National Park Service U.S. Department of the Interior

The Civil War Defenses of Washington National Capital Parks – East Washington, D.C.



FINDING OF NO SIGNIFICANT IMPACT

Repair and Connectivity Improvements of the Civil War Defenses of Washington Hiker-Mountain Biker Trail

National Capital Parks - East

National Capital Parks – East, an administrative unit of the National Park Service (NPS), in cooperation with the National Capital Planning Commission (NCPC), proposes to repair and improve connectivity of the Civil War Defenses of Washington (CWDW) Hiker-Mountain Biker trail. National Capital Parks – East includes 13 park sites, parkways, and statuary covering 8,000 acres of historic, cultural, natural, and recreational parklands from Capitol Hill to the nearby Maryland suburbs. National Capital Parks – East manages the CWDW, which includes remnants of a complex system of Civil War fortifications. The CWDW was formally called "Fort Circle Parks."

The proposed project area is the 7-mile Hiker-Mountain Biker trail located in southeast Washington, D.C., linking six of the CWDW forts — Fort Mahan, Fort Chaplin, Fort Dupont, Fort Davis, Fort Stanton, and Fort Ricketts — in Wards 6, 7, and 8 of the District of Columbia. The project will involve installing up to four prefabricated bridges (replacements of existing bridges), one new boardwalk, and 28 new vehicle prevention structures; constructing 11 sections of new trail to improve connectivity; and resurfacing five areas of existing asphalt.

The NPS completed an environmental assessment (EA) for the repair and connectivity improvements of the CWDW Hiker-Mountain Biker trail in southeast Washington, D.C., was done in accordance with National Environmental Policy Act (NEPA) and implementing regulations, Title 40 Code of Federal Regulations (CFR) 1500–1508; NPS Director's Order 12: Conservation Planning, Environmental Impact Analysis, and Decision Making and Handbook; and Section 106 of the National Historic Preservation Act of 1966 (NHPA), as Amended, and its implementing regulations, 36 CFR 800.

SELECTED ALTERNATIVE

The NPS alternative selected for implementation is alternative 2 (the NPS preferred alternative), described on page 17 of the EA. The four major components of the selected alternative, as described below, include asphalt resurfacing, improving trail connectivity, installing motor vehicle prevention measures, and replacing pedestrian bridges. Project elements have been designed to repair damage and improve connectivity along several portions of the Hiker-Mountain Biker trail to increase visitor safety and experience while protecting natural and cultural resources present in the area.

Asphalt Resurfacing: Asphalt resurfacing will include asphalt demolition, repairs, and resurfacing, as well as turf grading, or reducing the slope, at six locations throughout Fort Mahan, Fort Davis, and Fort Dupont. Total resurfacing will include 5,225 linear feet of existing trail (6-feet wide).

Trail Connection Improvements: New trail connections will involve upgrading informal trails and creating connections to existing trails to improve overall trail system connectivity. Trail construction and connectivity improvements will consist of standard 6-foot-wide gravel trails. Ten new connecting trails will be constructed at multiple trailheads to improve wayfinding at road crossings. At these locations, no trail currently exists at road crossings between the curb or sidewalk and the woods line. Six-foot-wide compacted gravel trails will be constructed in these areas, extending from the woods line to the curb or sidewalk. New trail connections will be constructed at 11 locations, totaling 2,385 linear feet of new trail.

Motor Vehicle Prevention Measures: In order to prevent motorcycle and all-terrain vehicle use on the Hiker-Mountain Biker trail, standard trailheads will be equipped with motor vehicle deterrent structures under the selected alternative. The use of all-terrain vehicles and motorcycles, particularly on trails that are not designed to accommodate such use, can result in soil compaction and erosion, sedimentation of streams and water bodies, spread of invasive species, increased air pollution and greenhouse gas emissions, and conflicts with other user groups. A total of 27 structures will be installed at 14 road crossings, typically with two trailheads at each crossing. Vehicle prevention structures will be introduced for the first time at all locations with the exception of one road crossing at East Capitol Street, NE, where existing motor vehicle prevention structures will be replaced. Vehicle prevention measures will include placing boulders on either side of the trail so vehicles cannot enter the trail. In the middle of the trail, a collapsible metal post will be installed so NPS maintenance vehicles can access the trail, as necessary.

Bridge Replacement/Boardwalk Installation: Under the selected alternative, four bridges and one boardwalk will be installed. All bridges will be pre-fabricated, 6-foot-wide Enwood© laminated wood, girder-style structures and will replace existing deteriorating structures. The boardwalk will be a new installation to prevent further damage to an environmentally sensitive area.

The new boardwalk will be constructed between Benning Road North and Hunt Place along the Fort Mahan Loop. At this site, frequent water exposure from a seep, located approximately 18 feet upslope from the north side of the Hiker-Mountain Biker trail, has deteriorated the asphalt. Water currently drains from the seep across the trail and into a palustrine wetland. To protect the wetland, including soils and vegetation, the NPS will remove the deteriorated asphalt and construct a pre-fabricated raised boardwalk spanning the removed portion of the trail, approximately 34 feet long by 6 feet wide.

After the EA was released for public review, the District of Columbia Department of Transportation (DDOT) approached NPS with minor changes to the selected alternative. The changes represent minor alignment and length adjustments, the overall design of the trail remains unchanged from what was presented in the EA. Changes to the alignment/length are provided below. The total difference for feet of trail removed or added is provided in the left column.

| Project Location | Change | Difference in Trail Length/Area Disturbed |
|---------------------|--|--|
| #34 | Replaced long switchback with shorter switchback | 60 feet of trail removed |
| #39 | End of new trail widened to better align at intersection's existing sidewalk and curb cuts | 30 feet of trail added |
| #149 and #187 | The new connecting trail on north side of East Capitol Street will be lengthened about 100 feet and realigned to run parallel along the NPS property line. The trail will be extended further east to encourage users to go to the existing crosswalk at the intersection (41 st Street). | 100 feet of trail added |
| #182 and #84 | Americans with Disabilities Act-compliant (ADA) curb cuts added to two corners without ramps | No change |
| #47 | Trail realigned to connect directly to existing location of street crossing | No change |
| #0 | Two ADA curb cuts and a crosswalk added at Ridge Road | No change |
| #162 | The 140 feet of trail initially proposed parallel to 28 th Street has been eliminated by NPS. The proposed trail was replaced with 30 feet of connecting trail from the existing trail to new ADA ramps, signs and crosswalk at 28 th street. | 110 feet of trail removed |
| #103 and | Mid-block crossing with ADA ramps, crosswalk, and painting | No change |

| #104 | the chevron on the pavement up to the existing curb cuts were added on Good Hope Rd | |
|---------------------|---|------------------------|
| #128 and #102 | On east side, a new 45 foot-long connecting gravel trail was added from the existing sidewalk along 27 th St to existing NPS Hiker-biker trail | 45 feet of trail added |

As demonstrated by the table above, a few trail segments have been altered. The net change of disturbed area is a reduction of 5 feet of trail from what was analyzed in the EA. In addition, these minor changes to the overall alignment/length of these trail segments were presented to the SHPO's office on July 9, 2014, and the SHPO concurred with the NPS determination that the changes were minor and did not change the finding of no adverse effect associated with Section 106 compliance. These slight changes do not affect the overall impact analysis that was presented in the EA or the decision to move forward with the selected alternative. Overall, there will be less impacts resulting from this project than the original analysis.

OTHER ALTERNATIVES CONSIDERED

In addition to the NPS selected alternative described above, the EA analyzed the no action alternative.

Alternative 1: No Action Alternative

Under the no action alternative, no repairs or connectivity improvements, beyond regular maintenance activities, would be made to the Hiker-Mountain Biker trail. Damage found throughout the trail system, including numerous areas where erosion, rutting, and ponding have occurred, would not be corrected. Neither repairs to or replacement of deteriorated or damaged asphalt surfaces and bridges nor connectivity improvements would be made. Continuation of current conditions would contribute to further deterioration of existing environmental and safety conditions. The no action alternative was not selected because it did not meet the purpose and need for the project.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The NPS is required to identify the environmentally preferable alternative in its NEPA documents for public review and comment. The NPS, in accordance with the Department of the Interior's NEPA Regulations (43 CFR Part 46) and the Council on Environmental Quality's (CEQ's) Forty Questions, defines the environmentally preferable alternative (or alternatives) as the alternative that best promotes the national environmental policy expressed in NEPA (section 101[b]) (516 DM 4.10). CEQ's Forty Questions (42 CFR Part 46.30) (Q6a) further clarify the identification of the environmentally preferable alternative as "the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources."

After completing the environmental analysis, the NPS identified alternative 2 as the environmentally preferable alternative. Alternative 2 includes the removal of existing asphalt in one location, which will connect wetland areas currently separated by the trail. Throughout the Hiker-Mountain Biker trail project area, alternative 2 will formalize social trails, which currently compact soils and increase erosion potential.

NATIONAL PARK SERVICE PREFERRED ALTERNATIVE

To identify the preferred alternative, the proposed alternatives were evaluated based on their ability to meet the purpose of and need for action as well as potential impacts to the environment that may result under each. The evaluation identified alternative 2 as the NPS' preferred alternative.

MITIGATION MEASURES OF THE ACTION ALTERNATIVE

The NPS places strong emphasis on avoiding, minimizing, and mitigating potentially adverse environmental impacts. To help ensure the protection of natural and cultural resources and the quality of the visitor experience, the following protective measures will be implemented as part of the selected

alternative. The NPS will conduct an appropriate level of monitoring throughout the construction period to help ensure that protective measures are properly implemented and achieving their intended results. Mitigation measures identified to date are presented below.

GENERAL CONSIDERATIONS

- Construction fencing will be installed to clearly delineate the project disturbance limits prior to the onset of construction activities by the contractor.
- All protection measures will be clearly stated in the construction action plan, and workers will be
 instructed to avoid conducting activities beyond the construction zone, as defined by road or
 construction zone fencing. Construction staging areas will utilize existing paved areas, to the extent
 feasible.
- New concrete and asphalt will be produced at locations outside of the Hiker-Mountain Biker trail. No
 overnight storage of these materials will be permitted within park boundaries.
- All construction equipment used throughout construction activities will be maintained in a clean and well-functioning state to avoid or minimize contamination from automotive fluids and to ensure that noise controls are properly functioning. All equipment will be checked daily.
- Prior to the onset of construction activities, the construction contractor will develop an assessment using the bridge specifications to determine access and installation needs at each location to avoid tree cutting to the extent feasible. At this time, no tree cutting is anticipated.
- Prior to the onset of construction activities, a hazardous spill plan will be submitted to NPS for review and approval, identifying those actions that will be taken in case of a spill to minimize adverse impacts. This plan will also incorporate preventive measures, including the siting of construction staging areas and refueling facilities, storage and handling of hazardous materials, and notification procedures in the event of a spill. A spill kit will be available, and workers trained in its application will be available onsite in the event of a spill.

SOILS

- An erosion and sediment control plan will be prepared and implemented, consistent with the D.C.
 Soil Erosion and Sediment Control Program. A soil erosion and sediment control permit will be obtained from the District.
- The amount of disturbed soils and soil exposure to rainfall will be minimized.
- Any soil excavated during construction activities will be stockpiled and reused as fill, as appropriate.
- Erosion containment controls, such as silt fencing and sediment traps, will be used to contain sediment on site.
- Disturbed soil or soil stockpiles will be covered with plastic sheeting, jute matting, erosion netting, straw, or other suitable cover material.
- Erosion and sediment control best management practices (BMPs) will be inspected regularly and after each measurable rainfall to ensure they are functioning and continue to function properly.
- BMPs will be installed and removed in coordination with earth-disturbing activities. If and when BMPs are no longer needed, they will be reclaimed and affected areas revegetated.
- Prior to grading, the area to be cleared will be marked to minimize the amount of cleared area.
- Exposed soils will be stabilized and replanted with vegetation identified by the park as appropriate for the vegetation zone where construction is occurring, immediately following completion of construction activities or during temporary cessation of earth-disturbing activities.

HYDROLOGY AND WATER QUALITY

 Installation of any resurfaced asphalt will be conducted in accordance with Section 438 of the Energy Independence and Security Act (EISA 438) and District Stormwater regulations. No new impervious surface is anticipated.

WETLANDS

- Appropriate erosion and siltation controls will be used during construction activities, including stabilization of all exposed soil or fill material at the earliest practicable date.
- Heavy equipment use in wetland areas will be avoided.
- Excavated material will be placed on an upland site.

VEGETATION

All construction equipment that will leave paved or dirt roads shall be pressure-washed prior to
entering the park and shall be clean of any soil, plant matter, or other materials (focus on invasives).

CULTURAL RESOURCES

- Impacts to the cultural landscape will be minimized by ensuring that the rehabilitation, reconstruction, and connection improvements are conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes (NPS 1996).
- A Phase I assessment was conducted to ensure that construction activities would not damage any previously unidentified archeological resources. However, if archeological resources are discovered during construction activities, all work in the immediate vicinity of the discovery will be halted until the resources can be identified and documented and an appropriate mitigation strategy developed. Consultation with the District of Columbia state historic preservation officer (DC SHPO), the NPS, the park archeologist, and/or the NPS regional archeologist will be coordinated to ensure that the protection of resources is addressed. In the unlikely event that human remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered during construction activities, provisions outlined in the Native American Graves Protection and Repatriation Act (25 USC 3001) of 1990 will be followed.

VISITOR USE AND EXPERIENCE

- Construction during peak visitor use periods (e.g., weekends and holidays) will be avoided so as not
 to disturb visitors. Detours will be provided during construction to maintain visitor access to the trail.
- Construction fencing will be placed at the intersections of the construction area and any other areas visible to visitors to discourage visitors from entering a construction site.

WHY THE SELECTED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As documented in the EA, the NPS has determined that the selected alternative, alternative 2, can be implemented without significant adverse effects. As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts that require analysis in an Environmental Impact Statement (EIS): Soils, hydrology and water quality, wetlands, soils, cultural landscapes, and visitor use and experience will experience both beneficial and adverse impacts as a result of implementing the selected alternative. However, no significant impacts were identified that will require analysis in an EIS. Anticipated impacts that will occur to the affected resources are summarized below:

Soils: Implementation of the selected alternative will include repair of approximately 5,220 linear feet (this number includes the reduction in five feet of trail impacts from the minor changes proposed by DDOT) of existing trail (approximately 0.72 acre), construction of approximately 2,430 linear feet (this number includes the addition of 45 feet of gravel trail from the minor changes proposed by DDOT) of new gravel trail (approximately 0.334 acre), and replacement of four deteriorating bridges. Construction activities associated with the selected alternative will disturb and modify soils, which have the potential to contribute to erosion. BMPs, including the implementation of an approved erosion and sedimentation plan, will be employed to minimize adverse effects to soil during construction. Following construction, disturbed soils will be replaced, to the extent practicable, and revegetated to avoid compaction and erosion. Adverse construction-related impacts will be localized, short-term, and negligible to minor in areas where construction activities are proposed. Once in operation, trail repairs and connectivity improvements associated with the selected alternative will promote use of officially designated trails and discourage the use of social trails, preventing continued soil compaction. Use of gravel will allow the soil beneath new and repaired trails to continue infiltration functions and will not increase impervious surface or increase soil erosion. Over the long term, beneficial impacts on soils in the project area will result.

Hydrology and Water Quality: Over the long term, trail repairs associated with the selected alternative will minimize soil erosion and decrease runoff into surrounding streams through soil compaction and revegetation. During bridge replacement activities, short-term adverse impacts from increased sedimentation and streambank destabilization will result. In accordance with District Department of the Environment (DDOE) regulations, BMPs including an approved erosion and sedimentation plan will be used to minimize impacts from erosion. Adverse impacts to hydrology and water quality from bank disturbance and potential increased sedimentation during construction activities associated with the selected alternative will be short-term and negligible to minor. Implementation of gravel trails will allow for partial water infiltration and will not increase the amount of impervious surface in the project area. Overall, impacts on hydrology and water quality in the project area will be long-term beneficial.

Wetlands: At location 30, a 20-foot-long by 6-foot-wide pre-fabricated boardwalk will be placed over the existing deteriorated trail. This will allow for removal of the existing asphalt and facilitate the connection of the approximately 600-square-foot wetland area present on either side of the asphalt. Short-term minor impacts to wetlands will be limited to areas adjacent to the existing trail at location 30. BMPs will be implemented to minimize adverse impacts and to prevent sediment and fill material from accumulating in the wetland. Connecting the two wetland areas and removal of excess or waste asphalt from the site will result in long-term beneficial impacts to wetlands. After consulting with the Water Resources Division on September 11, 2014 it was determined that a wetlands statement of findings was not required for this project because the proposed foot/bike trails and boardwalks impacts less than 0.1 acre (0.01 acres impacts) of wetlands identified within the project area and fits the definition of an excepted action under *Procedural Manual #77-1: Wetland Protection 4.2.1.a – Scenic overlooks and foot/bike trails or boardwalks.* In addition, this project will replace the existing asphalt trial with an elevated boardwalk, restoring the connection between wetlands and improving the health of the wetlands.

Cultural Landscapes: Construction activities associated with the selected alternative will result in minimal disturbance to the fabric of the park. No resurfacing, trail construction, or vehicle prevention measures will occur within the boundaries of the Civil War forts or any of their historic defensive features. Trail resurfacing and bridge and boardwalk implementation will have a long-term beneficial impact on the historic and cultural landscape because they will provide needed maintenance to the trail network and improve visitor use and experience. No adverse impacts to the cultural landscape will result from the introduction of new trails because they will be implemented in accordance with the Secretary of the Interior's Standards. Vehicle prevention barriers will result in a long-term beneficial impact on the historic and cultural landscape because they will stop unauthorized vehicles from entering park land and potential damage to trails, historic landscape features, or sensitive environmental areas. Over the long term, the selected alternative will result in long-term beneficial impacts on the historic and cultural landscape of the CWDW.

Visitor Use and Experience: Implementation of the selected alternative will include trail repairs and connectivity improvements. These project elements will improve safety conditions and increase accessibility from Fort Mahan to Fort Ricketts, which will enhance visitor use and experience. Additional project elements to reduce illegal vehicle use and enhance access for persons with limited mobility will be implemented. Construction activities associated with the selected alternative will require short-term, localized trail closures and increase noise in limited areas when such activities are ongoing. Resulting impacts on visitor use and experience will be short-term, minor, and adverse. Improvements and enhancements will provide additional opportunities for pedestrians and bicyclists to enjoy park resources. Over the long term, the selected alternative will result in long-term beneficial impacts to visitor use and experience.

Degree of effect on human health or safety: The selected alternative will not adversely affect human health and safety. During construction associated with the selected alternative, visitors will not be permitted in active construction areas. Fencing, signage, and other means to inform the public will be installed at appropriate locations indicating the temporary closure of areas undergoing repair and improvement. The proposed trail repairs and improvements will not occur in an area of contaminated soils and would not be expected to mobilize any contaminants into the environment. As a result, no short-term effects are anticipated. Over the long term, resurfaced asphalt, improved trail connectivity, and vehicle prevention measures will likely result in beneficial impacts to human health and safety.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, wetlands, prime farmlands, wild and scenic rivers, or ecologically critical areas: No prime farmlands, wild and scenic rivers, ecologically critical areas, or park lands other than the NPS property located within the project area and therefore will not be subject to effects resulting from implementation of the selected alternative.

The project area includes an approximately 600-square-foot palustrine wetland crossing approximately 10 feet of the existing asphalt trail near 42nd Street SE, and Benning Road SE, in the northern section of Fort Mahan (location 30). The existing asphalt trail shows moderate deterioration and frequent water exposure, originating from a seep approximately 18 feet up slope of the trail's north side, which then crosses the trail and into the wetland. Under the selected alternative, the asphalt will be removed and replaced with a boardwalk. Removal of the asphalt will allow for wetland areas on either side of the asphalt to be connected. Construction activities associated with the selected alternative will result in localized, minor adverse impacts to wetlands within the vicinity of the asphalt. Over the long term, improved connectivity between the wetland areas currently separated by the asphalt trail and removal of excess or waste asphalt will result in beneficial impacts. A wetlands statement of findings is not required for this project because foot/bike trails and boardwalks with impacts less than 0.1 acre (0.01 acres of impact with this project) of fill placement are an excepted action under *Procedural Manual #77-1: Wetland Protection, Section 4.2.1.a – Scenic overlooks and foot/bike trails or boardwalks*.

The project area is also located within the CWDW park system, which is a major element of the Senate Park Improvement Plan of 1902 (The McMillan Plan). The McMillan Plan identified District-wide park system improvements, both for its importance as a historic landscape and vistas of the Potomac and Anacostia rivers, the city, and the hills of Virginia. The CWDW Hiker-Mountain Biker trail is the remnant of that plan because the McMillan Commission recommended forming Fort Drive, a highway extending around Washington connecting all the Civil War era forts. Portions of Fort Drive were constructed by the Civilian Conservation Corps (CCC) in the 1930s; however, the NPS modified the plan in the 1960s when it was acknowledged that vehicular traffic in the city of Washington had exceeded volumes for the roadway to serve as a rural byway. Subsequently, the CWDW Hiker-Mountain Biker trail was implemented to provide public access to these important historical sites, to encourage visitor use, and to create additional recreational opportunities within the park.

Nineteen separate properties were nominated to the National Register of Historic Places (national register) for the CWDW Historic District. The project area, which contains Forts Mahan, Chaplin, Dupont, Davis, Stanton, and Battery Ricketts, represents a small section of the historic district. A cultural landscape overview was completed on the CWDW in 1996, which outlines the basic contributing features

to each landscape within a fort site. The report determined that the Fort Circle Parks were a historic military landscape. As a result, it is considered a significant cultural and historic landscape. The structures remaining at each fort site in the project area are contributing features of the significant cultural and historic landscape and have been cataloged with the NPS' List of Classified Structures. In late 2013, two additional Cultural Landscape Inventory reports were completed for Forts Mahan and Dupont. These reports provide a more detailed assessment of the contributing and non-contributing landscape features near these two forts.

Construction activities associated with the selected alternative, and the recent proposed minor changes, will be conducted within the culturally significant landscape. However, such activities will be limited to those areas where improvements are proposed and construction staging areas. Adverse impacts during construction will be minor and short-term. Once construction is completed, the selected alternative will result in long-term beneficial impacts to the cultural landscape through enhanced opportunities to enjoy park resources and improved trail conditions.

Degree to which effects on the quality of the human environment are likely to be highly controversial: No highly controversial effects in terms of scientific uncertainties as a result of the selected alternative were identified during the preparation of the EA or by the public during the public comment period.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks: No highly uncertain, unique, or unknown risks were identified during either preparation of the EA or during the public comment period.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration: The selected alternative neither establishes an NPS precedent for future actions with significant effects nor represents a decision in principle about a future consideration.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts: Implementation of the selected alternative will have no significant cumulative impacts. As described in the EA, past, present, and future actions and projects within the project area that could affect soils, hydrology and water quality, wetlands, cultural landscapes, and visitor use and experience include additional trail repairs at Fort Dupont and Fort Bunker Hill, installation of fitness equipment at Fort Mahan at Benning Road, and siting of new and replacement of existing wayfinding and signage. Cumulative impacts conclusions were determined for the following resources:

Soils: The trail maintenance and repair at Fort Bunker Hill and Fort Dupont would rehabilitate eroded areas as well as repair poorly maintained trails to minimize additional erosion, resulting in long-term beneficial impacts on soils. The installation of the outdoor fitness center at Fort Mahan would require moving and grading of soil to accommodate the new equipment and would likely result in soil compaction as people use the equipment. During construction, there would be short-term, adverse, negligible impacts, but once construction is complete there would be long-term, adverse, minor effects on soils. Placing new signs and waypoints within the project area would result in short-term, negligible, adverse impacts from digging small post-holes in which to place the signs. When combined with the short-term minor adverse and long-term beneficial impacts of the selected alternative, cumulative impacts on soils will be short-term, minor adverse and long-term beneficial.

Hydrology and Water Quality: Past and ongoing projects include stormwater management improvements, Total Maximum Daily Loads (TMDLs), and water quality monitoring of each tributary and the Anacostia River watershed. TMDLs and water quality monitoring of the tributaries would allow for updated sediment, pollutant, and streamflow information. Stormwater management improvements would use the information gathered from each monitoring station to apply to the tributaries. Routine stormwater maintenance in and around the project area would continue to focus on riparian buffers; swells; retention areas; and permeable surfaces, specifically trails. These past and ongoing projects would result in beneficial impacts to hydrology and water quality. When combined with the long-term beneficial and short-term minor adverse impacts of the selected alternative, cumulative impacts on hydrology and water quality will be long-term beneficial and short-term minor adverse.

Wetlands: No past, present, or reasonably foreseeable projects will impact wetlands. As a result, no cumulative impacts to wetlands will result.

Cultural Landscapes: Maintenance projects and trail rehabilitation in the area of Fort Dupont and Fort Bunker Hill that are identified as cumulative actions will have a long-term beneficial impact on the historic and cultural landscape because they will expand and enhance visitor use and implement timely maintenance. Repair and replacement of trail markers, trail signs, waysides, signs, railings, steps, and other park features will result in long-term beneficial impacts to the historic and cultural landscape because they will not only improve visitor experience but also provide more comprehensive interpretation of the historic features of the park. When combined with the short-term minor adverse and long-term beneficial impacts under the selected alternative, there will be short-term minor adverse and long-term beneficial impacts to cultural landscapes.

Visitor Use and Experience: Ongoing projects include trail maintenance and repair at Fort Bunker Hill and Fort Dupont and site restoration and installation of outdoor fitness equipment at Fort Mahan. These projects would require some temporary trail and site closures related to trail repairs and construction. In addition, demolition and construction activities would subject visitors to increased noise levels. Together, the cumulative actions described above would result in short-term minor adverse impacts and long-term beneficial impacts to visitor use and experience. When combined with the short-term minor adverse and long-term beneficial impacts of alternative 2, cumulative impacts on visitor use and experience would be short-term, minor, and adverse and long-term beneficial.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources: District and federal agencies were consulted during the NEPA process to identify issues and/or concerns related to natural and cultural resources along the Hiker-Mountain Biker trail. All consultations with the DC SHPO, as mandated by Section 106 of the NHPA, occurred in conjunction with the development of the EA and subsequent changes. The existing cultural landscape will be impacted by the selected alternative.

During the project scoping period, fieldwork was conducted to determine if archeological resources are present in the project area where ground-disturbing activities are proposed. No prehistoric artifacts or material relating to the Civil War were found during fieldwork. Artifacts more than 50 years old were found in one location in the vicinity of Battery Ricketts on Bruce Place and Fort Place SE; however, these artifacts lack the integrity to be potentially eligible for listing on the National Register and no other sites were identified. As a result, ground-disturbing activities associated with the selected alternative will not result in adverse effects on archeological resources.

The NPS began consultation with the DC SHPO in June 2013. In September 2013, a letter from the DC SHPO indicated that it would like to review the EA when it becomes available to ensure proper consideration of protected resources. The EA and Assessment of Effects (AoE) was provided to the DC SHPO in January 2014 for comment. A summary of the AoE is provided below.

The selected alternative improves the existing park infrastructure for visitors, enhances access to the existing trail network, improves environmentally sensitive areas, and prevents damage to the park resources and historic fabric by unauthorized vehicles. There will be minimal ground disturbance from the proposed action and, consequently, there will be *no adverse effect* on any part of the historic and cultural landscape of the CWDW Historic District from these actions.

In a letter dated March 13, 2014, the DC SHPO concurred with the NPS' finding of "no adverse effect" for cultural landscapes. In correspondence dated July 10, 2014, the DC SHPO concurred with the NPS that the minor changes to the project as recommended by DDOT would not alter the initial finding of "no adverse effect."

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat: In accordance with Section 7 of the Endangered Species Act (ESA), on June 5, 2013, a letter was

sent on behalf of National Capital Parks – East to solicit comments from the U.S. Fish and Wildlife Service (USFWS) regarding federally listed rare, threatened, and endangered species known to be present in the project area that could potentially be adversely affected by the proposed alternatives. A similar letter was sent to the DDOE on the same day regarding state-listed species or habitats.

In September 2013, a letter from the USFWS stated that, with the exception of occasional transient individuals, no proposed or federally listed endangered or threatened species are known to exist in the project impact area. USFWS indicated that no Biological Assessment or further Section 7 consultation was required should the proposed project alternatives remain unchanged. No response was received from DDOE.

Whether the action threatens a violation of federal, state, or local environmental protection law: The selected alternative violates no federal, state, or local environmental protection laws.

PUBLIC INVOLVEMENT

The NPS initiated public scoping for this EA by issuing a public scoping notice on June 21, 2013. The scoping notice was posted to the park's Planning, Environment, and Public Comment (PEPC) website. The scoping notice described the history of the planning process and identified the purpose of and need for action, objectives, and preliminary alternatives. The public scoping comment period was open from June 21, 2013, to July 21, 2013. During this time, the NPS requested comments on the project via the NPS' PEPC website or written comments to be mailed to the park. No correspondence was received during the comment period.

The EA was made available for public review and comment on December 4, 2013, through January 17, 2014. The EA was placed on the NPS' PEPC website. During the public comment period, no correspondence was received.

CONCLUSION

The NPS has selected alternative 2 for implementation. In light of the impacts described in the EA for the project and with guidance from NPS *Management Policies 2006*, natural and cultural resources information, professional judgment, and considering agency and public comments, the impacts that will result from the selected alternative will not impair any park resources and values (see attached Non-Impairment Determination). The selected alternative does not constitute an action that normally requires preparation of an EIS. The selected alternative will not have a significant effect on the human environment. Adverse environmental impacts that could occur to park natural and cultural resources are short-term negligible to minor in intensity. Long-term impacts will be beneficial. There are no significant impacts to soils, hydrology and water quality, wetlands, cultural resources, and visitor use and experience. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the selected alternative will not violate any federal, state, or local environmental protection law.

Based on the foregoing, an EIS is not required for this action and will not be prepared. This is a finding of no significant impact.

Mendelson-Telmin

Recommended:

Gopaul Noojibail Superintendent

National Capital Parks - East

Approved:

Lisa Mendelson-Ielmini Acting Regional Director National Capital Region

NON – IMPAIRMENT DETERMINATION

The National Park Service (NPS) has determined that implementation of the selected alternative will not result in impairment of park resources and values of the Hiker-Mountain Biker trail. Pursuant to the NPS Guidance for Non-Impairment Determinations and the NPS National Environmental Policy Act (NEPA) Process (October 31, 2011), a non-impairment determination for the selected alternative is included here as an appendix to the Finding of No Significant Impact.

The prohibition against impairment originates in the NPS Organic Act, which directs that the NPS shall:

promote and regulate the use of the...national parks...which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

According to NPS Management Policies 2006, an action constitutes an impairment when its impact "would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values" (sec. 1.4.5). To determine impairment, the NPS must evaluate "the particular resources and values that would be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts" (sec. 1.4.5).

National Park System units vary based on their enabling legislation, natural and cultural resources present, and mission. Likewise, the activities appropriate for each unit and for areas in each unit also vary. For example, an action appropriate in one unit could impair resources in another unit. The Hiker-Mountain Biker trail links six of the Civil War Defenses of Washington (CWDW) forts — Fort Mahan, Fort Chaplin, Fort Dupont, Fort Davis, Fort Stanton, and Fort Ricketts — in Wards 6, 7, and 8 in southeast Washington, D.C. These historic sites experienced some of the earliest planning efforts related to public recreation in the United States in 1902 and was later recommended by the National Capital Planning Commission in the 1960s as a "fort park system" providing enhanced recreational opportunities with the implementation of a continuous "bicycle and pedestrian way." The importance of the historic earthworks and the greenbelt that these parks create along the ridge surrounding Washington, D.C. makes this a significant open space element in the nation's capital.

As stated in the NPS *Management Policies 2006* (sec. 1.4.5), an impact on any park resource or value may constitute an impairment, but an impact would be more likely to constitute an impairment to the extent that it affects a resource or value whose conservation is

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park; or
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- identified in the park's general management plan or other relevant NPS planning documents as being of significance.

The resource impact topics carried forward and analyzed for the NPS selected alternative in the EA, and for which an impairment determination is contained in this appendix, are soils, hydrology and water quality, wetlands, and cultural landscapes. The following describes each resource or value for which impairment is assessed and the reasons why impairment will not occur.

Soils

The selected alternative will not result in impairment to soils. The purposes of the CWDW are to conserve the linkage of urban green spaces that contribute to the character and scenic values of the nation's capital and to provide recreational opportunities compatible with historic and natural resource values. Under current conditions, numerous trail sections within the park have deteriorated due to high visitor use, weathering, overgrown vegetation, and illegal motorized vehicle use. Deteriorated conditions are impacting park resources including soil compaction and erosion. The covering of exposed soil when repair to degraded trails takes place will minimize soil erosion and the provision of formalized trails and new trail connections will both reduce potential for new social trails and the amount of future soil compaction and erosion from use of unsanctioned trails. While the selected alternative will introduce more linear feet of gravel trail and soil compaction will continue in these areas, use of gravel materials will allow the soil beneath those trails to continue infiltration functions. The selected alternative will correct soil damage that has resulted from social trails and damaged sections of the existing trail; create conditions that reduce impacts to soils from erosion, destabilization, and normal visitor use of the trail; and help achieve part of the purpose of the CWDW with improved connections and visitor opportunities to experience the historic and natural resource values present in the project area.

BMPs employed throughout the construction period will help minimize or avoid localized adverse impacts to soils. Following construction, disturbed soils will be replaced, to the extent feasible, and revegetated to avoid compaction and erosion. Because the selected alternative will not inhibit the park's ability to protect natural resources, but instead help promote it, including a permanent reduction of soil compaction and erosion along unsanctioned social trails, the selected alternative will not result in impairment.

Hydrology and Water Quality

The selected alternative will not result in impairment to hydrology and water quality. Part of the purpose of the CWDW is to conserve the linkage of urban green spaces that contribute to the character and scenic values of the nation's capital and to provide recreational opportunities compatible with historic and natural resource values. Trail improvements associated with the selected alternative will minimize soil erosion and decrease runoff into the surrounding streams through revegetation post construction. New connector trails will be gravel, not asphalt, and will not increase impervious surfaces, allowing for partial water infiltration.

Construction activities associated with the selected alternative will contribute to short-term adverse impacts from increased sedimentation and streambank destabilization during bridge replacement activities. Best management practices (BMPs) will be used to prevent impacts from erosion in accordance with District Department of the Environment (DDOE) regulations (DDOE 2003a). Stream banks will be revegetated once construction activities are complete, which will reduce erosion and help maintain bank stability. Once construction is complete, improved water function and bank stability will result in beneficial impacts that will not impair park resources but will rather help conserve linkages of urban spaces that contribute to the character and scenic values of the nation's capital and provide recreational opportunities compatible with historic and natural resource values.

Wetlands

The selected alternative will not impair wetlands. Requirements for addressing impacts to wetlands are contained in Executive Order 11990 (Protection of Wetlands) and in NPS Director's Order 77–1: Wetland Protection. Part of the purpose of the CWDW is to conserve the linkage of urban green spaces that contribute to the character and scenic values of the nation's capital and to provide recreational

opportunities compatible with historic and natural resource values. Under the selected alternative, the 600-square-foot wetland area separated by the existing trail at location 30 will be connected with the removal of the existing deteriorating asphalt and implementation of a boardwalk. BMPs will be implemented to minimize or avoid adverse impacts to wetland areas. Under the selected alternative, introduction of a boardwalk at location 30 will be beneficial by removing the deteriorated asphalt and restoring the hydrologic connectivity of the wetland. The improved quality of the wetland will provide visitors with an improved natural resource experience and help the park achieve part of its purpose. Because the park will continue to be able to meet the park mission and fulfill the park purpose under the enabling legislation, the selected alternative will not result in impairment.

Cultural Landscapes

There will be no impairment to the park's cultural landscapes. The purpose of the CWDW is to preserve and interpret historical resources related to the CWDW, to conserve the linkage of urban green spaces that contribute to the character and scenic values of the nation's capital, and to provide recreational opportunities compatible with historic and natural resource values.

The project area, which contains Forts Mahan, Chaplin, Dupont, Davis, Stanton, and Battery Ricketts, represents a small portion of the CWDW Historic District, and subsequently contributes to the significance of the cultural and historic landscape. The Hiker-Mountain Biker trail was implemented to provide public access to important historical sites, to encourage visitor use, and to create additional recreational opportunities within the park. The selected alternative does not alter the cultural landscape and is designed to improve access to the park and cultural and historic resources. Operation of the selected alternative will not result in adverse effects or constitute impairment of the cultural landscape but rather will help achieve the three primary purposes of the park.

Summary

The NPS has determined that implementation of the NPS' selected alternative will not constitute an impairment of the resources or values of the Hiker-Mountain Biker trail. As described above, adverse impacts anticipated as a result of implementing the selected alternative on a resource or value whose conservation is necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or identified as significant in the Fort Circle Parks General Management Plan or other relevant NPS planning documents, will not constitute impairment. This conclusion is based on consideration of the park's purpose and significance, a thorough analysis of the environmental impacts described in the EA, comments provided by the public and others, and the professional judgment of the decision—maker guided by the direction of the NPS *Management Policies* 2006.