

DRAFT - Finding of No Significant Impact

Proposed Restoration of
Industrial Stormwater Outfall #0015
U.S. Army Garrison Fort Belvoir
Directorate of Public Works
Fort Belvoir, Virginia

Name of Action: Proposed Restoration of Industrial Stormwater Outfall #0015

Description of the Proposed Action and Need: The Outfall #0015 Project Study Area is approximately 8-acres and is located in the south-east portion of Fort Belvoir Main Post. The area is described as a large ravine that encompasses Outfall #0015 and approximately 1,500-feet of an unnamed tributary to Accotink Creek, which conveys a combination of runoff and stormwater from an approximately 70-acre industrial watershed at Fort Belvoir. The Outfall #0015 structure itself is a 60-inch diameter reinforced concrete pipe (RCP) through which the majority of stormwater in the watershed is discharged. Outfall #0015 dates back to the late 1960s or early 1970s, is nearing the end of its useful life, and is dilapidated beyond its reliable capacity to function properly under adverse weather conditions. The high flowrate and volume of stormwater discharging from Outfall #0015 has significantly eroded the unnamed ravine, creating near vertical sidewalls in much of the area. The stormwater transports large amounts of sediment through the ravine until discharging into Accotink Bay and ultimately the Potomac River and Chesapeake Bay. This challenges Fort Belvoir's ability to meet state water quality standards for stormwater discharged into these water bodies.

The Proposed Action would stabilize the Outfall #0015 stream system, which would entail a multiyear project to replace the current Outfall #0015 and the possible restoration of the unnamed and adjoining tributaries.

The purpose of the Proposed Action is to achieve lower discharge velocities from Outfall #0015 into the receiving unnamed tributary, achieved by upgrading Outfall #0015, improving stormwater flow controls upstream of Outfall #0015 according to Best Management Practices (BMPs), and completing stream restoration within the unnamed tributary. The Proposed Action is needed to increase the overall health of the unnamed tributary and Accotink Bay, and to properly manage water during storm events.

Outfall #0015 does not contain any engineering controls needed to effectively dissipate water velocity within the piping itself or downstream from its point of discharge. Additionally, the proposed action is a follow-on project to the Regional Stormwater Management Pond Construction, previously coordinated with Virginia Department of Environmental Quality (VADEQ). Current site conditions prevent personnel from safely accessing Outfall #0015 to perform required water quality sampling. The improvements would allow Fort Belvoir to fully comply with its Industrial Stormwater permit requirements.

Alternatives: The Environmental Assessment (EA) evaluated the Proposed Action and the No Action alternative. Under the No Action alternative, Fort Belvoir would forego the reconstruction of Outfall #0015, upgradient BMPs, and restoration of the unnamed stream channel. Outfall #0015 would continue to degrade and not function properly during storm events. This would result in further erosion of the down gradient stream channel and ravine sidewalls, causing increased

sedimentation of the surface water that also exceeds water quality standards prior to reaching Accotink Bay.

Environmental Consequences: The EA, which is attached hereto and incorporated by reference in its entirety into this Finding of No Significant Impact (FNSI), examines the potential effects of the Proposed Action and the No Action alternative on the following resource areas: aesthetics, air quality, cultural and historic resources, transportation and parking, water resources, land use, geology, topography, and soils, biological resources, noise, socioeconomics, community services, solid and hazardous materials, utilities, and environmental justice.

Summary of Environmental Impacts: Based on the findings of the EA, it is anticipated that the Proposed Action would result in no significant adverse impact to any of the aforementioned resource areas. As summarized in the following table, the Proposed Action could have minor adverse impacts on selected resources, and an overall beneficial impact on water quality, topography and soil quality, biological resources, and socioeconomics. The adverse impacts would be maintained at a less-than-significant level by implementing BMPs, permit requirements, and performing other management measures throughout the construction and operational phases. Further, impacts from the Proposed Action would not be significant even when considered on a cumulative basis with other actions at Fort Belvoir.

Resource Area	Proposed Action	No Action Alternative
Aesthetics	No impact. Project study area is not visible by any reasonable measure, and work within the project study area would not directly or indirectly impact aesthetic conditions elsewhere at Fort Belvoir.	No Impacts
Air Quality	Less-than-significant short-term adverse impacts during construction due to construction engine emissions and potential fugitive dust emissions; impacts minimized through BMPs. No operation impacts.	No Impacts
Cultural and Historic Resources	No Impacts. No archaeological sites are present within the project study area. Inadvertent discovery of cultural resources would be managed according to procedures documented in Fort Belvoir's ICRMP.	No Impacts
Transportation and Parking	No Impact. Existing roadways and parking areas have sufficient capacity to handle machinery and workers' vehicles involved with constructing the Proposed Action.	No Impacts
Water Resources	Less-than-significant adverse impacts during construction, should surface water be present in the intermittent stream channel during the construction phase. Long term beneficial impacts during operation due to reduced erosion and sedimentation due to improved stormwater control measures.	Significant adverse impact. Continued erosion would result in discharge of larger amounts of sediment due to higher stormwater discharge velocities.
Land Use	No Impacts. Restoring Outfall #0015 and the stream channel would not cause or induce any changes in land use at Fort Belvoir or in the surrounding community. The land would continue to be used for Fort Belvoir stormwater management.	No Impacts

Resource Area	Proposed Action	No Action Alternative
Geology, Topography, and Soils	No impacts on geology. Overall, long-term beneficial impacts on topography and soil due to reduced soil erosion and slowing of channeling in sidewalls.	Significant adverse impact. Continued soil erosion of the sidewalls and stream channels due to higher stormwater discharge velocities.
Biological Resources	Less-than-significant adverse impacts from removing some vegetation so that construction equipment and supplies can reach the outfall and stream channel, and to construct the embankment berm. Common wildlife species would relocate during construction. As needed, mitigation measures, such as tree replanting in accordance with Fort Belvoir's Tree Removal and Protection Policy and compliance with time-of-year restrictions for northern long-eared bats, would be implemented to minimize adverse impacts caused by construction. Operation would have a long-term beneficial impact due to improved vegetation habitat (through bank stabilization and reduced erosion).	Moderate adverse impact on vegetation due to bank erosion that undercuts tree roots.
Noise	No impact on human receptors due to isolated location and natural noise-blocking features (work would occur within the stream valley). Temporary impacts to common wildlife would be negligible as individual animals would be able to relocate to similar habitat available through and adjacent to the project study area.	No Impacts
Socioeconomics	Temporary and negligible beneficial impacts due to the potential employment of local construction workers and purchasing of materials from local vendors.	No Impacts
Community Services	No impact on community resources. No community services are required to construct or operate the Proposed Action.	No Impacts
Solid and Hazardous Materials	Less-than-significant impact due to potential for accidental release of petroleum-based fluids from construction equipment involved with outfall reconstruction and stream channel restoration. Low potential to impact existing PCE-contaminated groundwater due to avoidance of known plume.	No Impacts
Utilities	No Impacts. The Proposed Action would not require changes to utility demand or distribution at Fort Belvoir or in the community.	No Impacts
Environmental Justice	No Impact. While minorities comprise greater than 50% of the population in the surrounding community, the Proposed Action has no direct or indirect mechanism to impact these communities.	No Impacts

Notice of Availability: The EA and Draft FNSI have been made available for a 30-day review and comment period by the public, regulatory agencies, and stakeholder organizations. A Notice of Availability of the EA and Draft FNSI and the 30-day review period was published in the *Springfield Connection*, the *Mount Vernon Voice*, and the *Gazette*. Printed copies of the EA and Draft FNSI are available for review at the Fort Belvoir Van Noy Library; the Fairfax County Library - Kingstowne Branch, Lorton Branch, and the Sherwood Branch; and on the installation's website at: <https://home.army.mil/belvoir/index.php/about/Garrison/directorate-public-works/environmental-division>.

Response to Comments: Comments from federal, state, and local agencies and the public received during the public review period will be considered by Fort Belvoir for incorporation into the Final EA.

Conclusion: Pursuant to the Council on Environmental Quality (CEQ) regulations; Title 40, CFR Section 1500-1508 regarding procedural implementation of the National Environmental Policy Act (NEPA) of 1969; and implemented for the Army by Title 32 CFR 651, Environmental Analysis of Army Actions, it is anticipated that the Proposed Action would not have a significant adverse effect on the environment and that a FNSI is appropriate. An environmental impact statement (EIS) will not be prepared.

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Colonel, U.S. Army
Commanding

Date