

Executive Summary

Introduction

The Ronan Telephone Company (RTC) proposes to install new fiber optic infrastructure and incorporate existing middle mile telecommunication facilities in parts of five Montana counties and on the Flathead and Blackfeet Indian Reservations. When completed, the proposed Montana West Project will expand and improve access options for residents and businesses in these areas and connect up to 75 anchor institutions with a redundant high-speed 10 Gb fiber network.

The purpose of the Montana West Project is to develop telecommunications facilities that will enable access to affordable and reliable broadband service within a region of northwestern Montana where such services are currently limited or unavailable. The Montana West Project is needed because the current telecommunications services in the region are inadequate and at least 7 communities on the Blackfeet and Flathead Indian Reservations are underserved. Sparse populations, dispersed residences, long distances between communities, and difficult terrain have all been factors that limited the development of telecommunications networks in these areas.

This project will allow RTC and its project partners to build facilities to deliver higher bandwidth speeds now and into the future to the residents, businesses, and anchor institutions in communities across the region. The result will be a more competitive environment where all potential users will benefit from lower cost connectivity to the Internet. The project will also offer opportunities for local Internet service providers to use the resulting open network at new points of connection.

Preparation of this Environmental Assessment (EA) is required in order to fulfill the conditions of a 2010 grant award to RTC from the National Telecommunications and Informational Administration (NTIA) through the Broadband Technology Opportunities Program (BTOP). The BTOP, funded through the American Recovery and Reinvestment Act (ARRA), requires that funds be obligated and the Montana West Project be completed within three of the grant award. This timeline is driven by the laws and regulations governing the use of this ARRA funding source.

Description of the Proposed Action

The Montana West Project consists of installing more than 320 miles of new fiber-optic cable with associated facilities and making connections to key sections of existing fiber to create a new telecommunications network within the project areas. The project will provide a new high-speed backbone network between 360 Network facilities at Santa Rita (north of Cut Bank) and the Missoula Fiber Hotel.

Three major fiber routes will be developed within the Mission and Flathead Valleys to serve the following areas:

- Elmo to Hot Springs (including the Niarada and Loneline areas)
- Hot Springs to Camas Prairie

- Elmo to Kalispell (including Dayton, Rollins, Lakeside and Somers areas)
- Pablo to Polson
- Pablo to Big Arm to Elmo (via Buffalo Bridge Road)
- Ronan to St. Ignatius
- St. Ignatius to Missoula (including the Arlee and Evaro areas)

Four major fiber paths will cross the Blackfeet Reservation providing service to the following areas:

- Santa Rita to Cut Bank (in Glacier County)
- Cut Bank to Browning
- Browning to East Glacier
- Browning to St. Mary and Babb
- Browning to Heart Butte

The new 96-count fiber optic cable will typically be placed within existing road rights-of-way or utility corridors in rural areas and within existing utility easements along streets or alleys within developed areas. RTC's primary installation methods for new fiber optic cable will be direct burial using vibratory plows, directional boring with placement in conduit, and trenching. While the majority of the proposed fiber optic cable will be buried, aerial installation on existing poles will be employed within many developed areas, at locations where terrain poses an obstacle to installation, and at some locations where it is desirable to avoid impacts to sensitive environmental resources.

The installation of several permanent, above-ground facilities associated with the new fiber network will be required. These facilities include stations to house the electronic equipment needed to regenerate and/or amplify the transmitted signal along the fiber optic strands, utility access vaults and manholes/handholes to serve as splice points or assist in fiber optic cable installation or maintenance.

RTC proposes to install Last Mile Wireless Internet facilities within several communities to deliver high-speed wireless service to residents and businesses. Wireless base stations connected to the new fiber backbone are planned for Arlee, Evaro, Big Arm/Elmo, St. Mary's/Babb, East Glacier, Heart Butte, Browning, and Cut Bank. The base stations send microwave signals and customers connect to the network via wireless radio modem hardware.

Installation of the new fiber and associated facilities will occur using three construction crews working simultaneously in three areas—on the Blackfeet Reservation, on the Flathead Reservation north to Kalispell, and in the Mission Valley south to Missoula.

Alternatives Considered

The EA process was used to consider and compare a variety of alternatives for the Montana West Project. The Proposed Action (Preferred Alternative) represents the installation of new fiber optic cable and associated facilities along the paths preferred by RTC within the Mission-Flathead and Blackfeet-Glacier project areas. RTC has also

identified and evaluated several routing options for portions of its major fiber optic cable paths should difficulties arise in securing approvals for all preferred path segments. Chapter 2 of the EA identifies paths for new fiber optic cables that are preferred for construction and alternate path segments that were eliminated from further consideration.

RTC also considered aerial installation of all new fiber for the Montana West Project; however, this was not advanced as a viable alternative. The existing utility poles which would support the fiber optic lines in most of the project areas are not owned or controlled by RTC. As a result, RTC would need to develop rental agreements with other utilities to allow cables to be hung on their poles. The ongoing cost for pole rental makes aerial installation a less desirable installation method than direct burial.

Additionally, RTC considered various wireless internet technologies as an alternative to the proposed fiber optic network. Although construction of wireless facilities could potentially serve a larger initial area than the proposed project, these systems would not address the identified purpose and needs of the Montana West to the extent possible by the proposed fiber network.

As required by National Environmental Policy Act (NEPA), a No Action Alternative has been included for consideration. Although this alternative does not meet the purpose and need for the Montana West Project, it provides a baseline for comparing the potential effects of the Proposed Action and other reasonable alternatives. Under the No Action Alternative, no fiber optic cable would be placed in the project areas. Affordable and reliable broadband service options would continue to be limited or unavailable on significant portions of the Blackfeet and Flathead Indian Reservations.

Potential Environmental Effects

This EA evaluates the potential environmental effects of the Proposed Action and the No Action Alternative for the Montana West Project. In an effort to compare these potential effects, the following resource areas were evaluated:

- Noise
- Air quality
- Geology and soils
- Water resources
- Biological resources
- Historic and cultural resources
- Aesthetic and visual resources
- Land use
- Infrastructure
- Socioeconomic resources
- Human health and safety
- Greenhouse gases and global warming

These resource areas are consistent with the scope of environmental analysis required by NTIS and are discussed to a level of detail proportionate to the potential for the Montana West Project to impact that particular resource. The environmental analysis in the EA addresses the potential direct and indirect effects of the alternatives under consideration and the potential cumulative effects associated with the alternatives. Table ES-1 summarizes the potential effects of each alternative for the resource areas examined in the EA.

Table ES-1: Potential Effects of the Proposed Action and No Action Alternatives

Resource Consideration	Potential Effects
Noise	<p>Proposed Action: Operation of the fiber optic cables would not produce noise. Equipment at OP-AMP stations would result in minor increases in noise in vicinity of stations. Temporary noise from equipment and activities associated with the installation and maintenance of fiber optic lines would occur. However, the areas where fiber would be installed already experience noise from automobiles and other modes of transportation, road construction and maintenance, and from adjacent residential, commercial and agricultural activities.</p> <p>No Action Alternative: The No Action Alternative would have no effect on noise levels.</p>
Air Quality	<p>Proposed Action: Impacts to air quality resulting from the Proposed Action include increased particulates from vehicle movements and soil disturbances during construction and emissions of vehicle-generated pollutants from the operation of construction equipment and maintenance vehicles. These impacts would be short-term, and would not cause state and/or federal air quality standards to be exceeded.</p> <p>Neither the installation of the fiber optic cable nor its operation would create any new permanent sources of air emissions.</p> <p>No Action Alternative: The No Action Alternative would not affect air quality.</p>
Geology and Soils (Including Prime, Unique and Important Farmlands)	<p>Proposed Action: The installation of new fiber optic would have minimal effects to the geology and soils since most work would occur in areas previously disturbed by road or utility construction. The construction of OP-AMP and regeneration stations may disturb surface soils outside the existing rights-of-way.</p> <p>Activities causing soil disturbances have the potential to cause soil erosion. As part of the project, RTC must employ good construction practices and implement standard best management practices (BMPs) to minimize erosion and control the transport of sediment to streams within the project areas. With the implementation of BMPs, the potential effects on soils are expected to be short-term and minor within the project areas.</p> <p>The Proposed Action would not convert soils classified as prime, unique, or important farmland to nonagricultural use.</p> <p>No Action Alternative: There would be no direct or indirect effects on the geology or soils within the project areas. No soil disturbances would occur other than that already occurring due to highway construction, agriculture, commercial and residential development and utility line maintenance activities. There would be no effects to soils classified as prime, unique or important farmland.</p>

Resource Consideration	Potential Effects
<p>Water Resources (Including Surface Water, Floodplains, and Groundwater)</p>	<p>Proposed Action: The proposed fiber paths cross numerous perennial and intermittent streams, ephemeral drainages, and canals or ditches. However, impacts to these resources would be minor. RTC proposes to use installation methods (directional boring beneath waters, aerial installation, or attaching fiber optic cable to existing bridges) to ensure that potential impacts to aquatic lands and sensitive habitat are minimized or avoided.</p> <p>Work in or near streams and drainages will be subject to a variety of federal, state, and Tribal permits protecting water quality.</p> <p>Construction activity could potentially increase erosion locally, which may indirectly affect surface water quality. RTC must develop and implement a Storm Water Pollution Prevention Plan (SWPPP) incorporating best management practices (BMPs) for erosion and sediment control.</p> <p>The proposed fiber paths cross 100-year floodplains at several locations. However, floodplain impacts are not expected because the new fiber optic cable would be installed below the ground surface.</p> <p>Impacts to groundwater resources are not expected due to the proposed installation methods and the shallow installation depth for cables.</p> <p>No Action Alternative: There would be no direct or indirect effects on the streams, rivers, irrigation canals or ditches within the Montana West project areas.</p> <p>The No Action Alternative would not encroach on any floodplains.</p> <p>There would be no effect to groundwater resources.</p>
<p>Biological Resources (Including Wildlife, Vegetation, Threatened or Endangered Species, Species of Concern, and Wetlands)</p>	<p>Proposed Action: There would be no substantial long-term adverse effects on habitat or any wildlife or fish species. Construction activities would generally be confined to existing road and utility rights-of-way and the proposed installation methods would limit surface disturbances and avoid work within surface waters and riparian habitats.</p> <p>Wildlife may be temporarily disturbed or displaced by noise associated with work activities and equipment operation and from vehicles and construction crew movements in work areas. These impacts would be minor and localized to work areas.</p> <p>The installation of new fiber optic cable would result in minor impacts to vegetation along the proposed paths due to construction activities. Impacts would be mitigated by revegetating disturbed areas and using best management practices to control erosion.</p> <p>Six threatened species, one endangered species, two candidate species, and one proposed species could potentially occur in the project areas. Through informal consultation efforts, the U.S. Fish and Wildlife Service (USFWS) concurred there would be no adverse</p>

Resource Consideration	Potential Effects
<p>Biological Resources (Including Wildlife, Vegetation, Threatened or Endangered Species, Species of Concern, and Wetlands)</p>	<p>effects to any listed, proposed for listing, or candidate species in the project areas. Conservation recommendations made by the USFWS will be followed during the implementation of the project.</p> <p>No adverse effect on habitat or any species of concern are anticipated since activities would generally be confined to existing road and utility rights-of-way and installation methods that limit surface disturbance would be used.</p> <p>The installation of new fiber optic cable would likely encounter surface waters and wetlands of varying size and types along most all proposed and alternate paths. Impacts to wetlands areas would be avoided through proposed installation methods (directional boring, aerial, attachment to structures, and vibratory plowing through dry areas).</p> <p>If impacts are unavoidable, RTC would obtain the appropriate permits for disturbance to jurisdictional wetlands. The U.S. Army Corps of Engineers, the Confederated Salish & Kootenai Tribes (CSKT), Blackfeet Tribe, and the Montana Department of Environmental Quality (MDEQ) have permit requirements or conditions that must be met in such circumstances.</p> <p>Work in or wetland areas will be subject to a variety of federal, state, and Tribal permits protecting water quality.</p> <p>No Action Alternative: There would be no direct or indirect effects on any wildlife or fish species or their habitats beyond that already occurring due to road and utility line maintenance and other human activities.</p> <p>The No Action alternative would not result in any direct or indirect impacts to vegetation in the Montana West project areas.</p> <p>The No Action alternative would not impact any threatened, endangered, proposed or candidate species for listing under the Endangered Species Act.</p> <p>The No Action alternative would not affect wildlife or plant species of concern within the Montana West project areas.</p> <p>The No Action alternative would have no impact to wetlands in the Montana West project areas.</p>
<p>Historic and Cultural Resources (Including Archaeological, Architectural, or Native American Resources)</p>	<p>Proposed Action: A cultural resource study of the Montana West project areas was conducted to meet the requirements of Section 106 of the National Historic Preservation Act of 1966. The study identified 23 archaeological sites within the area of potential effect (APE) for the Montana West Project. Based on a review of these sites relative to the proposed location of fiber optic lines and facilities, it was determined that there would be no effect to 8 of the sites and impacts to 6 sites could be avoided by the use of directional boring or minor re-routes in the vicinity of the sites. Monitoring by an archaeologist as lines are installed near the remaining sites in the APE was recommended.</p>

Resource Consideration	Potential Effects
<p>Historic and Cultural Resources (Including Archaeological, Architectural, or Native American Resources)</p>	<p>Coordination and consultations about potential effects to cultural resources in the Montana West project areas occurred with the Montana SHPO, the Tribal Historic Preservation Officers (THPOs) for the CSKT and Blackfeet Tribe, and with the BIA’s Regional Archaeologist. These agencies have generally concluded the Montana West Project will not affect cultural or historic properties as long as the measures below are followed:</p> <ul style="list-style-type: none"> • Using qualified archaeologists and/or Tribal Historic Preservation Office field technicians to monitor ground disturbing activities for inadvertent discoveries near identified sites and Traditional Cultural Properties (TCPs) within the Flathead and Blackfeet Reservations. • Using Blackfeet Tribal Historic Preservation Office field technicians to conduct a TCP survey to identify cultural properties within the highway rights-of-way where new fiber optic cables are proposed for installation. • Using Blackfeet Tribal Historic Preservation Office field technicians to relocate and update boundaries, mapping, site forms, and photographs for cultural sites directly located on proposed Montana West fiber routes on the Reservation. • Following recommended protocols for inadvertent discovery of cultural materials or human remains during construction. • Maintaining consultation with the THPOs throughout the project by providing updated project mapping and advising the Preservation Offices of any changes in the locations of proposed fiber optic paths. <p>The NTIA uses the FCC’s Tower Construction Notification System (TCNS) as a means of notifying and expediting outreach efforts to THPOs for federally-recognized tribes and SHPOs of projects that have received BTOP grant awards. As a result of the TCNS notification, NTIA advised RTC that automated responses were received from 9 Tribes and SHPOs. Follow-up contacts were made by RTC with the Spirit Lake Nation, Lower Brule Sioux Tribe, Fort Peck tribes and the Shoshone Bannock Tribe to determine if these tribes needed additional information and to confirm they are interested in consulting on the Montana West Project. To date, no responses have been received from the four tribes contacted by RTC.</p> <p>No Action Alternative: The No Action Alternative would not affect any archaeological, architectural, or Native American resources.</p>
<p>Aesthetics/Visual Resources</p>	<p>Proposed Action: The Proposed Action would result in temporary aesthetic disruptions along roadsides as RTC’s construction crews install new fiber optic cables and associated facilities. These impacts would be temporary and virtually eliminated when construction is completed and disturbed areas are revegetated.</p> <p>No Action Alternative: The No Action alternative would have no impact to aesthetic and visual resources. There would be no change in the existing appearance of lands within the project areas.</p>

Resource Consideration	Potential Effects
Land Use	<p>Proposed Action: The existing land use would not be altered since the infrastructure necessary to complete this project would be located almost entirely within existing roadway rights-of-way and existing utility easements.</p> <p>The proposed new telecommunications and broadband facilities would provide positive benefits and new opportunities to many of the land use types that adjoin the project areas.</p> <p>RTC must secure necessary approvals to place new fiber optic cable in public road rights-of-way and existing utility corridors from MDT and affected counties, local governments, and Tribes.</p> <p>No Action Alternative: The No Action Alternative would not result in any changes to land use in the Montana West project areas.</p>
Infrastructure	<p>Proposed Action: The proposed project would bring high speed internet and communications connectivity to two regions of western Montana that are presently underserved or that lack desirable telecommunications infrastructure.</p> <p>Construction equipment may occasionally impede traffic as crews enter and leave the roadway while traveling between work areas along existing or proposed paths or work in close proximity to roads. Any delays to road users would temporary since most work would occur away from the roadway surfaces. Traffic control and construction area signage would be used to alert motorists of work zones.</p> <p>Installation of new fiber optic cable will need to be coordinated with the MDT, local governments, and the CSKT and Blackfeet Tribe to help avoid interference with numerous ongoing or planned highway and bridge reconstruction projects in the project areas.</p> <p>No Action Alternative: The No Action Alternative would not result in any changes to infrastructure and would therefore not result in the important enhanced communications infrastructure needed within this portion of western Montana and in underserved areas on the Flathead and Blackfeet Reservations.</p>
Socioeconomic Resources	<p>Proposed Action: No adverse impacts on the socioeconomic conditions are expected to result from the installation of new fiber optic cable along the proposed paths.</p> <p>The new and /or improved telecommunications services would have positive impacts on healthcare, education, economic opportunities, and public safety for rural or disadvantaged populations.</p> <p>Some minority and low-income populations may be affected. However, these populations would not experience disproportionately high and adverse environmental effects. Minority and low-income populations within the project areas will receive the benefits of the proposed telecommunications services at a higher rate than the populations of adjoining counties or the State of Montana as a whole.</p>

Resource Consideration	Potential Effects
Socioeconomic Resources	<p>No Action Alternative: The No Action Alternative would not change socioeconomic conditions within the Montana West project areas. Residents, businesses, schools and social services within the project areas would continue to operate as is, without the benefit of enhanced telecommunications services and broadband access.</p>
Human Health & Safety	<p>Proposed Action: There is a small possibility that existing contaminated soils, contaminated groundwater, abandoned underground storage tanks and piping, and contaminated material from past undocumented dumping could be discovered in areas of new fiber placement. Federal, state, Tribal, and local regulations establish procedures of proper reporting, handling, and disposal should contaminated materials be discovered.</p> <p>The Proposed Action would not require the long-term storage, treatment, disposal, or transport of hazardous materials; however, small quantities of hazardous materials (generally associated with the operation of vehicles and equipment) will be stored, used, and handled during construction. These materials could potentially be released in accidental spills. This impact is not significant because RTC will be required to develop a SWPPP, which includes methods to protect water quality in case of emergency spills.</p> <p>The proposed work would occur adjacent to motorized traffic, worker and motorist safety is paramount. RTC will implement traffic control plans to establish and maintain safe work zones.</p> <p>RTC will comply with all applicable federal, state, local and industry-specific health and safety regulations.</p> <p>No Action Alternative: The No Action alternative would not result in any contact with any hazardous wastes or contaminated soils and there would not be any adverse impacts to human health and safety.</p>
Global Warming and Greenhouse Gases	<p>Proposed Action: The Proposed Action would constitute a short-term minor increase in the use of fossil fuel and associated GHG emissions during construction. However, analysis shows GHG emissions from the Proposed Action would not contribute appreciably to climate change or global warming.</p> <p>No Action Alternative: The No Alternative would not result in any increase in the use of fossil fuel and there would be no GHG emissions.</p>

Cumulative Effects

The EA includes an evaluation of potential cumulative environmental effects of implementing the proposed Montana West Project. The analysis considered the potential environmental impacts that may result when the project is considered along with other past, present, and reasonably foreseeable future actions impacts in the project areas. The analysis did not identify any notable cumulative impacts to environmental resources. The analysis did identify the potential for beneficial

cumulative effects to occur for businesses, institutions and residents of the project areas due to new and improved high-speed telecommunications services.

Coordination Efforts

RTC has contacted a variety of interested environmental and governmental agencies, the CSKT and Blackfoot Tribe, county and local governments, as well as consulted with NTIA's NEPA coordinator and the Department of Commerce's Preservation Officer for project comments and guidance. Notable agencies and Tribes contacted during the development of the EA included:

- Montana Historical Society – State Historic Preservation Office
- Confederated Salish & Kootenai Tribes – Tribal Council, Tribal Departments, Tribal Historic Preservation Office (THPO), Culture and Elders Committees
- Blackfoot Nation – Tribal Council, Tribal Departments, Tribal Historic Preservation Office (THPO)
- County Governments - Lake, Flathead, Sanders, Missoula, Glacier Counties
- Municipal Governments – City of Kalispell, City of Missoula
- Army Corps of Engineers
- Bureau of Indian Affairs
- U.S. Fish and Wildlife Service
- U.S. Forest Service – Lolo National Forest
- Montana Department of Transportation
- Montana Fish, Wildlife & Parks
- Montana Department of Environmental Quality

Project descriptions and maps of the Montana West Project showing proposed routing for new fiber optic cable were provided to those contacted. Each agency was given the opportunity to comment on the proposed project and its potential effect on the environment. Relevant comments and information received from these agencies and Tribes have been incorporated into the EA and used to help analyze potential impacts and identify appropriate mitigating measures.

Guidance obtained from those contacted has helped identify necessary project reviews and establish permit requirements for the Montana West Project. RTC has secured or is in the process of securing necessary permits and right-of-way approvals necessary for its proposed year one construction activities.

Conclusion

Based on the environmental analysis conducted for this EA and input received from interested agencies, the Confederated Salish and Kootenai Tribes, and the Blackfoot Tribe, no significant impacts to the existing environment are anticipated as a result of implementing the Montana West Project.