

**STATEMENT OF FINDINGS**  
**FOR**  
**FLOODPLAIN MANAGEMENT**  
**Following EO 11988 and 13690 and DO 77-2**

---

**Emergency Activities for Temporary Housing of Migrants  
at  
Floyd Bennett Field, Jamaica Bay Unit  
Brooklyn, Kings County, New York  
(PEPC 119028)**

**Gateway National Recreation Area**

**September 14, 2023**

**JENNIFER NERSESIAN**

Digitally signed by JENNIFER  
NERSESIAN

Date: 2023.09.15 16:51:41 -04'00'

Recommended: \_\_\_\_\_

Jennifer T. Nersesian  
Superintendent, Gateway National Recreation Area

\_\_\_\_\_  
Date

Certification of Technical Adequacy and Servicewide Consistency:

**FORREST HARVEY**

Digitally signed by FORREST HARVEY  
Date: 2023.09.15 16:58:05 -06'00'

Forrest (Ed) Harvey  
Chief, Water Resources Division

\_\_\_\_\_  
Date

*Frank W. Lands*

Digitally signed by FRANK LANDS  
Date: 2023.09.16 17:34:36 -04'00'

Approved: \_\_\_\_\_

Frank Lands  
Deputy Director, National Park Service

\_\_\_\_\_  
Date

## **INTRODUCTION**

Executive Order (EO) 11988 (Floodplain Management) and EO 13690 (Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input) require the National Park Service (NPS) and other federal agencies to clearly identify the likely impacts of proposed actions in floodplains and to improve the Nation's resilience to flood risk. The objective of EO 11988 is to avoid, to the extent possible, the long- and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative. EO 13690 was issued to establish a Federal Flood Risk Management Standard (FFRMS) for federally funded projects to improve the Nation's resilience to floods and to ensure new federal infrastructure will last as long as intended. NPS procedures for complying with the floodplain Executive Orders are outlined in NPS Directors Order and Procedural Manual 77-2 (DO 77-2 and PM 77-2, respectively). This Floodplain Statement of Findings (FSOF) documents compliance with these NPS floodplain management procedures. In accordance with the floodplain Executive Orders and NPS guidelines for implementing the orders, the NPS has clearly identified the flood hazards and flood risk mitigation associated with emergency activities for temporary housing of migrants in Gateway National Recreation Area (GATE).

Consistent with guidance from the Council on Environmental Quality (Emergencies and the National Environmental Policy Act Guidance 2020), the National Environmental Policy Act (NEPA) Decision Memorandum and this FSOF will be made available in the Department of the Interior (DOI) Freedom of Information Reading Room (<https://www.doi.gov/foia/library>) to comply with the regulatory requirements for environmental assessment content, interagency coordination, and public involvement to the extent practicable. The action constitutes an emergency situation that is being addressed through the DOI NEPA emergency procedures at 43 CFR 46.150. This generally includes construction, improvements to existing infrastructure, and placing new temporary infrastructure to allow occupancy of the site; operation and administration of the site; and associated actions related to health and safety of individuals within the project area. Planned future improvements (identified as "follow-on actions" in the NEPA Decision Memorandum) are actions that will provide public benefits and that will not be immediately implemented. The NPS has time to complete site-specific NEPA compliance for follow-on actions and will do so as necessary before implementing any follow-on actions.

## **EMERGENCY ACTION**

New York City (City) has seen an influx of approximately 100,000 migrants in the past year and is currently housing more than 58,000 migrants in City shelters. The City has utilized areas such as soccer fields, recreation centers, and parking lots to house migrants, but lacks additional space and resources to meet current needs. The influx of migrants has led to overcrowding in existing facilities, instances of migrants being forced to sleep on sidewalks and other public areas, and in some cases unsanitary conditions. Taken together, the situation has resulted in threats to health and safety of migrants and others. The State of New York has declared a Disaster Emergency as a result of the large number of migrants, stating, "federal support is critical to support the City of New York and other local governments within the State that lack the infrastructure, facilities, and resources necessary to meet the immediate humanitarian demand to house and meet other basic needs of the large numbers of migrant arrivals related to the large influx of migrants" (see New York State Executive Order 28).

The NPS will enter into one or more agreements, leases, and other administrative arrangements in accordance with its authorities to allow the City to use NPS lands for the purposes of temporarily operating a migrant camp on Floyd Bennett Field (FBF) within GATE. The purposes of taking action are: 1) to allow New York City to operate a temporary shelter to provide housing and other services for a limited number of migrants; and 2) to make certain improvements to Floyd Bennett Field that ensure its preservation, repair and rehabilitation and will contribute to its long-term visitor use and enjoyment. Action is needed to alleviate

risks related to health and safety of migrants and others and to assist the City in meeting migrant needs. GATE has historic resources available for lease that can assist the City in meeting those needs, as well as its own need to make certain improvements to the historic property at Floyd Bennett Field.

The NPS will enter into a lease agreement with the City for a period of one year with an initial period of ninety days. The lease agreement will allow the City to take actions necessary to provide occupation and use of the areas specified in Figure 1 for the purpose of housing up to 2,000 migrants in tent-based structures. Temporary facilities will be constructed to support a maximum initial occupancy of 2,000 residents plus additional support personnel to provide shelter, food services, restrooms, showers, clothing, medical, security, laundry, and associated needs.

All facilities will be constructed in a temporary and removable fashion. Facilities will be designed in a resilient manner or will be able to be quickly demobilized in anticipation of major weather events. Based upon facilities constructed at other locations, NPS anticipates that 4 to 8 winterized tents similar in size to the airplane hangars at FBF will be installed to support the 2,000 residents. Facilities will be arranged and anchored in a manner that minimizes impacts to natural and cultural resources. To the greatest extent possible, tents will be secured using sandbags, water ballast or similar materials. Staking will be minimized and will avoid areas with sensitive resources. The City will make arrangements for all required utilities, including gas, electricity, other power, water, cable, telephone, sewage, waste removal, and other communication services. The City will manage all water and wastewater facilities in a containerized manner as the City will not be permitted to connect to NPS utilities, which are not sized to accommodate additional capacity.

The lease agreement will also include requirements for site improvements of certain areas within FBF as public benefits (see Figure 2). The City will improve traffic circulation, parking, and access to the site by reestablishing the historic entrance to the FBF at the Ryan Visitor Center, improving the Hangar B/Sea-Plane Ramp Parking Lot, and performing repairs on approximately 12,000 linear feet of main access routes throughout the project area. The cumulative amount of new permanent infrastructure would be small, above ground, and in previously disturbed and developed areas. Some of the site improvements will be completed at the end of, or after, the up to 12-month emergency action period.

### **Site Selection and Financial Investments in Site Improvements**

The 1,450-acre Floyd Bennett Field Historic District is the largest single publicly owned, managed, and accessible under-developed parcel of land in New York City. The Historic District is a largely anthropogenic landform that was transformed during the 1920s and 1930s through extensive grading and landfilling to develop New York's first municipal airport. The site was most densely developed during the World War II era. Many of the buildings and structures at the site today are unoccupied and in varying degrees of disrepair or ruin. It is an expansive landscape characterized by open fields, extensive areas of concrete and asphalt pavement, young second-growth thickets and woods, engineered and natural shorelines, and a variety of buildings clustered into what were historically flight-path clear zones. It is surrounded by the Jamaica Bay estuary on the east and south, Mill Basin on the north, and Rockaway Inlet and Dead Horse Bay on the west.

By entering into a lease agreement with the City, the NPS Deciding Official confirms that this property will be used for activities in a manner that is consistent with the park's purposes, as well as meeting additional criteria and standards in accordance with Federal regulations for leasing of historic properties (36 CFR 18). Historic property leasing is among the tools available to the NPS to limit Federal financial investment in areas vulnerable to flooding.

The NPS Director (or designee) will retain command oversight of the park's facilities and operations, balancing the City's requirements against impacts to the park's mission. The City and its agents will be held accountable for the protection of park resources to include natural and cultural resources identified in various NPS management plans. All improvements shall be undertaken at the City's sole expense and only with the NPS' prior written approval. No Federal funds would be expended for the project.

## **FLOODPLAINS WITHIN PROJECT AREA**

Floyd Bennet Field is located along the shore of Jamaica Bay in an area that includes coastal floodplains. In preparing this FSOF, the NPS reviewed both the current Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panels (3604970357F and 3604970359F, effective 9/5/2007) and the preliminary revised FIRM panels (3604970357G and 3604970359G, issued 1/30/2015) to consider how the Federal perspective on flood hazards associated with the project area and emergency action have changed since 2007. The 2015 FIRMs are more conservative and recent, and thus were used for the present analysis. Most of the project area, and all of the leased premises for overnight occupancy, is located outside of the 1% annual exceedance probability (AEP) (i.e., 100-year) floodplain but within the 0.2% AEP (500-year) floodplain, as determined by the 2015 FEMA preliminary FIRMs.

The temporary facilities will primarily be constructed on existing hardscaped lands, including the historic airfield Runway 19 and Hangar B/Sea-Plane Ramp Parking Lot (Figure 1). The leased lands are situated outside of the 1% AEP flood, but portions of the greater project area (Figure 2) fall within the 0.2% AEP floodplain (Figure 3). Site-specific natural floodplain values of the historic airport Runway 19 and Hangar B/Sea-Plane Ramp Parking Lot are limited due to their impervious pavements designed specifically for heavy equipment use and flooding/erosion resistance. The infield zones of the airfield are non-paved and provide some limited form of surface water/precipitation capture and storage. Those areas would also provide some minor local groundwater recharge and potentially water quality benefits from interception of surface water runoff. However, those functions would be very minor and relegated only to the project area's green space located southwest of the Hangar B/Sea-Plane Ramp Parking Lot.

## **JUSTIFICATION FOR USE OF THE FLOODPLAIN**

Continued use of the floodplain in support of historic property leasing is justified because there is no practicable non-floodplain location for use within the Jamaica Bay Unit at GATE. The availability of existing hardscaped areas and roadway infrastructure needed to support emergency services can be found nowhere else within NPS lands at this location. Floyd Bennett Field has previously been used by the US Government for emergency relief services stemming from Hurricane Sandy that included housing for 2,000 troops (US Army 2012).

## **FLOOD HAZARDS**

The flood hazard at Floyd Bennett Field comes from coastal flooding associated with storm events. Flood events would be large scale and advance at a slow speed relative to streams where powerful floodwaters can quickly manifest. Overall, the potential flood risks associated with the proposed action include risk to human life, health, and safety, as well as minor flooding damage risk to temporary housing and associated facilities that are not federal investments.

NPS policy documents DO 77-2 and PM 77-2 identify three action classes that prescribe the level of flood risk management applied to a proposed action and determine the Regulatory Flood.

- Class I Actions – include administrative, residential, warehouse and maintenance buildings, and nonexempted (overnight) parking lots.

- Class II Actions – those that will create “an added disastrous dimension to the flood event.” Class II actions include schools, clinics, emergency services, fuel storage facilities, large sewage treatment plants, and structures such as museums that store irreplaceable records and artifacts.
- Class III Actions – Class I or Class II Actions that are located in high hazard areas such as those subject to flash flooding.

The emergency action at Floyd Bennett Field is considered a Class II Action (Critical Action). Following EO 11988 and PM 77-2, the regulatory floodplain for Class II Actions is the 0.2% AEP, floodplain. As described above, some of the project area is located within the regulatory floodplain.

For proposed actions that are federally funded, EO 13690 and FFRMS amend the definition of the regulatory floodplain to add additional flood resiliency. However, because this project is not federally funded, the FFRMS does not apply. Additionally, because implementation of the emergency action is immediate and its lifespan is short, the emergency use does not extend far into the future when climate-related risks are anticipated to increase. The NYC Flood Hazard Mapper (see References) shows very little change in mapped floodplain extents between the 2015 FEMA FIRM map and climate-informed projections for the 2020s.

NPS staff reviewed Floyd Bennett Field elevations using the USGS National Map (Advanced Viewer) to evaluate their relation to projected flood elevations. In general, the project site is highest in its western portion, near Flatbush Avenue at +14 feet NAVD88, and then it slopes downward to +9.5 feet NAVD to the east near Taxiway 6. The eastern edge of Hangar B/Sea-Plane Ramp parking lot is the lowest elevation within the project area, but the leased area stops before entering the 1% AEP floodplain (Figure 3). Areas of greatest flooding potential occur within approximately 500 feet of Jamaica Bay and 100 feet of Dead Horse Bay. Runway 19 spans +9 to +12 feet NAVD. For reference, the 1% and 0.2% AEP floods roughly fall along the +9 feet and +10.5 feet elevation contours, respectively. Therefore, anticipated 0.2% AEP floodwater depths in the project area are less than 1 foot for most of the site, but potentially upwards of 2 feet on the eastern edge of the Hangar B parking lot closest to Jamaica Bay. All overnight accommodations will be located outside of these higher-risk areas, being outside of the 1% AEP floodplain but partly within the 0.2% AEP floodplain (regulatory floodplain for Class II Actions).

The risk of inundation, erosion, wave attack, and overtopping potential at the project area is low for the lifespan of this temporary use project. According to USACE 2019, 23 major storms have impacted the New York City region since 1815, with wide ranging impacts including fatalities and substantial structural damage. In analyzing storm surge for the years 1959 to 2007, Colle et al. (2010) found high tide combined with storm surge and wind speed increases flooding. Storm surge in the New York/New Jersey area usually varies from 0.5 to 1 meter, but has reached 2 meters to cause coastal flooding, as it did in 1985 when Hurricane Gloria made landfall during a low tide cycle. Hurricane Sandy came ashore during a high tide cycle in 2012. According to NPS operations staff working at Floyd Bennett Field, field conditions of flooding were manageable and less than what is represented on NYC Open Data for Sandy Inundation Zone (<https://data.cityofnewyork.us/Environment/Sandy-Inundation-Zone/uyj8-7rv5>, accessed August 2023). Other than some erosion on the north shoreline of Floyd Bennett Field, the project area was not substantially affected by Hurricane Sandy. Within NPS lands, Flatbush Avenue experienced some puddling, followed by relatively quick draining, and no major flooding or impediment to vehicle use beyond a day or two. North of the Flatbush Avenue and Belt Parkway interchange, segments of Flatbush Avenue were flooded.

The risk to federal capital investment is acceptable because the short-term housing would be undertaken at the sole City’s expense. No Federal funds would be expended for the project.

No risk to natural and beneficial floodplain values would result because the emergency action does not impact natural flood storage and erosion control, water quality, groundwater recharge, biological productivity, fish and wildlife habitats, or the scenic and scientific values associated with adjacent natural areas. The emergency actions primarily occur on existing hardscaped surfaces that lack natural and beneficial floodplain values.

## **MITIGATION**

Flood risks associated with the emergency action primarily relate to protection of human life, health, and safety due to overnight occupation of the floodplain. Prior to commencing the installation of any temporary facilities, the City will develop a Temporary Facility Management and Site Plan for NPS review. That plan will provide a set of procedures to govern the protection of people and resources in the event of a hurricane or other major storm event during initial project implementation. Within 30 days of the lease commencement, the City will develop a Storm Management Plan for the review of the NPS to provide a set of procedures to govern the protection of people and resources in the event of a hurricane or other major storm event. All temporary facilities will be designed to be appropriate for local conditions (including wind and heat) and be able to be demobilized within 72 hours in anticipation of major weather events. During hurricane season (June 1 to November 30), extra care and precautions will be maintained to ensure quick response to potentially severe tropical weather. Floyd Bennett Field is located within NYC Hurricane Evacuation Zone 2, with dozens of handicap accessible evacuation centers located in adjacent upland areas in Brooklyn and Queens (<https://maps.nyc.gov/hurricane>, accessed August 2023).

Ample notice of severe weather is provided by the National Weather Service and other agencies, making warning and evacuation a practical option for protection of human life at Floyd Bennett Field. The City would coordinate with the NPS as warranted to minimize risk to human health and safety in accordance with the terms and conditions of the fully executed lease, which includes temporary suspension of use and occupancy of leased properties. The park's response to severe weather conditions is managed under an Incident Command System approach for preparedness purposes during hurricane season. In keeping with the park's storm plan and protocols, areas will be closed and evacuated 48 hours before a named storm for which the trajectory is within 50 miles of landfall or a prediction of severe coastal flooding.

The risk to capital investment by the Federal government is acceptable because all improvements shall be undertaken at the City's sole expense and only with the NPS's prior written approval.

## **SUMMARY**

Through the FSOF process, the NPS has determined that there are no practicable, non-floodplain locations for the emergency action. Potential impacts to human life, health, and safety would be mitigated through a combination of non-structural risk mitigation measures. Emergency preparedness planning, storm and flood warning, and coordinated evacuation plans and protocols would protect human life, health, and safety. There is no risk to natural and beneficial floodplain values. All improvements shall be undertaken at the City's sole expense and only with the NPS's prior written approval. Therefore, the NPS finds that the emergency action would not have any additional adverse impacts on floodplains and their associated values.

## References

Executive Order 11988, “Floodplain Management” (May 28, 1980). Executive Order of the President of the United States.

Executive Order 13690, “Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input” (January 30, 2015). Executive Order of the President of the United States.

Federal Emergency Management Agency (FEMA). 2019. Flood Map Changes Viewer. Accessed August 2023 at <https://fema.maps.arcgis.com/apps/webappviewer/index.html?id=e7a7dc3ebd7f4ad39bb8e485bb64ce44>.

—, 2003a. Director’s Order 77-2: Floodplain Management. Washington Office, Washington, D.C.

—, 2003b. Procedural Manual 77-2 Floodplain Management (PM 77-2).

—, 2014. General Management Plan and Environmental Impact Statement for Gateway National Recreation Area. Accessed July 2021 at <https://www.nps.gov/gate/learn/management/gmp-2012.htm>.

New York City Flood Hazard Mapper (Updated 6 November 2017). Accessed August 2023 at <https://dcp.maps.arcgis.com/apps/webappviewer/index.html?id=1c37d271fba14163bbb520517153d6d5>.

United States Army. 2012. Massive logistical effort marks N.Y. Guard response to Hurricane Sandy. Accessed August 2023 at [https://www.army.mil/article/91055/massive\\_logistical\\_effort\\_marks\\_n\\_y\\_guard\\_response\\_to\\_hurricane\\_sandy](https://www.army.mil/article/91055/massive_logistical_effort_marks_n_y_guard_response_to_hurricane_sandy).

United States Army Corps of Engineers. 2019. Integrated Hurricane Sandy General Reevaluation Report and Environmental Impact Statement for the East Rockaway Inlet to Rockaway Inlet and Jamaica Bay. Accessed September 2021 at <https://www.nan.usace.army.mil/Missions/Civil-Works/Projects-in-New-York/East-Rockaway-Inlet-to-Rockaway-inlet/>.

# Gateway National Recreation Area Proposed Premises

National Park Service  
U.S. Department of the Interior



Figure 1. Project area map, showing the leased premises on Runway 19, a portion of the Hangar B / Sea-Plane Parking Lot, and two campground areas at Floyd Bennett Field.





**Figure 3.** Preliminary flood insurance rate map, showing the leased premises (outlined in yellow). Portions of the leased areas fall within Zone X, which constitutes a potential flood risk of less than 1% and greater than 0.2% AEP (i.e., within the 500-year flood zone). Map prepared using the NYC Flood Hazard Mapper at <https://dcp.maps.arcgis.com/apps/webappviewer/index.html?id=1c37d271fba14163bbb520517153d6d5> (accessed August 2023)