

**National Telecommunications and Information Administration
Broadband Technology Opportunities Program
Mitigated Finding of No Significant Impact
Navajo Tribal Utility Authority
Quality Broadband for the Navajo People Middle/Last Mile Project**

Summary

The Navajo Tribal Utility Authority (NTUA) applied to the Broadband Technology Opportunities Program (BTOP) for a grant to enable wireless, fixed, and mobile broadband access and high-capacity connectivity on a middle-mile backbone. The proposed action will provide broadband access and connectivity across 15,120 square miles of Navajo lands within Arizona, New Mexico, and Utah, and is referred to as the Quality Broadband for the Navajo People Middle/Last Mile Project (Project).

The National Telecommunications and Information Administration (NTIA) awarded a grant for the Project to NTUA, through BTOP, as part of the American Recovery and Reinvestment Act (ARRA). The funding must be obligated and the Project completed within three years. This timeline is driven by the laws and regulations governing the use of this ARRA grant funding.

BTOP supports the deployment of broadband infrastructure in unserved and underserved areas of the United States and its Territories. As a condition of receiving BTOP grant funding, recipients must comply with all relevant Federal legislation, including the National Environmental Policy Act of 1969 (NEPA). Specifically, NEPA limits the types of actions that the grantee can initiate prior to completing required environmental reviews. Some actions may be categorically excluded from further NEPA analyses based on the specific types and scope of work to be conducted (74 *FR* 32876 and 74 *FR* 33204). For projects that are not categorically excluded from further environmental review, the grant recipient must prepare an Environmental Assessment (EA) that meets the requirements of NEPA. After a sufficiency review, NTIA may adopt the EA, use it as the basis for finding that the project will not have a significant impact on the environment, and issue a finding of no significant impact (FONSI). Following such a finding, the BTOP grant recipient may then begin construction or other activities identified in the EA as the preferred alternative, in accordance with any special protocols or identified environmental protection measures.

NTUA completed an EA for this Project in October 2010. NTIA reviewed the EA, determined it sufficient, and adopted it as part of the development of this FONSI.

The Project includes:

- Deploying a combination of fiber optics, mobile wireless, and fixed wireless technologies;
- Leasing 4 dark fibers from the Public Service Company of New Mexico;
- Replacing 328 miles of static wire with 550 miles of fiber optic cable on existing distribution lines;

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- Replacing approximately 704 utility poles to accommodate the extra weight of aerial fiber;
- Installing 32 new communication tower sites and 1 tower extension;
- Installing a telecom hut and shelter at each tower site;
- Connecting the wireless network with the new fiber backbone in at least 6 locations; and
- Partnering with Commnet Wireless to provide last-mile services.

Based on a review of the analysis in the EA, NTIA has determined that the Project, if implemented in accordance with the preferred alternative and incorporating best management practices (BMPs) and protective measures identified in the EA, will not result in any significant environmental impacts. Therefore, the preparation of an EIS is not required. The basis for this determination is described in this FONSI.

Additional information and copies of the Executive Summary of the EA and FONSI are available to all interested persons and the public through the BTOP website (www2.ntia.doc.gov/) and the following contact:

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Purpose and Need

The purpose of this Project is to provide affordable high-speed Internet services to the Navajo Nation. This technology will provide the Navajo Nation with the opportunity to develop a sustainable economy through e-commerce. The Project will also leverage and expand existing NTUA broadband infrastructure and offer high-speed fiber optic connectivity to Navajo tribal government agencies, residents, and businesses through last-mile wireless services provided by Commnet. The Navajo Nation, like most rural areas, faces considerable challenges with regard to the availability of telecommunications services. According to the 2000 Census, only 39% of the Navajo Nation had basic telephone service. The residents of the Navajo Nation have fallen behind the rest of the country in terms of access to digital and information technology due to the lack of a viable telecommunications infrastructure. The Project will also enhance public safety and health care resources on Navajo lands.

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Project Description

The Project will be implemented in five phases and will extend over 550 network miles. Each phase covers a different area along the Project route. There is also an alternate route to be used for Phase III if needed. The Project phases are as follows:

- I. Phase I of the Project covers the area from Farmington, NM to Yah-Ta-Hey, NM and the estimated length is 117 miles.
- II. Phase II of the project covers the area from Tohatchi, NM to Tsaile, AZ and the estimated length is 161 miles.
- III. Phase III of the Project covers the area from Chinle, AZ to Kayenta, AZ and the estimated length is 98 miles.
- IV. Phase IV of the Project covers the southern portion of the NTUA service area, the total length of this phase is approximately 69 miles.
- V. Phase V of the Project covers the areas southwest of Kayenta, AZ and the estimated length is approximately 85 miles.
- VI. Phase VI is an alternate route for Phase III. This route goes north from Chinle on NTUA's existing line to Kayenta.

The construction plan includes installing a combination of fiber optic cable, 32 new communication tower sites and 1 tower extension. This Project will leverage and expand NTUA's existing microwave network. NTUA partnered with Commnet Wireless to provide last-mile services via Commnet's 4th Generation (4G) Long Term Evolution (LTE) network.

Existing distribution lines comprised of 328 miles of static wire will be replaced and extended with 550 miles of fiber optic cable. An engine puller will be used to replace static wire with fiber optic cable. A bull wheel or tensioner will be used to keep line tension and prevent new or replacement cables from interfering with phase conductors. A reel payoff stand will be used to hold the new fiber being installed. Travelers or pulley blocks will be placed on poles for pulling fiber. Pulling grips will protect the cable during the pulling process. Boom trucks will be used to setup travelers and clip in fiber. As the existing static wire is removed, that wire will be wound on wooden reels and shipped to a local NTUA warehouse or other storage site for eventual salvage.

To accommodate the extra weight of aerial fiber optic cable, approximately 704 utility poles will be replaced. Utility poles will be replaced and new aerial fiber will be installed simultaneously. Pole replacements will involve digging a hole directly adjacent to the existing pole with a post hole digger. Approximately 6 inches of stone will be placed in the bottom of the new hole to provide a level surface for the new pole to sit upon. Once the pole is placed into the hole by

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mechanical lift, the space around the pole will be back-filled and tamped down, leaving approximately 6 to 12 inches above ground to allow for settling. Using a cherry-picker, workers will then move the existing electric cable from the existing pole to the new pole. Once the existing cable is in place, the top of the existing pole will be cut off to allow room for the pole to be mechanically pulled out of the ground with a backhoe or similar equipment. The resulting hole will then be back-filled, tamped down, leaving approximately 6 to 12 inches above ground level for settling. The old poles will be sold and/or donated for reuse (e.g., barn raising and fence posts).

This project also involves the development of 32 new communication tower sites and one tower extension. The majority of the new structures are self supported towers. There will be one 60 foot tower and twenty-five 180 foot towers. The self supported towers are steel structures supported by 3 legs with diagonal members to join the legs. There will also be one 65 foot Lite-Site and three 120 foot Lite-Site/Lite-Poles. A Lite-Site/Lite-Pole is a monopole structure that can be installed without ground disruption and requires no geotechnical investigation due to its relatively low pressure on ground. There are also 26 existing structures that will be incorporated into the final middle mile network.

The Project's wireless component design utilizes existing NTUA and other carrier tower infrastructure wherever possible. Where existing infrastructure is not available, new structures will be erected within existing NTUA utility compounds, which are previously disturbed areas. Where these two approaches are not possible, previously undeveloped sites have been selected for tower construction. These areas are typically relatively flat, cleared areas with existing access routes and in close proximity to other development and void of vegetation and other natural features. The Navajo Nation has no land use or zoning restrictions and relies upon the discretion of local Chapters to seek community input and concurrence on development proposals. Consequently, all previously undeveloped wireless sites have been submitted for Chapter review and Bureau of Indian Affairs (BIA) consent for the rights-of-way (ROWs). The review process is not complete, but it is accounted for in the Project timeline. All new structures will be located in an existing compound adjacent to a Chapter House, NTUA water tank or utility facility, NTUA district office, or an NTUA power line corridor.

Each new tower requires a foundation with a 4 to 6 foot diameter hole for each leg. To accommodate the tower foundation, soil will be excavated up to 20 feet deep. Microwave and LTE will be installed on the towers. After installation of the wireless structure, a telecom hut and shelter will be installed. The shelter will be built on a concrete slab placed in the site compound. The sites will be enclosed by a 6-foot tall chain link fence. In addition to standard power (main electrical lines to the site), all structures, with the exception of the Forest Lake Chapter and Sanostee structures, will be equipped with back-up generators and a diesel tank. In all instances, no new roads or access ways are required for construction and operation.

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The proposed fiber backbone will have signal regeneration sites and will initially be a 1 gigabit network that is expandable to 10 gigabits, as the need arises. The fiber optic backbone will connect NTUA's substations that will also be tied to an existing microwave network. In addition, the fiber optic network will also connect towers. These towers will have microwave, fixed and mobile wireless antennas where it is not cost effective to build a fiber optic link. All of these components will be installed simultaneously using various electronics and regeneration equipment.

Mobile broadband access will be provided via a wireless 4G LTE network. The LTE network will be deployed at 40 locations in order to support stationary and mobile data applications for residential, business and government customers. The 4G LTE network will be installed using the latest technology for electronics equipment, antennas, and accessories. The LTE system has two main components: the core LTE network and the radio access network. The LTE core will be located in the main operation center for NTUA and the 40 radio access sites are distributed across the service area.

Alternatives

The EA includes an analysis of the alternatives for implementing the Project to meet the purpose and need. NTIA also requires that an EA include a discussion of the no action alternative. The following summarizes the alternatives analyzed in the EA and those considered but not carried forward.

Alternative 1 – Fiber, Wireless, and Existing Network Configuration (Preferred Alternative). As noted in the Project Description, this effort will provide broadband coverage over 15,120 square mile of Navajo land. The Project includes installing fiber optic cable, constructing 32 new communication tower sites, and 1 tower extension. This alternative also utilizes NTUA's existing microwave network. Last-mile services will be provided by Commnet Wireless on their 4G LTE network.

No Action Alternative. No action was also considered. This alternative represents conditions as they currently exist. By taking no action, the Navajo Nation will continue to be without a reliable and adequate telecommunications/broadband infrastructure to address emergencies and economic development. The desire of the Navajo Nation to benefit from modern use of these facilities will not be met and the Navajo Nation's business opportunities and other goals will not be realized. The EA examined this alternative as the baseline for evaluating impacts related to other alternatives being considered.

Alternatives Considered But Not Carried Forward. NTUA considered a satellite-based solution, but it was eliminated from consideration due to the elevated cost and poor performance in terms of speed for the end user. A total backbone underground fiber deployment was also considered, because it would provide a longer life cycle than aerial fiber. However, an underground fiber deployment throughout Navajo Lands was cost prohibitive to implement due to the geography of

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the area and the lack of infrastructure that allows for an underground deployment (e.g., ducts or trenches commonly found in most metropolitan areas). In addition, environmental and archeological constraints would restrict the trenching needed for underground fiber installation. Because NTUA already has ROWs to its power pole infrastructure, the deployment of fiber in this corridor is more economical than other wired solutions considered.

Another alternative network solution involved incorporating fiber and a fixed point to point microwave solution based on unlicensed spectrum. The unlicensed spectrum-based alternative has the advantage of lower price points; however, the unlicensed solution does not offer any long-term protection regarding technical issues, such as radio interference and security. Unlicensed solutions also have a lower data transport capacity in addition to a higher maintenance cost in the medium- and long-term. Licensed spectrum-based solutions are protected by the FCC in terms of the use of spectrum and have lower maintenance cost in the medium- and long-term; thus, NTUA selected a licensed spectrum-based solution.

Findings and Conclusions

The EA analyzes existing conditions and environmental consequences of the preferred alternative and the no action alternative. To analyze the conditions and consequences, 11 major resource areas were analyzed, including Noise, Air Quality, Geology and Soils, Water Resources, Biological Resources, Historic and Cultural Resources, Aesthetic and Visual Resources, Land Use, Infrastructure, Socioeconomic Resources, and Human Health and Safety. Cumulative impacts of each alternative were also evaluated.

Noise

A temporary increase in noise levels from construction vehicles and other tools is expected during Project construction and installation activities. Generators will provide power during construction and will be a temporary source of noise. Construction will occur on week days during standard business hours. Any noise impacts will be temporary. Populated areas are at least 50 feet away from construction sites and typically more than 100 feet away. For tower construction, excavation machinery will produce an overall noise of 80 to 85 dB(A). Drilling is done in intervals of 5 to 10 minutes each, for 20 to 30 minutes during the work day. The duration of the total excavation normally takes 1 to 2 days. Vehicles used during construction, including trucks, mobile cranes, pullers, and lifts, will produce standard noise related to motor, winches, and safety signal devices from 70 to 93 dB(A) during operation. Vehicles carrying materials are expected to operate during material drop-off and pick-up throughout the day for intervals of 20 to 30 minutes once to three times a day. Mobile cranes and other types of vehicles are expected to be used for intervals of 20 to 40 minutes twice or three times a day for 2 to 7 days. Other construction tools such as air compressors, jack hammers, grinders, misers, and power tools, generate noise levels from 75 to 108 dB(A) during operation. These tools will operate intermittently during construction activities from a few seconds to several minutes, but

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will not continuously operate for more than 15 minutes. Noise resulting from construction equipment used for the installation of the Project will be localized and short-term; no long-term noise effects will occur. Thus, the preferred alternative will not have significant adverse impacts on noise in the Project area. There would be no construction activities associated with the no action alternative, therefore, there would be no impact on noise levels.

Air Quality

A temporary increase in vehicle emissions will result during Project construction, but no long-term emissions of air pollutants will occur. Emissions will include standard engine emissions from commercial vehicles and diesel-powered generators, temporarily located at the site. The emissions will result in minimal releases of greenhouse gases that will not significantly contribute to global warming. The Navajo Nation Environmental Protection Agency, Air Quality Control Program, in a letter dated June 21, 2010, stated the Project, “may proceed provided NTUA take measures to minimize fugitive dust emissions during construction activity.” Fugitive dust emissions shall be kept to a minimum during construction activity. A dust abatement plan will be implemented during construction of the Project, per NTUA’s standard operating procedures that meet the Navajo Nation Environmental Protection Agency’s requirements. Dust abatement methods will include:

- regularly spraying minimal water on loose dirt in construction sites. This practice will dampen the ground just enough to control the dust, but not enough to create run off. This dust control practice will be performed by personnel who are familiar with this method. The surface area sprayed will not be greater than 0.1 acre.
- prevent motor vehicle and/or off-road vehicle trespassing, parking, and/or access, by installing barriers, curbs, fences, gates, posts, signs, or other effective means; and
- dust palliatives will be used if necessary.

With these protective measures in place, construction as part of the preferred alternative is not expected to have long-term significant impacts to air quality, and minor short-term impacts will be minimized. The no action alternative would include no construction, equipment, generators, or ground disturbance activity. Accordingly, the no action alternative would have no impacts on air quality in the Project area.

Geology and Soils

The Project entails construction of existing facilities in previously disturbed areas and usage of existing access roads, thus minimizing impacts to the land. Pole replacements will be inserted directly adjacent to existing poles. Holes will be backfilled and tamped down, leaving approximately 6 to 12 inches above ground to allow for settling. Tower construction is situated almost entirely on previously disturbed areas. These sites will be located on existing NTUA business site lease areas adjacent to existing power lines; within existing NTUA water tank sites under a federal ROW designated for all utility uses, including telecom; on existing tower facilities developed under a federal ROW designated for utility uses, including telecom; within existing NTUA power line corridor and easements; and within existing Chapter House tracts.

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When existing tower infrastructure is not available and new structures cannot be located within NTUA utility compounds, previously undeveloped sites were identified. These sites are relatively flat, cleared areas in close proximity to other development, void of vegetation and other natural features, with existing access routes. These locations were specifically selected to minimize impacts to undisturbed land. No improved roads or new access will be required for the site construction and operation. Given these conditions and protective measures, implementation of the preferred alternative will not result in significant impacts to geology or soil within the Project area. Moreover, the no action alternative would have no impact on geology or soil in the Project area because no construction or ground disturbance would occur.

Water Resources

At two locations, existing NTUA facilities enter and cross the San Juan River and the Hogback Canal in New Mexico. The San Juan River is the only perennial tributary with year-round water flows. Other water resources crossed along the Project route in Arizona include the Hogback Canal, Black Creek, Wide Ruin Wash, Chinle Wash, Begashibito Wash, Moenkopi Wash, Laguna Creek and Chinle Creek. These water bodies are intermittent water courses less than 60 feet wide and do not have any natural, permanent, or semi-permanent source of water flows. Installation of the fiber across these water resources does not involve excavation or ground disturbance. There were no wetlands identified along the Project route. There are also no coastal zones in this region. Several short segments of the Project route are situated within floodplains. However, no new construction or towers will be built in floodplains; only modifications to existing facilities will occur in these areas.

To avoid potential impacts to fish and amphibian species in the San Juan River, no construction activities will be conducted on or near the river. Pulleys will be located on both sides of the river banks to hoist and string the fiber optic cables. The existing poles structures are fixed at the furthest points away from the banks. If impacts to the San Juan River are deemed unavoidable, the Water Pollution Control Program will be notified immediately for further consultation. In a letter dated May 25, 2010, the Navajo Environmental Protection Agency concurred with these protective measures.

Based on these findings and protective measures, no significant impacts to water resources are anticipated as a result of implementing the Project in accordance with the preferred alternative. The no action alternative would have no impacts on water resources in the Project area because no construction activities would occur.

Biological Resources

For Phase I of the Project, the Navajo Fish and Wildlife Department and U.S. Fish and Wildlife Service (USFWS) provided NTUA with a list of 29 species of concern and the species' status. A contractor conducted site surveys to determine if these species were present in or near the existing electrical corridors. The site surveys also included an assessment to determine what issues, if any, would arise due to any pole replacement needed to accommodate the new aerial

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fiber. Results of the surveys determined that 23 species were not present in the existing corridors and are highly unlikely to be present due to the absence of critical habitat requirements and/or absence of these species. Phase 1 of the Project does include potential nesting, foraging, or suitable habitat within the existing corridors for the 6 remaining species.

Similar to Phase 1 of the Project, the Navajo Fish and Wildlife Department and USFWS provided a list of 61 species of concern for Phases II through VI (alternate route). Site surveys determined that 47 species were not present in the existing corridors and are highly unlikely to be present due to the absence of critical habitat requirements and/or absence of these species. For Phases II through VI (alternate route), potential nesting, foraging, or suitable habitat exist within the existing corridors for the remaining 14 species.

Biological Survey Reports addressing all Project phases confirmed that potential nesting, foraging, or suitable habitats exist within the existing corridors for the golden eagle (*Aquila chrysaetos*), ferruginous hawk (*Buteo regalis*), mountain plover (*Charadrius montanus*), peregrine falcon (*Falco peregrines*), Mesa Verde cactus (*Sclerocactus mesae-verdae*), northern goshawk (*Accipiter gentilis*), northern saw-whet owl (*Aegolius acadicus*), burrowing owl (*Athene cunicularia*), California condor (*Gymnogyps californianus*), bald eagle (*Haliaeetus leucocephalus*), flammulated owl (*Otus flammeolus*), three-toed woodpecker (*Picoides dorsalis*), Mexican spotted owl (*Strix occidentalis lucida*), gray vireo (*Vireo vicinior*), and the kit fox (*Vulpes macrotis*).

A re-survey was conducted during the appropriate flowering season for the Mesa Verde cactus, and none were found within the Project route; therefore, no impacts to this species are anticipated.

No impacts are anticipated to the burrowing owl, peregrine falcon, California condor, and the bald eagle, as no nesting individuals/pairs or breeding/nesting activities were observed during the surveys. The surveys were conducted during the appropriate nesting time period. In the event that construction occurs during the nesting period, an additional preconstruction survey will be conducted and coordinated with the Navajo Fish & Wildlife Department.

Due to the transient nature of the northern goshawk, northern saw-whet owl, golden eagle, ferruginous hawk, mountain plover, flammulated owl, three-toed woodpecker, Mexican spotted owl, gray vireo and the kit fox, these species are not expected to be adversely impacted by Project activities. Additionally, none of these species were observed during the surveys.

Tower construction can potentially interfere with migratory bird flyways. The sites do not appear to be in a migratory bird flyway, based on information obtained from the Nature Conservancy Migratory Bird Database.

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A letter from the Navajo Nation Department of Fish and Wildlife dated August 9, 2010, recommended conditional approval of the Project, provided that NTUA either complete construction activities outside the bird breeding season or complete surveys for migratory birds if the construction were to take place during the bird breeding season. As indicated, if the construction takes place during the bird breeding season, NTUA will complete surveys for migratory birds.

Temporary displacement of wildlife along the Project route will occur during construction activities, but displacement will cease once the project is completed. Based on the above analysis and through the implementation of protective measures, no significant adverse impacts to biological resources are anticipated as a result of the Project. The no action alternative would have no impacts on biological resources in the Project area because no construction or habitat disturbance would occur.

Historic and Cultural Resources

Two cultural resource inventories were conducted along the Project route. The first inventory identified 13 archaeological sites, 43 isolated occurrences (IOs), 1 grave site, and 32 in-use sites (IUSs). Numerous traditional cultural places (TCPs) were also identified. The report regarding TCPs is confidential and on file with the Navajo Nation Historic Preservation Department in Window Rock, Arizona. A second cultural resources inventory along the Project route identified 167 archaeological sites, 211 IOs, 79 currently in-use sites IUSs, 1 marked grave, 1 cemetery, and 4 TCPs.

NTUA consulted with the Navajo Nation Historic Preservation Department to identify potential Project impacts to historic and cultural resources. Due to the vast Project area covered, the Navajo Nation Historic Preservation Department provided the following consultation recommendations for three specific areas along the Project route. The following three separate statements and recommendations were provided:

- In correspondence dated August 25, 2009, the Navajo Nation Historic Preservation Department stated that for the Project route from Farmington to Ya-Ta-Hey, NM, no historic properties will be affected by the Project, but requires that 12 archaeological resources be flagged by a qualified archeologist and monitored during construction activities.
- For a transmission line between Farmington and Shiprock, in correspondence dated April 28, 2010, the Navajo Nation Historic Preservation Department stated no historic properties will be affected.
- In correspondence dated August 3, 2010, regarding fiber optic cable installation throughout the Navajo Reservation, the Navajo Nation Historic Preservation Department stated no historic properties will be affected, but this area of the Project requires that the listed archaeological resources be protected by flagging site boundaries, restricting construction within the existing roads and corridors, conducting no blading within the site

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boundaries, hand carrying cable across the sites, and monitoring by a qualified archaeologist during construction activities.

Based on these findings, and considering the protective measures to be implemented, the preferred alternative is not expected to have adverse impacts on historic and cultural resources. The no action alternative involves no infrastructure installation or ground disturbance and would have no impacts on historic and cultural resources.

Aesthetic and Visual Resources

There are many aesthetic and visual resources located along the Project route, including the San Juan River, Hogback Ridge, Shiprock Pinnacle, NAPI farmlands, Chuska Mountains, Dezza Bluff, Fluted Rock, Red Lake, Lukachukai Mountain, Many Farms Lake, Los G Santos Buttes, Round Rock Butte, Dine College, Tsaile Butte, Tsaile Lake, Baby Rocks, and Black Mesa plateau. To minimize aesthetic and visual resource impacts fiber optic cables will be attached to existing facilities and/or replacing existing facilities. Communication towers will be located in either industrial or urban areas adjacent to existing structures and are not projected to create any adverse visual impact in these areas. To minimize impact on scenic resources, the tower sites are situated behind the main facilities and adjacent to existing power lines. Based on this analysis, the Project will not have a significant adverse impact on aesthetic and visual resources. The no action alternative would similarly result in no impacts to aesthetic and visual resources in the Project area because no changes would be made to the existing environment.

Land Use

The primary land uses of the Navajo Tribal Trust Lands along the Project route are livestock grazing, farming and wildlife habitat. Other land uses in the surrounding areas include, camping, fishing, hunting, forest, woodland, recreation, mining, utility corridors and transportation. Towers will be located in either industrial or urban areas and will not impact the current land use. Numerous dirt roads provide access to existing facilities that will be used for operation and maintenance of the Project. There are no coastal zones in the Project area. Implementing the Project will not adversely impact livestock grazing, which is the primary land use across the Navajo Nation. Similarly, the no action alternative will not adversely impact land use because there will be no changes to the existing environment.

Infrastructure

NTUA operates and maintains power, water, wastewater, natural gas, and photovoltaic services across the Navajo Nation. NTUA currently operates and maintains 26 telecommunication towers that will be used as a major part of the Project route. No new roads or access ways will be needed for construction and operation of the Project. The new tower structures will be connected to existing main electrical lines. The preferred alternative is not expected to have adverse impacts on existing infrastructure. Because there would be no changes to the existing environment, the no action alternative would not adversely impact infrastructure. However, the no action alternative would not enhance telecommunications infrastructure in the Project area, as expected to result from implementation of the preferred alternative.

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Socioeconomic Resources

The preferred alternative will not have an adverse impact on socioeconomic resources. The Project will provide broadband access to a sparsely-populated, poverty-stricken rural area. Commercial and residential clients across the Navajo Nation will benefit from the Project. Implementation of the Project will also provide an important service to the Navajo community by extending bandwidth to Chapter Houses, which now have limited extended services from central administration and educational institutions. Chapter Houses are community centers where political discussions, elderly care, and early childhood education occur. Using technologies enabled only by broadband, the Project will allow Navajo communities to capture, record, and share Navajo culture, including language, politics, lifestyle, and religion. Implementation of the preferred alternative will result in beneficial impacts on socioeconomics in the Project area. Under the no action alternative, anticipated benefits of the Project would not be realized.

Human Health and Safety

The Waste Regulatory Compliance Department of the Environmental Protection Agency concurred that there are no hazardous waste sites along the Project route. The NTUA's established safety criteria, "Safety Operating Plans and Requirements" will be followed during Project construction to protect workers and the public. No adverse impacts on human health and safety are anticipated to occur as a result of Project implementation. The no action alternative would also have no impacts on human health and safety because no physical Project activity would be conducted.

Cumulative Impacts

The Project is not expected to have significant adverse cumulative effects on any resource area. Project implementation will result in a temporary increase in noise and vehicle emissions during business hours. There will be minimal impacts to geology and soils in the immediate area of replacement poles and tower construction, and most of these activities will occur in previously disturbed areas. There will also be minimal temporary displacement impacts to foraging animals in the immediate vicinity of construction. There are no anticipated impacts on water resources, floodplains, historic or cultural resources, visual resources, land use, infrastructure, or health and human safety. There will be a positive impact to socioeconomic resources. No significant adverse cumulative impacts were identified with respect to resource areas evaluated in the EA, or with regard to the no action alternative.

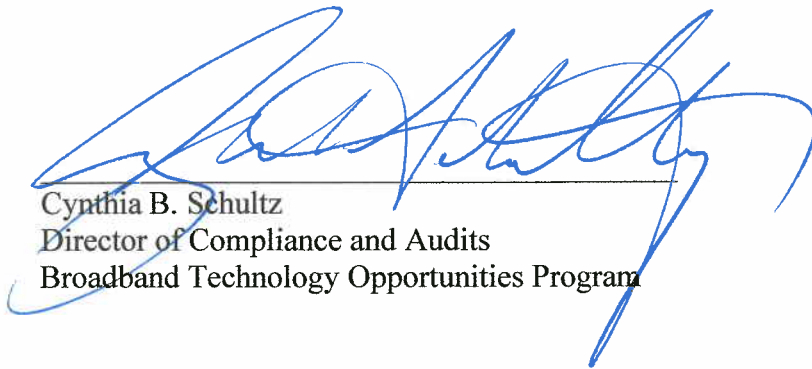
Decision

Based on the above analysis, NTIA concludes that constructing and operating the Project as defined by the preferred alternative, and in accordance with identified protocols and environmental protection measures, will not require additional mitigation. A separate mitigation

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plan is not required for the Project. The analyses indicate that the proposed action is not a major Federal action that will significantly affect the quality of the human environment. NTIA has determined that preparation of an EIS is not required.

Issued:



Cynthia B. Schultz
Director of Compliance and Audits
Broadband Technology Opportunities Program

November 1, 2010
Date