National Park Service
U.S. Department of the Interior

National Mall and Memorial Parks
National Desert Storm and Desert Shield Memorial Environmental Assessment
Washington, DC





NATIONAL DESERT STORM AND DESERT SHIELD MEMORIAL

ENVIRONMENTAL ASSESSMENT FEBRUARY 2022

National Desert Storm and Desert Shield Memorial Environmental Assessment

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PURPOSE AND NEED

Introduction

The National Park Service (NPS) and the National Desert Storm War Memorial Association (Association), in cooperation with the National Capital Planning Commission (NCPC), propose to establish a permanent National Desert Storm and Desert Shield (NDSDS) Memorial on the National Mall at the southwest corner of the intersection of 23rd Street NW and Constitution Avenue NW in Washington, DC (all streets referenced in this document are NW unless otherwise specified). The National Desert Storm and Desert Shield War Memorial Act (Public Law (P.L.) 113-291) authorized the National Desert Storm Memorial Association to establish the NDSDS Memorial as a commemorative work in the District of Columbia.

This Environmental Assessment (EA) describes two alternatives for the NDSDS Memorial, including one action alternative and the no action alternative, and analyzes the environmental consequences of implementing each alternative. This document has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA); regulations of the Council for Environmental Quality (40 CFR 1500-1508); NPS Director's Order #12: Conservation Planning, Environmental Impact Analysis, and Decision-Making; the NPS NEPA Handbook (NPS 2015); and NCPC's NEPA Regulations (NCPC 2017). In conjunction with this EA, the project is undergoing a review of potential effects on historic resources in compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966. This document is being used for compliance with NEPA of 1969, as amended.

Purpose

The purpose of the NDSDS Memorial is to commemorate and honor those who, as members of the United States Armed Forces, served on active duty in support of Operation Desert Storm or Operation Desert Shield.

Need

The planning, design, and construction of the NDSDS Memorial is being undertaken to carry out the National Desert Storm and Desert Shield War Memorial Act (P.L. 113-291) to address the current lack of a formal place for commemoration of those who served during Operation Desert Storm or Operation Desert Shield in the District of Columbia.

BACKGROUND AND PROJECT AREA

After the congressional authorization of the development of the NDSDS Memorial in 2014, the Association conducted a site selection study to identify an appropriate location for the placement of a new memorial. The initial review considered over 20 potential sites. After presentations to the National Capital Memorial Advisory Commission (NCMAC), the U.S. Commission of Fine Arts (CFA), NCPC and a site selection scoping period to solicit comments from the public, the Association and NPS advanced three final sites for design consideration. The project site, a 4.4-acre area located at the southwest corner of the intersection of 23rd Street and Constitution Avenue, emerged as the selected location after approval within Area I by Congress on March 31, 2017 (P.L. 115-18). Area I is depicted on the map entitled "Commemorative Areas Washington, DC and Environs", numbered 869/86501 B, and dated June 24, 2003.

The site is bounded by Constitution Avenue and exit ramps from the Theodore Roosevelt Bridge (I-66) to the north, 23rd Street to the east, Rock Creek and Potomac Parkway to the west, and the Reserve to the

south (see **Figure 1**). The Reserve is an area within DC established by the Commemorative Works Act (40 U.S.C. 8908 (c)) that refers to the great cross-axis of the National Mall (generally extends from the United States Capitol to the Lincoln Memorial, and from the White House to the Jefferson Memorial) where no new memorial may be located as depicted on the map entitled "Commemorative Areas Washington, DC and Environs", numbered 869/86501 B, and dated June 24, 2003. The site is owned by the United States, administered by the NPS and managed by National Mall and Memorial Parks.

Located in West Potomac Park (Reservation 332) within the National Mall, the site is located within open space in an urban context. The site is currently an open lawn and used for recreational purposes. Trees and sidewalks border the site to the north and east. The U.S. Institute of Peace and government office buildings are located to the north, while Rock Creek and Potomac Parkway and the Potomac River are located to the west. The Lincoln Memorial and Vietnam Veterans Memorial are located to the south and east of the site, respectively. These nearby high-profile attractions draw millions of visitors each year, including pedestrians.

Figure 1: NDSDS Memorial Project Site Location

Since the selection of the site, the design has advanced to identify the key memorial features. The NPS conducted a second scoping period to solicit public comment on the memorial design. Multiple agencies have reviewed the design concepts, including NCMAC, NCPC, and CFA. Consulting parties under Section 106 of the NHPA provided comments at two meetings regarding the design. In 2020, the District of Columbia Department of Historic Preservation Office (DC SHPO) concurred that the design would result in no adverse effect on historic resources under Section 106 of the NHPA, which has different

standards for analysis than NEPA. Although the memorial's design elements are now established, additional design advancement will occur and will receive additional review by NCPC and CFA.

ISSUES AND IMPACT TOPICS RETAINED FOR DETAILED ANALYSIS

The NPS, participating agencies and stakeholders, and the public identified issues and impact topics for detailed analysis during the internal and public scoping processes. These issues and concerns are included in the impact topics that are discussed in the "Affected Environment and Environmental Consequences" section of this EA.

Potential for the project to impact cultural landscapes and historic districts. The proposed project could introduce or change contributing features of the documented cultural landscapes and historic properties eligible for or within the National Register of Historic Places (NRHP). The project site is located in the Lincoln Memorial Grounds Cultural Landscape. The L'Enfant Plan of the City of Washington and East and West Potomac Parks Historic District, both of which encompass the project site, are listed in the NRHP. The project's potential impacts on historic properties are analyzed in detail under the Cultural Landscapes and Historic Districts sections in this EA.

Potential for the project to impact visitor use and experience. The project could attract more tour buses, private and ridesharing automobiles, and taxis to the vicinity of the site, which could affect traffic and bus drop-off/pick-up locations. Additionally, the project would have the potential to alter pedestrian circulation in the site. The project's potential impacts are analyzed in detail under the Transportation Resources section in this EA.

ISSUES AND IMPACT TOPICS DISMISSED FROM DETAILED ANALYSIS

Some issues and concerns identified during scoping were considered by the NPS but ultimately dismissed from detailed analysis because they were determined not central to the proposal or not of critical importance. This section will provide brief descriptions of the issues and concerns determined to not warrant further consideration, as well as a summary justification for the dismissal of each issue.

Potential for the project to impact floodplains. Executive Order 11988, "Floodplain Management," Executive Order 13690, "Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input," and NPS DO #77-2: Floodplain Management define the NPS goal to maintain and preserve the beneficial values of floodplains. The limit of disturbance of the proposed action includes an area within the 500-year floodplain. DO #77-2 requires NPS to take action to "reduce the risk of flood loss" (to capital resources), "minimize the impact of floods on human safety, health and welfare," and maintain "natural and beneficial values served by floodplains." Section 5.0 of DO #77-2 states that projects within the 500-year floodplain that are considered critical actions, such as irreplaceable record storage and museums, are subject to floodplain policies and procedures. The NDSDS Memorial would not result in significant negative impacts on human health and safety, federal capital resources, or natural beneficial floodplain values. Furthermore, the project does not include a critical action, and it was therefore determined that a Floodplain Statement of Findings (FSOF) was not necessary for the action. As a result, this topic was dismissed from further analysis in this EA.

Potential for the project to impact water resources. The project site does not contain bodies of water, but is located within the Potomac River Basin and is approximately 870 feet from the Potomac River. The project would follow applicable stormwater requirements listed in the District of Columbia's 2013 Rule on Stormwater Management and Soil Erosion and Sediment Control and the federal Energy Independence and Security Act (EISA).

The 2013 Stormwater Management Rule (July 19, 2013) updates and amends Chapter 5 (Water Quality and Pollution) of Title 21 (Water and Sanitation) of DC's Municipal Regulations to reflect the current scientific, engineering, and practical understanding in the fields of stormwater management, soil erosion, and sediment control. The detention requirements have not changed significantly, but the focus on water-quality treatment has shifted to a standard for volume retention.

Signed into public law in 2007, EISA aims to move the United States toward greater energy independence and security, increase the efficiency of buildings, and improve the energy performance of the Federal government, among other purposes. Regarding stormwater, EISA requires the sponsor of any development or redevelopment project involving a Federal facility with a footprint that exceeds 5,000 square feet to use site planning, design, construction, and maintenance strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to temperature, rate, volume, and duration of flow. As a result, this topic was dismissed from further analysis in this EA.

Vegetation, Wildlife, and Special Status Species. The NPS policy is to protect the natural abundance and diversity of all naturally occurring communities. The 2006 NPS Management Policies (NPS, 2006), NPS DO #77: Natural Resources Management, and other NPS and park policies, provide general direction for the protection of vegetation and wildlife. The project area for the construction and establishment of the new NDSDS Memorial will require the removal and replacement of four diseased or missing American elm trees along the Constitution Avenue and 23rd Street existing allées; the removal of five existing trees and the installation of an estimated six new trees, whose species is to be determined through advancement of the design process, within the memorial interior; and the addition of nine new trees along Lincoln Circle. An estimated 15,250 square feet of turf would be removed. In accordance with Section 7 of the Endangered Species Act, the NPS consulted with the U.S. Fish and Wildlife Service to determine the potential for federally listed protected species to be present at the project site. This consultation indicated the potential for the federally threatened Northern Long-Eared Bat (Myotis septentrionalis). However, because the project would have tree clearing of less than 15 acres (the level required for additional consultation for the Northern Long-Eared Bat), this topic was dismissed from analysis.

ALTERNATIVES

This EA has been prepared in accordance with NEPA of 1969, as amended, and implementing regulations, 40 Code of Federal Regulations (CFR) Parts 1500-1508, NPS Director's Order 12: Conservation Planning, Environmental Impact Analysis, and Decision-making, and the accompanying NEPA Handbook. Compliance with Section 106 of the NHPA of 1966 NHPA, as amended, is being conducted concurrently with the NEPA process.

ALTERNATIVE A: NO ACTION

Under the no action alternative, the NDSDS Memorial would not be established. The project site would remain in its current configuration. Trees along Constitution Avenue and 23rd Street would remain, as would the existing turf area. The existing ball field and backstop would remain. The ability of the formal field to be permitted for recreation leagues and other activities would continue.

ALTERNATIVE B: MANAGEMENT PLAN (NPS PREFERRED)

The proposed project would establish a new NDSDS Memorial, as authorized in P.L. 113-291, at the southwest intersection of Constitution Avenue and 23rd Street. The approximately one-acre memorial employs a landscape-based approach, using sloped berms to enclose a memorial featuring two walls: one wall approximately 240 feet in length and an average height of 4.5 feet (maximum height of approximately 6.5 feet) and another wall approximately 165 feet in length and an average height of approximately four feet (maximum height of approximately six feet). The interior enclosure provided by the walls would contain a central commemorative element, vegetated berms, and seating. The proposed project would also include accessible entrances along both Constitution Avenue and 23rd Street, new lighting, replacement of approximately three street trees along Constitution Avenue and 23rd Street, and alteration of topography to incorporate flood control systems (see **Figure 2** and **Figure 3**).

The proposed project would remove approximately five trees outside the allées and approximately 15,250 square feet of turf. The memorial would also replace the existing delineated ball field and backstop with turf open space. The southwest portion of the site would accommodate informal ball games through the placement of the memorial in the northwest corner of the site.

Outside the new memorial, but within the project site, one additional tree along 23rd Street and nine trees along Lincoln Circle would be planted, consistent with the implemented historic planting plan for the grass panel.

6 Alternatives

Figure 2: NDSDS Memorial Site Plan





Alternatives 7

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter describes current environmental conditions in and around the project area. The discussion is focused on resources that could potentially be affected by the implementation of the proposed project and provides a baseline for understanding the current condition of the resources. This section also includes an analysis of the environmental consequences, or "impacts," of the No Action and Action Alternatives.

The Affected Environment description is followed by the Environmental Consequences analysis for each resource topic. The resource topics analyzed here correspond to the planning issues and concerns described in the Purpose and Need section of this EA.

In accordance with the Council on Environmental Quality (CEQ) regulations, the environmental consequences analysis includes the direct, indirect, and cumulative impacts potentially resulting from the proposed alternatives (40 CFR 1502.16). The intensity of the impacts is assessed in the context of the park's purpose and significance, and any resource-specific context that may be applicable (40 CFR 1508.27). Where appropriate, mitigating measures for adverse impacts are described and their effect on the severity of the impact is noted. The methods used to assess impacts vary depending on the resource being considered but are generally based on a review of pertinent literature and park studies, information provided by on-site experts and other agencies, professional judgment, and park staff knowledge and insight.

CULTURAL LANDSCAPES AND HISTORIC DISTRICTS

Affected Environment

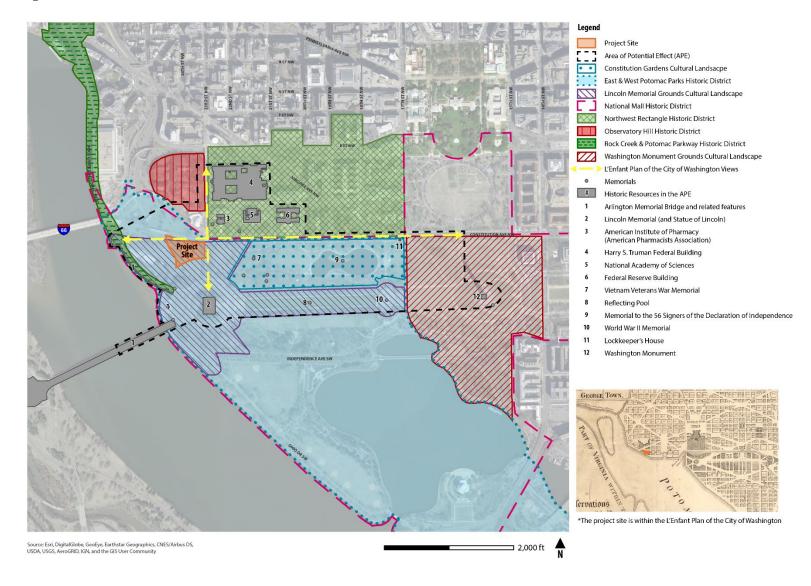
Historic properties were identified within the project's Area of Potential Effect (APE) (see **Figure 4**). As defined by 36 CFR 800.16(d), the APE represents "the geographic area within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist." The project is situated within the following historic resources:

- L'Enfant Plan of the City of Washington (L'Enfant Plan). The L'Enfant Plan contains reservations, streets, and vistas that contribute to the L'Enfant Plan's NRHP listing, including West Potomac Park (Reservation No. 332), Constitution Avenue, 23rd Street, and the Constitution Avenue and 23rd Street corridor vistas (NPS 1997).
- National Mall Historic District. Contributing vistas to the National Mall Historic District within the APE include the 23rd Street vista from Constitution Avenue to its southern terminus and the vista from the Lincoln Memorial to the Washington Monument (NPS 2016).
- East and West Potomac Parks Historic District. Contributing vistas in the APE include the 23rd Street vista from Constitution Avenue to its southern terminus and the vista from the Lincoln Memorial to the Washington Monument (NPS 1999a).
- Lincoln Memorial Grounds Cultural Landscape. The Lincoln Memorial Grounds cultural landscape encompasses the entire project site and part of the APE. The Cultural Landscape Report identifies landscape features that contribute to the landscape's significance. Specific features present in and adjacent to the project site that contribute to the landscape's significance are summarized in Table 1 (NPS 1999b).

Table 1: Select Contributing Features of the Lincoln Memorial Grounds Cultural Landscape

Category	Contributing Features			
Land Use	Active recreation within grass panels, Lincoln Memorial radial roads			
Views and Vistas	Mall axis vista from and to the Lincoln Memorial to Washington Monument to U.S. Capitol			
	Vista from radial roads to Lincoln Memorial and along radial roads from the Lincoln Memorial			
	Vista from the Lincoln Memorial raised terrace north to Constitution Avenue, along 23 rd Street axes (also opposing view from Constitution Avenue to the Lincoln Memorial)			
	Vista from and to Parkway Drive (i.e., Rock Creek and Potomac Parkway)			
	Fan-shape vista from Lincoln Memorial west to the Virginia shoreline (also opposite view from the shoreline to the Lincoln Memorial)			
Vegetation	Rows of American elms along radial roads			
	Remnant circular band of American elms around Lincoln Circle			
	Grass panels surrounded by rows of elms			
	Double row of American elms on south side of old alignment of Constitution Avenue			
	Remnant grassy panels west of 23 rd Street			
Circulation	Vehicular Circulation: 23 rd Street Constitution Avenue Lincoln Circle			
	Pedestrian Circulation: Sidewalks along both sides of 23 rd Street Outer circle sidewalk Sidewalk along south side of Constitution Avenue			
Small-Scale Features	Wire type trash receptacle			
	18-foot Washington Globe lamp post, outer circle			
	16-foot Washington Globe lamp post, radial roads			
	Twin-twenty lamp post, Constitution Avenue			

Figure 4: Area of Potential Effect



Impacts of Alternative A: No Action

Under the No Action Alternative, no changes would occur to the L'Enfant Plan, National Mall Historic District, East and West Potomac Parks Historic District, and the Lincoln Memorial Grounds Cultural Landscape. The missing or diseased trees of the allées along Constitution Avenue and 23rd Street would not be replaced.

Impacts of Alternative B: Action Alternative

Alternative B would place the NDSDS Memorial within a contributing turf panel of the Lincoln Memorial Grounds, remove and replace four diseased or missing American elm trees along Constitution Avenue and 23rd Street, and reduce the area available for active recreation. The proposed low height of the memorial berms would minimize the visual intrusion on the National Mall and the Lincoln Memorial, as well as along the existing views along Constitution Avenue and 23rd Street. The replacement of four existing trees in the allées along Constitution Avenue and 23rd Street would be consistent with the historic landscape design implementation. Furthermore, additional trees would be planted on the southern edge of the project site consistent with the Lincoln Memorial's planting plan implementation. The NDSDS Memorial would not alter pedestrian or traffic patterns at the site. Nighttime lighting would be limited to the extent possible.

The NDSDS Memorial introduces commemorative elements in an area that is currently open space and is used for active recreation. The NDSDS Memorial would add an additional military memorial to the western end of the National Mall. However, the National Mall plays a commemorative role, and the NDSDS Memorial would be consistent with that character. As a result of the NDSDS Memorial's low and discreet design, Alternative B would not substantially alter cultural landscapes and historic districts.

In addition to changes as a result of the NDSDS Memorial, the DC Water Potomac River Tunnel project construction would temporarily alter or displace character-defining features of the National Mall Historic District, East and West Potomac Parks Historic District, and the Lincoln Memorial Grounds Cultural Landscape, including the removal of trees at the NDSDS Memorial project site. Following the five- to eight-year construction period, DC Water would coordinate with NPS and would consult with DC SHPO to reestablish the functions and facilities of the impacted parks, reestablish trees, and ensure that the character-defining features and overall integrity of impacted historic properties are restored. Lincoln Memorial Grounds Cultural Landscape views would be impacted by permanent visible infrastructure, including the combined sewer overflow (CSO) control at the NDSDS Memorial project site. Therefore, Alternative B would result in detectable adverse impacts on cultural landscapes and historic districts from a NEPA perspective.

VISITOR USE AND EXPERIENCE

Affected Environment

The existing site is used for active and passive recreation by visitors. Visitors use the open space, including the ball field and backstop, for organized recreation such as softball, lacrosse, or other games. Although ad-hoc games can occur, the park issues permits for the National Mall for organized active recreation activities; the park issued a total of 390 sporting permits for the site in 2019. The site also offers an opportunity to view the Lincoln Memorial.

In addition to those using the project site, many more pass by it due to its presence on the National Mall and its location adjacent to Constitution Avenue. The adjacent Lincoln Memorial received approximately 7.8 million visits in 2019 (NPS 2021). Additionally, special events, such as festivals and demonstrations, can draw hundreds of thousands of people to the National Mall.

Visitors can access the site at multiple intersections and crosswalks from the north, east, and south. The Constitution Avenue/23rd Street and the Lincoln Circle/23rd Street intersections are traffic signal-controlled crossings. To the west, a pedestrian-only path leads toward Rock Creek and Potomac Parkway and other recreation sites within West Potomac Park.

Impacts of Alternative A: No Action

Alternative A would not change recreation activities or circulation within the project area. No impacts would occur to visitor use and experience under Alternative A.

Impacts of Alternative B: Action Alternative

Alternative B would replace approximately one acre encompassing turf, an existing ball field, and a backstop with a new memorial. Two new paths from the new memorial would connect to the Constitution Avenue and 23rd Street sidewalks. The new vegetated berm forms would gently slope up from the open space to the memorial. The construction of these elements mentioned above would temporarily close areas of the park to visitors.

New pathways leading to existing sidewalks would not noticeably alter circulation patterns around the perimeter of the site. Within the site, the new paths to the memorial would formalize circulation.

The new memorial would remove opportunities for formal permitted recreation at the site through the removal of the ball field and the reduction of the turf area. However, the remaining open space would accommodate informal recreation at the site without the demarcated field lines. Additionally, the placement and grade of the berms would also accommodate recreation uses in the remaining turf open space.

Overall, the project would contribute to the reduction of sports fields within the park, the number of which is expected to decline for five to eight years as a result of the DC Water Potomac River Tunnel project construction. In order to accommodate the volume of permit requests, which exceeds the number of fields, the NPS uses a lottery system. The permanent loss of formal sports fields at the project site, as well as the fields that will be unavailable due to DC Water Potomac River Tunnel project, will place pressure to secure permits on the remaining fields. Therefore, Alternative B would result in adverse impacts on visitor use and experience.

CONSULTATION AND COORDINATION

The NPS involved the public during the NEPA process to provide an opportunity for the public to comment on the proposed project. Consultation and coordination with federal and District of Columbia agencies and other interested parties was also conducted to refine the alternatives and identify issues and/or concerns related to park resources. This section provides a brief summary of the public involvement and agency consultation and coordination that occurred during planning.

- The NPS held two scoping meetings and 30-day public comment periods related to the NDSDS Memorial: one period for site selection (between June 23 and July 24, 2017) and one for Memorial design (between March 13 and April 13, 2018). The public, agencies, and interested parties were invited to submit comments.
- The NPS initiated consultation with the DC SHPO on June 20, 2017 and with the Virginia SHPO on June 26, 2017.
- NCMAC reviewed the site selection study and design in May 2017 and February 2020, respectively. The public was offered the opportunity to comment during the meetings.
- CFA reviewed the project's design and site selection seven times between October 2017 and October 2021. During each of these meetings, the public was offered the opportunity to comment.
- NCPC reviewed the memorial site selection and design in July 2017 and January 2020, respectively. During each of these meetings, the public was offered the opportunity to comment.
- The NPS held two Section 106 consulting parties meetings, which occurred on November 13, 2018 and November 12, 2019. Consulting parties reached a consensus that the project will result in no adverse effects on historic properties. The NPS sent a determination of no adverse effect to the DC SHPO on March 2, 2020. The DC SHPO concurred with the determination on October 4, 2020.

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