NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NOTICE: GSFC-14-01

National Environmental Policy Act: Expansion of satellite ground communications terminal facilities and operations at the U.S. Army Garrison Adelphi Laboratory Center, Blossom Point Research Facility (Blossom Point) in Charles County, Maryland

AGENCY: National Aeronautics and Space Administration (NASA)

ACTION: Finding of No Significant Impact

SUMMARY: Pursuant to the National Environmental Policy Act (NEPA) of 1969 , as amended (42 U. S. C. 4321, *et seq.*), the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 CFR parts 1500-1508), and NASA policy and procedures (14 CFR part 1216, subpart 1216.3), NASA has made a Finding of No Significant Impact (FONSI) with respect to the expansion of satellite ground communications terminal facilities and operations at the U.S. Naval Research Laboratory (NRL) Blossom Point Tracking Facility (BPTF), located within the U.S. Army Garrison Adelphi Laboratory Center, Blossom Point Research Facility (Blossom Point) in Charles County, Maryland.

ADDRESSES: The Environmental Assessment (EA) that serves as the basis for this FONSI can be viewed online at http://code250.gsfc.nasa.gov/environmental/blossom-point.cfm and at the following locations:

(a) Charles County Public Library, La Plata Branch, 2 Garrett Avenue, La Plata, MD 20646 (301-934-9001)
(b) Goddard Space Flight Center Visitor Center, 8800 Greenbelt Rd, Greenbelt, MD 20771 (301-286-8981)

A limited number of the hard copies of the EA are available by contacting Ms. Lizabeth Montgomery at the address indicated herein.

FOR FURTHER INFORMATION CONTACT:

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SUPPLEMENTARY INFORMATION: The U.S. Army, as the landowner, is the lead agency for the Proposed Action. Action Proponents include NRL and NASA. As the lead agency, the Army prepared the EA to analyze the impacts of the expansion of satellite ground communications terminal facilities and operations to include both NRL's action (Southern Drawl Project) and NASA's action. NASA, as an action proponent, served as a cooperating agency in the preparation of the EA.

The EA evaluates the potential environmental impacts associated with proposed expansion at BPTF. The Draft Army EA, including the Draft Army FONSI, was available for a 30-day public review and comment period from June 25 to July 24, 2014, followed by a 15-day extension period from August 8 to 22, 2014. A copy of the document was placed at the Charles County Public Library, La Plata Branch, 2 Garrett Avenue, La Plata, MD 20646, and on the Internet. Comments received were taken into consideration in the development of the final EA.

NASA has reviewed the Army EA prepared for the proposed expansion at BPTF and has determined it represents an accurate and adequate analysis of the scope and level of associated environmental impacts. NASA, as the adopting agency, has concluded that the EA prepared by the Army adequately describes NASA's proposed action and the potential environmental impacts and in all other respects meets NASA's requirements for an EA. NASA, therefore, has adopted the Army EA and hereby incorporates it by reference in this FONSI.

Background

The Navy's BPTF is contained on 41 acres located within the U.S. Army's Blossom Point property. The existing antennas at BPTF receive data from and transmit commands to various types of satellites. NASA's existing antenna facility, the Space Network Expansion Ground System-East (SNEGS–E) is located adjacent to the BPTF. The NASA antennas are part of a network that provides mission critical, long-term communication with orbiting spacecraft associated with the Tracking and Data Relay Satellite System. Construction and operation of the SNEGS-E antennas and related infrastructure was previously analyzed in an EA (*Final Environmental Assessment for the Space Network Expansion Ground System–East at Blossom Point Tracking Facility* (A. Morton Thomas and Associates, Inc. 2008)) that resulted in a FONSI signed by the Army and NASA in 2008. Following construction (completed in 2013), NASA determined that the antenna line-of-sight (LOS) zone (i.e. tree clearance area) analyzed in the 2008 EA was not large enough to enable the NASA antennas to meet their mission requirements due to tree obstructions. Additional tree clearance is necessary for the SNEGS–E antennas to operate and fulfill their mission. Moreover, since the prior EA analysis NRL has indicated a need for up to two new satellite communications antennas.

Purpose and Need

The purpose of the Proposed Action is to provide communications links with NASA Space Network and NRL satellites in orbit over the Atlantic Ocean region. The Proposed Action is needed for the following reasons:

1. To ensure that the previously installed NASA SNEGS–E antennas are able to fulfill their mission-critical need of long-term communications with orbiting spacecraft associated with the Tracking and Data Relay Satellite System.

2. To provide the NRL's Southern Drawl project with required exclusive use of one to two new satellite communications antennas to communicate with satellites in the Atlantic Ocean region to support Operationally Responsive Space capabilities and national security.

Proposed Action and No Action Alternative

Proposed Action

The Proposed Action, as analyzed in the Army EA, is to expand satellite ground communications terminal facilities and operations at the BPTF. This includes installation of up to two 13-meter parabolic satellite communications antennas, related facilities, and infrastructure in support of the NRL's Southern Drawl project, and clearing of vegetation that would obstruct communications signals in the combined LOS zone for both the proposed NRL antennas and NASA's previously installed SNEGS–E antennas.

Both NASA's SNEGS–E antennas and the 2 new NRL antennas would serve as communications links for satellites over the Atlantic Ocean region. BPTF is uniquely located in an area with an unobscured view to the satellites with which the proposed NRL antennas and the existing NASA antennas need to communicate, where there is minimal radio frequency interference, and where the antennas would not impact other existing or future missions. Trees that would obstruct communications signals in the combined LOS zone would need to be removed.

Alternatives

The following alternatives were analyzed in the EA.

Alternative 1 (Preferred Alternative)

Under this alternative, the NRL Southern Drawl facility would be located immediately north of NASA's SNEGS–E site and adjacent to the BPTF. Trees within the combined LOS zone would be cut at ground level and the vegetation maintained at that height for the life of the antennas (approximately 20 years). Vegetation maintenance within the combined LOS zone would consist of prescribed burning, mechanical removal, herbicide application, or a combination of these methods every 2 to 3 years, depending on the rate of vegetation growth.

Alternative 2

Under this alternative, the NRL Southern Drawl facility would be built immediately south of NASA's SNEGS–E site. Because of its location farther from existing BPTF operations, this alternative would require an approximate 900-foot-long gravel access road around the east side of the SNEGS–E facility, much longer cable runs, and likely would require that a new data center be built on site. Also, due to the site's steeper grades and proximity to wetlands, a concrete retaining wall would need to be constructed on drilled piers around the south side of the facility. Rip-rap would then be added along the wall for shoreline protection. Trees within the combined LOS zone would be cut at ground level and the vegetation maintained at that height for the life of the antennas (approximately 20 years). Vegetation maintenance within the combined LOS zone would be conducted in the same manner as described for Alternative 1.

No Action Alternative

Under the No Action Alternative NASA's SNEGS–E LOS would not be expanded, previously installed antennas would not be able to communicate with satellites, and the SNEGS–E would not be able to fulfill its mission. The proposed Southern Drawl antennas would not be constructed, thus NRL would not be able to communicate with satellites over the Atlantic Ocean region and fulfill its mission. While potential environmental impacts from implementation of the Proposed

Action would not occur, the No Action Alternative would not support the purpose of and need for the Proposed Action.

Summary of Environmental Impacts

The following environmental resources, with potential environmental impacts from the Proposed Action, were analyzed in the EA: Air Quality; Biological Resources; Water Resources; Cultural Resources; Land Use; Utilities and Infrastructure; and Geology, Topography, and Soils. The environmental impacts for each alternative and resource topic analyzed are summarized below.

No significant impacts on air quality would be expected under either Alternative 1 or 2. Air pollutant emissions from construction, prescribed burns, and the operation of an emergency power generator would be well below general conformity *de minimis* thresholds.

No significant impacts on biological resources, including habitat, bald eagles, migratory birds, and other wildlife, would be expected under either alternative. No effect on threatened and endangered species would be expected, as none are present. Alternative 1 would include the removal of three inactive bald eagle nests, one of which was active during the 2014 breeding season, while Alternative 2 would require removal of two inactive nests, one of which was active during the 2014 breeding season. A permit from the U.S. Fish and Wildlife Service would be obtained prior to nest removals.

No significant impacts on water resources, including wetlands, storm water, or floodplains would be expected under either alternative. Impacts to wetlands under Alternative 1 would include the permanent loss of 0.31 acres of wetlands and the conversion of approximately 3.15 acres of forested wetland areas to emergent wetland habitat. Under Alternative 2, wetland impacts would include the permanent loss of 0.24 acres of wetlands and the conversion of approximately 1.19 acres of forested wetland areas to emergent wetlands. All necessary wetland permits would be obtained prior to clearance and construction activities. Alternative 1 would increase impervious surface area by approximately 0.96 acres, while Alternative 2 would result in an increase of 1.2 acres. Implementation of either alternative would require application for coverage under the Maryland Department of the Environment General Discharge Permit for Stormwater Associated with Construction Activity Use of erosion and sediment control plans and best management practices (BMPs) to provide erosion and sediment control and storm water management during site construction and forestry operations would reduce adverse effects on surface water. The anticipated impacts of construction on the 100-year floodplain and flood zones at BPTF would be negligible.

No cultural resources would be impacted by either Alternative 1 or Alternative 2. The three previously recorded archaeological sites within or just outside of the proposed LOS zone for both Alternatives 1 and 2 are not expected to be impacted as long as low-impact timber harvesting methods are used and no grubbing or grading occurs in these areas.

Neither Alternative 1 nor 2 would impact land use or utilities and infrastructure at Blossom Point. No significant impacts on geology, topography, and soils would be expected for either alternative. Alternative 2 would have 2.58 more acres of highly erodible soils than Alternative 1 (Alternative

1 would have 0.17 acres). However, erosion and sediment control plans and BMPs would be implemented to minimize impacts.

Based on a review of past, present, and reasonably foreseeable future actions at Blossom Point and in areas near the installation, it was determined that there would be no significant cumulative impacts. Implementation of either Alternative 1 or Alternative 2 of the Proposed Action would not result in significant, direct, indirect, or cumulative impacts on the natural or man-made environment.

On the basis of the Army EA, NASA has determined the environmental impacts associated with NASA's proposed action would not individually or cumulatively have a significant impact on the quality of the human environment. Therefore, an environmental impact statement is not required.

CJS

Christopher J. Scolese
Director
Goddard Space Flight Center

13 FEBRUARY 2015

Date