First Step Internet, Central North Idaho Regional Broadband Network Expansion Project

Summary

First Step Internet applied to the Broadband Technology Opportunities Program (BTOP) for a grant to construct network infrastructure. The new infrastructure will support wireless delivery of broadband Internet services to hospitals, businesses, schools, government agencies, and residential users in central north Idaho. This proposed action is called the Central North Idaho Regional Broadband Network Expansion Project (Project).

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

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

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

The Project includes:

- Constructing 10 wireless communication towers at 10 locations in central north Idaho (nine of which will be co-located with existing towers and/or buildings);
- Installing a small communications hut at each of the 10 new tower sites;
- Clearing approximately 3,400 square feet of land to accommodate tower construction at all sites, and approximately 12,600 square feet to widen the existing access road at the Spud (Potato) Hill site:

October 2010 First Step Internet

First Step Internet, Central North Idaho Regional Broadband Network Expansion Project

- Installing microwave radios and antennas, as well as routers and other network equipment, at the 10 tower sites; and
- Connecting the new towers and communication huts to existing power utility service, and providing each location with a propane-fueled generator system for backup power.

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

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

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Purpose and Need

The purpose of the Project is to build a broadband network capable of providing the infrastructure for multiple Internet service providers to deliver broadband Internet service in central north Idaho. The network is designed to provide broadband service for use by hospitals, businesses, schools, government agencies, and residential users. The central north Idaho region is severely limited in broadband options, capacity, and coverage. The network constructed through implementation of this Project will create more options for service from various providers and exponentially increase actual bandwidth available to anchor tenants. The Project will also expand service to unserved and underserved areas throughout the region.

Project Description

The Project will construct 10 wireless communications towers and leverage a number of existing towers to create a regional wireless telecommunications network throughout central north Idaho. With the exception of the Spud (Potato) Hill site, all of the tower locations are occupied by

October 2010 First Step Internet

existing telecommunications towers and/or buildings. A small communications hut will also be installed at each of the 10 new tower sites.

For construction of towers at the existing nine sites, land will be cleared. Approximately 600 square feet will be cleared at 5 of the sites, and 100 square feet will be cleared at the other 4 existing tower sites. Should re-seeding be necessary, only native species will be used. A tower base will be excavated, and a rebar-reinforced concrete foundation will be poured with embedded tower bolts and bolt templates. A crane will be used to set the building and tower. Once the towers and buildings are in place, tower installers will run fiber optic cable from the tower to the communications hut. First Step Internet will then install wireless antennas, radios, routers, and other network equipment at each site.

Power will be provided by traditional line power at each location. The onsite power will be brought to the communication hut via overhead lines in accordance with current electrical codes. Power is currently available at 9 of the planned sites. Spud (Potato) Hill does not currently have power available. Each site will be additionally equipped with a standby propane fueled generator. These generators will run in the event of an extended power outage and for monthly pre-programmed maintenance cycles.

Tower construction for the Spud (Potato) Hill site requires different protocols for construction, access road improvement, and provision of necessary power supply. The area to be cleared for tower construction at this site is approximately 600 square feet. The tower sections in this location will be bolted directly to the communications hut, and a separate concrete foundation for the tower will not be needed. The 3,000-foot long access road will be widened from its current 6 foot width to 10 feet wide to accommodate a bulldozer and delivery of a communications hut to the site. This will require clearing a total of approximately 12,000 square feet. of trees and brush. The widening will be done by a bulldozer and will result in the removal of brush and trees alongside the current access path. No gravel or permanent surface will be laid. Once the communications hut is in place at the Spud (Potato) Hill site, the tower sections will be brought to the site in three 10-foot sections, assembled, and bolted to the communication hut. Power will be provided to the site by extending the existing power from the next closest cell tower, approximately 3,000 feet away. The power line will be buried along the same path as the previously disturbed access road. Again, should re-seeding be necessary, only native species will be used.

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.

Alternative 1 – Wireless Communication Tower Construction (Preferred Alternative). As noted in the Project Description, this alternative involves construction of 10 wireless communication

First Step Internet

towers and their associated communication huts. Existing communication towers will also be leveraged to create a regional wireless Broadband network throughout central north Idaho. In addition to tower construction, microwave radios and antennas, routers, other network equipment, and emergency power generators will be installed at each site.

No Action Alternative. No action was also considered. Under the no action alternative, tower construction would not occur. As a result, a broadband network capable of delivering broadband Internet service to the North Central Idaho region would not be realized. The EA examined this alternative as the baseline for evaluating impacts related to other alternatives being considered.

Alternatives Considered But Not Carried Forward. During the Project planning stage, First Step Internet evaluated the alternative of installing a fiber optic network. Due to the mountainous terrain, installing a fiber optic network would be much more challenging than the microwave option. Such a project would have a much greater impact in terms of land disturbance and other environmental, cultural, and historical concerns. Running fiber for hundreds of miles, some across Nez Perce Tribal land, would have a greater impact on the land and resources than the comparatively minimal impact of constructing 10 new towers. Another major consideration was the fact that the cost to install a new fiber optic cable network is substantially greater than costs projected for installation of a wireless network, particularly when leveraging existing tower infrastructure in the area. Based on these findings, installing a fiber optic network was eliminated from further consideration for the Project.

Findings and Conclusions

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

Noise

During tower construction activities, there will be a minor and temporary increase in ambient noise levels. However, private residents at the Elk City sites are the only potential sensitive noise receptors expected to be impacted during the construction phase. Increased noise from construction equipment will last for about one week, with approximately 12 hours of actual equipment run-time at each tower site. The Spud (Potato) Hill site will have less noise associated with tower construction because no concrete foundation will be needed. However, there will be an increase in short-term noise associated with access road enhancements at this site. There are no identifiable noise receptors located near the Spud (Potato) Hill site. Moreover, operation of the wireless towers will not result in new permanent sources of noise in the Project area. Thus, the preferred alternative is not expected to have significant adverse

impacts on noise. There would be no construction or new sources of noise associated with the no action alternative. Accordingly, the no action alternative would have no impact on noise.

Air Quality

There will be short-term generation of fugitive dust caused by minor earth disturbance during Project implementation. There will also be short-term air quality degradation associated with generation of fugitive dust emissions during access road improvements at the Spud (Potato) Hill site. However, no receptors have been identified along the access road route, and these air quality impacts are expected to be minor. Propane-fueled generators at the tower sites will run on average for 6 hours per year per generator, and may result in minor, occasional impacts on regional air quality. To minimize these impacts, the propane tanks will meet industry standards for release prevention.

Air emissions associated with tower construction activities will last approximately one week, with about 12 hours of actual equipment run-time at each tower site. The preferred alternative will constitute a short-term minor increase in the use of fossil fuel and associated GHG emissions during construction. Heavy equipment to be used on this Project will use approximately 46 gallons of diesel fuel over the projected 12-hour run time at each tower site. Thus, the preferred alternative would result in the release of approximately 0.5 metric tons of equivalent CO2 emissions per tower site, or a total of approximately 5 metric tons of CO2 emissions for the Project as a whole. The incidental GHG emissions associated with the preferred alternative are well below the threshold of concern established by the Council on Environmental Quality, and will not significantly contribute to climate change.

Based on these analyses, the preferred alternative is not expected to have significant adverse impacts on air quality in the Project area. There would be no construction associated with the no action alternative and, therefore, no heavy equipment would be used or ground disturbance would occur. As a result, the no action alternative would not increase current levels of air pollution, fugitive dust, or GHG emissions in central north Idaho. Thus, the no action alternative would have no impacts on air quality in the Project area.

Geology and Soils

There is no prime farmland, unique farmland, or land of statewide or local importance surrounding most of the proposed tower sites, although some sites are zoned for agricultural use. All of the tower sites, with the exception of Spud (Potato) Hill, will be located next to existing towers or structures. Although there are currently no towers or structures at Spud (Potato) Hill, it is zoned for industrial/commercial/residential use and was formerly occupied by a telecommunications tower. As such, these tower sites do not pose a threat of irreversible conversion of farmland to nonagricultural uses and are not subject to the Farmland Protection Policy Act requirements. At the Spud (Potato) Hill site, the access path to the tower site will be widened from 6 feet to 10 feet wide along its entire 3,000-foot length. Brush and trees will be removed as needed along the path. No gravel or permanent surface will be placed on the Spud (Potato) Hill access road. Erosion control procedures will be in accordance with local

October 2010

First Step Internet

requirements governing such matters. Based on the planned scope of work, the preferred alternative is not expected to have significant adverse impacts on geology and soils in the Project area. No ground disturbance or construction would occur under the no action alternative. Accordingly, the no action alternative would have no impact on geology and soils.

Water Resources

Wetlands features are located in the vicinity of several planned tower sites (West Twin, Paradise Ridge, Winchester Grade, Grangeville, Kamiah, and Elk City #3). However, these resources are located more than 1,000 feet from the planned tower construction area. Moreover, the proposed tower sites are situated in areas already occupied by existing towers and antenna poles. Wetlands features are also located near, but not on, the Elk City #2 (HS) tower site. A small stream flows on the east side of the project site at a distance of approximately 250 feet, but no surface waterways flow through the proposed tower site. The remaining tower sites are not associated with wetlands features. Thus, wetlands are not expected to be impacted by the Project as planned. The Project does not occur in a coastal zone; thus, there is no risk of coastal zone impact as a result of Project implementation. No surface waterways run through the tower sites and extensive ground disturbing activities are not anticipated under the preferred alternative. Thus, the Project is not expected to have significant adverse impacts on water resources. No construction or ground disturbing activities would occur under the no action alternative. Accordingly, the no action alternative would have no impact on water resources.

Biological Resources

The Project will likely have minor adverse impacts to biological resources. Potential risks to migratory birds were identified and will be addressed through implementation of multiple best management practices (BMPs). Transmission towers have the potential to kill or maim migratory birds. Although migratory birds were not identified at any of the tower sites during site reconnaissance, First Step Internet will address potential adverse effects to any birds that may migrate through the area in accordance with United States Fish and Wildlife Service (USFWS) guidelines. This will be accomplished by collocating the towers with existing structures whenever possible, building the towers under 199 feet (all of the towers will be 100 feet high or shorter), using a concrete pad rather than guy wires for the tower foundation, and not lighting the towers. In addition, because the Spud (Potato) Hill tower will not be collocated with another tower or existing structure, it will only be 50 feet tall to further reduce the potential for bird strikes. To reduce the area disturbed by the construction, and to eliminate the potential for bird collisions and electrocution, power lines to the Spud (Potato) Hill site will be buried within the access road grade.

First Step Internet engaged in consultation with the USFWS regarding species and habitat of concern at the tower sites. Most of the planned tower sites contain no designated or proposed critical habitat, and no threatened or endangered species were observed during reconnaissance at any of the 10 sites. The planned tower sites at Moscow (West Twin and Paradise Ridge), Lewiston Hill, Spud (Potato) Hill, Grangeville, Kamiah, and Winchester Grade are located in previously disturbed areas already occupied by existing towers, utility buildings, and/or

October 2010 First Step Internet

First Step Internet, Central North Idaho Regional Broadband Network Expansion Project

previously constructed footings. No federally listed threatened or endangered species were observed during reconnaissance of these sites, and these locations are unlikely to provide significant habitat for species of concern. The proposed towers at Elk City #1 (FOC), Elk City #2 (HS), and Elk City #3 (Howzen) are located on previously disturbed ground and/or existing structures in the town of Elk City and are unlikely to provide significant habitat for species of concern. Furthermore, the proposed towers have a relatively small footprint, and extensive clearing of vegetation will not occur as part of this Project. In an email to the Department of Commerce dated October 7, 2010, the USFWS indicated that the Project is not likely to adversely affect endangered, threatened, or listed species.

Based on these analyses, the Project is not expected to have significant adverse impacts on biological resources. The no action alternative would involve no construction or ground/vegetation disturbance and, therefore, would have no impact on biological resources.

Historic and Cultural Resources

The Project will not cause adverse effects on historic or cultural resources. The Milner Trail, which is eligible for listing in the National Register of Historic Places, is located within the Grangeville tower Project area. In a letter dated January 15, 2010, the Idaho State Historical Society determined that there will be no adverse effect on the Milner Trail as a result of Project implementation. The Idaho State Historical Society recommended that Grangeville tower construction proceed as planned with no additional investigations necessary. The Idaho State Historical Society identified no historic properties within the rest of the proposed Project area.

The Winchester Grade and Kamiah tower sites are located within the external boundary of the Nez Perce Tribal reservation. The rest of the proposed tower sites are not located on Tribal lands. As required under the National Historic Preservation Act, a letter was submitted to the Nez Perce Tribal Historical Preservation Office for comments. First Step Internet received and responded to a request for more information from the Preservation Office. No further requests or comments were received.

Based on all available information, the preferred alternative is not expected to have adverse impacts on historic and cultural resources. There would be no impact to historic and cultural resources under the no action alternative because there would be no construction or ground disturbance.

Aesthetic and Visual Resources

The Project will have minimal impact on aesthetic and visual resources. Six of the tower sites will be co-located with existing towers and should not further impair existing aesthetic or visual resources. The Spud (Potato) Hill site is located in a rural forested area and does not currently have a tower or building in place. However, the proposed tower will be only 50 feet tall and should blend in with the existing trees. The Elk City sites are located on or near existing structures and will have towers only 50 feet tall. In addition, the towers will not be lit. Based on these specifications, the preferred alternative is not expected to have significant adverse impacts

First Step Internet October 2010

on aesthetic and visual resources within the Project area. Under the no action alternative, towers and buildings would not be constructed, and there would be no changes to or impacts on existing aesthetic and visual resources.

Land Use

Land uses at the 10 sites vary, but the towers will be predominately located on private lands in rural agricultural and forested areas. The land necessary to build the towers is approximately 100 or 600 square feet at each tower site. Most of the sites are currently being used to house similar communication towers and buildings. The Spud (Potato) Hill site was formerly used as a telecommunications tower site and, although the old tower has been removed, the footings remain in place. Surrounding land uses include farmland, forest, urbanized areas within Elk City, and residential property at the Elk City #3 site. Because the Project will not occur in a coastal zone, there is no risk of coastal zone impact as a result of Project implementation. Based on this analysis, the preferred alternative is not expected to have adverse impacts on land use. Because no changes would be made within the Project area, the no action alternative would not impact land use.

Infrastructure

Nine of the tower sites are supported by existing roads and power lines. The Spud (Potato) Hill site will require improvements to an existing access path, and power will be brought to the site from a cell tower along that path. Infrastructure improvements at Spud (Potato) Hill will be minor. No significant adverse impacts on existing infrastructure systems are anticipated as a result of implementing the preferred alternative. However, broadband services will be expanded throughout the Project area, resulting in positive impacts to regional telecommunications infrastructure. Because no infrastructure changes would be implemented, the no action alternative would not impact existing infrastructure.

Socioeconomic Resources

The Project will provide improved communication capabilities throughout central north Idaho. Bringing broadband to the public, particularly in rural areas, will have a beneficial impact to unserved and underserved areas throughout the region, including low income and minority populations in the region. No adverse socioeconomic impacts are anticipated as a result of Project implementation. The no action alternative would not provide enhanced broadband accessibility to currently unserved and underserved populations in the Project area.

Human Health and Safety

There are no hazardous waste sites identified in the Project area. The Project will be implemented by contractors with established worker safety procedures. No adverse impacts are anticipated to occur as a result of Project implementation. The no action alternative would also have no impacts on human health and safety because no physical Project activity would be conducted.

First Step Internet, Central North Idaho Regional Broadband Network Expansion Project

Cumulative Impacts

Although Project construction may temporarily contribute to noise and air quality impacts, particularly in urbanized areas within Elk City, significant cumulative impacts on these resources areas are not anticipated over the long term. Based on the limited scope of Project-related clearance and ground disturbance, cumulative impacts are not anticipated to occur with regard to historic and cultural resources, geology and soil, human health and safety, and water resources. Towers and buildings are currently in place at most of the planned tower sites. These sites, and the Spud (Potato) Hill site which was formerly occupied by a telecommunications tower, have already been developed and used for telecommunications purposes. Consequently, no cumulative impacts are anticipated with regard to the land use or biological resources. However, Project implementation will add 10 new towers and will contribute to minor cumulative adverse impacts on visual resources in central north Idaho. Implementation of the Project will expand the available telecommunications infrastructure in central north Idaho, leveraging a number of existing towers to provide internet accessibility to unserved and underserved areas throughout the region. Thus, the Project is expected to contribute positively to cumulative impacts on infrastructure and socioeconomic resources. No adverse cumulative impacts were identified with regard to the no action alternative.

Decision

Based on the above analysis, NTIA concludes that constructing and operating the Project as defined by the preferred alternative, and in accordance with identified protocols and environmental protection measures, will not require additional mitigation. A separate mitigation plan is not required for the Project. The analyses indicate that the Proposed Action is not a major Federal action that will significantly affect the quality of the human environment. NTIA has determined that preparation of an EIS is not required.

Issued:

Cynthia B. Schultz

Director of Compliance and Audits

Broadband Technology Opportunities Program

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Date