



ANDREW M. CUOMO  
Governor

**STATE ENVIRONMENTAL QUALITY REVIEW ACT  
DETERMINATION OF NON-SIGNIFICANCE (NEGATIVE DECLARATION)**

**IMPROVEMENTS TO POTABLE WATER AND FIRE PROTECTION SYSTEMS GILGO AND  
WEST GILGO PROJECT**

DATE: January 9, 2019  
NAME OF ACTION: Improvements to Potable Water and Fire Protection Systems Gilgo and West Gilgo Project  
LOCATION: Gilgo and West Gilgo, Ocean Parkway  
Town of Babylon, Suffolk County, NY 11702  
SEQRA CLASSIFICATION:  Type I;  Unlisted  
REVIEW TYPE:  Coordinated;  Uncoordinated  
DETERMINATION OF SIGNIFICANCE:  Negative Declaration;  Positive Declaration

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**The Proposed Project:**

The project includes the design and construction of improvements, which are detailed below, to potable water and fire protection systems that service the communities of Gilgo Beach and West Gilgo Beach within the Town of Babylon. These two locations are barrier-island, beach communities located on Jones Beach Island, approximately one mile south of mainland Long Island (**Attachment 1 and 2**). The project will consist of the following:

**West Gilgo Beach Association:**

At the West Gilgo Beach Association, improvements to the fire protection system will include the installation of three (3) new drafting wells for firefighting purposes. Additionally, the project aims to improve the community's ability to provide potable water to its residents by constructing modifications to the two (2) existing well houses. The community intends to raise the two (2) existing potable water supply wellheads and any necessary mechanical and electrical equipment with the intent that the entire water system could maintain operation during a storm surge or flood event. All equipment, including but not limited to pump controls, filters, tanks, the existing generator, etc. will be raised 5'-0" above the Base Flood Elevation of 6'-0". The new elevation to which the necessary equipment is raised to will be referred to as the Design Flood Elevation (DFE). Equipment that cannot be raised will be modified accordingly to ensure functionality during a storm surge or flood event. Under the project scope, replacement of iron treatment vessels will be designed, including the removal of the existing sand vessels and installation of new vessels and connection to existing piping.

**Gilgo Beach Community:**

At the Gilgo Beach Community, improvements to the fire protection system will include the installation of two (2) new drafting wells for firefighting purposes.

**Background**

Existing Potable Water Supply System

The existing potable water supply system for West Gilgo consists of Well house No. 1, which is the location of Well No. 1 (50 gallons per minute capacity) and all major equipment including the existing iron removal vessels and piping, aeration tank and air compressor, chemical treatment equipment, and electrical equipment. Well No. 1 is a submersible pump with the well cap and seal located at first floor elevation. Attached to Well house No. 1 is a 5,000-gallon hydro pneumatic tank that is fed directly from the two water supply wells before entering into the distribution system. The hydro pneumatic tank is enclosed within a wooden frame separate from the Well house No. 1 building. Well House No. 2 is in a standalone building located approximately fifty (50) feet northwest of Well house No. 1. Well house No. 2 consists of Well No. 2, which has a 100 gallons per minute capacity and is equipped with an electric deep well vertical turbine pump and associated electrical equipment.

The West Gilgo potable water supply system is operated by members of the Homeowner's Association. The community only has the ability to run one well at any given time. The discharge piping of both Well Nos. 1 and 2 runs first through the aeration tank, followed by the iron treatment vessels, and finally into the hydro pneumatic tank that feeds the distribution system. Each well pump is automatically operated by pressure control on the hydro pneumatic tank. The raw water out of Well No. 1 and Well No. 2 is treated first with soda ash for pH adjustment prior to entering the aerator and iron removal vessels. The water is then treated with chlorine for disinfection.

Elevations

The first floor (grade level) of Well house No. 1 is located at an elevation 6'-2" Above Mean Sea Level (AMSL). The primary equipment necessary to keep the potable water supply system operational during a storm event in Well house No. 1 includes the submersible well pump in Well No. 1, chlorine and soda ash storage tanks, chemical metering pumps, iron removal vessels and piping, the air compressor, aeration tank, and all electrical controls and equipment.

The first floor (grade level) of Well house No. 2 is located at an elevation 7'-8" AMSL. The wellhead of Well No. 2 is located on an 18-inch high concrete base, which puts the wellhead at an elevation of 9'-2" AMSL. The major equipment necessary to keep the potable water supply system operational during a storm event in Well house No. 2 includes the electric vertical turbine well pump in Well No. 2, and all electrical controls and equipment.

The two major pieces of equipment outside of both well houses that are necessary to keep the potable water supply system operational during a storm event include the existing generator and the 500-gallon propane tank that fuels the generator. The existing generator and propane tank are located at a grade elevation of 6'-0" AMSL. The existing generator is located on a concrete pad and the existing propane tank is located on an existing concrete footing that raises each piece of equipment to approximately 7'-0" AMSL. Being that the site is in flood elevation Zone AE, the Base Flood Elevation (BFE) of the area is 6'-0". Therefore, an applicable DFE is 11'-0" (5'-0" above the BFE).

All major mechanical equipment will need to be raised anywhere from 1'-10" to 5'-0" above their respective current elevations to meet the DFE as described below.

**Well house No. 1**

Well No. 1 will be raised by 4'-10". The well casing, cap, seal and electric submersible pump shall be raised to the DFE. All associated piping connecting to the well shall be raised as required.

The air compressor will be raised 4'-10" on a concrete pad in a location to be determined by the engineer. The aerator shall be anchored to the existing concrete floor to avoid movement during a flood occurrence. Raising the aerator 4'-10" without altering the existing building is not possible due to the height of the existing aerator and existing ceiling height.

Iron Vessels shall be removed, and new vessels installed in the same location as the existing vessels. The new vessels shall be located on support legs that raise the inlet of the iron vessels as high as possible. Support legs shall be anchored to the existing floor to protect against possible shifting in the case of a flood. Piping associated with the iron vessels shall be modified to meet the connection points of the new system.

The existing chlorine and soda ash storage tanks will be raised so that the tops of the tanks are above the DFE. The bottom of the tanks will be anchored to the ground via support platforms to protect against movement during a flood occurrence. The chemical pumps will remain on top of shelves anchored into the existing wall within the chemical containment area. The shelves for the chemical pumps will be raised to the design flood elevation of 11'-0" and service platforms will be installed for work on the pumps.

Piping and valve modifications shall be constructed to allow for direct feed into the distribution system in case of a flood event. Flood vents, to protect the structural integrity, will be added to Well house No. 1.

**Well house No. 2**

Well No. 2 shall be raised 1'-10". The well casing, vertical turbine pump, motor, and sanitary seal shall be raised to the DFE of 11'-0". The existing concrete base shall be raised well to attain the proper height of the wellhead and all associated piping connecting to the well shall be raised as required. Flood Vents, to protect the structural integrity of Wellhouse No. 2, shall be added.

**Proposed Drafting Well for Firefighting Purposes**

Gilgo Beach and West Gilgo Beach fall within the boundaries of the Babylon Fire Department. In Gilgo Beach, two new drafting wells will be drilled. In West Gilgo Beach, three new drafting wells will be constructed for the purpose of increased fire protection to the community.

The locations of the proposed drafting wells are depicted in **Attachment 7**. The proposed fire wells are situated strategically throughout the communities to minimize the distance between the fire wells and residential structures. At each of the five proposed drafting well locations, an 8" well casing will be drilled using a conventional or reverse rotary method with a minimum 13" borehole, to approximately 70-feet deep. The well screen will be constructed of type 316 stainless steel, 8" inside diameter by 30-foot length minimum. Each of the proposed wells will be able to produce a minimum of 500 gallons per minute, are to be free of sand, and have a maximum drawdown of 20-feet. All wells will be constructed with the necessary hardware including, but not limited to stainless steel mesh wire wrapped screen, steel casing, steel discharge elbow and cap, and threaded hose adapter as per Town of Babylon Fire District specifications.

**Purpose and Need:**

The project is identified in the West Gilgo to Captree NY Rising Community Reconstruction (NYRCR) Plan, (March 2014). During Superstorm Sandy, the Gilgo homes were endangered by the risk of their water-saturated electrical wiring and equipment's exposure to corrosion and subsequent potential of catching fire. This project would fund mitigation measures by providing improved access to water for fire suppression by the community and the Babylon Fire Department to contain and put out fires.

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The purpose of this project is to reduce the risk of post-flooding fire hazards to the residential structures in the barrier island community of West Gilgo and Gilgo Beach. When a fire breaks out in West Gilgo and Gilgo Beach, the Babylon Fire Department may take 30 to 40 minutes to arrive on the scene. Upon arrival, the firefighters extend a hose directly into the bay and draft water for use on the burning structure. During extreme winters, the bay can also freeze and strategically located drafting wells will ensure first responders have the water needed to quickly extinguish fires.

The West Gilgo potable water supply system, during Superstorm Sandy, was nearly submerged by floodwaters and nearly failed due to floodwaters rising almost to the height of the well heads, the generator, and the electrical controls. This project would fund mitigation measures for the water supply system by raising the tops of the wellhead and elevating the emergency standby generator to DFE 11'0".

**Existing Conditions:**

The Gilgo Beach and West Gilgo Beach communities are two of the six barrier island communities within the Town of Babylon's jurisdiction. The communities are predominantly residential, and the land is leased from the Trustees of the Town of Babylon to residents via long-term leases that will expire in the year 2065. The Town owns the land on which each lessee must construct and maintain a house, attached garage, and bulk-heading, boardwalk, or sidewalk depending on the leased parcel's location, all in accordance with the Town's specifications. The lessee pays rent for use of the land but maintains full ownership and responsibility over the structures. All land that is not built upon, including boardwalks and walkways is accessible to the public. The Town of Babylon has a number of additional parcels that could be leased for residential use; the Town, however, currently has no plans to expand development on the barrier islands. Approximately 412 households lease land in the barrier island communities from West Gilgo to Captree, many of whom are increasingly choosing to live there year-round. The number of leaseholds in each community are as follows: 80 in West Gilgo; 57 in Gilgo; 117 in Oak Beach; 72 in Oak Island Beach Association; 32 on Captree Island; and 54 on Oak Island.

The barrier islands have historically been and continue to be a natural and recreational resource. Built assets along the coastline are most likely to be inundated and damaged during a storm event, but natural resources assets on the coastline provide protective capacity by lessening the impact of storm surges on inland locations. Many of these resources are relatively large in geographic area and span multiple risk areas.

**Funding:**

The total project cost is estimated at \$601,019.00. GOSR proposes to allocate funding pursuant to the U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant-Disaster Recovery (CDBG-DR) program as authorized by the Disaster Relief Appropriations Act of 2013 (Public Law 113-2, approved January 29, 2013). The NYS Housing Trust Fund Corporation (HTFC), which administers the CDBG-DR program funds on behalf of GOSR, intends to approve funding for the proposed project as described in this notice.

**Environmental Considerations:**

No remediation sites were identified within a 2,000-foot radius of the project site.

The US Fish and Wildlife Service (USFWS) online review process lists two endangered species: Roseate tern (*Sterna dougalli*) and Sandplain gerardia (*Agalinis acuta*) and four threatened species: the Northern Long-eared Bat (*Myotis septentrionalis*), the Piping plover (*Charadrius melodus*), the Rufa red knot (*Calidris canutus rufa*) and the Seabeach amaranth (*Amaranthus pumilus*), as potentially occurring within the project area (Attachment 3). According to the USFWS report, there is no critical habitat within the project area. GOSR determined the project activities would have no effect on the above species because the project area does not provide the habitat required for the species. GOSR also determined that any migratory birds would not be impacted by the project activities because the activities are limited to the replacement of an existing infrastructure and/or provides little

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habitat for migratory birds. Migratory birds are expected to leave the project area during construction. There are no known breeding bald eagles within the vicinity of the project area; therefore, no adverse impacts to breeding bald eagles are expected as a result of the project. In the letter, GOSR requested the USFWS concurrence with the determination that the proposed action will have no effect on the listed species or the habitats on which these species depend.

On August 23, 2018, the USFWS acknowledged the receipt of the no effect determination and stated that no further ESA coordination or consultation is required.

New York State Department of Environmental Conservation, Division of Fish and Wildlife, New York Natural Heritage Program (NYSDEC NHP) identified the potential presence of NYS endangered or threatened species near the project area. Two NYS endangered species: Piping Plover (*Charadrius melodus*) and the Short-Eared Owl (*Asio flammeus*) and three NYS threatened species: the Least Tern (*Sterna antillarum*), Common Tern (*Sterna hirundo*) and Northern Harrier (*Circus cyneus*) were identified (Attachment 3). Based upon the absence of habitat for these species within the project area and the limited construction foot print of the proposed action it has been determined by GOSR that the project will have minimal impact on these NYS listed species. Due to the limited area of construction it has been determine that no significant long term affects to the endangered or protect species will occur.

Based on Flood Insurance Map 36059C0356G, the Project site area is within mapped Special Flood Hazard Area (SFHA) Zone A. The project is within a flood hazard area and a 5-step floodplain management plan was prepared and followed. The project in total will not have any long-term negative effects on floodplain.

The New York State Historic Preservation Officer (SHPO) has determined that the proposed project would not affect historic properties (Attachment 4). In addition, representatives of the Representatives of the Shinnecock Indian Nation and the Unkechaug Nation sent consultation letters. The no comments were received from the nations.

The project site is located over a Federal Sole Source Aquifer. GOSR consulted with USEPA and in a letter dated September 4, 2018, USEPA stated this project will not pose a significant threat to public health or groundwater resources and complies with Section 1424(e) of SDWA (Attachment 5). No negative impacts to groundwater are anticipated from the projects.

The project site is located within the boundaries of a New York State Coastal Zone. On August 23, 2018, New York State Department of State (NYSDOS) responded to GOSR's request for consultation on a Coastal Zone Consistency Review. NYSDOS stated the Department of State has no objection to the release of United States Department of Housing and Urban Development Community Development Block Grant – Disaster Recovery funding in support of the proposed project (Attachment 6).

**Standard Requirements:**

Any change to the Proposed Project as described will require re-evaluation by GOSR's Certifying Officer for compliance with SEQRA and other law, regulations and policies.

This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize federal funding.

**Additional Mitigation Measures:**

To the extent required and/or practicable, any approval of the proposed project is subject to following mitigation measures being adhered to by the grant recipient to minimize environmental impacts and create a more sustainable project:

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- Construction and demolition – to the maximum extent possible, utilize local and recycled materials in construction process and recycle materials generated onsite.
- Clean diesel – implement diesel controls, cleaner fuel, and cleaner construction practices for on-road and off-road equipment used for transportation, soil movement, or other construction activities, including:
  - Strategies and technologies that reduce unnecessary idling, including auxiliary power units, the use of electric equipment, and strict enforcement of idling limits; and
  - Use of clean diesel through add-on control technologies like diesel particulate filters and diesel oxidation catalysts, repowers, or newer, cleaner equipment.
- Stormwater – utilize low impact development (LID) principles such as minimizing effective imperviousness to create site drainage, and the planting of native and non-invasive vegetation on the project site for stormwater management purposes. Other LID practices can include bio retention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements;
- Cost-efficient, environmentally friendly landscaping – EPA’s GreenScapes program provides cost-efficient and environmentally friendly solutions for landscaping;
- Energy efficiency – energy-efficient technologies should be incorporated into the station house when possible; and
- Water conservation and efficiency – promote water conservation and efficiency through use of water efficient products (toilets, faucets, showerheads) and practices. Consider use of products with the WaterSense label where appropriate.

In addition to the factors considered above, the GOSR considered the following guidance from the State Environmental Quality Review Act and its implementing regulations and determined that the Proposed Action would:

- (i) Not result in “a substantial adverse change in existing air quality, ground or surface water quality or quantity, traffic or noise levels; a substantial increase in solid waste production; a substantial increase in potential for erosion, flooding, leaching or drainage problems;” (§617.7(c)(1)( i ))
- (ii) Not result in “the removal or destruction of large quantities of vegetation or fauna; substantial interference with the movement of any resident or migratory fish or wildlife species; impacts on a significant habitat area; substantial adverse impacts on a threatened or endangered species of animal or plant, or the habitat of such a species; or other significant adverse impacts to natural resources;”(§617.7(c)(1)(iii))
- (iii) Not result in “the impairment of the environmental characteristics of a Critical Environmental Area as designated pursuant to subdivision 617.14(g) of this Part;” (§617.7(c)(1)(iii))
- (iv) Not result in “the creation of a material conflict with a community’s current plans or goals as officially approved or adopted;” (§617.7(c)(1)(iv))
- (v) Not result in “the impairment of the character or quality of important historical, archaeological, architectural, or aesthetic resources or of existing community or neighborhood character;” (§617.7(c)(1)(v))
- (vi) Not result in “a major change in the use of either the quantity or type of energy;” (§617.7(c)(1)(vi))
- (vii) Not result in “the creation of a hazard to human health;” (§617.7(c)(1)(vii))
- (viii) Not result in “a substantial change in the use, or intensity of use, of land including agricultural, open space or recreational resources, or in its capacity to support existing uses;” (§617.7(c)(1)(viii))
- (ix) Not result in “the encouraging or attracting of a large number of people to a place or places for more than a few days, compared to the number of people who would come to such place absent the action;” (§617.7(c)(1)(ix))

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(x) Not result in “the creation of a material demand for other actions that would result in one of the above consequences;” (§617.7(c)(1)(x))

(xi) Not result in “changes in two or more elements of the environment, no one of which has a significant impact on the environment, but when considered together result in a substantial adverse impact on the environment; or (§617.7(c)(1)(xi))

Therefore, GOSR, acting as Lead Agency, and having prepared a Short Environmental Assessment Form (SEAF), has determined that the proposed action will not have a significant effect on the environment and a Draft Environmental Impact Statement will not need to be prepared.



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Short Environmental Assessment Form  
Negative Declaration Distribution List

Attachments:

- Attachment 1 – Site Location Figure
- Attachment 2 - Site Aerial Figure
- Attachment 3 – USFWS and NYSDEC NHP Reviews
- Attachment 4 - NYS SHPO and Tribal Consultations
- Attachment 5 – USEPA Sole Source Aquifer Consultation
- Attachment 6 – NYS Department of State Consultation
- Attachment 7 – 90% Design Submission

A copy of this Notice and attachments is available at the following web address:

<http://www.stormrecovery.ny.gov/environmental-docs>

The attachments are large and therefore, have not been mailed out.