National Capital Parks - East Washington, DC



### FINDING OF NO SIGNIFICANT IMPACT

District of Columbia Water and Sewer Authority
Long Term Control Plan
Combined Sewer Overflow Control Program

# Anacostia River Projects District of Columbia

In an effort to control combined sewer overflows (CSOs), the District of Columbia Water and Sewer Authority (DC Water) (formerly referred to as DC WASA prior to June 2010), along with the National Park Service (NPS), propose to construct the Anacostia River Projects (ARPs), located entirely within the District of Columbia (District). DC Water is responsible for the construction and funding of the ARPs; however, a large portion of the project facilities will be housed on or beneath NPS lands. Therefore, the NPS and DC Water are co-lead agencies in the development of the environmental assessment (EA) for the ARPs. In addition, the United States Air Force and the United States Navy serve as cooperating agencies for the EA, due to the number of facilities and potential impacts to lands under their jurisdiction within the Joint Base Anacostia Bolling (JBAB). As of October 1, 2010, the Department of Defense combined the Navy's Anacostia and the Air Force's Bolling facilities into the JBAB, including Bolling Air Force Base (BAFB), Naval Support Facility Anacostia, and the Naval Research Lab.

The purposes of the ARPs are (1) to help meet District water quality standards in the Anacostia River by reducing CSOs; (2) to reduce flooding and sewer backups in the northeast portion of the District; and (3) to comply with the requirements of a Consent Decree entered into by DC Water, the District, and the United States, as represented by the Environmental Protection Agency (EPA). Currently, an estimated 1.485 million gallons of CSOs reach the Anacostia River annually. These contribute to the EPA's listing of the water quality of both the Potomac and Anacostia Rivers as impaired under Section 303(d) of the Clean Water Act (CWA). "Impaired waters" is a term used by the EPA to define waters that do not meet state-designated water quality standards. Additionally, deficiencies in the current sewer system have contributed to a history of flooding and sewer backups in sections of the northeast portion of the District during heavy rain events.

In the District, the wastewater sewer system is comprised of both combined sewers and separate sanitary sewers. A combined sewer carries both sewage and runoff from storms. During dry weather conditions and small storm events, sewage from homes and businesses is conveyed to the Blue Plains Advanced Wastewater Treatment Plant (BPAWWTP). The wastewater is treated to remove pollutants before being discharged to the Potomac River. When the capacity of the combined sewer system is exceeded during heavy storm events, the excess flow is discharged into the Anacostia and Potomac rivers and Rock Creek. The excess flow is referred to as CSO, a mixture of sewage and stormwater runoff, which is a source of water quality degradation and a system deficiency requiring correction.

Under the national CSO Policy at Section 402(q) of the CWA, communities such as the District are required to prepare Long Term Control Plans (LTCP) to bring all CSO discharges into compliance with the technology-based and water quality-based requirements. DC Water prepared the LTCP for the District's combined sewer system, and the plan was approved by the District Department of Health (DOH) on August 23, 2003. Subsequently, as a result of an enforcement action by the EPA, DC Water, the District, and the United States entered into a Consent Decree to implement the LTCP. The Consent Decree includes the defined scope and schedule for the facilities included in the LTCP and was entered into the Federal Court on March 23, 2005.

DC Water and the NPS completed an EA that provides an analysis of the environmental consequences of the alternatives considered to control CSOs in the Anacostia River. This EA was prepared in accordance with the National Environmental Policy Act of 1969, as amended (NEPA), its implementing regulations

by the Council on Environmental Quality (40 CFR 1500-1508), and Director's Order 12, Conservation Planning, Environmental Impact Analysis and Decision-Making, and accompanying Handbook.

### SELECTED ALTERNATIVE

Based on the analysis presented in the EA, the NPS selected Alternative B—Implementation of the LTCP--for implementation (the NPS Preferred Alternative). The Selected Alternative will include:

- Approximately 12.9 miles of tunnels up to 23 feet in diameter for the storage and conveyance
  of captured combined sewer and flood relief stormwater flows to the BPAWWTP for
  treatment and discharge;
- Drop shaft facilities for the conveyance of captured flows into the tunnel system;
- Tunnel system overflow facilities at two locations for hydraulic relief of the tunnel system upon reaching storage capacity;
- Diversion chambers and diversion sewers to capture excess combined sewer flow from the
  existing sewer system infrastructure and convey the flow to the drop shaft facilities;
- A Tunnel Dewatering Pumping Station at BPAWWTP designed to dewater the flows stored in the tunnel system within 59 hours after termination of a storm event and to convey the stored flows to treatment facilities; and
- A new Pumping Station at Poplar Point designed to convey flow from the Anacostia Interceptor to the BPT for storage and eventual treatment at BPAWWTP.

Collectively, these facilities are referred to as the ARPs, and they will satisfy the purpose and need of the proposed project. The Selected Alternative will include three major segments: the Blue Plains Tunnel (BPT), the Anacostia River Tunnel (ART), and the Northeast Boundary Tunnel (NEBT). The Selected Alternative is described on pages 31 through 49 of the EA and is summarized below.

The BPT will be approximately 23,600 feet in length, beginning at the BPAWWTP and ending at the Main Pumping Station, located near the intersection of New Jersey Avenue SE and Tingey Street SE, in the southeast part of the District. Approximately 9,700 feet of the tunnel alignment will pass beneath the Potomac and Anacostia Rivers. The proposed tunnel will have a finished inside diameter of 23 feet and the invert of the tunnel will range from approximately 100 to 130 feet below the ground surface. The BPT will have a permanent lining, composed of precast concrete segments connected by bolts and gaskets to create watertight joints. The tunnel will be constructed using a pressurized face tunnel boring machine. A total of five shafts will be constructed from the surface to the tunnel's depth and will be used to both facilitate tunnel construction and to house permanent facilities. Shafts will be located at each end of the tunnel and at intermediate locations along the alignment. Shaft construction will involve slurry walls or ground freezing. In addition to the tunnel and the shafts, the BPT will include an overflow structure at JBAB; four diversion chambers; a junction structure at the Main Pumping Station; and diversion sewers to divert CSOs to the tunnel. The BPT and its associated hydraulic structures will have four general areas of surface disturbance:

- BPAWWTP Facilities This surface disturbance area is on the grounds of BPAWWTP, where
  the BPT will make landfall just south of the BPAWWTP boundary with the Naval Research Lab,
  and will contain the tunnel dewatering pumping station and a new enhanced clarification facility.
- Bolling Air Force Base Overflow and Diversion Facilities This surface disturbance area is located along the bank of the Potomac River within JBAB. A single shaft will be constructed in this area. It will contain combined drop/overflow hydraulic structures that will convey diverted flows from the existing Potomac Outfall Sewers on JBAB into the BPT and serve as one of two overflow points for the tunnel system.
- Poplar Point Pumping Station This surface disturbance area is located at the intersection of South Capitol Street SE, Suitland Parkway SE, and I-295. The western section of this surface disturbance area is located in a paved lot currently used by the District Department of Motor Vehicles (DMV) for commercial drivers license testing. This surface disturbance area will include a diversion chamber for the Main Outfall Sewers, which will be located underground on the DMV lot. The eastern portion of the surface disturbance is located on an undeveloped lot between I-295 and South Capitol Street SE. A single shaft designated as the Poplar Point

Junction Shaft will be located at this site. A new pumping station will also be built 1,000 feet south of the existing Poplar Point Pumping Station. This surface disturbance area will include a diversion chamber for the Anacostia Main Interceptor, which will be located underground at the intersection of Howard Road SE and Suitland Parkway. Flow from the Anacostia Main Interceptor will be diverted to the new Poplar Point Pumping Station. Flows beyond pump station capacity will overflow into the BPT.

Tingey Street Diversion Sewers and Main Pumping Station Diversion Facilities – This surface disturbance area is located at the northern terminus of the BPT where the Main Pumping Station Drop Shaft will be located. The Tingey Street Diversion Sewers will include two diversion chambers, a junction chamber, and diversion sewers. The Main Pumping Station Diversion Facilities will consist of two diversion chambers, a junction chamber, and a tide gate chamber.

The proposed ART will extend approximately 12,600 feet, originating at the Poplar Point Junction Shaft and terminating at the CSO 019 overflow structure. Approximately 9,200 feet of the tunnel will pass beneath the Anacostia River. The proposed tunnel will have a 23-foot finished diameter and will range from 90 to 100 feet below the ground surface. The ART will have a permanent lining composed of precast segments connected by bolts and gaskets. The tunnel will be constructed using a tunnel boring machine. A total of five shafts will be constructed to tunnel depth and will be used to facilitate tunnel construction, as well as house permanent facilities. The ART and its associated hydraulic structures will have five general areas of surface disturbance. Shafts will be located at each end of the tunnel and at two intermediate locations along the alignment, with internal diameters between 50 and 110 feet. In addition to the ART and its associated shafts, three diversion sewers will be constructed to divert CSO volumes directly to the ART. The various facilities are described below, by location, from the southern terminus of the ART to the northern terminus:

- Poplar Point Pumping Station This surface disturbance area, located at the intersection of South Capitol Street SE, Suitland Parkway SE, and I-295, will contain the previously described Poplar Point Junction Shaft and a new pumping station will also be built 1,000 feet south of the existing Poplar Point Pumping Station. This surface disturbance area will also include a diversion chamber for the Anacostia Main Interceptor, which will be located underground at the intersection of Howard Road SE and Suitland Parkway.
- CSO 005 and 007 Diversion Facilities This surface disturbance area, located on the east side of the Anacostia River along Anacostia River Park, will contain a drop shaft that will convey flow from the proposed diversion sewers for CSOs 005 and 007 to the ART. This surface disturbance area will also include the individual diversion chambers for CSOs 005 and 007.
- CSO 018 Diversion Facilities This surface disturbance area, located on the west side of the Anacostia River, south of Barney Circle, will contain a drop shaft that will convey flow from CSO 018 to the ART. This surface disturbance area will also include a diversion chamber and sewer for CSO 018.
- M Street Diversion Facilities This surface disturbance area, located along M Street SE near the 9th Street SE, 12th Street SE, and Water Street SE intersection, will include three diversion chambers, one for each CSO, connected by a series of microtunnels, a doghouse manhole, a drop shaft, and a vortex drop facility. The proposed location for the CSO 015 Diversion Chamber is the intersection of 9<sup>th</sup> and M Streets SE. The proposed location for the CSO 016 Diversion Chamber is the intersection of 12<sup>th</sup> and M Streets SE. The proposed location for the CSO 017 Diversion Chamber is near the intersection of M and 14<sup>th</sup> Streets SE.
- CSO 019 Overflow and Diversion Structures This surface disturbance area is bounded by the Anacostia River to the east, the Eastside Pumping Station and the Northeast Boundary Swirl Facility to the north, and Water Street to the west. The RFK Stadium Access Road and the Anacostia Riverwalk trail run through this area. The proposed facilities at CSO 019 will include:
  - A diversion structure to divert flows up to 1,160 MGD from the Northeast Boundary Trunk Sewer (NEBTS) to the ART. The surface exposure will include removable slabs over three

- tide gates and cast iron covers over a row of stop logs. All other portions of the structure, with the exception of manhole frame and covers, will be below grade.
- 2) Along the NEBTS at the location of the existing tide gates, two rows of cast iron covers will be uncovered and brought to grade along with the installation of some additional manhole frames and covers to house instrumentation.
- 3) An overflow structure, approximately 320 feet in length, will be constructed. The multiple access points along this structure have been carefully coordinated with NPS to be located along the existing road and trail in order to have minimum impact to the surrounding landscape. In addition, the overflow structure will be designed to match the stone wall of the existing seawall along the river.
- 4) Two mining shafts will be constructed in support of the ART and NEBT for construction and operation. The surface treatment of these shafts will include access hatches. The remainder of the structure will be below grade.
- 5) During construction of an overflow and diversion structure at the site, detours will be provided for the existing access road and trail. Prior to the construction of the shafts and tunnel, the detours will be removed and the access road and trail will be restored to their original footprints.

## OTHER ALTERNATIVES CONSIDERED

In addition to the NPS Selected Alternative described above, the EA analyzed a No Action alternative. The No Action Alternative would maintain use of the existing combined sewer system. The combined sewer system conveys both stormwater and sewage to the BPAWWTP. During storm events, the excess sewage and stormwater runoff would continue to discharge into the Anacostia River. DC Water currently utilizes, and would continue to employ, small-scale programs in an attempt to minimize some of the adverse impacts associated with CSOs. These small scale programs include:

- More efficient use of the Northeast Boundary Swirl Facility (NBSF). The NBSF is a treatment facility located near RFK stadium that can treat up to 400 million gallons per day of overflow liquids from the Northeast Boundary drainage area.
- Use of inflatable dams, known as fabridams, to reduce the amount of debris that reaches waterways. Fabridams are balloon-like devices that are installed in existing sewers that receive CSOs in order to prevent overflows to receiving waters.
- Operation of skimmer boats to remove floating debris and trash from the Anacostia River, thereby improving the quality of waterways within the DC Water service area and beyond.
- More regular cleaning and maintenance of thousands of catch basins, which are the traps that catch debris and litter before they enter a storm drain.
- Public education and neighborhood initiatives that encourage and support Low Impact Development/Retrofit, rooftop greening, stormwater treatment, street storage of stormwater, rain gutter disconnections, and extending storm sewers to receiving waters.

The No Action Alternative includes existing CSO controls. Additionally, construction is underway on the federal CSO Nine Minimum Controls program, which is designed to reduce CSO volume and the pollutants in CSO discharges throughout the District by almost 36 percent.

During the course of internal scoping and preliminary engineering, several alternatives were considered, but were deemed insufficient to meet the project objectives, neither individually nor in various combinations, and were not carried forward for analysis in this EA. Many of these alternative techniques and technologies are currently being employed by DC Water and will continue to be employed regardless of the Selected Alternative. The broad range of alternative technologies includes the following:

 Source Controls – Public education, a higher level of street sweeping, additional construction site controls, more frequent catch basin cleaning, garbage disposal bans, and combined sewer flushing;

- Inflow Controls Low Impact Development/Retrofit, rooftop greening, stormwater treatment, street storage of stormwater, rain gutter disconnections, and extending storm sewers to receiving waters;
- Sewer System Optimization Real time control, storing combined sewage in existing sewers, and revision to facility operations;
- Sewer Separation Partial or complete separation;
- Storage Technologies Retention basins and tunnels;
- Treatment Technologies Screening, sediment filtering, high rate physical chemical treatment, swirl concentrators, and disinfection; and
- Receiving Water Improvement Aeration and flow augmentation.

Each technology was evaluated for its ability to reduce CSO volume and the pollutants in CSO discharges, as discussed below:

- Source Controls These are important elements of CSO control but on their own do not provide a comprehensive CSO control system solution.
- Inflow Controls These are being looked at for reducing the size of the CSO facilities required but do not provide the basis of a larger scale CSO solution.
- Sewer System Optimization This can be helpful in controlling CSOs, but is not sufficient for a larger CSO control system.
- Sewer Separation This has been adopted as a partial CSO solution in some parts of the DC Water system. As a complete solution for a major system deficiency, it has certain limitations. It is cost prohibitive to perform sewer separation on a large scale in congested urban areas It also directs stormwater to waterways which would otherwise be treated. This can actually lead to a decrease in water quality.
- Storage Technologies This is the solution of choice in large wastewater municipal systems. The CSO volume produced usually cannot be contained in retention basins and therefore, tunnels are required.
- Treatment Technologies This is only effective in conjunction with another solution such as storage technologies. CSOs have to be captured and diverted to a central point, as it would be cost prohibitive to provide treatment at each CSO outfall.
- Receiving Water Improvement Aeration and flow augmentation alone would not provide an
  adequate resolution to a large scale CSO problem because it would not achieve the water qualitybased requirements of the CWA.

After the initial screening, groups of technologies were assembled into individual control plans. The control plans were evaluated for regulatory compliance, cost effectiveness, reduction of Northeast Boundary Flooding, non-monetary factors, and public acceptance. The results of the analysis regarding individual technologies and control plans are included in DC Water's LTCP.. Justification for eliminating these options from further analysis were based on a lack of technical feasibility, an inability to meet the project's purpose and need, and economic infeasibility.

### **ENVIRONMENTALLY PREFERABLE ALTERNATIVE**

The NPS is required to identify the environmentally preferred alternative in its NEPA document for public review and comment. The NPS, in accordance with the Department of the Interior policies contained in the Departmental Manual (516 DM4.10) and the Council on Environmental Quality's (CEQ) NEPA's Forty Most Asked Questions, defines the environmentally preferred alternative as the one that "causes the least damage to biological and physical environment". It is the alternative "which best protects, preserves, and enhances historic, cultural and natural resources" (Q6a).

After completing the environmental impact analysis, the Selected Alternative was identified as the environmentally preferred alternative. By building the tunnel using the tunnel boring machine and by using microtunneling to construct most of the diversion sewers, as well as implementing a variety of mitigation measures, the environmental impacts are minimized and generally limited to relatively small

surface disturbance areas. Furthermore, the Selected Alternative will have long-term beneficial impacts on water quality by eliminating over 1.4 billion gallons of CSO discharge to the Anacostia River per year. Due to overall beneficial impacts, the Selected Alternative is the environmentally preferable alternative. The No Action Alternative is not the environmentally preferred alternative because it will not provide enough CSO control measures to comply with the LTCP.

### **MITIGATION MEASURES**

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

Resource Area			
Soils	Ground movements and settlement on existing structures, foundations, and utilities will be monitored.     Exposed soil will be protected from precipitation and erosion.     Disturbed soil and stockpiles will be covered.     Erosion and sediment controls including silt fencing will be employed.     Exposed soils will be stabilized and replanted with vegetation as soon as possible following completion of construction activities.     DC Water will ensure that the construction contracts will include requirements for the contractor to submit plans for the handling and disposal of contaminated dredge materials in upland locations or contained sites that have been approved for such use by the federal or local authorities having jurisdiction. Also, the construction documents will require measures to control dust, protect exposed soil from precipitation and erosion, and protect workers and any		
Water Quality	<ul> <li>nearby sensitive receptors from exposure to hazardous materials.</li> <li>Best Management Practices will be employed- including the use of coffer dams and dewatering operations; use of construction fence, super silt fence, hay bales, diversion channels and berms, and short-term stormwater basins for stormwater management and perimeter controls; proper disposal of dredged material; and the dedication of an environmental manager to monitor the project during construction.</li> <li>A 10:1 wetland mitigation ratio will be implemented aimed at improving the overall functionality and values of nearby wetlands through the removal of invasive plant species in the Kenilworth Marsh located along the Anacostia River.</li> </ul>		
Wetlands	A 10:1 wetland mitigation ratio will be implemented aimed at improving the overall functionality and values of near-by wetlands through the removal of invasive plant species in the Kenilworth Marsh located along the Anacostia River.      Additional compensatory mitigation will be determined through future coordination with USACE, DDOE, and NPS.		
Vegetation/ Wildlife and Wildlife Habitat	<ul> <li>On NPS property, vegetation will be restored according to NPS or other agency-specific criteria in areas where surface disturbance occurs.</li> <li>Restored vegetation areas will be monitored following construction to ensure successful establishment.</li> </ul>		
Cultural Resources	<ul> <li>All work carried forward will be consistent with the MOA entered into among DC Water, the NPS, the Joint Base Anacostia Bolling, and the DC State Historic Preservation Office that was prepared in accordance with the National Historic Preservation Act (NHPA) Section 106 process (see attached).</li> </ul>		
Aesthetics	<ul> <li>New above ground structures will be designed to complement the existing or proposed surrounding landscape.</li> <li>Impacted existing scenic resources which contribute to each area's visual quality will be restored to near preconstruction conditions.</li> <li>Vegetation will be restored according to NPS or other agency-specific criteria in areas where surface disturbance occurs.</li> </ul>		
Land Use	Coordination will occur with the DMV in order to maintain the operation of the Commercial Drivers License Test Lot     of the Pooles Point Facilities and the Commercial Drivers License Test Lot		
Human Health and Safety	<ul> <li>Disposal of excavated soils will be the responsibility of the contractors. However, DC Water will ensure that the construction contracts include requirements for the contractors to submit plans for the handling of contaminated dredge materials from upland locations or contained sites and the disposal of those materials in locations that have been approved for such use by the federal or local authorities having jurisdiction. Also construction documents will include measures to control dust, protect exposed soil from precipitation and erosion, and protect workers and any nearby sensitive receptors from exposure to hazardous materials.</li> <li>Soil borings will be taken at representative excavation sites to determine if soil contamination is present.</li> <li>Groundwater samples will be taken at the representative excavation sites to determine if contamination is present at the construction site.</li> <li>Public information will be made available on the NPS website and on signs in the park to inform visitors of the project and its construction impacts.</li> <li>Construction workers will follow an approved health and safety plan.</li> <li>Barriers and signage will be used around construction sites.</li> </ul>		

Resource Area	Mitigation Measure		
Human Health and Safety	<ul> <li>Disposal of excavated soils will be the responsibility of the contractors. However, DC Water will ensure that the construction contracts include requirements for the contractors to submit plans for the handling of contaminated dredge materials from upland locations or contained sites and the disposal of those materials in locations that have been approved for such use by the federal or local authorities having jurisdiction. Also construction documents will include measures to control dust, protect exposed soil from precipitation and erosion, and protect workers and any nearby sensitive receptors from exposure to hazardous materials.</li> <li>Soil borings will be taken at representative excavation sites to determine if soil contamination is present.</li> <li>Groundwater samples will be taken at the representative excavation sites to determine if contamination is present at the construction site.</li> <li>Public information will be made available on the NPS website and on signs in the park to inform visitors of the project and its construction impacts.</li> <li>Construction workers will follow an approved health and safety plan.</li> </ul>		
Visitor/Resident Use and Experience	<ul> <li>Barriers and signage will be used around construction sites.</li> <li>Rerouting of hiker/biker trails that could potentially be impacted, including the Anacostia Riverwalk, will be developed before construction begins.</li> <li>Maintenance of emission controls on all construction equipment and covering/wetting exposed soils to reduce dust will be required.</li> <li>Odor control measures, such as a carbon absorption system, intake dampers, and adjustable exhaust dampers, where warranted.</li> <li>Near-surface construction will only be performed between the hours of 7 a.m. and 7 p.m. to limit potential noise impacts. The only exception to these hours of operations is work within the BPAWWTP surface disturbance area. No impacts will exist to visitors or residents due to the location, type, and use of this treatment plant facility.</li> <li>Short term shielding of construction will be implemented to reduce noise impacts.</li> <li>Areas of short term surface disturbance will be returned to their original conditions, except near the Poplar Point Facilities.</li> <li>Public information will be made available on the NPS website and on signs in the park to inform visitors of the project and its construction impacts.</li> </ul>		
Topography	An Erosion and Sediment Control Plan will be implemented.     Ground movements and settlement on existing structures, foundations, and utilities will be monitored.		
Socioeconomics	<ul> <li>Traffic Control Plans (TCPs) will be developed to define detours and changes in traffic patterns before construction begins.</li> <li>Rerouting of hiker/biker trails that could potentially be impacted, including the Anacostia Riverwalk, will be developed before construction begins.</li> <li>Trucks that haul materials from construction sites will be covered.</li> <li>Emission controls on all construction equipment will be maintained and covering/wetting exposed soils to reduce dust will be required.</li> <li>Odor control measures such as a carbon absorption system, intake dampers, and adjustable exhaust dampers, will be employed where warranted.</li> <li>Near-surface construction will only be performed between the hours of 7 a.m. and 7 p.m. to limit potential noise impacts. The only exception to these hours of operations will be work within the BPAWWTP surface disturbance area where there will be no impacts due to the location of the treatment plant.</li> <li>Short term shielding of construction will be implemented to reduce noise impacts.</li> <li>Areas of short term surface disturbance will be returned to their original conditions except near the Poplar Point Facilities.</li> <li>Public information will be made available on the NPS website and on signs in the park to inform visitors of the project and its construction impacts.</li> </ul>		
Air Quality	<ul> <li>Trucks that haul materials from construction sites will be covered.</li> <li>Emission controls on all construction equipment will be maintained and covering/wetting exposed soils to reduce dust will be required.</li> </ul>		
Noise	<ul> <li>Near-surface construction will only be performed between the hours of 7 a.m. and 7 p.m. to limit potential noise impacts. The only exception to these hours of operations will be work within the BPAWWTP surface disturbance area where there will be no impacts due to the location of the treatment plant.</li> <li>Short term shielding of construction will be implemented to reduce noise impacts.</li> </ul>		

Resource Area	Mitigation Measure
Transportation	<ul> <li>TCPs will be developed, and be approved by DDOT, JBAB, and NPS to define detours and changes in traffic patterns before construction begins.</li> <li>Rerouting of hiker/biker trails that could potentially be impacted will be developed and approved by DDOT, JBAB, and NPS prior to construction.</li> <li>DDOT construction notification policies will be followed, i.e. a TCP that will be established within the contract documents.</li> <li>From the BPAWWTP surface disturbance area, hauling of excavated materials from the tunneling operations will only be undertaken on off hours.</li> </ul>

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

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

Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts that require analysis in an EIS: Both beneficial and adverse impacts will occur to soils, water quality, wetlands, vegetation, wildlife and wildlife habitat, cultural resources, aesthetics, land use, human health and safety, and visitor/resident use and experience as a result of implementing the Selected Alternative; however, no significant impacts were identified that will require analysis in an EIS.

Adverse impacts to soils will be both short-term and long-term along the alignment. Long-term, moderate, adverse impacts to soils will occur where drop shafts are planned because the soil will be permanently removed. Short-term impacts to soils under the Selected Alternative will include compaction by heavy machinery and erosion transport by both stormwater and winds during construction. After construction, damaged soils will be restored.

Short-term minor adverse impacts to water quality will result in runoff from construction activities. These impacts, however, will be mitigated through the use of best management practices, as well as erosion and sediment control measures. Under the Selected Alternative, CSO discharges will be reduced by up to 98 percent, resulting in long-term beneficial impacts on water quality in both the Potomac River and Anacostia River. The Selected Alternative will also result in short-term and long-term, minor, adverse impacts to tidal wetlands in areas near CSO 019 and BAFB Overflow Facility, due to the placement of approximately 21,820 square feet (0.50 acres) and 11,040 square feet (0.25 acres) of riprap at the CSO 019 Overflow Facility and the BAFB Overflow Facility respectively. However, the project will ultimately enhance water quality by reducing CSO discharges into the Anacostia and Potomac Rivers by 98 percent and increasing flood storage capacity. To help mitigate the impacts to these tidal wetlands, DC Water has agreed to improve the overall functionality and values of 328,600 square feet (7.5 acres) of wetlands (10:1 mitigation ratio) in the Kenilworth Marsh through the removal of invasive plant species.

The Selected Alternative will have a short-term, adverse impact to vegetation and wildlife habitat in Anacostia Park. Up to 19 trees will be removed, as well as a small area of riparian vegetation. As a result of the vegetation removal, existing wildlife habitat will be disrupted, but this will not impact any species of concern or impede feeding, nesting, or breeding activities. An existing pedestrian path, the Anacostia Riverwalk, will be rerouted during construction.

The Selected Alternative will cause negligible adverse impacts to archeological resources to six surface disturbance areas with no potential to contain such resources. The Selected Alternative could result in negligible to moderate, short and long-term impacts to each of the remaining surface disturbance areas. The Selected Alternative will cause minor short- and long-term adverse impacts to a historic structure, which is a contributing element to Anacostia Park (the Anacostia Seawall) at the new CSO 019 facility. No to negligible impacts to historic structures will occur at each of the remaining eight surface disturbance areas.

Under the Selected Alternative, two overflow structures and a pumping station will be constructed, changing the overall aesthetics in the study area. This will result in long-term, minor adverse impacts to aesthetics. During construction, there will be a short-term, moderate adverse impact on aesthetic resources from site specific equipment that will be present during construction at the surface disturbance areas. Reduction of CSOs will have long-term beneficial impacts on the aesthetics of the rivers.

As part of the Selected Alternative, private property will be purchased by DC Water and short-term and long-term easements will be obtained. This will result in short-term minor adverse impacts to existing land use and long-term, minor, adverse impacts on future land use.

The Selected Alternative will also result in short-term, minor, adverse impacts on visitor/resident use and experience during construction. Any affected trails, paths, sidewalks, and roadways will be restored to full operational status by the end of construction. Odor control measures will be implemented, as needed, during construction. In addition, the overall improvement in water quality will have in long-term, beneficial impacts to the overall visitor/resident use and experience of those who utilize the Potomac River and Anacostia River for recreational purposes.

Degree of effect on public health or safety: The Selected Alternative will have long-term, beneficial impacts on human health and safety. It will significantly reduce existing CSO discharges to the Anacostia River by 98 percent, which will decrease the abundance of hazardous bacteria and other toxins, improve the quality of the river, and help the river meet its Designated Use Category A – Primary Contact Recreation, which current conditions do not support.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, wetlands, prime farmlands, wild and scenic rivers, or ecologically critical areas: There are no prime farmlands, wild and scenic rivers, or ecologically critical areas within the project area. However, the EA addresses cultural resources (archeological and historic resources) as well as wetlands that will be affected by the Selected Alternative.

The Selected Alternative has potential to result in moderate, long term, adverse impacts to archeological resources at the BAFB Overflow and Diversion Facilities, the Poplar Point Pumping Station, and the DC Water Main Pumping Station. Additional archeological investigations to identify and evaluate historic resources will be conducted as stipulated in the Memorandum of Agreement (MOA) that has been executed for this project. In addition, Construction of the CSO 019 Overflow and Diversion Facilities will affect approximately 200 feet of the existing Anacostia Seawall, which is considered to be a contributing element to Anacostia Park, a historic property.

The Selected Alternative will result in long-term, minor, adverse impacts to riverine, tidal wetlands. Approximately 21,820 square feet and 320 linear feet of the Anacostia River, including intertidal wetlands, will be impacted due to placement of riprap at the CSO 019 Overflow Facility. Approximately 11,040 square feet and 184 linear feet of the Potomac River, including intertidal wetlands, will be impacted due to placement of riprap at the BAFB Overflow Facility. Neither construction activity is expected to greatly alter the functions or values of the wetlands. A total of 32,860 square feet (0.75 acre) and 504 linear feet of Waters of the U.S., including wetlands, are expected to be impacted in the long-term by the Selected Alternative. Short-term construction-related impacts to wetlands and Waters of the U.S. will occur at the CSO 019 Overflow Facility (43,815 square feet) and the BAFB Overflow Facility (18,638 square feet). These construction impacts will be minimal and are required for control and containment of benthic sediments. Impacts to wetlands will require a Section 404 CWA permit from United States Army Corps of Engineers (USACE) and a Section 401 CWA Water Quality Certification from District Department of the Environment (DDOE) Water Quality Division. Additionally, these impacts were documented in a NPS Statement of Findings (see attached). A Statement of Findings is a summary required by NPS DO-77 that explains why the impacts to wetlands under NPS administration are unavoidable and identify the mitigation to avoid, minimize or compensate for wetland losses, if any. To compensate for unavoidable impacts to tidal wetlands, DC Water has agreed to improve the overall functionality and values of approximately 328,600 square feet (7.5 acres) of wetlands (10:1 mitigation ratio) in the Kenilworth Marsh through the removal of invasive plant species.

Kenilworth Marsh is located approximately two miles upstream from the CSO 019 Overflow Facility along the Anacostia River on lands administered by the NPS.

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

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

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

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts: As described in the EA, cumulative impacts were determined by combining the impacts of the NPS Selected Alternative with other present and reasonably foreseeable future actions. Cumulative actions included primarily current and future development projects occurring within and adjacent to the District. Impacts of the NPS Selected Alternative on soils, water quality, wetlands, vegetation, wildlife and wildlife habitat, cultural resources, aesthetics, land use, human health and safety, and visitor/resident use and experience were identified.

Cumulative impacts to soils will occur under the Selected Alternative, as a number of additional projects within the study area are likely to occur in addition to the Selected Alternative. These projects are likely to expose large volumes of soil that could be subject to erosion or compaction. Also, existing soils could be replaced by fill or impervious surfaces, or some of the soils may contain contaminants. There will be a moderate, adverse cumulative impact on soils.

Past and present development has incrementally increased the impervious surface in the project vicinity and the larger watershed; this development has also contributed to the burden on the existing sewer system. Present and future development projects will likely increase impervious surface area and exacerbate runoff and pollutant loadings into the Anacostia and Potomac rivers. Upstream sources will also continue to add pollutants to the rivers, and there will be incremental water quality impacts associated with the reasonably foreseeable development. The Selected Alternative will greatly minimize CSO discharges and improve the overall health of the Anacostia River, thereby mitigating some of the cumulative adverse impacts of decades of urbanization and development. Because many other factors will continue to cumulatively affect the water quality of the Anacostia and Potomac Rivers, the overall adverse cumulative impacts for the Selected Alternative will be long-term and minor.

Cumulative impacts to wetlands are comprised of the effects of past, current, and future development. These effects include (1) dredging, filling and conversion of wetlands and waterways; (2) increased impervious surfaces; (3) increased source and non - source pollutant loads; and (4) flooding and erosion associated with CSO discharges. Direct and cumulative impacts to wetland and waterways will be minimized and mitigated by project-specific federal and local protective regulations; stormwater, sediment, and erosion control measures that will be conditions of development; and various projects to restore or mitigate wetlands and waterways or educate the public about wetland benefits. However, there will still be incremental cumulative impacts to wetlands especially associated with pollution loads. Although the Selected Alternative will minimize CSO discharges and manage runoff associated with some pollutant loads, it will still have minor adverse cumulative impacts on wetlands.

Cumulative impacts to vegetation include the removal or planting of vegetation for development projects and associated pollution that will affect the integrity of vegetative communities. Much of the study area is urban and does not support sizable terrestrial vegetative communities. Aquatic vegetation is subject to various pollution sources mostly associated with runoff. Past and present development has incrementally decreased the vegetative community in the project vicinity and contributed to water pollution. Due to future development, incremental reduction in vegetation is likely, and aquatic vegetation will still be subject to water pollution. Although the Selected Alternative will greatly reduce CSO discharge, the

cumulative impact on vegetation, primarily aquatic, will be minor and adverse because of the other sources of pollution to aquatic vegetation communities.

Under the Selected Alternative, past, present, and future development have contributed and will continue to contribute to incremental loss of localized habitat for terrestrial species. Aquatic habitat is subject to various pollution sources mostly associated with runoff. Although aquatic species will benefit from improved water quality afforded by the Selected Alternative, there will still be a minor, adverse cumulative impact on wildlife and wildlife habitat when considering the potential effect of reasonably foreseeable development. Incremental reduction in vegetation is likely, and aquatic vegetation will be exposed to pollution from other sources.

Past, present, and future projects have affected and will continue to affect archeological resources. Along the Anacostia River, most archeological resources are deeply buried beneath fill which has generally protected them from development projects. Past, present, and future development projects with construction extending below these deep fill layers have disturbed or have the potential to disturb archeological resources. Most of the Selected Alternative's facilities will extend below the fill, and a Phase I/II archeological survey will be conducted in locations with intact soils to determine if there will be direct effects. Future development projects have similar potential to extend below deep layers of fill in areas with high potential to contain archeological resources, and could result in adverse, minor cumulative effects to archeological resources. Cumulative impacts to historic structures, buildings, or districts may occur under the Selected Alternative. Reasonably foreseeable construction projects will be reviewed by the District of Columbia State Historic Preservation Office (DC SHPO), and plans to mitigate adverse effects will be incorporated into project designs. As such, there will be a minor, adverse cumulative impact on historic structures, buildings, and districts.

Above ground structures associated with the development of past, current, and future development projects will have a negligible, cumulative impact on aesthetics because of the nature of the built urban environment. Many of these projects are being designed to improve the aesthetics of the corridor, and each design contains provisions for associated landscaping. Also, the District's Comprehensive Plan and zoning regulations protect the unique vistas around the city. However, many of the District's water bodies are visibly polluted. The Selected Alternative will improve the long-term aesthetics of the Anacostia and Potomac Rivers due to reductions in visible pollutants resulting from decreased CSOs.

Concepts for most of the present and reasonably foreseeable development projects are specified in approved local and regional master planning documents. The land use along several roadway corridors may change, but will not be considered impacts. Future development within the study area will be slightly restricted by the Selected Alternative, as the types of facilities built along the alignment may have to meet specific construction requirements. This requirement may result in adjustments or additional approvals of planned structures or limit new construction along the alignment of the Selected Alternative. Therefore, long-term minor adverse cumulative impacts to land use will result from the Selected Alternative.

Once operational, the Selected Alternative will have a beneficial impact on human health and safety by improving water quality and reducing human health risks associated with primary contact with fecal coliform bacteria and other pathogens found in CSOs. Current and future development activities could continue to incrementally increase impervious surfaces and pollutant loading, thereby contributing to existing water quality issues found in the Anacostia River and offsetting some of the benefits associated with the Selected Alternative. Current and future soil contamination, although difficult to project, is expected to be minimal due to strict environmental regulations. Although substantial efforts will be made to eliminate release of and exposure to hazardous materials as part of the Selected Alternative, past development has resulted in an array of hazardous materials and sites in or near the study area. Any hazardous sites discovered as part of the proposed project will be subject to mitigation. However, future development in or near the study area could uncover or release contaminants. As a result, there is the potential for long-term, minor, adverse cumulative impacts to human health and safety.

Within Anacostia Park, CSO reduction associated with the Selected Alternative will improve the long-term quality of the Anacostia and Potomac Rivers. This project could mitigate some potential adverse

impacts to the Anacostia River. Furthermore, the reasonably foreseeable future development projects, including those on or adjacent to park resources are generally intended to improve the quality of living within the District. Therefore, there will be long-term, beneficial, cumulative impacts on visitor/resident use and experience. However, there will be short-term nuisances associated with project construction, including impacts to noise, air quality, and aesthetics. So, there will be minor, short-term, adverse cumulative impacts on visitor/resident use and experience.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources: The Selected Alternative has the potential to cause negligible to moderate, long term impacts to archeological resources. Where necessary, geoarcheological studies were conducted to address archeological potential. The borings, conducted in March and April 2010, produced continuous core soil samples that extended below fill layers. The soil samples were examined by a geoarcheologist to determine whether each surface disturbance area contained intact soils and, therefore, the potential to contain archeological resources. Identification and evaluation of archeological resources will be completed following the Environmental Assessment, but prior to or during construction of any facility elements. NPS, the DC SHPO, and JBAB have executed an MOA with DC Water that stipulates a process and schedule for completion of archeological investigations in compliance with the Section 106 regulations.

The Selected Alternative will cause minor, long-term, adverse impacts to National Register of Historic Places (NRHP)-eligible historic buildings or structures or districts adjacent to one surface disturbance area. The Selected Alternative will have negligible, long-term, adverse impacts to historic structures, buildings, or districts at seven surface disturbance areas.

- BPAWWTP Facilities The Selected Alternative will be constructed in the vicinity of the Digestion Facility, which is being removed as part of another project. Proposed facility construction is consistent with the technologically significant contributing elements that make the BPAWWTP eligible for the NRHP. Construction will not physically impact any elements of the Digestion Facility or other facilities associated with the BPAWWTP. The only visible above ground features associated with the proposed facilities will be access grates and manholes. These are common, visible features that already exist on the site and are consistent with the elements that make the BPAWWTP a NRHP-eligible resource. The Selected Alternative will cause a negligible, long-term, adverse impact to the BPAWWTP.
- Bolling Air Force Base Overflow and Diversion Facilities The surface disturbance area is located approximately 2,500 feet northwest of the BAFB Historic District. The facilities proposed in this location will not physically impact the district. In addition, no facility elements will be visible from the historic district. The Selected Alternative will cause a negligible, long-term, adverse impact to the BAFB Historic District. (NOTE: Due to the property transfer from BAFB to Navy, this site is now referred to as JBAB).
- Poplar Point Pumping Station The pumping station and diversion structures proposed for this surface disturbance area will not physically affect any historic structures, buildings, or historic districts. In addition, it will not be visible from the existing Poplar Point Pumping Station. The Selected Alternative will cause a negligible, long-term, adverse impact to the Poplar Point Pumping Station.
- Main Pumping Station Diversion Facilities The proposed diversion facilities will be constructed in the northern yard area of DC Water's Main Pumping Station. The facilities will not physically impact the historic building, as all facilities will be located underground. The only visual elements associated with the diversion facilities will be manholes and access panels at ground surface. The Selected Alternative will cause a negligible, long-term, adverse impact to the Main Pumping Station.
- CSO 005 and 007 Diversion Facilities The proposed diversion facilities will be constructed
  underneath an existing roadway within Anacostia Park. All facilities will be located
  underground, with no above ground visual elements other than a few manholes. The Selected
  Alternative will have a negligible, long-term, adverse impact to Anacostia Park.

- M Street Diversion Facilities The CSO 015 diversion chamber surface disturbance area is located adjacent and to the north of the NRHP-listed Washington Navy Yard Historic District. All facilities will be located underground, with no above ground visual elements other than a few manholes or access panels. The Selected Alternative will have a negligible, long-term, adverse impact to the BPAWWTP.
- CSO 018 Diversion Facilities No historic structures or districts are located in the vicinity of this surface disturbance area. The Selected Alternative will cause a negligible, long-term, adverse impact to historic resources.
- CSO 019 Overflow and Diversion Facilities The proposed overflow facility will result in the removal of approximately 200 feet (or 0.2 percent) of the existing Anacostia Seawall, which is considered to be a contributing element to Anacostia Park. The design of CSO 019 will reconstruct several damaged portions of the seawall and incorporates a stone masonry facing that complements the stone blocks in the existing wall. Because only a small portion of the wall will be removed to construct the CSO 019 Overflow and Diversion Facilities, the Selected Alternative will cause a minor, long-term, adverse impact to the sea wall and to Anacostia Park. These impacts to the wall and Anacostia Park will be mitigated by landscape restoration in the vicinity of the CSO, sea wall restoration, and incorporation of the Anacostia Riverwalk Trail and RFK Access Road into the design of the CSO facility.

Section 106 consultation has taken place with the DC SHPO, JBAB, and NPS. An ARPA permit was obtained for archeological investigations at Anacostia Park on December 15, 2009 and an ARPA permit was obtained for archeological investigations at JBAB on January 6 2010. NPS, CFA, and NCPC have been involved in design review for above ground elements of CSO 019 and unanimously concurred on proposed designs for the facility on February 22, 2010. A process for identifying adverse project effects was proposed to the DC SHPO in a March 10, 2010 letter. DC SHPO responded to this letter on April 23, 2010 and suggested additional archeological identification to identify potential adverse effects at the DC Water Main Pumping Station and BPAWWTP facilities. On April 30, 2010 the DC SHPO concurred that the project will have no adverse effect on historic properties conditioned upon fulfillment of several measures, including additional archeological investigation at the DC Water Main Pumping Station, JBAB, and Poplar Point to identify and evaluate archeological resources and to continue design review by NPS and DC SHPO of facility elements. An MOA was developed by NPS, DC Water, DC SHPO, and JBAB to formalize the agreements made by NPS and DC Water; and the MOA was executed on December 27, 2010.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat: In accordance with Section 7 of the Endangered Species Act of 1973, NPS sent a letter to solicit comments from the U.S. Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NMFS), and the DOH Fisheries and Wildlife Division regarding potential occurrences of federal and local listed species within the project area that could be adversely impacted by the proposed alternatives. On October 27, 2009, USFWS responded "with the exception of occasional transient individuals, no proposed or federally listed endangered or threatened species are known to exist within the project area." In a letter dated March 12, 2010, the District's Fisheries and Wildlife Division stated that it had determined that, due to the primarily underground nature of the proposed project, no impacts to these species are anticipated to occur.

On October 17, 2009, the NMFS determined that the proposed project will not directly affect Essential Fish Habitat (EFH); therefore, an EFH assessment will not be necessary. However, on February 23, 2010, NMFS indicated that the endangered shortnose sturgeon (*Acipenser brevirostrum*) has been documented as being present in the Potomac River. Though the shortnose sturgeon have not been documented as present within the Anacostia River, based on new information on the use of the river system by this species, NMFS has determined that transient individual shortnose sturgeons have the potential to enter the Anacostia River on a transient basis. The probability of shortnose sturgeon entering the Anacostia River is considered by NMFS to be low, due to the nature of the degraded habitat that presently exists. Nevertheless, the Protected Resource Division of NMFS is not able to rule out the occasional presence of shortnose sturgeon in the lower part of the Anacostia River. Therefore, NPS

consulted with the Protected Resources Division of NMFS regarding the need to conduct a Biological Assessment (BA) for that species. In an email response on April 22, 2010, NMFS determined that NPS will not be required to undertake an independent BA.

The Selected Alternative will require a Section 404 CWA permit from USACE, and NMFS recommended to USACE that an informal Endangered Species Act Section 7 consultation be completed. Therefore, the USACE prepared a BA in July, 2010 and forwarded the document to NMFS for review and concurrence. NMFS indicated in an August 24, 2010 electronic mail message that it had completed its review of the BA and has determined that construction of the Selected Alternative is not likely to adversely impact the shortnose sturgeon. The USACE subsequently sent a letter to NMFS on September 29, 2010 requesting that NMFS issue a Biological Opinion to that effect. A response letter from NMFS was received on November 24, 2010 (see attached). The letter indicates that the Selected Alternative is not likely to adversely affect any NMFS listed species and that no further consultation pursuant to Section 7 of the Endangered Species Act is required

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

### IMPAIRMENT OF PARK RESOURCES OR VALUES

The NPS has determined that the implementation of the Selected Alternative will not constitute an impairment to the resources or values of Anacostia Park. This conclusion is based on a thorough analysis of the environmental impacts described in the EA, relevant scientific studies, and the professional judgment of the decision-maker guided by the direction in NPS *Management Policies 2006*. As described in the EA, implementation of the Selected Alternative will not result in major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of National Capital Parks-East; (2) key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or (3) identified as a goal in the park's General Management Plan or other relevant NPS planning documents.

The following purpose statement represents the NPS's interpretation of the establishing legislation:

"Anacostia Park was created when the banks of the Anacostia River were reclaimed for park purposes. It is part of the comprehensive, systematic, and continuous development of the park system of the national capital, and provides waterfront recreation and access for public enjoyment. Within this system, the park provides opportunities for a variety of recreational activities that are compatible with the resources of the Anacostia River. Legislation covering Anacostia Park gives specific direction to preventing pollution in the Potomac and Anacostia Rivers and to preserving forests and natural scenery in and about Washington. The park protects natural and nationally significant historic resources, promoting and regulating the use of the area in such a manner as will leave them unimpaired for the enjoyment of future generations. The park provides opportunities for the understanding of these resources and values to the American people."

While the Selected Alternative will result in short-term to long-term negligible to moderate adverse impacts on some of the park's resources (soils, water quality, wetlands, vegetation, wildlife, and cultural resources), these impacts are not key to the overall natural or cultural resources of the park, nor will these impacts hamper opportunities to enjoy the park. In fact, over the long-term, the Selected Alternative will benefit the park by improving and protecting the resources for which it was created. The Selected Alternative will provide substantial benefits to the Potomac River and Anacostia River and their associated habitats. These beneficial impacts, in turn, will then enhance the overall visitor use and experience and opportunities to enjoy these resources.

### PUBLIC INVOLVEMENT

Public involvement for the LTCP and a subsequent ARP Facility Plan has been on-going for more than a decade, and has served in informing the design of the Selected Alternative. The Draft LTCP was officially released on June 29, 2001. It was distributed to more than 150 individuals associated with local government agencies, regulatory agencies, environmental interest groups, citizens groups, DC Water, and

consultants, and was also made available to for public review. DC Water received a total of 2,365 comments on the LTCP. The comments and responses were addressed as part of the LTCP.

DC Water then prepared the Facility Plan for the ARPs in order to refine the locations and alignments of proposed project facilities. As DC Water developed and implemented the Facility Plan-level geotechnical exploration program, a public outreach plan was implemented to more directly inform interested and impacted citizens about the overall project. During the development of the Facility Plan, DC Water modified the alignments and components described in the LTCP as the planning effort progressed. DC Water conducted additional public outreach activities to address the proposed modifications, including an informational public meeting held on August 2, 2007. Prior to the meeting, DC Water mailed relevant explanatory and background documents to various District and federal agencies, interested parties, and ANCs. DC Water received no comments from members of the public or agencies during the 90-day public comment period following the meeting.

Following the completion of the Facility Plan in July 2008, DC Water attended numerous meetings held by ANCs and local organizations to provide the public updates on the project. The meetings discussed CSOs, sewer separation and the ARP project schedule. DC Water held a public meeting on September 17, 2009, at Washington Highlands Library to inform the public of the design status, potential environmental effects of the ARPs, and the preliminary EA schedule.

In anticipation of the EA public commenting period and its associated public meeting, DC Water advertised the meeting at various local events including a Community Event on April 27, 2010 at the Anacostia Community Museum highlighting DC Water projects in Ward 7 and at an Anacostia Waterfront Business Summit. Also, DC Water produced a CSO Control Facilities Update flier in April 2010 that announced the upcoming EA Public Meeting. The one-page flier was also included in the April bill for DC Water customers.

The EA was made available for public review and comment from May 14, 2010 through June 14, 2010. It was available on-line for public review on the DC Water and NPS websites, and hard copies were made available at eight libraries located in the District. DC Water also held a EA Public Meeting midway through the commenting period on May 27, 2010, at Watkins Elementary School from 6-8pm. To encourage meeting attendance and provide opportunities for the public to submit comments, the following public outreach was carried out:

- The public meeting was advertised on the DC Water website, local television, and in six area newspapers: the Washington Post, Washington Informer, El Progonero News, East of the River, Hill Rag, and DC North.
- Public meeting fliers were placed at eight District libraries while distributing copies of the EA.
- Announcements were also included in the CSO quarterly newsletter included in the April 2010 customer bill.
- District ANC leaders were informed about the meeting and were asked to inform their constituents.
- Notice of availability letters and public meeting fliers were sent to District and regional agencies and organizations prior to the meeting.

The meeting drew approximately 12 attendees, who were afforded the opportunity to hear information about and give comments on the project in person. Five comments were received from individual citizens at the meeting. In general, the comments indicated an appreciation for continued public outreach, expressed concern regarding the cost of the project, and several commented on non-project specific DC Water policies. No comments were received during this meeting that directly related to the project engineering or the environmental study. Two additional pieces of correspondence commenting on the proposed action were received during the public comment period. One correspondence was from an individual who wanted to know what happens to the stormwater that is stored in the tunnel. The other letter was from the Historic Anacostia Boating Association (HABA) and contained ten comments regarding the cultural resources analysis in the EA. Response to comments are attached. None of the responses to the comments resulted in any changes to the overall impact analysis or the Selected Alternative that was presented in the EA.

#### CONCLUSION

The NPS has Selected Alternative B for implementation. In light of the impacts described in the EA for the project and with guidance from NPS *Management Policies 2006*, natural and cultural resources information, professional judgment, and considering agency and public comments, the impacts that will result from the Selected Alternative will not impair any park resources and values. The Selected Alternative does not constitute an action that normally requires preparation of an EIS. The Selected Alternative will not have a significant effect on the human environment. Long-term, negative environmental impacts that could occur are negligible to minor in intensity. There are no significant impacts on soils, water quality, wetlands, vegetation, wildlife and wildlife habitat, cultural resources, aesthetics, land use, human health and safety, and visitor/resident use and experience. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the Selected Alternative will not violate any federal, state, or local environmental protection law.

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

Alex Romero
Superintendent,
National Capital Parks East

Approved:

Woodw MIUI

3/19/11

National Pack Service National Capital Region

### **Responses to Comments**

Sixteen written comments were received on the ARP EA. One comment was received from an individual via the NPS Planning Environment and Public Comment website; the Historic Anacostia Boating Association (HABA) submitted a letter that contained ten comments; and the other five comments were from individual citizens during the public meeting. The citizens found the public meeting useful, indicated that they looked forward to the continued public outreach, expressed concern regarding the cost of the project, or commented on non-project specific DC Water policies. Comments and responses to those comments received from the individual and HABA are provided in the table below.

No.	Commenter	Date Received	Comment	NPS Response
1	Individual	05/26/2010	What happens what happens to the sewage overflow after they are stored in the tunnels?	Water stored in the tunnels is eventually pumped into the sanitary sewer system and treated at BPAWWTP.
2	НАВА	05/12/2010	The Boathouse Row Master Planning Process and Study were not consulted or incorporated.	The Boathouse Row Planning Study (Final Draft — March 2009) was reviewed. The study identified the District Yacht Club and Pump house as historic structures of potential significance. The study identified 19th century drawbridge remains, Wheeler's Ferry remains, and a prehistoric quarry site as potential archeological resources. The Wheeler's Ferry remains, if present, are the only resources of "potential historic significance" (as identified in the Boathouse Row Planning Study) within the Area of Potential Effects (APE). The District Yacht Club and the 19th Century drawbridge remains are outside of the area of potential effect (APE).
3	НАВА	05/12/2010	The Boathouse Row Master Planning Process and Study identified historic structures (the Eastern Power Boat Club, the Washington Yacht Club, the Seafarer's Yacht Club, and the District Yacht Club) and archeological resources potentially eligible for the National Register of Historic Places.	Of the structures noted above, only the District Yacht Club was identified in the Boathouse Row Planning Study as a site of potential historic significance. However, these resources are outside of the project's APE because they would not be physically, visually, or auditorily affected by the construction of ARP facilities at this surface disturbance area. These resources, therefore, were not studied as a part of the cultural resource investigation and were not specifically included in the Section 106 process.
4	HABA	05/12/2010	Section 3.6.1: This entry fails to note and identify the historic resources of the power boat clubs which are potentially eligible for the NRHP. The Eastern Power Boat Club, the District Yacht Club, and the Washington Yacht Club must be identified here specifically as historic resources potentially eligible for the NRHP.	The purpose of Section 3.6.1 is to identify known archeological resources and to address the potential of each surface disturbance area to contain archeological resources that have not yet been identified. Therefore, this section does not address built resources such as the boat clubs. The District Historic Preservation Office has not identified any archeological resources within the M Street Diversion Facilities or CSO 018 Diversion Facilities surface disturbance areas. The surface disturbance area associated with the M Street Diversion Facilities was originally considered to have high potential to contain resources due to the extensive amount of prehistoric activity and historic development in the area. The potential of the surface disturbance area to contain resources was tested with geoarcheological soil borings, as noted in the EA text. The soil borings indicated that this surface disturbance area was partially located within the Anacostia River prior to being filled, and a four foot depth of the original land surface (which would have contained any archeological resources that may have been present) had been highly disturbed during previous construction activities. In addition, installation of the numerous utilities buried within this surface disturbance area would have disturbed

No.	Commenter	Date Received	Comment	NPS Response
				archeological resources which may have been present within the APE. Therefore, this surface disturbance area is not considered to have any potential to contain intact archeological resources. The surface disturbance area associated with the CSO 018 Diversion Facilities is not considered to have any potential to contain any resources due to the extensive grading required to construct the Southwest Freeway and Barney Circle.
5	HABA	05/12/2010	Section 3.6.2: This entry incorrectly notes "No historic structures or districts are located in the vicinity of this surface disturbance area." We disagree and request that you expressly identify, pursuant to Section 106, the Seafarer's Yacht Club as a historic resource potentially eligible for listing on the NRHP" within the vicinity of the surface disturbance area for the CSO 18 Diversion Facilities.	The Seafearers Yacht Club has not been considered for eligibility to the National Register of Historic Places nor was it identified as a resource of potential historic significance in the Boathouse Row Planning Study. Furthermore, the yacht club is not within the APE for either the M Street Diversion Facilities or CSO 18 Diversion Facilities. Therefore, NPS and the District Historic Preservation Office believe the statement to be correct.
6	НАВА	05/12/2010	Section 4.8.1: This entry must be revised in the final CSO EA to note the historic resources identified already in these comments regarding historic boat clubs and their resources as potentially eligibleIn particular, we urge you to fully comply with Section 106 and identify in the final CSO EA the historic and archeological resources on Boathouse Row.	Section 106 requires that historic properties within the APE be identified. The Boathouse Row resources are not considered by NPS nor or the District Historic Preservation Office to be located within the APE because they would not be physically, visually, or auditorily affected by construction of the CSO 18 and M Street Diversion Facilities; therefore, they are not identified within the EA.
7	HABA	05/12/2010	Section 4.8.4: Please amend this entry to acknowledge the potential archeological and historic resources already discussed in these comments, which are currently incorrectly listed as having no historic structures.	This entry does not require amendment because archeological resources have not been identified in the CSO 18 or M Street Diversion Facility APEs. Additionally, geoarcheological testing at the M Street Diversion Facilities has indicated that there is no potential for archeological resources because the APE was once located within the Anacostia River or on land that has been severely graded.
8	НАВА	05/12/2010	Area of Potential Effects: The letter from Straughanis incomplete and does not contain accurate information about the Boathouse Row areaspecifically, the "Historic Built Environment" entry appears incomplete. SDA F and E do not contain the National Register-eligible resources of the four historic boat clubs.	The APE for SDAs F (the CSO 18 Diversion Facilities) and E (the M Street Diversion Facilities) do not include any of the Boathouse Row resources. The District Historic Preservation Office concurred with Straughan's findings for historic and archeological resources at the CSO 18 Diversion Facilities and M Street Diversion Facilities on April 30, 2010. Therefore, the letter from Straughan contains complete information.
9	НАВА	05/12/2010	Area of Potential Effects: We further request that a corrected letter, with the changesbe sent to David Maloneyto ensure that the DC Government has the correct information in order to analyze and issue a proper Section 106 determination.	Identification efforts undertaken by Straughan, with the assistance of the District Historic Preservation Office and the NPS, indicate that the APEs for SDAs F and E do not contain historic architectural resources or known archeological sites.  Geoarcheological testing and historic map research indicates that there is no potential for these SDAs to contain archeological resources. Therefore, we consider our identification and effects assessment to be adequate and do not anticipate sending a corrected letter to the District Historic Preservation Office.
10	НАВА	05/12/2010	Section 1.7.11: Needs to identify potential disruption to parking and access for boat clubs located along M and Water Streets.	The surface disturbance area associated with the M Street Diversion Facilities will not disrupt parking along M and Water Streets. As stated in Section 1.7.11, a Traffic Control Plan will be required to address the short-term road closures and traffic management.

No.	Commenter	Date Received	Comment	NPS Response
11	НАВА	05/12/2010	Section 4.1.3: These various entries do not independently identify Boathouse Row as an impacted resource; do not set Boathouse Row as a boundary area in the study, despite the significance above-ground work and disruption in the area, do not identify any cumulative action scenario as a result of the Boathouse Row Master Planning Study and anticipated future actions as expressed in that study; and do not summarize the impact of these actions, plus the proposed actions, to arrive at the total cumulative impact on the Boathouse Row resource. Likewise, the accompanying Table 4.4-1 must be revised to identify the cumulative impacts to the Boathouse Row Master Planning Study and its two alternatives in each of the impact topics.	Section 4.1.3 and Table 4.4-1 identify the cumulative impact on environmental resources from projects that are reasonably foreseeable and that would require a notable amount of development. NEPA does not require a determination of the cumulative impact on Boathouse Row resources. The inclusion of the Boathouse Row in Section 4.1.3 would not alter the conclusions of the cumulative impact analysis.