BEARCREEK REMOTE BROADBAND (BRB) Cable Montana; an established, regional, rural cable operator; is applying for $1.8M Broadband Infrastructure Program (BIP) grant funding to build out regional (Middle Mile) Gigabit Ethernet backbone and local (Last Mile) Hybrid Fiber Coax access network to the residents, agencies and enterprises in south central Montana. Cable Montana proposes the Bearcreek Remote Broadband (BRB) project to deploy a broadband network that will provide Montana’s rural communities in the coverage area with Broadband Internet, video and voice services. The Cable Montana’s BRB project is designed to build out 51 miles of the Middle Mile network backbone from Laurel to Red Lodge, with an extension to Bearcreek. This Middle Mile segment will also touch the communities of Joliet and Roberts, and will allow an enhancement of broadband access. Joliet is currently served by Cable Montana. Cable Montana has plans to build out last mile access network in Roberts during the construction, however without the assistance of federal grant funds. The Last Mile segment of the Cable Montana’s BRB project is a new (green field) build HFC broadband access network in Bearcreek and 6.4 miles of fiber optic interconnect route from Red Lodge to Bearcreek, MT. This small community is remote, rural, and unserved and in need of Broadband access to Internet and other data, interactive video, and value added services. Together, these two Middle Mile and Last Mile segments of the BRB project are required to provide services to these rural areas of Montana. Cable Montana is well-positioned to build out this network, having over 50 years cumulative management experience as owner-operator of a cable network with 85,000 Internet, video and voice subscribers at its peak. The company has built a reputation for creating efficiencies in operations and providing superior service. The management team, which has worked together for many years, is fully prepared to take on a project of this size and scope. Cable Montana’s CEO, Christian Hilliard, has over 20 years experience in the industry. Under his leadership, the company has offered distance learning programs to a consortium of twenty schools, as well as data transport service for businesses and a hospital alliance in central Nebraska. The plans for the BRB project include leveraging established relationships with officials in Red Lodge and Laurel to establish sustainability programs. The Cable Montana existing systems are located in central Montana, south/west of Billings, MT. Cable Montana passes a total of 9,967 homes and serves 5,686 EBUs (Equivalent Basic Unit) customers, 628 digital customers, 2,327 internet customers and 473 phone customers. It is an established company that understands the needs of its customers. All of the systems owned and operated by Cable Montana are located in rural areas. Consistent with this focus, the BRB project is designed to bring comparable services to households in the region that otherwise would not have access to this technology. Cable Montana is seeking Federal help in order to make this project a reality; without federal assistance, Cable Montana cannot afford to implement the BRB
The end users in Bearcreek are more than fifty miles from Billings, MT. Like citizens in the neighboring villages of Joliet and Roberts, they have NO schools and NO hospitals. In addition, these communities have aging populations that exceed the national average by 160%, according to United States 2000 Census. Today, area residents seek education and medical resources the old fashioned way – they travel long distances by ground transportation. The new 51-mile regional broadband network will connect Bearcreek with two larger towns, Red Lodge and Laurel, providing expanded access to strategic and critical public resources to the existing and to at least 330 new subscribers. The population of impacted communities, which totals less than 1,500 including Bearcreek, Joliet and Roberts, will benefit from vastly improved communication channels and connectivity between residents and area schools, hospitals/clinics and public safety organizations. When completed the Middle Mile segment of the BRB project will pass 4,395 households and 71 businesses, including the end points of the Middle Mile that are currently being served. The BRB project’s service area covers at least 12 strategic institutions such as health care institutions, schools, public safety institutions and libraries. These community anchors will benefit greatly from broadband infrastructure created in this project as it will provide the Internet access they need to thrive and develop. Schools and hospital/clinics in Red Lodge, Carbon County and Laurel, Yellowstone County will serve as strategic institutions for Bearcreek and other remote villages.

Cable Montana is a regional digital cable operator offering video services at no charge to schools in local markets. Montana’s remote, sparsely populated rural communities are especially vulnerable to being “left behind.” While Bearcreek is almost a “ghost town,” having suffered a huge decline in population since its height of 744 people in the 1920s, the town has taken steps to ensure that its future holds the promise of growth and prosperity for area residents. The Cable Montana’s BRB project will serve as a vital component of that plan. The BRB project adheres to principles contained in the Federal Communication Commission’s broadband policy statement and meets all federal and state criteria regarding non-discrimination and network interconnection obligations. Cable Montana will adhere to a neutral traffic policy with all systems funded through the program and deploy network policies on the public web site. Every aspect of the Cable Montana’s BRB network has been designed to meet statutory and eligibility requirements, maintain reasonable costs and comply with federal guidelines regarding performance, suitability and integration within the existing infrastructure in the area. The BRB project is “shovel ready” and will be substantially completed by spring of 2011 with full completion scheduled for November 2011. This project will launch immediately upon funding and will be completed within the designated timeframe. The technology design represents a focus on performance-to-cost ratios with special emphasis on technical feasibility. Cable Montana, as a cable and telecommunications operator, deploys its broadband networks utilizing the cable and telecom industries proven architectures, designs, standards, protocols and equipment. The BRB project’s technical feasibility is provided by the ARRIS Hybrid/Fiber Coax (HFC) and Dense Wavelength Division Multiplexing (DWDM) Network Solution and is made up of two major segments, Middle Mile and Last Mile. The Middle Mile transport segment feeds and supports the Last Mile access segment. Both segments are comprised of International Telecommunication Union (ITU) standardized fiber optic components operating in the 1550 and 1291 nm ranges. Last Mile outside plant utilizes industry field-proven HFC coaxial cable and 870 MHz RF electronics compliant with IEEE, SCTE, and CableLabs standards. The high speed data is transported from the Internet interconnect backbone gateway to the system headend, to the Cable Modem Termination System (CMTS) to the fiber optic transport (Middle Mile) and coaxial access (Last Mile) networks to the
end user’s cable modem. The signal from the cable modem travels back upstream through the reverse optical network back to the CMTS and then back to the gateway to the Internet. The proposed solution offers up to 20Mbps service to homes and businesses in the proposed service area and is scalable to 100Mbps. Future growth utilizing CableLabs DOCSIS 3.0 channel bonding would allow for up to 160Mbps service offerings. The BRB’s Middle Mile Metro Ethernet fiber optic Gigabit Ethernet (GigE) multi-link 1/10 Gbps transport backbone provides reliable and enhanced broadband bandwidth and redundant paths for both broadcast (point-to-multipoint) and narrow-cast (point-to-point) data, interactive video, voice and other value-added wired and wireless services. Middle Mile GigE backbone will be an extension of Cable Montana’s existing GigE infrastructure and will utilize carrier grade IP switches and routers with scalable bandwidth at access ports. All these are well proven standards-driven technologies and products that are in full production by established vendors (Arris, Cisco, and Alcatel-Lucent) and will provide the ability to promptly start the project. The number of jobs created directly as a result of the BRB project is estimated to be two full positions in the company for the project and will save two full-time positions that are dependent on construction activities. This tally includes construction and technical personnel associated with the Middle Mile and Last Mile build out, as well as administrative staff and service support representatives. The number of jobs that could be created by services offered due to broadband access is difficult to calculate with precision, but undoubtedly will contribute to the local economy. An average of 27 homes per mile over the proposed service area does not lend itself to traditional funding avenues for broadband infrastructure projects. Without the ARRA Stimulus funds these remote and rural unserved and underserved homes and businesses will remain without broadband access. With the funding, the Cable Montana will deliver broadband access along with other critical services at affordable rates to at-risk families and children.