

**LINCOLN MEMORIAL REFLECTING POOL AND GROUNDS
REHABILITATION AND PERIMETER SECURITY**

Constitution Avenue and Bacon Drive, NW
Washington, DC

Finding of No Significant Impact

MAR 25 2010

Pursuant to Section 102(2)(C) of the National Environmental Policy Act, the Council on Environmental Quality Regulations (40 CFR, Parts 1500-1508), and the National Capital Planning Commission's Environmental and Historic Preservation Policies and Procedures, I have evaluated the preliminary and final site and building plans for the rehabilitation of the Lincoln Memorial Reflecting Pool and Grounds including perimeter security, located in West Potomac Park on the National Mall in Washington, DC, as shown on NCPC Map File No. 1.44(38.40)43010; the December 2009 environmental assessment (EA) prepared by the National Park Service in which NCPC was a cooperating agency; the comments that the National Park Service received in response to the EA; and the National Park Service's March 22, 2010 Finding of No Significant Impact, and I have determined that the rehabilitation of the Lincoln Memorial Reflecting Pool and Grounds including perimeter security as proposed will not have a significant impact on the human environment.

Proposed Action

The National Park Service (NPS) proposes improvements to the Lincoln Memorial Reflecting Pool and Grounds to address structural deficiencies in the Reflecting Pool and to enhance the infrastructure, security, and pedestrian circulation systems associated with it.

The project area is one of the most popular destinations in the country and is being used far beyond the capacity for which it was originally designed. The physical condition of the infrastructure, landscape, and circulation paths has deteriorated in appearance and quality. In addition, several components need to be upgraded to address issues that were not anticipated in the original planning and design of West Potomac Park, such as security, accessibility and nighttime visitation.

NPS completed an environmental assessment (EA) that provides an analysis of two alternatives and the resulting impacts. The two alternatives presented in the EA include the no action alternative and the action alternative. The action alternative has several options with design variations that improve and enhance the infrastructure, circulation, accessibility, and historic resources in three locations in the project area: at the elm walks, the Lincoln Memorial east plaza, and the Reflecting Pool. To the north and south of the Reflecting Pool, the historic elm walks will be resurfaced, site furnishings will be refurbished and reconfigured and permanent lighting will be installed to enhance public safety and visitor experience. At the west end of the elm walks improvements are proposed to integrate accessible pathways between the Reflecting

Pool and the Lincoln Memorial east plaza with a permanent vehicle barrier that will replace the temporary concrete barriers installed in 2008 in the center section of the east plaza. At the Reflecting Pool, proposed upgrades to repair its structural system will improve its appearance and sustainability, improve water quality, and formalize the flanking walkways where the lawns have been worn bare by visitors traveling between the World War II and Lincoln Memorials.

NPS prepared and published an EA on December 23, 2009. The associated public comment period extended from that date through January 29, 2010. Subsequent to the publication of the EA, NPS entered the design development phase of the project and conducted additional design review, engineering evaluations, and financial analysis on each component of the project. These studies helped to inform NPS on additional factors which in turn led to modification and refinement of some design aspects that generally lessened the impacts from what had previously been described in the EA.

Modifications were made to the proposed structural system for the Reflecting Pool to use more readily available and less expensive timber piles. New piles beneath the proposed walkways along the Reflecting Pool and at the lower approach way will correct for differential soil settlement. In addition, to limit the potential for damage, the existing granite coping around the pool will be removed and reset as the project nears completion. By selecting the modified structural system, there will be no difference in impacts to the park resources beyond what was described in the EA.

Modifications were made to the proposed water system for the Reflecting Pool to enhance the water quality in the pool and to minimize adverse effects to cultural resources within West Potomac Park. Impacts to all resources will be minimized. There will be no appreciably different impact on floodplains beyond what was analyzed in the EA.

The existing worn dirt paths, or social trails, that flank the north and south sides of the Reflecting Pool will be resurfaced and made into formal 13'4"-wide walkways, connecting the World War II Memorial and the lower approachway plaza. The material, color, and pattern of the walkways will blend harmoniously with the adjacent historic features (such as the granite coping around the pool and lower approachway), the features of the World War II Memorial, and the overall visual character of the site.

NPS's selected option combines certain elements of previously considered options that are described in the EA. In the selected option, the water supply will be drawn from the Tidal Basin and screened at the point of intake to eliminate debris. To enhance water quality, the water will be treated and filtered prior to entering the Reflecting Pool, and any backwash from the filtration process will be discharged to the sanitary sewer.

Once the Reflecting Pool is filled, the water will be continuously re-circulated. Any water lost to evaporation will be recharged by capturing and re-treating the groundwater from the World War II Memorial Pool and redirecting it to the Reflecting Pool. The District of Columbia potable water supply (now the only source of water for the pool) will serve as the back-up source for make-up water in the Reflecting Pool should the recaptured water be inadequate. Once a year, the Reflecting Pool will be emptied and discharged to the Tidal Basin before inspection and cleaning of the Pool.

The implementation of this option will require the construction of a small subsurface intake feature adjacent to the Tidal Basin to accommodate the pumps and screening equipment. It will require a water treatment facility within the project area to accommodate the filtration equipment. The water treatment facility, measuring approximately 40 feet by 60 feet, and 15 feet in height to the top of the hipped roof, will be co-located with the U.S. Park Police maintenance yard south of Ash Road, between the District of Columbia World War I Memorial and the Korean War Memorial.

The Tidal Basin was selected as the preferred intake source due to several factors primarily related to concerns with the water quality of the Potomac River. The intake location proposed in the EA is approximately 2,500 feet downstream from the Easby Point combined sewer overflow (CSO), one of nine CSOs along the Potomac River upstream of the Lincoln Memorial. The project engineers determined that in an average year, the Easby Point CSO would overflow 25 times, with a total overflow volume of 89.58 million gallons. The frequency of these CSO events would have required the NPS to develop a complex system whereby the river intake and the continuous flow within the Reflecting Pool would have to be shut off in advance of any storm events to prevent excess *e coli* and fecal coliform bacteria from entering the pool. In addition, through ongoing consultation with the National Oceanic and Atmospheric Administration (NOAA) and the National Marine Fisheries Service (NMFS), several issues related to the fisheries habitat and submerged aquatic vegetation were raised regarding siting an intake structure on the banks of the Potomac River without causing damage the aquatic resources.

While the preferred water system option analyzed in the EA would provide a continuous flow-through of river water, the modified preferred option will provide for filtration and recirculation of the water. This option is advantageous because it will ensure better water quality. Subsequent analysis determined that the flow-through option would have a flow rate of 2,500 gallons per minute (gpm) which would be insufficient to properly flush the suspended solids coming from the river water. Increasing the flow rate beyond 2,500 gallons per minutes would potentially create perceptible surface movement of Reflecting Pool water, which would jeopardize its reflective quality. In addition, to ensure a constant rate of flow at 2,500 gpm and once daily turnover of approximately 4 million gallons of water, the energy costs associated with constantly running several pumps would be relatively large compared to the life cycle costs of maintaining filtration and recirculation equipment.

In addition, it was determined that this water system would have the ability to extend to adjacent water bodies. While the scope of the project is limited to the Reflecting Pool, implementation of the water system would incorporate a valve that would accommodate future expansion of the Tidal Basin intake and water treatment system into Constitution Gardens.

This option will best preserve the natural resources in the area. By using a renewable water source such as the Tidal Basin to supply the Reflecting Pool, the reliance on the District of Columbia potable water supply is greatly reduced. In addition, the water lost to evaporation will be re-charged by capturing the re-treated groundwater from the World War II Memorial pool. By implementing this system, NPS will eliminate the need for approximately 15 million gallons of potable water a year.

Standard for evaluation

Under NEPA, the Council on Environmental Quality (CEQ) regulations, and NCPC Environmental and Historic Preservation Policies and Procedures, an EA is sufficient and an Environmental Impact Statement need not be prepared if the EA supports the finding that the federal action will not significantly affect the human environment. The EA for this project was prepared in accordance with these standards.

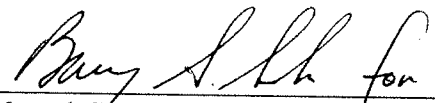
Potential Impacts

The EA found that the project would provide long term beneficial impacts to visitor use and experience, to park management and operations, and to soils, water quality, and vegetation. There will be long-term negligible to minor impacts to cultural resources resulting from the adverse effects of introducing new paths and light standards, although there will be a loss of bollards and fewer visual intrusions in the viewshed.

There will be long-term minor adverse impacts to transportation during the construction period, which is expected to last up to 21 months. However, this impact will be minimized by demolishing and compacting the foundation slab on site to eliminate the need for debris removal. Improvements to the water system serving the Reflecting Pool will result in short-term minor impacts to transportation due to the required partial closure of portions of Independence Avenue, SW.

The project area encompasses nine major National Register-listed historic properties. As described above, there will be long-term minor adverse impacts to cultural resources from the proposed project, minor because all of the actions have been mitigated to this level through design. In addition, there will be long-term minor adverse cumulative impacts to visual resources and aesthetics associated with the proposed actions. There will also be some actions that will benefit the cultural landscape. There will be long-term beneficial impacts to water quality resulting from the proposed action and other projects. The proposed actions will ultimately have beneficial effects on the water quality of the Tidal Basin.

All adverse effects to historic resources, views, and vistas were thoroughly discussed in public meetings, including during Section 106 consultation meetings, and minimized to the extent possible. Alternatives raised by the public to reduce historic preservation adverse effects were analyzed and discussed during the Section 106 consultation process and responded to by the District of Columbia State Historic Preservation Officer, the Advisory Council on Historic Preservation, and by NPS with the execution of a Programmatic Agreement.



Marcel C. Acosta
Executive Director