National Telecommunications and Information Administration Broadband Technology Opportunities Program Finding of No Significant Impact Nez Perce Tribe, Nez Perce Reservation Broadband Enhancement Project

Summary

The Nez Perce Tribe (the Tribe) applied to the Broadband Technology Opportunities Program (BTOP) for a grant to deploy a wireless backbone network across four counties in Idaho (including Clearwater, Idaho, Lewis, and Nez Perce Counties) to connect the Reservation communities of Lapwai, Culdesac, Peck, Ahsahka, Orofino, Kamiah, and Kooskia. The Tribe will construct seven new towers and place new telecommunications equipment on the new towers, as well as seven existing towers across the Reservation. Project activity at the seven existing tower sites will be limited to the placement of network equipment with no additional ground disturbance. Each new tower site will include a non-guyed, self-supporting lattice tower placed on a concrete foundation and a prefabricated equipment shed placed on prefabricated cement blocks. Temporary access roads will be constructed or upgraded at five of the new tower sites. Power to each site will be provided by the existing utility grid, and back-up batteries will be housed in the sheds. The network will provide enhanced broadband service delivery to 18 community anchor institutions (CAIs), and is referred to as the Nez Perce Reservation Broadband Enhancement Project (Project).

The National Telecommunications and Information Administration (NTIA) awarded a grant for the Project to the Tribe 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.

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

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The Project includes:

- Installing seven non-guyed, self-supporting lattice towers ranging from 100-250 feet tall;
- Installing or upgrading temporary access roads to five of the new tower sites;
- Installing concrete foundations at the new tower sites prior to tower placement;
- Constructing a prefabricated equipment shed on cement blocks at each new tower site;
- Connecting new tower sites to the existing power grid;
- Providing backup batteries in the onsite equipment sheds;
- Installing wireless equipment on seven existing towers and the seven new towers; and
- Providing enhanced broadband connectivity for 18 CAIs in the Project 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 applicable Programmatic Agreements (PAs), 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

This Project addresses current connectivity gaps across the Nez Perce Reservation and north central Idaho. At this time, most areas within the Reservation are limited to dial up and/or satellite access to the internet. This Project will expand infrastructure capacity and enhance broadband access opportunities for emergency medical service providers (including fire, sheriff, and police services), libraries, and the Northwest Indian College. The Project is also expected to bolster economic development opportunities across the Reservation. Enhancement of broadband telecommunications connectivity in rural areas of the Reservation opens the opportunity for entrepreneurial growth and better access to online learning and networking.

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Project Description

The Project will expand existing infrastructure by erecting seven new telecommunications towers, installing wireless network equipment on the new towers, and installing wireless network equipment on seven existing towers. New wireless equipment will be collocated on two existing towers on tribal land in Lapwai and Kamiah, and at five other existing towers in Stony Point, Hubbard, Teaken Butte, Orofino, and Mason Butte. No additional ground disturbance is planned for these seven existing tower sites. New antennas will be placed on these existing towers at heights ranging from 80-160 feet.

Seven new tower towers will be erected in or near the towns of Culdesac, Winchester, Peck, Nezperce, Beard, and Kooskia City. The new towers will be self-supporting and constructed on concrete foundations. Each new tower site will include placement of a prefabricated electronics shed installed on prefabricated cement blocks. Both the tower and equipment shed will be located within a 50-foot by 50-foot area at each new site. The existing utility grid will supply power to each new tower site and backup batteries will be housed in the electronics sheds. Soil disturbance at each tower site will be limited to installation of temporary access roads, power line trenching or aerial pole placement, and excavation to facilitate pouring of the tower foundations. All disturbed areas will be restored, except where tower foundations are located. Backfilling around the tower foundation will return the slope to grade, and bare soil areas will be reseeded. Because off-road vehicles will be used for long-term access to tower sites, existing agriculture fields will revert back to agriculture production following site development.

Tower-specific site development plans are as follows:

- The Culdesac tower site will include placement of a 100-foot tall tower on an existing concrete foundation (10-feet by 10-feet by 5-feet). This site will use an existing access road, and one utility pole will be installed to accommodate placement of 50 feet of aerial power line.
- Tower site TU 99-101 near Winchester will include placement of a 165-foot tall tower on a new concrete foundation (approximately 23-feet by 23-feet by 10-feet). A one mile long, 12-foot wide temporary access road will be constructed by blading across a wheat field from the County Road to the tower site. Approximately 3,170 feet of buried power conduit will be installed at a depth of forty-eight inches below the surface via trenching within the access road.
- The TU 17 tower site also near Winchester will include placement of a 250-foot tall tower on a new concrete foundation (approximately 30-feet by 30-feet by 10-feet). This site will use an existing access road. Approximately 2,940 feet of buried power line will be installed via trenching through an agricultural field from the County Road to the tower site.

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- The Peck tower site will include placement of a 100-foot tall tower on a new concrete foundation (approximately 10-feet by 10-feet by 5-feet). The existing access road to this site (approximately one-third of a mile long) will require minor clearing of grasses and shrubs that have grown onto the surface and placement of a four-inch gravel surface to reduce long term maintenance requirements. Power lines on existing poles will be upgraded, no ground disturbance will be needed to provide power to this tower site.
- The Beard tower site will include placement of a 180-foot tall tower on a new concrete foundation (approximately 31-feet by 31-feet by 10-feet). A temporary access road will be constructed by blading and excavation to form a twelve-foot wide driving surface that will be used by construction equipment to access the tower site. The access road will be approximately one-quarter mile long from Private Road to the tower site. This Project also includes installation of six power poles and installation of 1,630 feet of aerial power cable, following the path created by the access road. Following construction, the access road will be maintained in a primitive manner to allow for off road vehicle access, which will enable power line clearance to be maintained while not creating a permanent access roadway.
- The TU 60 tower site near the city of Nezperce will include placement of a 180-foot tall tower on a new concrete foundation (approximately 23-feet by 23-feet by 10-feet). Construction of a temporary access road will be limited to blading the current rangeland field to create a twelve-foot wide driving surface approximately 1,300 feet long from the County Road to the tower site. In addition, buried power cable will be trenched across the field for approximately 1,000 feet from the nearest power pole to the tower site. Power conduit will be installed forty-eight inches below the surface. Following construction and tower erection, there will be no long-term use of the access roadway, and the path will be reseeded.
- The TU 71 tower site near Kooskia City will include placement of a 160-foot tall tower on a new concrete foundation (25-feet by 25-feet by 10-feet). An existing road, approximately three-quarters of a mile long, will require minor clearing of grasses and shrubs that have grown onto the surface, and water bars will be flattened to enable construction equipment to access the tower site. Power will be brought to the site by installing 12 new utility poles and hanging approximately 5,000 feet of aerial power line on those poles. Following construction, the access road will be maintained in a primitive manner to allow for off road vehicle access, which will enable power line clearance to be maintained while not creating a permanent access roadway.

The network will provide enhanced broadband service delivery to 18 CAIs in the Project area (including libraries, public safety entities, and a community college) that use wireless access points and wide area networks. No end user equipment will be provided under this Project.

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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.

Wireless Network Installation (Preferred Alternative). As noted in the Project Description, this effort will include installation of seven new telecommunications tower sites (including the towers, equipment sheds, access roads, and power connections), and placement of wireless network equipment on a total of 14 towers (seven new towers and seven existing towers).

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, broadband access opportunities would be limited, and benefits associated with the Project would not be achieved. The majority of Nez Perce tribal members, non-tribal residents, businesses, and CAIs would continue to rely on dial-up or satellite internet connectivity. The EA examined this alternative as the baseline for evaluating impacts relative to other alternatives being considered.

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 (including greenhouse gases [GHGs]), 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

Heavy equipment used to prepare access roadways, excavate tower foundations, trench utility lines, excavate utility pole holes, and erect towers will cause short-term increases in ambient noise in the Project area. However, construction activities will require no longer than two weeks per site. Construction noise associated with the Culdesac tower may impact nearby residents; no other planned tower sites are located within one-quarter of a mile of any residence or routine human presence. No long term noise impacts are anticipated. Based on these assessments, no significant noise impacts are expected to occur as a result of the Project.

Air Quality

Minor impacts to air quality will occur during installation of seven new telecommunications towers across the Nez Perce Reservation. However, these impacts will be limited in duration and localized to the tower construction sites. Best management practices (BMPs) will be implemented to minimize emissions of air pollutants or fugitive particulates during construction; these BMPs may include spraying water on access roads. Short-term construction-related

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emissions are not likely to exceed National Ambient Air Quality Standards, and no new permanent sources of air emissions will result from implementation of this Project. Long-term operation of a wireless, high-speed internet network will have no impacts on air quality. Construction of new towers under this Project will result in a short-term, minor increase in the use of fossil fuel (i.e., gasoline and diesel fuel) and associated GHG emissions in the region. It is estimated that this Project will result in the release of approximately 5.93 metric tons equivalent of carbon dioxide emissions during site construction and maintenance activities. This estimate is well below the 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 operation and maintenance of the Project.

Geology and Soils

This Project will require ground disturbance for excavating the foundation at seven new tower sites; building 1.5 miles of temporary access roads; reconstructing one mile of existing site access road; trenching power line conduit along 6,560 linear feet; and digging 19 new aerial power poles. Erosion control measures and BMPs (e.g., silt fence placement to reduce the chance of soil movement from the site) will be implemented during all construction activities. The lengths of required access roads are limited, and trenching for burial of power lines will follow paths created by the access roads. Only a small number of utility poles will be installed as part of this Project, and aerial placement of power lines on these and existing poles will not require ground disturbance. All disturbed areas, except for tower foundation locations, will be reseeded and re-vegetated following Project construction. Consequently, the Project is not expected to result in significant adverse impacts on geology or soils.

Water Resources

All planned tower sites for this Project are located on ridge tops or prairie upper slopes. None of the tower sites are located near, adjacent to, or within rivers, streams, seeps, wetlands, or Coastal Management Zones. For this reason, it is unlikely that sediment from excavation of tower foundations or construction of site access roadways will reach waterways across the Nez Perce Reservation. In addition, erosion control barriers will be placed down slope of all ground-disturbing activities. Accordingly, the Project will not result in significant erosion or sedimentation. None of the site development activities will result in discharges to bodies of water. No Clean Water Act permits are applicable to the Project. Based on these assessments, the Project is not expected to impact water resources.

Biological Resources

Several threatened and endangered species or critical habitats are present within or near the Nez Perce Reservation, including bull trout (Salvelinus confluentus), Canada lynx (Lynx canadensis), grey wolves (Canis lupus), MacFarlane four-o'clock (Mirabilis macfarlanei), and Spalding catchfly (Silene spaldingii). However, the planned tower sites, specifically tower site TU 99-101, only contain suitable habitat types for Spalding's catchfly. No evidence of Spalding's catchfly was found in this location during an on-site review conducted by a Tribal botanist on November 1, 2010. Because there are no listed Threatened or Endangered species habitats or

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species at any of the planned tower sites, the Tribe concluded that there will be no effect on such species. In a letter dated February 8, 2011, the U.S. Fish and Wildlife (USFWS) expressed no disagreement with the "no effect" determination.

A wide range of migratory bird species also use habitats across the Nez Perce Reservation, including open water bodies, large and small clear rivers and streams, riparian areas, forests, and open rangelands. To minimize Project impacts on migratory birds, the Project will follow USFWS guidance on siting, construction, operation, and decommissioning of communication towers. The Project maximizes collocation opportunities with private partners and will use seven existing towers to complete the planned network. The Project will include non-guyed self-supporting towers, equipped with the minimum amount of lighting allowed, and only where the Federal Aviation Administration requires for aviation safety. The Project will limit access road development to temporary usage to support construction activities, and tower sites will be limited to a 50-foot by 50-foot area. Down-shielded lighting will be used on equipment sheds and ground facilities. In addition, an analysis of migratory bird flight patterns near the planned tower sites indicates that there will be no Project-related impacts to migratory bird species across the Nez Perce Reservation. In their February 8, 2011 letter, the USFWS concurred with this approach for minimizing the potential for bird collisions with the new towers.

By limiting ground disturbance and implementing appropriate BMPs, the Project is not expected to have significant adverse impacts on biological resources.

Historic and Cultural Resources

Section 106 review of the Nez Perce towers, as communications facilities funded by BTOP but subject to FCC licensing, fall under the FCC Nationwide Programmatic Agreement (NPA) for Review of Effects on Historic Properties for Certain Undertakings Approved by the FCC per the Program Comment for Streamlining Section 106 Review for Wireless Communication Facilities Construction and Modification Subject to Review Under the FCC Nationwide Programmatic Agreement and/or the Nationwide Programmatic Agreement for the Co-location of Wireless Antennas, issued on November 20, 2009 (74 F.R. 60280). Consequently, the FCC assumed lead agency status for consultation under the National Historic Preservation Act (NHPA).

On October 29, 2010, NTIA entered information describing the BTOP-funded project into the Tower Construction Notification System (TCNS). The system notified five tribes, including the Nez Perce. The Nez Perce THPO had also received NTIA's Section 106 initiation letter, and as all proposed work is within the reservation, confirmed that the THPO would be acting as SHPO for the purposes of Section 106 review.

The Coeur d'Alene Tribal Council indicated no further interest in the Project, and the Fallon Paiute-Shoshone Tribe requested that Project activity be halted and they be immediately notified in the event of inadvertent discovery of archaeological remains or resources. As of April 7, 2011, the remaining two tribes notified through TCNS have not responded. The State Historic Preservation Officers (SHPOs) from Idaho and Utah were also notified via TCNS; no responses

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were received through the automated system. The Idaho SHPO deferred to the THPO and indicated no further interest in the Project.

On November 20, 2009, NTIA notified the Nez Perce Tribal Historic Preservation Officer (THPO) that the agency would apply the Program Comment referenced above. The Nez Perce Tribe, as the FCC licensee, then entered the project's proposed tower locations into the FCC E-106 system.

As stated previously, seven existing towers will be used for collocation of network equipment. These activities have been reviewed by the THPO and determined to have no adverse effects on historic, cultural, or Native American resources across the Nez Perce Reservation. The THPO also determined that the tower proposed for location at a site referenced as "Culdesac" will have no adverse effects on historic, cultural, or Native American resources.

The Nez Perce tribe contracted the Tribal Archaeologist to review the remaining new tower sites. As winter weather inhibited access to perform required archaeology at these sites, the THPO has been unable to concur on effect determinations for the remaining six new tower sites.

Accordingly, on March 17, 2011, NTIA entered into a Programmatic Agreement (PA) with the Nez Perce THPO and Tribal Executive Committee to establish the procedures and timeline for completing FCC Section 106 review. The agreement outlines procedures to ensure avoidance and/or mitigation of adverse effects to thresholds below the level of significance in the event that historic properties are identified.

The Nez Perce National Historic Park consists of 38 sites across Idaho, Montana, and Oregon. Three of the National Park sites lie within the Nez Perce Reservation: Spalding Park, Canoe Camp, and Heart of the Monster.

The extant Lapwai tower at the KIYE radio station was erected in June 2010 and lies within the view-shed of Heart of the Monster National Historic Park. The THPO concurred that the addition of antennas to this pre-existing tower is not expected to significantly impact this historic and cultural resource. None of the other existing or planned towers associated with this Project are within the boundaries or view-sheds of these National Park sites on the Nez Perce Reservation.

Thus, the Project should have no significant adverse impacts to National Historic Park sites or other historic or cultural resources.

Aesthetic and Visual Resources

The planned telecommunications network will include seven existing towers and seven new towers. Both existing towers and new towers are located on ridge tops, prairies, or within city limits. Placement of additional wireless antennae range in size from 2.5-4 feet in diameter on seven existing towers will not significantly diminish visual quality. These towers, ranging in

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height from 80-160 feet tall, have been in place for many years and have completed all required local planning and zoning permitting. The effects of viewing an additional antenna on these towers will have minimal impact on local aesthetics. Most of the new towers planned for this Project, ranging in height from 100 to 250 feet and including a prefabricated equipment shed, are expected to blend in with existing development, power line poles, and tree cover present around each new tower site. Installation of towers that are self-supporting and free of guy wires minimizes potential visual impacts, and use of non-natural materials will be minimized where such materials would be visible in local or regional viewsheds. Although construction of the new 180-foot tower at Beard will be visible from the roadway, aesthetics of this rural, remote highway are not expected to be significantly impacted and will be offset by enhanced cellular voice coverage and safety for highway users.

Two of the existing towers being used by this Project (i.e., the Lapwai-KIYE and Stony Point towers) are visible from the Northwest Passage Scenic Byway, an All American Road. Addition of antennae on these towers will have minimal impact on visual and aesthetic qualities along the Byway. The Stony Point tower sits approximately one-half mile from the highway, and the KIYE tower is located within City limits of Kamiah and behind two commercial facilities. The new tower planned at Beard will be visible to travelers on the state-designated Gold Rush Historic Byway (ID Hwy 11). However, the visual impact of this newly erected tower is expected to be minimally disturbing to travelers, and will be offset by enhanced cellular voice coverage along this rural route. Based on these assessments, this Project will not negatively affect aesthetic or visual qualities in the region.

Land Use

The Project will install equipment on seven existing towers, land use at these sites will not change. The Project will also construct seven new tower sites; long-term land use in these locations will not change significantly. Although development of temporary access roads will have a short-term impact on agricultural production at one site (TU 99-101), this impact is expected to be limited to the year of construction. The Beard site is currently bare land used by wildlife as part of a 160-acre privately owned parcel on the edge of a canyon (Lolo Creek) locally recognized as a wilderness like landscape. Long-term use of the area around this tower site will not change, as wildlife is expected to return to the area following construction activity. Based on these assessments, the Project will have no significant impact on land uses.

Infrastructure

This Project will construct seven new telecommunications towers, build temporary road access, extend power utility lines to the new tower sites, and add equipment to seven existing towers. The planned tower sites are located along existing and improved roadways. Because of its height (planned for 250 feet), the TU 17 tower site near Winchester requires registration and licensing through the FCC. This Project will provide enhanced middle and last mile internet, data, and cellular communications for public and private users across the Nez Perce Reservation. Overall, the Project will have a positive impact on infrastructure in the region, and is not expected to result in significant impacts on infrastructure.

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Socioeconomic Resources

Implementation of this Project and long-term operation of the network is expected to generate an additional 200 jobs per year on and around the Nez Perce Reservation. In addition to direct job growth, enhanced broadband connectivity in rural areas of the Reservation opens the opportunity for entrepreneurial growth. Better access to online learning and networking also creates the potential for job growth in the region. Construction and deployment of a broadband network across the Nez Perce Reservation will have a positive impact on the socioeconomic well-being of Tribal and non-tribal residents and businesses. Overall, the Project will have a positive impact on socioeconomic resources in the region, and is not expected to result in significant impacts on socioeconomic resources.

Human Health and Safety

Improved telecommunication infrastructure and increased access will offer the residents of rural north central Idaho and the Nez Perce Reservation greater access to physical and mental health services. A regional mental health organization is working in parallel with this Project to upgrade clinic equipment to expand the delivery capacity of mental health care via telecommunications. The Project will compliment these expansion efforts by enhancing the telecommunication backbone capacity and connectivity to the internet for rural residents. In addition, wireless voice coverage will be enhanced by Project partners through collocation of cellular equipment on three of the new towers. Expansion of cellular service in these areas will greatly enhance traveler safety and improve public safety service providers' ability to communicate and transfer data. Contractors and construction activities will adhere to applicable safety regulations under the applicable Occupational Safety and Health Administration (OSHA) guidelines. Based on these assessments, Project implementation will result in positive impacts and negligible adverse impacts to health and safety in the region.

Cumulative Impacts

Several projects may occur in the same region and around the same time as the Nez Perce Reservation Broadband Enhancement Project. These unrelated efforts may include:

- Expansion of First Step Internet's middle mile infrastructure under a separate BTOP grant (EGID 643). That project does not include tower construction within the boundary of the Nez Perce Reservation, but does include addition of network equipment on existing towers.
- The Konkolville Water System upgrade project will extend the main water distribution line to a small unincorporated community adjacent to the City of Orofino, involving less than one mile of excavation.
- Access roads will be extended and a storm drainage system will be installed for a distance of less than one mile from Craigmont Industrial Park to connect with infrastructure in the city of Craigmont.

Cumulative impacts associated with concurrent implementation of multiple projects are not expected to be significant.

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Decision

Based on the above analysis, NTIA concludes that constructing and operating the Project as defined by the preferred alternative, applicable PAs, 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:

Wayne Ritchie

Chief Administrative Officer

Office of Telecommunications and Information Applications National Telecommunications and Information Administration