

**National Telecommunications and Information Administration  
Broadband Technology Opportunities Program  
Finding of No Significant Impact  
North Central New Mexico Economic Development District  
REDI Net Middle Mile Fiber Optic Project**

**Summary**

The North Central New Mexico Economic Development District (NCNMEDD) applied to the Broadband Technology Opportunities Program (BTOP) for a grant to provide high speed broadband service to rural communities in the northern New Mexico counties of Santa Fe, Los Alamos, and Rio Arriba. To create the network, NCNMEDD will install approximately 125 miles of fiber optic cable, most of which will be placed aerially on existing utility poles. Where no such infrastructure is available, the new fiber line will be buried in existing rights of way (ROW) or jetted into existing buried conduit. New cable will also be placed in existing conduit on bridges to cross large water bodies, including the Omega Bridge over Los Alamos Canyon. Additionally, NCNMEDD will splice into and light existing buried dark fiber along a portion of the route. A small utility hut will be installed in Española, and a second hut may be installed in Santa Fe, to house network equipment. NCNMEDD will install fiber lateral extensions to 107 community anchor institutions (CAIs), seven last mile providers, and five Native American Pueblos in the planned service area. Appropriate telecommunications equipment will be provided to the CAIs, service providers, and tribes. This proposal is referred to as the Regional Economic Development Initiative (REDI) Net Middle Mile Fiber Optic Project (Project).

The National Telecommunications and Information Administration (NTIA) awarded a grant for the Project to NCNMEDD 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 will comply with 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. 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.

NCNMEDD completed an EA for this Project in April 2011. NTIA reviewed the EA, determined it is sufficient, and adopted it as part of the development of this FONSI.

May 2011

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The Project includes:

- Attaching approximately 99 miles of fiber optic cable to approximately 3,400 existing or replacement utility poles;
- Installing approximately 18 miles of buried conduit and fiber in existing ROWs using horizontal directional drilling (HDD) techniques;
- Splicing into and lighting approximately five miles of existing fiber optic cables in buried conduit in Los Alamos;
- Installing approximately 15,000 feet of new fiber in existing buried conduit;
- Install new fiber in existing conduit on bridges to cross large water bodies, including the Omega Bridge over Los Alamos Canyon;
- Installing a pre-cast concrete shelter and foundation slab on county-owned land in Española and, possibly, a second identical shelter on county-owned land in Santa Fe;
- Providing each shelter with primary power from nearby existing utility infrastructure and a backup power generator, using either diesel or natural gas as fuel; and
- Installing fiber lateral extensions and providing appropriate transceiver equipment to 107 CAIs, seven last mile service providers, and five Native American Pueblos in the planned service area.

Based on a review of the analysis in the EA, NTIA has determined that the Project, 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/](http://www2.ntia.doc.gov/)) and the following contact:

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**Purpose and Need**

The purpose of the Project is to resolve issues related to limited service provider competition and broadband access in north central New Mexico. Current broadband service in the region is inadequate for New Mexico's schools, libraries, health care facilities, community centers, government bodies, and businesses throughout the region. REDI Net will provide direct broadband access to 107 CAIs in north central New Mexico. This access will enable distance learning and advanced technology applications at schools and community colleges; supercomputing gateways at institutions of higher education; smart grid/green grid applications for rural electric cooperatives; and support economic development in the technology, media, and renewable energy industries. In addition, REDI Net will offer high levels of security and reliability for public safety, telemedicine, and electronic medical records applications throughout the region. REDI Net will improve access to and use of broadband service by public safety agencies, including fire stations, judicial complexes, police departments, and two primary 9-1-1 public safety answering points.

**Project Description**

The new REDI Net middle mile fiber optic system will provide direct broadband connectivity to 107 CAIs and seven last mile service providers in Santa Fe, Rio Arriba, and Los Alamos counties, as well as five Native American Pueblos in northern New Mexico. The REDI Net middle mile network will be installed aerially on existing utility pole infrastructure to the maximum extent possible, combined with buried cable installation within disturbed ROW along other routes, placement of new fiber into existing buried conduit at Los Alamos, and lighting existing buried dark fiber along the planned route through rural areas of northern New Mexico. The new 125-mile network will be constructed on lands managed by four federal agencies, five tribes, county and municipal governments, and the New Mexico Department of Transportation (NMDOT).

Approximately 79 percent of the REDI Net network will be installed by attaching fiber optic cable to the existing utility pole infrastructure. Approximately 3,400 existing utility poles, located primarily along roadways, will be used for this portion of the Project. NCNMEDD will use metal hardware attachments to hang fiber optic cable on existing wood utility poles carrying power and communications cables. If necessary, wooden poles that have deteriorated and lack sufficient strength or space to accommodate new cabling will be replaced with new poles of similar specifications. Replacement poles will be drilled and placed as near as possible to the existing poles, and additional cut/fill will be limited. Excess soil generated during drilling will be removed or mounded at the base of the new pole, compacted, and reseeded.

Approximately 14 percent of the network will be installed by burying conduit and fiber in existing ROWs. HDD techniques will be used for underground installation. The fiber cable will be buried at minimum depth of approximately 36 inches below the ground surface.

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Approximately 50 entry and exit pits will be excavated to facilitate HDD boring activities. These pits will be backfilled and revegetated immediately after the conduit and fiber cable are installed. NCNMEDD will also install new fiber in existing, empty buried conduit along a total of approximately 15,000 feet of the network route. For these portions of the route, fiber optic cables will be jetted through the open conduit and accessed at existing manhole or handhole locations where the splice points will be created. New cable will also be placed in existing conduit on bridges that span large water bodies, including the Omega Bridge over Los Alamos Canyon. No significant surface disturbance is required for installation of this fiber. Finally, NCNMEDD will splice into and light approximately five miles of existing, buried, dark fiber and conduit in the Los Alamos area. Again, the new network fiber will be spliced into existing fiber optics at existing manhole and handhole locations, with only minor restoration needed at those access points.

Installation of the fiber optic cables will be accomplished using standard utility vehicles, such as bucket trucks and fiber spool trailers, operating primarily on public roadways. Construction vehicles will use readily accessible paths for installing the fiber optic cables in new conduits, existing conduits, and existing utility poles for aerial attachments.

NCNMEDD will install a utility shelter on Rio Arriba County land in Española. A concrete slab foundation will be poured on an existing dirt parcel that was previously cleared, leveled, and excavated. A pre-cast shelter with dimensions of approximately 21.5 feet by 11.5 feet will be installed on the slab. Primary power will be provided through connection to nearby Jemez Mountains Electric Co-op utility infrastructure. A generator, using either diesel or natural gas, will also be installed to provide backup power to the shelter. Depending on budgetary considerations, a second, identical hut may be installed on county land in Santa Fe. The proposed lot for this hut has also been cleared and leveled, and the structure would be installed on a newly poured concrete slab on previously disturbed ground.

Fiber lateral extensions will be constructed between the middle mile network and 107 CAIs, seven last mile service providers, and five Native American Pueblos. These extensions will be installed along main corridors of established roadways. Telecommunications transceivers will be provided to CAIs, service providers, and tribes.

### **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.

*Hybrid Aerial and Underground Fiber Network Installation (Preferred Alternative).* As noted in the Project Description, this effort will include installing approximately 99 miles of aerial fiber cable on approximately 3,400 existing poles; installing approximately 18 miles of new buried

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fiber and conduit via HDD; lighting approximately five miles of existing, buried dark fiber; installing approximately 15,000 feet of new fiber in existing buried conduit; installing new fiber in existing conduit on the Omega Bridge over Los Alamos Canyon; replacing existing utility poles, as necessary, to accommodate new cabling; constructing up to two new utility shelters; and providing end user telecommunications equipment to 107 CAIs, seven internet service providers, and five Native American Pueblos to allow for direct connection to the REDI Net network.

*No Action Alternative.* No action was also considered. This alternative represents conditions as they currently exist in the Project area. Under the no action alternative, the proposed REDI Net network would not be constructed, and northern New Mexico would continue to suffer from a lack of access to affordable, high speed broadband services. The EA examined this alternative as the baseline for evaluating impacts relative to other alternatives being considered.

*Alternatives Considered But Not Carried Forward.* Additional alternatives that would meet the purpose and need of this Project were also evaluated. NCNMEDD considered installing the network entirely underground. However, this option would require a significant amount of additional construction and ground disturbance via trenching, boring, and blasting. Accordingly, permitting requirements would increase, and it is foreseeable that the Buried Cable Alternative could take more than the NTIA-stipulated three years to complete. Thus, this option was eliminated from further consideration. NCNMEDD also considered installing an all-aerial network but eliminated this option because it would not leverage existing underground infrastructure in the Project area. Wireless technologies were also considered, which would require construction of multiple towers and installation of microwave radios, with an estimated construction timeline of four years. The wireless alternative was ruled out because it would not support the bandwidth needs of northern New Mexico residents, businesses, CAIs, and other end users.

## **Findings and Conclusions**

The EA analyzed existing conditions and environmental consequences of the preferred alternative and the no action alternative in 11 major resource areas, 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 were also evaluated.

### **Noise**

The Project will result in negligible to minor increases in ambient noise levels during the construction phase. This may create minor disturbances in residential and commercial areas, particularly where boring and drilling activities are conducted. However, noise associated with use of construction equipment will be localized and limited to brief periods of time along any particular section of the Project route. Long-term noise associated with maintenance of the

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network and backup power generation at the new utility shelters will be negligible and intermittent. Based on these assessments, no significant noise impacts are expected to occur as a result of this Project.

***Air Quality***

This Project requires the use of construction equipment and, thus, will result in dust generation and other air pollutant emissions. Construction activities will incorporate proper exhaust controls and dust suppression practices (e.g., wetting exposed soils) to limit the effects on local air quality. Long-term air quality impacts associated with backup power generation at the new utility shelters will be negligible and intermittent. The Project will also result in a short-term, minor increase in the use of fossil fuel and associated greenhouse gas (GHG) emissions during construction. It is estimated that this Project will result in the release of approximately 105.7 metric tons equivalent of carbon dioxide emissions. This estimate is well below the Council on Environmental Quality's presumptive effects threshold of 25,000 metric tons of carbon dioxide equivalent emission from an action. Based on these assessments, no significant impacts to air quality are expected to result from this Project.

***Geology and Soils***

The Project will result in a minor disturbance of geology and soils along portions of the planned network route during construction. These impacts will be permanent where replacement poles or buried fiber will be installed, although areas will be restored to pre-construction conditions. The area of ground disturbance associated with pole replacements will measure roughly 4 feet by 4 feet per pole, and will total approximately 0.06 to 0.12 acres across the entire Project area. All pole replacements will be within, or immediately adjacent to, previous installations, with only minor disturbance to previously undisturbed, native soil profiles. Appropriate BMPs will be used to prevent soil erosion during required pole replacements.

Disturbance of soils and geology for underground fiber placement will also be minor, as all such installation will use low-impact HDD techniques. Surface soils will be impacted at approximately 50 bore entry points, which measure roughly 4.8 feet by 4.8 feet per pit. However, these bore entry points will be located within existing ROWs that have already been disturbed by road construction and maintenance and prior underground transmission and utility line installations. The pits will be backfilled immediately after fiber and conduit installation. Subsurface soils will also be impacted in areas where existing underground conduit is not available. These activities represent minor short-term impacts and negligible long-term impacts due to the permanent presence of new underground telecommunications infrastructure.

All installation of the new fiber across prime and unique farmlands will be completed aerially. Pole replacements may occur in areas designated as prime farmland, but construction activity will be contained within existing utility corridors that are not irrigated or used as farmland. Furthermore, these impacts will affect far less than one percent of the prime and unique farmland in the state and are considered negligible to minor impacts. Portions of the project area have also

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been identified as having potential for containing important paleontological deposits. Fiber optic cable will be installed on existing poles in these areas. Where poles are accessible by existing roads, the cable will be installed using bucket trucks. On Bureau of Land Management (BLM) land near the Sombrillo Area of Critical Environmental Concern (ACEC), roads providing access to the poles are limited. Therefore, installation will be completed with pedestrian access and climbing poles. If paleontological materials are discovered on BLM land during line installation or pole replacement, NCNMEDD will notify the BLM Taos Field Office.

Based on these assessments, the Project is not expected to result in significant impacts on geology or soils.

***Water Resources***

The Project will cross more than 100 jurisdictional waterways and 18 potential wetlands. Major water bodies intersected by the Project include the Rio Grande, Embudo Creek, Rio Chama, Santa Cruz River, Pojoaque River, Tesuque Creek, and Guaje Canyon. The Project will result in only minor impacts to water resources because fiber optic cabling will primarily be installed aerially on existing utility poles. In areas where aerial installation is not feasible, cable will be buried using low-impact HDD techniques or placed within existing conduit which is either buried or mounted on bridges. Large water bodies will be crossed by passing cable through existing conduit on bridges. At all other water crossing locations, cable will be installed below the ordinary high water mark using low-impact HDD. Standard water quality protection protocols and best management practices (BMPs) for utility line maintenance and construction will be followed during Project construction adjacent to surface waters. These provisions include erosion control measures, spill/leak prevention and countermeasures, and water course restoration. Because the Project will only disturb approximately 0.2 acres of soil, a National Pollutant Discharge Elimination System (NPDES) permit is not required.

Installation of the fiber optic line will not result in dredging or filling of wetlands or surface waters; consequently, a Nationwide Permit from the U.S. Army Corps of Engineers (USACE) is not required. Any work within wetlands will occur on the existing access roads. The shallowest groundwater in the Project area is reported to occur between depths of 8 and 17 feet below the ground surface. Because fiber and conduit will generally be installed at depths of three feet and pole replacements will be installed to a depth of 6 feet, it is unlikely that groundwater will be encountered during Project construction. If groundwater is unexpectedly encountered during Project activities, NCNMEDD will notify the New Mexico Environment Department (NMED) Ground Water Quality Bureau. The Project will not impact the flood storage or water conveyance in the region. The planned shelter in Española will be built within a floodplain zone, but will be constructed in an existing parking lot, at grade with a poured concrete foundation, and will not require ground preparation. A City of Española zoning permit will be required for construction of the hut. Based on these considerations, and through implementation of appropriate construction methods and BMPs, the Project is not expected to have significant impacts on water resources in the region.

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***Biological Resources***

Pole replacements and line installation activities associated with this Project will result in minor, short-term impacts on wildlife habitat. There will also be minor, permanent impacts to very marginal habitat at the planned shelter locations. New aerial cable will be placed on existing utility poles proximal to other utility cables and will not present a substantive additional obstacle to birds and bats that could collide with overhead lines. Impacts to vegetation from pole replacement and line installation activities will be minor and temporary. No tree trimming or clearing will be necessary for aerial or buried cable installation, and areas identified for shelter construction are disturbed, bladed lots with no vegetation. Some vegetation will be impacted at entry points of low-impact HDD. NCNMEDD will implement efforts to control noxious weeds by cleaning all heavy equipment to remove mud and dirt prior to entering and exiting public lands. On BLM property, NCNMEDD will provide for the treatment of noxious weeds, should they occur, as directed by the BLM Taos Field Office.

In a letter dated December 23, 2010, the U.S. Fish and Wildlife Service (USFWS) expressed no objection to NCNMEDD's "no effect" determination, but recommended that species-specific surveys be conducted in the Project area to identify suitable habitat for listed species. The USFWS also recommended that NCNMEDD consult with the New Mexico Department of Game and Fish (NMDGF) and the New Mexico Energy, Minerals, and Natural Resources Department (NMEMNRD). Accordingly, species lists were obtained from all three of these agencies. Recent surveys conducted by BLM, the Department of Energy (DOE), the San Ildefonso Pueblo, and Project biologists in and adjacent to the Project area were used to identify presence of listed species. On January 5, 2011, NCNMEDD sent a letter to NMDGF presenting their "no effect" determination for this Project. On January 31, 2011, NMDGF expressed no objection to this determination but requested that trenching be kept to a minimum. There will be no impacts from trenching, as this type of construction is not proposed.

The Project passes through designated critical habitat for the Southwestern willow flycatcher (*Empidonax traillii extimus*) and Mexican spotted owl (*Strix occidentalis lucida*), but the planned shelter locations are not within these critical areas. To ensure there will be no impacts to protected species, NCNMEDD will make no modifications (e.g., clearing vegetation, in-stream work, or land alteration) in areas identified as designated critical habitat for listed species. Moreover, construction activities will be conducted outside migratory and nesting seasons (April 15 to September 15), and there will be no disturbance to cliffs along Kwage Mesa which are commonly used by nesting peregrine falcons (*Falco peregrinus*). In an email dated January 5, 2011, the BLM stipulated that NCNMEDD conduct area surveys prior to construction activity to determine if bald eagles (*Haliaeetus leucocephalus*) are present in the work area. If so, NCNMEDD must suspend work until the bird leaves of its own volition. If these stipulations and mitigation measures are followed, the Project should have no adverse impacts on state or federally listed, candidate, proposed, threatened, or endangered species or designated critical habitat.



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A small Gunnison's prairie dog (*Cynomys gunnisoni*) colony was observed near the planned Santa Fe shelter location. This species is classified as a sensitive species by NMDGF, and is protected by Santa Fe City Code. The colony is located on the site margin, approximately 150 ft from the planned hut location in the center of the existing parking lot. No equipment or construction materials will be staged within the colony, and personnel will be restricted from the area. Through avoidance, this Project will have no impact on this protected species. Accordingly, NCNMEDD has determined that the Project will have "no effect" on protected species and their designated critical habitat.

No significant adverse impacts on biological resources are anticipated to result from Project implementation.

***Historic and Cultural Resources***

NTIA initiated Section 106 review for this Project via a letter to the New Mexico State Historic Preservation Office (SHPO) dated September 17, 2010. NTIA provided a Project description and a map of the Project area. In a response dated October 13, 2010, the SHPO requested additional information on the Project. NCNMEDD's contractor responded to this request on November 9, 2010, proposing to conduct an intensive pedestrian cultural resources survey of the Project's area of potential effect, covering the entire 125-mile network route. The results of this survey were provided to the SHPO on January 20, 2011. The results indicated that the Project will have no adverse impact on historic or cultural resources. Aerial installation of cable on existing poles limits the potential for adverse impacts on cultural resources. NCNMEDD will coordinate with DOE during fiber installation to ensure there will be no adverse impacts on cultural or historic resources on government land in the Los Alamos area. Approximately 14 percent of the Project route will require burial of fiber optic cable under existing roads or disturbed areas via HDD. Of that amount, roughly 70 percent is located in the US 84/285 corridor where extensive archaeological mitigation work was completed in the last decade as part of road improvements. Therefore, it is anticipated that this installation will have no impact. HDD will also be used to install cable under existing roads or disturbed ROW in the Los Alamos area and the paved parking lot of the Ohkay Owingeh Casino. No adverse effects on historic or cultural resources are expected along these segments. No historic properties are present within the areas of ground-disturbing activities (e.g., pole replacement, pit excavation), and impacts to CAI buildings will be negligible and will not affect their historic qualities. On January 25, 2011, the SHPO issued a determination that the Project will have No Adverse Effect on properties registered on or eligible for the National Register of Historic Places (NRHP). Tribal Historic Preservation Officers for the Pueblos of Pojoaque and Tesuque concurred that the project should have No Adverse Effect on Historic Properties under their jurisdiction.

In addition, the Project is not expected to impact National Park Service (NPS) lands other than Bandelier National Monument. This resource is managed to protect archaeological sites from Paleoindian and Ancestral Pueblo prior occupants, as well as cultural landscapes, scenic

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qualities, natural resources, and wilderness values related to the archaeological resources. In a letter dated November 24, 2010, NPS requested that, to minimize potential impacts, NCNMEDD will avoid installation of new pole-mounted utility alignments and, instead, rely on existing overhead electrical infrastructure that is located at substantial setbacks from Highways 4 and 502, and on the sides of the roads farther away from NPS land. In this same letter, NPS requested that no construction activities be conducted in the immediate vicinity of Interagency Fire Center (IFC) helicopter travel routes between May and July to ensure that wildfire response crews can maintain operational safety.

NCNMEDD's proposed route passes through five Pueblos in the greater Española area (i.e., Ohkay Owingeh, Santa Clara, San Ildefonso, Pojoaque, and Tesuque). The San Ildefonso, Santa Clara, and Ohkay Owingeh (formerly San Juan) Pueblos are listed on the NRHP for their historical significance and architectural features. On October 1, 2010, NTIA notified 22 Native American tribes and nations of the Project through the Tower Construction Notification System (TCNS), including those tribes whose land will be traversed by the planned network route. Fifteen tribes did not respond, but seven tribes requested additional information including the Southern Ute tribe, the Comanche Nation, the Mescalero Apache tribe, the Navajo Nation, and the Pueblos of San Ildefonso, Taos, and Tesuque. On March 2, 2011, NCNMEDD provided the requested summaries and maps. No further issues were identified by these tribes, and Tribal Historic Preservation Officers for the Pueblos of Pojoaque and Tesuque concurred that the project will have No Adverse Effect on Historic Properties.

On October 6, 2010, the Pueblo of Santa Clara also requested additional cultural resources information through TCNS. Although the EA does not indicate NCNMEDD's specific response to this request, the Santa Clara subsequently entered into a Joint Powers Agreement (JPA) with NCNMEDD for establishment and management of the new network, including those portions that extend across their land. The Pueblo of Santa Clara representative signed the JPA on December 17, 2010.

Based on completed cultural resources reviews and consultations, the Project is not expected to have significant impacts on historic or cultural resources.

***Aesthetic and Visual Resources***

The Project will result in the addition of a single cable to existing utility poles along roadways. The effect of viewing one additional cable on already existing utility poles is expected to be so small as to not be noticed by most people, and will assimilate into an already existing infrastructure, even on rural road corridors. This small, incremental impact to the viewshed represents a negligible change to the existing visual landscape. Visual impacts to Scenic Byways, national register properties, and tribal lands will also be negligible. Short-term visual impacts during installation will be minimal. Although the planned network route does not extend into portions of the Rio Grande River that have been designated as a Wild and Scenic River, the northernmost seven miles of the route fall within the BLM's Lower Gorge ACEC.

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Existing utility lines cross the Rio Grande River six times in this ACEC and are visible from most points within the canyon of the Lower Gorge. The addition of one fiber optic cable to this existing alignment will not significantly alter the viewshed. Consequently, the Project is in accord with BLM's visual management policy. Visual impacts associated with the planned shelters are consistent with the general aesthetics of the existing urban development and infrastructure in the surrounding areas. Therefore, visual impacts of the new structures will be permanent but minor. Based on these assessments, this Project will not result in significant impacts to aesthetic and visual resources.

***Land Use***

The Project will not conflict with any known Federal agency, state, local, or tribal government land use plans or zoning restrictions. New fiber optic cable will be installed on existing utility poles and will be buried in disturbed ROWs. The Project is consistent with current NPS and BLM land uses and is allowable as maintenance activities under existing ROW permits. The Project will not impact grazing or recreational lands. The acquisition of easements across Native American lands is required for all utility infrastructure. NCNMEDD has secured cooperation in obtaining such easements by entering into a JPA with the affected tribes on November 19, 2010. NCNMEDD will comply with regulations issued by the Bureau of Indian Affairs for proper compliance with Federal and tribal ROW requirements. Based on these provisions, the Project will have no significant impact on land uses.

***Infrastructure***

The Project will bring high-speed connectivity to areas that are populated and presently underserved. This lack of communications infrastructure results in public health and safety concerns and inadequate service for schools, government agencies, residents, and businesses in the region. The Project will have the positive impact of providing this needed infrastructure. In addition, aging or overloaded utility poles will be replaced under this Project. Construction activities related to fiber installation will generate a minimal amount of waste that will be properly disposed in local landfills or recycling centers. By providing equipment and connections to enable enhanced internet connectivity, this Project is expected to have a positive overall impact on infrastructure in north central New Mexico, and will have no significant impact on infrastructure.

***Socioeconomic Resources***

The Project will have positive impacts on socioeconomic conditions in north central New Mexico by introducing and enhancing high-speed broadband access to residences, businesses, CAIs, and Native American Pueblos. The Project will provide vital communications and facilitate rural economic development, job creation, education, and improved health care. After the REDI Net network is completed, schools, libraries, health-care facilities, community centers, and government entities will be better able to fulfill their public-service missions and educational responsibilities. This Project will not adversely affect a disproportionate population of minority or low-income groups. Overall, the Project is expected to have a positive impact on

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socioeconomic resources in the region, and will have no significant impact on socioeconomic resources.

***Human Health and Safety***

A number of positive effects on human health and safety are expected to result from implementation of this Project. The REDI Net network will facilitate enhanced sharing of medical data and imagery over the internet, with the potential to benefit the health of local residents while reducing travel and expenses. Additionally, police and ambulance services expect to improve their first-response coordination and communication, thereby providing improved care for those in need.

The health and safety of the travelling public using roadways along which the fiber will be installed will not be impacted by Project activities, as access will be maintained during the construction phase. Clearly marked vehicles and personnel will be visible to the public and restricted to road shoulders. There would be no impact to the health and safety of recreational users of adjacent forests and rivers because these activities do not occur within or directly adjacent to the ROW and will not be in direct contact with installation activities.

Contact with hazardous waste is unlikely during installation of new aerial lines on existing utility poles. Workers might, however, be exposed to hazardous waste in the soil and groundwater during HDD or excavation of boring pits in proximity to four known hazardous waste sites along the Project route. All of these sites are undergoing varying degrees of investigation and remediation and are thought to be locally contained with the exception of the North Railroad Avenue Superfund Site. Primary risks to human health at this site include ingestion, inhalation, and dermal contact with contaminated groundwater. Because all of the new cable near this site will be installed on existing poles that do not require replacement, contact with contaminated media is unlikely and no adverse health or safety effects are expected. Construction workers will have proper training, monitoring equipment, and personal protective equipment to minimize potential exposures around the other three sites when installing new fiber using low-impact HDD. No pole replacements or HDD is planned within any known areas of environmental contamination.

In a letter dated January 6, 2011, DOE indicated that NCNMEDD must coordinate with the agency to ensure that a radiation control technician screens residual soils generated near a former hazardous waste line on the property of Los Alamos National Laboratory (LANL). Fiber optic lines will be hung on the Omega Bridge over Los Alamos Canyon to avoid known Areas of Concern related to past LANL activities that may have resulted in residual contamination. If DOE guidelines are followed and appropriate personal protective gear are worn by construction personnel, no adverse affects on human health and safety are expected. All contractors performing site work are required to complete a site specific health and safety plan in compliance with any state and federal OSHA regulations relating to worker protection and health and safety practices. By adopting the safety and coordination efforts described above, it is

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anticipated that the Project can be constructed with no significant impacts to human health and safety.

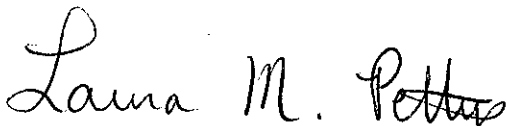
***Cumulative Impacts***

With Project construction occurring along existing ROW and easements, there is potential for overlap between the planned installation and future improvements. NCNMEDD will work with NMDOT to coordinate scheduling details to avoid construction conflicts, including traffic safety and access issues. There is also a minor cumulative impact to infrastructure because the Project involves adding cable to existing utility poles. The existing poles can accommodate a finite number of cables and associated equipment. Therefore, less space will be available for potential new cables and lines on these poles in the future. However, no particular project, development, or social need has been identified that would be impacted by this use of infrastructure for Project implementation. There is a substantial positive cumulative impact of the project on socioeconomic resources and public safety. This project will provide broadband access to numerous unserved and underserved communities, which will improve educational opportunities, medical care, and public safety through reliable and high-speed communication. No significant cumulative impacts have been identified with regard to this Project.

**Decision**

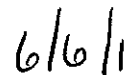
Based on the above analysis, NTIA concludes that constructing and operating the Project as defined by the preferred alternative, identified BMPs, and protective measures, will not require additional mitigation. A separate mitigation plan is not required for the Project. The analyses indicate that the 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:



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Office of Telecommunications and Information Applications  
National Telecommunications and Information Administration



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Date