

**Floodplain Statement of Findings**  
**FOR**  
**EXECUTIVE ORDER 11988 “FLOODPLAIN MANAGEMENT”**  
**AND**  
**DIRECTORS ORDER (DO) 77-2 “FLOODPLAIN MANAGEMENT”**

**U.S. Park Police H1 Stables on the National Mall Redevelopment**

National Mall and Memorial Parks

Washington, DC

**July 18, 2019**

RECOMMENDED:

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Jeffrey P. Reinbold Date  
Superintendent, National Mall and Memorial Parks

CERTIFICATION OF TECHNICAL ADEQUACY AND SERVICEWIDE CONSISTENCY:

\_\_\_\_\_  
Chief, Water Resources Division Date

APPROVED:

\_\_\_\_\_  
Lisa Mendelson-Ielmini Date  
Regional Director, National Capital Region

**U.S. Park Police H1 Stables on the National Mall Redevelopment  
Floodplains Statement of Findings  
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**1. Introduction**

The National Park Service (NPS) is developing a design for the redevelopment of the United States Park Police (USPP) H1 Stables (the proposed project) on the National Mall in Washington, DC. The approximately 3.3-acre project area is located on the National Mall between the Korean War Veterans Memorial and the DC War Memorial and is bound by Ash Road to the north and the sidewalk parallel to Independence Avenue to the south (see **Figure 1** and **Figure 2**). The project site is developed, and includes the existing H1 Stables facility, water treatment plan, administration facilities, and parking lot. The project site is surrounded by a wooded area known as Ash Woods to the south, west, and east. Portions of the project area are located within the 100- and 500-year floodplain (see **Figure 3**). The project would include the following:

- Replace the detached stables, storage structures, and office trailer with a single multipurpose building
- Replace the single paddock with four paddocks
- Replace the existing parking and loading area
- Add a new vehicle entry driveway from Independence Avenue
- Replace the informal social trail with a new designed path
- Retain the existing small water treatment plant that serves the Lincoln Memorial reflecting pool

The Potomac River in this area is relatively wide, and the floodplain is also wide and shallow. Flooding beyond the banks is an infrequent event. The NPS would adhere to the requirements of Executive Order 11983 and the procedures set forth in Procedural Manual 77-2: Floodplain Management to eliminate or minimize impacts on the 100-year floodplain to the extent possible. Although the project would be located within the 100-year floodplain, it does not include critical actions such as schools or hospitals. The NPS would also obtain all necessary federal and District permits for projects occurring in the 100-year floodplain, and would adhere to applicable requirements set forth in the permits to avoid, mitigate, or otherwise minimize floodplain impacts. The water treatment plant, which will not be touched for this project, serves only the reflecting pool (to minimize algal growth and treat water fowl leavings) and should be considered a small facility, not requiring mitigation.

**2. Justification for Use of Floodplain**

The NPS has explored other locations for the stables, but ultimately determined that redeveloping the existing site would be needed. In 1980, a study evaluated the potential alternative locations for the stables, and concluded that the existing site proposed for redevelopment along the National Mall is the most appropriate location. The National Capital Planning Commission and the U.S. Commission of Fine Arts reviewed this analysis and accepted its findings. The NPS reevaluated the location of the stables during its 2010 planning process for the National Mall Plan. This document specifically calls for the redevelopment of the stables at its existing site. Other sites were dismissed because they did not meet the operational requirements of the USPP or would result in more intense impacts on natural and cultural resources.

### **3. Associated Flood Hazard**

The site is subject to riverine flooding from the Potomac River. As a result, the risks of flash flooding are limited. Flooding at the site would have enough warning to avoid hazards to human life. The site is located within the FEMA-established 100-year floodplain of the river. (This means each year there is a 1 in 100 chance of a storm of that magnitude occurring.) The 100-year floodplain elevation at the site location is approximately 12.6'. Ground surface elevations on the site range from approximately 9.8' to 13.3'; the 100-year flood would inundate the site by up to 2.8' depth. However, the velocity in the river's overbanks, where the site is located, is approximately 1.2 feet/second, which is relatively slow.

Due to the low velocity in the overbank, erosion is unlikely. The predicted low velocities at the site would allow the construction of flood-resilient structures to mitigate loss of capital investment. However, the low velocity does mean that sedimentation is likely during a flood. If flooding occurs, it should be expected that sediment and debris would need to be cleared from the site.

### **4. Mitigation**

The project would result in limited changes to the natural and beneficial values of the floodplain. As shown in **Figure 2**, the site is primarily developed with asphalt parking and existing structures. Therefore, the natural and beneficial values of the site are primarily due to the area's ability to accept floodwaters. In order to minimize potential impacts on floodplains, care would be taken to minimize changes to topography of the site that could impound floodwaters or change their flow.

Because the proposed action would result in potential impacts on human health and life and potential impact on capital investment, the NPS would undertake strategies to mitigate potential impacts of the floodplain. Structures within the floodplain would incorporate elements of construction to increase flood resiliency and minimizing flood damage, as contained in the National Flood Insurance Program *Floodplain Management Criteria for Flood-Prone Areas* (44 CFR 60.3). The NPS would develop an evacuation plan to facilitate exit from the site during a flood event, consistent with District of Columbia evacuation protocols.

### **5. Summary**

The project would redevelop the existing site with stables, parking, driveway, fencing, and administrative facilities. The USPP Stables Redevelopment site is uniquely suited to meet the operational requirements of the USPP and would avoid more intense impacts on natural and cultural resources. A 100-year flood event would inundate the site up to 2.8' in depth with a velocity of approximately 1.2 feet/second, making erosion unlikely; sedimentation would likely occur during a flood. Although the redevelopment would be sited in the floodplain, the project would result in no limited changes to the natural and beneficial values of the floodplain. In order to mitigate potential impacts on the floodplain values, human health and life, and capital investment, the NPS would avoid changes to topography, develop an evacuation plan, and use flood-resilient construction strategies..



**Figure 1: Project Area Map**



**Figure 2: Project Area Detail Map**



**Figure 3: Floodplains in the Project Area**