

# Environmental Assessment

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Bend BroadBand Fiber Optic Cable Installation  
Between Bend, La Pine, Madras, Prineville, Redmond, and  
Sunriver

Grant ID# NT10BIX5570079



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# Executive Summary

## Overview

BendBroadband (BBB) is Central Oregon's high speed internet, cable television and digital phone service provider and has received a grant from the National Telecommunications and Information Administration's (NTIA) Broadband Technology Opportunities Program (BTOP) to install middle mile fiber optic cable infrastructure in Crook, Jefferson, and Deschutes counties. The project crosses through lands managed by the United States Bureau of Land Management (BLM), United States Forest Service (USFS), and the United States Bureau of Reclamation (BOR). The grant funding is considered a major federal action thus requiring compliance with the National Environmental Policy Act (NEPA) prior to the commencement of construction. This Environmental Assessment (EA) has been prepared to review the project's potential impacts on the environment.

The project, which would include 181.4 miles of high capacity fiber optic cable network, will be installed on existing transmission line structures and in existing transmission line rights of way. The total length is roughly 50 miles longer than the original 132 miles described in the project application. The original estimate of 132 miles was based upon an early route plan and did not include the installation of the Gigabit Ethernet Passive Optical Network (GePON) network described in section 3. This hybrid network would consist primarily of aerial and supplemental buried fiber cable and include connections to existing wireless facilities along the route. Five alternatives were fully analyzed, and two additional were eliminated from consideration. The alternatives that were considered but eliminated from discussion include developing a Wireless Network Alternative and a Buried Cable Alternative. The fully evaluated alternatives include the Preferred Alternative, four minor action alternatives (small scale changes in route location or construction method), and the No Action Alternative.

As required by the NTIA NEPA guidelines (NTIA 2010), this EA analyzes eleven resource areas that include: noise, air quality, geology & soils, water resources, biological resources, historic & cultural resources, aesthetic & visual resources, land use, infrastructure, socioeconomic resources, and human health & safety. A public notice was placed in two local newspapers, the *Central Oregonian* and *The Bulletin*, on October 1<sup>st</sup>, 4<sup>th</sup> and 8<sup>th</sup>, 2010. No comments were received.

***The results of the analysis contained within this document indicate that Preferred Alternative would not differ significantly from the four Action Alternatives in terms of their effect on the environment.*** The environmental analysis (with the exception of the cultural and historic resources) described below is applicable to a corridor which extends to both sides of the roadways along which the proposed route follows. The validity of the conclusions within the corridor is contingent upon the following: 1) all disturbance taking place within existing utility easements; 2) no wetlands or significant vegetation being impacted; 3) sediment control BMPs being applied; and 4) the construction methods do not deviate from that described in the proposed action. The analysis conducted for the archeological component of this project is valid within a 3-7 meter corridor only. Changes to the route outside of this corridor will require additional assessment. Below is a summary of results from the analysis of potential impacts from the proposed BendBroadband project.

### **Noise**

The construction required for the project will be of a short duration and similar to the ambient noise of the roadways that the project is occurring near. In some cases, the project will be within forested areas that are subject to loud machinery utilized for timber harvesting and also used recreationally for hunting, fishing and four-wheeling with sport utility vehicles. These areas are within the utility rights of way of existing dirt roads; therefore, the grantee believes the project would not have noise pollution impacts that are greater than what already occur within the forest by commercial and recreational users.

### **Air Quality**

The project qualifies as a "Small [Emissions] Emitter" and will therefore have a very small, temporary impact on air quality.

### **Geology & Soils**

The majority of the project will consist of fiber installation on existing utility poles. Where excavation does occur, the maximum depth will be to 42 inches. Based on these findings, it appears that the project will not impact the geology or native soils of the region.

### **Water Resources**

The project will not harm or jeopardize the continued use of any water resources for recreational, commercial or community use. Four irrigation canals will be trenched or directionally drilled while dry. These canals do not connect to the natural stream network and are not fish bearing.

### **Biological Resources**

It is not anticipated that the project will disturb or reduce the habitat of any federally listed threatened or endangered species in Crook, Deschutes, or Jefferson County. The Endangered Species Act (ESA) consultation with the United States Fish and Wildlife Service (USFWS) was completed with their concurrence that there would be no impacts to ESA listed species. However additional analysis of site specific impacts to unlisted species may be undertaken by the USFS, BLM, and/or BOR.

### **Historic & Cultural Resources**

No adverse effects to historic properties are anticipated for this project. A cultural resources report was completed for the majority of the non-federal lands crossed by the project. A Section 106 Review of architectural resources was completed and the project will have no adverse effects upon architectural resources. Additional reports for the federal segments of the project as well as for a portion of the project on private land that requires testing are currently in preparation but may not be completed prior to the NTIA review of this EA.

Conditional concurrence has been granted from the Oregon State Historic Preservation Office (SHPO) with the requirements that all three federal agencies complete their Section 106 processes prior to installation commencement on their respective jurisdictional lands. In addition, SHPO requested the completion of archaeological testing at the existing site on private lands, implementation of an Unanticipated Discovery Plan, and to have all project modifications reviewed by a qualified archaeologist to determine whether the modifications have the potential to affect historic properties or archaeological resources. Refer to Section Four and Appendix J for a detailed discussion of these issues.

The project is also crossing federal lands managed by the BLM USFS, and BOR. None of these agencies have issued right of way permits for the project and therefore have not completed their respective Section 106 requirements. However, these agencies have contacted SHPO's head archaeologist, Dr. Dennis Griffin, Ph.D., and stated they "find it acceptable for the NTIA to request a Conditional Effect Finding from the Oregon SHPO in advance of the completion of the agency's permitting process".

Several Indian tribes were notified of the project. The Fallon Paiute-Shoshone Tribe, the Confederated Tribes of the Warm Springs Reservation, and the Klamath Tribe requested and received the cultural resources report for the project, but no additional comments were received.

### **Aesthetic & Visual Resources**

It is not anticipated that the project will diminish the aesthetic and visual resources within Crook, Deschutes or Jefferson Counties, the cities/towns, or any of the federal lands the project crosses. Two miles of the project lies within a Wild and Scenic (M7, refer to Appendix-J) land allocation and 7.7 miles of the project lies within a Scenic Views allocation of the Deschutes National Forest(DNF). Segments of the Bend to Prineville route cross federal lands that have high or sensitive visual qualities (BLM 1989). As the project is situated within existing utility right of way it is anticipated that the project would not attract attention or leave long term adverse visual changes on the land.

### **Land Use**

It is not anticipated that the project will alter local, state, or federal land uses. The project will be constructed within existing utility right of way on private, municipal, state, and lands managed by the USFS (DNF) and Crooked River National Grasslands (CRNG), BLM (Bend/Fort Rock District), and BOR. The project appears to meet the land and resource planning objectives of the federal agencies. The BLM, USFS, and BOR are currently reviewing this project and have yet to formally approve construction on land they manage.

### **Infrastructure**

The project will improve telecommunications infrastructure in the region. Crossing permits and facility attachment agreements have been obtained or are in the process for bridge, rail, canal, transmission line crossings and pole attachments. No long term disturbance to roadways or railroads is anticipated. BBB will comply with all conditions noted in crossing permits and the facility attachment agreements.

### Socioeconomic Resources

The project is expected to have a positive socioeconomic impact by improving access to high speed internet throughout the region. Additionally, the project will have no negative impacts on minorities.

### Human Health & Safety

Two limited areas of potential concern will be fully evaluated prior to construction to ensure clean conditions, which are discussed in Chapter 5, Health and Human Safety. No other significant areas of concern were found. Therefore, the project is not expected to have an effect on human health or safety

### Conclusions

***The results of the analysis contained within this document indicate that the proposed project will not adversely affect any of the environmental resources listed above.*** Concurrence has been granted by the Oregon State Historic Preservation Office and US Fish and Wildlife Service with this determination. Additional section 106 and environmental assessment will occur following the completion of this document on select portions of the route to ensure there are no negative impacts. Review of this document is still underway by the BLM, USFS, and BOR, and no construction will occur on their lands until approval and concurrence with the finding of no effect. ***As such, it is recommended that the NTIA issue a Finding of No Significant Impact (FONSI) regarding the proposed BendBroadband Fiber Optic Cable Installation project.***