National Telecommunications and Information Administration
Broadband Technology Opportunities Program
Finding of No Significant Impact
EAGLE-Net Alliance
Colorado Community Anchors Broadband Consortium Project

REVISED - April 3, 2013

Summary

The National Telecommunications Information Administration (NTIA) is issuing this revised Finding of No Significant Impact (FONSI) to reflect project changes that were documented and analyzed in a Supplemental Environmental Assessment (EA) dated April 3, 2013. This revised FONSI is effective as of April 3, 2013, and supersedes the original FONSI issued July 28, 2011.

The Centennial Board of Cooperative Educational Services (CBOCES) applied for and received a Broadband Technology Opportunities Program (BTOP) grant to install fiber-based and microwave infrastructure in Colorado and a portion of southern Wyoming. This BTOP grant award for middle-mile infrastructure development was transferred from CBOCES to the Educational Access Gateway Learning Environment Network (EAGLE-Net) Alliance (of which CBOCES is a member) on February 16, 2011. This effort is referred to as the Colorado Community Anchors Broadband Consortium Project (Project).

The NTIA awarded this grant 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 laws, 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 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 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.

Based on a review of the original EA submitted by EAGLE-Net in July 2011, NTIA determined the Project, implemented in accordance with Preferred Alternative and any protective measures identified in the EA, would not have a significant effect on the human environment, and issued a FONSI on July 28, 2011. After the issuance of the original FONSI, EAGLE-Net was authorized

to install 305 miles fiber optic cable in existing utility corridors and ROWs throughout Colorado and Laramie County, Wyoming; erect 9 new towers in Las Animas, Rio Blanco, Park, and Moffat Counties; and install new antennas and other microwave equipment on 127 existing towers and 126 existing buildings. However, during design and construction phases of the Project, field and business conditions arose that compelled EAGLE-Net to make route and infrastructure changes. EAGLE-Net consulted with the Federal, State, Tribal, and local agencies and authorities as project segments were adjusted and re-designed.

Following a review of the Project in December 2012, NTIA determined there were substantial differences between the Project evaluated in the original EA and that being constructed. Based on the Project review, the BTOP grant was suspended on December 6, 2012, and EAGLE-Net was directed to immediately cease installation work and secure construction sites.

At the point the grant was suspended and construction secured, EAGLE-Net was building a total broadband network of 1,070 miles of new fiber, 2,200 miles of existing dark fiber, and 642 miles of wireless connectivity, and had installed 728 miles of fiber and leased 1,718 miles of dark fiber and 242 miles of existing wireless links.

Following the suspension, EAGLE-Net provided NTIA and other Federal agencies with documentation and plans for both the completed and remaining elements of the Project. With the exception of a 7-mile segment of buried fiber installed in Critical Habitat of a Federally listed endangered plant, clay-loving buckwheat (*Eriogonum pelinophilum*), no significant impacts to environmental or historic resources were identified. The U.S. Fish & Wildlife Service (USFWS) is presently evaluating whether construction of this 7-mile segment of buried fiber resulted in a significant impact to the clay-loving buckwheat.

Due to concerns about the Project's compliance with environmental and cultural resource laws and regulations, as well as consultation and coordination requirements with Federal and State agencies, NTIA directed EAGLE-Net to develop a Supplemental EA for the remaining Project elements, which includes:

- Installing 342 miles buried fiber optic cable;
- Leasing approximately 482 miles of existing dark fiber through Indefeasible Rights of Use (IRUs);
- Installing microwave infrastructure on 37 existing towers and 9 buildings for approximately 400 miles of new wireless links (including wireless links over Critical and or Potentially Suitable Habitat of the endangered Pagosa skyrocket, *Ipomopsis polyantha*) and clay-loving buckwheat); and
- Connecting 140 community anchor institutions (CAIs), including 168 school districts, 26 libraries, 11 Boards of Cooperative Educational Services, 15 community colleges, 3 universities, and several institutions on the Southern Ute Indian Reservation.

EAGLE-Net completed the Supplemental EA for the remaining Project elements in March 2013. NTIA reviewed the Supplemental EA, determined it is sufficient, and adopted it as part of the development of this revised FONSI, which is effective April 3, 2013.

Based on a review of the analysis in the Supplemental EA, NTIA has determined that the remaining EAGLE-Net Project, implemented in accordance with the Preferred Alternative, and incorporating best management practices (BMPs) and protective measures identified in the Supplemental EA, will not result in any significant environmental impacts. Therefore, the preparation of an Environmental Impact Statement (EIS) is not required. The basis for this determination is described in this FONSI.

Additional information and copies of the Executive Summary of the Supplemental 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 middle mile infrastructure to connect underserved and unserved rural areas in Colorado and a portion of Laramie County, Wyoming. Colorado is currently ranked 42nd of the 50 States in broadband connectivity. In addition, facilities in rural or remote areas of the State pay approximately 10 times the rate of neighboring States for inferior broadband bandwidth. The planned Project will improve broadband service and internet access for education, healthcare, public safety, and other CAIs Statewide. The Project will provide connectivity for 223 CAIs, including 168 school districts, 26 libraries, 11 Boards of Cooperative Educational Services, 15 community colleges, and 3 universities (the Air Force Academy, Colorado College, and the University of Northern Colorado), as well as a school district and 2 libraries on the Southern Ute Indian Reservation.

Project Description

Under this Project, EAGLE-Net will install 1,070 miles of new fiber optic middle mile and lateral cable in Colorado and Laramie County, Wyoming. This new fiber will primarily be installed underground in existing public ROWs along previously disturbed roadways, utility

corridors, and railroad lines. Underground installation will be principally by vibratory plowing in rural areas and directional boring in urban areas (to avoid impacts to roads, sidewalks, and driveways) and in areas with sensitive surface resources (such as streams and wetlands). Where vibratory plowing and directional boring are not feasible due to access constraints, costs, or other concerns, the new fiber will be installed via trenching or micro-trenching. Similarly, fiber will be installed aerially on existing utility poles where underground installation is not feasible, and attached to existing bridges or other structures to avoid impacts to wetlands and streams. The number and location of aerial segments and bridge attachments will be determined during the Project's final design phase. No utility poles would be installed or replaced for this project. Existing buried conduit along Highway 60, within the Rio Grande National Forest, is also being used along a portion of the route. In addition, portions of the Project will occur on lands owned by the Bureau of Land Management (BLM) and the U.S. Forest Service (USFS), which are both cooperating agencies on this Supplemental EA. Furthermore, a portion of the proposed Project will include ground-disturbing activities on Bureau of Reclamation (BOR) land.

Vibratory plowing uses a track plow to open a slot into the ground no more than 6 inches wide. Cable is placed into the slot approximately 36 inches below ground surface. The typical ground disturbance width when plowing is between 6 to 8 feet. After the cable is installed, excavated soil is compacted back into the slot and re-graded to the original land contour. Directional boring uses a drilling rig to create a borehole, typically 4-6 inches in diameter, at a depth appropriate for avoiding obstacles such as streams and other impediments. Most bore lengths will be less than 100 feet; however, to avoid large obstacles or sensitive resources (such as wetlands) some bores may be several hundred feet. Bore entry and exit pits may be excavated, if necessary, to facilitate fiber installation via directional boring, and will be at least 30 feet outside the limits of wetlands or riparian habitat. The typical ground disturbance width when directional boring is between 4 to 8 feet. Trenching involves use of a backhoe to open a trench approximately 8 to 12 inches wide and 36 inches deep. Conduit and fiber, or fiber alone, will be installed in the bottom of the open trench. Following cable installation, the trench will be backfilled with the excavated material and compacted. Hand holes will be installed below-grade at intervals along new underground fiber lines; small excavators will be used for hand-hole installation to minimize soil disturbance. The typical ground disturbance width when trenching is between 6 and 10 feet. Micro-trenching uses special equipment to simultaneously cut a narrow trench, typically 12 to 18 inches deep, through roadway pavement while at the same time removing spoil with a vacuum system. Ground disturbance when micro-trenching will be limited to the width of the micro-trench in the roadbed, typically 2 to 4 inches. After conduits are placed in the trench, the excavation is filled with an environmentally safe grout that is immune to shrinkage, weathering, and erosion. After curing, asphalt mastic is applied on top of the grout filled trench.

During construction, handholes would be placed, in the ROW, at intervals of approximately 500 feet in urban environments and approximately 1,500 feet in rural areas. The handholes are installed flush to the surface with a depth of 18 inches. These handholes are used for fiber slack

storage and fiber splicing locations. Telecommunication equipment cabinets would also be placed in the public right of way. These cabinets sit on a modified hand-hole base.

CAIs will be connected to the new network via underground or aerial fiber. If underground fiber laterals are installed, fiber will be routed into CAI buildings through existing communications conduit (if available) or through a new 2-inch hole penetrating the facility wall. If aerial fiber laterals are used, the new fiber line will parallel existing aerial utilities and enter the building at the same location as existing utilities. No utility poles will be installed or replaced. Installation methods will be determined during the Project's final design phase.

Wireless technology will be used in remote and rural areas where fiber cable placement is not feasible. EAGLE-Net will install new antennas on 37 existing towers and 9 buildings, in accordance with applicable Federal Communications Commission (FCC) and industry guidelines and regulations. No new towers will be constructed. Antenna installations on buildings designated as historic will comply with Colorado State Historic Preservation Office (SHPO) recommendations and applicable BMPs developed by NTIA. EAGLE-Net will obtain leasing agreements from the existing tower owners prior to placing antennas and installing a 3-foot by 3-foot pre-cast concrete pad and network equipment cabinet within each existing tower's fenced compound. These weatherproof cabinets will house power and communication electronics such as batteries, power supplies, and microwave radios. If required, emergency generators will be installed within the existing compound, and ground disturbance will not occur outside of the existing tower compound footprint. Antenna collocations on existing buildings will involve attaching microwave antennas to rooftops using standard antenna and roof mounts. Co-axial cable will run from the roof to additional network equipment to be placed inside the buildings. Collocations on existing structures will not require ground disturbance.

Alternatives

The Supplemental 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 Supplemental EA.

Alternative 1 – Hybrid Fiber and Wireless Network Technologies (Preferred Alternative). This alternative involves installing 1,070 miles of new fiber optic cable and collocating new microwave antennas on 37 existing towers and 9 existing buildings. This alternative leverages existing infrastructure, and involves construction of new facilities only where necessary. Most of the new fiber optic cable will be installed underground within existing ROWs. Bridge attachment and aerial fiber installation will be used for short segments where underground installation is infeasible or impracticable. Where aerial fiber installation is required, fiber optic cable will be added to existing poles. No utility poles would be installed or replaced for this project. Wireless technology will be used in remote and rural areas where cable placement is not feasible and to avoid disturbing Critical Habitat or Potentially Suitable Habitat of Federally listed endangered species.

Alternative 2 – Complete Core Network Fiber. This alternative is similar to the Preferred Alternative, but with a 100% fiber-optic core ring, including fiber optic line installed in or near designated Critical and or Potentially Suitable Habitat, as defined by the U.S. Fish and Wildlife Service (USFWS), for the Federally endangered Pagosa skyrocket (*Ipomopsis polyantha*) and clay-loving buckwheat (*Eriogonum pelinophilum*). This alternative was not chosen as the Preferred Alternative because completion of the Biological Assessments (BA) and Formal Consultation with the USFWS could not be finished in time for the Project to be restarted and completed in time to meet the ARRA grant completion deadline of September 30, 2013. Therefore, this alternative does not meet the purpose and need of the Federal Action. Furthermore, there was no guarantee that the BAs for this alternative would have shown no impact to potentially affected species.

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, no new fiber-based or wireless infrastructure would be installed. As a result, the Project would not meet its intended purposes, including provision of enhanced broadband access to rural communities in the region. The Supplemental EA examined this alternative as the baseline for evaluating impacts relative to other alternatives being considered. The baseline included broadband infrastructure installed before December 2012 by EAGLE-Net under the BTOP grant

Alternatives Considered But Not Carried Forward. In addition to the Preferred Alternative, EAGLE-Net considered limiting broadband connections to a single type of technology (i.e., using either fiber optic cable or wireless technology, but not both) or a single installation type (i.e., underground or aerial installation, but not both). Similarly, EAGLE-Net considered construction of all new towers, or limiting wireless technology to collocations on existing towers. These options were determined to be infeasible or impracticable. Limiting the network to wireless technology would not meet the goals of the Project, as wireless technology is unable to provide the bandwidths and internet speeds available with fiber optic cable. Due to rough terrain and other considerations, limiting the Project to fiber optic cable infrastructure would significantly increase the length of fiber required, as well as the complexity of and time required for installation. Use of aerial installation as a more significant Project component was deemed infeasible due to the susceptibility to damage from severe weather and the need to install additional utility poles in areas where they currently do not exist. However, aerial installation cannot be ruled out entirely because portions of the Project route are not conducive to underground fiber installation. Based on these assessments, only the Preferred Alternative, Complete Core Network Fiber Alternative, and the No Action Alternative were retained for full evaluation in the EA.

Findings and Conclusions

The Supplemental 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 and Recreation, Infrastructure, Socioeconomic Resources, and Human Health and Safety. Cumulative impacts were also evaluated.

Noise

This Project will have short-term impacts on noise. Use of heavy equipment during the construction phase will result in short-term, temporary increases in ambient noise. However, it is unlikely that construction equipment will be near sensitive noise receptors for more than one to two days. Nevertheless, some noise impact near sensitive receptors is unavoidable because many of the entities to be served by the new network are themselves sensitive receptors (e.g., schools and libraries). If work would occur in or near sensitive receptors such as school zones, libraries, residential areas, etc., then appropriate work hour guidelines would be followed such as avoidance of construction during operational school hours. Potential impacts to residential areas would be mitigated through restricted work hours, with the work day generally beginning at 8 a.m. and ending at approximately 6 to 7 p.m. Operation of the network will not increase long-term ambient noise levels. Based on these assessments, no significant noise impacts are expected to occur as a result of this Project.

Air Quality

During the construction phase of the Project, emissions will be generated by construction equipment, including vibratory plows and directional drilling equipment. Emissions from this construction equipment will be temporary, minor, and transitory as construction activities move along the installation route. Depending upon ambient moisture levels, minor amounts of dust may also be generated during construction operations. Water trucks may be used to control fugitive dust during construction as deemed necessary. The Project will also result in short-term, minor increases in the use of fossil fuel and associated greenhouse (GHG) emissions during construction. Considering the nature and scope of the planned network expansion, EAGLE-Net estimates that the Project will result in the release of approximately 3,100 metric tons of carbon dioxide equivalent emissions. Thus, GHG emissions are expected to be well under the Council on Environmental Quality's presumptive effects threshold of 25,000 metric tons of carbon dioxide equivalent emissions from an action. Neither the placement nor operation of the buried fiber optic cable will create any new, long-term sources of air emissions in the Project area. Based on these assessments, no significant impacts to air quality are expected.

Geology and Soils

Under this Project, fiber optic lines will be installed in previously disturbed ROWs along utility lines, roadways, and railroads. Construction using a vibratory plow or directional drilling is intended to preserve existing soils profiles and will not adversely affect the geology or soils of the area. Areas requiring trenching will be backfilled with soils from the area of excavation and restored to their original condition. In areas requiring hand holes for fiber optic splices or transmitting equipment, small excavators will be used to minimize soil disturbance. Installing fiber on bridges or utility poles should have negligible impacts on geology and soil. In areas where more significant ground disturbance will occur, such as locations of hand hole

installations, erosion control BMPs approved by the Colorado Department of Transportation (CDOT) will be implemented to minimize disturbance. These BMPs may include silt fences berms and straw bales. Based on these assessments, the Project is not expected to result in significant adverse impacts on the geology or soil in the area.

Water Resources

The Project fiber route will require numerous stream, river, floodplain, and wetland crossings. Impacts to these water resources will be avoided by installing the fiber using directional boring, aerial suspension, or bridge attachment. Aerial installation will avoid placement of new poles in wetland habitats. Most of the new fiber will be installed below grade, and will not result in substantial fills or other grading revisions within floodplains. After consulting with the U.S. Army Corps of Engineers (USACE), EAGLE-Net confirmed that permits are not required for directional boring or aerial installation of fiber and installation of fiber via vibratory plow is permitted under USACE Nationwide Permit 12 for Utility Line Activities. Nevertheless, EAGLE-Net will prepare a stormwater pollution-prevention plan and implement appropriate CDOT BMPs to reduce potential impacts on surface waters. Significant groundwater aquifers are not present at such limited depths and therefore will not be impeded by installation of the new network. Based on these assessments, the Project is not anticipated to result in significant adverse impacts on water resources in the area.

Biological Resources

Based on information provided by the USFWS, the Colorado Parks and Wildlife (CPW), and the Wyoming Game and Fish Department (WYGF), 100 species of concern were identified in the Project area. However, after further review of the list, EAGLE-Net determined that suitable habitat for only 21 of these species may be present near Project sites and subject to potential disturbance, including two Federally-listed endangered species: Pagosa skyrocket, *Ipomopsis polyantha*) and clay-loving buckwheat, *Eriogonum pelinophilum*).

On January 2, 2013, NTIA initiated formal consultation with the USFWS regarding potential significant adverse impacts from Project activities on the Pagosa skyrocket and clay-loving wild buckwheat, for the proposed Durango-to-South Fork and Delta-and-Montrose route segments. This included, the clay-loving buckwheat designated Critical Habitat located on or near the Delta to Montrose routes and Pagosa skyrocket designated Critical Habitat located on or near the Highway 160 route in Archuleta County, Colorado. As proposed by the Preferred Alternative, by using wireless transmission through the locations of Potentially Suitable Habitat identified by USFWS, it is anticipated no measurable affects to these two plant species will occur. However, if in the future, the Complete Core Network Fiber Alternative is pursued, the process of Formal Consultation will be required to evaluate options for mitigating impacts to these plant species, including field surveys to identify and delineate plant populations. The results of the field surveys and other information obtained in preparation of the BA will be presented to the USFWS to assist the agency in issuing a Biological Opinion with guidance on installation options and mitigation actions if found necessary. These activities will be coordinated with the appropriate BLM and USFS personnel.

After reviewing the current listing of Federally threatened, endangered and candidate species located in the counties where the proposed fiber optic line would be installed, EAGLE-Net concluded, that by following guidance received from the USFWS and BMPs for minimal ground disturbance, the Project is not anticipated to result in significant impacts to protected species. In letters dated October 15, 2012 and November 6, 2012, the USFWS concurred with these findings for regulated Federal species on the routes as proposed by November 2012. Furthermore, based on a conversation held on January 22, 2013 the USFWS Denver office confirmed through an Informal Consultation process that the Project is expected to have "no effect" on the and Pagosa skyrocket and clay-loving wild buckwheat, and therefore does not require consultation with USFWS. Therefore, USFWS will not provide written concurrence on a "no effect" opinion.

In a letter dated May 19, 2011, the WYGF indicated that they have "no terrestrial wildlife or aquatic concerns pertaining to this Project." On June 17, 2011, CPW concluded that potential impacts to wildlife from planned Project activity would be "minimal" provided that EAGLE-Net implements BMPs to protect wildlife. The protective measures specified by Colorado Division of Wildlife (CDW) include reclamation of disturbed habitats with native shrubs, grasses, and forbs; implementation of a noxious weed monitoring and suppression program for each disturbed site; and using directional boring to cross all streams and jurisdictional wetlands along the route.

In addition to considering potential impacts on listed species, EAGLE-Net evaluated potential impacts on migratory birds and other wildlife. The wireless routes will be installed on existing towers or structures; no new towers or structures will be installed. Connections to existing towers and other structures will be performed with minimal disturbance. The installation of new equipment on existing towers will not cause the height of the tower to exceed 199 feet or require the installation of additional guywires; thereby reducing potential impacts on avian species protected under the Endangered Species Act, Bald and Golden Eagle Protection Act. Finally, EAGLE-Net will survey all areas of ground disturbance for protected species, burrowing species and their dependent species (e.g., Prairie dogs, Burrowing owls, Mountain plovers, Ferruginous hawks, Black-footed ferrets), and nesting species, if construction activities will occur during the primary nesting season as recommended by the USFWS. If protected species, burrowing species, or nests are observed during construction activities, construction will be temporarily halted to consult with applicable agencies, and sensitive areas will be avoided temporally or spatially when possible.

Based on these assessments, no significant adverse impacts on biological resources are anticipated to result from Project implementation.

Historic and Cultural Resources

On July 1, 2011, EAGLE-Net entered into a Programmatic Agreement (PA) with the Colorado State Historic Preservation Office (SHPO) and NTIA for the original EA that details stipulations related to construction monitoring and inadvertent discovery notification. During the initial consultation process, it was determined that EAGLE-Net would follow appropriately protective

BMPs during Project implementation, including avoiding known archaeological resources, and ceasing work within 100 feet of a discovery if unknown archaeological resources are uncovered so that appropriate authorities can be notified and provide further consultation. In addition, EAGLE-Net was required to submit documentation to the Colorado SHPO regarding connection of existing CAI buildings to the network using underground or aerial installation. In a response letter dated May 25, 2011, the Colorado SHPO determined that, based on the stipulations detailed above, the Project will have no adverse effect on historic and archaeological resources.

For the Supplemental EA, EAGLE-Net completed a file search to identify potential historic and archaeological resources in the Project's area of potential effect (APE), which is defined as 100 feet of either side of the broadband fiber centerline. The file search was completed and additional information on the route was provided to the Colorado SHPO on October 29, 2012. The database search indicated that 37 eligible or potentially eligible archaeological resources are located within the APE. Further identification efforts in Colorado included providing digital map files indicating the proposed fiber route locations and additional file reviews with four resources on or near USFS and BLM owned lands. Consultation with the SHPO and Federal agencies for portions of the Project crossing USFS and BLM lands is ongoing.

The method of construction for each segment will determine the area of actual ground disturbance within the APE/study area. The depth of all trenches and bores will be determined by the presence of cultural resources, engineering concerns, and field conditions. Potential impacts to historic buildings will be minimized by following the approved treatment, as agreement with the SHPO in the PA and Special Award Conditions (SAC), in conjunction with NTIA developed best practices for connecting broadband to historic buildings. Aerial fiber alternatives on existing lines/poles and leases of existing fiber are excluded from National Historic Preservation Act (NHPA) Section 106 consultation for NTIA ARRA grant projects per the Nationwide Programmatic Agreement that NTIA entered into with the Advisory Council of Historic Preservation, the National Council of State Historic Preservation Officers, and other consulting parties. Collocation of equipment on existing towers will be reviewed individually, by tower location, to ensure that the placement of such equipment would adhere to the *Programmatic Agreement (PA) Among the U.S. Department of Agriculture Rural Utilities Service, National Telecommunications and Information Administration, National Conference of State Historic Preservation Officers, and the Advisory Council on Historic Preservation for the Broadband Technology Opportunities Program and Broadband Initiatives Program* (March 2001) in order to avoid adverse effects to historic properties.

NHPA Section 106 consultation is still ongoing for this Project in Colorado under the existing EAGLE-Net PA (July 2011). The continuing consultation will allow for refining of the identification efforts and any archaeological surveys deemed necessary to comply with all consultation requirements in the PA, SAC, and cooperating agreements prior to construction of a project segment. Installation of buried fiber in areas outside of existing previously disturbed ROW will adhere to Section 106 consultation requirements, the SAC, the PA, the cooperating agreements, and the NHPA. All consultation will be complete before project implementation in

order to avoid adverse effects to historic and cultural resources. Use of professionally acceptable avoidance measures is an accepted means of avoiding adverse effects to historic and cultural resources.

EAGLE-Net will implement the following avoidance measures:

- Conduct plowing and boring only on public lands within public ROW along previously disturbed roadways and utility corridors;
- Flag and avoid known historic and cultural resources;
- Flag known archaeological sites located within 100 feet of the project corridor;
- Use a qualified and properly permitted archeologist to flag sites;
- Shift the project corridor if sites are within the buffer of a site (following the SHPO approved approach in the PA);
- Stop construction if any artifacts or human remains are discovered; and
- Contact the appropriate parties (including NTIA and local law enforcement).

NTIA initiated consultation with the Wyoming SHPO on January 27, 2011, and EAGLE-Net provided additional information to the Wyoming SHPO on March 2, 2011. In a letter dated March 14, 2011, the Wyoming SHPO concurred that the portion of the Project to be implemented in Wyoming will have no effect on historic properties. Because there is a possibility that prehistoric or historic materials may be found in the Project corridor, the Wyoming SHPO also stipulated that work be halted immediately if any cultural resources are discovered during construction. In such an event, EAGLE-Net must immediately contact NTIA and the SHPO so that a qualified and properly permitted archaeologist or historian can evaluate the materials.

NTIA originally notified 13 Native American Tribes of the Project through the Tower Construction Notification System (TCNS) on October 29, 2010. NTIA issued another TCNS notification on the Project to nine Tribes on February 4, 2011. This second notification included four of the Tribes previously notified, bringing the total number of Tribal organizations notified to 18. Additional correspondence regarding the Project and requests for comment were issued in February and April 2011. Re-initiation of tribal consultation regarding changes in construction scope and scale were resubmitted via the TCNS system in January 2, 2013 by the NTIA. Thirty days after the January 2, 2013 tribal notification, only one tribe has responded. The Jicarilla Apache Nation Tribal Historic Preservation Office has requested to be notified in the event of inadvertent discoveries during construction.

EAGLE-Net will ensure that an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards monitors all ground-disturbing activities that occur during Project work near known or suspected archaeological sites and burial sites. If construction work uncovers cultural materials (e.g., structural remains, historic artifacts, or prehistoric artifacts),

EAGLE-Net will cease all work immediately, and notify interested Tribes, the SHPOs, and NTIA. If human remains are discovered, EAGLE-Net will cease all work immediately, in accordance with the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) and relevant State statutes, secure the discovery area, and immediately notify local law enforcement personnel (e.g., police or County Coroner) and NTIA.

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

Aesthetic and Visual Resources

The Project will involve construction adjacent to agricultural fields, natural areas, railroads, and urban streetscapes. Aesthetic disruptions for most areas will be limited to the short-term presence of construction equipment. Permanent aesthetic impacts will be limited because the majority of fiber and splice enclosures will be underground. Where aerial fiber installation is necessary, EAGLE-Net will use existing utility poles to the maximum extent practicable to avoid creating new visual impacts. Based on these assessments, this Project will not significantly affect aesthetic or visual qualities in the region.

Land Use

Fiber will be installed in previously disturbed utility corridors and existing ROWs. The planned improvements are consistent with normal uses of ROWs and utility corridors. Leases will be obtained for fiber routes in railroad ROWs. In NTIA correspondence with the Bureau of Indian Affairs (BIA) regarding the segment crossing on the Southern Ute Tribal land (email chain dated February 14, 2013), BIA indicated they have no concerns with installations methods described in the Preferred Alternative. However, BIA started they may require additional review if future development includes the methods described in the Complete Core Network Fiber Alternative. EAGLE-Net has applied for the necessary permits from BLM and BOR allowing access for construction across portions of Federal land. In addition, a Special Use Permit will be obtained from the U.S. Forest Service for a portion of the route that crosses through Rio Grande National Forest and San Juan National Forest. Based on these considerations, this Project will not significantly affect land use in the region.

Infrastructure

Various levels of infrastructure services (e.g., roadways, telephone lines, natural gas, and electric lines) are in place throughout the Project area. Existing utility lines within ROWs in the Project area will be avoided. Overall, this Project is expected to have a positive impact on infrastructure in Colorado and Laramie County, Wyoming.

Socioeconomic Resources

The Project will provide enhanced broadband access to users in Colorado and Laramie County, Wyoming, particularly within rural and remote parts of the region. Implementation of the Project will provide enhanced broadband services to rural schools, libraries, and universities, including one school district and two libraries on Tribal land. In rural, low income, and Tribal

locations, the enhanced bandwidth will have a positive impact on education, economic opportunities, health care, and public safety. The network will help to attract and retain businesses; provide access to educational resources available locally and globally; allow for multi-agency collaboration, coordinated actions, and training for public safety; provide better access to comprehensive health services; and facilitate telecommuting and new internet-based business opportunities. The Project will not disproportionately affect minority and low-income populations. Overall, this Project is expected to have a positive impact on socioeconomics in the planned service area.

Human Health and Safety

The Project is not expected to have direct impacts on human health and safety during normal operation. However, human health and safety concerns may arise during construction when such activities occur in close proximity to traffic along roadways. Because construction activities will occur in ditches and utility corridors along highways and roads, contractors will not be located directly in the path of traffic. In addition, the impact to vehicles traveling on the highways and roads will be minimized because traffic lanes will not need to be rerouted or closed. Contractors will comply with Federal Highway Administration requirements and the Manual on Uniform Traffic Control Devices to promote highway safety and efficiency by providing warning and guidance to all elements of traffic. CDOT and Wyoming Department of Transportation (WYDOT) traffic control standards will be used to establish and maintain a safe work zone. Workers are required to meet Occupational Safety and Health Administration (OSHA) standards for worker visibility, and equipment driven on roadways must meet proper signage and licensing requirements. Work in and around school zones will be coordinated with school district officials to ensure that safe, functional routes are available for pedestrian and bus traffic. By adopting the safety and coordination efforts described above, the Project can be constructed without adverse impacts to human health and safety.

A review of the Environmental Protection Agency's (EPA) National Priorities List, Corrective Action Baseline Database, and Brownfield sites did not reveal areas of concern within the planned Project corridor. Nevertheless, if soils encountered during construction appear visually different from surrounding soil, or petroleum product odors are detected, the soils will be identified as potentially contaminated and work will cease in the area of concern. Further investigation will be conducted to determine the presence and extent of soil contamination. Workers will then be equipped with appropriate personal protective equipment and follow the required procedures for mitigating identified soil contamination.

Cumulative Impacts

During implementation of the Project, cumulative noise impacts may occur due to concurrent road construction and maintenance, particularly during the summer months. However, because fiber installation is expected to proceed rapidly, the anticipated increase in noise is expected to be minimal and insignificant in duration. Similarly, the presence of multiple construction crews may have a temporary effect on traffic in the area of installation. However, if installation of fiber routes occurs simultaneously with other anticipated construction and maintenance, repeated

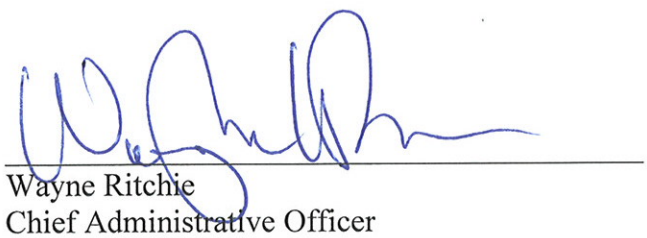
disturbance to biological resources such as wildlife and vegetation in the area of construction will be reduced. Ground disturbance will be limited to existing ROWs, which are routinely disturbed for roadway and utility installation and maintenance. The previously constructed portions of the Project (i.e., segments built before December 6, 2012 grant suspension) were generally completed with methods described in the Complete Core Network Fiber Alternative of this Supplemental EA, and in accordance with the Preferred Alternative of the original EA and FONSI, the PA with the Colorado SHPO, and the guidelines and permits issued by State and Federal agencies. Deviations from the original Proposed Action (prior to the grant suspension) that potentially caused impacts are being addressed by the responsible State and Federal agencies.

No significant adverse cumulative impacts will result from concurrent implementation of the remaining elements of the EAGLE-Net Project and other routine roadway and utility installation and maintenance.

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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4/3/13
Date