

**Forge River Watershed Sewer Project
 Draft Environmental Impact Statement
 Appendix C
 Town of Brookhaven, Suffolk County, New York**

May 2018



*Prepared pursuant to the New York State
 Environmental Quality Review Act*

*SEQRA Lead Agency:
 NY Governor's Office of Storm Recovery
 25 Beaver Street, 5th Floor
 New York, NY 10004*

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**APPENDIX C.1: COASTAL ZONE MANAGEMENT PROGRAM CONSISTENCY
REVIEW**



FEMA

December 29, 2016

Mr. Jeffrey Zappieri
Consistency Review, New York Coastal Management Program
New York Department of State
One Commerce Place
99 Washington Avenue, Suite 1010
Albany, New York 12231-0001

Re: State's Coastal Management Program Consistency Review of FEMA-4085-DR-NY Super Storm Sandy: Suffolk County Coastal Resiliency – Forge River (HMGP #2486)

Dear Mr. Zappieri:

The Federal Emergency Management Agency (FEMA) is proposing to provide federal funding from its Hazard Mitigation Grant Program (HMGP) to assist Suffolk County (the Subrecipient) with the construction of sewer lines, pump stations, and a waste water treatment plant in the Forge River watershed (40,80658, 72.86460).

The applicant proposes to decommission existing on-site wastewater treatment and disposal systems (OSWS), such as septic systems and cesspools, on approximately 3,600 parcels in the project area and connect the parcels to a new sewer collection system that would flow to a proposed new advanced wastewater treatment facility (AWTF). The project would include the construction of new sewer infrastructure including a combination of gravity sewer and low-pressure sewer mains and lateral connections as well as pump stations to connect all flow from the properties within the project area to the new AWTF. The project would be constructed over three phases.

The primary purpose of the proposed action is to mitigate short-term and repetitive, adverse impacts on human life and property associated with OSWS 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.

New York State Coastal Policies 1 through 44 have been reviewed with their respect to the project to be performed per FEMA's disaster recovery operations. Based on this review, FEMA has determined that the above referenced proposed activities are consistent with the policies of the New York State Coastal Management Program (CMP) and will not hinder the achievement of

those policies. A summary of the proposed project's consistency with the State Coastal Policies is included as an attachment.

FEMA is seeking the New York Department of State's (NYDOS) concurrence with FEMA's Coastal Zone Consistency Determination, in accordance with the requirement of the Coastal Zone Management Act of 1972 (15 CFR Part 930), prior to the release of federal funding to the grant recipient.

FEMA Environmental and Historic Preservation (EHP) looks forward to your office's feedback within 60 days of receipt of this letter. If you have any questions, please contact Christina Gray at 202-765-9108 or at marychristina.gray@fema.dhs.gov.

Sincerely,

**BROCK A
GIORDANO**

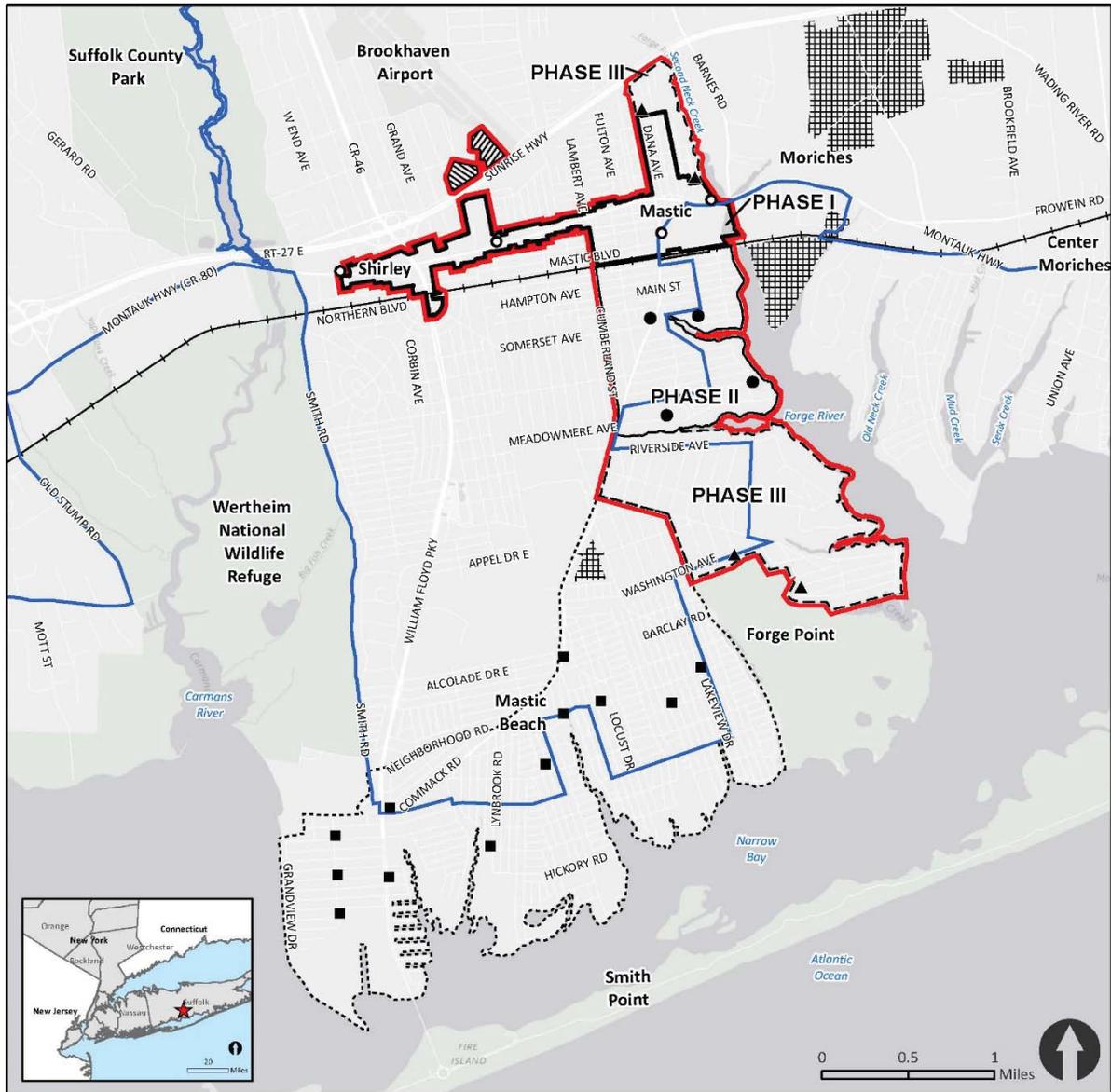
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Homeland Security, ou=FEMA, ou=People, cn=BROCK A
GIORDANO,
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Date: 2016.12.29 14:42:05 -05'00'

Brock Giordano, RPA
EHP Sandy (4085) Supervisor
FEMA/Region II
iphone: (347) 574-1467
Email: brock.giordano@fema.dhs.gov

BG/cm

Encl: Figures
Consistencies with Coastal Policies of New York Worksheet

ATTACHMENTS



- Project Area
- Coastal Zone
- MTA Long Island Rail Road
- Private Sewer Areas
- Proposed Advanced Wastewater Treatment Facility (AWTF)**
- Advanced Wastewater Treatment Facility Parcel
- Advanced Wastewater Treatment Facility Expansion Parcel
- Proposed Sewer District**
- Phase I
- Phase II
- Phase III
- Phase IV
- Phase I Pump Stations
- Phase II Pump Stations
- Phase III Pump Stations
- Phase IV Pump Stations

Coastal Zone
Forge River Watershed
Sewer Project

Source: Suffolk County GIS;
 ESRI World Imagery;
 CP8189 Suffolk County
 Sewer Capacity Study
 (CDM Smith, H2M,
 Browne AE&T Group)



Figure 1. Project Location in Coastal Zone



Figure 2: Existing Land Use

Summary Table for Project's Consistency with Coastal Policies of New York State

Policy 1

Restore, revitalize, and redevelop deteriorated and underutilized waterfront areas for commercial, industrial, cultural, recreational, and other compatible uses.

Consistent. Proposal does not change existing land uses, with the exception of the proposed AWTF located outside of the coastal zone.

Policy 2

Facilitate the siting of water-dependent uses and facilities on or adjacent to coastal waters.

N/A. Proposal does not affect positively or negatively water dependent uses.

Policy 3

Further develop the state's major ports of Albany, Buffalo, New York, Ogdensburg, and Oswego as centers of commerce and industry, and encourage the siting, in these port areas, including those under the jurisdiction of state public authorities, of land use and development which is essential to, or in support of, the waterborne transportation of cargo and people.

N/A. Proposal is not under a port authority and does not interfere with port authority land uses.

Policy 4

Strengthen the economic base of smaller harbor areas by encouraging the development and enhancement of those traditional uses and activities which have provided such areas with their unique maritime identity.

N/A. Proposal does not affect positively or negatively the economic base of surrounding water dependent facilities due to existing zoning requirements.

Policy 5

Encourage the location of development in areas where public services and facilities essential to such development are adequate.

Consistent. Construction of sewers in coastal area provides appropriate public infrastructure for development. Project area is currently almost fully developed.

Policy 6

Expedite permit procedures in order to facilitate the siting of development activities at suitable locations.

Consistent. FEMA provides a 60-day consistency determination review period to the NYSDOS Coastal Management Program before processing the federal disaster relief grant specifically for declaration of NY-4085.

Policy 7

Significant coastal fish and wildlife habitats (SCFWH) will be protected, preserved, and where practical, restored so as to maintain their viability as habitats.

Consistent. Proposal's construction impacts will be limited to within road rights-of-way, previously disturbed portions of developed lots, and at the AWTF location outside of the coastal zone. Thus, no expected negative impacts to SCFWHs have been identified. Viable SCFWHs will also be protected indirectly by complying with permit requirements prescribed for protecting state's natural resources.

Policy 8

Protect fish and wildlife resources in the coastal area from the introduction of hazardous wastes and other pollutants which bio-accumulate in the food chain or which cause significant sub lethal or lethal effect on those resources.

Consistent. Proposal would not introduce hazardous wastes or other pollutants into the abutting aquatic ecosystem based on implementing Best Management Practices such as employing barrier controls at locations adjacent to aquatic areas. It is anticipated that activities will not adversely impact environmentally sensitive vegetation, soils, and/or animal resources as it is located primarily within road rights-of-way and disturbed portions of developed lots. The proposed AWTF location is outside of the coastal zone. Overall, the project should be beneficial to coastal fish and wildlife resources as it will reduce discharge of nitrogen to aquatic habitats.

Policy 9

Expand recreational use of fish and wildlife resources in coastal areas by increasing access to existing resources, supplementing existing stocks, and developing new resources.

Consistent. Although the proposal is not directly related to a natural resources/wildlife conservation management plan, it would improve water quality and tidal marsh habitat conditions over time, which would provide expanded opportunities for recreational use of fish and wildlife resources.

Policy 10

Further develop commercial finfish, shellfish, and crustacean resources in the coastal area by encouraging the construction of new, or improvement of existing on-shore commercial fishing facilities, increasing marketing of the state's seafood, maintaining adequate stocks, and expanding aquaculture facilities.

Consistent. Although developing commercial fish and shellfish resources is not a part of the project's purpose, the project would improve water quality in the Great South Bay and expand tidal marsh habitat, which would improve conditions for commercial fish and shellfisheries.

Policy 11

Buildings and other structures will be sited in the coastal area so as to minimize damage to property and the endangering of human lives caused by flooding and erosion.

Consistent. Infrastructure would not be placed in coastal erosion hazard areas, and the purpose of project is to reduce hazards to human health that result when existing on-site sewage systems overflow or fail during floods and storms.

Policy 12

Activities or development in the coastal area will be undertaken so as to minimize damage to natural resources and property from flooding and erosion by protecting natural protective features including beaches, dunes, barrier islands and bluffs.

Consistent. Proposal has been sited to avoid encroaching on any area of potential effects. Thus construction activities will occur within disturbed and/or improved properties and follow best management practices listed in NYDEC permits for minimizing erosional/flooding damages to surrounding natural resources.

Policy 13

The construction or reconstruction of erosion protection structures shall be undertaken only if they have a reasonable probability of controlling erosion for at least thirty years as demonstrated in design and construction standards and/or assured maintenance or replacement programs.

N/A. Proposal does not include construction of or require erosion protection structures

Policy 14

Activities and development, including the construction or reconstruction of erosion protection structures, shall be undertaken so that there will be no measurable increase in erosion or flooding at the site of such activities or development, or at other locations.

Consistent. Proposal is not anticipated to impact flood capacity and flows or increase erosion/flooding because project elements will be placed underground in previously developed areas. The proposed AWTP is located outside of the coastal zone and is not within floodplains.

Policy 15

Mining, excavation or dredging in coastal waters shall not significantly interfere with the natural coastal processes which supply beach materials to land adjacent to such waters and shall be undertaken in a manner which will not cause an increase in erosion of such land.

N/A. No dredging and/or filling in coastal waters are identified for this proposal.

Policy 16

Public funds shall only be used for erosion protective structures where necessary to protect human life, and new development which requires a location within or adjacent to an erosion hazard area to be able to function, or existing development; and only where the public benefits outweigh the long term monetary and other costs including the potential for increasing erosion and adverse effects on natural protective features.

Consistent. Proposal is not for erosion protective structures and is intended to assist existing development that requires location within or adjacent to an erosion hazard area to be able to function with a reduced impact on environmental health and protective wetlands.

Policy 17

Non-structural measures to minimize damage to natural resources and property from flooding and erosion shall be used whenever possible.

Consistent. Non-structural measures will be used during construction to minimize run-off to local surface waters/natural resources or significant erosional effects. In addition, the proposal is intended to improve conditions for the development of protective tidal marshes and thus support non-structural measures to minimize damages from flooding and erosion.

Policy 18

To safeguard the vital economic, social and environmental interests of the state and of its citizens, proposed major actions in the coastal area must give full consideration to those interests, and to the safeguards which the state has established to protect valuable coastal resource areas.

Consistent. Proposal protects the economic and social interests of the state and its citizens through employing a risk-reduction measure to reduce impacts from future high-energy events. All work will be done using construction best management practices per state/federal permit requirements.

Policy 19

Protect, maintain, and increase the level and types of access to public water-related recreation resources and facilities.

Consistent. Proposal does not change existing access to public water-related recreation resources or facilities.

Policy 20

Access to the publicly-owned foreshore and to lands immediately adjacent to the foreshore or the water's edge that are publicly-owned shall be provided and it shall be provided in a manner compatible with adjoining uses.

Consistent. Proposal does not change existing access to public water-related recreation resources or facilities.

Policy 21

Water-dependent and water-enhanced recreation will be encouraged and facilitated, and will be given priority over non-water-related uses along the coast.

N/A. Policy is not the proposal's purpose since it does not affect positively or negatively the siting of water-dependent and water-enhanced uses and facilities.

Policy 22

Development, when located adjacent to the shore, will provide for water-related recreation, whenever such use is compatible with reasonably anticipated demand for such activities, and is compatible with the primary purpose of the development.

N/A. Policy is not the proposal's purpose since it does not affect positively or negatively the existing land uses nor does it provide water-related recreational opportunities.

Policy 23

Protect, enhance and restore structures, districts, areas or sites that are of significance in the history, architecture, archaeology or culture of the state, its communities, or the nation.

Consistent. FEMA is consulting with the State Historic Preservation Office and Participating Tribes per Section 106 of the National Historic Preservation Act, to address any proposed ground disturbing activities as identified in submitted project plans. Any identified adverse effect(s) for standing structures will be mitigated through the Abbreviated Consultation process outlined in the New York Programmatic Agreement.

Policy 24

Prevent impairment of scenic resources of statewide significance.

Consistent. Proposal does not impact known scenic resources of statewide significance.

Policy 25

Protect, restore or enhance natural and man-made resources which are not identified as being of statewide significance, but which contribute to the overall scenic quality of the coastal area.

Consistent. Proposal purpose is to reduce discharges of raw sewage into buildings and the environment. Over time the proposal is expected to improve conditions for the development of tidal marsh habitat, which may contribute to the overall scenic quality of the coastal area.

Policy 26

Conserve and protect agricultural lands in the state's coastal area.

N/A. No agricultural land is present in the vicinity of the proposal. There is a small area of mapped farmland soils, but it is entirely developed with urban uses and is within the boundaries of the Town of Brookhaven.

Policy 27

Decisions on the siting and construction of major energy facilities in the coastal area will be based on public energy needs, compatibility of such facilities with the environment, and the facility's need for a shorefront location.

N/A. Policy is not the proposal's purpose because the proposal does not involve siting and construction of energy facilities.

Policy 28

Ice management practices shall not interfere with the production of hydroelectric power, damage significant fish and wildlife and their habitats, or increase shoreline erosion or flooding.

N/A. Policy is not the proposal's purpose because ice-management practices are not involved in construction or operation activities.

Policy 29

Encourage the development of energy resources on the outer continental shelf, in Lake Erie and in other water bodies, and ensure the environmental safety of such activities.

N/A. Policy is not the proposal's purpose because project activities do not include development of energy resources.

Policy 30

Municipal, industrial, and commercial discharge of pollutants, including but not limited to toxic and hazardous substances, into coastal waters will conform to state and national water quality standards.

Consistent. The proposal purpose is to prevent the discharge of raw sewage into surface and ground waters. Sewage would be collected from the project area and routed to the new proposed treatment plant before discharge by infiltration. There would be no direct discharge to coastal waters and the quality of the effluent would be improved significantly.

Policy 31

State coastal area policies and management objectives of approved local waterfront revitalization programs will be considered while reviewing coastal water classifications and while modifying water quality standards; however, those waters already overburdened with contaminants will be recognized as being a development constraint.

Consistent. Proposal does not involve review of or modification to coastal water classifications or water quality standards.

Policy 32

Encourage the use of alternative or innovative sanitary waste systems in small communities where the costs of conventional facilities are unreasonably high, given the size of the existing tax base of these communities.

N/A. Policy is not the proposal's purpose because this project will occur in a developed urban area.

Policy 33

Best management practices will be used to ensure the control of stormwater runoff and combined sewer overflows draining into coastal waters.

Consistent. The proposal would result in a net increase in impervious surfaces at the AWTF and pump station locations. Best management practices will be used to control storm water runoff during and after construction. The project would not construct combined sewers or combined sewer overflows and would reduce the occurrence of septic and cesspool overflows to coastal waters during storm events.

Policy 34

Discharge of waste materials into coastal waters from vessels subject to state jurisdiction will be limited so as to protect significant fish and wildlife habitats, recreational areas and water supply areas.

N/A. Policy is not the proposal's purpose because this project will have no impact on vessel discharges

Policy 35

Dredging and filling in coastal waters and disposal of dredged material will be undertaken in a manner that meets existing State permit requirements, and protects significant fish and wildlife habitats, scenic resources, natural protective features, important agricultural lands, and wetlands.

N/A. Policy is not the proposal's purpose because the project does not involve dredging and filling in coastal waters, nor disposal of dredged material.

Policy 36

Activities related to the shipment and storage of petroleum and other hazardous materials will be conducted in a manner that will prevent or at least minimize spills into coastal waters; all practicable efforts will be undertaken to expedite the cleanup of such discharges; and restitution for damages will be required when these spills occur.

N/A. Policy is not the proposal's purpose because the project does not involve shipment and storage of petroleum and other hazardous materials.

Policy 37

Best management practices will be utilized to minimize the non-point discharge of excess nutrients, organics and eroded soils into coastal waters.

Consistent. Project purpose is to reduce the non-point discharge of nitrogen and organics from sewage into coastal waters. Best management practices will be utilized during construction of the project to reduce the potential discharge of soils into coastal waters.

Policy 38

The quality and quantity of surface water and groundwater supplies will be conserved and protected, particularly where such waters constitute the primary or sole source of water supply.

Consistent. The purpose of the project is to improve the quality of surface and groundwater by reducing the discharge of untreated sewage from on-site treatment systems. The project would also result in a reduction of nitrogen deposition in surface waters and groundwater.

Policy 39

The transport, storage, treatment and disposal of solid wastes, particularly hazardous wastes, within coastal areas will be conducted in such a manner so as to protect groundwater and surface water supplies, significant fish and wildlife habitats, recreation areas, important agricultural land, and scenic resources.

Consistent. Proposal will use best management practices listed in federal/NYSDEC permits for transport, storage, treatment and disposal of all C&D, hazardous waste, etc. during the construction. There are no anticipated significant adverse impacts on fish and wildlife resources, surface and groundwater quality, recreation areas, scenic resources or agricultural land.

Policy 40

Effluent discharged from major steam electric generating and industrial facilities into coastal waters will not be unduly injurious to fish and wildlife and shall conform to state water quality standards.

N/A. Policy is not the proposal's purpose or function since the facility is not a steam electric generating or industrial facility.

Policy 41

Land use or development in the coastal area will not cause national or state air quality standards to be violated.

Consistent. Proposal is not anticipated to impact state or national air quality standards.

Policy 42

Coastal management policies will be considered if the state reclassifies land areas pursuant to the prevention of significant deterioration regulations of the federal clean air act.

N/A. Policy is not the proposal's purpose or function as it does not propose reclassifying land areas pursuant to the federal Clean Air Act.

Policy 43

Land use or development in the coastal area must not cause the generation of significant amounts of acid rain precursors: nitrates and sulfates.

Consistent. Proposal is not anticipated to cause acid rain precursors.

Policy 44

Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas.

Consistent. Proposal will not adversely impact tidal or freshwater wetlands, and project purpose is to improve conditions for the development and maintenance of tidal marshes, increasing the benefits derived from these areas.

STATE OF NEW YORK
DEPARTMENT OF STATE
ONE COMMERCE PLAZA
99 WASHINGTON AVENUE
ALBANY, NY 12231-0001
WWW.DOS.NY.GOV

ANDREW M. CUOMO
GOVERNOR

ROSSANA ROSADO
SECRETARY OF STATE

January 27, 2017

M. Christina Gray
Lead Environmental Specialist
FEMA/Region II Mitigation Division
One World Trade Center, 53 Floor
New York, New York 10007

Re: **F-2016-1209(FA)**
FEMA – Forge River Watershed Sewer
HMGP #2486
Funding for the construction of new sewer
infrastructure including a combination of gravity
sewer and low-pressure sewer mains and lateral
connections as well as pump stations to connect all
flow from the properties within the project area to
the new Advanced Wastewater Treatment Facility.
General Concurrence - No Objection to Funding

Dear Ms. Gray:

The Department of State received the information you submitted regarding the above matter on 12/30/2016.

The Department of State has determined that this proposal meets the Department's general consistency concurrence criteria. Therefore, the Department of State has no objection to the use of FEMA funds for this financial assistance activity. This concurrence pertains to the financial assistance activity for this project only. If federal permits or other form of federal agency authorization is required for this activity, the Department of State will conduct a separate review for those permit activities. In such a case, please forward a copy of the federal application for authorization, a completed Federal Consistency Assessment Form, and all supporting information to the Department at the same time it is submitted to the federal agency from which the necessary authorization is requested.

When communicating with us regarding this matter, please contact Jeffrey Zappieri at (518) 474-6000 and refer to our file #F-2016-1209(FA).

Sincerely,



Jeffrey Zappieri
Supervisor, Consistency Review Unit
Office of Planning and Development

JZ/dc



Department
of State

APPENDIX C.2: SOLE SOURCE AQUIFER SCREENING

ATTACHMENT 2.A

NON-HOUSING/PROJECT ACTIVITY INITIAL SCREEN CRITERIA

The following list of criteria questions are to be used as an initial screen to determine which **non-housing** projects/activities should be forwarded to the Environmental Protection Agency (EPA) for Preliminary Sole Source Aquifer (SSA) Review. (For housing projects/activities see Attachment 2.B) If any of the questions are answered affirmatively, Attachment 3, SSA Preliminary Review Requirements, should also be completed. The application/final statement, this Attachment, Attachment 3, and any other pertinent information should then be forwarded to EPA at the address below.

Any project/activity not meeting the criteria in this Attachment, but suspected of having a potential adverse effect on the Sole Source Aquifer should also be forwarded.

CRITERIA QUESTIONS	YES	NO	N/A
<p>1. Is the project/activity located within a currently designated or proposed groundwater sensitive area such as a special Ground Water Protection Area, Critical Supply Area, Wellhead Protection Area, etc.? [This information can be obtained from the County or Regional Planning board, the local health department, the State health department or the State environmental agency.]</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>2. Is the project/activity located within a one half mile radius (2640 feet) of a current or proposed public water supply well or wellfield? [This information can be obtained from the local health department, the State health department or the State environmental agency.]</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Will the project/activity include or directly cause (check appropriate items):

	YES	NO	N/A
construction or expansion of solid waste disposal, recycling or conversion facilities	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
construction or expansion or closure of landfills	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
construction or expansion of water supply facilities	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
construction or expansion of on-site wastewater treatment plants or sewage trunk lines	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
construction or expansion of gas or petroleum trunk lines greater than 1320 feet	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
construction or expansion of railroad spurs or similar extensions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
construction or expansion of municipal sewage treatment plants	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Will the project/activity include storage or handling of any hazardous constituents as listed in Attachment 4, Hazardous Constituents

5. Will the project/activity include bulk storage of petroleum in underground or above ground tanks in excess of 1100 gallons?
(Please give what assurance they are done in a proper manner.)

6. Will the project/activity require a federal or state discharge elimination permit or modification of an existing permit?

This attachment was completed by:

Name: Matt Accardi

Title: Certifying Environmental Officer

Address: 25 Beaver Street
New York, NY 10004

Telephone number: 212.480.6265

Date: _____

ATTACHMENT 3

SSA PRELIMINARY REVIEW INFORMATION REQUIREMENTS

Where currently available, the information in this Attachment should be provided to the Environmental Protection Agency (see address below) along with the application/final statement; Attachment 2.A, Non-Housing Initial Screen Criteria or Attachment 2.B, Housing Initial Screen Criteria; and any other information which may be pertinent to a Sole Source Aquifer review. Where applicable, indicate the source of your information.

I. Project/Activity Location	Enclosed?	
	Yes	No
1. Provide the geographic location and total acreage of the project/activity site. Include a site map which identifies the site in relation to the surrounding area. [Examples of maps which can be used include: 1:24,000 or 1:25,000 U.S. Geological Survey quadrangle sheet, Hagstroms Street Map.]	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. If applicable, identify which groundwater sensitive areas (Special Ground Water Protection Area, Critical Supply Area, Wellhead Protection Area, etc.) the project/activity is located within or adjacent to. [This information may be obtained from the County or Regional planning board, the local health department, the State health department or the State environmental agency.]	<input checked="" type="checkbox"/>	<input type="checkbox"/>

II. Nature of Project/Activity	Enclosed?	
	Yes	No
3. Provide a general narrative describing the project/activity including but not limited to: type of facility; type of activities to be conducted; number and type of units; number of residents, etc. Provide the general layout of the project/activity site and site-plan if available.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

III. Public Water Supply	Enclosed?	
	Yes	No
4. Provide a description of plans to provide water supply.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5. Provide the location of nearby existing or proposed public water supply wells or wellfields within one half mile radius (2640 feet) of the project/activity. Provide the name of the supplier(s) of those wells or wellfields. This information should be available from the local health department, State health department or the State environmental agency.	☒	☐
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IV. Wastewater and Sewage Disposal	Enclosed?	
	Yes	No
6. Provide a description of plans to handle wastewater and sewage disposal. If the project/activity is to be served by existing public sanitary sewers provide the name of the sewer district.	☒	☐
7. Provide a description of plans to handle storm water runoff.	☒	☐
8. Identify the location, design, size of any on-site recharge basins, dry wells, leaching fields, retention ponds, etc.	☒	☐

V. Use, Storage, Transport of Hazardous or Toxic Materials <i>(Applies only to non-housing projects/activities)</i>	Enclosed?	
	Yes	No
9. Identify any products listed in Attachment 4, Hazardous Constituents, of the Housing and Urban Development-Environmental Protection Agency Memorandum of Understanding which may be used, stored, transported, or released as a result of the project not related to construction	☒	☐
10. Identify the number and capacity of underground storage tanks at the project/activity site. Identify the products and volume to be stored, and the location on the site.	☒	☐
11. Identify the number and capacity of above ground storage tanks at the project/activity site. Identify the products and volume to be stored, and the location on the site	☒	☐

This attachment was completed by:

Name: Matt Accardi

Title: Certifying Environmental Officer

Address: 25 Beaver Street
New York, NY 10004

Telephone number: 212.480.6265

Date: _____

I. Project/Activity Location

1. Provide the geographic location and total acreage of the project/activity site. Include a site location map which identifies the site in relation to the surrounding area. [Examples of maps which can be used include: 1:24,000 or 1:25,000 U.S. Geological Survey quadrangle sheet, Hagstroms Street Map.]

The proposed project area encompasses approximately 1,600 acres in the densely nearly completely developed residential and commercial area bounded by Sunrise Highway to the north, Home Creek to the south, mostly Cumberland Street to the west (with exception of the northern most section along Montauk Highway), and Forge River and its tributaries to the east. The proposed project area also includes a 13.7-acre parcel and a 17.0-acre expansion area parcel located on the Brookhaven Calabro Airport situated north of Sunrise Highway (New York State Route 27). The proposed project area is broken down into three separate phases. Phase I consists largely of the areas along the Montauk Highway Corridor. Phase II consists of the area between the LIRR Montauk line in the north and the Second Neck Creek in the south. Phase III consists of everything else within the aforementioned project area that is south of the Second Neck Creek in addition to one small section in the northeastern most portion of the overall project area. See Figure 3-1.

2. If applicable, identify which groundwater sensitive areas (Special Ground Water Protection Area, Critical Supply Area, Wellhead Protection Area etc.) the project/activity is located within or adjacent to. [This information may be obtained from the County or Regional planning board, the local health department, the State health department or the State environmental agency.]

The Suffolk County Department of Health Services (SCDHS) enacted Article 4, Article 6, Article 7 and Article 12 of the Suffolk County Sanitary Code to form rules and regulations on which to protect groundwater and public health in Suffolk County. Article 6 of the Suffolk County Sanitary Code separates the County into eight groundwater management zones (GMZ) based on differences in hydrogeology and groundwater quality, and establishes flow limitations for parcels within each GMZ based on maintaining a maximum total nitrogen concentration in groundwater of 10 mg/L. The project area is located within GMZ VI, in which the sanitary flow limitation is 300 gpd/acre. Given that significant development within the Town of Brookhaven occurred prior to Article 6, the build-out of the Town in many areas exceeds this sanitary flow limitation, equal to approximately one-acre lot for each single family residence.

II. Nature of Project Activity

3. Provide a general narrative describing the project/activity including but not limited to: type of facility; type of activities to be conducted; number and type of units; number of residents etc. Provide the general layout of the project/activity site and a site-plan if available.

The Proposed Action would entail establishment of a Mastic-Shirley Sewer District (MSSD) and construction and operation of a collection system with a combination of gravity sewers and low-pressure sewers, a conveyance system consisting of multiple pump stations and force mains, and an advanced wastewater treatment plant (AWTF). See Figures 4-1 through 4-6.

The collection system would comprise 12 Drainage Zones that would direct wastewater to a series of pump stations. Each pump station would direct flow through the conveyance system via force mains to the AWTF. Phases I through III would result in combined average daily flows of approximately 1.4 million gallons per day (MGD) from approximately 3,400 parcel connections. Based on preliminary engineering, the components of the proposed system are described in further detail below. It is anticipated that design specifications and details will be refined through the detailed design process.

Collection System

Gravity Sewers

The Montauk Highway Corridor and residential areas, where the depth to groundwater is generally greater than 10 feet, would be served by gravity sewers. In these areas, pipe installation would follow the inclines of the terrain to allow for natural flow to a pump station. Sewers would run the length of street right-of-ways with lateral (side) connections to adjacent properties.

The gravity sewer collection system would consist of approximately 161,500 linear feet of DR-18 polyvinyl chloride (PVC) piping ranging in diameter from 8 to 20 inches, as well as laterals with diameters of 6 or 8 inches. Gravity sewer mains would be installed at depths no less than 6 feet below ground surface (bgs) to provide the required clearances between existing utilities and to maintain sufficient slope to facilitate a self-scouring (gravity based) velocity of wastewater flow within the pipe.

Low-Pressure Sewers

Low-pressure sewers would be used in relatively flat areas where the groundwater table is shallow, generally at a depth of 10 feet or less, along Forge River and its tributaries, as well as along Great South Bay.

The sewers would consist of approximately 46,000 linear feet of between 2- and 4-inch diameter high-density polyethylene (HDPE) mains approximately 6 feet bgs. Each connected property would operate and maintain an on-site storage tank with level-sensing equipment, as well as a grinder pump. The grinder pumps would be turned on when a pre-set fill level is sensed in the storage tank, and turned off after the storage tank is drained to a low-level condition. The pump cycles would be controlled by the capacity of the onsite wet well, the real-time pressure within the common sewer main, and the daily wastewater generation rate of the property. The grinder pumps would be configured to operate based on the average daily and peak hourly flows expected from each property. On-line standby spare pump(s) would be included in each grinder pump station to satisfy SCDHS redundancy requirements.

Conveyance

Wastewater from the gravity and low-pressure sewers would flow to twelve separate pump stations located throughout the project area. Eleven stations would require single-chamber wet wells and singular force mains to convey flow directly to the tributary sewers to the Drainage Zone II pump station via force main. The Drainage Zone II pump station would serve as an influent pump station to the AWTF. This station would be provided with dual force mains and a chambered wet well to provide operational flexibility during initial low-flow periods.

The force mains would consist of approximately 42,500 linear feet of DR-18 PVC piping, ranging in diameter from 6 to 16 inches. All force mains would be installed at a minimum depth of 4 feet bgs.

Advanced Wastewater Treatment Facility

The proposed AWTF would comprise either a membrane bioreactor (MBR) or sequencing batch reactor (SBR). See Figure 4-7.

MBR Process

The conveyance system would direct wastewater flows to an AWTF located within 30.7 acres of non-contiguous property on the southwestern portion of Brookhaven Calabro Airport property. The AWTF would have a hydraulic daily design flow capacity of 1.4 MGD, which is equivalent to the projected average daily design flow of the collection and conveyance system.

From the Drainage Zone II pump station, wastewater would be directed to the AWTF and discharged to influent screening equipment that would be sized to handle peak-hour flows and remove solids and debris larger than 2 millimeters (mm) in diameter, which would be washed and compacted onsite and conveyed into a container for offsite disposal. The wastewater passing through the influent screens would flow by gravity into an aerated equalization tank, which would be sized to provide capacity for 20 percent of the average daily flow, and would be used to regulate constant flow through the facility to maintain the process and result in more consistent treatment efficiency.

Flow from the equalization tank would discharge into parallel pre-anoxic basins, which would provide mechanical mixing to facilitate de-nitrification of the wastewater. Then the wastewater would flow via gravity into downstream aeration basins where nitrification of the wastewater would occur.

Following nitrification, wastewater would be conveyed to downstream post-anoxic basins for de-nitrification. Effluent from the post-anoxic basins would enter parallel downstream membrane bioreactors (MBRs) to remove solids remaining in the process stream and to filter the wastewater prior to discharging to the on-site subsurface leaching pools. Each membrane tank would be sized to handle a proportioned amount of the process flow to provide redundancy in the event that one must be taken offline for maintenance. One of the membrane tanks would be used as a Membrane Bioreactor Thickening (MBT)/standby MBR in the event that one of the online MBR basins must be taken offline for maintenance. The solids removed in the clarification portion of the process would be either returned to the biological process or pumped to a sludge holding tank for further conditioning. All process tanks would be covered.

SBR Process

The conveyance system would direct wastewater flows to an AWTF located within 30.7 acres of non-contiguous property on the southwestern portion of Brookhaven Calabro Airport property. The AWTF would have a hydraulic daily design flow capacity of 1.4 MGD, which is equivalent to the projected average daily design flow of the collection and conveyance system.

If an SBR is selected as the treatment option, from the Drainage Zone II pump station, wastewater would be directed to the AWTF and discharged to influent screening equipment that would be sized to handle peak-hour flows and remove solids and debris larger than 6 millimeters (mm) in diameter, which would be washed and compacted onsite and conveyed into a container

for offsite disposal. The wastewater passing through the influent screens would flow by gravity into an aerated equalization tank to regulate constant flow through the facility to maintain the process and result in more consistent treatment efficiency. Flow from the equalization tank would discharge into parallel process bio-reactor tanks where anoxic, aeration, and clarification are combined in one common tank to achieve nitrification/denitrification, eliminating the need for additional tanks and recycle flows between tanks. Then the wastewater would flow via gravity into the post-equalization tank.

Effluent from the post-equalization tank would enter parallel downstream filters to remove solids remaining in the process stream and to filter the wastewater prior to discharging to the on-site subsurface leaching pools. Each bio-reactor tank and filter would be sized to handle a proportioned amount of the process flow to provide redundancy in the event that one must be taken offline for maintenance. The solids removed in the clarification portion of the process would be either returned to the biological process or pumped to a sludge holding tank for further conditioning. All process tanks would be covered.

Facility Sizing

Based on SCDPW and SCDHS requirements, design flows from Phases I and II would require nearly 12.9 acres for the treatment facility, leaching pools, roads, and buildings. This area is based on an effluent loading rate of 10 gpd/sq. ft. with 8-foot diameter leaching pools with an effective depth of 16 feet per pool and a separation distance between pools of 8 feet. This could be accommodated within the 13.7-acre parcel under consideration for the AWTF. The leaching area would require the installation of almost 800 eight-foot diameter leaching pools with approximately 200 five-foot diameter distribution pools. Phase III effluent is roughly estimated to require 20 percent additional land, which could be accommodated in the 17-acre expansion area.

All process tanks would be located inside of a building designed with architectural features that blend into the surrounding area. The building would be provided with an odor control system to minimize potential odors from migrating offsite during normal operations. An emergency stand-by power generator would be provided to maintain system operation during periods of power loss. The generator would be fueled by natural gas and located inside an onsite weather-proof enclosure. The process controls, laboratory, motor control center, pumps, storage, and a small locker room would also be integral to this building.

III. Public Water Supply

4. Provide a description of plans to provide water supply.

The proposed project would not require or provide a water supply.

5. Provide the location of nearby existing or proposed public water supply wells or wellfields within a one half mile radius (2,640 feet) of the project/activity. Provide the name of the supplier(s) of those wells or wellfields. This information should be available from the local health department, State health department or the State environmental agency.

The area is served with public water. Suffolk County Water Authority (SCWA) supply wells S-71881, S-71882, S-96232, and S-112780 located at Lambert Avenue and Main Street.

IV. Wastewater and Sewage Disposal

6. Provide a description of plans to handle wastewater and sewage disposal. If the project/activity is to be served by existing public sanitary sewers provide the name of the sewer district.

The Proposed Alternative would entail establishment of a new sewer district called the Mastic-Shirley Sewer District (MSSD) and construction and operation of a collection system with a combination of gravity sewers and low-pressure sewers, a conveyance system consisting of multiple pump stations and force mains, and an AWTF.

7. Provide a description of plans to handle storm water runoff.

No work would be within or near the vicinity of identified waterbodies or would modify them directly. Potential impacts to stormwater quality during construction would be minimized through implementation of best management practices (BMPs), including construction site stabilization, dust control, sediment traps, temporary swales, and temporary or permanent seeding. These measures would be specified as part of the New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity permit application, which would also include an Erosion and Sediment Control Plan and Stormwater Pollution Prevention Plan (SWPPP). Stormwater runoff from the AWTF would be retained on-site.

8. Identify the location, design, size of any on-site recharge basins, dry wells, leaching fields, retention ponds etc.

The Proposed Action would require use of public land for the AWTF and pump stations. The area under consideration for the AWTF comprises approximately 30.7 acres of non-contiguous land. Approximately 13.7 acres of vacant/undeveloped land southwest of the Brookhaven Calabro Airport, situated north of Sunrise Highway (New York State Route 27), would be required for treating the 1.0 MGD of wastewater volumes associated with Phases I and II.

This area would accommodate the treatment facility, leaching pools, roads, and buildings. This area is based on an effluent loading rate of 10 gpd/sq. ft. with 8-foot diameter leaching pools with an effective depth of 16 feet per pool and a separation distance between pools of 8 feet. The leaching area would require the installation of almost 800 eight-foot diameter leaching pools with approximately 200 five-foot diameter distribution pools. Effluent from Phase III of the project area is roughly estimated to require 20 percent additional land, which could be accommodated in the 17-acre expansion area.

The Suffolk County groundwater model was used to evaluate the potential impacts of recharging treated effluent from the proposed Forge River Watershed Wastewater Treatment Plant (WWTP) on Suffolk County Water Authority (SCWA) supply wells. See Appendix A.05. Under recent average annual conditions of recharge and water supply pumping and potential future recharge of 1.4 MGD (Phases I, II and III) of treated effluent from the Forge River Watershed WWTP, the

treated effluent is simulated to migrate to discharge to the Forge River, with no impacts to the nearby SCWA wellfields.

V. Use, Storage, Transport of Hazardous or Toxic Materials

9. Identify any products listed in Attachment 4, Hazardous Constituents, of the Housing and Urban Development-Environmental Protection Agency Memorandum of Understanding which may be used, stored, transported, or released as a result of the project not related to construction.

The proposed project would transport wastewater through gravity and low pressure sewer mains to the new AWTF. Prior to treatment, wastewater transported through the proposed sewer collection system may contain products listed in Attachment 4, Hazardous Constituents, however the concentrations of any hazardous constituents would be below the allowable discharge limits. Metals are some of the more likely contaminants because of corrosion of piping systems for delivery of potable water. Lead and zinc in particular may be present if the drinking water is corrosive.

10. Identify the number and capacity of underground storage tanks at the project/activity site. Identify the products and volume to be stored, and the location on the site.

The total number of underground storage tanks are not known at this time. It is anticipated that such tanks may be used for the storage of fuels associated with operation and maintenance of the treatment plant and pump stations, such as fuels for backup generators. Fuel storage for the backup generators could comprise up to 3,000 gallons at the AWTF, and between 250 and 1,000 gallons at each of the 12 pump stations. The proposed project would also require the construction of an undetermined number of on-site underground grinder pump stations. This number and location of these features will be determined through district map and plan process. These grinder stations would be located on or near the Town right-of-way, as close to where the existing lateral pipe exits from the home and within proximity of the building. They cannot be located under driveways as they are not traffic rated, and are typically installed in a lawn area.

11. Identify the number and capacity of above ground storage tanks at the project/activity site. Identify the products and volume to be stored, and the location on the site.

The total number of above-ground storage tanks are not known at this time. It is anticipated that such tanks may be used for the storage of fuels associated with operation and maintenance of the treatment plant and pump stations, such as fuels for backup generators. Fuel storage for the backup generators could comprise up to 3,000 gallons at the AWTF, and between 250 and 1,000 gallons at each of the 12 pump stations. The number and location of these tanks will be determined through the district map and plan process.

APPENDIX C.3: CULTURAL RESOURCES CONSULTATIONS



Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

November 23, 2016

Mary Barthelme
Governor's Office of Storm Recovery
99 Washington Ave, Suite 1224
Albany, NY 12231

Re: GOSR/ NY Rising Program- Forge River Watershed Sewer
East of Cumberland Street, north of Washington Avenue, bounded by Forge River on the
East and Sunrise Highway on the north, Town of Brookhaven/ Suffolk County
16PR07596

Dear Ms. Barthelme:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the submitted materials in accordance with Title 54, Section 306108 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/ Cultural resources. They do not include other environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

Based on this preliminary review, it is the opinion of SHPO that The Moss Lots Caretaker's Cottage at 2 Old Mastic Drive, Mastic is eligible for inclusion in the State or National Register of Historic Places. Please indicate any other properties over 45 years old that are within the APE's of the new above-ground buildings such as the pump stations and wastewater treatment plant. Also, please show any new trenching from the sewer mains to the individual properties. We look forward to receiving more complete information such as the engineering drawings.

We have reviewed the Phase IA archaeological survey report and concur with the recommendations regarding areas of archaeological sensitivity. In the results section (Chapter III, Section B), the authors divided the project into six areas, with each of the six areas described in detail, including assessments of archaeological sensitivity within each area. Area 5 is the location of 10 Proposed Pump Stations, the locations of which are shown on Figure 1. The other five areas described in the results section are not shown on any of the report figures. The difficulty of matching verbal descriptions of each area with an actual geographic area on report figures hindered review of the document. Please provide figure(s) showing the boundaries of the other five areas that have been included in the report.

Division for Historic Preservation

P.O. Box 189, Waterford, New York 12188-0189 • (518) 237-8643 • www.nysparks.com

If I can be of further assistance, contact me at (518) 268-2187 Larry.moss@parks.ny.gov or Tim Lloyd at (518) 268-2186 Timothy.Lloyd@parks.ny.gov

Sincerely,

A handwritten signature in black ink that reads "Larry K Moss". The signature is written in a cursive, slightly slanted style.

Larry K Moss, Historic Preservation Technical Specialist

CC: Camilla Deiber, Louis Berger



FEMA

February 7, 2018

Michael F. Lynch, P.E. AIA
Deputy State Historic Preservation Officer
Division for Historic Preservation
Peebles Island State Park
P. O. Box 189
Waterford, NY 12188-0189

Project Number: FEMA-DR-4085-NY, Hurricane Sandy, HMGP 4085-2486
Recipient/Sub-Recipient: NYS Division of Homeland Security and Emergency Services/
Suffolk County, NY Department of Public Works
Undertaking: Forge River Watershed Sewer Project
Location: Towns of Babylon and Islip, Suffolk County, New York
SHPO ID: 16PR07596

Dear Mr. Lynch:

This letter serves as continuing consultation in accordance with Section 106 of the National Historic Preservation Act for the undertaking identified above. The Federal Emergency Management Agency (FEMA) will be providing funds authorized thru the 404 Hazard Mitigation Grant Program (HMGP) in response to the major Disaster Declaration for FEMA-4085-DR-NY, dated October 28, 2012, as amended.

Project Information

This consultation provides the results of the Phase IB archaeology survey completed for the proposed Undertaking. Chrysalis Archaeological Consultants, Inc. (Chrysalis) was retained by Louis Berger on behalf of The New York State Governor' Office of Storm Recovery to complete the Phase IB archaeological survey at six sites for the Forge River Watershed Sewer Project (*Phase IB Field Test Report, Forge River Watershed Sewer Project, Town of Brookhaven, (Suffolk County), New York, NY SHPO No.: 16PR07596*). Louis Berger completed the Phase IA archaeological sensitivity assessment report in May of 2016. Based on that report and subsequent consultation with the State Historic Preservation Office (SHPO), six potentially significant areas for Phase IB testing were identified. Five of the sites are the potential future locations of pump stations and the last is the location of a new Advanced Wastewater Treatment Facility (AWTF). All sites were located in and around the Town of Brookhaven, (Suffolk County), NY along the southern shore of Long Island approximately 65 miles east of New York, NY.

Evaluation of Archaeological Impacts

Chrysalis conducted Phase IB field testing between the months of September and December 2017 on select Forge River Watershed Sewer Project sites. In total, the Forge River Watershed Sewer Project is proposing the construction of twelve pump stations and one large waste water treatment facility in the Brookhaven, NY area. Based on the Phase IA assessment and subsequent consultation with SHPO, a total of six sites were identified as being potentially archaeologically significant and subject to Phase IB field testing: Pump

Station 4A, Pump Station 5A, Pump Station 6A, Pump Station 6B, Pump Station 10, and the Advanced Wastewater Treatment Facility (AWTF). For the most part, the sites proposed for IB field testing are in areas that are close to bodies of water, have little to no evidence of being disturbed, and are on relatively flat terrain, thus increasing the potential to find precontact or historic resources.

Phase IB field investigation attempted to determine whether the six Forge River sites contained significant precontact and/or historic resources. In total, archaeological testing on all six sites yielded only six positive test pits, all on Site 10. The artifacts, tertiary chert and quartz chipping debris, were all recovered from disturbed contexts. No other artifacts or features were found. The majority of contexts in other areas of Site 10 were also found to be disturbed. Therefore, based on the combined data Chrysalis has recommended that no further archaeological concerns for the site remain and no further testing is deemed warranted. FEMA concurs with this assessment.

In addition, Riverhead and Plymouth Series soils were encountered on almost every site save for 5A and 6B. However, every site was also found to have areas of profound above- and below-ground disturbances, many of them the result of modern grading and clearing activities.

The high proportion of disturbed contexts on sites 4A, 5A, 6A, 6B, 10 and AWTF indicates that the potential to encounter *in-situ* archaeological resources is low. Additionally, no significant cultural materials were recovered from intact contexts. Therefore, Chrysalis's concluded that no further archaeological testing or mitigation efforts are recommended. FEMA concurs with this assessment.

Determination of Effect

Based on the information presented above and the attached *Phase IB Field Test Report, Forge River Watershed Sewer Project, Town of Brookhaven, (Suffolk County), New York, NY SHPO No.: 16PR07596* report, no *in-situ* archaeological resources were encountered. Therefore, the determination of effect for this Undertaking is **No Historic Properties Effectuated** that are either in, or eligible for inclusion in, the State or National Register of Historic Places.

We respectfully request your response and/or any comments within thirty (30) calendar days. If you have any questions or require any additional information, please contact archaeologist Brock Giordano, RPA at brock.giordano@fema.dhs.gov or by phone at 347-574-1467.

Sincerely,

BROCK A GIORDANO  Digitally signed by BROCK A
GIORDANO
Date: 2018.02.07 17:38:29 -05'00'

Brock Giordano, RPA
EHP Supervisor, NY Sandy
DR-4085-NY

BG

cc: Mr. Rick Lord, NYS Division of Homeland Security & Emergency Services
Mr. Charles Smith, Shinnecock Nation of Indians

Enclosures: *Phase IB Field Test Report, Forge River Watershed Sewer Project, Town of Brookhaven, (Suffolk County), New York, NY SHPO No.: 16PR07596*, Prepared by Chrysalis Archaeological Consultants, Inc., January 2018.



Parks, Recreation, and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

February 09, 2018

Mr. Brock Giordano
EHP Supervisor (NY Sandy, DR-4085)
FEMA
11835 Queens Blvd.
Forest Hills, NY 11375

Re: FEMA
Forge River Watershed Sewer
Hamlet of Mastic, Brookhaven, NY
16PR07596
FEMA-DR-4085-NY, HMGP 4085-2486

Dear Mr. Giordano:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the submitted materials in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include other environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York State Environmental Conservation Law Article 8).

We concur with your determination (letter dated February 7, 2018) that the project will have No Effect upon cultural resources in or eligible for inclusion in the NYS and/or National Registers of Historic Places

If further correspondence is required regarding this project, please refer to the SHPO Project Review (PR) number noted above. If you have any questions I can be reached at 518-268-2186.

Sincerely,

Tim Lloyd, Ph.D., RPA
Scientist - Archaeology
timothy.lloyd@parks.ny.gov

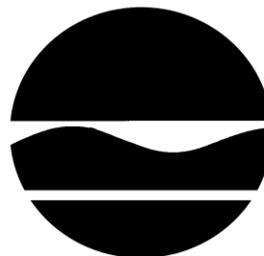
via e-mail only

Division for Historic Preservation

P.O. Box 189, Waterford, New York 12188-0189 • (518) 237-8643 • www.nysparks.com

**APPENDIX C.4: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL
CONSERVATION CONSULTATION**

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Fish & Wildlife
New York Natural Heritage Program
625 Broadway, 5th Floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • **Fax:** (518) 402-8925
Website: www.dec.ny.gov



December 21, 2016

Dana Flynn
Louis Berger
412 Mount Kemble Avenue
Morristown, NJ 07962

Re: Forge River Watershed Sewer Project
Town/City: Brookhaven. County: Suffolk.

Dear Mr./Ms. Flynn:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities that our database indicates occur, or may occur, on the project site or in its immediate vicinity.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our database. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

Our database is continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the NYS DEC Region 1 Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Sincerely,

A handwritten signature in black ink that reads "Nick Conrad".

Nicholas Conrad
Information Resources Coordinator
New York Natural Heritage Program



The following state-listed animals have been documented in the vicinity of the project site.

The following list includes animals that are listed by NYS as Endangered, Threatened, or Special Concern; and/or that are federally listed or are candidates for federal listing.

For information about any permit considerations for your project, contact the Permits staff at the NYSDEC Region 1 Office. For information about potential impacts of your project on these species, and how to avoid, minimize, or mitigate any impacts, contact the Wildlife Manager.

A listing of Regional Offices is at <http://www.dec.ny.gov/about/558.html>.

The following species have been documented very near the project site (within 700 feet).

<i>COMMON NAME</i>	<i>SCIENTIFIC NAME</i>	<i>NY STATE LISTING</i>	<i>FEDERAL LISTING</i>
Birds			
Bald Eagle <i>Nesting</i>	<i>Haliaeetus leucocephalus</i>	Threatened	14951
Mammals			
Northern Long-eared Bat <i>Non-winter roosts, including maternity colonies</i>	<i>Myotis septentrionalis</i>	Threatened	Threatened 14542

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the listed animals in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, and from NYSDEC at www.dec.ny.gov/animals/7494.html.



The following rare plants, rare animals, and significant natural communities have been documented at the project site, or in its vicinity.

We recommend that potential onsite and offsite impacts of the proposed project on these species or communities be addressed as part of any environmental assessment or review conducted as part of the planning, permitting and approval process, such as reviews conducted under SEQR. Field surveys of the project site may be necessary to determine the status of a species at the site, particularly for sites that are currently undeveloped and may still contain suitable habitat. Final requirements of the project to avoid, minimize, or mitigate potential impacts are determined by the lead permitting agency or the government body approving the project.

The following animals, while not listed by New York State as Endangered or Threatened, are of conservation concern to the state, and are considered rare by the New York Natural Heritage Program.

<i>COMMON NAME</i>	<i>SCIENTIFIC NAME</i>	<i>NY STATE LISTING</i>	<i>HERITAGE CONSERVATION STATUS</i>
Birds			
Seaside Sparrow <i>Breeding</i>	<i>Ammodramus maritimus</i>	Special Concern	Imperiled in NYS
Forge Point Marsh, 2001: The birds have been observed in two areas of the salt marsh at Forge Point. The marsh is tidal in nature and contains drainage ditches. Taller scrub areas border some of the ditches. Along the mouth of a creek, the vegetation is thick and composed of marsh grass and a mixture of coniferous and deciduous trees.			11174

The following significant natural communities are considered significant from a statewide perspective by the NY Natural Heritage Program. They are either occurrences of a community type that is rare in the state, or a high quality example of a more common community type. By meeting specific, documented criteria, the NY Natural Heritage Program considers these community occurrences to have high ecological and conservation value.

<i>COMMON NAME</i>	<i>SCIENTIFIC NAME</i>	<i>NY STATE LISTING</i>	<i>HERITAGE CONSERVATION STATUS</i>
Wetland/Aquatic Communities			
Red Maple-Blackgum Swamp			High Quality Occurrence of Rare Community Type
Carmans River Wetlands, Wertheim National Wildlife Refuge: The swamp is of moderate size with good diversity and some large diameter trees. The swamp is minimally buffered and located at the edge of a locally intact landscape block.			3866
Brackish Tidal Marsh			High Quality Occurrence of Uncommon Community Type
Carmans River Wetlands, Wertheim National Wildlife Refuge: This is a large marsh in good to fair condition, in a good landscape that is mostly protected.			6446

The following plants are listed as Endangered or Threatened by New York State, and/or are considered rare by the New York Natural Heritage Program, and so are a vulnerable natural resource of conservation concern.

COMMON NAME	SCIENTIFIC NAME	NY STATE LISTING	HERITAGE CONSERVATION STATUS	
Vascular Plants				
Swamp Sunflower	<i>Helianthus angustifolius</i>	Threatened	Imperiled in NYS	
Forge Point Marsh, 1997: The marsh is <i>Phragmites</i> -fringed and ditched.				517
Marsh Straw Sedge	<i>Carex hormathodes</i>	Threatened	Imperiled in NYS	
Forge Point Marsh, 1985.				12722
Water Pigmyweed	<i>Crassula aquatica</i>	Endangered	Critically Imperiled in NYS	
Carmans River Wetlands, Wertheim National Wildlife Refuge, 1988-08-31: A river bank at a road embankment, at an intertidal section of river. There much <i>Callitriche</i> , too.				3541

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the rare animals and plants in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, from NatureServe Explorer at www.natureserve.org/explorer, and from USDA's Plants Database at <http://plants.usda.gov/index.html> (for plants).

Information about many of the natural community types in New York, including identification, dominant and characteristic vegetation, distribution, conservation, and management, is available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org. For descriptions of all community types, go to www.dec.ny.gov/animals/97703.html for Ecological Communities of New York State.



**The following rare plants have
historical records
in the vicinity of the project site.**

The following rare plants and animals were documented in the vicinity of the project site at one time, but have not been documented there since 1979 or earlier, and/or there is uncertainty regarding their continued presence. There is no recent information on these plants and animals in the vicinity of the project site and their current status there is unknown. In most cases the precise location of the plant or animal in this vicinity at the time it was last documented is also unknown.

If suitable habitat for these plants or animals is present in the vicinity of the project site, it is possible that they may still occur there.

<i>COMMON NAME</i>	<i>SCIENTIFIC NAME</i>	<i>NYS LISTING</i>	<i>HERITAGE CONSERVATION STATUS</i>
Vascular Plants			
Silvery Aster	<i>Symphotrichum concolor</i> var. <i>concolor</i>	Endangered	Critically Imperiled in NYS
1934-10-05: Mastic. Dry sandy woods.			542

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the rare animals and plants in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, from NatureServe Explorer at www.natureserve.org/explorer, and from USDA's Plants Database at <http://plants.usda.gov/index.html> (for plants).

APPENDIX C.5: U.S. FISH AND WILDLIFE SERVICE CONSULTATION

Northern Long-Eared Bat 4(d) Rule Streamlined Consultation Form

Federal agencies should use this form for the optional streamlined consultation framework for the northern long-eared bat (NLEB). This framework allows federal agencies to rely upon the U.S. Fish and Wildlife Service's (USFWS) January 5, 2016, intra-Service Programmatic Biological Opinion (BO) on the final 4(d) rule for the NLEB for section 7(a)(2) compliance by: (1) notifying the USFWS that an action agency will use the streamlined framework; (2) describing the project with sufficient detail to support the required determination; and (3) enabling the USFWS to track effects and determine if reinitiation of consultation is required per 50 CFR 402.16.

This form is not necessary if an agency determines that a proposed action will have no effect to the NLEB or if the USFWS has concurred in writing with an agency's determination that a proposed action may affect, but is not likely to adversely affect the NLEB (i.e., the standard informal consultation process). Actions that may cause prohibited incidental take require separate formal consultation. Providing this information does not address section 7(a)(2) compliance for any other listed species.

Information to Determine 4(d) Rule Compliance:	YES	NO
1. Does the project occur wholly outside of the WNS Zone ¹ ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Have you contacted the appropriate agency ² to determine if your project is near known hibernacula or maternity roost trees?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Could the project disturb hibernating NLEBs in a known hibernaculum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Could the project alter the entrance or interior environment of a known hibernaculum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Does the project remove any trees within 0.25 miles of a known hibernaculum at any time of year?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Would the project cut or destroy known occupied maternity roost trees, or any other trees within a 150-foot radius from the maternity roost tree from June 1 through July 31.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

You are eligible to use this form if you have answered yes to question #1 **or** yes to question #2 **and** no to questions 3, 4, 5 and 6. The remainder of the form will be used by the USFWS to track our assumptions in the BO.

Agency and Applicant³ (Name, Email, Phone No.):

Kate Stenberg, CDM Smith, on behalf of FEMA; Email: stenbergkj@cdmsmith.com; Phone: 425-746-0197

Project Name: Forge River Watershed Sewer Project

Project Location (include coordinates if known): Hamlets of Mastic and Shirley, Town of Brookhaven, Suffolk County; approximate coordinates: 40° 48' 35.99" N/75° 51' 33.29" W

Basic Project Description (provide narrative below or attach additional information):

The proposed project seeks to mitigate impacts on human life and property, surface waters, and coastal wetlands associated with on-site wastewater treatment and disposal system (OSWS) failures caused by natural hazards. The project would establish a Mastic-Shirley Sewer District and construct and operate a collection system with a combination of gravity sewers and low-pressure sewers, a conveyance system consisting of multiple pump stations and force mains, and an advanced wastewater treatment facility (AWTF). The conveyance system would direct wastewater flows to an AWTF located on 30.7 acres of non-contiguous property on the southwestern portion of Brookhaven Calabro Airport property.

¹ <http://www.fws.gov/midwest/endangered/mammals/nleb/pdf/WNSZone.pdf>

² See <http://www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html>

³ If applicable - only needed for federal actions with applicants (e.g., for a permit, etc.) who are party to the consultation.

General Project Information	YES	NO
Does the project occur within 0.25 miles of a known hibernaculum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the project occur within 150 feet of a known maternity roost tree?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the project include forest conversion ⁴ ? (if yes, report acreage below)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Estimated total acres of forest conversion	31	
If known, estimated acres ⁵ of forest conversion from April 1 to October 31	0	
If known, estimated acres of forest conversion from June 1 to July 31 ⁶	0	
Does the project include timber harvest? (if yes, report acreage below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Estimated total acres of timber harvest		
If known, estimated acres of timber harvest from April 1 to October 31		
If known, estimated acres of timber harvest from June 1 to July 31		
Does the project include prescribed fire? (if yes, report acreage below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Estimated total acres of prescribed fire		
If known, estimated acres of prescribed fire from April 1 to October 31		
If known, estimated acres of prescribed fire from June 1 to July 31		
Does the project install new wind turbines? (if yes, report capacity in MW below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Estimated wind capacity (MW)		

Agency Determination:

By signing this form, the action agency determines that this project may affect the NLEB, but that any resulting incidental take of the NLEB is not prohibited by the final 4(d) rule.

If the USFWS does not respond within 30 days from submittal of this form, the action agency may presume that its determination is informed by the best available information and that its project responsibilities under 7(a)(2) with respect to the NLEB are fulfilled through the USFWS January 5, 2016, Programmatic BO. The action agency will update this determination annually for multi-year activities.

The action agency understands that the USFWS presumes that all activities are implemented as described herein. The action agency will promptly report any departures from the described activities to the appropriate USFWS Field Office. The action agency will provide the appropriate USFWS Field Office with the results of any surveys conducted for the NLEB. Involved parties will promptly notify the appropriate USFWS Field Office upon finding a dead, injured, or sick NLEB.

Signature: _____

Date Submitted: _____

⁴ Any activity that temporarily or permanently removes suitable forested habitat, including, but not limited to, tree removal from development, energy production and transmission, mining, agriculture, etc. (see page 48 of the BO).

⁵ If the project removes less than 10 trees and the acreage is unknown, report the acreage as less than 0.1 acre.

⁶ If the activity includes tree clearing in June and July, also include those acreage in April to October.



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Long Island Ecological Services Field Office
340 SMITH ROAD
SHIRLEY, NY 11967
PHONE: (631)286-0485 FAX: (631)286-4003

Consultation Code: 05E1LI00-2017-SLI-0100

December 08, 2016

Event Code: 05E1LI00-2017-E-00132

Project Name: Forge River Watershed Sewer Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having

similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: Forge River Watershed Sewer Project

Official Species List

Provided by:

Long Island Ecological Services Field Office
340 SMITH ROAD
SHIRLEY, NY 11967
(631) 286-0485

Consultation Code: 05E1LI00-2017-SLI-0100

Event Code: 05E1LI00-2017-E-00132

Project Type: WASTEWATER FACILITY

Project Name: Forge River Watershed Sewer Project

Project Description: Sewer upgrade and advance wastewater treatment facility installation

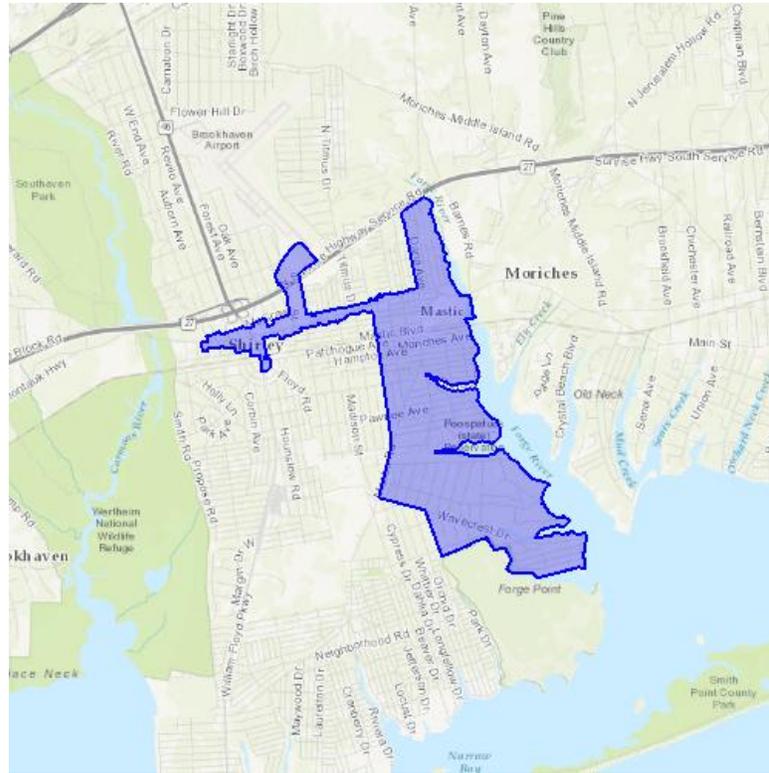
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Forge River Watershed Sewer Project

Project Location Map:



Project Coordinates: The coordinates are too numerous to display here.

Project Counties: Suffolk, NY



United States Department of Interior
Fish and Wildlife Service

Project name: Forge River Watershed Sewer Project

Endangered Species Act Species List

There are a total of 6 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
Piping Plover (<i>Charadrius melodus</i>) Population: except Great Lakes watershed	Threatened	Final designated	
Red Knot (<i>Calidris canutus rufa</i>) Population: Wherever found	Threatened		
Roseate tern (<i>Sterna dougallii dougallii</i>) Population: northeast U.S. nesting pop.	Endangered		
Flowering Plants			
Sandplain gerardia (<i>Agalinis acuta</i>) Population: Wherever found	Endangered		
Seabeach amaranth (<i>Amaranthus pumilus</i>) Population: Wherever found	Threatened		
Mammals			
Northern long-eared Bat (<i>Myotis septentrionalis</i>) Population: Wherever found	Threatened		



United States Department of Interior
Fish and Wildlife Service

Project name: Forge River Watershed Sewer Project

Critical habitats that lie within your project area

There are no critical habitats within your project area.

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