



FINDING OF NO SIGNIFICANT IMPACT

City of Cumberland CSO Pipeline Installation Environmental Assessment Cumberland, Maryland

An environmental assessment (EA) was prepared that evaluated the impacts of the installation of a new 78-inch combined sewer overflow (CSO) pipeline along and adjacent to the last approximately 2.65 miles of the Chesapeake and Ohio Canal National Historical Park (C&O Canal NHP or the Park). The purpose of this project is to provide a means to transport a greater capacity of combined sewage and stormwater to the City of Cumberland's water reclamation facility. A Consent Decree was issued by the Maryland Department of the Environment (MDE) in 2001, requiring the City of Cumberland to eliminate the CSOs per the Environmental Protection Agency's (EPA) 1994 CSO Control Policy by no later than October 2023. The Mill Race pipeline project serves to complete the capture of overflows from the Mill Race area, the second largest overflow location in the City of Cumberland; two additional overflows at Oldtown Road and Elizabeth Street will also be captured by this pipeline. The goal of the EPA and MDE regulations is to reduce nutrient and pollutant loading into streams and rivers. These regulatory mandates have been enacted to reduce the occurrence of CSO events and therefore provide significant improvements to the water quality of the North Branch which affects both aquatic organisms and recreational users.

The Federal action that that will be undertaken by the NPS is the issuance of a Special Use Permit for the construction of the pipeline under NPS property, and a Right-of-Way permit to authorize use and occupancy of the facility within the Park. The decision considers impacts to the Park resources as expressed in statute, including the Park's enabling legislation, regulation, and policy.

The EA was prepared in accordance with the National Environmental Policy Act of 1969 (NEPA; 42 United States Code [USC] 4321 et seq.) and its implementing regulations (40 Code of Federal Regulations [CFR] 1500-1508.9); the Department of the Interior NEPA regulations (43 CFR Part 46); and with NPS Director's Order 12: *Conservation Planning, Environmental Impact Analysis, and Decision-making* (2011) and its accompanying handbook (2015). The statements and conclusion reached in this finding of no significant impact (FONSI) are based on the 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

The EA analyzed two alternatives (no-action alternative and the proposed action/preferred alternative) and the associated impacts on the environment. Based on the analysis presented in the EA, the NPS has selected the proposed alternative/preferred alternative for implementation.

The selected alternative (see page 17 of the EA) will include the installation of the CSO pipeline within and adjacent to the final 2.65 miles of the park in Cumberland, Maryland. The majority of trenching will take place off NPS property, the portion of the project area within the C&O Canal NHP is located

between Canal Place and Riverside Park in Allegany County, Maryland. The NPS will issue a Special Use Permit to the City of Cumberland for construction of the pipeline. The pipeline will mostly lie adjacent to the park. The majority of the line placement within the park lies to the west of the towpath from the approximate location of Bowen Street to the canal terminus. Construction for the majority of the pipeline would involve the excavation of a trench at an engineered gradient. The pipeline would be installed within the trench, then the excavated area would be backfilled with fill to reestablish the pre-existing grades. In some areas where trench installation is infeasible, including through the Army Corps of Engineer's levee and the towpath near the canal terminus, the pipeline will be installed via boring. The construction of the levee and the other flood control measures at the Western Terminus have destroyed the integrity of feel and look of the C&O Canal. As this section no longer contributes as an authentic representation of the Park, disturbance on this section of the C&O Canal NHP Historic District and the towpath would not be considered an impact to historic resources. The project also includes the construction of eight aboveground ventilation structures (i.e., new manhole with short ventilation stack) on NPS property that will be designed and colored to be compatible with historic materials.

RATIONALE FOR DECISION

The NPS is willing to permit the City of Cumberland's request to construct this infrastructure partially on NPS property because it will allow the City to meet the EPA and MDE mandates and regulations while providing water quality benefits to the North Branch of the Potomac River. The alignment of the proposed pipeline has been modified through several iterations in order to avoid or minimize impacts to the existing natural, environmental, historic, archeological, and Park user resources. Although the project will install modern, aboveground ventilation structures within the park, the project as designed will not adversely affect historic properties, cultural resources, or the environment.

MITIGATION MEASURES

The NPS places a strong emphasis on avoiding, minimizing, and mitigating potentially adverse impacts to affected resources, whether under the jurisdiction of the NPS or as a result of an NPS decision. To help ensure the protection of cultural and natural resources and the quality of the visitor experience, the NPS will implement mitigation measures to avoid and/or minimize impacts.

The selected alternative incorporates the mitigation measures listed in Appendix A of this document. These mitigation measures will be included as conditions in the Special Use Permit issued to the City of Cumberland for construction and may in part be incorporated into the Right-of-Way Permit.

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As documented on page 12 of the EA, the selected alternative has the potential for adverse impacts on wetlands, vegetation, historic structures, cultural landscapes, and visitor use and experience; however, no significant adverse impacts were identified, as defined in 40 CFR §1508.27.

The project area within the park includes approximately 3.51 acres of wetlands, 0.36 acres of which would be temporarily affected by the selected alternative. These wetlands will be temporarily impacted during installation of the pipeline; however, the landscape will be regraded upon installation and wetlands will be restored on site. Additionally, per NPS Director's Order 77-1 *Wetland Protection*, a Wetland Statement of Findings has been developed and the City will undertake wetland restoration in an adjacent area of the park. This restoration plan has been approved by NPS, MDE, and the Army Corps of Engineers. Approximately 1.02 acres of wetlands will be restored as mitigation for the temporary wetland impacts. This Statement of Findings is appended to this document.

The selected alternative will result in the removal of trees and shrubs throughout approximately 3.5 acres of the park. Although some areas of vegetation clearing will remain open after the project is complete, all areas will be reseeded with a native grass and forb seed mix. Cleared sections of the Park not needed for right-of-way maintenance will be replanted with native tree and shrub species. Planting of trees in

adjacent areas outside of the right-of-way will occur to account for loss in forested vegetation, with a no net loss of forested acreage.

The project area for the selected alternative includes numerous historic structures. These structures are detailed in the EA within Chapter 3: Affected Environment. The design of the pipeline alignment specifically avoids physical impacts to the historic fabric of structures within the Park and the C&O Canal NHP Historic District. The project's physical impacts to the towpath and basin are limited to the Western Terminus parcel that was heavily modified by the flood control measures in the mid-20th century. In this section of the Park, the towpath and canal basin have lost their historic integrity in terms of look and feel and no longer are contributing historical features to the Park and the pipeline disturbance will not be considered an adverse effect. All other historic structures will be avoided by construction in the selected alternative.

In the selected alternative, eight aboveground manholes and vents will be installed within the Park. These comprise modern additions to the cultural landscape; however, the design, texture, material, and color of these structures will be determined in consideration of the cultural landscape. These structures will have minor adverse impacts on the cultural landscape, as will the removal of vegetation along sections of the pipeline. The majority of the proposed project is underground, and the topography would be restored to its preconstruction elevation. Vegetation clearing and maintenance will result in vegetative changes to the historic landscape. Overall, some elements and features of the cultural landscape will be impacted by the proposed action.

Visitor use and experience in the Cumberland area of the Park will be temporarily affected by the selected alternative. During construction, sections of the Park adjacent to the towpath will be closed to visitors; however, the towpath will remain open. As necessary, flaggers will be stationed on-site to temporarily exclude visitors to allow for construction vehicle access. Such exclusion will not exceed 15 minutes, at which point the towpath will reopen to maintain towpath continuity. Construction will cause temporary impacts to visitors through noise and visual intrusion. Permanent visual changes will occur from the addition of aboveground ventilation structures; however, the design of these structures will minimize visual impacts. Disturbance to the visitor use and experience will be temporary and would not result in adverse impacts. Following construction, use of the Park within the project area will be reopened. Visitors will also be informed of construction activities by posting information at the towpath and on the C&O Canal website. Visitors will also be routed away from work areas during construction.

Overall, there will be no significant impacts on public health, public safety, or unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the NPS selected alternative will not violate any Federal, State, or local environmental protection law.

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: **TINA CAPPETTA** Digitally signed by TINA CAPPETTA
Date: 2021.01.12 13:37:45 -05'00'

Tina Cappetta
Superintendent
Chesapeake and Ohio Canal National Historical Park
Region 1 – National Capital Area

Date

Approved: *Lisa A Mendelson-Ielmini*

Lisa A. Mendelson-Ielmini
Deputy Area Director
Region 1 – National Capital Area

January 19, 2021

Date

Appendix A Mitigation Measures
Appendix B Non-Impairment Determination
Appendix C Response to Public Comment
Appendix D Wetland Statement of Findings

APPENDIX A: MITIGATION MEASURES

To minimize impacts related to the selected alternative, the NPS will implement mitigation measures whenever feasible. Subject to the final design and approval of plans by relevant agencies, mitigation measures will include, but will not be limited to, the items listed below.

- Tree removal within the NPS property will follow time of year restrictions between April 15 and September 1 to avoid potential impact to bat habitat. The City of Cumberland will work with the NPS to restore forested habitat at a 1:1 ratio on NPS property to account for the spatial extent of trees to be removed for the pipeline installation.
- The removal of vegetation will result in exposed soils during construction, presenting the possibility for erosion at the proposed construction corridor located near the North Branch of the Potomac River and associated tributaries. An erosion and sediment control plan will be prepared and implemented in accordance with *Maryland Erosion and Sediment Control Guidelines for State and Federal Projects* (MDE 2015). The plan will include resource protection measures that conform to *Maryland Standards and Specifications for Erosion and Sediment Control* (MDE 2011) and will be submitted to the MDE Water Management Administration for approval.
- Conditions and Best Management Practices for Working in Non-Tidal Wetlands and Buffers will be strictly adhered to and monitored by MDE inspectors.
- Wetland mitigation will be conducted in accordance with the NPS, MDE, and USACE regulations. A mitigation site has been selected and proposed designs and mitigation actions are detailed in the Wetland Statement of Findings (Appendix D). This plan has been developed in accordance with NPS Director's Order 77-1 and Procedural Manual 77-1: Wetland Protection to ensure that no net loss of wetland functions and values are incurred.
- The City of Cumberland will coordinate efforts with the MD-DNR and MDE regarding mitigation measures, including in-stream construction timing restrictions, such as stream closure periods.
- If vehicles or equipment may cause rutting of the towpath, mitigation measures such as timber matting will be employed.
- Buffers between areas of soil disturbance and waterways will be planned and maintained. Soil erosion best management practices would be used (e.g., sediment traps, erosion check screen filters, silt fences) to prevent the entry of sediment into waterways.
- Where seeding is required, a weed-free native grass and forb seed mix will be obtained and used in accordance with NPS policies and with Park approval. Management techniques will be implemented to foster rapid development of native plant growth.
- To avoid transport of non-native species to terrestrial portions of the study area, all construction vehicles will be washed prior to use on the towpath and only clean and weed-free fill material will be used.
- Adequate drainage will be maintained around historic structures (culverts) to promote stability and preservation.
- Vibration monitors will be installed during excavation and installation of the pipeline in the vicinity of the stop gate and the spillway and wastew weir. The City of Cumberland is coordinating this mitigation with the NPS and MHT and will include specific requirements in the construction documents.

- Archeological monitoring during project excavation is recommended in sections of the terrace in order to ensure the identification of deeply buried prehistoric archeological sites that may be inadvertently discovered. Upon discovery, all work will be halted until a resolution is identified and agreed upon, in consultation with MHT. The City of Cumberland is coordinating this mitigation with the NPS and MHT and will include specific requirements in the construction documents.
- Visitors will be informed of construction activities by posting information at the towpath and C&O Canal website. Visitors will also be routed away from work areas during construction. In the event that any trail closures are necessary, such as brief closures to allow for construction equipment to traverse the towpath, closures will be temporary and last less than 15 minutes. Flaggers will be on-site if any brief closures are necessary.
- Where the use of new, above-grade material is necessary, consideration will be given to the characteristics of the materials utilized and will be compatible with historic materials in terms of design, color, and texture, resulting in a minimal effect to the overall integrity of the cultural landscape. The City of Cumberland will continue consultation with the NPS and MHT regarding design, color, and texture.
- Construction employees will be instructed on the sensitivity of the general environment, and their activity would be monitored.
- Best management practices will be followed to avoid exposure of the terrestrial and aquatic environment to risks, such as fuel spills.
- All environmental protection measures will be clearly stated in the construction details and specifications.

APPENDIX B: NON-IMPAIRMENT DETERMINATION

By enacting the National Park Service (NPS) Organic Act of 1916 (Organic Act), Congress directed the U.S. 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” (54 U.S.C. 100101). 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” (54 USC 100101).

NPS Management Policies 2006, Section 1.4 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 NPS 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 NPS. 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, Section 1.4.3). However, the NPS cannot allow an adverse impact that would constitute impairment of the affected resources and values (NPS 2006, Section 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, Section 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, Section 1.4.5).

This determination on impairment has been prepared for the selected alternative described in this Finding of No Significant Impact. An impairment determination is made for the resource topics of wetlands, vegetation, historic structures, and cultural landscapes. These resources are considered fundamental to the Chesapeake and Ohio Canal National Historical Park, and the NPS as a whole. Non-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. This determination on impairment has been prepared for the preferred alternative described in Chapter 2 of the EA. The summary of impacts described below show that the selected alternative does not run counter to the Park's establishing legislation, nor would it inhibit opportunities to see and interpret the historic and cultural resources of the Park.

WETLANDS

The selected alternative will temporarily impact 0.36 acres of wetlands within the park. Upon completion of the project, the ground will be regraded to restore the impacted wetland. Additionally, approximately 1.02 acres of wetland mitigation will occur in a nearby park area. The selective alternative will not result in impairment due to the temporary nature of wetland impacts and the wetland restoration actions that will occur within the park.

VEGETATION

The selected alternative will require approximately 3.5 acres of forest vegetation clearing. Some of this vegetation will be replanted on site with native tree and shrub species. The remaining acreage left open for right-of-way maintenance will be compensated by forest habitat restoration in a nearby area of the

Park. All areas cleared by this project will be reseeded with a native grass and forb seed mix. The selected alternative will not result in impairment because the impacts will be extremely localized to the pipeline corridor and due to the remaining forested acreage of the Park and the forest restoration that will occur after pipeline installation.

HISTORIC STRUCTURES

The selected alternative will result in the pipeline boring through and under the historic towpath and into the basin at the terminus of the park. This section of the park and towpath has been heavily modified, in part from the construction of a levee by the army corps of engineers. The pipeline will bore under the current towpath and will connect to existing infrastructure and a manhole within the terminus basin. All other historic structures will be avoided by construction activities. Because impacts will be avoided, impairment of historic structures will not occur. The selected alternative will not result in impairment of the park historic structures because the orientation of the pipeline had been revised to avoid historic structures including the spillway and wastewer, culvert 241, and stop gate. Similarly, due to the previous disturbance near the canal terminus, the project will not impair the towpath or canal prism.

CULTURAL LANDSCAPE

The selected alternative will result in the addition of eight modern, aboveground ventilation structures located on NPS property. While these structures comprise modern elements, selection of material, color, and texture of the structures will be done in consideration of the cultural landscape. This section of the Park has also experienced significant modifications from human activity related to urban development, utility infrastructure, and construction of the levee. The selected alternative will not result in impairment of the Park cultural landscape because of the material, texture, and color of the modern aboveground structures and the extent to which the landscape has already been modified by human activity.

CONCLUSION

The NPS has determined that the implementation of the NPS selected alternative will not constitute an impairment of the resources or values of the Chesapeake and Ohio Canal National Historical Park. As described above, implementing the selected alternative is not anticipated to impair resources or values that are essential to the purposes identified in the establishing legislation of the park, key to the natural or cultural integrity of the park, or identified as significant in the park's relevant planning documents. This conclusion is based on consideration of the Park's purpose and significance, a thorough analysis of the environmental impacts described in the EA, the 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*.

APPENDIX C: RESPONSE TO PUBLIC COMMENT

The City of Cumberland CSO Pipeline Installation Environmental Assessment was released for public review and comment between October 1 and October 31, 2020. The EA was available on the Planning, Environment, and Public Comment (PEPC) website at <https://parkplanning.nps.gov/cumberlandcso>.

During the comment period, one correspondence was received. The NPS is required to respond to substantive comments submitted during the public review period for the EA. Substantive comments are those that question, with a reasonable basis, the accuracy of information presented in the EA; question, with a reasonable basis, the adequacy of the environmental analysis; present reasonable alternatives other than those presented in the EA; or cause changes or revisions in the proposal. Substantive comments raise, debate, or question a point of fact or analysis. Comments that merely support or oppose an alternative or that merely agree or disagree with NPS policy are not considered substantive. The correspondence received and the NPS response are listed below.

Comment: In order to install a 78-inch underground pipeline, it will require the removal of trees and vegetation cover and the established right-of-way for the new utility will be required to be maintained to prevent tree and forest cover to become reestablished. Removal of vegetation would result in exposed soils during construction, presenting the possibility of erosion at the proposed construction corridor located near the North Branch and associated tributaries. This will require the removal of approximately 19.5 acres of tree/forest cover, 3.5 acres of which will be on National Park Service property. Mitigation measures propose the city will work with the National Park Service to restore forested habitat at a 1:1 ratio to account for the spatial extent of trees to be removed for pipeline installation. Also disturbed areas would be seeded with a weed-free native grass and forb seed mix which would help stabilize the disturbed soils. This does not communicate if these measures are to mitigate the impacts on the 3.5 acres of NPS property only or the total 19.5 acres of affected land. If not then the city has to present measures for mitigation in order to account for the impact on the remainder 16 acres and that has to be communicated clearly.

Response: The NPS, in its issuance of a Special Use Permit for the construction of the project to the City of Cumberland, will require reforestation on NPS properties to account for forested land lost during pipeline construction and maintenance. The EA analyzed the potential impacts of the project on NPS properties and did not assess potential impacts to other properties.

APPENDIX D: WETLAND STATEMENT OF FINDINGS

City of Cumberland CSO Pipeline Installation Wetland Statement of Findings

NPS Director's Order 77-1: Wetland Protection

Prepared by the City of Cumberland
for
U.S. Department of the Interior
National Park Service
Chesapeake and Ohio Canal National Historical Park

October 2020

Recommended:

JOHN NOEL

Digitally signed by JOHN
NOEL
Date: 2020.12.11
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Acting Superintendent, C&O Canal National Historical Park

Concurred:

FORREST HARVEY

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FORREST HARVEY
Date: 2020.12.14
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Chief, Water Resources Division

Approved:

Lisa A Mendelson Telmini

January 21, 2021

Deputy Area Director, Region 1 – National Capital Area

Acronyms and Abbreviations

BMPs	Best Management Practices
C&O Canal NHP or Park	Chesapeake and Ohio Canal National Historical Park
City	City of Cumberland
CFR	Code of Federal Regulations
CSO	Combined sewer overflow
EA	Environmental Assessment
ENR	Enhanced Nutrient Removal
EO	Executive Order
EPA	Environmental Protection Agency
FONSI	Finding of No Significant Impact
JPA	Joint Permit Application
LOD	Limits-of-disturbance
MDE	Maryland Department of the Environment
NE	New England
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act of 1966
NPS	National Park Service
PEM	Palustrine emergent
PFO	Palustrine forested
PSS	Palustrine scrub-shrub
USACE	U.S. Army Corps of Engineers
WOUS	Waters of the U.S.
WRF	Water Reclamation Facility

1.0 INTRODUCTION

This Wetland Statement of Findings (SOF) describes the alternatives that were evaluated in the Environmental Assessment (EA), characterizes the wetland resources that may be adversely impacted within National Park Service (NPS) managed lands as a result of implementing the preferred alternative, describes adverse impacts that the project would likely have on these resources, and documents the steps that would be taken to avoid, minimize, and offset these impacts.

1.1 Wetlands

Executive Order 11990, “Protection of Wetlands”, issued May 24, 1977, directs all Federal agencies to avoid to the maximum extent possible the long- and short-term impacts associated with the occupancy, destruction, or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative. In the absence of such alternatives, agencies must modify actions to preserve and enhance wetland values and minimize degradation.

To comply with Executive Order 11990 within the context of the agency’s mission, the NPS has developed a set of policies and procedures found in *Procedural Manual #77-1: Wetland Protection* (NPS, 2016). These policies and procedures emphasize:

- 1) Exploring all practical alternatives to building on, or otherwise adversely affecting wetlands;
- 2) Reducing impacts to wetlands whenever possible; and,
- 3) Providing direct compensation or mitigation for any unavoidable wetland impacts by restoring degraded or destroyed wetlands on NPS owned property.

If a preferred alternative results in adverse effects to wetlands, a SOF must be prepared that documents the above steps and presents the rationale for choosing an alternative that would result in impacts to wetland resources. This SOF addresses wetland impacts within the Chesapeake and Ohio Canal National Historical Park (C&O Canal NHP) boundaries that would be affected by the proposed project.

2.0 ALTERNATIVES

The City of Cumberland (City), in cooperation with the NPS, is evaluating the impacts of the installation of a new 78-inch combined sewer overflow (CSO) pipeline along and adjacent to the last approximately 2.65 miles of the C&O Canal NHP, between mile posts 181.8 and 184.5. The portion of the project area within the C&O Canal NHP is located between Canal Place and Riverside Park in Allegany County, Maryland. **Figure 1** shows the location of the project. **Figure 2** identifies the limits of disturbance (LOD) of the project and the boundary of the C&O Canal NHP.

The Project Team has been working with the City of Cumberland for several years to implement various phases of the Project. This project encompasses Phase II, which includes the proposed pipeline carrying the overflows from Mill Race to the City's Water Reclamation Facility (WRF). The pipeline will also collect overflows from the Oldtown Road outfall and Elizabeth Street diversion manholes and convey these flows to the CSO storage facility at the WRF, which is currently under construction. A Preliminary Engineering Report for Phase II was completed in March of 2019.

An EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, and implementing regulations, 40 Code of Federal Regulations (CFR) Parts 1500-1508; NPS Director's Order 12: *Conservation Planning, Environmental Impact Analysis, and Decision-making* (NPS 2011) and the accompanying handbook (NPS 2015). Compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, is being conducted concurrently with the NEPA process. Since the project will impact a National Historical Park, the Archeological Resources Protection Act of 1979 (16 U.S.C. 470aa-mm; 43 CFR 7) requires a permit that will be overseen by the NPS.

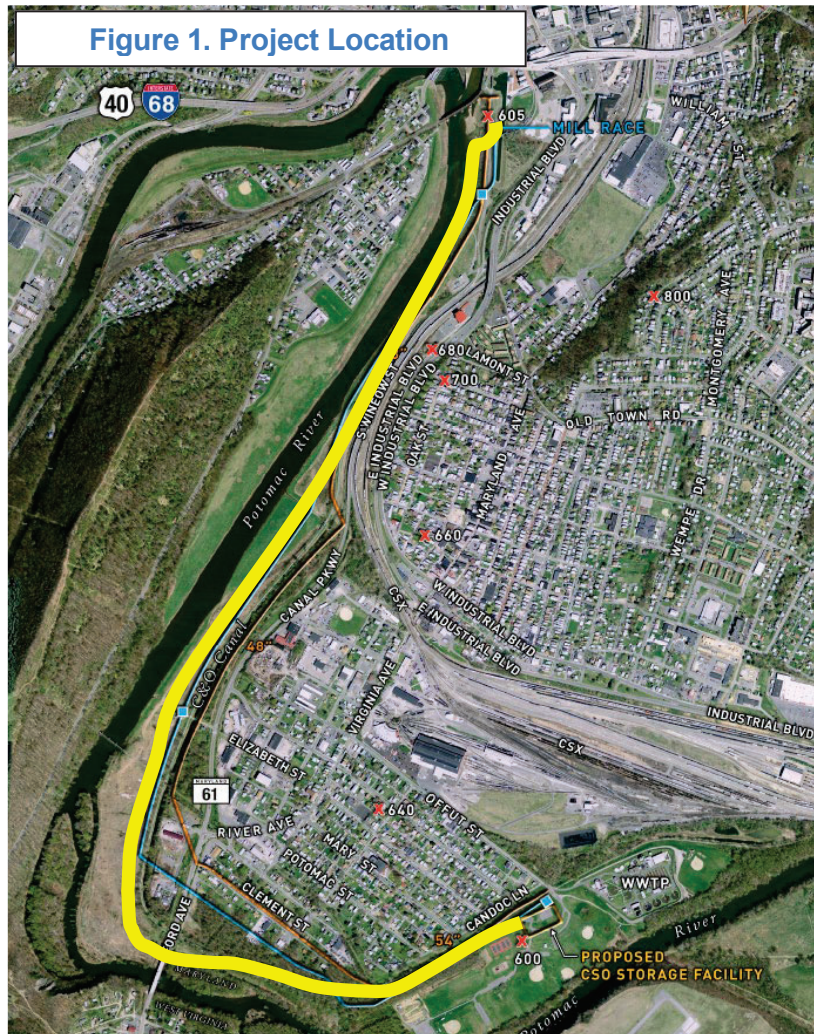


Figure 2. C&O Canal NHP and Project Location

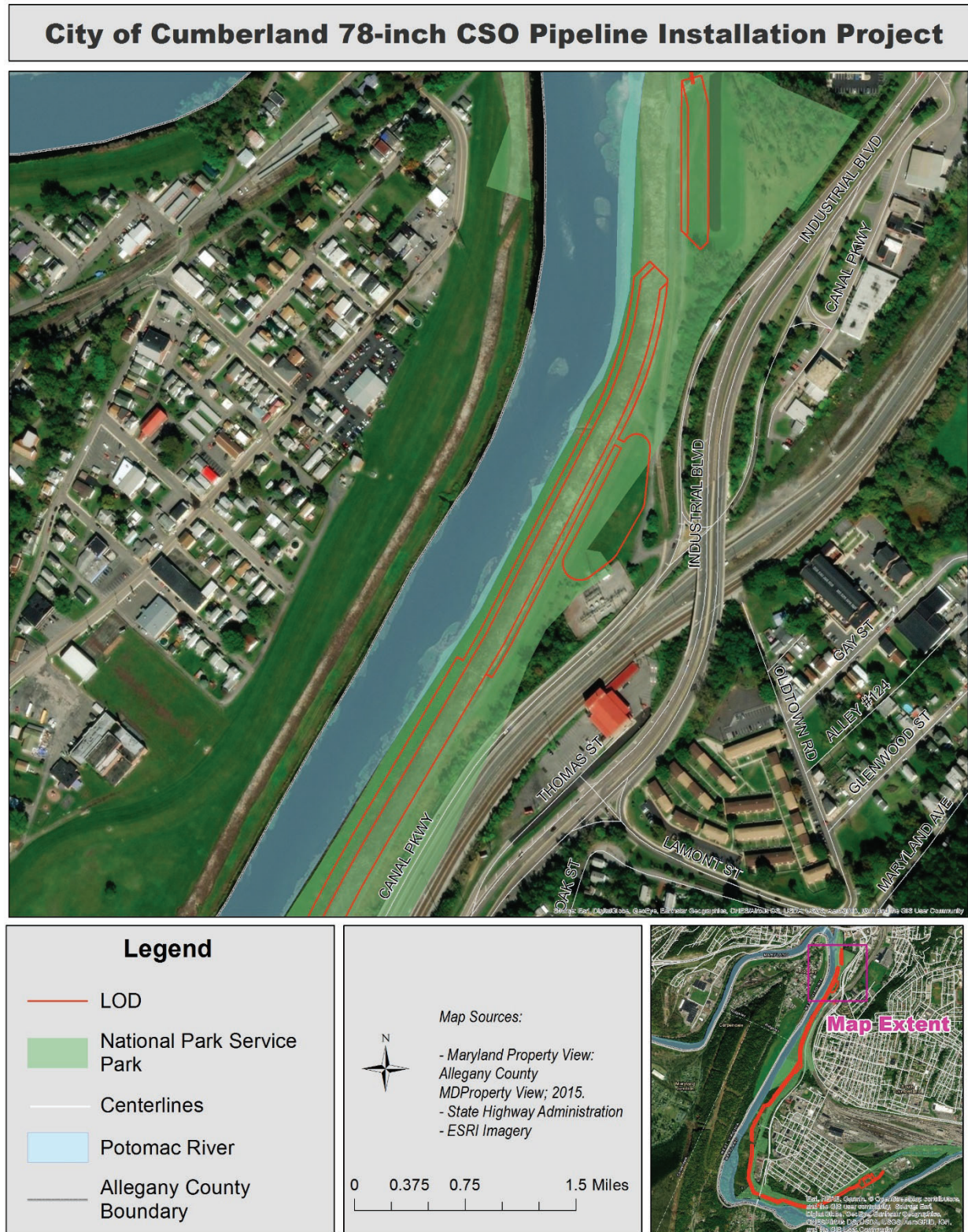


Figure 2 (cont). C&O Canal NHP and Project Location



Figure 2 (cont). C&O Canal NHP and Project Location

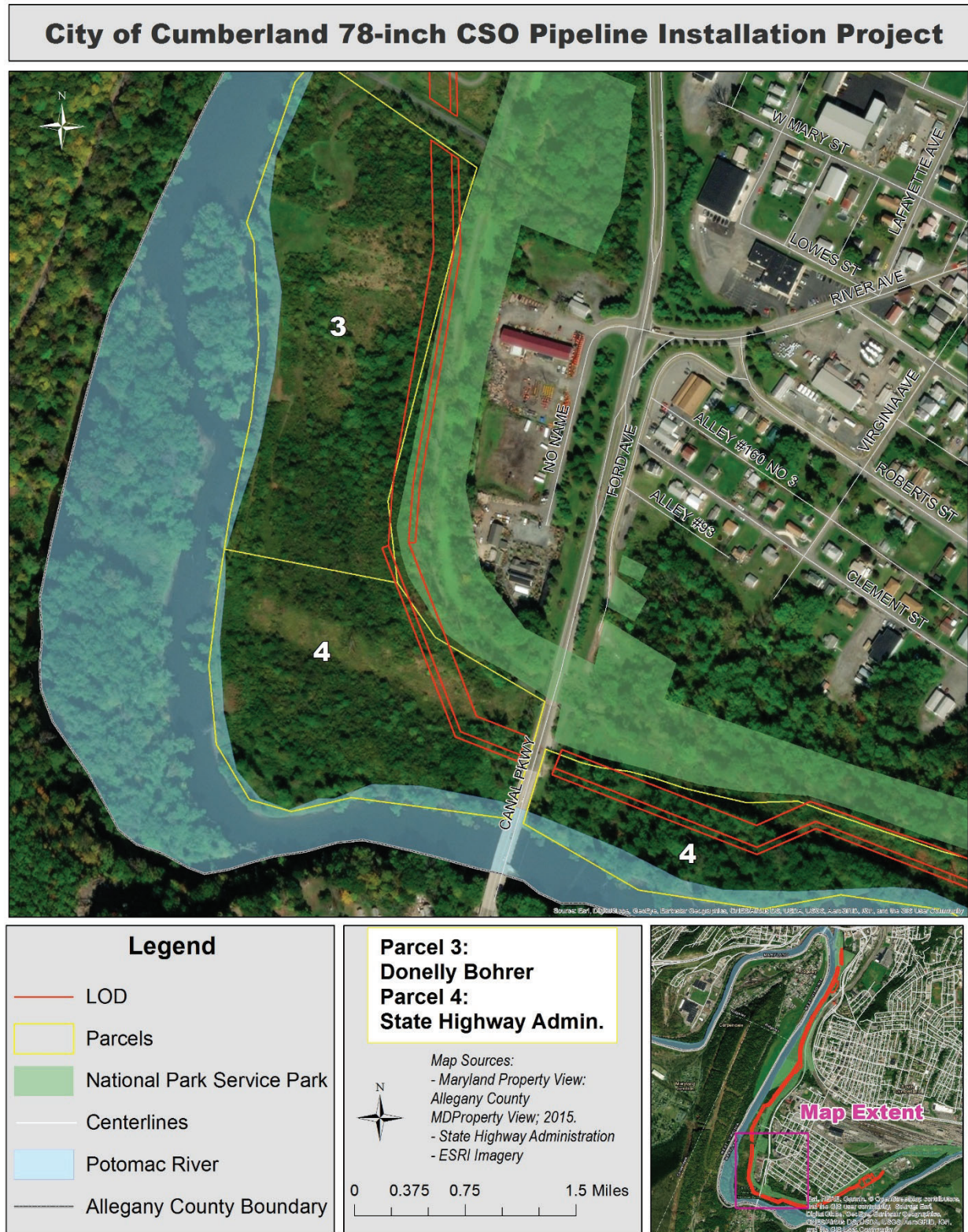


Figure 2 (cont). C&O Canal NHP and Project Location



2.1 Purpose and Need for Action

The purpose of the 78-inch CSO pipeline installation project is to provide a means to transport a greater capacity of combined sewage and stormwater from the Mill Race Screening Facility (which collects flow from several interceptors serving the northern portion of the City) to the City's WRF. A Consent Decree was issued by the Maryland Department of the Environment (MDE) in 2001, requiring the City of Cumberland to eliminate the CSOs per the Environmental Protection Agency's (EPA) 1994 CSO Control Policy by no later than October 2023. The Mill Race pipeline project serves to complete the capture of overflows from the Mill Race area, the second largest overflow location in the City; two additional overflows at Oldtown Road and Elizabeth Street will also be captured by this pipeline.

Since issuance of the EPA CSO Policy in 1994, the City has completed the following projects: Mill Race Screening and Odor Control Facility; Evitts Creek Pumping Station, Force main, and Gravity Sewer Upgrades; Enhanced Nutrient Removal (ENR) Upgrades at the WRF; and multiple additional studies of the system. Phase I of the CSO Storage Facility is currently under construction and additional projects are planned.

2.2 Project Area

The proposed project is linear in nature and spans approximately from Canal Place to the Riverside Park Recreation Complex in the City of Cumberland, Allegany County, Maryland. The current alignment generally runs in between and parallel to the NPS towpath and the North Branch of the Potomac River for the majority of the alignment, from the Mill Race facility at Canal Place to the City of Cumberland WRF near the Riverside Park Recreation Complex. The proposed alignment for the 78-inch pipeline avoids crossing the canal itself but will require one crossing of Canal Parkway and one crossing of the C&O Canal NHP Historic District (MIHP # AL-I-B-086), underneath the existing towpath. The limits of disturbance (LOD) for the installation of the pipeline consists of an 80-foot wide corridor, with bump-outs for staging areas, access points, and areas where a wider construction footprint is necessary.

3.0 ALTERNATIVES CONSIDERED

Two alternatives were chosen for detailed evaluation in the EA: the No-Action Alternative and the Proposed Action. The chapter also describes other alternatives, which consisted of different corridor alignments that were considered but ultimately dismissed during the impact analysis and agency coordination phase. Mitigation measures for the proposed action are also discussed.

3.1 Alternative 1: No-Action Alternative

The No-Action Alternative is analyzed in the NEPA process for the review and comparison of feasible alternatives to the existing baseline conditions. Under the No-Action Alternative, the City of Cumberland would not construct the 78-inch CSO pipeline. The CSO flows from the Mill Race and other outfalls along the proposed alignment would not be intercepted for treatment and would ultimately be discharged directly into the North Branch. The CSO Storage Facility (Phase I), which can store five million gallons of effluent and is currently under construction, was designed to accept the initial anticipated volume of CSO flow generated by the northern portion of the City. Without the proposed pipeline conveyance, these flows will not be transported to the facility. Furthermore, the pipeline itself provides an additional two million gallons of storage capacity.

Additionally, the No-Action Alternative would cause the City to be in violation of the EPA's Combined Sewer Overflow Policy of 1994 and the MDE's Consent Decree requiring that the City eliminate the combined sewer overflows by no later than October 2023.

3.2 Alternative 2: Preferred Alternative

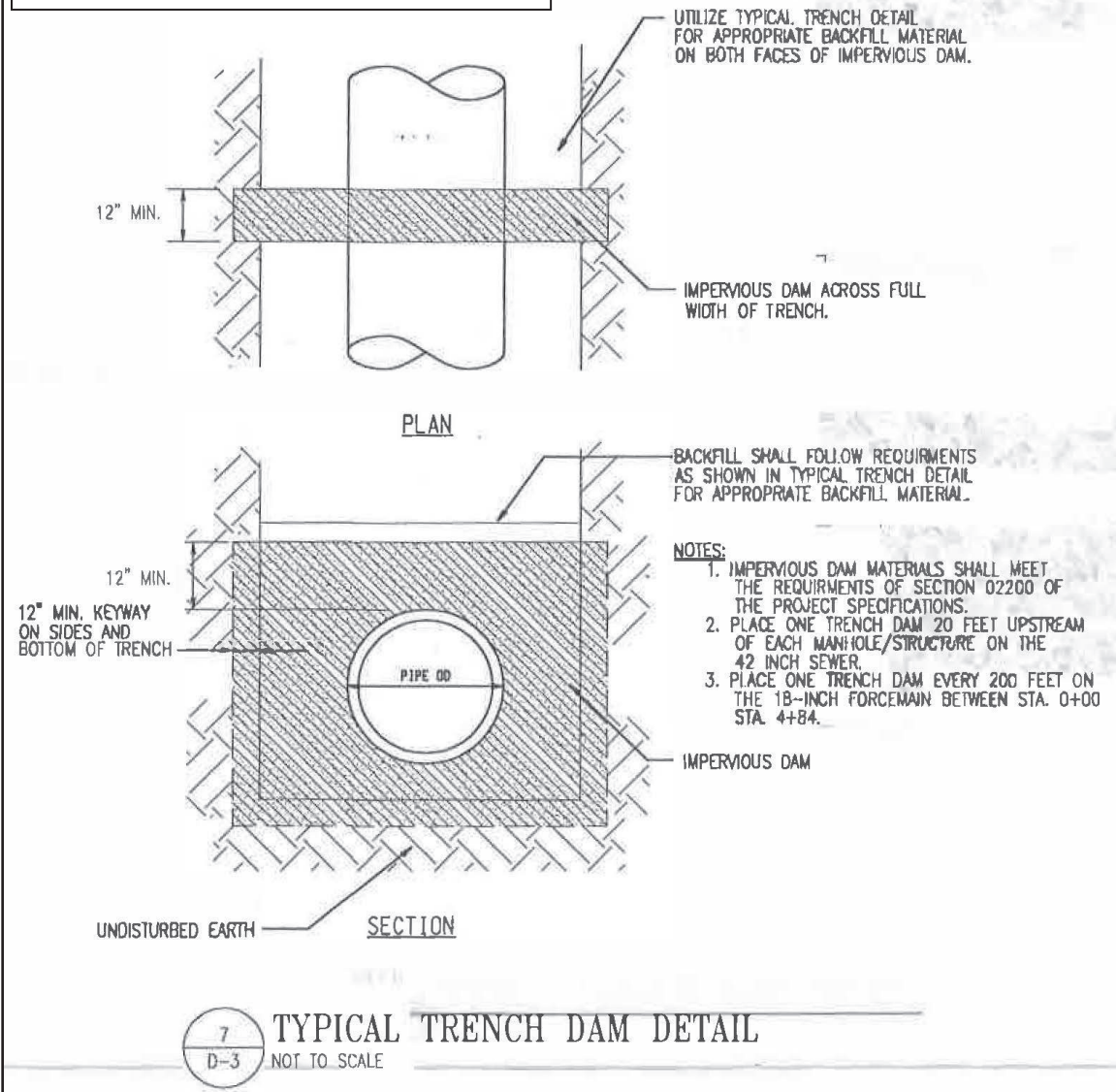
The Preferred Alternative would satisfy the EPA and MDE mandates and regulations while providing water quality benefits to the North Branch of the Potomac River. The alignment of the proposed pipeline has been modified through several iterations in order to avoid and minimize impacts to the existing natural, environmental, historic, archeological, and park user resources. A gravity flow pipeline design was selected to both minimize cost and negate the need for unsightly pumping stations along the proposed corridor within and adjacent to the Park and towpath.

Construction for the majority of the pipeline would involve the excavation of a trench at an engineered gradient. The pipeline would be installed within the trench, and then the excavated area would be backfilled with fill to re-establish the pre-existing grades. **Figure 3** provides a typical detail of a trench dam.

Certain obstacles along the alignment, such as the towpath, Canal Parkway, and railroad crossings, will require the pipeline to be installed within a constructed tunnel to avoid impacts associated with above ground crossings.

The design of the proposed alternative has been shifted to avoid and minimize impacts to wetlands, avoid archeological resources, and avoid impacts to historic structures.

Figure 3. Typical Trench Dam Detail



4.0 DESCRIPTION OF WETLANDS WITHIN THE PROJECT AREA

Wetlands and waterways were delineated according to the 1987 *U.S. Army Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region Version 2.0* (USACE, 2012) and represent those areas that are within the regulatory jurisdiction of the U.S. Army Corps of Engineers (USACE) and the MDE. Also, as stipulated in *Procedural Manual #77-1: Wetland Protection* (NPS, 2012), NPS uses *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al., 1979) as the standard for defining, classifying, and inventorying wetlands. Therefore, wetlands and waterways were also delineated in accordance with the Cowardin System and #77-1 procedures. Under the Cowardin definition, a wetland must have one or more of the following three attributes:

1. At least periodically, the land supports predominantly hydrophytic vegetation (wetland plants);
2. The substrate is predominantly undrained hydric soil; and,
3. The substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season.

Wetland and waterway delineations were conducted during the spring and summer months of 2019 to confirm the presence and extent of any previously documented and undocumented wetlands that are located within the project corridor. Three jurisdictional nontidal wetlands were identified and delineated on NPS property within the project corridor; however, only two of the delineated wetlands are proposed to be temporarily impacted by the project. Wetland boundaries were evaluated and confirmed in the field by representatives with both the MDE and the USACE.

Fieldwork was conducted by Mr. Matthew V. Smith, who has over 20 years of experience with wetland delineation, mitigation, restoration and regulatory permitting. Mr. Smith is the project manager for the environmental aspects of the project.

4.1 Affected Wetlands

Wetlands that intersected the project corridor were delineated, including the portions of the wetlands that extend beyond the project corridor. Eight non-tidal palustrine wetlands, encompassing 9.59 acres, were delineated; three of which, encompassing 3.51 acres, are within NPS property (see **Table 1**). Wetlands consisted of palustrine emergent (PEM), palustrine scrub-shrub (PSS), and palustrine forested (PFO) wetlands. Two small non-tidal streams or Waters of the U.S. (WOUS) were identified within the project corridor, both of which originate from pipe outfalls that most likely convey stormwater and intercept groundwater that results in either intermittent or perennial flow. The wetland and WOUS boundaries were inspected and confirmed by representatives with MDE and USACE.

Table 1: Wetlands/WOUS Within the Project Corridor

Wetland and WOUS ID	Cowardin Class	Wetland/WOUS Size (Acres)	Portion within NPS property (Acres)
Wetland A - WA	PEM	0.35	0.35
Wetland B - WB	PEM	0.71	0.62
Wetland C - WC	PSS	0.78	
Wetland D - WD	PEM	0.10	
Wetland E - WE	PFO	2.54	2.54
Wetland F - WF	PEM	0.01	
Wetland G - WG	PFO & PEM	3.71	
Wetland H - WH	PEM	1.39	
WOUS1	n/a	0.05	0.05
WOUS2	n/a	0.02	
Wetland Total		9.59 acres	3.51 acres
WOUS Total		0.07 acres	0.05 acres

4.2 Description of Wetlands on NPS Property

Three vegetated wetlands, or portions thereof, were identified on NPS property. Descriptions of the vegetated wetlands identified on NPS property during the field investigations are presented below.

Vegetated Wetland W-A is classified as a palustrine, emergent, temporarily flooded (PEM1A) wetland. Wetland W-A is located within the actual canal prism of the C&O Canal NHP. Portions of the canal in the immediate upstream proximity of Wetland W-A retains sufficient hydrology to maintain a static water level (see **Table 2**).

Table 2: Characteristics of Vegetated Wetlands W-A

Indicator	Status
Classification	Palustrine, emergent, persistent, temporarily flooded (PEM1A)
Hydrology	Saturation, drainage patterns, water-stained leaves, oxidized rhizospheres
Hydrophytic Vegetation [Dominant Species]	Soft rush, lurid sedge, jewelweed
Hydric Soils	10YR 3/1 with mottles

Vegetated Wetland W-B is classified as a palustrine, emergent, temporarily flooded (PEM1A) wetland. Wetland W-B is a long, narrow wetland that is located parallel to the NPS towpath and is situated along a natural gas pipeline right-of-way. It appears that the installation of the gas pipeline and subsequent soil settlement has created a shallow depression that is sufficient to retain hydrology for hydrophytic vegetation to become dominant (see **Table 3**).



Table 3: Characteristics of Vegetated Wetland W-B

Indicator	Status
Classification	Palustrine, emergent, persistent, temporarily flooded (PEM1A)
Hydrology	Saturation, water-stained leaves, drainage patterns, oxidized rhizospheres
Hydrophytic Vegetation [Dominant Species]	Soft rush, lurid sedge, wool grass, red maple, jewelweed
Hydric Soils	10YR 3/2 with occasional mottles

Vegetated Wetland W-E is a palustrine, forested, broad-leaved deciduous, temporarily flooded (PFO1A) wetland. Wetland W-E is located within the floodplain of the North Branch of the Potomac River and was created as a wetland mitigation site for impacts incurred for the construction of Canal Parkway. The project LOD has been designed in order to avoid any impacts to Wetland W-E (see **Table 4**).

Table 4: Characteristics of Vegetated Wetland W-E

Indicator	Status
Classification	Palustrine, forested, broad-leaved deciduous, temporarily flooded (PFO1A)
Hydrology	High water table, saturation, water-stained leaves, drainage patterns
Hydrophytic Vegetation [Dominant Species]	Red maple, American sycamore, river birch
Hydric Soils	10YR 3/2

4.1.1 Wetland Functions and Values

An assessment of wetland functions and values was conducted as described in the September 1999 supplement to *The Highway Methodology Workbook* (Supplement) by the New England Division of the USACE (USACE, 1999). This methodology is commonly referred to as the “New England (NE) Method.” The NE Method is an expansion of the Highway Methodology (developed by the New England USACE District) and is used to rapidly assess and document principal wetland functions and values for use in mitigation planning. The NE Method uses a descriptive approach to characterize functions and values of wetlands and is typically used for projects that must comply with NEPA. This method was therefore considered appropriate for the City of Cumberland CSO Pipeline Installation project. The data requirements for the NE Method are minimal and require general descriptions of the wetlands. Quantitative techniques for this method are primarily based upon best professional judgement by a consensus of an interdisciplinary team.

Table 5 illustrates the principal functions and values associated with wetlands delineated on NPS property within the project corridor.

Table 5: Principal Functions and Values of Wetlands

Functions and Values	Vegetated Wetland W-A	Vegetated Wetland W B	Vegetated Wetland W E
Functions			
Groundwater Recharge and Discharge	X	X	X
Flood Flow Alteration			X
Fish and Shellfish Habitat			
Sediment/Toxicant Retention	X	X	X
Nutrient Removal	X	X	X
Production Export			
Sediment/Shoreline Stabilization			
Values			
Wildlife Habitat		X	X
Recreation			
Educational/Scientific Value			X
Uniqueness/Heritage	X		
Visual Quality/Aesthetics			
Endangered Species Habitat			
Other			

5.0 PROPOSED IMPACTS TO WETLANDS

Due to the nature and location of the project corridor, minor temporary and conversion impacts to nontidal wetlands are unavoidable. The EA for the project describes and evaluates the two project alternatives, consisting of the No Action Alternative and the Preferred Alternative.

5.1 Alternative 1: No Action Alternative

Under the No Action Alternative, wetlands and WOUS would remain in their current condition. No construction activities would occur; therefore, no permanent or temporary impacts to wetlands or WOUS would be incurred. However, the CSO flows from the Mill Race and other outfalls along the proposed alignment would not be intercepted for treatment and would ultimately be discharged directly into the North Branch of the Potomac River. Additionally, the No Action Alternative would cause the City to be in violation of the EPA's Combined Sewer Overflow Policy of 1994 and the MDE's Consent Decree requiring that the City eliminate the combined sewer overflows by no later than October 2023.

5.2 Alternative 2: Preferred Alternative

The Preferred Alternative would satisfy the EPA and MDE mandates and regulations while providing water quality benefits to the North Branch of the Potomac River. The alignment of the proposed pipeline has been modified through several iterations in order to avoid and minimize impacts to the existing natural, environmental, historic, archeological, and park user resources. Overall, the proposed action provides the greatest minimization and avoidance efforts to vegetated wetlands.

The Preferred Alternative LOD was overlaid with the delineated wetland boundaries in both GIS and CADD. This effort revealed that one vegetated wetland would be temporarily impacted by the Preferred Alternative (see **Table 6**). The wetland and wetland boundaries would be re-established after construction.

Table 6: Wetlands Located Within LOD and on NPS Property

Wetland	Cowardin Classification	Proposed Impacts
W-A	PEM1A	0
W-B	PEM1A	0.36 acres (Temporary)
W-E	PFO1A	0

Vegetation removal and regrading activities near wetlands has the potential to alter hydrologic patterns, such as increasing or decreasing wetland hydrology sources. Therefore, trench dams will be installed along the pipeline installation at critical locations to prevent hydrology from being diverted from the existing wetlands after construction. The proposed project, as designed, would not alter the existing supporting wetland hydrology, including groundwater discharge and surface runoff. As such, proposed activities are not expected to result in short- or long-term changes to wetland hydrology.

6.0 COMPLIANCE

In addition to compliance with NPS Director's Order 77-1, *Wetland Protection*, as discussed in **Section 1.1**, the proposed project is subject to the following regulations.

6.1 Clean Water Act Section 404 and 401

The proposed actions impact waters of the U.S., as defined by the Clean Water Act (CWA), and are therefore subject to review by USACE. Section 404 of the CWA regulates the discharge of dredged or fill material into waters of the U.S.

6.2 National Environmental Policy Act

The Environmental Assessment constitutes the review and analysis of the proposed project to ensure compliance with the National Environmental Policy Act. The Project Team and the NPS have completed the required consultation with the Maryland Historical Trust to ensure that the proposed project is in compliance with Section 106 of the National Historical Preservation Act.

6.3 Endangered Species Act and Maryland Nongame and Endangered Species Conservation Act

The Project Team and the NPS have completed the required consultation with the U.S. Fish and Wildlife Service and Maryland Department of Natural Resources to ensure that the proposed project is in compliance with both the Endangered Species Act and Maryland's Nongame and Endangered Species Conservation Act.

7.0 MITIGATION OF WETLAND IMPACTS

The proposed mitigation site was selected based on several factors. Initially, the project corridor and adjacent properties were evaluated for the location of a suitable mitigation site. Given the constraints of the project, on-site mitigation within the project corridor was determined to be infeasible. Given the jurisdictional authority of the on-site wetlands (NPS and MDE) and varying requirements by NPS and MDE, it was determined that a single mitigation site that met the criteria for all agencies involved was preferable to multiple locations. The NPS requires that any wetland impacts incurred on property owned by NPS shall be mitigated for on NPS-owned property. Therefore, the project team worked with NPS to identify a potential site, located on NPS property, within the same watershed as the impacts, and as close in proximity as possible to the project corridor and the impacts.

The City of Cumberland and the design team worked collaboratively with NPS, MDE, and USACE to identify sensitive resources and priorities within the project corridor and have engaged in an iterative design process to avoid and minimize impacts to NPS wetlands while satisfying the proposed project's purpose and need. The team has worked to achieve a minimal LOD that incorporates only the necessary areas that are required for the pipeline construction, staging areas, and access, while maintaining a positive park visitor experience.

While this wetland SOF primarily discusses and describes the proposed wetland impacts incurred on NPS property, the proposed wetland mitigation site is sufficient to mitigate the wetland impacts for the entire project, thereby satisfying the regulatory requirements for all the agencies involved. The NPS mitigation ratio for temporary PEM impacts is 1:1 and the mitigation ratio as determined by MDE for PFO/PSS conversion impacts is also 1:1. Table 7 provides a breakdown of the proposed wetland impacts and identifies NPS wetland impacts versus total wetland impacts, including the resultant mitigation requirements.

Table 7. Proposed Project Total Wetland Impacts

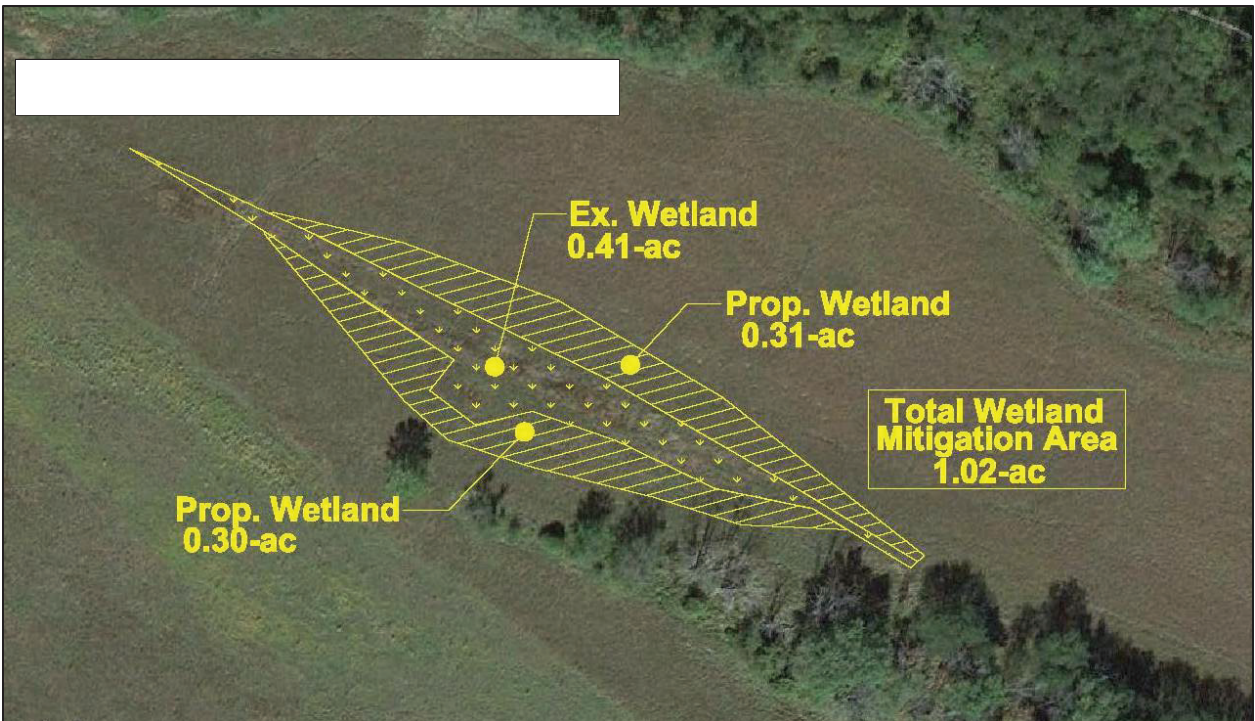
Wetland ID	Wetland Type	Wetland Size (Acres)	Proposed Impact (Acres) & Type	NPS Wetland Impacts	Mitigation Required
Wetland A - WA	PEM	0.35	0.00		
Wetland B - WB	PEM	0.71	0.36 (Temp)	0.36	0.36
Wetland C - WC	PSS	0.78	0.04 (Conv.)		0.04
Wetland D - WD	PEM	0.10	0.05 (Temp.)		
Wetland E - WE	PFO	2.54	0.00		
Wetland F - WF	PEM	0.01	0.00		
Wetland G - WG	PFO	3.27	0.41 (Conv.)		0.41
Wetland G - WG	PEM	0.44	0.14 (Temp.)		
Wetland H - WH	PEM	1.39	0.73 (Temp.)		
Wetland Totals		9.59 acres	1.73 acres	0.36 ac	0.81 ac
Temporary PEM Wetland Impacts			1.27 acres	0.36 ac	
Conversion Wetland Impacts PFO/PSS to PEM			0.45 acres		

Impacts associated with the Preferred Alternative would result in minor temporary impacts to wetland resources located on NPS property. Post-construction, the maintenance of principal functions (i.e., conveyance of surface water and groundwater discharge) and values (i.e., wildlife habitat, uniqueness and heritage, and visual quality and aesthetics) associated with vegetated wetlands in the project corridor will be retained. Proposed mitigation of unavoidable PFO/PSS conversion impacts within the project corridor, including wetland impacts on NPS property, will be satisfied by creating 0.61 acres of PFO wetland and converting 0.41 acres of PEM wetland to PFO wetland for a total of 1.02 acres of total wetland mitigation. The proposed mitigation is greater in size than requirements of MDE, USACE, and the NPS.

A wetland mitigation site located on NPS property is proposed for wetland function and values replacement associated with the conversion of nontidal PFO/PSS wetlands associated with the project. The mitigation site is located within the floodplain of the North Branch of the Potomac River, a few miles downstream of the project, near Oldtown, Maryland. The mitigation site consists of an agricultural field with existing nontidal emergent wetlands in the center of the property. The preliminary mitigation design will include reforestation plantings with native wetland tree species, minor grading for site preparation, planting native seed mix, and implementation of a five-year post-construction performance monitoring plan in accordance with MDE requirements. A Phase I Wetland Mitigation Plan has been prepared and submitted to MDE/USACE as part of the Joint Permit Application (JPA). **Figure 4** provides a visual depiction of the basic conceptual wetland mitigation design.



The Phase II Mitigation Plan will provide details such as site access, sediment and erosion control, grading plan, best management practices (BMPs), detailed planting plan, monitoring and maintenance, and other specifications to fully implement the wetland mitigation establishment.



8.0 CONCLUSION

The City of Cumberland CSO Pipeline Installation project is necessary to adhere to State and Federal mandated improvements to address combined sewer overflows within the City of Cumberland. The overall intent of the project is to capture, store, and treat CSOs in order to improve water quality within the North Branch of the Potomac River watershed. Multiple design and alignment iterations have been evaluated in order to minimize and avoid impacts to environmental, historical, cultural, and other resources.

The proposed impacts to NPS-managed jurisdictional wetlands are temporary and will not affect the existing functions and values of the identified resources. Additionally, wetland mitigation is proposed to offset the anticipated impacts, both temporary and conversion, thus ensuring a no-net loss of wetland acreage, functions, and values within the watershed. The wetland mitigation site will be monitored for a minimum of five years to document and ensure the success of the wetland creation.

9.0 REFERENCES

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10.0 APPENDIX A: Wetland Functions and Values Worksheets

11.0 APPENDIX B: Wetland Data Sheets

12.0 APPENDIX C: Wetland Impact Plates