FINDING OF NO SIGNIFICANT IMPACT

SOAPSTONE VALLEY PARK SEWER REHABILITATION

Washington, District of Columbia

The National Park Service (NPS) prepared an Environmental Assessment (EA) to examine alternative actions and environmental impacts associated with the proposed Soapstone Valley Sewer Rehabilitation Project. The District of Columbia Water and Sewer Authority (DC Water) is responsible for operating and maintaining the existing sanitary sewers serving the District of Columbia (DC or District), and the proposed project identifies multiple sanitary sewers throughout DC Water's collection system that have exceeded their design life and are in need of rehabilitation within the Soapstone Valley sewer system, primarily located within Soapstone Valley Park. Soapstone Valley Park (United States Reservation 402) is 24.59 acres in size and is administered in part by Rock Creek Park, a unit of NPS.

The EA was prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), the regulations of the Council on Environmental Quality (CEQ) for implementing NEPA (40 Code of Federal Regulations [CFR] 1500-1508), and NPS Director's Order (DO) 12, *Conservation Planning, Environmental Impact Analysis, and Decision-making.* The statements and conclusions reached in this finding of no significant impact (FONSI) are based on documentation and analysis provided in the EA and associated decision file. To the extent necessary, relevant sections of the EA are incorporated by reference below.

SELECTED ALTERNATIVE

Based on the analysis presented in the EA, NPS concurred with DC Water's selected Alternative 2: Trenchless Alternative (page 4 of the EA) for implementation. Implementation of the Selected Alternative is anticipated to begin in 2021. As existing infrastructure is primarily located on NPS property, NPS will issue DC Water the required Special Park Use and Right-of -Way permits to rehabilitate the existing sanitary sewer infrastructure that runs through Soapstone Valley Park. Rehabilitating and repairing the sanitary sewer involves the following components:

- **Trenchless Sanitary Sewer Pipe Rehabilitation** – Approximately 6,200 linear feet (LF) of sanitary sewer pipe infrastructure within the Soapstone Valley sewer system will be rehabilitated using trenchless technology (page 4 of the EA).
- **Manhole Repair** – Twenty-nine sanitary sewer manholes will be repaired associated with the sanitary sewer pipe repair (page 5 of the EA).
- **Asset (Sanitary Sewer Pipes and Manhole) Protection and Erosion Prevention** – Protection for exposed sanitary sewer assets will be conducted at six sites (page 5 of the EA).
- **DC Municipal Separate Storm Sewer System (MS4) Outfall Rehabilitation** – Two MS4 outfalls within the Soapstone Valley Park will be repaired, Outfalls F-117 and F-140.
    - **MS4 Outfall F-117** is listed in the DC Water MS4 Permit Outfall Repair Schedule and Report (prepared by DC Water, December 2012). Three areas comprise the MS4 Outfall F-117 rehabilitation: Albemarle Street Regrading Area, Soapstone Trail Regrading Area, and F-117 Outfall Area (page 6 of EA).
    - **MS4 Outfall F-140** exists within District Department of Transportation (DDOT) right-of-way, and given its criticality and severe erosion issues, DDOT entered into a joint venture with the District Department of Energy & Environment (DOEE) to repair the outfall. This project will connect the existing DOEE step pool system to Soapstone Creek (page 7 of EA).

RATIONALE FOR DECISION

Alternative 2: Trenchless Alternative for implementation because it best meets the purpose and need of the Soapstone Valley Park Sewer Rehabilitation Environmental Assessment. This alternative will improve the structural integrity of the Soapstone Valley sewer system, reduce stream and groundwater infiltration and the potential for sewer overflows, eliminate exposed sanitary sewer pipes and manholes, and meet the regulatory requirements of the MS4 permit for Outfalls F-117 and F-140.

MITIGATION MEASURES

NPS places a strong emphasis on avoiding, minimizing, and mitigating potentially adverse impacts. Mitigation measures outlined in the EA are presented as Appendix A.

FINDING OF NO SIGNIFICANT IMPACT

As documented in the EA, the Selected Alternative will result in adverse impacts on the following: soils resources; water quality; wetlands and Waters of the U.S.; hydrology; floodplains; vegetation; wildlife and wildlife habitat; historic districts and landscapes; and visitor use and experience. However, NPS has determined that the Selected Alternative can be implemented without significant adverse effects, as defined in 40 CFR §1508.27.

During construction, soil disturbance will occur throughout the study area, predominately along Heavy Equipment (HE) access paths, within asset protection areas, and in staging and storage locations. To minimize the overall impacts to soils, access paths will be covered with geotextile, mulch, and wooden mats; the MS4 F-117 Stormwater Outfall area will be regraded; a Sediment and Erosion Control Plan will be prepared; and Best Management Practices (BMPs) will be utilized. Post construction, a combination of rock cascades and revegetation will help to stabilize soils within and adjacent to the creek. Revegetation along the access paths will also serve to stabilize soils. Post construction, along the access paths and in the asset protection sites, a combination of rock cascades and revegetation will help stabilize soils. A combination of geocells and rock cascades will be utilized along the slopes in the vicinity of the F-117 Stormwater Outfall to help protect the soils from future erosion.

The project will result in an adverse short-term, minor impact on water quality primarily due to in-water construction activities. Impacts will be minimized by utilizing BMPs including erosion and sediment control measures such as super silt fencing, stream diversion, dewatering bags, and a strict sequence of construction. Also, the project will result in long-term beneficial impacts to water quality benefits to Soapstone Creek, although water quality standards will likely not be met.

The project will impact wetlands and Waters of the U.S. The short-term impacts will primarily result from the construction of the HE access paths and asset protection. Construction-related impacts will be mitigated through the use of BMPs aimed at reducing impacts to water resources, and additional BMPs may be stipulated in the permits issued by the U.S. Army Corps of Engineers (USACE) and DOEE pursuant to Sections 401 and 404 of the Clean Water Act (CWA). The long-term impacts to the waterways will involve repair and replacement of MS4 Outfalls F-117 and F-140, asset protection measures, streambank stabilization measures, and stream restoration measures. The impacts will require a CWA Section 404 permit issued by USACE and CWA Section 401 water quality certificate issued by DOEE. These permits will stipulate requirements for mitigation that must be carried out to replace the lost functions and values resulting from long-term impacts to Soapstone Creek, its tributaries and associated wetlands. Any adverse long-term wetland impacts will be minimized through the implementation of specific BMPs. NPS has concurred that long-term beneficial impacts will result from rehabilitation of the MS4 outfalls and asset protection sites, which results in riffle and pool creation and bank stabilization using imbricated rock walls. These structures will provide overall functional maintenance and/or uplift of the hydraulics, geomorphology, physiochemical, and biology of the affected systems.

The project will involve both land and in-stream disturbance. BMPs to mitigate short-term and long-term hydrology impacts will be employed. However, the watershed of Soapstone Creek and its tributaries will remain primarily urbanized and will continue to convey flash flows during storm events into Soapstone Valley Park. The creek will maintain existing status or improve function for measures assessing velocity, floodplain connectivity, and dominant erosion potential. The changes in the land cover with clearing, site grading, access paths, tree removal and reforestation will result in hydrological alteration within Soapstone Creek's watershed, both short-term during construction and long-term after the project site is fully stabilized and restored to the designed conditions. Riparian vegetation along the left and right banks will be reestablished using tree, shrub, and herbaceous species native to the region. Overall, hydrologic functions for the project will result in an overall maintenance or uplift of function throughout Soapstone Valley.

Short-term impacts to floodplains will include temporary placement of HE access paths within the floodplain. Operation of heavy equipment within and adjacent to the floodplain will have the potential to compact soils within the floodplain, reducing flood storage. To minimize soil disturbance, geotextile, mulch, and wooden mats will be placed on the HE access paths within the floodplain during construction. HE access paths will be removed post-construction. Tree and vegetation removal will have the potential to increase runoff by allowing more precipitation to reach the ground and flow into the waterways. Long-term impacts include occupancy of permanent structures within the floodplain such as rock cascades, riffle grade controls, pools, cross vanes, rock sills, and imbricated rock walls, as well as tree removal. Also, stream stabilization structures will moderate flood velocities when flows rise above designed channels, reconnect extant floodplains to increase flood storage, and stabilize the grade of the channel and eroding streambanks. Flood elevations will also increase in proximity to the stabilization structures as floodplains are reconnected to the stream.

Much of the vegetation within the limits of disturbance will be removed for construction activities. The project will require the removal of up to 371 trees and the trimming of up to 74 trees. However, DC Water, NPS, and the construction contractor will walk the site prior to construction to finalize the limit-of disturbance (LOD), flag trees for removal, and discuss construction methods that could minimize vegetation impacts. Trees located just outside of the LOD will also be impacted if limbs extending into the LOD need to be trimmed for equipment access. Additionally, trees located adjacent to the LOD will experience impacts to their root systems; however, geotextile, mulch, and wooden mats will be used along HE access paths help prevent soil and root compaction. Adverse impacts to the forest include the direct removal of vegetation inside the LOD, as well as to the adjacent forest, by creating gaps in the contiguous forest canopy, increasing exposure of a new forest edge to sun and wind, and possibly creating conditions that allow for non-native invasive plant and animal species colonization. These impacts will be minimized during construction by ongoing coordination to identify additional trees that can be saved; using super silt fencing and tree protection fencing around the work area; using the least impactful equipment necessary to accomplish the work; using geotextile, mulch, and wooden mats to reduce compaction of soil and adjacent tree root systems; monitoring construction for impacts to the environment; conducting International Society of Arboriculture Certified Arborist inspections and recommendations; and implementing BMPs during construction. At the end of construction activities, impacts to the forest will be mitigated by planting a combination of 2.5-3-inch caliper trees, bushes, live stakes, and permanent seeding. DC Water will prepare associated planting plans for NPS approval that specify all proposed plantings with considerations for vegetation characteristics and sunlight, soil, and moisture requirements. Because replanting will not fully mitigate the tree impacts, DC Water will continue to coordinate with NPS to determine the appropriate compensation required to meet the intent of Director's Order #14: Resource Damage Assessment and Restoration. This will include funding five years of post-construction maintenance of the restoration areas to ensure that the newly planted vegetation is allowed to mature and is protected from invasive, non-native plant species.

The project will result in adverse, short-term and long-term impacts to terrestrial and aquatic wildlife and wildlife habitat. During construction in the study area, wildlife may be temporarily affected by noise pollution, increased or diverted human traffic, and habitat disturbance, and aquatic habitats will incur impacts from in-stream construction and the removal of trees along the waterways. However, once installed, the asset protection and stabilization projects will allow for re-establishment of pre-construction populations of fish, amphibians, and macroinvertebrates. Proposed asset protection efforts and MS4 outfall stabilization efforts may enhance streambed habitat complexity and reduce fish passage barriers. It is possible that post-construction conditions, over time and in conjunction with modest water quality improvements, will result in a more diverse macroinvertebrate community. In areas of tree removal, terrestrial habitat will be disturbed and fragmented, leaving openings for non-native invasive flora and fauna to become established, at least until mature native forest conditions return. These impacts will be partially offset by replanting and vegetation maintenance efforts in the study area, and restoration efforts within the watershed. Although the forest composition will change post construction, the resulting forest edges will provide suitable habitat for numerous native species adapted to living in disturbed habitat associated with an urban environment and transient species associated with the adjacent forested habitat within Rock Creek Park.

The project will result in short-term and long-term impacts to Soapstone Valley Park, which will be included in the proposed update of the Rock Creek Park Historic District National Register Nomination. The park will be physically and visually affected by the removal of up to 371 trees and 74 trimmed trees within the Soapstone Valley Park expansion area of the Rock Creek Park Historic District, U.S. Reservation 402. Impacts to the historic district's vegetation will be mitigated by replanting trees and other vegetation mitigation measures. The project will also have a short-term and long-term, moderate impact on the Soapstone Valley Trail, which is a component of the Rock Creek Park Historic Trails Cultural Landscape. Portions of the trail will be used as HE access paths and grading of the trail is anticipated in the vicinity of MS4 Outfall F-117 near the Soapstone Valley Trailhead at Albemarle Street. Also, the visual character of the trail will be altered by vegetation removal. A Memorandum of Agreement (MOA) between DC Water, NPS, and the District of Columbia Historic Preservation Office (DC SHPO) is being developed by NPS to identify additional mitigation to document the changing cultural landscape.

Lastly, during construction of the project, which will last between 18 and 24 months, signage will be placed informing the public of construction activities, estimated construction duration, and project purpose. Also, to ensure public safety, barricades and/or other control measures will be installed to keep visitors out of the construction site. Following construction, portions of Soapstone Valley Park will remain closed for up to 2years to allow restoration areas to remain undisturbed. However, the public paths and walking trails will be reopened following construction. Also, the character of the park's forest landscape will change as vegetation and trees mature. The project will conceal the exposed sewer infrastructure by constructed riffles, rock cascades and imbricated walls

CONCLUSION

As described above, the selected alternative does not constitute an action meeting the criteria that normally requires preparation of an environmental impact statement (EIS). The Selected Alternative will not have a significant effect on the human environment in accordance with Section 102(2)(c) of NEPA.

Based on the foregoing, it has been determined that an EIS is not required for this project and, thus, will not be prepared.

Recommended:

Frank Young
Acting Superintendent
Rock Creek Park
Region 1 - National Capital Area
National Park Service

4/13/20
Date

Approved:

Lisa A. Mendelson-Ielmini
Acting Director
Region 1 – National Capital Area
National Park Service

April 14, 2020
Date

Documents appended to the FONSI include:

- Appendix A: Mitigation Measures
- Appendix B: Non-Impairment Determination
- Appendix C: Public Comment Responses
- Appendix D: ESA Section 7 USFWS Co Letters
- Appendix E: Errata
- Appendix F: NHPA Section 106 MOA

APPENDIX A: MITIGATION MEASURES

Environmental Resource	Proposed Mitigation
Transportation	▪ The proposed project will require ongoing coordination with the District Department of Transportation (DDOT) and the Washington Metropolitan Area Transit Authority (WMATA) to properly prepare and implement a feasible Maintenance of Traffic (MOT) plan with the least amount of impacts. ▪ Traffic Control Plans (TCP) will be developed during the design phase and implemented during periods of construction, as needed.
Air Quality	▪ Construction areas may be watered during dry periods to reduce airborne dust. ▪ Trucks hauling excavated materials will be covered.
Soils and Water Quality	▪ Construction contracts will be required to include provisions for the handling and disposal of contaminated materials, if encountered. ▪ Construction documents, required for construction permits within the District of Columbia, must include measures to control dust, protect soil from precipitation and erosion, protect workers from exposure to soil contaminants, and manage stormwater. ▪ Short-term erosion transport will be controlled through the implementation of an approved Soil Erosion and Sediment Control Plan. ▪ Geotextile, mulch, and wooden mats will be placed along the HE access paths within the floodplain during construction to minimize soil disturbance. ▪ A combination of geocells and an imbricated rock channel will be utilized to armor the slopes around the F-117 Stormwater Outfall to help protect from future erosion.
Water Quality	▪ Best Management Practices (BMPs) will be used and coordinated with NPS and US Army Corps of Engineers (USACE). ▪ Stormwater, sediment, and erosion control measures are conditions that will need to be met to obtain individual construction permits.
Wetlands and Waters of the U.S.	▪ Clean Water Act (CWA) permits obtained from the USACE and DOEE will prescribe actions that must be carried out to mitigate impacts to Soapstone Creek, its tributaries, and wetlands, if required. ▪ Staging and storage areas will be placed outside of wetland boundaries. ▪ The use of Heavy Equipment (HE) access paths will circumscribe some potential impacts and allow minor adjustment in the field to avoid resources. ▪ HE access paths will be covered with geotextile, mulch, wooden mats, and super silt fencing along access paths. ▪ Temporary bypass pumping equipment for ensuring clear water flow around dry stream work areas (including coffer dams, clear water diversion pumps, and dewatering pumps with filter bags) will be used daily. ▪ Site-specific streambank stabilization elements to include live stakes, permanent seeding, imbricated rock walls, and adjustment of eroding streambank slopes will be installed to provide functional uplift to Soapstone Creek and its tributaries, reduce soil loss, and increase scour protection.
Floodplains	▪ Post-construction plantings, including species native to Rock Creek Park, will be installed to ensure contiguous habitat and suppression of invasive species. ▪ Equipment and materials will be stored outside the floodplain to the extent practical. ▪ Floodplain fill for construction access will be removed at the completion of construction ▪ Fill used in outfall repair, asset protection, and streambank stabilization will be minimized to only what is necessary to maintain appropriate flow velocities and manage storm surges.
Vegetation	▪ Mature trees will be given special consideration and will be avoided to the extent possible. DC Water will provide incentives for construction contractors to reduce tree removal. ▪ All trees to be cut on NPS property will be field approved by NPS in consultation with DC Water. ▪ Geotextile, mulch, and wooden mats will be applied on access paths to protect the root zones of the trees and other woody vegetation. ▪ Super silt fence will be used to delineate all HE access paths.

Environmental Resource	Proposed Mitigation
	▪ All wheeled machinery will be cleaned prior to start of construction and following completion of construction to reduce the risk of seed cross contamination and spread of non-native invasive species. ▪ For trees removed on NPS property, DC Water will pay a one-time, fee-in-lieu, which will be used by NPS for onsite long-term vegetation management and protection. ▪ For trees removed on DDOT property, a Tree Fund will be paid $55 per inch of circumference for each special tree removed, in accordance with DDOT regulations. ▪ Post-construction plantings will be installed including species native to Rock Creek Park to ensure contiguous habitat and suppression of invasive species.
Rare, Threatened, and Endangered Species	▪ Prior to construction, DC Water and NPS will coordinate with USFWS regarding timing restrictions and current status of the northern long-eared bat.
Cultural Resources	▪ Impacts to the character-defining vegetation within the Rock Creek Park Historic District and the Rock Creek Park Historic Trails Cultural Landscape will be mitigated by tree replacement. ▪ A Memorandum of Agreement (MOA) between NPS and the DC SHPO that identifies mitigation to document the changing cultural landscape will be executed.
Visitor Use and Experience	▪ To ensure public safety, signage, barricades and/or other control measures will be installed to keep the public out of the active construction site. ▪ The proposed project will comply with the District of Columbia's Municipal Regulations (Title 20, Chapter 28), which set certain standards for noise levels.
Socioeconomic	▪ Traffic Control Plans will be developed and approved by DDOT to define detours and changes in traffic patterns before construction begins. ▪ Signage will be placed informing the public of general construction information such as duration, closings, and hazards. ▪ To ensure public safety, barricades and/or other control measures will be installed to keep the public out of the construction site. ▪ Residents and businesses will receive notifications in advance of any temporary water or sanitary sewer shut-offs. ▪ Trucks that haul materials from construction sites will be covered. ▪ Emission controls on all construction equipment will be maintained, and exposed soils will be covered and/or wetted to reduce fugitive dust. ▪ Project information will be made available on NPS and DC Water websites and on signs in the Park.

Appendix B: Non-Impairment Determination

By enacting the NPS Organic Act of 1916 (Organic Act), Congress directed the US Department of Interior and the NPS to manage units "to conserve the scenery and the natural and historic objects and wildlife therein and to provide for the enjoyment of the same in such a manner and by such a means as will leave them unimpaired for the enjoyment of future generations" (16 USC § 1). Congress reiterated this mandate in the Redwood National Park Expansion Act of 1978 by stating that NPS must conduct its actions in a manner that will ensure no "derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress" (16 USC 1a-1).

NPS Management Policies 2006, Section 1.4.4, explains the prohibition on impairment of park resources and values:

> *While Congress has given the Service the management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the Organic Act, establishes the primary responsibility of the Nation Park Service. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.*

The NPS has discretion to allow impacts on Park resources and values when necessary and appropriate to fulfill the purposes of a Park (NPS 2006 sec. 1.4.3). However, the NPS cannot allow an adverse impact that would constitute impairment of the affected resources and values (NPS 2006 sec 1.4.3). An action constitutes an impairment when its impacts "harm the integrity of Park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values" (NPS 2006 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" (NPS 2006 sec 1.4.5).

This determination on impairment has been prepared for the selected alternative described in this FONSI. An impairment determination is made for all resource impact topics analyzed for the selected alternative. An impairment determination is not made for visitor use and experience because impairment findings relate back to park resources and values, and these impact areas are not generally considered to be park resources or values according to the Organic Act and cannot be impaired in the same way that an action can impair park resources and values.

Soil Resources - Implementation of the project will have a short-term, adverse impact on soils during construction. The Heavy Equipment (HE) access paths will require clearing along the length of the path, which will temporarily affect soil stability. These paths will be covered with geotextile, mulch, and wooden mats prior to vehicle use, which will protect the soil and tree roots in these areas from over compaction during construction. Short-term soil impacts will be controlled through the implementation of an approved Sediment and Erosion Control Plan. Best management practices (BMPs), such as silt fencing and tree protection fencing and the use of geotextile, mulch, and wooden mats on the HE access paths, will be utilized to minimize the overall impacts to soils. Post construction, the disturbed areas will be stabilized using coir mats, vegetation, geocells, and rock cascades, as necessary. No long-term, adverse impacts to soils are anticipated. Therefore, implementation of the project will have no impairment to the park resources related to soils.

Water Quality - Implementation of the project will result in the repair and rehabilitation of sanitary sewer infrastructure, decreasing the potential for future sewage leaks from defective pipes and/or manholes, and will have a long-term, beneficial impact on water quality. Implementation of the project

will have an adverse short-term impact on water quality during construction due to work being performed in Soapstone Creek. These short-term adverse impacts will be minimized by utilizing BMPs for erosion and sediment control, including measures such as super silt fencing, stream diversion, dewatering bags, and a strict sequence of construction. No long-term, adverse impacts to water quality are anticipated. Therefore, implementation of the project will have no impairment to the park resources related to water quality.

Wetlands and Waters of The U.S. - Implementation of the project will have short-term adverse impacts and long-term beneficial impacts on wetlands and Waters of the U.S. The temporary, short-term impacts to the riverine wetlands and waterways from this alternative will primarily result from the construction of the HE access paths. The access paths will be temporary and will be removed at the completion of construction; pre-construction stream conditions will be restored. Construction-related impacts will be mitigated by using BMPs that reduce impacts to water resources. The project will result in maintenance or uplift of functions and values associated with the impacted waterways. The long-term impacts to the waterways from this alternative will involve repair of MS4 Outfalls F-117 and F-140, asset protection measures, streambank stabilization measures, and stream restoration measures. These structures will provide overall functional maintenance and/or uplift of the hydraulics, geomorphology, physiochemical, and biology of the affected systems. No long-term, adverse impacts to wetlands and Waters of the US are anticipated. Therefore, implementation of the project will have no impairment to the park resources related to wetlands and Waters of the U.S.

Hydrology - Implementation of the project will have short-term impacts to hydrology and beneficial long-term impacts. The changes in the land cover with clearing, site grading, access paths, tree removal and reforestation will result in hydrological alteration within Soapstone Creek's watershed. BMPs that mitigate impacts to vegetation, soil and erosion, and water quality will be used. Overall, hydrologic functions under the project will result in an overall maintenance or uplift of function throughout the Soapstone Valley. No long-term, adverse impacts to hydrology are anticipated. Therefore, implementation of the project will have no impairment to the park resources related to hydrology.

Floodplains - Implementation of the project will have short-term impacts, and long-term impacts. The short-term impacts will result from temporary placement of HE access paths within the floodplain that consist of geotextile, mulch, and wooden mats, tree and vegetation removal, and operations of heavy equipment within the floodplain during construction. Equipment and materials will be staged and stored outside the floodplain, as practicable. Following construction, mats will be removed, and trees and shrubs will be replanted. No long-term, adverse impacts to floodplains are anticipated. Therefore, implementation of the project will have no impairment to the park resources related to floodplains.

Vegetation - Implementation of the project will have short-term and long-term impacts to vegetation. Much of the vegetation within the limit-of-disturbance (LOD) would be removed and some vegetation adjacent to the LOD would be trimmed for construction activities. Short-term impacts would be minimized by ongoing coordination with NPS to identify trees that can be saved and appropriate treatment measures before and after construction; using super silt fencing and tree protection fencing around the work area to prevent stray equipment from further impacting adjacent retained forest; using the least impactful equipment necessary for the work; and using geotextile, mulch, and wooden mats to reduce compaction of soil and adjacent tree root systems. Other minimization measures, such as environmental construction monitoring, ISA Certified Arborist inspections and recommendations, and implementing BMPs during construction to reduce introduction and/or spread of non-native invasive species, could further reduce impacts.

Mitigation efforts for long-term impacts will include replanting trees and other vegetation within the LOD. Some portions of the Park that were disturbed during construction will remain closed and fenced off for up to two years post-construction to support the vegetation restoration. Riparian vegetation along the left and right banks will be reestablished using tree, shrub, and herbaceous species native to the

Soapstone Valley. However, these plantings will not fully compensate for total vegetation impacts based on the total circumference of trees removed. Therefore, DC Water will pay a one-time, fee-in-lieu which will be used for onsite long-term protection as well as offsite plantings and long-term protection.

With the implementation of the BMPs and replanting of native species, vegetation within the Park would be restored. Furthermore, long-term, adverse impacts will continue to be mitigated over time throughout the maintenance and monitoring of ecological restoration initiatives. Therefore, implementation of the project will have no impairment to the park resources related to vegetation.

Wildlife and Wildlife Habitat - The project will result in adverse, short-term and long-term impacts to terrestrial wildlife and wildlife habitat. It will also result in short-term, adverse and long-term, beneficial impacts to aquatic wildlife and wildlife habitat. During construction in the study area, wildlife may be temporarily affected by noise pollution, increased or diverted human traffic, and habitat disturbance, and aquatic habitats will incur impacts from in-stream construction and the removal of trees along the waterways. Post construction, the asset protection and stabilization projects will allow for re-establishment of pre-construction populations of fish, amphibians, and macroinvertebrates. Terrestrial habitat will be disturbed and fragmented. These impacts will be partially offset by replanting efforts in the study area, and restoration efforts within the watershed. Although the forest composition will change post construction, the resulting forest edges will provide suitable habitat for numerous native species adapted to living in disturbed habitat associated with an urban environment and transient species associated with the adjacent forested habitat within Rock Creek Park. Long-term, adverse impacts will continue to be mitigated over time throughout the maintenance and monitoring of ecological restoration initiatives. Therefore, implementation of the project will have no impairment to the park resources related to wildlife and wildlife habitat.

Cultural Resources - The project will result in a short-term and long-term impacts to Soapstone Valley Park, which will be included in the proposed expansion of the Rock Creek Park Historic District and is a component of the Rock Creek Park Historic Trails Cultural Landscape. The park will be physically and visually affected by the removal of up to 351 trees and 68 trimmed trees within the Soapstone Valley Park expansion area of the Rock Creek Park Historic District. Impacts to the historic district's vegetation will be mitigated by replanting trees and other vegetation mitigation measures. A Memorandum of Agreement (MOA) between DC Water, NPS, and the DC HPO is being developed by NPS to identify additional mitigation to document the changing cultural landscape. Long-term, adverse impacts will continue to be mitigated over time throughout the maintenance and monitoring of ecological restoration initiatives. Therefore, implementation of the project will have no impairment to the park resources related to cultural resources.

CONCLUSION

The preferred alternative would not result in major, long-term adverse impacts on park resources. Therefore, the preferred alternative would result in no impairment of park resources.

Appendix C: Public Comment Responses

Topic	Concern Statement	Response
Soapstone Valley Park	Maintain the integrity of Soapstone Valley Park.	Comment noted. NPS and DC Water are committed to maintaining the long-term integrity of Soapstone Valley Park by implementing the preferred alternative. Compared to other alternatives that were considered and dismissed, it reduces environmental impacts both during construction and long-term, its design is consistent with the park's natural environment, and is more cost effective.
Park Trails/Walking Paths	Will the proposed walking path next to M-9761 be permanent for allowing southern access to the Park?	All access paths are for construction and are temporary unless they are on an existing, official NPS trail. Where the access paths are located on an existing trail, the trail will be restored and reopened to the public once construction is complete.
	The Windom Place NW entrance to the park and the trail leading down into the park needs rehabilitation. What are NPS's plans for this pedestrian accommodation?	Comment noted. This is beyond the purpose and scope of this project.
	Replace the boulders, wood, and rocks currently used as steps and in-stream crossings at the conclusion of the work. Also, save some downed trees and limbs to be used by volunteers to narrow the trail once the project is completed.	Step stone stream crossings and boulder/wood steps that are impacted by construction in the proposed asset protection areas will be replaced. Downed trees and limbs will be used to block access to social (unofficial) trails.
	Will there be any changes made to the trail system post construction? New entrances?	Except for a minor re-route of an official trail by manhole M-10442, no changes to the trail system are anticipated.
Soapstone Creek	Stormwater needs to be slowed down to avoid erosion and stripping the flora and fauna out of the stream and stream banks. Vegetation buffers and permeable surfaces will contribute to a more ecologically sound system along Soapstone Creek, into Broad Branch and Rock Creeks.	Stormwater run-off will be addressed within the context of meeting the project purpose and need (see EA Chapter 1). The EA states that proposed sanitary sewer asset protection and MS4 outfall repairs will reduce stream bank erosion (see Asset Protection and Erosion Prevention and MS4 Outfall Rehabilitation subsections under Chapter 2). A Sediment and Erosion Control Plan and best management practices will be implemented to control erosion during construction. Vegetated buffers will be re-established to maintain soil and stream bank stability and to restore ecological function of riparian areas.

	The trees around Soapstone Creek provide shade, leading to cooler water temperatures for the aquatic ecosystems to thrive. Removing these trees will warm the water and make it a poor habitat or uninhabitable for the species that live in the creek or use it during their lifecycle. Minimize impact on shade trees during construction to protect the conditions of this specialized ecosystem.	Comment noted. NPS acknowledges the impact of canopy removal on water temperature and aquatic habitat. The EA states that current water quality assessments identify Soapstone Creek aquatic habitat as moderately impaired with only pollutant-tolerant aquatic fauna present. The EA states that there will be short-term and long-term adverse impacts to vegetation. Revegetation will occur in accordance with best practices in ecological restoration to allow re-establishment of riparian canopy cover.
	The EA indicated that banks would be stabilized in some locations. The associated access paths will likely cause the contractor to cut into the banks to build earthen ramps, but cuts should be avoided where possible, and the contractor should build ramps with imported material that can be removed post construction.	Comment noted. The EA states that temporary stream crossings (i.e., bridges) will be installed for access (see EA Chapter 2 under the Trenchless Pipe Rehabilitation subsection). These bridges as well as mulch and wooden mats will be removed after construction. All disturbed stream banks will be stabilized with temporary seeding and coir mat and replanted with live stakes and permanent seeding.
	The agencies should identify and support stormwater management opportunities upland of Soapstone Creek.	Comment noted. This is beyond the purpose and scope of this project.
	Include mitigation for long-term, comprehensive stream restoration post construction.	Comment noted. This is beyond the purpose and scope of this project.
Park Closure	Limit the downtime of park usage; keep Park closure to a minimum.	Comment noted. The EA states that the trail system will be closed during construction and that portions of the park would remain closed for up to two years for restoration activities (see EA Chapter 4 subsection on Impact on Visitor Use and Experience). Construction and post-construction restoration activities will be completed as quickly as is feasible, and trails will be re-opened once conditions are safe for visitor use.
	Identify parts of the park that will be available during construction	Comment noted. Specific details regarding areas of park closure will not be known until final design.
Tree Impacts	Deforestation will have economic impacts.	Comment noted. The economic impact of tree removal was not assessed in the EA, but NPS acknowledges the impact of vegetation removal and the need to minimize canopy loss. The EA states that the project will have a long-term adverse impact on vegetation (see Chapter 4 under the subsection Impact on Vegetation). Efforts to minimize tree loss (especially mature trees) and incentivize tree retention during construction are discussed in this section of the EA Appendix C: Mitigation. Revegetation will occur in accordance with best practices in ecological restoration to ensure re-establishment of riparian canopy cover.

	The tree removal is long-term, detrimental impact. Minimize tree loss especially large canopy trees.	NPS acknowledges the impact of vegetation removal and the need to minimize canopy loss. The EA states that the project will have a long-term adverse impact on vegetation (see Chapter 4 under the subsection Impact on Vegetation). Efforts to minimize tree loss (especially mature trees) and incentivize tree retention during construction are discussed in this section of the EA Appendix C: Mitigation. Revegetation will occur in accordance with best practices in ecological restoration to ensure re-establishment of riparian canopy cover.
	Time tree removal to take place after the spring mating and breeding season.	Restrictions related to the timing of tree removal will be determined in further consultation with NPS and other regulatory agencies. Section 7 consultation is being completed as required by the Endangered Species Act. Section 7 consultation concluded that the project would have no effect on endangered, threatened, or candidate species. However, consultation is ongoing in efforts to minimize potential adverse impacts.
	Consider the provisions of the Forest Hills Tree and Slope Protection Overlay.	The provisions of the Forest Hills Tree and Slope Protection Overlay are not applicable on federal government-owned property.
	Sub-tabulate tree impacts for each asset path, asset protection site, and other LOD areas.	Reference Figure 5, Tree Impacts, Sheet 1-3.
Tree Mitigation	Replanting saplings will not sufficiently mitigate the tree removal.	NPS acknowledges the long-term adverse impact of tree removal on vegetation. Efforts to minimize tree loss (especially mature trees) and incentivize tree retention during construction are discussed in the EA (Chapter 4 under the subsection Impact on Vegetation and Appendix C: Mitigation). Revegetation will occur in accordance with best practices in ecological restoration to ensure re-establishment of mature trees over time.
	The fee-in-lieu payment is a poor substitute for tree mitigation.	Under the direction of NPS staff, DC Water will re-vegetate disturbed areas of Soapstone Valley Park following construction and will fund the maintenance of newly planted trees and shrubs for the first two years following construction. DC Water will deposit funds into a third-party account, which NPS will utilize for maintaining newly planted trees during years three through five, following construction.
	Remove invasive species throughout the Park beyond the LOD and restore adjacent DDOT land for habitat connectivity.	Comment noted. This is beyond the purpose and scope of this project. NPS follows the 2017 NCR Invasive Plant Management Plan/Environmental Assessment to address invasive plant issues throughout the park. DC Water will remediate disturbed trees and vegetation on DDOT property as required by the DDOT permit.

	Support a comprehensive ecosystem restoration approach.	Efforts to minimize tree loss (especially mature trees) and incentivize tree retention during construction are discussed in the EA (Chapter 4 under the subsection Impact on Vegetation and Appendix C: Mitigation). Under the direction of NPS staff, DC Water will re-vegetate disturbed areas of Soapstone Valley Park following construction and will fund the maintenance of newly planted trees and shrubs for the first two years following construction. DC Water will deposit funds into a third-party account, which NPS will utilize for maintaining newly planted trees during years three through five, following construction. This will help ensure re-establishment of a functioning forest ecosystem over time.
	Rock Creek Conservancy is interested in supporting long-term vegetation management.	Comment noted.
	Conduct long-term maintenance, evaluation, monitoring, and invasive species removal.	Efforts to minimize tree and habitat impacts may include environmental construction monitoring, ISA Certified Arborist inspections and recommendations, and implementing BMPs during construction to reduce introduction and/or spread of non-native invasive species (see EA Chapter 4 under the subsection Impact on Vegetation). In addition, under the direction of NPS staff, DC Water will re-vegetate disturbed areas of Soapstone Valley Park following construction and will fund the maintenance of newly planted trees and shrubs for the first two years following construction. DC Water will deposit funds into a third-party account, which NPS will utilize for maintaining newly planted trees during years three through five, following construction. This will help ensure re-establishment of a functioning forest ecosystem over time.
	Use trees with deep roots to further mitigate erosion.	Revegetation will occur in accordance with best practices in ecological restoration to ensure re-establishment of a functioning forest ecosystem over time, including planting native tree species with root structures well-suited for riparian forest conditions (see EA Appendix C: Mitigation).
	Share the tree mitigation plan with the public.	NPS will adhere to the mitigation listed in the EA.
	A tree replanting ration of 1:1 may not be sufficient. Consider a 3:1 ratio.	The EA states that impacts to the forest would be mitigated through planting trees and other vegetation and through fee-in-lieu payment (see EA Chapter 4 under the subsection Impact on Vegetation). Revegetation will occur in accordance with best practices in ecological restoration to ensure re-establishment of a functioning forest ecosystem over time.

	Provide details on the process to effectively remove Tree of Heaven (A*ilanthus latissimi*) from the LOD without unintended proliferation.	Comment noted. NPS acknowledges that this species is nonnative and invasive. Efforts to effectively remove these trees from the LOD will continue to be coordinated with regulatory agencies and ISA-certified arborists during final design and construction.
	Who will be responsible for maintaining and monitoring new trees?	Under the direction of NPS staff, DC Water will re-vegetate disturbed areas of Soapstone Valley Park following construction and will fund the maintenance of newly planted trees and shrubs for the first two years following construction. DC Water will deposit funds into a third-party account, which NPS will utilize for maintaining newly planted trees during years three through five, following construction. This will help ensure re-establishment of a functioning forest ecosystem over time.
	Put erosion measures in place now, prior to this project's implementation, to assist with mitigation during construction.	During final design, a sediment and erosion plan will be developed. The construction contract will require the contractor to have all sediment and erosion control measures in place prior to the start of active construction.
Construction (Methods, Duration, etc.)	Provide a detailed timeline to complete the project including procurement and permitting. Minimize construction timeline.	The project is in intermediate design and must continue through final design, pending the completion of the environmental review process. Permits must be acquired, and a contractor procured. The timing of these items is dependent on several factors. Where practicable, DC Water and NPS will inform park users and Advisory Neighborhood Commissions (ANCs) of developments in the schedule.
	Construction traffic will impact and be disruptive to surrounding residents. How will it be managed?	Maintenance of Traffic plans will be developed to plan for lane closures due to construction activities. These plans will be submitted to DDOT for review and approval.
	How will the public streets be used during construction? Would there be local road closures during construction?	Several lanes will be temporarily closed during construction. These temporary closures will be identified on Maintenance of Traffic plans that will be submitted to DDOT for review and approval. Lane closure and effects to traffic will be minimized to the extent practicable.
	Minimize noise impacts from heavy construction equipment. What should neighbors expect?	Construction activities will adhere to DC regulations and noise ordinances.
	Minimize air quality impacts during construction.	Construction activities will adhere to DC regulations and air quality requirements.
	Manage runoff and erosion during construction.	Construction activities will adhere to DC erosion and sediment control regulations.

	Provide more details on the exact location of construction work within the LOD.	The LOD includes access paths, storage and staging areas, as well as the areas that would be repaired and rehabilitated as part of the proposed project. Detailed descriptions of these activities are provided within the EA under Section 2 (pages 4-7).
	Provide more details on the final design and construction sequencing and phasing for each major project component including a detailed timeline.	The project has been designed to the intermediate design phase to support the EA. This information will be determined as the project moves into final design.
	Further explain the bypass pumping process, notably what happens at the end of workdays.	Bypass pumping will be used for both lining of pipes as well as for asset protection. All pipes that will be lined will need to be bypassed while lining occurs. Pumps will be installed at manholes upstream of the installation, and flow would be carried to a manhole downstream of the installation via temporary hoses and/or pipes, allowing the water to bypass the work area. Once construction is complete, the temporary bypass pumping operation will be removed, and standard gravity flow will be returned to the system. Details on bypass pumping will be finalized when the project moves to final design. DC Water anticipates overnight bypass pumping and will comply with night work regulations in DC.
	How long is the construction contractor procurement process?	180 days.
	When is the earliest start date of construction?	2021
	Can you replicate 1908 low-impact construction methods?	1908 construction methods cannot be replicated due to significant changes in land ownership, landforms, technology, stricter environmental laws, and regulatory requirements including Occupational Safety and Health Administration standards.
	Seek out and utilize the best available technology.	Comment noted.
Cured-in-Place Pipe (CIPP)	Provide evidence to support a 50-year life expectancy.	The National Association of Sewer Service Companies (NASSCO) accepted a 50-year design life expectancy for CIPP lining technologies.
	How will the sewer system be repaired after the CIPP life expectancy?	At such time, DC Water will look at the technologies available to determine the most environmentally responsible solution to repair and rehabilitate their assets.
	Could DC Water mix and match trenchless technologies?	Yes, for example there are various methods of CIPP lining that could be utilized depending on pipe size, location or flow. This will be further considered during final design.
	Would CIPP reduce sewer system capacity?	The carrying capacity of the pipe will not be reduced, as the CIPP will decrease roughness within the pipe.

Alternative Solutions	Provide more information and pros and cons for dismissing the first alternative in Appendix D – diverting sewage by constructing new pipe along Albemarle.	This alternative was studied through the intermediate design phase. Information regarding benefits and impacts of this alternative is provided in Appendix D. Ultimately, based on several factors including environmental effects, NPS and DC Water concurred on its dismissal and decided that the Environmental Assessment (EA) should only carry forward the No Action and the Trenchless alternatives.
	An alternate solution could be to build a new sewer line down Albemarle St from Connecticut to Broad Branch.	Alternatives that involved installation along Albemarle Street NW were studied and dismissed, as such alternatives do not fully address the project's purpose and need and would involve significant environmental impacts. See Appendix D, Alternatives Considered and Dismissed, for additional information.
	Provide more information and pros and cons regarding the use of UV curing or slipping flexible plastic inside of the pipes.	The construction contract specifications will allow the contractor to select the CIPP curing method within the LOD. Slip lining was dismissed during conceptual design due to the large environmental footprint associated with pits necessary for construction and subsurface disturbance to park property.
	What other trenchless technology had been considered?	Construction methods considered include micro-tunneling, horizontal direction drilling, pipe ramming, spiral wound pipe, pipe bursting, and fold-and-form, all of which are included in Appendix D.
	Was installing plastic PVC piping inside terra cotta pipes considered? Would it be effective? What would be the equipment needs?	This alternative was considered during conceptual design and dismissed because of the large environmental footprint it would require, see Appendix D.
	Provide a comparison between CIPP curing methods within the EA.	The CIPP curing method for the project will be determined when the project's contractor is selected. However, both Ultraviolet-cured CIPP, water, and steam-cured CIPP will be considered during the project bid process.

	Include an option to protect the stormwater pipe and improve the stream rather than daylighting which includes tree loss. Explain the rationale for daylighting much of MS4 Outfall F-117 as compared to patching the crack.	Repairing the crack and daylighting the stream serve two different purposes. The primary purpose for repairing the outfall is to address water quality concerns, as identified in the National Pollutant Discharge Elimination System (NPDES) Permit No. DC0000221. The F-117 outfall pipe has a significant crack along the crown that makes repair impractical due to the extent of the crack as well as the characteristics of the original construction. As such, it must be cut back or replaced; these methods would result in similar tree loss. Cutting back the pipe would result in less overall adverse effects, however, as it requires less construction. The placement of the cascade feature downstream of the pipe would provide benefits to the stream by mitigating the erosional forces acting on the channel due to the high exit velocities and shear stress.
	Seriously consider alternatives to take most of the sanitary sewage out of the park. Consider pumping solutions other than big pumping stations.	Removing only a portion of the sewage would still require the pipes and manholes in the park to be repaired as sewage would still be conveyed through them. These pipes and manholes would also need to be protected if exposed, see Appendix D.
General Environmental Concerns	The viewshed will be permanently changed due to tree removal.	The EA describes impacts to the park's landscape, including tree removal, that will affect the visual character of the park. DC Water and NPS will implement mitigation to include restoration of areas where trees were removed. This mitigation will include the planting of replacement native trees, shrubs and grasses in Soapstone Valley Park. The trees, which will be maintained for up to five years after construction is completed, will help ensure the re-establishment of forest vegetation.
	There is a lack of assessment of the impact on the surrounding neighborhood and community. Elaborate on community impacts.	The National Park Services focuses on impacts to park property and examines ancillary impacts. The National Park Service uses all this information to make the decision.
	The project will be a nuisance to businesses and residences on adjacent streets.	Comment noted.
	Consider the effects of the project on terrestrial species.	Impacts to terrestrial species are discussed within the subsection Wildlife and Wildlife Habitat, of Chapter 3 of the EA.
	How long would the alley between Connecticut Avenue NW and manhole M-9766 be closed?	The alley by manhole M-9766 will remain partially open during construction, allowing access to parking garages accessed through the alley.
	The 1908 VCP sewer pipes and culverts should be recognized as cultural resources.	Comment noted.

	The EA should highlight the details about and the success of the construction of two previously lined segments of pipe in the park.	This is beyond the scope of this project.
	Address climate change in the EA.	Comment noted.
	Address the effects of deforestation on human health and pollution.	Permanent deforestation would not occur within the project site. Further, the relatively limited scale of tree impacts within the context of the 3,000 acres of contiguous forested parkland (Soapstone Valley and other federal park areas managed by Rock Creek Park) will not result in detectable human health or pollution concerns. DC Water and NPS will implement onsite mitigation to restore areas where trees were removed, including the planting of replacement native trees, shrubs and grasses in Soapstone Valley Park. The trees, which will be maintained for up to five years after construction is completed, will help ensure the re-establishment of forest vegetation and contiguous canopy.
	The Van Ness North Coop. will be greatly impacted by the project. Will the parking lot be used for staging?	DC Water will seek approval from The Van Ness North board to temporarily use the parking lot at 2939 Van Ness Street NW to line and bypass from Manhole M-9759 located just off the parking lot. DC Water does not anticipate requesting use of the parking lot as a staging area for other work related to the proposed project.
	Explain what causes sewer odor and the effect that rehabilitation will have on odors within the Park.	Odors within the park are the result of venting from manholes as well as deficiencies in the existing pipe network. Rehabilitated sewer lines should minimize odors in the park.
Public Outreach	Public involvement for design, mitigation, construction, and detailed schedules should be ongoing and include regular meetings and presentations with the ANCs.	DC Water is committed to coordinating with the ANCs and can provide updates as requested.
	Be proactive in providing frequent project information to nearby residents outside of formal presentations and public meetings.	DC Water will work directly with the ANCs to provide project updates, and information will be primarily disseminated through ANCs.
	Give advanced notice of any disruptions to water or sewer service.	Residents will be notified in the event of any water and sewer disruptions.
	How will the public be notified of closures to pubic land?	Signage will be located in and around the park. In addition, notifications will be posted on the DC Water's Soapstone Valley Sewer Rehabilitation Project website, as well as the National Park Service's Rock Creek Park website.
	Seriously consider input and recommendations from the ANCs.	Comment noted.
Trenchless Alternative (Components)	Detail the proposed work at MS4 Outfall F-140 including duration, tree impacts, and closures.	The duration of the work will be determined by the project contractor in consultation with DC Water. The anticipated tree impacts are shown in Figure 5, sheet 2 of 3, in Appendix B.

	Explain why DC Water proposes to rehabilitate rather than replace a sewer crossing near M-9766 and M-9767 as recommended in the 2011 Sewer Assessment.	The pipe between MH 9766 and MH 9768 was previously rehabilitated and the CCTV inspection showed it is in good condition.
	Can the public alley be used as a walking path and an alternate access path to the Outfall F-117 area?	Heavy vehicular access is required for stream work associated with constructing Outfall F-117 and the access protection area. The public alley for access is not a practical alternative to the use of the access paths and would not reduce the size of the LODs and associated park impacts.
	Provide more details on the Albemarle Street Regrading Area.	Information will be provided to the public through ANC meetings, public meetings, and DC Water's website.
	Does DDOT support the Trenchless Alternative?	Comment noted.
	Does this project include the repair of DOEE's 9 step pool stormwater conveyance or just 2 new pools?	The proposed project includes installing two step pools for stability and energy dissipation where the F-140 outfall enters NPS property. The step pools upstream of those are managed by DOEE.
	Remove the Audubon pipe lining from this project and pursue separately with specific community involvement.	DC Water will have specific community involvement for the work on Audubon Terrace NW before construction.
	Can the sewer asset be protected by concrete or steel enclosures with landscaping around them?	Some of the pipe crossings are already encased in concrete. Long-term stability of these pipes requires grade control and bank protection to prevent their exposure by erosional forces acting on the stream bed and banks. Landscaping is proposed along the stream banks and adjacent floodplain for long-term stability.
	Reduce the number of and the width of all access paths.	The access paths widths are the minimum required for the type of vehicle necessary to construct the project. The current path orientation has been designed to maximize efficiency and minimize access paths.
	Reduce the number of Heavy Equipment (HE) paths along Audubon Terrace from 3 to 1 or 2. Consolidate to one path at 29th and Audubon and connect to other HE paths near the Creek.	The number of access paths are the minimum required for the type of vehicle necessary to construct the project. The current path orientation was designed to maximize efficiency and minimize access paths. There is no solid ground near the creek that would support the weight of the equipment trucks.
	Replace the HE path at the NW end of Audubon Terrace with a path at Albemarle Street NW (at the entrance to the Soapstone Trail) which would require minor grading of a short stretch of the trail.	Due to the steep grade around F-117 and Asset Protection Site 1 the proposed change would increase project duration, cost and impact. The access to this area would require severe grading or the addition of several hundred feet of HE path to access a more gradual slope close to the NW end of Audubon Terrace.

	Provide more details to explain why DC Water does not propose to reline 3 pipe segments in Asset Protection Site 1, as well as long-term plans for these pipes.	Comment noted. These segments do not require repair or rehabilitation.
Project Support	Support that the sewer problems are finally being addressed.	Comment noted.
	Support for Alternative 2: Trenchless Alternative	Comment noted.
Proposed Edits to EA Text and Graphics	The southern NPS boundary and nearby manhole was not included on the map in Appendix B, Sheet 1.	All project manholes are shown on Figure 2, sheets 1 through 3.
	Is there an overlay map that shows the health of the removed trees?	As stated in the EA on Page 26, "Appendix B - Figure 6 depicts the range of health ratings for all trees" that are proposed to be removed for the preferred alternative.
	Update the DDOT Tree policy and its implications.	Comment noted; see errata.
	Revise "Sheet 4 of 3" in Appendix B, Fig 3 (PDF 9 of 22)	Comment noted; see errata.
	Revise maps in Appendix B to reflect 2015 DC Water pipe rehabilitations.	Comment noted; see errata.
	Reconcile how the EA addresses sewer rehabilitation components occurring outside of NPS property.	The EA provides information about all sewer rehabilitation that is occurring within the project area.
	Identify the correct NPS boundary and use it consistency on all mapping.	Comment noted. Boundary shown in the mapping within Appendix B has been verified as accurate.
	Broad Branch Road is not a boundary of Soapstone Valley Park because there is a gap between the Park and the roadway.	Comment noted. NPS property boundary does not extend into this region. Property near Broad Branch Road is owned by DDOT and private property owners. However, this area is generally referred to as a portion of Soapstone Valley Park because it functions as public parkland. The National Park Service maintains the trail in this area.
	Reconcile the EA text with Appendix E regarding the linear feet of sanitary sewer pipe to be rehabilitated	Comment noted. Appendix E was prepared at an earlier phase of the project design process. As the design was refined, the project's dimensions changed. The EA reflects the current length of proposed sanitary sewer pipe rehabilitation.
	Reconcile the CIPP lining sewer segments on Public Meeting Slide 30, Slide 34, and Appendix B, Figure 2, Sheet 1 of 3. IS DC Water relining the Albemarle Street segments?	Comment noted; see errata.
	EA maps omit the Windom Place trail segments.	Please see map titled "NPS Trails Vicinity of Soapstone Valley Park" in errata, which shows official NPS trails, including the Windom Place trail segment.

	The Purpose and Need of the project includes maintaining the hydraulic capacity of the sewer system; however, the Affected Environment and Environmental Consequences of hydraulic capacity is not address throughout the EA.	The Trenchless Alternative (the preferred alternative) would maintain the hydraulic capacity of the sanitary sewer system.
	Detailed information from the March 15, 2011 Sewer Assessment Report should be incorporated into the project design and referenced in this EA.	The 2011 Sewer Assessment Report was conducted by DC Water to determine the condition of the sewers in the Soapstone Valley Park area. The report can be found online at the following location: https://www.dcwater.com/sites/default/files/project/documents/soapstone_delivered.pdf.
	Differentiate between work done inside and outside of the NPS boundary of Soapstone Valley Park. Do not include work outside of the Park boundary in the EA.	See Figure 1 in the Environmental Assessment.
	The project would rehabilitate 10" and 15" pipes as well as 18" pipes.	The bulk of the pipes to be rehabilitated are 18" pipes (approximately 4,425 linear feet of 18" VCP). The remaining 1,775 linear feet is comprised of 10" and 15" pipes. All pipes would be rehabilitates using CIPP technologies.
	EA omits discussion of stormwater outfalls south and immediately north of Albemarle.	The EA discusses Outfall F-117 and Outfall F-140, which are the two outfalls identified as needing repair in National Pollutant Discharge Elimination System (NPDES) Permit No. DC0000221. The discussion of additional outfalls is beyond the scope of the proposed project.
	Add the 2018 hydrology and hydraulics assessment to the bibliography	Comment noted; see errata.
	Explicitly state worst-case impact scenarios and identify areas where impacts could be reduced in final design and/or construction.	The Environmental Assessment evaluates impacts for project alternatives relating to the sewer. Information on certain stormwater outfalls, which are being repaired to meet the requirements of the National Pollution Discharge Elimination System's Municipal Separate Storm Sewer System permit for the District of Columbia, is also included in the Environmental Assessment.
	Identify examples of Heavy Equipment (HE).	Specific heavy equipment would be determined by the contractor and approved by DC Water prior to the start of construction.
	Include a list of the 29 defective manholes to be repaired and summarize defects, including M-9787.	Defects in manholes were summarized in Chapter 1. Manholes to be rehabilitated are depicted on Figure 2: Alternative 2 Trenchless Alternative.
	EA Figures show Heavy Equipment paths up to 60 feet wide, which is much wider that the text asserts.	HE paths must be able to accommodate turning radiuses of large vehicles. In all other areas, HE paths were kept to a width of approximately 20-ft.
	How will DC Water monitor actual conditions of the CIPP pipes? Discuss post-construction sewer system monitoring.	DC Water routinely evaluates their system using CCTV.

	Project elements that require work outside of the park do not require NPS approval.	Comment noted.
	Provide more details on the Soapstone Valley sewer system including feeder sub-sewersheds.	Comment noted. This is beyond the purpose and scope of this project. As stated in the EA on Page 2, the Soapstone Valley sewer system within the project area includes approximately 6,200 linear feet (LF) of sanitary sewer pipes, much of which is defective, 29 defective manholes, and six exposed stream crossings. Information regarding feeder sub-sewersheds is beyond the scope of this project.
	Provide renderings of various years post-construction.	This is beyond the scope of the EA.
	Include visual depictions of all of the problems and solutions for project components.	This is beyond the scope of the EA.
	Include viewshed renderings from the perspective of nearby houses and apartment homes.	This is beyond the scope of the EA.
	Provide more information about a sewer manhole and associated pipe on the northeast corner of the Van Ness North Coop. property.	Manhole M-9759 is associated with sewage flow from structures to include The Van Ness North building. It is located on private property.
General Questions/ Concerns for DC Water	DC Water should look into pedestrian/biker links between Soapstone and Rock Creek as well as turning Broad Branch into a one-way street.	Comment noted. This is beyond the purpose and scope of this project.
	Take immediate action to correct the flooding and stormwater management at Albemarle and 32nd Streets NW.	Stormwater catch basins will be installed along Albermarle Street to help alleviate stormwater stresses in the area.
	What are the project costs?	Once final design is completed, construction costs will be reevaluated.
	Share the details of the procurement process for selecting consultant firms for construction.	Refer to the Procurement Manual located on DC Water's website: https://www.dcwater.com/procurement-manual.
	Provide more information on governmental agency coordination other than NPS.	Chapter 5 provides a summary of further coordination with varies local and federal agencies.
	Share dissents and challenges on the preferred alternative with elected officials.	Comment noted.
	Will the final design documents be released to the public/ANC?	DC Water will work directly with the ANCs to provide project updates, and information will be primarily disseminated through ANCs.
	The Audubon Terrace roadway is in need of repair and cannot support increased HE traffic.	DC Water will coordinate with DDOT. The contractor will walk the project area in advance of construction and will evaluate ingress and egress points at that time.
	Consider rehabilitating adjacent sewer pipes for efficiency.	Comment noted. This is beyond the purpose and scope of this project.

	What provision of the National Environmental Policy Act (NEPA) does NPS believe requires NPS to prevent free sharing of information by DC Water with stakeholders until after the 59-day Public Comment Period plus the month or months thereafter until NPS releases decisional documents	According to the federal Council on Environmental Quality, NEPA ensures agencies consider the significant environmental consequences of their proposed actions and inform the public about their decision making. As a matter of practice, NPS provides information to the public through the Environmental Assessment, through the project website and through public meetings. This helps ensure that the same information available to all parties at all times, and that no one party has information that is not available to all.
	Compare the long-term, worst case impacts of the No Action alternative with impacts during the construction of the Trenchless Alternative for both the sanitary and stormwater systems.	It is impossible to assume what the worst-case scenario would be. However, the No Action Alternative in the EA provides a description of the current conditions and where those conditions are trending. The pipes need to be repaired: there is sanitary sewer pipe that is over 100 years old, the pipe has exceeded its design life, and CCTV inspection shows structural defects. Additionally, stormwater outfalls must be repaired as required by the EPA to meet the requirements of the National Pollution Discharge Elimination System's Municipal Separate Storm Sewer System permit for the District of Columbia, as discussed in the EA.
	Provide mapping and additional information on the sanitary sewer flow rates before and after construction.	Comment noted. This is beyond the purpose and scope of this project.
	Provide mapping and additional information on the stormwater flow rates from MS4 Outfalls including land use, environmental, and regulatory factors.	Comment noted. This is beyond the purpose and scope of this project.
	How may feet of CIPP installed within NPS and DDOT property?	As stated in the EA on Page 4, approximately 6,200 linear feet of pipe would be rehabilitated using Cured-in-Place Pipe (CIPP) on NPS and DDOT property. Approximately 2,050 LF of this pipe is located on DDOT property and the remainder is within NPS park boundaries.
	Is asset protection or CIPP more important when considering the worst-case sanitary sewer release? Could asset protection be accomplished alone with narrower access paths than if combined with CIPP?	Both components of the repair and rehabilitation are required to provide long-term improvements to the sewer system in this area. The asset protection design provides external protection for the pipes and manholes from stream erosion. The CIPP work creates a new pipe within the existing host pipe, providing the needed internal protection.
	Has DC Water inspected pipes upstream of M-9787?	Yes. This is beyond the purpose and scope of this project.
	Provide lessons and other learned information from other DC Water projects that daylight storm sewers.	DC Water's purpose is to provide water and sewer services and does not routinely take place in daylighting and stream restoration.

General Questions/ Concerns for NPS	Does NPS have any recommendations on paving strategies near the park? Is there anything that nearby property owners need to be aware of when paving near NPS property.	Comment noted. Paving required to repair roads outside of park boundaries will be completed by the general contractor and their subconsultants following all requirements of DDOT.

Appendix D: ESA Section 7 Consultation Letters

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
Phone: (410) 573-4599 Fax: (410) 266-9127
http://www.fws.gov/chesapeakebay/
http://www.fws.gov/chesapeakebay/endsppweb/ProjectReview/Index.html

In Reply Refer To:
Consultation Code: 05E2CB00-2018-SLI-1749
Event Code: 05E2CB00-2018-E-03848
Project Name: Soapstone Valley Sewer Rehabilitation

August 17, 2018

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
(410) 573-4599

Project Summary

Consultation Code: 05E2CB00-2018-SLI-1749

Event Code: 05E2CB00-2018-E-03848

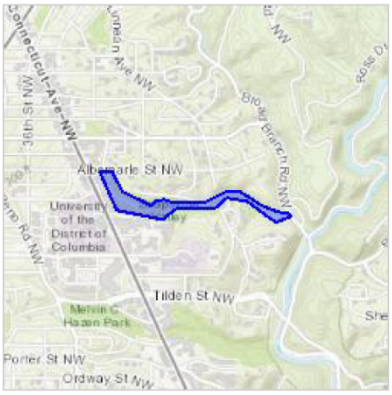
Project Name: Soapstone Valley Sewer Rehabilitation

Project Type: WASTEWATER PIPELINE

Project Description: DC Water is proposing a Sewer Rehabilitation Project in Soapstone Valley Park

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/38.94635966766518N77.06307540251555W



Counties: District of Columbia, DC

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Crustaceans

NAME	STATUS
Hay's Spring Amphipod *Stygobromus hayi* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8410	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

REFUGE INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

Wetlands

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

RIVERINE

- R3UBH

Appendix E: Errata

The following changes have been made to the *Soapstone Valley Sewer Rehabilitation Environmental Assessment* (May 2019) Finding of No Significant Impact (FONSI) to correct minor statements of fact and update information. The original text is shown below in strikethrough followed by the replacement text in underline.

Environmental Assessment

IMPACT ON VEGETATION Impacts of Alternative 2: Trenchless Alternative

TABLE 8: TREES REMOVED ON DDOT PROPERTY FOR ALTERNATIVE 2	
Tree Size (DBH)	**Quantity**
Street Trees	
2 – 6 inches	2
6.1 inches and greater	0
Non-Special Trees	
2 – ~~17.4~~ inches	~~98~~
Special Trees	
1~~7.5~~ inches and greater	~~29~~
Total	**129**

TABLE 8: TREES REMOVED ON DDOT PROPERTY FOR ALTERNATIVE 2	
Tree Size (DBH)	**Quantity**
Street Trees	
2 – 6 inches	2
6.1 inches and greater	0
Non-Special Trees	
2 – 14 inches	91
Special Trees	
14.01 – 31.84 inches and greater	30
Heritage Trees	
31.85 inches and greater	6
Total	**129**

IMPACT ON VEGETATION Impacts of Alternative 2: Trenchless Alternative

For trees outside of NPS property, DDOT-UFA requires a Public Space Permit for the removal or disturbance of a street tree, as well as a Special Tree Removal Permit for the removal or disturbance of a special tree or heritage tree. Mitigation for these potential impacts could include paying into the Tree Fund a tree replacement fee of $~~3~~5 per inch of circumference of each special tree or heritage tree to be removed.

For trees outside of NPS property, DDOT-UFA requires a Public Space Permit for the removal or disturbance of a street tree, as well as a Special Tree Removal Permit for the removal or disturbance of a special tree or heritage tree. Mitigation for these potential impacts could include paying into the Tree Fund a tree replacement fee of $55 per inch of circumference of each special tree or heritage tree to be removed.

APPENDIX B Figure 3

Delete Sheet 4 of 4

APPENDIX E Page 28 – new text added

Summary of Floodplain Impacts
Rehabilitation of the Soapstone Valley Park sewer system would result in both short-term and long-term impacts to the floodplain due to the proposed asset protection and outfall repair and rehabilitation occurring predominantly within the floodplain **(see Table 5.3-1)**. However, proposed designs for Sites 1-4 would result in maintenance or uplift of floodplain function, specifically related to floodplain connectivity.

The modifications to the stream channel and the left-bank floodplain area at the upper end of the project reach will raise the flood elevation in the floodplain area. However, raising the local flood elevation will not increase risk to life/health or put any infrastructure at risk.

APPENDIX E Title Page

~~Concurred:~~

Certification of Technical Adequacy and Servicewide Consistency:

APPENDIX E Footer

~~May 2018~~

February 2020

Appendix F: NHPA Section 106 MOA