-term, beneficial effects on employment from new construction jobs and associated spending at local businesses in Suffolk County. In the long term, there would be no effects on businesses and households incurring user, maintenance, and operation fees. The Proposed Action would result in long-term, beneficial effects from residential and commercial property access to sewer infrastructure and long-term, beneficial effects for the community from avoided property losses associated with enhanced ecosystems and improved flood attenuation.

The Proposed Action may also result in induced growth, which is not expected to generate any indirect population or business displacement. In addition, growth is not expected to lead to a net negative fiscal flow. Indirect impacts from induced growth (to topography and soils, air quality, water quality, wetlands, floodplains, cultural resources, biological resources, land use, environmental justice, transportation, noise, community facilities, public health and safety, public services, and climate change) would negligible or minor.

Environmental Justice
Construction activities would result in minor, adverse impacts in terms of air quality, water quality, transportation, community services and facilities, public health and safety, and aesthetic resources and moderate, adverse impacts in terms of noise. Impacts on environmental justice populations would not be considerably more severe or greater in magnitude than impacts on the general population.

Operationally, the adverse fiscal impact on owners of connected properties in environmental justice communities would not be greater than the impact on the general population. However, for lower income households, the costs associated with connection (e.g., the annual debt service charge and the annual operation and maintenance expense) would account for a larger portion of their income. The owners of properties in the environmental justice communities would experience the same benefits from the Proposed Action as the general population.

Noise
Construction of the sewer district facilities would result in short-term, moderate, adverse impacts from stationary sources during construction of the AWTF, collection system, and associated mobile sources (i.e., construction traffic). Adverse impacts would be mitigated by implementation of BMPs and conformance with construction work hours and local noise ordinances.

Operationally, the Proposed Action would result in long-term, intermittent, negligible impacts. Adverse impacts would be mitigated by construction noise reduction BMPs, town noise control compliance measures, and engineering controls.

Transportation
The Proposed Action would result in short-term, minor, adverse impacts associated with construction of sewers. Delays would be anticipated at the northbound and southbound approaches at the intersection of Mastic Beach Road and Mastic Road and at the eastbound
approach at the intersection of Montauk Highway and Washington Avenue/Herkimer Street. Adverse impacts would be mitigated by limiting construction times to between 9:00 a.m. and 5:00 p.m. if turning lanes need to be closed at an affected intersection to avoid background peak hours. There would be no operational effects.

Community Facilities and Services
The Proposed Action would result in short-term, minor, adverse impacts from temporary disturbances to property during the connection to collection and conveyance system. There would be no effect on emergency services during construction and no operational effects.

Public Health and Safety
Construction would result in short-term, minor, adverse impacts to air quality and noise. There would be no effect on emergency services during construction. Adverse impacts would be mitigated by implementation of BMPs and adherence to local Town codes.

The Proposed Action would result in long-term, beneficial effects from the reduction in storm-related sanitary wastewater discharges and high nitrogen and pathogen concentrations in groundwater and surface water. Less assistance would be required from public health and safety providers during storm events as a result of reduced discharges and the enhanced storm-surge attenuation abilities of the ecosystem.

Climate Change
Construction would result in short-term, minor, adverse impacts from peak-year construction greenhouse gas emissions of 5,271 metric tons of carbon dioxide equivalent (CO2e). The Proposed Action would result in long-term, minor, adverse operational impacts from a net greenhouse gas increase in 7,123.5 metric tons CO2e per year, with beneficial effects from reduced methane emissions. In the long term, indirect beneficial effects would include a reduction in direct discharge and nitrogen and pathogen loading, which would increase coastal resiliency.

Energy
Construction would result in both short- and long-term, negligible impacts on energy use from expenditure of gasoline, diesel, and electricity.

5. Rationale for the Agency’s Decision
The project area has experienced intense flooding during events such as Hurricane Sandy in 2012, Hurricane Irene in 2011, and other unnamed seasonal storms, nor’easters, and hurricanes. The project area is subject to heavy rainfall events that lead to regular surface and groundwater flooding and a combination of both ground and surface water flooding, with varying intensity and frequency. Sub-performing and non-performing OWTS provide sanitary wastewater disposal in the project area. Many of the OWTS in the project area failed during Hurricane Sandy and will continue to be subject to failures during future storm events. Without further action, the potential failure of OWTS caused by natural hazards will continue to cause public health risks associated with uncontrolled sewage discharges and repetitive, adverse impacts on human life and property in the Forge River watershed.
Findings Statement
Forge River Watershed Sewer Project, Town of Brookhaven, NY

The agency considered several alternatives to address this situation. Under the No Action Alternative, the risks and impacts described above would continue and this alternative was therefore dismissed.

The I/A OWTS Alternative would upgrade all cesspools and conventional OWTS in the project area with modern I/A OWTS, which are miniature variations of typical wastewater treatment processes found in large-scale treatment plants. Although they are better able to function under higher groundwater levels than traditional OWTS, the I/A OWTS would remain susceptible to adverse effects from inundation associated with storm or tidal flooding, including risk of adverse effects on human life and property and environmental resources.

Under the Proposed Action, the construction of a new AWTF would eliminate the susceptibility of wastewater treatment to adverse effects from inundation; it would treat nitrogen and reduce water pollution and overall would result in greater benefits and fewer adverse environmental impacts in the long term than installing I/A OTWS on each parcel.

The phasing of the Proposed Action was optimized to connect approximately 2,400 parcels to the AWTF with a projected flow of approximately 815,000 gallons per day in the initial two phases, increasing to up to approximately 3,400 parcels in subsequent phases.

6. Environmental Commitments/Minimizing Adverse Impacts
The FEIS identified minor or negligible adverse impacts that would result from construction and operation of the Proposed Action. To avoid or minimize the potential adverse impacts, GOSR developed an extensive set of mitigation measures to be included in relevant contract documents, as follows:

- Implement construction BMPs for soil erosion, stormwater protection, engineering controls, hazardous materials handling, and OWTS removal; adhere to hazardous materials discovery and handling compliance measures; and follow standard operating procedures.
- Follow EPA equipment compliance measures and performance standards, minimize idling times, and implement a fugitive dust control plan.
- Implement standard post-construction stormwater BMPs.
- Implement flood-proofing design elements.
- Adhere to limits on tree removal according to Town Code Chapters 70 and 490 and measures requiring clean equipment to reduce the spread of invasive species.
- Ensure operational maintenance of leaching field landscaping.
- Conduct tree removal activities outside active northern long-eared bat roosting seasons (i.e., limit tree removal activities to November 1 through March 31) and conduct a biological survey prior to construction activities to observe presence or absence of silvery aster.
• Require Brookhaven to approve an amendment to the zoning code to allow for
utility/infrastructure within any of the zones in which the new infrastructure is
proposed.
• Implement BMPs and conform to construction work hours and local noise
ordinances. Impacts could also be mitigated through specific design
requirements (i.e., generally housing equipment within structures and applying
architectural and mechanical features to the degree required to meet the design
criteria to reduce noise).
• Schedule construction within roadways to minimize the closure of roads and/or
turning lanes during peak traffic hours.

Certification
GOSR has considered the draft and final environmental impact statements and other
documents, described above, and the facts and conclusions disclosed therein. Further, it has
weighed and balanced the relevant environmental impacts with social, economic, and other
considerations.
Accordingly, this Statement of Findings certifies that:

1. The requirements of 6 NYCRR Part 617 have been met;
2. The Proposed Action is consistent with social, economic, and other essential
considerations, and to the maximum extent practicable, adverse environmental
impacts revealed in the environmental impact statement process (and summarized
above) will be minimized or avoided by incorporating as conditions to permits or as
regulatory requirements those mitigation measures that were identified as practicable;
and
3. The Proposed Action is consistent with the applicable policies of Article 42 of the
Executive Law, as set forth in 19 NYCRR Part 600.5

Matt Accardi
Assistant General Counsel

cc: Federal Emergency Management Agency
Attachment A

Responses to Comments
ATTACHMENT A: RESPONSES TO COMMENTS

The Governor’s Office of Storm Recovery received one set of comments on the Final Environmental Impact Statement. These comments and the responses are contained in this attachment. The comments have been assigned a code and are arranged by subject matter (i.e., project description and general, socioeconomics). Each comment is not necessarily a direct quote, but all comments are intended to remain as accurate as possible to the original comment(s).

Comments by each commenter are also coded by last name and comment number.

Written Correspondence
- Mark Rifkin, Richard Supply Mastic Corp.

Responses to Comments

1.1 Project Description and General Comments

Comment PD-1: Voting on the District
Will an owner of property within the proposed Sewer District but who lives outside the sewer district be able to vote on the referendum? [Rifkin-1]

Response PD-1:
Property owners within the proposed district who are resident electors will be able to vote on the referendum.

Comment PD-2: Source of Materials
Can individuals supply the materials needed to hook up to the system? [Rifkin-2]

Response PD-2:
Suffolk County will provide the materials for the connections using competitive contracting processes. Individual property owners will not be able to provide their own materials.

Socioeconomics Comments

Comment SE-1: Requirements and costs to commercial property owners
Will commercial property owners be required to hook up to the new system and how much will it cost? [Rifkin-3]

Response SE-1:
Suffolk County Code, Chapter 740—Sewers (Section 740-44) states that “all existing residential, commercial, industrial, governmental, and institutional facilities within the geographical boundaries of a sewer district must connect within one year of notification from the Administrator of the availability of sewer service.” The connection costs for commercial properties will vary depending on the size of the business and could start at approximately $20,000.