PROGRAMMATIC ENVIRONMENTAL ASSESSMENT

Abandoned Mine Land Reclamation Economic Development Pilot Program

Mountain State Broadband Expressway AML Pilot Project FINAL

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for:

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ABSTRACT

This Programmatic Environmental Assessment (PEA) has been developed for the Mountain State Broadband Expressway (MSBE) Project. The MSBE Project will develop a network of broadband towers throughout West Virginia in approximately 20 counties. Funding for the MSBE Project is provided from the Federal Government via a grant through the United States Department of the Interior (DOI) Office of Surface Mining, Reclamation and Enforcement (OSMRE). As the grant recipient, the West Virginia Department of Environmental Protection (WVDEP) Office of Abandoned Mine Lands (OAMLR) is administering the grant. The Upshur County Development Authority (UCDA), as a sub-recipient of the grant, is responsible for coordinating the implementation of the MSBE Project.

This PEA was prepared in accordance with National Environmental Policy Act (NEPA) and the Council of Environmental Quality (CEQ) regulations for implementing NEPA (40 CFR Parts 1500-1508); the Secretarial Order 3355; the DOI's regulations for implementation of NEPA (43 CFR Part 46); the DOI's Departmental Manual Part 516; and OSMRE's directive REG-1, Handbook on Procedures for Implementing the NEPA of 1969 (OSMRE 2019). The CEQ issued final guidance on the use of programmatic NEPA documents on December 18, 2014, titled "Effective use of Programmatic NEPA Reviews." The 2014 CEQ guidance states that programmatic NEPA review may be appropriate when the action being considered falls into one of the four major categories of actions. One of those categories includes "multiple projects that are temporally or spatially connected and that will have a series of associated concurrent or subsequent decisions. Programmatic examples include several similar actions or projects in a region or nationwide (e.g., a large scale utility corridor project)." The MSBE Project fits within this category.

Programmatic NEPA reviews address the general environmental issues relating to broad decisions, such as those establishing policies, plans, programs, or suite of projects, and can effectively frame the scope of subsequent site and project-specific Federal actions. A programmatic NEPA review will provide the basis for decisions to approve the MSBE Project. Using programmatic NEPA reviews allows an agency to avoid repetitive broad level analyses in subsequent NEPA reviews, providing a more comprehensive picture of the potential consequences of the MSBE Project. This process has the advantage of not repeating information that has already been considered at the programmatic level.

This PEA provides the impacts of the MSBE Project in its entirety. Use of the PEA is intended to expedite the deployment and expansion of broadband infrastructure, save processing time, ensure consistent and accurate environmental evaluations, and avoid unnecessary duplication and repetition in planning and evaluation of potential environmental impacts of the MSBE Project financially supported by the OSMRE. The PEA describes the need for the MSBE Project, coordination with stakeholders, alternatives, and potential environmental impacts. The MSBE Project will consist of a series of connected tower sites which will be implemented through multiple phases. The initial phases will consist of identifying sites on/or adjacent to AML property to construct towers. The initial infrastructure will typically be backbone towers that will be connected into existing broadband resources with the goal of expanding broadband connectivity.

Additional phases will construct support towers which will tie into the backbone towers, thus expanding the reach of broadband proliferation.

Direct, indirect, and cumulative impacts are described. Environmental resources and the potential impacts are considered in this document in Section 3. Of the 28 environmental resources evaluated, seventeen (17) are shown to be comprehensively addressed and pose no discernible effects if industry standards and minimization and mitigation are properly applied during the planning and construction phase. These environmental resources would need no additional consideration during site-specific evaluations. Eleven (11) of the environmental resources will undergo additional site-specific NEPA reviews.

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INTRODUCTION

OSMRE was established in 1977 when Congress enacted the Surface Mining Control and Reclamation Act (SMCRA). One of the purposes of SMCRA is to ensure that land mined for coal would be reclaimed as part of the surface coal mining operations, and that mined lands abandoned without adequate reclamation prior to SMCRA would be reclaimed. 30 U.S.C. §1202.

OSMRE, through its Abandoned Mine Land (AML) reclamation program, addresses the hazards and environmental degradation posed by these legacy mine sites left or abandoned in either an unreclaimed or inadequately reclaimed condition prior to August 3, 1977. The AML reclamation program is funded by a reclamation fee assessed on each ton of coal produced for sale, transfer or use. The Abandoned Mine Land Inventory System (e-AMLIS) is the system used to store, manage, and report on the OSMRE's Inventory of Abandoned Mine Land Problems. This includes both problems in need of reclamation and those that have been reclaimed.

The state of West Virginia has an OSMRE approved AML program (primacy), and the WVDEP, Office of Abandoned Mine Lands & Reclamation (OAMLR) oversees and facilitates the resolution of public safety issues such as mine fires, subsidence, hazardous highwalls, mining-impacted water supplies, open shafts and portals, and other dangers resulting from coal mining prior to 1977.

An additional funding program, the Abandoned Mine Land Reclamation Economic Development Pilot Program (AML Pilot Program) was authorized by Congress with the purpose of reclamation of abandoned mine lands in conjunction with economic and community development and reuse goals. OSMRE administers the AML Pilot Program and provides eligible states and tribes with AML Pilot Grants and guidance to use the funds and track the progress of projects that provide a combination of reclamation and economic growth opportunities in the areas of AML.

The MSBE Project is an initiative of the UCDA to address limiting factors for broadband proliferation in West Virginia and therein create needed infrastructure for economic development. The MSBE Project includes site identification, site preparation, and construction. Initially, the MSBE Project will identify AML sites in the state near fiber optic cable communication lines (hereinafter referred to a fiber) and in unserved and underserved areas, which would serve as hub locations for backhaul operations to other nearby AML sites while serving the site vicinity. Backhaul operations refer to the use of fiber optic cables to facilitate communication between towers. Utilizing radio signal proliferation analysis, spoke, or support, sites will be identified to be located on other AML sites that would communicate with each hub site, expanding the breadth of the coverage and overcoming the barrier of fiber facilities in the unserved and underserved communities. The MSBE Project's mission is to construct fiber-connected towers on or adjacent to AML sites to expand fiber resources into unserved and underserved areas to facilitate competitive providers' offering of broadband services.

This PEA has two objectives:

• Present and analyze the broad view of the Proposed Action and its potential impacts to the environment, and

• Avoid unnecessary duplication and repetition to ensure that the MSBE Project is consistently and efficiently planned and evaluated.

The Proposed Action and the associated broadband technologies are described in Section 2.1 and their direct, indirect, and cumulative impacts to the environmental settings are evaluated in Section 3. The PEA provides a broad description and analysis of the overall project and potential impacts anticipated to be common amongst each of the tower sites. Site-specific analysis of potential impacts will be conducted as the sites are located in order to address any unique aspects of each specific tower site (such as impacts to protected species or cultural resources).

Term
Advisory Council on Historic Preservation
Abandoned Mine Land
Area of Potential Effect
Antenna Structure Registration
Best Management Practices
Council of Environmental Quality
Clean Water Act
Division of Mining and Reclamation
Department of the Interior
Enhanced Abandoned Mine Land Inventory System
Economic Development Authority
Executive Order
Environmental Protection Agency
Endangered Species Act
Federal Aviation Administration
Federal Communication Commission
Farmland Protection Policy Act
Hydrologic Unit Codes
World Health Organization International Agency for Research on Cancer
International Commission on Non-Ionizing Radiation Protection
USFWS Information for Planning and Consultation
Megabits per second
Migratory Bird Treaty Act
Memorandum of Agreement
Mountain State Broadband Expressway
National Ambient Air Quality Standards
Noise Control Act
National Environmental Policy Act
National Emission Standard for Asbestos
National Historic Preservation Act
National Marine Fisheries Service
National Pollutant Discharge Elimination System
National Park Service
Natural Resources Conservation Service
National Wild and Scenic Rivers

OAMLR	Office of Abandoned Mine Lands
OSMRE	Office of Surface Mining Reclamation and Enforcement
OWWM	Office of Water and Waste Management
PA	Programmatic Agreement
PEA	Programmatic Environmental Assessment
PM	Particulate Matter
RCRA	Resource Conservation and Recovery Act
RF	Radiation Frequency
RHA	Rivers and Harbors Act
RUS	Rural Utility Service
SHPO	State Historic Preservation Office
SMCRA	Surface Mining Control and Reclamation Act
SO	Secretarial Order
SOP	Standard Operating Procedure
T&E	Threatened and Endangered Species
THPO	Tribal Historic Perseveration Officer
UCDA	Upshur County Development Authority
USACE	United States Army Corps of Engineers
USDOT	United States Department of Transportation
USGS	United States Geological Survey
USFWS	United States Fish and Wildlife Service
WHO	World Health Organization
WOTUS	Water of the United States
WVDEP	West Virginia Department of Environmental Protection
WVDNR	West Virginia Division of Natural Resources
WVDOH	West Virginia Department of Highways
WVGES	West Virginia Geological Economic Survey

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Mountain State Broadband Expressway AML Pilot Project

1.0 PURPOSE AND NEED

1.1 Need for Broadband Services

West Virginia ranks 47th in the nation in terms of broadband connectivity, a ranking which prevents many businesses from locating or expanding in the state. The primary factors contributing to this status are population density, terrain, amount of dark fiber (currently unused fiber optic cables, often installed by companies during unrelated construction efforts as a preventative cost saving measure) in the state, incumbent telecommunications provider efforts, limits on the number of wireless licenses, and number of competitive providers. The rural nature of the state and its low population density combined with terrain composed of hills, rivers, and mountains reduces the efficiency and feasibility of wireline for connecting users. The most effective and efficient manner to connect the rural populations is via wireless communications, and recent improvements in certain fixed wireless technologies have increased the feasibility of such deployments. The communities targeted by the MSBE Project will be unserved or underserved, as defined by the federal minimum level of broadband service of 25 megabits per second (Mbps) downstream and 3 Mbps upstream (FCC, *Broadband Progress Report*, 2015).

The "digital divide," due to the lack of broadband infrastructure, is marked in the communities by such things, for example, as the lack of connectivity to allow smart phone connection; limiting educational opportunities to the classroom; requiring travel to a central office for online job training; increased medical costs due to travel to a shrinking healthcare provider pool, electronic medical record initiatives failing, inability to conduct telemetry monitoring of patients at home, and sharing of knowledge by healthcare workers; barrier to business creation due to inability to access the cloud for software or utilize online resources for sales channels; and decreased opportunities for multilocation or conglomerate relocation due to inability to connect to corporate virtual private networks.

1.2 Purpose of MSBE Project

The economic and community development criteria of the AML Pilot Program are met by the MSBE Project by the provision of a critical infrastructural component to communities which otherwise would not be receiving this infrastructure in the foreseeable future. The MSBE Project will help address the growing "digital divide" which, over the last decade, has widened at an ever-increasing rate in rural communities of West Virginia. The MSBE Project will facilitate the

reversal of the digital divide by providing the needed open access for competitive broadband providers to these communities, therein aiding these communities' economies.

The MSBE Project will address two of the main barriers to increasing broadband services in these communities: access to fiber and implementation cost of tower construction.

Increasing broadband availability will have multiple positive impacts including: improving education by increasing access to information and increasing methodologies for teaching; improving the cost and quality of healthcare by allowing for implementation of telemedicine and telemetry monitoring reducing time in a health facility; increasing workforce training results by allowing displaced workers to train online at home; increasing tourism through increased night stays as visitors would have the facilities to "be connected" to home and work; increasing the capability of small communities to increase small business creation and relocation as required broadband infrastructure available to connect to websites, cloud-based software services, corporate networks; improve property values and spur residential development, and allow the great craftspeople of the state to connect to digital marketplaces where they can sell their goods to more customers.

Broadband infrastructure typically consists of fiber, cable, and wire connections deployed underground or on poles, oftentimes existing poles, as well as wireless equipment mounted on or in towers, buildings, or other structures, including transmission and reception equipment and facilities. This infrastructure provides the backbone for connections to the internet, wireless telephone, smartphones, and other telecommunication equipment. Society's increasing reliance on web-based technologies has in turn increased capacity demands on the broadband network.

Due primarily to commercial enterprises and companies, the United States has become a global leader in the deployment of broadband services. Today, more than 95% of the U.S. population has access to robust and diverse wired broadband infrastructure, including fiber to the home, cable and digital subscriber line, capable of supporting average download speeds of 4 Mbps (FCC, *Connecting America: National Broadband Plan*, 2010).

Although progress in the expansion of broadband deployment is considerable, areas of the country continue to be underserved or even without service. These areas are primarily rural and may be seen as less profitable for service expansion and/or may be economically depressed, with many households potentially unable to afford an internet connection.

A robust broadband infrastructure connects people, businesses, and institutions in underserved rural areas and provides a strong economic development incentive for quality educational opportunities, professional medical care, efficient first responder communication, and business opportunities.

Expanding access and upgrading services into rural areas requires installation of new broadband infrastructure. Federal departments and agencies are critical to the deployment of broadband infrastructure and have a significant opportunity to help expand broadband infrastructure for supporting and improving the economic and social quality of life in rural America (RUS February 2016).

The Counties in West Virginia that the MSBE may include are:

- Barbour
- Boone
- Braxton
- Fayette
- Gilmer
- Greenbrier
- Harrison
- Kanawha
- Lewis
- Lincoln
- Logan
- McDowell
- Nicholas
- Preston
- Randolph
- Taylor
- Tucker
- Upshur
- Wayne
- Webster

1.3 Scoping

This PEA is being used to evaluate the potential human health and environmental impacts associated with the MSBE Project. The temporal scope of this PEA is not limited to a date or timeframe. Changes in the project or changes in technology may require supplementing this PEA. The geographic scope of the MSBE Project is approximately 20 counties in West Virginia. These counties are shown in **Figure 1**. Since the broadband network for the MSBE Project will be phased, each tower site will undergo specific reviews under the regulations and agencies listed in Section 1.4. OSMRE is the lead Federal agency coordinating NEPA compliance for this project. OSMRE will ensure coordination with all other governmental and review agencies is completed during the subsequent site-specific reviews for each MSBE site.

OSMRE, with assistance from WVDEP, and UCDA, performed initial scoping for the MSBE Project. This scoping includes working with the Economic Development Authority of various counties in the MSBE Project area in addition to notifying the United States Fish and Wildlife Service (USFWS), Federal Communication Commission (FCC), West Virginia Division of Natural Resources (WVDNR), the Advisory Council on Historic Preservation (ACHP), the West Virginia State Historic Preservation Office (SHPO) and federally recognized tribal governments. Correspondence with these agencies or governments are provided in **Appendix B** and summarized below. Additional scoping will be completed for the MSBE Project as site-specific infrastructure is identified and defined or as needed. Site-specific NEPA reviews, as outlined in this PEA, will

tier to this PEA.

UCDA performed initial scoping with the USFWS, and the USFWS responded with standard recommendations within the ranges and counties of the MSBE Project. Site-specific locations with threatened or endangered (T&E) species concerns will be avoided as feasible, and not all recommendations will apply depending on the history and specific settings of each site.

The Indiana Bat and the Northern Long Eared Bat will be considered present in forested areas for the MSBE Project for any tree over 3 inch-diameter at breast height. The USFWS recommended minimizing tree clearing to less than 17 acres per site and avoid or minimize effects to caves or mine portals. If tree clearing is required over 17 acres for a specific tower site, two options are recommended: completion of an Indiana Bat Conservation Plan and winter tree clearing between November 15 and March 31, or the completion of a mist net survey or acoustic survey. Each site will have a site-specific consultation with the USFWS to determine if there are known maternity roosts with ½ mile of the site. Virginia Big-Eared Bat and Gray Bat may use caves or mine portals, so further consultation will be necessary if disturbances are expected to these features. When the MSBE Project is located within a watershed with protected aquatic species including fish, mussels or crayfish, the USFWS recommends utilizing stringent erosion and sediment controls. Each of the listed species that may be present within the counties of the MSBE Project are listed in Appendix A.2. The Information for Planning and Consultation (IPaC) web-based system of USFWS will be utilized for each site-specific location to determine the presence of T &E species. Each site will have site-specific consultation with the USFWS prior to construction.

UCDA performed initial scoping with the SHPO. SHPO performed a records search to determine if previously documented archaeological resources are located within the counties and areas of potential sites. Typically, sites will be located on terrain that is steeply sloped, has been previously disturbed, or contains severely eroded soils. SHPO also performed an architectural review of the sites. An initial architectural review added a 0.75-mile radius around potential sites and identified any above ground resources that are either listed in, eligible, or potentially eligible, for inclusion in the National Register of Historic Places.

The MSBE Project constitutes an undertaking subject to review under Section 106 of the National Historic Preservation Act (NHPA), 54 U.S.C. § 306108, and its implementing regulations, "Protection of Historic Properties" (36 C.F.R. Part 800). In compliance with Section 106, OSMRE contacted the ACHP and the West Virginia State Historic Preservation Officer (SHPO) regarding the potential to prepare a Programmatic Agreement to address the phasing of the MSBE Project. Section 3.15 provides more discussion regarding Section 106 compliance.

OSMRE initiated consultation with the thirteen federally recognized tribes in West Virginia. These tribes are listed in Section 3.16 and do not have lands within the West Virginia but do have a cultural interest within the state. Additional information about the consultation with the tribes is provided in Section 3.16.

1.4 List of Related Laws and Executive Orders

In order to implement the MSBE Project, compliance with federal, state, and local laws is required. Almost all broadband projects use similar types of installation and implementation methods and technologies that are standard to the industry. These technologies are described in detail in Section 2.0.

The following is a list of the related laws and executive orders (EO) that would apply to the MSBE Project and will be considered in locating sites for the construction of the towers and ancillary structures:

- NEPA, 42 U.S.C. §§ 4321 to 4370h
- Clean Water Act, 33 U.S.C. §§ 1251 to 1388
- The Clean Air Act, 42 U.S.C. § 7401 et seq
- National Historic Preservation Act, 16 U.S.C. § 470
- Endangered Species Act, 16 U.S.C. §§ 1531 1544
- Migratory Bird Treaty Act, 16 U.S.C. §§ 703–712
- Bald and Golden Eagle Protection Act 16 U.S.C §§ 668 668c
- Farmland Protection Policy Act 7 U.S.C. § 4202
- Executive Order (EO) 11988 Floodplain Management, May 24, 1977
- EO 11990 Protection of Wetlands, May 24, 1977
- EO 12989 Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, February 11, 1994
- EO 13175 Consultation and Coordination with Indian Tribal Governments, November 6, 2000
- EO 13045 Protection of Children from Environmental Health Risks and Safety Risks, April 23, 1997.

See **Appendix C** for a list of laws and EOs including a summary of each one potentially related to the MSBE Project.

2.0 PROPOSED ACTION AND ALTERNATIVES

The MSBE Project includes site identification, site preparation, and construction within the 20 counties identified in Section 1.2. The MSBE Project will identify AML sites in the state near fiber communication lines, which would serve as hub locations for backhaul operations to other nearby AML sites while serving the site vicinity. The MSBE Project's construction of fiber-connected towers on AML sites will expand available fiber resources into unserved and underserved areas and facilitate competitive providers' offering of broadband services.

2.1 Proposed Action Description

The Proposed Action includes construction and creation of an open-access, fiber-connected wireless backbone to provide broadband services. The MSBE Project will include installation and construction methods and technologies for the following components:

- Broadband/Cell Towers Construction of new towers with antennas installed on these new towers or collocated on existing leased towers,
- Wireless Connectivity Future applications for Federal Communications Commission (FCC) licensing by others and managed by UCDA.
- Fiber cables buried underground in ductwork, conduit or directly in a protective bed, and
- Ancillary Equipment and Support Buildings Equipment necessary for supporting the use of fiber optic cable for broadband operation, such as electrical cabinets and buildings.

2.1.1 Towers

New towers for the MSBE Project will be constructed on a concrete foundation, with antennas located on the tower. The towers will be straight towers supported by guy wires attached to the ground to anchor the tower or can be self-supporting (monopole towers on one foundation, or three-sided lattice towers with a triangular base), depending on engineering, economic, environmental, visual, wind loading, or historic preservation considerations. Typically, the backbone support towers are less than 295 feet tall and the support towers are less than 200 feet tall unless they are collocated on taller towers owned by others through space leased by the applicant. Fiber cable may sometimes be necessary for connecting antenna to the existing network systems.

For a 150-foot self-supporting tower, each supporting structure, or face, is approximately 15 feet at the base tapering toward the top, with a concrete pad footprint no larger than 20 feet by 20 feet. For a 150-foot guyed lattice structure, each face is about 3 feet up the tower. If support guys are needed, guy wire anchors are typically located between 100 to 150 feet from each corner of the tower. Typically, towers less than 200 feet tall have no lighting requirements.

2.1.2 Wireless Connectivity

The MSBE Project will involve wireless technology which will send and/or receive radio frequency signals using antennas attached to new towers, collocated towers, buildings, or other infrastructure and may include accessory equipment such as equipment rooms and metal cabinets. Any wireless system using towers within the licensed spectrum must meet FCC licensing requirements. The FCC was established by the Communications Act of 1934 and is charged with regulating interstate and international communications by radio, television, wire, satellite and cable. The FCC initiated the Antenna Structure Registration (ASR) in 1995. The ASR describes the approval process for any antenna structure more than 200 feet above ground level. Future applicants for wireless systems will be initially managed by UCDA. The exact number of licensing applications is not known. FCC and the applicant will be required to comply with the requirements needed to issue the license.

2.1.3 Fiber Optic Cables

Fiber optic cables may be utilized for connection to the newly constructed towers. Fiber optic cable may be installed directly into the ground or placed in a conduit or duct to protect the cable from being damaged by future ground disturbance or by burrowing rodents. Conduits may be polyvinyl chloride pipes or concrete casings. The conduits will be placed at a minimum depth of three to four feet throughout a site's alignment. The buried cable placement will parallel existing roads within rights-of-way or in existing utility rights-of-way when possible. Activities associated with the construction of an underground cable system may include:

- Flagging and staking of the right-of-way,
- Clearing and grading if necessary,
- Mobilization of conduit/fiber placement crews,
- Installation of the fiber optic cable and conduit, including needed direction boring,
- Placement of right-of-way markers,
- Splice fiber optic cable system and test for functionality,
- Site cleanup and restoration concurrent with conduit and fiber placement,
- Place route markers; and
- Operation and maintenance.

2.1.4 Ancillary Structures

Ancillary structures associated with broadband deployment may consist of installing small pre-fabricated buildings, sheds, or cabinets that will be used for housing electric equipment in support of the broadband network infrastructure, often on previously disturbed or developed land. These small buildings will be placed on concrete pads and generally require very minimal land disturbance. Activities associated with the construction of a new facility may include:

- Site clearing and grubbing,
- Site grading,
- Excavation,
- Staging areas for equipment, building material, fill, etc.,
- Delivery, installation, and connection of utilities,
- Installing supporting security measures,
- Use of construction equipment, such as backhoes, front-end loaders, compactors, trenchers, augers, trucks, and air compressors, and
- Traffic to and from the site.

All associated needs for a new ancillary structure, including utility connections, fencing, lighting, access roads, equipment staging areas, parking and security measures, etc., are being addressed under this PEA. In order to accurately assess the environmental impacts of this project type, this PEA has analyzed all the potential features involved with the MSBE Project.

2.1.5 Phasing Construction

The MSBE Project will consist of a series of constructed tower sites that will be connected to other tower sites. The construction will be implemented through multiple phases, once site specific locations have been identified. The initial phases will have towers located on or adjacent to AML property. AML sites are typically disturbed ground, and multiple AML sites exist within the range of the MSBE Project. Constructing on AML sites will avoid and minimize impacts as these sites are already disturbed. Alternatives for each tower will be identified and considered during the subsequent site-specific analysis.

The initial infrastructure will be backbone towers that will be connected into existing broadband resources. Backbone towers are the primary or "hub" towers located along an existing fiber network. Utilizing this existing fiber, backbone towers have the capability to host equipment for cellular, line of sight and white space wireless networks, as well as provide service to multiple "last mile" spoke, or support, towers. The proposed support towers will connect to the backbone towers while serving the site vicinity. Radio signal proliferation analysis will be utilized to identify further support tower sites, preferably on other AML property, that will communicate with each support or backbone tower. Each new tower site will be connected to other existing broadband resources or to tower sites previously developed under the MSBE Project. The MSBE Project will construct fiber connected towers to expand fiber resources into unserved and underserved areas in the MSBE Project range.

2.1.6 Funding

The Proposed Action meets the economic and community development criteria of the AML Pilot Program. Under the Proposed Action, OSMRE may award approximately \$16,068,500 from the AML Pilot Funds due to the demonstration of the economic and community development nexus to AML property. The towers and tower sites will be owned by the UCDA. UCDA, in conjunction with the West Virginia Broadband Enhancement Council, intend to lease the space on the towers to wireless communication operators facilitating additional private investment to provide service to the surrounding community and wireless backhaul links to existing and future towers within approximately 20 miles of the hub tower sites. The West Virginia Legislature designed the Council to represent diverse users of broadband, including residential and business users, from various locations throughout the State. The Council has 13 voting members, as well as two appointees from the West Virginia Senate and two appointees from the West Virginia House of Delegates, one from each party, to serve as ex officio, nonvoting advisory members (West Virginia Department of Commerce).

2.2 Alternatives Considered

2.2.1 No Action Alternative

NEPA and the CEQ regulations require that a No Action alternative be presented in all environmental analyses to serve as a baseline from which to compare the Proposed Action and alternatives pursuant to 40 CFR § 1502.14(d). For the No Action Alternative, the MSBE Project would not proceed, and the current described conditions would continue and, in the absence of this project, economic and

social benefits, as presented in the Proposed Action (Section 2.1) would not be achieved. Without increasing broadband capabilities there would be:

- No improvements or advancements to education,
- No increase to digital marketplaces,
- No advancement in quality of healthcare,
- No reduction of time in health facilities,
- No increase of workforce training results,
- No increase in the capability of small communities to advance small business creation and relocation.

The No Action is considered in the environmental setting, Section 3.0, for comparison with the Proposed Action.

2.2.2 Other Alternatives Considered but Eliminated

Other alternatives were considered during the planning of the MSBE Project and the development of this PEA but are not considered further due to the lack of the nexus of community and economic development. Utilizing existing infrastructure to promote the broadband proliferation was considered as described in this PEA and in the Proposed Action. This is the preferred industry practice but in rural West Virginia existing infrastructure is uncommon, and where infrastructure is present, it is often not capable of supporting the defined Federal limit of service, 25 megabits per second (Mbps) downstream and 3 Mbps upstream (FCC, Broadband Progress Report, 2015). If this were the preferred alternative, OSMRE could not fund the project because it was not in conjunction with reclamation of AML sites. This alternative was eliminated from further consideration.

Utilizing new infrastructure on privately owned lands that do not contain AML features was considered, but eliminated. Using privately owned and potentially undisturbed lands could have more impacts to the environmental settings. The privately owned lands would not have the same benefits in avoiding potential impacts as using AML sites that are previously disturbed unreclaimed lands and are typically located in remote areas. The alternative of using privately owned lands was eliminated from further consideration.

In addition, these two alternatives would not meet the criteria for the AML Pilot Grant Program because OSMRE requires a nexus of community and economic development to implement its mission of advancement of broadband infrastructure. Without the grant funding these benefits would not occur just as the No Action alternative. In fact, as with the No Action alternative, West Virginia would fall further behind with the broadband expansion increasing across the nation.

2.3 Minimization and Best Management Practices

Factors including critical need, land use, engineering, economic, environmental, visual, wind loading, and historic preservation considerations will be evaluated during the siting process. There

are approximately 2400 AML sites¹ within the 20 counties that could be used for the towers that provide opportunities to minimize and avoid impacts to environmental resources.

In addition to site selection, the following Best Management Practices (BMPs), Standard Operating Procedures (SOPs), and minimization and mitigation measures, identified in Section 2.3.1 through Section 2.3.7, will be considered for inclusion in project design and implementation, in addition to terms and conditions included in state, county, and local permits. Minimization and mitigation measures will be implemented for each site and each project will undergo specific evaluations as needed. BMPs are based on impact analyses in Section 3. SOPs are features that are routinely implemented in project design to protect resources. The chosen method and location of the sites for the MSBE Project will have the least amount of impacts when considering the effects of benefits.

2.3.1 Protection of Soils, Vegetation, Wetlands, Floodplains, Groundwater, and Surface Water Quality (Sections 3.3.1, 3.3.3, 3.3.4, 3.3.5, 3.5, 3.6)

- Do not disturb stream or riverbanks and beds by using directional boring, attaching cable to bridges, attaching cable to poles, or using microwave propagation as feasible.
- If stream or riverbanks and beds must be disturbed, design the site to disturb the minimum amount necessary, using the fewest pieces of equipment, and minimize the amount of sediment flowing downstream.
- Avoid removing native riparian vegetation, including trees and shrubs, within riparian areas, wetlands, and floodplains. If trees or shrubs must be removed, design the site to remove the absolute minimum number of trees and shrubs necessary. This applies to underground and aerial features and new towers. However, for aerial features, woody vegetation must be permanently removed to avoid interference with poles and wires and to minimize the risk of fire.
- Any sites needing revegetation to improve recovery rates or minimize the risk of soil erosion shall be planted in accordance with OAMLR's Guide for the Preparation of Reclamation Designs (WVDEP, 2020).
- Maintain or protect roadside ditches and culverts to efficiently collect storm water within construction areas and avoid over-road flow.
- No fueling will be conducted less than 200 feet from wetland, floodplain, and/or riparian areas, and secondary containment will be used where appropriate and minimum spill cleanup kits will be in all fueling vehicles, including equipment such as storm drain plug or cover kit, non-water absorbent containment boom of at least 10 feet in length with a 12-gallon absorbent capacity, non-metallic shovel, and two

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¹ Based on e-AMLIS query run in April 2020.

five-gallon buckets with lids. All fueling will be conducted at least 25 feet from the nearest storm drain or inside an impervious containment with a volumetric holding capacity equal to or greater than 110% of the fueling tank volume, or covering the storm drain to ensure no inflow of spilled or leaked fuel. Spills over five gallons or any spills of hazardous or toxic materials/wastes will be reported to the state environmental protection agency.

- The contact information for the local fire department (911) and the appropriate regional office of the WVDEP Office of Water and Waste Management (OWWM) will be on site to report all spills in a timely manner.
- During directional boring operations near riparian areas, containment and cleanup
 equipment will be present for use at the site, as needed; a qualified hydrological
 monitor will be present for prompt detection of any releases; releases will be
 immediately controlled and drilling fluid contained or removed; a remediation plan
 will be in place for all directional boring operations; and all slurry used for
 directional boring will be removed from the site and discarded at an approved site.
- Concrete trucks will be taken off site to wash out or discharge surplus concrete or drum wash when possible or temporary containment will be used if on-site cleaning is necessary.
- Each contractor will designate at least one trained person to be responsible for erosion and spill control to ensure compliance with all local, state, and federal erosion and sediment control requirements.
- Storm drain inlets will be protected to prevent coarse sediment from entering drainage systems prior to permanent stabilization of disturbed areas. Protection may include, depending on site conditions: a temporary dike using concrete blocks and gravel; a gravel "donut"; gravel and wire mesh filters; catch basin filters; curb inlet protection with wooden weir; block and gravel curb inlet protection; or curb and gutter sediment barrier.
- If contaminated soils are encountered during ground-disturbing activities, the contractor will halt construction and contact the WVDEP.
- To prevent compaction, gullying, and rutting, mechanical equipment would be limited or excluded during wet soil conditions.
- The contractor will be responsible for implementing the measures called for in the National Pollutant Discharge Elimination System (NPDES) Stormwater permit provided by the WVDEP for erosion and sediment control. Sediment control measures shall be in-place and operational prior to any disturbance occurring in the site area. The WVDEP's approval of this plan does not relieve the contractor of his/her responsibility to be in compliance with any laws and/or permits.

2.3.2 Protection of Historical, Cultural, and Tribal Resources (Sections 3.15 and 3.16)

- Protection measures, resulting from consultations in accordance with Section 106
 of the NHPA, and EO 13175 Consultation and Coordination with Indian Tribal
 Governments, will be provided to the contractor prior to work, and an approved
 archaeologist will conduct training on the location, requirements, and protective
 conditions that must be followed.
- Installation equipment and vehicles will remain on road surfaces or within existing rights -of-way whenever possible.
- Should ground disturbance encounter previously unknown cultural artifacts or deposits or human remains, work will be halted within a defined area. The approved archaeologist must contact the SHPO, THPO, and OSMRE for further consultation.
- Whenever possible, avoid all historic sites when causing ground disturbance, especially in sites not previously disturbed.
- If a site is possibly within the Area of Potential Effect (APE) and cannot be avoided, including by directional boring, the process for assessing adverse effects will be in compliance with Section 106 of the NHPA and EO 13175 Consultation and Coordination with Indian Tribal Governments.
- For cemeteries located within 200 feet of the APE, flagging and/or monitoring by an approved archaeologist will be conducted to ensure that no adverse impacts are created.
- If any buildings and properties contributing to a historic district may be adversely impacted by vibrating equipment or visually by towers and poles, the process for assessing adverse effects will be coordinated with in accordance with Section 106 of the NHPA and EO 13175 Consultation and Coordination with Indian Tribal Governments.

2.3.3 Protected Migratory Birds and All Protected Species (Section 3.7.1 and 3.7.2)

• Where placement of cable or other infrastructure would require removing nest trees for migratory birds protected by the Migratory Bird Treaty Act (MBTA) or ESA, develop effective protective measures, such as avoiding removing the nesting trees or shrubs during nesting season. If active nests of migratory birds are discovered during surveys, the potential for adverse impact would be evaluated by USFWS and appropriate protective measures identified, including measures such as appropriate buffers, avoidance during the sensitive season (such as nesting), not removing or disturbing habitat or vegetation to avoid or minimize adverse impacts.

- If nests or birds must be disturbed while present, the UCDA will contact OSMRE and the United States Fish and Wildlife Service (USFWS). The contractor will acquire any necessary permits from the USFWS prior to the start of work.
- The applicant should consult with the USFWS if lattice towers are proposed for constructing in areas of protected birds or mammals (such as Bald Eagle, for example) that might provide perching habitat for raptors that might prey on the protected species, or use monopole towers instead.
- Any project specific or programmatic agreements from consultations with the USFWS will be provided to the construction contractor prior to work.
- Follow the USFWS guidelines for towers to protect migratory birds as appropriate.
- If informal consultation results in conservation recommendations, or if formal consultation is required, resulting in mandatory terms and conditions per the ESA, integrate such recommendations if appropriate, and terms and conditions when required into project design and implementation.
- Further consultation regarding Threatened and Endangered species are outlined in Section 3.7.1.

2.3.4 Protection of Human Health and Safety (Section 3. 17)

- Ensure that all cell and microwave towers/base stations are at least 30 feet from public areas and residences, with no access by unauthorized people.
- Any hazardous abandoned mine land features that could potentially impact persons entering the site shall be abated in a manner approved by the WVDEP OAMLR.
- All sites will have fencing and locked gates to prevent access by unauthorized people. Access roads will have locked gates at the beginning of any easement ROW.

2.3.5 Protection of Air Quality (Section 3.4)

- All measures to control fugitive dust will be followed as appropriate.
- Dust suppression, such as use of water trucks, will be employed as required to control particulate matter (PM_{10} and $PM_{2.5}$).
- Minimize idling time either by shutting equipment off when not in use or reducing the idling time to 5 minutes.

- Maintain all construction equipment in proper working condition according to manufacturer's specifications.
- When appropriate, update equipment to higher efficiency models to minimize air quality emission.

2.3.6 Minimizing the Effects of Noise (Section 3.13)

• Activities near residences and sensitive noise receptors such as hospitals, nursing homes, and residences would be performed during daylight hours, with optimum muffling of equipment where needed and in accordance with local ordinances.

2.3.7 Values of Lands with Special Designations (Section 3.20)

• Integrate standards, guidelines, and conditions found in the applicable agency's land management plan as pertinent to the MSBE Project and its construction into site-specific project location and design.

3.0 ENVIRONMENTAL SETTING AND ENVIRONMENTAL IMPACTS

The predominant land use of the MSBE Project is previously unreclaimed mined lands in West Virginia. This pilot project is novel in its scope, both by incorporating broadband and in locating on multiple AML sites within the state. This section describes the existing environment and defines the potential impacts from the Proposed Action and the No Action Alternative to resources in the existing environment.

3.1 Topography

3.1.1 Affected Environment

The MSBE Project will typically be located on or adjacent to AML sites within the West Virginia counties listed in Section 1.2. The topography of West Virginia can generally be described as mountainous, as the state is entirely located within the Appalachian Mountain region. AML sites are lands previously disturbed by mining activities, often resulting in altered site topography.

3.1.2 Environmental Impacts – No action

Under the No Action, the MSBE project would not be implemented as proposed. No additional infrastructure would be constructed, thus no disturbance to topography would occur as a result of the No Action.

3.1.3 Environmental Impacts- Proposed Action

Under the Proposed Action, construction activities associated with the MSBE project primarily will be located on AML sites or within existing rights-of-way. Access to the sites will typically occur via existing road systems. Short term impacts to topography may occur during construction

of access roads, improvements to existing roads, preparation of tower pad sites, including clearing and grading activities. Once the sites are graded and the structures are constructed, the overall topography will deviate only slightly from the current configuration. Newly constructed towers may result in long term impacts in that they may be visible from a distance, but they will not alter the overall topography of West Virginia. Impacts to topography will be localized and minor, and will not be considered further in this PEA, nor must it be considered at site-specific planning.

3.2 Geology

3.2.1 Affected Environment

The geology of West Virginia includes two major regions, the Appalachian Plateau and the Valley and Ridge (WVGES, 2020). These regions are characterized by steep mountains with narrow, winding valleys. The geology resources within the range of the MSBE Project can be described as disturbed as a result of past coal mining practices. Typical coal mining related disturbances are the result of blasting, coal extraction, and earth moving activities.

3.2.2 Environmental Impacts – No Action

Under the No Action, the MSBE project would not be implemented as proposed. No additional infrastructure would be constructed, thus no disturbance to geology would occur as a result of the No Action.

3.2.3 Environmental Impacts – Proposed Action

Under the Proposed Action, work for the Proposed Action will involve minor grading and excavation activities during construction. However, these activities will be localized to within a few feet of the ground surface. No major excavations activities are proposed. Impacts to geology from construction will be limited to the installation of the support system needed for tower erection. Once the towers are in place, there will be no further impacts to the surface or subsurface geology resources.

While impacts to geology are not anticipated, the geology will be assessed on a site by site basis with respect to the risk of subsidence and damage to MSBE infrastructure. Due to the potential instability of AML sites as a result of past coal mining activities, a desktop mapping study of each proposed tower location and the immediate surrounding area will be completed to determine the potential presence of historic underground mining. Underground coal mining presents a risk of subsidence, which could damage MSBE infrastructure. Historic mine mapping will be obtained from the West Virginia Geologic and Economic Survey and the WVDEP for each site-specific location to determine if the presence of an abandoned deep mine could impact a tower site. Qualified geotechnical professionals will be utilized to determine the concerns of tower erection and, the MSBE Project will rely on them to perform the necessary studies and make proper recommendations.

3.3 Aquatic Related Resources

3.3.1 Water Resources

3.3.1.1 Affected Environment

The MSBE Project area is characterized by steep mountains with narrow, winding valleys. The valleys typically will host water resources including ponds, springs, streams and wetlands. West Virginia is known to have numerous water resources as a result of the mountainous terrain.

Streams will be verified utilizing the "bed-and-bank" method or definition of a stream bed [33 CFR § 328.3 (c)]. Delineation efforts will include the preliminary determination of stream type using the WVDEP's Division of Mining and Reclamation (DMR) October 1999 revision to Section 33 in the Permit Handbook, "Guidance of Delineation of Ephemeral/Intermittent Streams." This document is commonly referred to as the October 1999 WVDEP Stream Delineation Memorandum (WVDEP, 1999) and will be used in delineations for projects that requires State certification of activities requiring Federal permits or licenses.

The Permit Handbook defines ephemeral channels as those which "flow only in direct response to precipitation in the immediate watershed or in response to the melting of a cover of snow and ice, and which has a channel bottom that is always above the local water table." In the WVDEP Memorandum, intermittent channels are defined as "a stream or reach of a stream that is below the local water table for at least some part of the year and obtains its flow from both surface runoff and groundwater discharge." As defined further in West Virginia's regulations, W.Va. Code St. R.(47 CSR 2 §2.9), intermittent channels are those "which have no flow during sustained periods of no precipitation and which do not support life whose life history requires residence in flowing waters for a continuous period of at least six months." The preliminary jurisdictional determination for perennial reaches will be made based on the "bed and bank" method, as well as the WVDEP's DMR definition of a perennial channel (a stream portion or a portion of stream that flows continuously) and the use of best professional judgment.

Wetland delineation will be performed in accordance with methods described in the USACE's Delineation Manual. On-site Routine Determination/Delineation Wetlands (Environmental Laboratory, 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region to determine the presence of wetlands (Environmental Laboratory, 2012). As established by this manual and supplement, wetlands will be assessed for the presence of the following three criteria: hydrophytic vegetation (Strausbaugh, 1978), hydric soils (Munsell, 2012), and wetland hydrology. Plant species should be identified using appropriate keys and will be classified using the USACE's National Wetlands Plant List (http://rsgisias.crrel.usace.army.mil/NWPL/index.html) and the U.S. Department of Agriculture Wetland Indicator Status site (http://plants.usda.gov/wetland.html) National Wetland Plant List for Eastern Mountains and Piedmont Region. Wetland will be classified using the Document, Classification of Wetlands and Deepwater Habitats of the United States (Cowardin, et. al, 1979).

Due to the disturbed nature of AML sites, the use of the following documents may be needed: "Comprehensive and Atypical Determination/Delineation Methods as described in the 1987 Corps

of Engineers Wetlands Delineation Manual and the Regional Supplement's "Difficult Wetland Situations in the Eastern Mountains and Piedmont Regions." Both of these documents provide guidance for making wetland determinations in difficult-to-identify wetland situations, including atypical situations where an indicator may be absent. In general, problematic wetland delineation efforts will be completed based on the information available and further scrutinized using best professional judgment, knowledge of the wetlands in the region, and reference locations (as applicable).

Section 404 (see 33 U.S.C. § 1344) of the CWA prohibits the discharge of dredged or fill material into waters of the United States without a permit from the USACE unless the specific activity is exempted in 33 C.F.R. Part 323 or covered by a nationwide permit (NWP) in 33 C.F.R. Part 330.

On April 21, 2020, the EPA and USACE published a final rule defining "Waters of the United States" (WOTUS) in 33 CFR 328.3 and 40 CFR 120.2. In this final rule, the agencies interpret the term "waters of the United States" to encompass: The territorial seas and traditional navigable waters; perennial and intermittent tributaries that contribute surface water flow to such waters; certain lakes, ponds, and impoundments of jurisdictional waters; and wetlands adjacent to other jurisdictional waters.

3.3.1.2 Environmental Impacts – No Action

Under the No Action, the MSBE project would not be implemented as proposed. No additional infrastructure would be constructed, thus no disturbance to water resources would occur as a result of the No Action.

3.3.1.3 Environmental Impacts – Proposed Action

Under the Proposed Action, the deployment of broadband with currently available technologies is not considered a "water dependent" activity per the Guidelines for Preparation of Analysis of Section 404 Permit Applications Pursuant to the Section 404(B)(1) Guidelines of the Clean Water Act (40 C.F.R. Part 230). However, at a site-specific level, UCDA will perform additional studies, including a Stream and Wetland Delineation, to determine whether construction activities may be located within potential jurisdictional "Waters of the U.S." (WOTUS). During construction, contractors will follow the BMPs, SOPs and mitigation measures identified in Section 2.3.1. By using certain technologies (such as directional drilling) or through avoidance measures (such as relocating a tower or spanning the area of a water resource), it is likely that the UCDA can minimize effects of construction in USACE jurisdictional WOTUS and navigable waters. The following outlines general practices that will be adhered to and permits that may be sought throughout the implementation of the MSBE project.

The MSBE Project will avoid construction in wetlands as defined by the EO 11988. National Wetlands Inventory will also be utilized during the site-specific planning phase of each tower. This can be used to make a preliminary determination if the existence of wetlands could be present. Whenever practicable, directional boring under wetlands should be used to avoid impacting the wetlands. If sites are located within a WOTUS and cannot be completed following these common

practices and a stream or wetland could be adversely impacted or a Section 404 permit is required, additional consultation with the USACE will be required.

The WVDEP – Division of Water and Waste Management regulates water quality impacts under Section 401 of the CWA. As a result of the Proposed Action, if impacts to WOTUS are anticipated for any MSBE action, CWA permitting must be addressed. In addition, 401 State Water Quality should be completed along with the NPDES permit for construction stormwater. However, it is difficult to address impacts to water resources at the programmatic level; therefore, impacts to water resources will undergo additional site-specific review.

3.3.2 Navigable Waters

3.3.2.1 Affected Environment

Section 10 of the Rivers and Harbors Act (RHA) of 1899 (33 U.S.C. § 403) prohibits the obstruction or alteration of navigable WOTUS without a permit from the USACE. A Section 10 stream is defined as a navigable water and is regulated by the USACE. In West Virginia, there are multiple Section 10 streams and, within the range of the MSBE Project, the following Section 10 streams exist (USACE Section 10 Streams, 2020):

- Coal River (mouth to mile 57.90),
- Elk River (mouth to mile 139.00),
- Gauley River (mouth to mile 75.00),
- Greenbrier River (mouth to mile 150.50),
- Guyandotte River (mouth to mile 122.00),
- Kanawha River (mouth to mile 97.00),
- Little Kanawha River (mouth to mile 130.75),
- New River (mouth to mile 87.50),
- Ohio River (entire stretch), and
- Tug Fork (mouth to mile 58.00).

See Figure 2 for a map showing the location of the regulated Section 10 streams within the MSBE Project range. A Section 10 Permit is required for any obstructions or changes to navigation. This can include overhead utility lines constructed over waters classified in Section 10 of the RHA that might be low enough or have poles located in such a way that they would potentially obstruct or change navigation.

3.3.2.2 Environmental Impacts – No Action

Under the No Action, the MSBE project would not be implemented as proposed. No additional infrastructure would be constructed, thus no disturbance to this resource would occur as a result of the No Action.

3.3.2.3 Environmental Impacts – Proposed Action

Under the Proposed Action, due to the nature of the topography of West Virginia, and also the connectivity requirements for broadband infrastructure, it is anticipated that MSBE project structures will not be constructed such that they would obstruct or change the navigation on Section 10 streams. Therefore, impacts to Section 10 RHA will not be considered further in this PEA, nor must it be considered at project-level planning.

3.3.3 Floodplains

3.3.3.1 Affected Environment

Because West Virginia has numerous water resources amongst its mountainous terrain, floodplains can be typically found within its valleys. Floodplains serve as the overflow of streams extending throughout the low-lying area in valleys.

Protecting the functions of floodplains is addressed by an EO, "Floodplain Management" (EO 11988, originally signed in 1977. The guidelines further describe approaches to delineate a floodplain by considering climate change effects, adding height to the estimated 100-year floodplain elevation, and/or reliance on the 500-year floodplain in project planning.

The purpose of floodplain management is to reduce flood damage. Floodplain management is the operation of community programs for preventative and corrective measures. These measures take a variety of forms and generally include zoning, subdivision or building requirements, and special-purpose floodplain ordinances.

Communities agree to adopt and enforce floodplain management ordinances to make flood insurance available to home and business owners. To date, 55 counties and 214 communities in West Virginia have voluntarily adopted and are enforcing local floodplain management ordinances that provide flood loss reduction building standards for new and existing development. Construction activities associated with the MSBE Project will be implemented in accordance with West Virginia Division of Homeland Security and Emergency Management's guidelines.

3.3.3.2 Environmental Impacts – No Action

Under the No Action, the MSBE project would not be implemented as proposed. No additional infrastructure would be constructed, thus no disturbance to this resource would occur as a result of the No Action.

3.3.3.3 Environmental Impacts – Proposed Action

Under the Proposed Action, due to the electrical components of broadband infrastructure, no towers or ancillary structures would be constructed within floodplains. Permanent aboveground structures will not be built within the 100-year floodplain. Impacts to floodplains will likely be limited to construction of access roads. Any temporary disturbance during construction within a floodplain will be returned to pre-construction conditions after construction has been completed.

The construction contractor must implement BMPs included in federal, state, and/or local permits regarding the construction in floodplains (Section 2.3.1).

It is difficult to identify and address impacts to floodplains at the programmatic level; therefore, impacts to floodplains will undergo additional site-specific review.

3.3.4 Groundwater

3.3.4.1 Affected Environment

Groundwater is water held underground by soil, rock crevices or in aquifers. West Virginia has abundant groundwater resources (West Virginia Legislature, *Chapter 22 Environmental Resources*, 2020). The groundwater near AML sites is often polluted as a result of past coal mining practices.

3.3.4.2 Environmental Impacts – No Action

Under the No Action, the MSBE project would not be implemented as proposed. No additional infrastructure would be constructed, thus no disturbance to this resource would occur as a result of the No Action.

3.3.4.3 Environmental Impacts – Proposed Action

Under the Proposed Action, broadband infrastructure construction is not typically a water-dependent action and groundwater is no exception. Construction of the proposed towers, access roads, fiber optic cables and ancillary equipment will typically be located on the surface without impacting groundwater.

Chemicals or other discharges into groundwater are not typical in deployment of fiber optic cable or construction of towers and associated facilities. Any hazardous or toxic chemicals stored in buildings must be stored in accordance with federal, state, and/or local laws and regulations.

Potential adverse impacts to groundwater from the Proposed Action are not anticipated. Groundwater will not be considered further in this PEA, nor will it be considered at site-specific planning.

3.3.5 Surface Water

3.3.5.1 Affected Environment

West Virginia has abundant surface water resources. West Virginia has 32 watersheds divided according to the United States Geological Survey (USGS) hydrologic unit codes (HUC) that contribute to the Chesapeake Bay and the Gulf of Mexico. The surface water near AML sites is often polluted as a result of past coal mining practices, with regards to elevated acidity and metal concentrations.

3.3.5.2 Environmental Impacts – No Action

Under the No Action, the MSBE Project would not be implemented as proposed. No additional infrastructure would be constructed, thus no disturbance to this resource would occur as a result of the No Action.

3.3.5.3 Environmental Impacts – Proposed Action

Under the Proposed Action, the primary environmental impact of the MSBE Project will be earth disturbance during construction, which could cause erosion and stream sedimentation. The following measures will be taken to minimize those impacts:

- Use of BMPs as described in the WVDEP Erosion and Sediment Control Manual (WVDEP 2006)
- Use of a silt fence or straw bales between construction areas and waterways.
- Establishment of vegetation on disturbed areas.
- At stream crossings:
 - Shore areas disturbed by this operation will be reshaped, seeded and mulched immediately upon completion of the work.
 - Work will be performed during low flows.
 - Stream bed disturbance will be restricted to the immediate area. In-stream use of equipment will be kept to a minimum.
 - "Green" concrete will not be used in the stream beds.
 - The amount of stream bank vegetation removed will be kept to a minimum.
 - Requirements of the West Virginia Division of Natural Resources Office of Land and Streams and the USACE will be followed.
 - No in-stream work will be conducted during fish spawning season (April 1 through June 30).

The contractor will implement BMPs included in federal, state, and/or local permits regarding the control of storm water runoff and spills of petroleum and chemicals (Section 2.3.1). All applicable stormwater permits and associated erosion and sediment control measures will be implemented in accordance with WVDEP requirements. With these routine measures in place and the necessary permits or approvals obtained, the construction of each site will have minimal impacts to surface water.

Additionally, potential adverse impacts will be limited because each site will have third party environmental inspectors, whether government or privately contracted consultants, on site during construction and post-construction until the site is stabilized per WVDEP regulations. Once each site has been completed and reclaimed, negligible impacts are anticipated. Impacts to surface water will not be considered further in this PEA, nor will it be considered at site-specific planning.

3.3.6 Wild and Scenic Rivers

3.3.6.1 Affected Environment

The Wild and Scenic Rivers Act, 16 U.S.C. § 1271 et seq.) was enacted by Congress in 1968 to preserve certain rivers with outstanding natural, cultural and recreational value in free-flowing conditions for the enjoyment of present and future generations (NWSR, 2019). This Act established the National Wild and Scenic Rivers System to protect and enhance rivers found to be regionally and nationally significant. In West Virginia, an approximately 11-mile stretch of the Bluestone River is designated as the Bluestone National Scenic River and is protected by the National Park Service (NPS, 2019). This stretch of river is located in Mercer and Summers Counties, West Virginia and is not located within the MSBE Project range.

3.3.6.2 Environmental Impacts – No Action

Under the No Action, the MSBE project would not be implemented as proposed. No additional infrastructure would be constructed, thus no disturbance to this resource would occur as a result of the No Action.

3.3.6.3 Environmental Impacts – Proposed Action

Under the Proposed Action, potential impacts to the Bluestone National Scenic River are not anticipated because the MSBE Project area does not include this stretch of river. Therefore, impacts to Wild and Scenic Rivers Act will not be considered further in this PEA, nor will it be considered during site-specific planning.

3.4 Air Quality

3.4.1 Affected Environment

The Clean Air Act requires the Environmental Protection Agency (EPA) to set National Ambient Air Quality Standards (NAAQS) (40 CFR Part 50) for pollutants considered harmful to public health and the environment. The Clean Air Act identifies two types of NAAQS. Primary standards provide public health protection, including protecting the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards provide public health welfare protection, including protection against decreased visibility and damage to animals, vegetation, and buildings. Much of rural West Virginia, where the MSBE Project is targeting its efforts, is in attainment for these standards.

The Environmental Protection Agency (EPA) has set NAAQSs for six principal pollutants, which are called "criteria pollutants". These include ozone, carbon monoxide (CO), nitrogen dioxide, particulate matter (PM), sulfur dioxide, and lead. Attainment means that an area is meeting or is below a given safe standard set by the EPA for the particular criteria pollutant (EPA, 2020).

3.4.2 Environmental Impacts – No Action

Under the No Action, the MSBE Project would not be implemented as proposed. No additional infrastructure would be constructed, thus no disturbance to this resource would occur as a result of the No Action.

3.4.3 Environmental Impacts – Proposed Action

Under the Proposed Action, impacts to air quality associated with the MSBE project are limited to temporary and incidental increases in pollutants, including particulate matter (dust), during construction. Minor effects on local air quality may occur during construction activities, such as increased emissions of carbon monoxide, hydrocarbons, and nitrous oxides from vehicles entering/exiting the site and construction equipment. Daily equipment emissions and fugitive dust associated with construction, operations, and maintenance activities would also produce minor, temporary impacts localized to the site. No significant adverse effects on air quality are expected. No renovations, remodeling, or demolition of structures or buildings is proposed.

Dust suppression, especially use of water trucks, will be employed as required to control fugitive dust at construction sites for fiber plant and tower and building construction, as measured in particulate matter of 10 microns in size and 2.5 microns in size (PM₁₀ and PM_{2.5}), with 2.5 micron grains being more damaging to lungs. Fugitive dust is not expected to be a problem with deployment of either underground or aerial deployment.

Adherence to BMPs and SOPs in Section 2.3.5 will keep the already minimal air quality emissions to a minimum. The MSBE Project components will primarily be constructed within rural areas of West Virginia. Much of rural West Virginia is in attainment with EPA Standards for criteria pollutants; thus, construction associated with the MSBE project will primarily be located within attainment areas.

Because of the lack of permanent air emitting equipment, the proposed project does not appear to require pre-construction permits, authorizations, or air quality analyses by the West Virginia Division of Air Quality, except to the extent that the following three conditions apply:

- If land clearing debris is to be burned, prior approvals by the West Virginia Secretary of the Environmental Protection or his/her authorized representatives are required (45 W.Va. Code St. R. Series 6).
- If the project entails the renovation, remodeling, or demolition, either partially or totally, of a structure, building, or installation, irrespective of the presence or absence of asbestos containing materials and is subject to 45 W. Va. Code St. R. Series 34. The West Virginia code generally adopts the standards and incorporates by reference the provisions of 40 C.F.R. Parts 61, 63 and 65. See also, (the asbestos NESHAP at 40 C.F.R. Part 61, Subpart M National Emission Standard for Asbestos). If such is the case, a formal Notification of Abatement, Demolition, or Renovation must be completed and timely filed with the WVDEP Secretary's authorized representative and approval received before commencement of the activities addressed in the Notification.

• If backup or emergency electrical generators may be subject to federal and state requirements and require an air permit in accordance with 45 W.Va. Code St. R. Series 13.

Emissions from construction at an individual site in any one area are projected to be *de minimis* or negligible and do not need to be evaluated at the site-specific level, even in the unlikely circumstance where the area is in maintenance or non-attainment for a precursor air pollutant. Impacts to air quality will not be considered further in this PEA, nor will it be considered at site-specific planning.

3.5 Soils

3.5.1 Affected Environment

West Virginia soils are very diverse, including soils from rocky outcrops to very rich organic soils in bottomlands. Soils associated with AML property are typically disturbed due to past coal mining practices.

The Farmland Protection Policy Act (FPPA) 7 U.S.C. § 4202 is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It assures that, to the extent practicable, federal programs are administered to be compatible with state/local units of government, and private programs and policies to protect farmland. Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed or assisted by a federal agency, including providing financing or loans (http://www.nrcs.usda.gov/wps/portal/nrcs/detail).

3.5.2 Environmental Impacts – No Action

Under the No Action, the MSBE project would not be implemented as proposed. No additional infrastructure would be constructed, thus no disturbance to this resource would occur as a result of the No Action.

3.5.3 Environmental Impacts – Proposed Action

Under the Proposed Action, construction of the proposed towers and ancillary structures would result in temporary impacts to the soil resources within the proposed MSBE Project range. Disturbances during the construction phase of each site-specific tower will be limited to the immediate vicinity of the tower location, including access roads, cable installation and other ancillary structures. Areas disturbed during construction would be restored upon construction completion to their original conditions and elevations and would be seeded and mulched to prevent erosion. BMPs identified in Section 2.3.1 will be utilized to minimize the potential for soil erosion.

Most underground or aerial deployment of cable occurs in existing rights-of-way in which soils are already disturbed through regular maintenance activities. BMPs, identified in Section 2.3.1, will be utilized to further minimize the potential for adverse impacts to soils.

All applicable stormwater permits and associated erosion and sediment control measures will be implemented in accordance with WVDEP requirements. At each site, the contractor will be responsible for obtaining a NPDES Stormwater permit and implementing the measures called for in the NPDES Stormwater permit for erosion and sediment control. Sediment control measures will be in place and operational prior to any land disturbance occurring in the site area. The WVDEP's approval of the plan does not relieve a contractor of the responsibility to be in compliance with any laws or permits.

The contractor will take necessary steps to prevent erosion or silting problems from occurring and to minimize pollution or sedimentation of any water resource. If such issues arise during construction, the contractor will take immediate corrective action.

Construction sites will be evaluated by an engineer to determine whether they are balanced in regard to material, and if off-site borrow or disposal areas will be required. Any borrow and disposal of soil that must occur outside of the site boundaries will be subject to NEPA requirements.

Construction of a building on farmland for a specific structure may require evaluation using Form AD-1006 but, because of the small amount of land (5 acres is the usual size) required for construction of a tower and ancillary equipment, the risk of exceeding this acreage is negligible. To determine if special soils may be impacted, consultation with the United States Department of Agriculture and Natural Resources Conservation Service (NRCS) will occur (Soil Survey Staff). The correspondence will determine if Prime and Unique Farmland, Statewide Importance Farmland or Locally Important Farmland will be impacted.

It is difficult to address impacts to soils at the programmatic level; therefore, impacts to soils will undergo additional site-specific review.

3.6 Vegetation

3.6.1 Affected Environment

The MSBE Project is located solely in West Virginia, which is characterized by second growth hardwood forests, predominately deciduous broad-leaf trees (i.e., Tulip Poplar, Oaks and Maples) and evergreen needle-leaf conifers (i.e., Eastern Hemlock and Eastern White Pine). The percentage of land cover is broken down by county in Appendix A.1. Construction associated with the MSBE Project will mainly occur along existing access roads and ridgelines within AML properties. These areas are disturbed, and may not support native, mature vegetation.

3.6.2 Environmental Impacts—No Action

Under the No Action, the MSBE project would not be implemented as proposed. No additional infrastructure would be constructed, thus no disturbance to this resource would occur as a result of the No Action.

3.6.3 Environmental Impacts – Proposed Action

Under the Proposed Action, construction of the proposed towers and ancillary equipment would result in temporary impacts to the terrestrial vegetative resources within the proposed site corridor. Disturbances to wooded lots, mowed lawns, and fallow fields could occur during the construction phase of each site-specific tower. Disturbances would be limited to the access roads, cable installation, and towers. BMPs identified in Section 2.3.1 will be followed to minimize impacts to vegetation. Once installation has been completed, the displaced soils would be returned to the original area, graded in place, seeded, and mulched.

Most underground or aerial deployment of cable occurs in existing rights-of-way in which existing vegetation is already disturbed through regular maintenance activities. BMPs identified in Section 2.3.1 will be followed to minimize impacts to vegetation.

With routine measures in place, the potential for long term adverse impacts to vegetation is negligible. All impacts will be short term and minor in nature. Once each site has been completed and reseeded, negligible impacts are anticipated. Impacts to vegetation will not be considered further in this PEA, nor will it be considered at site-specific planning.

3.7 Fish and Wildlife

3.7.1 Threated and Endangered Species

3.7.1.1 Affected Environment

Under the Endangered Species Act (ESA) of 1973 as amended, (16 U.S.C. §§ 1531 – 1544), all federal agencies must conserve listed T&E species and will use their authorities in furtherance of the purposes of the ESA as set forth in 16 U.S.C. §1531(c) (Section 2(c)). The USFWS and the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NMFS) are charged with implementation and enforcement of the ESA, including development of recovery plans for listed species. These agencies provide protection for these listed species and their habitats by developing and implementing recovery plans to improve species status, and ultimately "delisting" these species and returning full management authority of the species to the states or tribes when warranted.

Specifically, 16 U.S.C. §1536 (a)(1) (Section 7 (a)(1)) of the ESA charges federal agencies to aid in the conservation of listed species, and 16 U.S.C. § 1536 (a)(2) (Section 7 (a)(2)) requires the federal agencies, through consultation with USFWS/NMFS to ensure that "any action authorized, funded or carried out by such an agency is not likely to jeopardize the continued existence of any endangered or threatened species" or destroy or adversely modify their critical habitat.

Under the ESA implementing regulations (50 CFR Part 402) regarding informal Section 7 consultation, federal agencies must review their actions and determine whether their action may affect federally listed or proposed listed species as well as proposed or designated critical habitat.

To accomplish Section 7 consultation, federal agencies must request from the USFWS/NMFS a list of species and critical habitats that may be in the project area or they can request concurrence with the agency's list of species.

Through project scoping, the USFWS has determined that the T&E species that may be found within the range of the MSBE Project include:

- Cambarus callainus (Big Sandy crayfish)
- Cambarus veteranus (Guyandotte River Crayfish)
- *Corynorhinus townsendii virginianus* (Virginia big eared bat)
- *Crystallaria stegaria* (Fanshell mussel)
- Epioblasma torulosa rangiana (Northern riffleshell mussel)
- Epioblasma torulosa torulosa (Tuberclad blossom pearlymussel)
- Etheostoma osburni (Candy darter)
- *Lampsilis abrupta* (Pink muckey mussel)
- *Myotis grisescens* (Gray bat)
- *Myotis septentrionalis* (Northern Long-Eared Bat)
- *Myotis sodalist* (Indiana bat)
- Pleurobema clava (clubshell mussel)
- Pleurobema collina (Spinymussel)
- Trifolium stoloniferum (Running buffalo clover).

The species distribution by county can be found in Appendix A.2. Species must only be considered in the counties in which they are present.

3.7.1.2 Environmental Impacts – No Action

Under the No Action, the MSBE Project would not be implemented as proposed. No additional infrastructure would be constructed, thus no disturbance to this resource would occur as a result of the No Action.

3.7.1.3 Environmental Impacts – Proposed Action

Under the Proposed Action, to determine potential impacts of this project and the appropriate mitigation measures, consultation regarding potential impacts to aquatic and terrestrial species shall be completed as follows:

• The proposed area of disturbance for each construction site shall be reviewed utilizing the USFWS Information for Planning and Consultation (IPaC) web-based consultation tool to determine the presence of potential T&E species that may be impacted by disturbance at each site. Should construction at a site have the potential to impact T&E species, additional consultation with the USFWS West

Virginia Field Office shall be completed, and any required conservation measures shall be included in the site planning process as required. Correspondence completed as part of this consultation shall be compiled and forwarded to the WVDEP. WVDEP will provide this information to OSMRE as part of the required NEPA documentation.

• In addition to the above requirement, the proposed area of disturbance for each site shall be submitted to the West Virginia Department of Natural Resources Wildlife Resources Section for T&E species review. Should this review result in the identification of the presence of any T&E species at the site, additional coordination shall be completed with this agency, and any conservation measures incorporated in the site-planning process as required. Correspondence completed as part of this consultation shall be compiled and forwarded to the WVDEP. WVDEP will provide this information to OSMRE as part of the required NEPA documentation.

Species and associated critical habitat vary among regions both in and outside West Virginia. Because of this, under the Proposed Action, each site will need site-specific compliance with the ESA. Consultation with the USFWS West Virginia Field Office and the WVDNR will occur for each site. Therefore, compliance with the ESA is deferred to site specific review and NEPA compliance.

3.7.2 Migratory Birds

3.7.2.1 Affected Environment

Under the Migratory Bird Treaty Act (MBTA), as amended, 16 U.S.C. §§ 703-712, the purposeful taking, killing, or possessing migratory birds is unlawful. Projects that are likely to result in the purposeful taking of birds protected under the MBTA would require the issuance of taking permits from the USFWS.

3.7.2.2 Environmental Impacts – No Action

Under the No Action, the MSBE Project would not be implemented as proposed. No additional infrastructure would be constructed, thus no disturbance to this resource would occur as a result of the No Action.

3.7.2.3 Environmental Impacts – Proposed Action

Under the Proposed Action, the recommendations provided in the BMPs and SOPs (Section 2.3.3) will be employed during construction to minimize impacts.

This analysis summarizes and incorporates by reference the analysis in the PEA prepared for the FCC's Antenna Structure Registration Program (FCC 2012), as well as USFWS guidance for minimizing the risk of collisions of migratory birds (USFWS, 2008) with telecommunications towers (Patterson, 2012; Manville, 2014, USFWS, 2014). Since 2000, the USFWS has provided

and updated guidance regarding tower siting and construction standards and mitigation for minimizing the risk of bird collisions (American Bird Conservancy 2000). Following the USFWS voluntary guidelines would include collocating antennas whenever possible and using non-guyed towers less than 200 feet tall with appropriate lighting.

Potential adverse impacts to migratory birds from the Proposed Action will be minimized because the towers will meet the USFWS guidelines for tower construction. Additionally, there is flexibility in the site selection to facilitate avoidance of areas of special concern with regards to migratory birds. Construction associated with the MSBE project will typically be located on previously disturbed AML properties, which could limit mature vegetation and roosting habitat availability. However, the possibility of impacting habitat and flight paths for migratory birds is difficult to assess programmatically; therefore, impacts to migratory birds will undergo additional site-specific review.

3.7.3 Wildlife

3.7.3.1 Affected Environment

According to the WVDNR, West Virginia is home to more than 57 species of amphibians and reptiles; 70 wild mammals; 178 species of fish and nearly 300 species of birds (WVDNR, 2020).

3.7.3.2 Environmental Impacts – No Action

Under the No Action, the MSBE project would not be implemented as proposed. No additional infrastructure would be constructed, thus no disturbance to this resource would occur as a result of the No Action.

3.7.3.3 Environmental Impacts – Proposed Action

Under the Proposed Action, the USFWS, operating within its authority under the MBTA and the ESA, has expressed concerns regarding the potential cumulative effects on birds caused by non-ionizing electromagnetic radiation frequency (RF) from communication towers. Little research has been conducted on the ecological effects of RF on wildlife and insects in natural habitats.

It is highly unlikely that wildlife would be located within the direct beam of a wireless base station for a significant amount of time. Construction activities will follow the minimization and mitigation techniques and the BMPs and SOPs as noted in Section 2.3.3. Effects on wildlife due to construction will be temporary and intermittent due to the spacing of the tower sites.

Potential adverse effects on wildlife from the Proposed Action will be limited because each site will have consultation with the USFWS, and construction activities will be temporary and on previously-disturbed lands. However, the possibility of impacting wildlife is difficult to assess programmatically; therefore, impacts to wildlife will undergo additional site-specific review with the WVDNR.

3.8 Land Use

3.8.1 Affected Environment

The MSBE Project will be localized to sites on or adjacent to AML property in rural areas of West Virginia. The predominant past land uses of AML properties include coal mining and timbering operations. The present land use will vary by site, but these sites will typically be undeveloped, nonproductive lands due to the disturbances caused by past land uses.

3.8.2 Environmental Impacts – No Action

Under the No Action, the MSBE project would not be implemented as proposed. No additional infrastructure would be constructed, thus no disturbance to this resource would occur as a result of the No Action.

3.8.3 Environmental Impacts – Proposed Action

Under the Proposed Action, the construction of the proposed towers, access roads, fiber optic cables, and ancillary equipment will typically be located on disturbed land or within existing rights-of-ways.

Impacts from construction may include land use changes for temporary staging areas, temporary access roads, or temporary trenching for the placement of cables. These impacts will be short term and minor in nature, with the original land use restored upon construction completion.

Upon construction completion, the footprint of each tower site will be relatively small, with the total construction pad area being approximately 0.25 acre. A typical access road will be 25 feet wide and could range from 1,000 to 7,000 feet in length. The MSBE Project will result in positive, long term impacts to land use, by converting nonproductive lands into assets to the community through the introduction of broadband connectivity.

Significant adverse impacts to the land use are not anticipated. Land use designations will not change after the competition of each site; therefore, potential impacts to land use is not anticipated and will not be considered further in this PEA, nor must impacts to land use be considered at site-specific planning.

3.9 Socioeconomics

3.9.1 Affected Environment

According to census data for West Virginia, the 2019 population (V2019) was 1,792,147 individuals, of which 1,675,657 were classified as "white." Approximately 72.9 percent of the population lives in owner-occupied housing units compared to approximately 63.8 percent nationwide. The median house value in the state is \$115,000 compared to \$204,900 nationwide. Average adjusted gross income for the 2018 tax year for this area was \$44,921, as compared to

\$60,293 for the nation. The cost of living is rated as less than the national average. The poverty level in 2018 was 17.8 percent with the national average at 11.8 percent.

Households with a computer in West Virginia between 2014 and 2018 was approximately 81.8 percent while the national average was approximately 88.8 percent. Finally, West Virginia households with a broadband internet subscription was approximately 72.9 percent with the national average at approximately 80.4 percent. As indicated in the US Census data presented below, West Virginia has a declining population, lower measures than national rates in income, education, computer ownership, and broadband internet subscription (United States Census Bureau 2019). See Table 1 for the West Virginia Census Summary (V2019). A table of county specific information can be found in Appendix A.3.

Historically, the major natural resources of the state include coal, oil and gas, salt and timber. From 1990 to 2017, West Virginia lost approximately 12,500 coal mining jobs, which was a drop of approximately 37 percent. Rural West Virginia has fallen behind in terms of population growth and economic development and leads among poverty and unemployment rate. This can be attributed to the lack of accessibility in high speed internet, the opioid crisis, and the low-paying jobs typically found in rural West Virginia. In the past decade, West Virginia has been one of the few states in the country to lose population, and that largely occurred in the rural areas. Between 2000 and 2010, the metro valley areas in West Virginia saw an increase in nearly 50,000 people which is an approximate 5 percent increase. In contrast, rural West Virginia had a population loss of approximately 4,600 which is an approximate 0.6 percent decline (State of Rural West Virginia 2018).

Table 1 - West Virginia Census Summary (V2019)

	West Virginia	United States
Population	n	
Population estimates, July 1, 2019 (V2019)	1,792,147	328,239,523
Population estimates base, April 1, 2019 (V2019)	1,853,018	308,758,105
Population, percent change – April 1, 2010 [estimates July 1, 2019 (V2019)]	-3.3%	6.30%
Population, Census, April 1, 2010	1,852,994	308,745,538
Age and So	ex	
Persons under 5 years, percent, July 1, 2019	5.30%	6.10%
Persons under 18 years, percent, July 1, 2016 (V2019)	20.20%	22.40%
Persons 65 years and over, percent, July 1, 2016 (V2019)	19.90%	16.0%
Female persons, percent, July 1, 2016 (V2019)	50.50%	50.80%
Race and Hispani	ic Origin	
White alone, percent, July 1, 2019 (V2019)	93.5%	76.50%
Black or African American alone, percent, July 2, 2019 (V2019	3.60%	13.40%

	West Virginia	United States
American Indian and Alaska Native alone,	0.30%	1.30%
percent, July 1, 2019 (V2019)		
Asian alone, percent, July 1, 2019 (V2019)	0.80%	5.90%
Native Hawaiian and Other Pacific Island alone,		0.20%
percent, 2019 (V2019)		
Two or more races, percent, July 1, 2019	1.80%	2.70%
(V2019)		
Hispanic or Latino, percent, July 1, 2019	1.70%	18.30%
(V2019) White alone, not Hispanic or Latino, percent,		
<u> </u>	92.10%	60.4%
July 1, 2019 (V2019) Population Chara	notoristics	
Veterans, 2014-2018	134,508	18,611,432
	· · · · · · · · · · · · · · · · · · ·	13.50%
Foreign-born persons, percent, 2014-2018 Housing	1.60%	13.50%
	893,778	138,537,078
Housing units, July 1, 2018 (V2018) Owner-occupied housing unit rate, 2014-2018	72.9%	63.80%
Median value of owner-occupied housing units	12.9%	03.80%
2014-2018	\$115,000	\$204,900
Median selected monthly owner costs – with a		
mortgage, 2012-2018	\$1,023	\$1,558
Median selected monthly owner costs – without a		
mortgage, 2014-2018	\$319	\$490
Median gross rent, 2014-2018	\$711	\$1,023
Building permits, 2018	2,887	1,328,827
Families & Living A	<u>'</u>	
Households, 2014-2018	734,676	119,730,128
Persons per household, 2014-2018	2.42	2.63
Living in same house 1 year ago, percent of	88.40%	85.50%
persons age 1 year+, 2014-2018		
Language other than English spoken at home,	2.500/	21.500/
percent of persons age 5 years+, 2014-2018	2.50%	21.50%
Computer and in	ternet use	-
Households with a computer, percent, 2014-2018	81.80%	88.80%
Households with a broadband internet	72 000/	00.40/
subscription, percent, 2014-2018	72.90%	80.4%
Educatio	n	
High school graduate or higher, percent of	06 500/	97.70/
persons age 25 year+, 2014-2018	86.50%	87.7%
Bachelor's degree or higher, percent of persons	20.200/	21.500/
age 25 years+, 2014-2018	20.30%	31.50%
Health		
With a disability, under age 65 years, percent,	14.10%	8.60%

	West Virginia	United States
2014-2018		
Persons without health insurance, under age 65	7.90%	10.00%
years, percent	7.90%	10.00%
Econon	ıy	
In civilian labor force, total, percent of	53.10%	62.9%
population age 16 years+, 2014-2018	33.1070	02.9%
In civilian labor force, female, percent of	48.90%	58.20%
population age 16 years+, 2014-2018	40.90%	36.20%
Total accommodation and food services sales,	4,036,333	708,138,598
2012 (\$1,000)(c)	4,030,333	700,130,390
Total health care and social assistance	12,259,395	2,040,441,203
receipts/revenue, 2012 (\$1,000)(c)	12,239,393	2,040,441,203
Total manufacturers' shipments, 2012	24 552 072	5,696,729,632
(\$1,000)(c)	24,553,072	3,090,729,032
Total merchant wholesaler sales, 2012	14 205 427	5 200 022 170
(\$1,000)(c)	14,295,437	5,208,023,478
Total retail sales, 2012 (\$1,000)(c)	22,637,923	4,219,821,871
Total retail sales per capita, (2012)(c)	\$12,201	\$13,443

Transportation			
Mean travel time to work (minutes), workers age 16 years+, 2012-2016	25.8	26.6	
Income & Poverty			
Median household income (in 2018 dollars), 2014-2018	\$44,921	\$60,293	
Per capital income in past 12 months (in 2018 dollars, 2014-2018	\$25,479	\$32,621	
Persons in poverty, percent	17.80%	11.8%	

3.9.2 Environmental Impacts – No Action

The No Action will negatively impact the socioeconomics of the MSBE Project area, as West Virginia would continue to experience limited broadband service availability. Without broadband service, access to education, occupational, and medicinal resources would not improve. Over time, West Virginia would continue to grow further behind in technology advancements, negatively impacting the socioeconomics of the State.

3.9.3 Environmental Impacts – Proposed Action

Under the Proposed Action, during construction, the MSBE Project will result in minor, temporary, positive impacts through the creation of jobs related to construction activities.

Upon completion, the MSBE Project will result in long term, positive impacts to the residents and businesses in the immediate vicinity of each tower location. By providing broadband services to unserved and under-served areas of the state, the MSBE Project will provide new occupational, education, and medicinal opportunities for residents and businesses. Additionally, broadband availability may attract new businesses, more tourists, and individuals capable of remote telework to visit or settle in rural areas of West Virginia.

Adverse impacts to socioeconomics are not anticipated to result from the Proposed Action and will not be considered further in this PEA, nor will it be considered at site-specific planning.

3.10 Environmental Justice in Minority Populations and Low Income Populations

3.10.1 Affected Environment

Environmental justice compliance is guided by EO 12898, to address Environmental Justice in Minority Populations and Low-Income Populations, which requires federal agencies to identify and address disproportionately high and adverse human health or environmental effects that its activities may have on minority or low-income populations. CEQ defines the term "minority" as persons from any of the following groups: Black, Asian or Pacific Islander, American Indian or Alaskan Native, and Hispanic (CEQ 1997). See **Table 2** for the West Virginia Racial Composition (United States Census Bureau 2019). In West Virginia, 93.5% of the population is identified as white.

Table 2 - West Virginia Racial Composition

Race or Ethnicity	Number of Persons	Percent of Total
White alone, percent July 1, 2019 (V2019)	1,675,657	93.5%
Black or African American alone,		
percent July 2, 2019 (V2019	64,517	3.6%
American Indian and Alaska Native alone, percent July 1, 2019 (V2019)	5,376	0.3%
Asian alone, percent July 1, 2019 (V2019)	14,337	0.8%
Native Hawaiian and Other Pacific Island alone, percent 2019 (V2019)	0	
Two or more races, percent July 1, 2019 (V2019)	32,258	1.8%
Total	1,792,147	100.0%

CEQ considers minority or low income when at least 50 percent or more of its residents are minority or low income or when the population in the census tract has a "meaningfully greater" number of minority and low-income persons when compared to larger geographic areas such as a county or state (CEQ 1997). Within the state, 6.5 percent of the population is minority. A table of county specific information can be found in Appendix A.4. There are four counties with a minority population higher than the state average, including Fayette, Gilmer, Kanawha, and McDowell. The highest percentage of minority population is in Kanawha County at 11.4 percent, which is less than half of the national average at 23.5 percent.

The 2019 poverty rate for a family in West Virginia was 17.8 percent (United States Census Bureau 2019). A table of county specific information can be found in Appendix A.3. The percentage of poverty within the twenty counties range from 13.5 percent to 35.4 percent. All have rates above the national average of 11.8 percent. Seven of the twenty counties are below the state average, including Greenbrier, Harrison, Kanawha, Lewis, Preston, Taylor, and Tucker. The following counties within the MSBE Project range have poverty rates higher than the state average: Barbour, Boone, Braxton, Fayette, Gilmer, Lincoln, Logan, McDowell, Nicholas, Randolph, Upshur, Wavne, and Webster.

3.10.2 Environmental Impacts – No Action

Under the No Action, the MSBE project would not be implemented as proposed. The No Action could negatively impact environmental justice in minority populations and low-income populations of the MSBE Project areas because access to broadband would continue to be limited, thus access to education, employment, and medical care would continue to be limited.

3.10.3 Environmental Impacts – Proposed Action

Under the Proposed Action, construction activities will primarily occur on AML properties along ridgelines, in remote locations.

Based on the 2019 census data, the Proposed Action is not anticipated to adversely impact minority or low income populations. Upon completion, the Proposed Action will have long-term, positive impacts for the residents of rural West Virginia, regardless of their socioeconomic standing, by providing affordable internet service where it is not currently available. Internet access will result in increased access to employment, education, and medical services. The MSBE Project will not disproportionately negatively impact environmental justice populations; therefore, potential adverse impacts to environmental justice will not occur and will not be considered further in this PEA, nor will it be considered at site-specific planning.

3.11 Transportation

3.11.1 Affected Environment

West Virginia has a diverse transportation network composed of roadways, railways, and airports. West Virginia's road network comprises 38,770 miles of public roadways, of which 82 percent are considered rural (31,791 miles) and 18 percent are considered urban (6,979 miles) (Federal Highway Administration 2015). West Virginia has five major interstates that provide connections for intercity and interstate travel and totals approximately 554 miles (Federal Highway Administration 2015).

The MSBE Project will generally be located in rural areas of West Virginia, where traffic is typically free flowing, except during daily rush hours. Most roadways providing access to AML sites are private roads connecting to secondary county or state roadways. Heavy traffic volume on roads leading to tower sites is rare and would generally occur only because of road closure and roadway construction. Seasonal weather conditions, such as snowing, flooding, and mudflows, can make roads impassable and are the primary cause of inefficient access on rural and remote roadways. At most times, intersections and roadways near AML sites and other potential projects would be free flowing.

3.11.2 Environmental Impacts – No Action

Under the No Action, the MSBE project would not be implemented as proposed. No additional infrastructure would be constructed, thus no disturbance to this resource would occur as a result of the No Action.

3.12.3 Environmental Impacts – Proposed Action

Under the Proposed Action, during construction, trucks entering and exiting the sites may result in temporary increases to traffic, but these impacts would be temporary and minor in nature.

Traffic flows and volumes would return to their original state upon project completion. No long-term adverse impacts are anticipated to result from the Proposed Action and, impacts to transportation will not be considered further in this PEA, nor will impacts to transportation be considered during site-specific planning.

3.12 Recreation

3.12.1 Affected Environment

The West Virginia Chamber of Commerce highlights the incredible outdoor adventure and stunning scenic views within West Virginia. The West Virginia State Park system includes approximately 50 state parks and forests. This count does not include local, federal, or private parks and recreational facilities. A map of State and Federal recreational lands can be found in Figure 3. The WVDNR has expressed a desire and need to have broadband resources at their facilities.

The West Virginia Department of Commerce, Division of Tourism has divided the state into nine regions. The MSBE Project is located in six of these regions. See Table 3 for a breakdown of the regions based on the counties where the MSBE Project is located. Mountaineer Country is located in the northern portion of the state and has a rich multicultural heritage. Mountain Lakes is located in the central part of the state and boasts many large lakes. This region also has an abundance of arts, crafts and boutique shopping. Metro Valley is located in the south central to western portion of the state and is home to the state capital in Charleston, West Virginia. This region offers antiques, boutiques, historic sites, and many parks and forests. The Hatfield-McCoy Mountains is located in the southwestern portion of the state and this region has a deep history in coal mining heritage and a unique Appalachian culture. The New River-Greenbrier Valley is located in the southeastern portion of the state. This region is known for its outdoor recreation and coal mining history. The Potomac Highlands is located in the east central portion of the state and encompasses the Allegheny Mountains and the Monongahela National Forest (WV Tourism Office).

Table 3 – West Virginia Division of Tourism Regions and MSBE Project Counties

Mountaineer Country	Mountain Lakes	Metro Valley	Hatfield- McCoy Mountains	New River- Greenbrier Valley	Potomac Highlands
Preston	Lewis	Kanawha	Wayne	Fayette	Tucker
		Kanawna	-	•	
Taylor	Upshur		Lincoln	Greenbrier	Randolph
Harrison	Gilmer		Logan	McDowell	
Barbour	Braxton		Boone		
	Webster				
	Nicholas				

3.12.2 Environmental Impacts – No Action

Under the No Action, the MSBE project would not be implemented as proposed. No additional infrastructure would be constructed, thus no disturbance to this resource would occur as a result of the No Action. Broadband availability would continue to be limited at recreation facilities across rural West Virginia, representing a negative impact to this resource.

3.12.3 Environmental Impacts – Proposed Action

Under the Proposed Action, towers would not be constructed within areas of a park or recreational area utilized by citizens, including private parks open to the public.

Potential short-term impacts to recreation could occur during tower construction in the way of increased noise levels, but these impacts would be minor and temporary.

Upon completion, the Proposed Action may result in increased broadband capabilities near recreational facilities, which would be beneficial to those recreating in these isolated areas. Potential adverse impacts to recreation are not anticipated because the sites will be located on previously disturbed AML properties. Therefore, negative impacts to recreational resources are not anticipated and will not be considered further in this PEA, nor will impacts to recreation be considered at site-specific planning.

3.13 Noise

3.13.1 Affected Environment

Noise, defined herein, is an undesirable sound that interferes with normal activities or in some way reduces the quality of the environment. Noise is Federally regulated by the Noise Control Act of 1972 (NCA), 42 U.S.C. §§ 4901 – 4918 Although the NCA gives the USEPA the authority to prepare guidelines for acceptable ambient noise levels, it only charges Federal agencies that operate noise-producing facilities or equipment to implement noise standards. Ambient noise levels are typically very low in rural West Virginia. AML sites are often located away from private residences in very rural areas.

3.13.2 Environmental Impacts – No Action

Under the No Action, the MSBE project would not be implemented as proposed. No additional infrastructure would be constructed, thus no disturbance to this resource would occur as a result of the No Action.

3.13.3 Environmental Impacts – Proposed Action

Under the Proposed Action, the construction processes would result in short-term negative impacts to noise levels. Construction would be consistent with local noise ordinances and limited to daylight hours. Peak outdoor noise levels could range from 78-90 dBA during daylight hours (7am – 6pm) when construction equipment would be operated. The equipment would be operated for up to 8 hours when most residents are at work, leaving a reasonable exposure time of 2 hours per

day. The BMPs, SOPs, and mitigation measures in Section 2.3.6 will mitigate any temporary noise impacts during construction. Additionally, vegetation and steep elevation changes would help buffer the noise levels during construction. Upon completion, noise levels will return to original conditions. Impacts to noise will not be considered further in this PEA, nor will it be considered at site-specific planning.

3.14 Visual

3.14.1 Affected Environment

West Virginia is often considered one of the more scenic states in the nation, and several of the most beloved sights in the state center around its natural beauty. The MSBE Project will generally be located in rural, mountainous settings surrounded by sparsely populated areas. Isolated residences, small towns, federal lands, state parks, and two-lane roads may be located within the viewshed of a MSBE project. The region is characterized by steep mountains with narrow winding valleys, so viewshed size and type vary within each county.

3.14.2 Environmental Impacts – No Action

Under the No Action, the MSBE project would not be implemented as proposed. No additional infrastructure would be constructed, thus no disturbance to viewsheds would occur as a result of the No Action.

3.14.3 Environmental Impacts – Proposed Action

Under the Proposed Action, for a visual impact to be considered significant, adverse impacts on a land use with a valued viewshed would be required. As the land use varies among regions both in and outside West Virginia, each site will need to be reviewed in relation to surrounding land uses to avoid and minimize effects to viewsheds.

Typically, the AML sites are located in undeveloped areas. Each site location will be coordinated with the local Economic Development Authority, including notification to the public, to obtain input regarding sensitive viewsheds. In addition, UCDA, prior to site selection will contact OSMRE to initiate coordination with appropriate stakeholders during the evaluation, selection, and design of the backbone and satellite towers. If specially designated lands, such as national refuges, parks, or cultural resources, are present in the site vicinity, this coordination will include the appropriate land management agencies, such as the National Park Service and National Forest Service, as appropriate. (See Sections 3.15, 3.16, and 3.20.)

3.15 Historical and Cultural Resources

3.15.1 Affected Environment

Pursuant to 40 C.F.R. § 1508.14, the human environment is interpreted comprehensively to include the natural and physical environment, and the relationship of people with that environment. A

NEPA analysis, therefore, should systematically address the social and cultural (human) aspects of the environment as well as those that are natural, and the relationships between them. The term "cultural resources" typically is used to refer to historic, aesthetic, and cultural aspects of the human environment, such as archeological sites, buildings, and traditional resources and use areas.

West Virginia has a rich historic and cultural background. West Virginia was a favorite hunting ground of numerous Native Americans prior to the European settlers. The state was formed during the Civil War and is the only state that resulted from seceding from a confederate state. The mountainous terrain, river valleys, and rich resources have played an important role in the development of the state.

There is the potential for various types of historic and cultural resources within the 20 counties where the MSBE Project will occur. UCDA, in coordination with OSMRE and WVDEP, contacted the West Virginia State Historic Preservation Office (SHPO) to conduct a cursory review of the known eligible sites and potential for the MSBE project to impact these resources. However, detailed studies within the MSBE Project area were not conducted due to the phasing and need to locate the sites. These detailed studies to identify historic and cultural resources will be conducted as the sites are located within each county.

In accordance with 54 U.S.C. § 306108 (Section 106) of the National Historic Preservation Act (NHPA) 54 U.S.C. §§ 300101-307108 and the implementing regulations at 36 C.F.R. Part 800, Federal agencies are required to take into account the effect of their undertakings on historic properties and provide the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on those effects. Pursuant to 36 C.F.R. § 800.16(y), an "undertaking" is defined as a "project, activity or program funded in whole or part under the direct or indirect jurisdiction of a federal agency". For undertakings for which Section 106 is applicable, OSMRE must complete the consultation process to comply with statutory requirements. The consultation process includes four basic steps, which as outlined in the <u>Advisory Council on Historic Preservation (ACHP) 106 Applicant Toolkit</u>, include:

- Step 1: <u>Establish the Undertaking and Initiate Section 106 Process</u> Identify the federal undertaking and initiate communication with applicable SHPO, tribal nations, and other consulting parties
- Step 2: <u>Identify Historic Properties</u> Define an Area of Potential Effect (APE) and identify existing eligible and potentially eligible historic properties
- Step 3: <u>Assess Effects</u> If historic resources are present, assess the effects and provide analysis and information to the SHPO, tribal nations, public and other consulting parties.
- Step 4: Resolve Adverse Effects If adverse effects are identified, evaluate creative solutions that meet project needs while avoiding or minimizing impacts to historic properties in coordination with SHPO, tribal nations, and consulting parties. If needed, prepare a Memorandum of Agreement (MOA) committing to avoidance and/or mitigation measures identified during the consultation process. Or, if the project is phased and all information is not available, prepare a Programmatic Agreement (PA) to document the overall process for complying with the Section 106 consultation process at each stage of the project.

3.15.2 Environmental Impacts – No Action

The No Action Alternative would not result in impacts to the cultural or historical resources since it does not include any new construction of broadband infrastructure.

3.15.3 Environmental Impacts – Proposed Action

As identified in Section 2, the Proposed Action includes construction of communication towers and ancillary compound facilities, access roads, and work staging areas at various sites within 20 counties of West Virginia. OSMRE is funding the construction of these components at multiple sites, and UCDA will eventually coordinate applications for licensing of wireless antennas with the Federal Communications Commission (FCC). Therefore, OSMRE initiated consultation for the Section 106 process with FCC in addition to WVSHPO, ACHP, and federally recognized tribal nations with a cultural and historical interest in West Virginia.

Construction of the Proposed Action could have direct effects on historic and cultural resources. Similarly, the proximity of the construction and components could potentially alter the qualifying characteristics of a historic property. As cultural and historical resources vary among regions of West Virginia, each site will need to be evaluated for potential affects to both cultural properties and archaeological resources in coordination with SHPO and federally recognized tribes. Overall, OSMRE does not anticipate the Proposed Action will have an adverse effect to historic and cultural resources. Each site will be on or adjacent to AML that were previously disturbed. In addition, there are a total of approximately 2,400 AML sites² within the 20 counties, which provides options for locating the sites to avoid or minimize effects. To address the phasing of identifying the sites and specific construction, OSMRE is considering the development of a Programmatic Agreement (PA) to comply with Section 106 and provide an overall process to evaluate and assess the historic resources and potential effects as the sites are located. Absent a PA, each site will be evaluated in accordance with Section 106 and EO 13175 Consultation and Coordination with Indian Tribal Governments.

3.16 Tribal Lands and Cultural Resources

3.16.1 Affected Environment

The first people known to occupy the territory of present West Virginia by 10,500 B.C. were the Paleo-Indians. After that, the region was continuously occupied by native people until the 17th century. Tribes were forced to vacate in the mid-1800s. Native American artifacts still crop up today along the Ohio River. One tribe with a commanding presence along the Ohio River was the Shawnee. The Shawnee lived in the upper Ohio Valley and could be found as far south as the Kanawha River. The Delaware tribe also lived here but were pushed out of the Eastern Panhandle by the late 1700s. Seneca and Mohawk tribes lived in north-central West Virginia, near Morgantown. There is also a potential connection to the Cherokee tribe within West Virginia. Bonnie Brown, the head of Native American Studies at West Virginia University, speculates that

² Number is based on inventory search of e-AMLIS in April of 2020.

there could have been a stronger connection than expected, such as the Cherokee may not have considered West Virginia homeland, but instead it was hunting land, which means they were present six months out of the year or more. (Knollinger, 2019)

A Native American presence in the state lingers with Native American names throughout Appalachia, like the Kanawha River, Seneca Rocks, and Wheeling. The more tangible presence is the people who identify with a tribe that was here at an earlier point in history. There are an estimated 11,000 Native American descendants that live in West Virginia.

Currently, there are no designated Native American or tribal lands in West Virginia, but there are 13 federally recognized tribes that have cultural interests in the state. These tribes include:

- Catawba Indian Nation
- The Delaware Nation
- Delaware Tribe of the Indians of Oklahoma
- Eastern Band of Cherokee Indians
- Eastern Shawnee Tribe of Oklahoma
- Keweenaw Bay Indian Community
- Osage Nation
- Seneca Cayuga Nation
- Wyandotte Nation
- United Keetoowah Band of Cherokee Indians
- Bad River Band of the Lake Superior Tribe of Chippewa Indians
- Shawnee Tribe
- Cherokee Nation

Presidential Executive Order 13175, Presidential Memorandum on Tribal Consultation, and Department Policy on Consultation with Indian Tribes, as adopted in Secretarial Order 3317 require consultation with federally recognized tribes. In addition, Section 106 of the NHPA requires coordination with the federally recognized tribes and requests for their tribes to be consulting parties.

OSMRE initiated consultation with the thirteen federally recognized tribes in October 2018 and has continued consultation during the development of the PEA. The correspondence includes letters, phone calls, emails, pre-arranged conference calls, and requests for comments on a possible draft PA (Appendix B). Responses were received from five tribes at various times during the consultation process. Five of the Tribes responded, and their respective responses are as follows:

- United Keetoowah Band of Cherokee Indians requested by phone that the ACHP be involved in the MSBE Project
- Catawba Indian Nation requested to be consulted for sites within the following specific counties: Braxton, Fayette, Gilmer, Greenbrier, Harrison, Lewis, Marion, Mercer, Monongalia, Nicolas, Raleigh, Summers, and Taylor.
- The Delaware Nation requested to be consulting parties for sites for the MSBE

- Project.
- Cherokee Nation requested to be consulted for the sites within the following specific counties: Boone, Cabell, Fayette, Kanawha, Lincoln, Logan, Mason, McDowell, Mercer, Mingo, Putnam, Raleigh, Summers, Wayne, and Wyoming.
- Osage Nation requested to be a consulting part.

Consultation with the Tribes will continue through the construction of the MSBE Project. The presence and potential effects to Native American resources will be reviewed and determined on a site by site basis in coordination with the tribes in accordance with Section 106 of the NHPA and EO 13175 Consultation and Coordination with Indian Tribal Governments.

3.16.2 Environmental Impacts – No Action

The No Action Alternative would not result in direct impacts to tribal resources because this alternative does not include any new construction of broadband infrastructure. However, the broadband wireless services would not be expanded in 20 counties, which would limit wireless services to the tribes that utilize broadband services.

3.16.3 Environmental Impacts – Proposed Action

The Proposed Action will not take or impact designated reservations or tribal lands since there are no designated lands in West Virginia. However, the Proposed Action has the potential to affect tribal cultural resources. Therefore, each site will be coordinated with the tribes to identify if there is the potential presence of an important resource.

Since there are multiple AML lands to choose from within the state, it anticipated that impacts to tribal resources can be avoided. Consultation with the tribes will include a site-by-site review with the tribes to ensure potential effects are avoided, as feasible. If not feasible to avoid, the potential affects will be minimized, and mitigation will be identified in consultation with the impacted tribe(s) as mandated by Section 106 of the NHPA and EO 13175 Consultation and Coordination with Indian Tribal Governments. prior to any construction.

3.17 Human Health and Safety

3.17.1 Affected Environment

The MSBE project will be located on AML properties, and AML properties often contain features from past coal mining activities that are hazardous to human health and safety.

In regard to technology, there is no convincing or generally accepted scientific evidence to date that adverse short- or long-term human health effects may occur from the RF radiation produced by base stations for cell phones. Because wireless networks produce generally lower RF signals than base stations, the current state of the science indicates that no adverse health effects are expected from the level of exposure to RF radiation at a reasonable distance from base stations that would be routinely experienced by the general public (WHO, ICNIRP and FCC). Therefore,

operation of wireless and microwave towers are assumed to comply with Executive Order 13045 "Protection of Children from Environmental Health Risks and Safety Risks" (http://www.archives.gov/federal- register/executive-orders/1997.html#13045).

Because humans are generally below the plane of and at least 30 feet from primary RF radiation associated with broadband antennas, based on information available to date there should be negligible impact to human health.

3.17.2 Environmental Impacts – No Action

Under the No Action, the MSBE project would not be implemented as proposed. No additional infrastructure would be constructed, thus no impacts to this resource would occur as a result of the No Action. Any hazards to human health and safety present at AML sites, would remain present.

3.17.3 Environmental Impacts – Proposed Action

Under the Proposed Action, in the event hazardous conditions are present at an AML site, reclamation efforts will be conducted to protect human health and safety.

Because the sites will be remotely located, and science does not indicate there is any danger to humans from this technology, adverse impacts to human health and safety are expected to be minimal and limited to the dangers of a construction site. BMPs will be followed during construction to maximize worker safety. Impacts to human health and safety will not be considered further in this PEA, nor must it be considered at site-specific planning.

3.18 Hazardous Waste

3.18.1 Affected Environment

Proper waste management is an essential part of society's public and environmental health. The Resource Conservation and Recovery Act (RCRA), passed in 1976, 42 U.S.C. § 6901-6992k, created the framework for America's hazardous and non-hazardous waste management programs. Materials regulated by RCRA are known as "solid wastes." Only materials that meet the definition of solid waste under RCRA can be classified as hazardous wastes, which are subject to additional regulation. EPA developed detailed regulations that define what materials qualify as solid wastes and hazardous wastes. "Hazardous wastes" are substances with physical properties of ignitability, corrosivity, reactivity, or toxicity that might cause an increase in mortality or reversible illness, or that might pose a substantial threat to human health or the environment. Hazardous wastes are solids, liquids, contained gaseous or semisolid wastes, or any combination of wastes that poses a substantial present or potential hazards to human health or the environment. Such materials or wastes can present substantial danger to public health or welfare and the environment when released or improperly managed (40 C.F.R. §261.3). A project would be considered to have significant adverse impacts on hazardous solids if it is noncompliance with applicable local, state and federal regulations, if the project had an increase in the amount of hazardous waste generated or if disturbance of contaminated sites occurred.

3.18.2 Environmental Impacts - No Action

Under the No Action, the MSBE project would not be implemented as proposed. No additional infrastructure would be constructed, thus no impact to this resource would occur as a result of the No Action.

3.18.3 Environmental Impacts – Proposed Action

Broadband infrastructure proposed within the MSBE Project typically does not involve hazardous wastes, but construction activities could uncover hazardous wastes. If hazardous wastes are found during construction, the applicable local, state and federal regulations will be followed. No adverse impacts to hazardous waste are anticipated; impacts to hazardous wastes will not be considered further in this PEA, nor will it be considered at site-specific planning.

3.19 Solid Waste

3.19.1 Affected Environment

Proper waste management is an essential part of society's public and environmental health. The Resource Conservation and Recovery Act (RCRA), passed in 1976, 42 U.S.C. § 6901-6992k, created the framework for America's hazardous and non-hazardous waste management programs. Materials regulated by RCRA are known as "solid wastes." EPA developed detailed regulations that define what materials qualify as solid wastes and hazardous wastes. RCRA states that "solid waste" means any garbage or refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, resulting from industrial, commercial, mining, and agricultural operations, and from community activities.

3.19.2 Environmental Impacts – No Action

Under the No Action, the MSBE project would not be implemented as proposed. No additional infrastructure would be constructed, thus no impact to this resource would occur as a result of the No Action.

3.19.3 Environmental Impacts – Proposed Action

Broadband infrastructure proposed within the MSBE Project could involve the generation of solid wastes. All solid waste will be managed at the site properly according to local, state and federal regulations. There is also a potential that solid wastes be encountered during earth disturbance and construction. If solid wastes are found during construction, the applicable local, state and federal regulations will be followed. Adverse impacts from solid waste are not anticipated; therefore, impacts will not be considered further in this PEA, nor will it be further evaluated at project-level planning.

3.20 Specially Designated Lands

3.20.1 Affected Environment

Specially designated lands include lands such as national parks, state and federal wildlife refuges, public parks, national monuments, wilderness and wilderness study areas, roadless areas, wild and scenic rivers, and other classifications. West Virginia includes numerous lands with special designations.

3.20.2 Environmental Impacts – No Action

Under the No Action, the MSBE project would not be implemented as proposed. No additional infrastructure would be constructed, thus no impact to this resource would occur as a result of the No Action.

3.20.3 Environmental Impacts – Proposed Action

Under the Proposed Action, construction will not occur within specially designated lands. No adverse impacts to specially designated lands are anticipated. However, specially designated lands can be sensitive to specific changes in land use in their vicinity. Therefore, under the Proposed Action, the areas surrounding the sites considered for the towers will be reviewed to determine if there are any specially designated lands. During the site evaluation and prior to selection, UCDA will contact OSMRE to coordinate with the National Park Service and the National Forest Service to obtain input in the evaluation of the site locations and design to avoid and minimize impacts as feasible.

3.21 Cumulative Effects

Cumulative impacts are those environmental impacts that could result from the implementation of the Proposed Action or the No Action, when added to the impacts from all other past, present, and reasonably foreseeable activities, regardless of who is conducting such activities.

The MSBE Project proposes to utilize relatively unproductive lands to facilitate a critically needed infrastructural service through 20 counties of West Virginia to generate economic benefits through an expanded broadband service.

3.21.1 No Action Alternative

The No Action Alternative would not construct a broadband network and would result in a continued lack of wireless services. There would be no direct impacts to the environment from construction, and thus no cumulative affects to the environmental resources. However, there would be a cumulative impact in loss of the benefits gained from wireless services to residents and businesses. This cumulative impact would be an ongoing result of no network services that would continue to affect the efficiency and economic growth in the area until other services could be provided in the area.

3.21.2 Proposed Action

The Proposed Action will construct individual towers at specific sites on or adjacent to disturbed AML sites throughout 20 counties. As discussed in previous sections, the Proposed Action is anticipated to have minimal to no impact on a majority of resources in the MSBE Project area, and thus would not have any cumulative impacts. The MSBE Project does have the potential to impact the following resources, which will be evaluated in detail when the specific sites are located:

- Geology
- Water Resources
- Floodplains
- Soils
- T&E Species
- Migratory Birds
- Wildlife
- Visual
- Historical and Cultural Resources
- Tribal Cultural Resources
- Specially Designated Lands

Impacts to these resources could potentially create cumulative effects if the sites selected are in the vicinity of other projects (planned or completed) that had or will impact these resources. The likelihood of this scenario is low given the sites will be located on or adjacent to AML sites, along ridges and typically not in developed areas

There is the potential for adverse visual impacts and a cumulative effect in relation to scenic areas or cultural resources within the 20 counties. West Virginia is known for its varied history and scenic mountainous areas. The construction of towers could be considered a visual intrusion to the setting of these resources. There is a specific interest in improving wireless services in remote areas, so although the sites will be located in remote areas, measures will be taken to balance the potential for visual effects and providing adequate services. Coordination with the individual counties and stakeholders and implementation of BMPs will be critical to evaluating the site locations and an important tactic in minimizing these impacts.

The MSBE Project will have positive cumulative impacts to socioeconomic resources within the state. Residents and businesses within each county will experience additional wireless connections and increased access to other businesses and resources via cellular and broadband services. This would promote additional growth of small businesses, expansion of medical, occupational, and educational services, as well as opportunity for remote telework capability of residents. Coordination with the individual counties and stakeholders will be critical to evaluating the site locations and an important tactic in maximizing these impacts.

3.22 Summary

Selection of the Proposed Action, the MSBE Project, will result in long-term positive impacts on local communities in the proposed project vicinities, regions, and state.

While preparation and construction for the sites could result in some minimal short-term impacts to the hydrology, vegetation, soils, air quality, noise, and fish and wildlife, the long-term beneficial impacts to the local and regional communities outweigh these temporary impacts. Overall, the improved land use will facilitate significant economic growth to improve the communities. In general, an improvement to the quality of life will be realized after completion of the Proposed Action due to the increased availability of broadband services and the accompanying growth in employment opportunities. The primary long-term benefit to the communities and local residents will be economic growth stemming from small business creation, access to online sales channels for local craftspeople, increased job training opportunities, and potential business relocation opportunities.

See Table 4 for the Impact Assessment Survey on the Potential Impacts to Environmental Settings.

Selection of the No Action Alternative would not result in new short- and long-term positive impacts on local community and environmental values in the Proposed Action area and vicinity. The current local stagnating economy would continue to be degraded by absence of new external economic drivers and the continued lack of improved land use.

Table 4 - Impact Assessment Survey to Environmental Settings

Environmental Setting	Impact Assessment
Topography	Negligible - Not considered further
Geology	Additional Site-Specific Review
Water Resources	Additional Site-Specific Review
Navigable Waters	Not anticipated – Not considered further
Floodplains	Additional Site-Specific Review
Groundwater	Not anticipated – Not considered further
Surface Water	Negligible - Not considered further
Wild and Scenic Rivers	Not anticipated – Not considered further
Air Quality	Negligible - Not considered further
Soils	Additional Site-Specific Review
Vegetation	Negligible - Not considered further
T&E Species	Additional Site-Specific Review
Migratory Birds	Additional Site-Specific Review
Wildlife	Additional Site-Specific Review
Land Use	Not anticipated – Not considered further
Socioeconomics	Not anticipated – Not considered further
Environmental Justice	Not anticipated – Not considered further
Transportation	Not anticipated – Not considered further
Recreation	Not anticipated – Not considered further
Noise	Negligible - Not considered further

Environmental Setting	Impact Assessment
Visual	Additional Site-Specific Review
Historical and Cultural Resources	Additional Site-Specific Review
Tribal Lands and Cultural Resources	Additional Site-Specific Review
Human Health and Safety	Not anticipated – Not considered further
Hazardous Waste	Not anticipated – Not considered further
Solid Waste	Not anticipated – Not considered further
Specially Designated Lands	Additional Site-Specific Review

4.0 CONSULTATIONS AND COORDINATION

As discussed previously in Section 1.3, correspondence completed during consultations can be found in Appendix B. Additional consultation will occur during the site-specific analysis of each site, as each site is identified.

4.1 Section 106 Consultation of the NHPA

During the development of the MSBE Project, OSMRE contacted SHPO, FCC, and the ACHP to discuss the project description and methodologies for complying with Section 106 for the NHPA. A request for consultation was also requested from thirteen federally recognized tribes that expressed a cultural and historical interest within West Virginia. The results of the coordination and consultation included discussions to begin drafting a PA that outlines an overall process to addresses the potential effects of the MSBE Project. OSMRE will continue to engage ACHP, tribal governments and SHPO in the potential development of a PA. Absent a PA, consultation and coordination will be coordinated on a site by basis in accordance with Section 106 of the NHPA and EO 13175 Consultation and Coordination with Indian Tribal Governments. See Section 3.15 for more details.

4.2 Tribal Consultation

OSMRE provided formal letters to each of the thirteen federally recognized tribes that expressed a cultural and historical interest within West Virginia introducing the MSBE Project and requesting their participation. In addition to letters mailed to the tribes in October 2018, OSMRE scheduled two conference calls with the tribes, provided follow-up emails and phone calls to provide information, request input regarding potential effects to tribal resources, and participation in the development of the PA. Of the thirteen tribes, a total of five responded to the request for consultation and information. See Section 3.16 for more information.

4.3 List of Potential Permits

Site-specific reviews of potential impacts will be conducted and applicable regulations will be followed. Depending on the location of the site, the information required for consultations and permits with the following agencies will be conducted:

• USACE: Wetland and Jurisdictional Water Impacts

- United States Department of Agriculture National Resources Conservation Service: Preserved Farmlands Protected by the FPPA.
- USFWS: Section 7 Endangered Species Act Consultation for Federally Listed T&E Species.
- WVDEP Division of Air Quality, Water and Waste and AML.
- West Virginia Division of Culture and History SHPO: Section 106 of the Historical Preservation Act for Cultural Resources.
- West Virginia Division of Natural Resources: State Listed T&E Species.
- WVDEP State 401 Water Quality Permit (Likely issued concurrent with Nationwide 404 Permit).
- West Virginia Division of Highways (WVDOH) Permit for Construction and Crossings within WVDOH right of--way.
- WVDEP Construction Stormwater Permit.
- West Virginia Division of Natural Resources, Office of Land of Streams Stream Activity Permit
- County Building and/or Floodplain Permit

4.4 Public Involvement

On June 5, 2018, the WVDEP announced the award of a grant to UCDA through the AML Pilot Program. UCDA is the lead agency responsible for coordinating the implementation of the MSBE Project. The UCDA discussed the MSBE Project with the County Commissioners including the potential impacts and any potential collaboration on future public discourse on the project. The area involved with this undertaking is expansive and incudes twenty counties across West Virginia to improve broadband connectivity in rural unserved and underserved communities. The success of an undertaking of this size is dependent on the involvement of the local stakeholders in site selection.

These efforts will continue through the various phases of the project to inform the public of the scope and benefits of the project. The UCDA, during its publicly noticed monthly board meetings, discusses the project status and provides updates. Also, the MSBE Project PEA is being made available to the public for a 15-day

comment period. Comments received will be addressed, utilized in OSMRE's decision-making process, and included in the final decision document.

An outreach plan will be implemented to share and obtain information from the local communities and stakeholders through the local Economic Development Authorities (EDA). The local EDAs are unique in that state statute (West Virginia Code Chapter 31-15-5) dictates the members of the board of directors include at least one county commissioner and at least one member of the municipal council or the mayor. The dynamic make-up of the development board will increase the awareness of the Undertaking throughout the community.

Sites will be identified based on eligible AML sites, as well as elevations and line of site for radio frequency propagation. Prior to moving forward with any site in a county, outreach contact will be made to the local EDA, Regional Planning and Development Council, and/or local government body. Public involvement will be achieved with a public notice, and the local EDA posting the MSBE Project information on their next board of director meetings, which is also classified as a public meeting.

UCDA, in coordination with DEP, will continue to work with the directors of the local EDA to expand awareness of the Undertaking and specifically the tower site or sites to be constructed within their county. A continuation of the effort will be made by working with the local community leaders to establish a public meeting to be held in the immediate area to be impacted by the tower to allow community members the ability to learn about the Undertaking and make comments. If applicable, additional agencies will be contacted for input into the sites and status of the MSBE Project.

On June 3, 2020, a Notice of Availability of the PEA was posted on the OSMRE Appalachian Region website for a 15-day comment period until June 18, 2020. During this comment period, a copy of the PEA was available for download. Additionally, OSMRE sent a letter to federal, state, local, and tribal stakeholders soliciting comments. OSMRE received no written public comments but did receive an inquiry from the National Park Service regarding the towers and the viewshed of the New River Gorge National River and the Gauley River National Recreation Area. Based on this inquiry, the PEA is revised at Sections 3.14, 3.20, 3.21 and Table 4 of Section 3.22 to include coordination with the National Park Service and the National Forest Service to obtain input in the evaluation of the site locations and design to avoid and minimize impacts as feasible.

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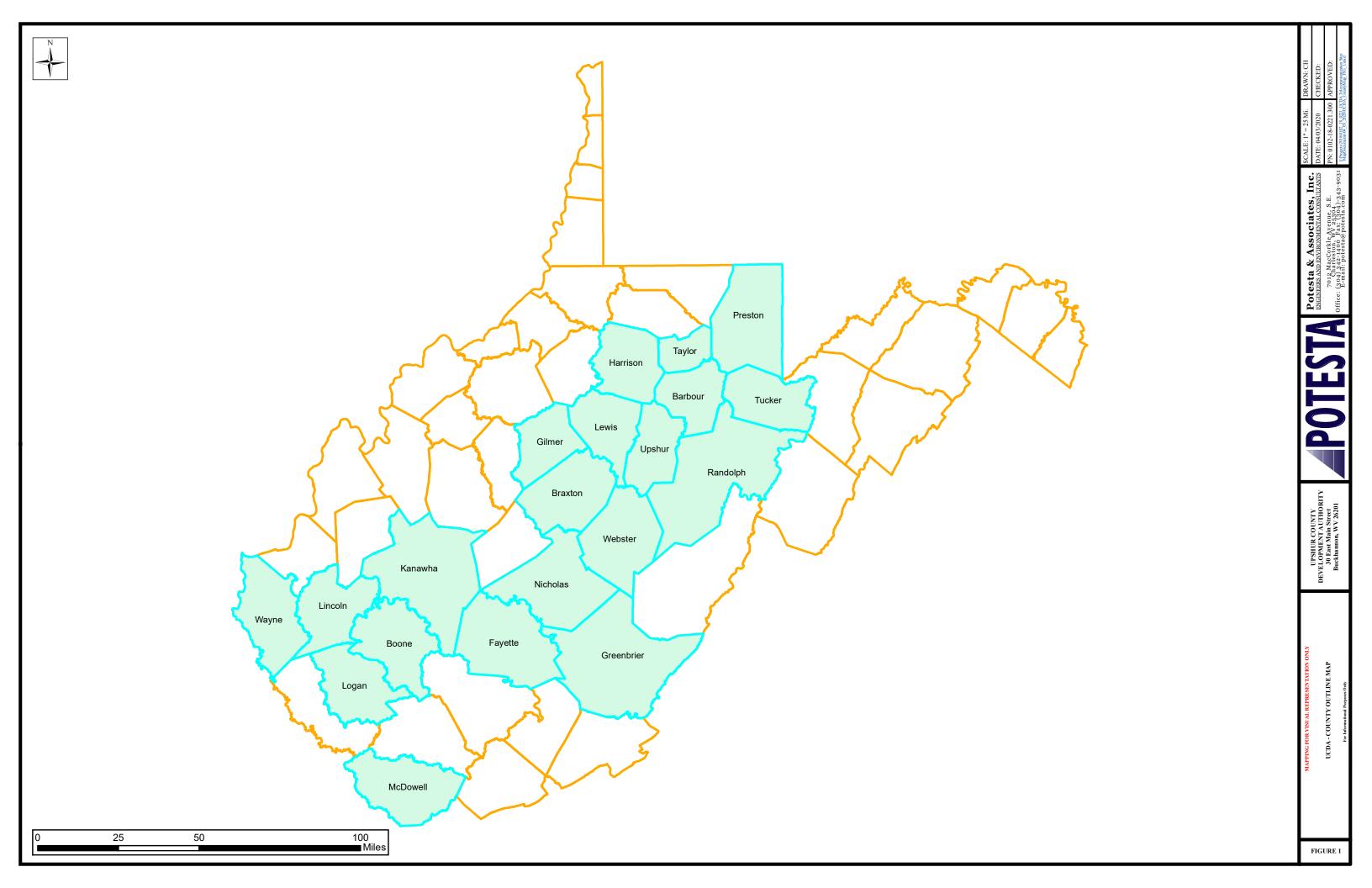
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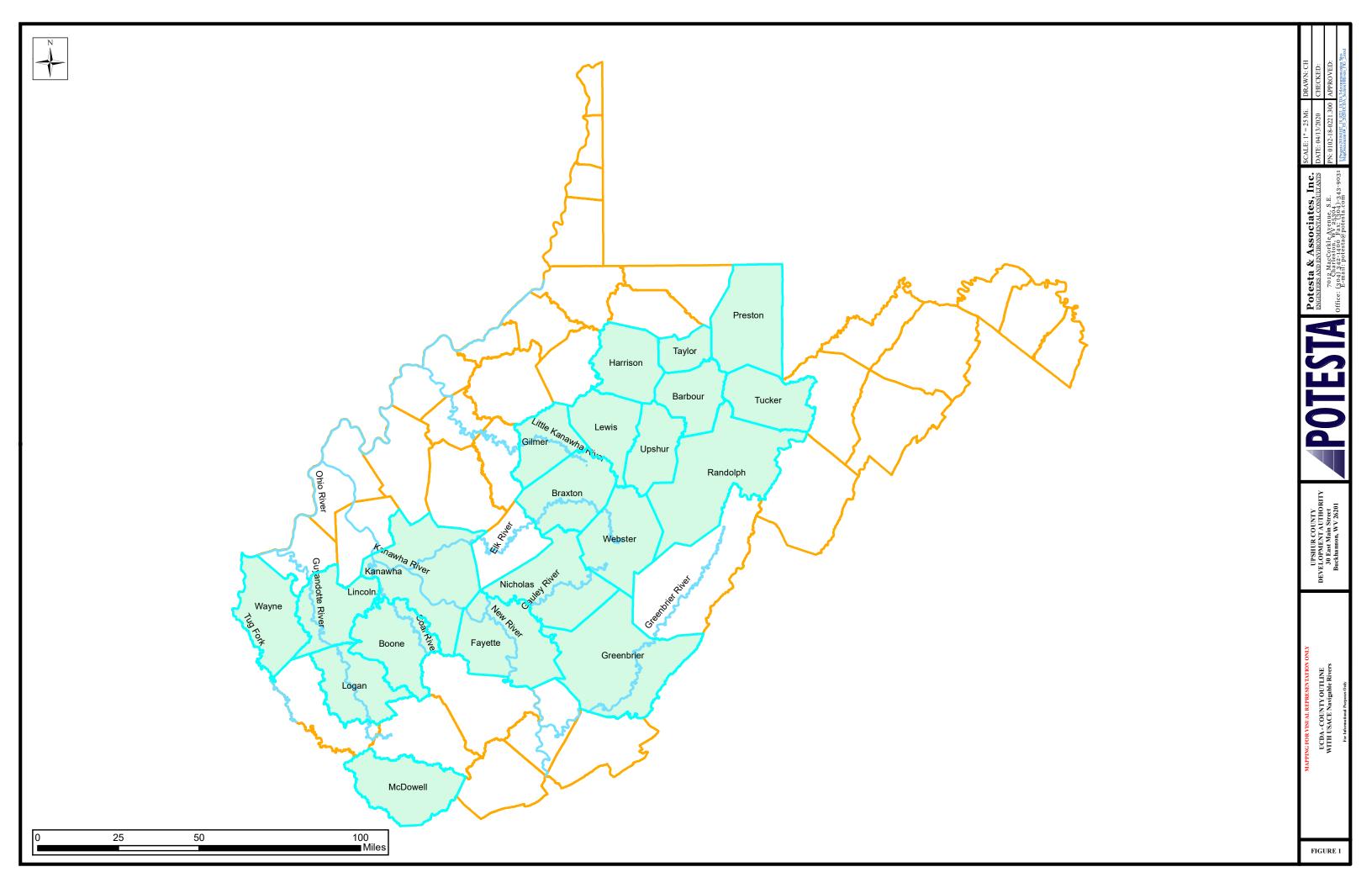
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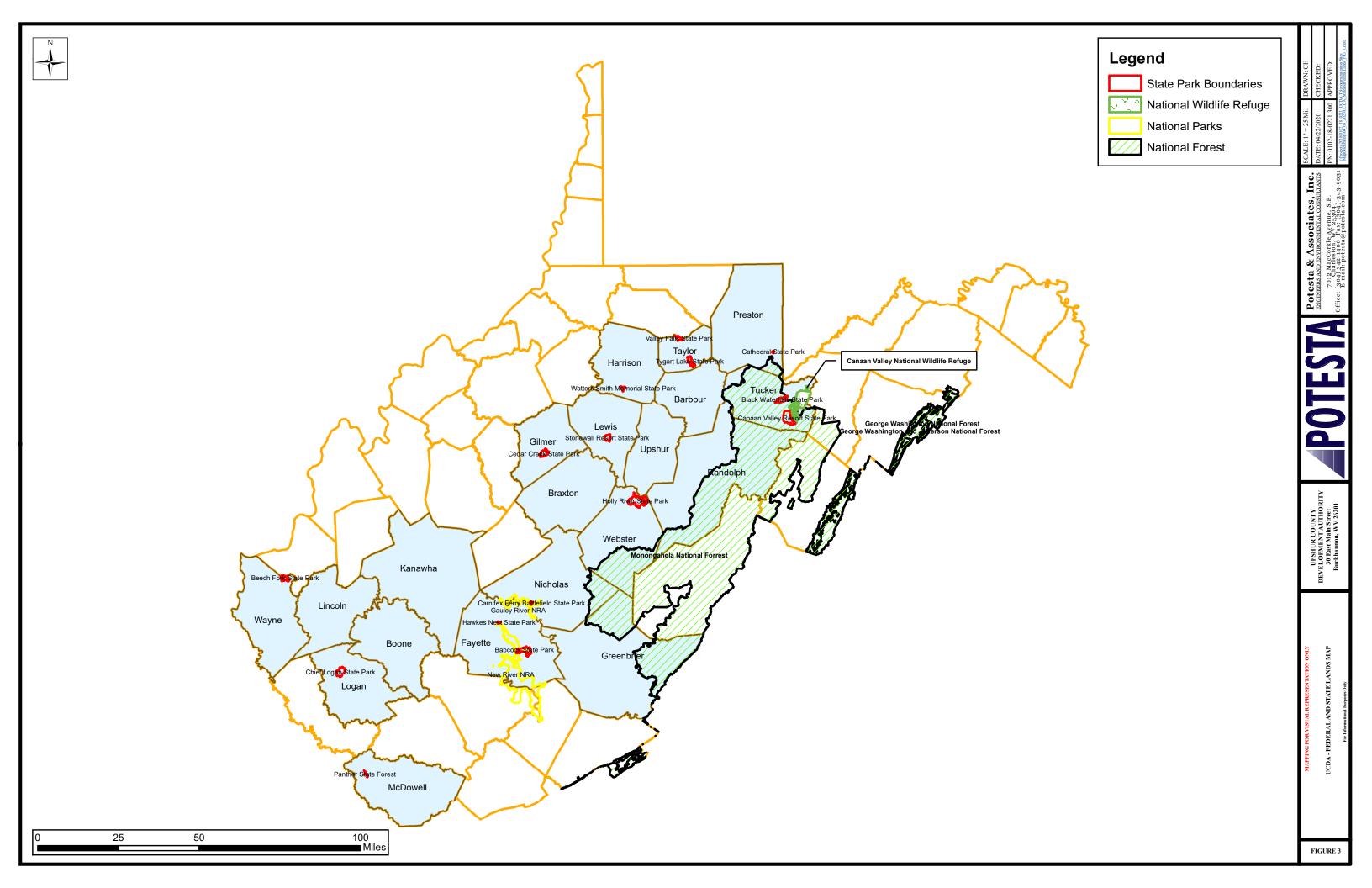
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Figures







Appendix A

Appendix A.1

Appendix A.1 Ups	hur	
Label	Area (acres)	Percent Coverage
Census Roads	6195.82	2.73
Forested	179251.35	79.00
Forested in SMCRA Permit Area	2447.31	1.08
Pre-SMCRA Forested	2003.46	0.88
Grasslands/Pastureland/Agriculture	30256.20	13.33
Mine Grass	1257.27	0.55
Pre-SMCRA Grass	646.30	0.28
Herbaceous Wetlands	120.43	0.05
Open Water	1310.12	0.58
Barren/Developed	2781.66	1.23
Mine Barren	408.86	0.18
Pre-SMCRA Barren	30.53	0.01
Woody Wetlands	190.33	0.08
TOTALS:	226899.65	100
Harr		
Label	Area (acres)	Percent Coverage
Forested	186832.47	70.11
Grasslands/Pastureland/Agriculture	42748.54	16.04
Barren/Developed	8106.94	3.04
Open Water	2016.18	0.76
Mine Grass	1271.39	0.48
Mine Barren	574.06	0.22
Forested in SMCRA Permit Area	1307.28	0.49
Pre-SMCRA Grass	4056.69	1.52
Pre-SMCRA Barren	770.63	0.29
Pre-SMCRA Forested	9601.25	3.60
Herbaceous Wetlands	162.33	0.06
Woody Wetlands	66.16	0.02
Census Roads	8959.50	3.36
TOTALS:	266473.40	100
Pres	ston	
Label	Area (acres)	Percent Coverage
Forested	311229.77	74.70
Grasslands/Pastureland/Agriculture	64024.51	15.37
Barren/Developed	7207.75	1.73
Open Water	2935.19	0.70
Mine Grass	3427.13	0.82
Mine Barren	821.03	0.20
Forested in SMCRA Permit Area	4097.38	0.98
Pre-SMCRA Grass	2583.70	0.62
Pre-SMCRA Barren	472.99	0.11
Pre-SMCRA Forested	7614.94	1.83
Herbaceous Wetlands	706.42	0.17

Woody Wetlands	1560.59	0.37
Census Roads	9959.68	2.39
TOTALS:	416641.09	100
Barb	our	
Label	Area (acres)	Percent Coverage
Forested	164231.30	74.91
Grasslands/Pastureland/Agriculture	35868.97	16.36
Barren/Developed	1153.85	0.53
Open Water	2217.07	1.01
Mine Grass	1196.05	0.55
Mine Barren	320.50	0.15
Forested in SMCRA Permit Area	922.26	0.42
Pre-SMCRA Grass	2587.80	1.18
Pre-SMCRA Barren	65.44	0.03
Pre-SMCRA Forested	4660.86	2.13
Herbaceous Wetlands	302.62	0.14
Woody Wetlands	203.93	0.09
Census Roads	5493.10	2.51
TOTALS:	219223.75	100
Lev	vis	
Label	Area (acres)	Percent Coverage
Forested	202456.12	81.27
Grasslands/Pastureland/Agriculture	28438.59	11.42
Barren/Developed	2091.16	0.84
Open Water	3655.77	1.47
Mine Grass	123.15	0.05
Mine Barren	14.10	0.01
Forested in SMCRA Permit Area	252.10	0.10
Pre-SMCRA Grass	1138.46	0.46
Pre-SMCRA Barren	32.64	0.01
Pre-SMCRA Forested	5013.96	2.01
Herbaceous Wetlands	64.33	0.03
Woody Wetlands	21.23	0.01
Census Roads	5814.75	2.33
TOTALS:	249116.36	100
Brax		
Label	Area (acres)	Percent Coverage
Forested	292020.77	88.39
Grasslands/Pastureland/Agriculture	24005.52	7.27
Barren/Developed	2162.40	0.65
Open Water	3337.00	1.01
Mine Grass	63.01	0.02
Mine Barren	67.20	0.02
Forested in SMCRA Permit Area	1239.08	0.38
Pre-SMCRA Grass	49.23	0.01
Pre-SMCRA Barren	1.93	0.001

Pre-SMCRA Forested	283.50	0.09
Herbaceous Wetlands	7.04	0.002
Woody Wetlands	52.09	0.02
Census Roads	7085.50	2.14
TOTALS:	330374.28	100
Gilm	er	
Label	Area (acres)	Percent Coverage
Forested	194639.20	89.63
Grasslands/Pastureland/Agriculture	15448.60	7.11
Barren/Developed	920.34	0.42
Open Water	1047.86	0.48
Mine Grass	13.48	0.01
Mine Barren	0.12	0.0001
Forested in SMCRA Permit Area	13.66	0.01
Pre-SMCRA Grass	52.26	0.02
Pre-SMCRA Barren	9.39	0.004
Pre-SMCRA Forested	515.42	0.24
Herbaceous Wetlands	8.67	0.004
Woody Wetlands	5.18	0.002
Census Roads	4476.06	2.06
TOTALS:	217150.25	100
Rando	olph	
Label	Area (acres)	Percent Coverage
Forested	597646.22	89.85
Grasslands/Pastureland/Agriculture	42942.69	6.46
Barren/Developed	3152.83	0.47
Open Water	2889.88	0.43
Mine Grass	460.87	0.07
Mine Barren	414.34	0.06
Forested in SMCRA Permit Area	2209.46	
Dro CMCDA Cross	2209.40	0.33
Pre-SMCRA Grass	219.82	0.33 0.03
Pre-SMCRA Grass Pre-SMCRA Barren		
	219.82	0.03
Pre-SMCRA Barren	219.82 30.15	0.03 0.005
Pre-SMCRA Barren Pre-SMCRA Forested	219.82 30.15 1337.31	0.03 0.005 0.20
Pre-SMCRA Barren Pre-SMCRA Forested Herbaceous Wetlands	219.82 30.15 1337.31 860.58	0.03 0.005 0.20 0.13
Pre-SMCRA Barren Pre-SMCRA Forested Herbaceous Wetlands Woody Wetlands	219.82 30.15 1337.31 860.58 2070.63	0.03 0.005 0.20 0.13 0.31
Pre-SMCRA Barren Pre-SMCRA Forested Herbaceous Wetlands Woody Wetlands Census Roads	219.82 30.15 1337.31 860.58 2070.63 10889.78 665124.56	0.03 0.005 0.20 0.13 0.31
Pre-SMCRA Barren Pre-SMCRA Forested Herbaceous Wetlands Woody Wetlands Census Roads TOTALS:	219.82 30.15 1337.31 860.58 2070.63 10889.78 665124.56	0.03 0.005 0.20 0.13 0.31
Pre-SMCRA Barren Pre-SMCRA Forested Herbaceous Wetlands Woody Wetlands Census Roads TOTALS:	219.82 30.15 1337.31 860.58 2070.63 10889.78 665124.56	0.03 0.005 0.20 0.13 0.31 1.64
Pre-SMCRA Barren Pre-SMCRA Forested Herbaceous Wetlands Woody Wetlands Census Roads TOTALS: Tuck Label	219.82 30.15 1337.31 860.58 2070.63 10889.78 665124.56 Ker Area (acres)	0.03 0.005 0.20 0.13 0.31 1.64 100 Percent Coverage
Pre-SMCRA Barren Pre-SMCRA Forested Herbaceous Wetlands Woody Wetlands Census Roads TOTALS: Tuck Label Forested	219.82 30.15 1337.31 860.58 2070.63 10889.78 665124.56 xer Area (acres) 230212.91	0.03 0.005 0.20 0.13 0.31 1.64 100 Percent Coverage 85.45 6.61
Pre-SMCRA Barren Pre-SMCRA Forested Herbaceous Wetlands Woody Wetlands Census Roads TOTALS: Tuck Label Forested Grasslands/Pastureland/Agriculture	219.82 30.15 1337.31 860.58 2070.63 10889.78 665124.56 (er Area (acres) 230212.91 17805.33	0.03 0.005 0.20 0.13 0.31 1.64 100 Percent Coverage 85.45 6.61
Pre-SMCRA Barren Pre-SMCRA Forested Herbaceous Wetlands Woody Wetlands Census Roads TOTALS: Tuck Label Forested Grasslands/Pastureland/Agriculture Barren/Developed	219.82 30.15 1337.31 860.58 2070.63 10889.78 665124.56 Ser Area (acres) 230212.91 17805.33 948.18	0.03 0.005 0.20 0.13 0.31 1.64 100 Percent Coverage 85.45 6.61 0.35 0.74
Pre-SMCRA Barren Pre-SMCRA Forested Herbaceous Wetlands Woody Wetlands Census Roads TOTALS: Tuck Label Forested Grasslands/Pastureland/Agriculture Barren/Developed Open Water	219.82 30.15 1337.31 860.58 2070.63 10889.78 665124.56 xer Area (acres) 230212.91 17805.33 948.18 1984.64	0.03 0.005 0.20 0.13 0.31 1.64 100 Percent Coverage 85.45 6.61 0.35

842.05	0.31
76.00	0.03
2000.39	0.74
2983.08	1.11
6113.95	2.27
4310.37	1.60
269414.78	100
lor	
	Percent Coverage
80914.90	72.02
20980.25	18.68
2257.72	2.01
2257.73	2.01
	0.18
	0.09
364.16	0.32
	0.62
+	0.06
	1.12
	0.02
	0.04
	2.83
	100
	Percent Coverage
,	82.31
	4.45
	0.74
4/05.501	1.10
4705.50 4271.42	1.10
4271.42	1.00
4271.42 2558.85	1.00 0.60
4271.42 2558.85 9307.40	1.00 0.60 2.18
4271.42 2558.85 9307.40 520.81	1.00 0.60 2.18 0.12
4271.42 2558.85 9307.40 520.81 144.45	1.00 0.60 2.18 0.12 0.03
4271.42 2558.85 9307.40 520.81	1.00 0.60 2.18 0.12
4271.42 2558.85 9307.40 520.81 144.45 22180.90	1.00 0.60 2.18 0.12 0.03 5.19 0.04
4271.42 2558.85 9307.40 520.81 144.45 22180.90 185.34	1.00 0.60 2.18 0.12 0.03 5.19
4271.42 2558.85 9307.40 520.81 144.45 22180.90 185.34 413.14	1.00 0.60 2.18 0.12 0.03 5.19 0.04 0.10
4271.42 2558.85 9307.40 520.81 144.45 22180.90 185.34 413.14 9192.41	1.00 0.60 2.18 0.12 0.03 5.19 0.04 0.10 2.15
4271.42 2558.85 9307.40 520.81 144.45 22180.90 185.34 413.14 9192.41 427642.35	1.00 0.60 2.18 0.12 0.03 5.19 0.04 0.10 2.15
4271.42 2558.85 9307.40 520.81 144.45 22180.90 185.34 413.14 9192.41 427642.35	1.00 0.60 2.18 0.12 0.03 5.19 0.04 0.10 2.15
4271.42 2558.85 9307.40 520.81 144.45 22180.90 185.34 413.14 9192.41 427642.35 wha Area (acres)	1.00 0.60 2.18 0.12 0.03 5.19 0.04 0.10 2.15 100 Percent Coverage 82.04
4271.42 2558.85 9307.40 520.81 144.45 22180.90 185.34 413.14 9192.41 427642.35 wha Area (acres) 477806.27	1.00 0.60 2.18 0.12 0.03 5.19 0.04 0.10 2.15 100 Percent Coverage 82.04
4271.42 2558.85 9307.40 520.81 144.45 22180.90 185.34 413.14 9192.41 427642.35 wha Area (acres) 477806.27 21846.50	1.00 0.60 2.18 0.12 0.03 5.19 0.04 0.10 2.15 100 Percent Coverage 82.04 3.75
	76.00 2000.39 2983.08 6113.95 4310.37 269414.78 lor Area (acres) 80914.90 20980.25 2257.72 2257.73 196.69 103.26 364.16 696.01 62.88 1260.20 24.99 40.33 3184.43 112343.54 ette Area (acres) 351981.92 19014.63 3165.57

3705.33	0.64
16382.50	2.81
225.88	0.04
27.60	0.005
18286.38	3.14
82.77	0.01
104.20	0.02
20019.28	3.44
582415.39	100
las	
Area (acres)	Percent Coverage
332563.81	79.48
28411.69	6.79
3197.61	0.76
	1.07
8289.67	1.98
6679.19	1.60
14124.98	3.38
596.10	0.14
	0.01
	2.21
	0.09
	0.22
+	2.27
	100
orier	
Area (acres)	Percent Coverage
528734.25	80.71
82140.95	12.54
+	12.04
6569.64	1.00
	1.00
6569.64 3385.53 1637.32	
3385.53 1637.32	1.00 0.52
3385.53	1.00 0.52 0.25
3385.53 1637.32 1561.27	1.00 0.52 0.25 0.24
3385.53 1637.32 1561.27 5641.09	1.00 0.52 0.25 0.24 0.86
3385.53 1637.32 1561.27 5641.09 194.59	1.00 0.52 0.25 0.24 0.86 0.03
3385.53 1637.32 1561.27 5641.09 194.59 28.68	1.00 0.52 0.25 0.24 0.86 0.03
3385.53 1637.32 1561.27 5641.09 194.59 28.68 4468.95	1.00 0.52 0.25 0.24 0.86 0.03 0.004
3385.53 1637.32 1561.27 5641.09 194.59 28.68 4468.95 2415.35	1.00 0.52 0.25 0.24 0.86 0.03 0.004 0.68
3385.53 1637.32 1561.27 5641.09 194.59 28.68 4468.95 2415.35 3827.52	1.00 0.52 0.25 0.24 0.86 0.03 0.004 0.68 0.37
3385.53 1637.32 1561.27 5641.09 194.59 28.68 4468.95 2415.35 3827.52 14492.59	1.00 0.52 0.25 0.24 0.86 0.03 0.004 0.68 0.37 0.58 2.21
3385.53 1637.32 1561.27 5641.09 194.59 28.68 4468.95 2415.35 3827.52 14492.59 655097.73	1.00 0.52 0.25 0.24 0.86 0.03 0.004 0.68 0.37 0.58 2.21
3385.53 1637.32 1561.27 5641.09 194.59 28.68 4468.95 2415.35 3827.52 14492.59 655097.73	1.00 0.52 0.25 0.24 0.86 0.03 0.004 0.68 0.37 0.58 2.21
3385.53 1637.32 1561.27 5641.09 194.59 28.68 4468.95 2415.35 3827.52 14492.59 655097.73 ter	1.00 0.52 0.25 0.24 0.86 0.03 0.004 0.68 0.37 0.58 2.21 100 Percent Coverage
	225.88 27.60 18286.38 82.77 104.20 20019.28 582415.39 las Area (acres) 332563.81 28411.69 3197.61 4477.93 8289.67 6679.19 14124.98 596.10 44.47 9229.75 389.36 914.80 9496.00 418415.38 orier Area (acres) 528734.25

Open Water	1933.42	0.54
Mine Grass	1068.54	0.30
Mine Barren	4331.86	1.22
Forested in SMCRA Permit Area	5889.76	1.66
Pre-SMCRA Grass	76.89	0.02
Pre-SMCRA Barren	12.22	0.003
Pre-SMCRA Forested	2392.90	0.67
Herbaceous Wetlands	65.07	0.02
Woody Wetlands	226.71	0.06
Census Roads	5849.39	1.64
TOTALS:	355705.06	100
Linc	oln	
Label	Area (acres)	Percent Coverage
Forested	247138.93	88.03
Grasslands/Pastureland/Agriculture	16723.48	5.96
Barren/Developed	989.39	0.35
Open Water	1409.79	0.50
Mine Grass	2891.43	1.03
Mine Barren	2677.00	0.95
Forested in SMCRA Permit Area	1432.01	0.51
Pre-SMCRA Grass	18.25	0.01
Pre-SMCRA Barren	0.16	0.0001
Pre-SMCRA Forested	1407.04	0.50
Herbaceous Wetlands	18.99	0.01
Woody Wetlands	12.54	0.004
Census Roads	6009.72	2.14
TOTALS:	280728.72	100
Log	an	
Label	Area (acres)	Percent Coverage
Forested	215594.56	73.99
Grasslands/Pastureland/Agriculture	6377.72	2.19
Barren/Developed	2713.26	0.93
Open Water	1041.84	0.36
Mine Grass	13109.78	4.50
Mine Barren	7879.00	2.70
Forested in SMCRA Permit Area	26086.42	8.95
Pre-SMCRA Grass	198.06	0.07
Pre-SMCRA Barren	148.53	0.05
Pre-SMCRA Forested	12653.32	4.34
Herbaceous Wetlands	4.18	0.001
Woody Wetlands	20.00	0.01
Census Roads	5555.03	1.91
TOTALS:	291381.68	100
Way	/ne	
Label	Area (acres)	Percent Coverage
Forested	287798.52	87.80

-		
Grasslands/Pastureland/Agriculture	19808.25	6.04
Barren/Developed	2515.82	0.77
Open Water	4518.39	1.38
Mine Grass	1743.98	0.53
Mine Barren	727.25	0.22
Forested in SMCRA Permit Area	1869.46	0.57
Pre-SMCRA Grass	15.22	0.005
Pre-SMCRA Barren	1.11	0.0003
Pre-SMCRA Forested	1308.32	0.40
Herbaceous Wetlands	30.10	0.01
Woody Wetlands	58.78	0.02
Census Roads	7374.96	2.25
TOTALS:	327770.16	100
Вос	ne	
Label	Area (acres)	Percent Coverage
Forested	225566.50	70.09
Grasslands/Pastureland/Agriculture	4710.57	1.46
Barren/Developed	1170.20	0.36
Open Water	1658.28	0.52
Mine Grass	16971.30	5.27
Mine Barren	10874.49	3.38
Forested in SMCRA Permit Area	29242.92	9.09
Pre-SMCRA Grass	165.56	0.05
Pre-SMCRA Barren	29.07	0.01
Pre-SMCRA Forested	26078.77	8.10
Herbaceous Wetlands	14.84	0.005
Woody Wetlands	22.44	0.01
Census Roads	5307.16	1.65
TOTALS:	321812.11	100
McDo	well	
Label	Area (acres)	Percent Coverage
Forested	306062.68	89.48
Grasslands/Pastureland/Agriculture	4050.07	1.18
Barren/Developed	1396.86	0.41
Open Water	976.91	0.29
Mine Grass	4207.24	1.23
Mine Barren	3352.52	0.98
Forested in SMCRA Permit Area	14267.45	4.17
Pre-SMCRA Grass	5.48	0.002
Pre-SMCRA Barren	3.41	0.00
Pre-SMCRA Forested	938.79	0.27
Herbaceous Wetlands	18.15	0.01
Woody Wetlands	31.13	0.01
Census Roads	6736.26	1.97
TOTALS:	342046.95	100

Appendix A.2 Status and Distribution of Threatened and Endangered Species within the MSBE Project (USFWS Updated July 2017)

Common Name	Scientific Name	Status E- Endangered T- Threatened	County Distribution
		Mamm	als
Cougar, eastern	Felis concolor cougar	E	May occur throughout entire state. May be extinct or extirpated.
Indiana bat	Myotis sodalis	E	May occur throughout entire state. Hibernacula (caves or mine portals) in Fayette, Greenbrier, Preston and Tucker. Summer habitat throughout entire state. Maternity activity in Boone, Fayette and Tucker.
Virginia big-eared bat	Corynorhinus townsendii virginianus	E	Summer or winter caves in Randolph and Tucker. Abandoned mine portals in Fayette and Tucker. Mine portals and caves throughout the state.
Northern long-eared bat	Myotis septentrionalis	Т	Occurs statewide. Hibernacula found in Tucker, Kanawha, Fayette, Preston, Greenbrier, Logan, Boone and Lincoln. Summer roosts in Harrison, Lewis, Tucker, Greenbrier, Fayette, Webster, Nicholas and Braxton.
Gray bat	Myotis grisescens	E	Documented in Logan. May use caves, abandoned mine portals and bridges in Wayne, Lincoln, Kanawha, Boone, Fayette, McDowell.
		Fishe	s
Diamond darter	Crystallaria cincotta	Е	Kanawha- Elk River.
71.6		Crustace	eans
Big Sandy Crayfish	Cambarus callainus	Т	McDowell and Wayne- Tug Fork watershed.
Guyandotte River Crayfish	Cambarus veteranus	Е	Logan- Upper Guyandotte watershed.
		Mollus	
Mussel, clubshell	Pleurobema clava	E	Braxton and Kanawha - Elk River. Braxton - Little Kanawha River. Wayne - Ohio River. Harrison and Lewis - West Fork River. Fayette and Kanawha - Kanawha River.

Common Name	Scientific Name	Status E- Endangered T- Threatened	County Distribution
Mussel, fanshell	Cyprogenia stegaria	Е	Fayette and Kanawha - Kanawha River. Wayne - Ohio River
Mussel, northern riffleshell	Epioblasma torulosa rangiana	E	Braxton and Kanawha- Elk River
Mussel, pink mucket	Lampsilis abrupta	E	Braxton and Kanawha - Elk River. Fayette and Kanawha - Kanawha River. Wayne - Ohio River.
Mussel, rayed bean	Villosa fbalis	Е	Braxton and Kanawha - Elk River.
Mussel, sheepnose	Plethobasus cyphyus	Е	Fayette and Kanawha - Kanawha River. Wayne - Kanawha River.
Mussel, spectaclecase	Cumberlandia monodonta	Е	Fayette and Kanawha - Kanawha River.
Mussel, tubercled- blossom pearly	Epioblasma torulosa	E	Fayette and Kanawha - Kanawha River. May be extinct.
Mussel, snuffbox	Epioblasma triquetra	E	Braxton - Elk and Kanawha River. Kanawha - Big Sandy Creek and Elk River. Lewis - Fink Creek, Hackers Creek, Leading Creek and West Fork River. Wayne - Ohio River.
Snail, flat- spired three- toothed land	Triodopsis platysayoides	T	Preston - Cheat River (gorge).
		Plant	s
Running buffalo clover	Trifolium stoloniferum	E	Greenbrier, Fayette, Webster, Tucker and potentially Preston.
Shale barren rock cress	Boechera serotine	E	Greenbrier.
Small whorled pogonia	Isotria medeoloides	Т	Greenbrier and Tucker.
Virginia spiraea	Spiraea virginiana	Т	Fayette, Greenbrier and Nicholas.
		Insect	
Rusty patched bumble bee	Bombus affinia	Е	May occur throughout entire state but could be extirpated.

Appendix A.3 Socioeconomic Data by County (West Virginia Census Summary V2019) 1

	West Virginia	Uni ted States	Barbour	Boone	Braxton	Fayette	Gilmer	Greenbrier	Harrison	Kanawha	Lewis	Lincoln	Logan	McDowell	Nicholas	Preston	Randolph	Taylor	Tucker	Upshur	Wayne	Webster
				1		1	·		Popu	lation		1			<u> </u>	1	<u> </u>	1	1			
Population estimates, July 1, 2019 (V2019)	1,792,147	328,239,523	16,441	21,457	13,957	42,406	7,823	34,662	67,256	178,124	15,907	20,409	32,019	17,624	24,496	33,432	28,695	16,695	6,839	24,176	39,402	8,114
Population estimates base, April 1, 2010 (V2019)	1,853,018	308,758,105	16,589	24,629	14,523	46,039	8,693	35,480	69,095	193,063	16,372	21,720	36,743	22,113	26,233	33,520	29,405	16,895	7,141	24,254	42,481	9,154
Population, percent change April 1, 2010 estimates July 1, 2019 (V2019)]	-3.3%	6.30%	-0.9	-12.9	-3.9	-7.9	-10.0	-2.3	-2.7	-7.7	-2.8	-6.0	-12.9	-20.3	-6.6	-0.3	-2.4	-1.2	-4.2	-0.3	-7.3	-11.3
									Eco	nomy												
In civilian labor force, total, percent of population age 16 years+, 2014-2018	53.10%	62.9%	51.4	40.0	53.0	47.4	41.2	50.3	58.3	55.6	51.6	43.8	43.2	28.3	50.5	52.5	50.4	53.7	53.1	53.3	45.1	47.6

¹ The vintage year (e.g., V2019) refers to the final year of the series (2010 thru 2019). Different vintage years of estimates are not comparable.

	West Virginia	Uni ted States	Barbour	Boone	Braxton	Fayette	Gilmer	Greenbrier	Harrison	Kanawha	Lewis	Lincoln	Logan	McDowell	Nicholas	Preston	Randolph	Taylor	Tucker	Upshur	Wayne	Webster
In civilian labor force, female, percent of population age 16 years+, 2014-2018	48.90%	58.20%	49.1	35.3	46.3	43.0	50.3	46.7	52.7	52.0	44.5	41.0	38.9	29.2	43.5	49.6	48.2	49.8	46.1	46.7	42.9	42.2
Total accommodation and food services sales, 2012 (\$1,000)(c)	4,036,333	708,138,598	1			58,597		190,747	155,321	552,892	34,321	1	48,291		36,876	13,604	38,396			29,968		
Total health care and social assistance receipts/revenue, 2012 (\$1,000)(c)	12,259,395	2,040,441,203	43,650	45,100	48,346	162,641	14,197	238,362	666,514	2,083,332	112,613	1	186,329	58,472	100,102	68,315	183,317	47,059	12,810	100,498	312,909	25,791
Total manufacturers' shipments, 2012 (\$1,000)(c)	24,553,072	5,696,729,632	28,633		148,155	275,039				2,196,648		2,216	157,849		212,936	147,079	189,375			285,273	446,126	

	West Virginia	Uni ted States	Barbour	Boone	Braxton	Fayette	Gilmer	Greenbrier	Harrison	Kanawha	Lewis	Lincoln	Logan	McDowell	Nicholas	Preston	Randolph	Taylor	Tucker	Upshur	Wayne	Webster
Total merchant wholesaler sales, 2012 (\$1,000)(c)	14,295,437	5,208,023,478	1,256		23,265				381,815	2,518,947	109,899		138,193		59,293	33,310	368,863			171,564	140,515	
Total retail sales, 2012 (\$1,000)(c)	22,637,923	4,219,821,871	89,576	227,385	171,108	413,830	38,293	543,420	1,314,734	3,186,551	301,204	80,307	551,188	131,211	432,541	234,527	352,705	110,917	50,121	264,187	254,945	42,861
Total retail sales per capita, (2012)(c)	\$12,201	\$13,443	5,431	9,289	11,827	9,022	4,385	15,171	19,015	16,581	18,399	3,713	15,240	6,153	16,491	6,932	12,003	6,528	7,165	10,793	6,121	4,740
				T	I				Income &	& Poverty							ı					
Median household income (in 2018 dollars) 2014-2018	\$44,921	\$60,293	39,580	38,642	42,213	40,379	35,810	39,038	50,433	45,426	39,423	37,679	38,123	26,547	38,468	48,317	41,094	47,205	45,655	40,401	39,875	34,312
Per capital income in past 12 months (in 2018 dollars, 2014-2018)	\$25,479	\$32,621	22,237	21, 394	21,596	21,466	17,313	23,936	27,869	28,405	22,575	19,423	21,672	14,489	21,941	23,337	24,162	24,258	23,670	21,701	21,240	20,507

Project No. 0102-18-0221

	West Virginia	Uni ted States	Barbour	Boone	Braxton	Fayette	Gilmer	Greenbrier	Harrison	Kanawha	Lewis	Lincoln	Logan	McDowell	Nicholas	Preston	Randolph	Taylor	Tucker	Upshur	Wayne	Webster
Persons in poverty, percent	17.80%	11.8%	20.0	22.5	21.6	22.5	24.8	15.8	16.7	17.1	17.3	23.3	24.6	35.4	19.0	16.2	19.4	16.1	13.5	19.0	20.9	23.0

Appendix A.4 Environmental Justice Population Data by County (West Virginia Census Summary V2019) 1

	West Virginia	United States	Barbour	Boone	Braxton	Fayette	Gilmer	Greenbrier	Harrison	Kanawha	Lewis	Lincoln	Logan	McDowell	Nicholas	Preston	Randolph	Taylor	Tucker	Upshur	Wayne	Webster
									Race a	and Hisp	anic Ori	gin										
White alone, percent, July 1, 2019 (V2019)	93.5%	76.50%	96.6	98.2	97.4	93.4	85.4	94.2	95.6	88.6	97.4	98.3	96.6	90.0	97.5	97.3	96.3	96.9	97.9	97.0	97.7	97.7
Black or African American alone, percent, July 2, 2019 (V2019	3.60%	13.40%	1.0	0.7	0.7	4.5	11.0	2.8	1.8	7.6	0.6	0.3	2.0	8.3	0.5	1.2	1.8	1.2	0.4	1.1	0.6	0.5
American Indian and Alaska Native alone, percent, July 1, 2019 (V2019)	0.30%	1.30%	0.6	0.2	0.4	0.3	1.0	0.4	0.2	0.2	0.3	0.1	0.1	0.2	0.4	0.2	0.3	0.3	0.3	0.3	0.3	0.1
Asian alone, percent, July 1, 2019 (V2019)	0.80%	5.90%	0.3	0.1	0.2	0.3	0.8	0.6	0.6	1.1	0.5	0.2	0.3	0.1	0.4	0.2	0.5	0.5	0.3	0.5	0.3	0.2

¹ The vintage year (e.g., V2019) refers to the final year of the series (2010 thru 2019). Different vintage years of estimates are not comparable.

	West Virginia	United States	Barbour	Boone	Braxton	Fayette	Gilmer	Greenbrier	Harrison	Kanawha	Lewis	Lincoln	Logan	McDowell	Nicholas	Preston	Randolph	Taylor	Tucker	Upshur	Wayne	Webster
Native Hawaiian and Other Pacific Island alone, percent, 2019 (V2019)		0.20%			ł		0.1	1	1		ŀ										1-	
Two or more races, percent, July 1, 2019 (V2019)	1.80%	2.70%	1.5	0.8	1.2	1.6	1.7	1.9	1.7	2.4	1.2	1.0	1.0	1.3	1.2	1.0	1.1	1.1	1.0	1.2	1.0	1.4
Hispanic or Latino, percent, July 1, 2019 (V2019)	1.70%	18.30%	1.0	0.6	0.8	1.2	5.8	2.1	1.7	1.1	1.2	0.7	1.0	1.4	0.8	1.7	1.0	1.1	0.8	1.4	0.7	0.7
White alone, not Hispanic or Latino, percent, July 1, 2019 (V2019)	92.10%	60.4%	95.7	97.6	96.8	92.4	81.0	92.4	94.1	87.7	96.4	97.7	95.7	88.7	96.8	95.7	95.4	95.9	97.2	95.8	97.1	97.1

Appendix B



The Culture Center 1900 Kanawha Blvd., E. Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org Fax 304.558.2779 • TDD 304.558.3562

December 20, 2017

Mr. Robert Hinton
Executive Director
Upshur County Development Authority
P.O. Box 2377
30 East Main Street
Buckhannon, WV 26201

RE: Mountain State Broadband Expressway AML Project

Phase A Sites FR#: 18-215-MULTI

Dear Mr. Hinton:

We have reviewed the information that was submitted for the above referenced project. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

Per your request, we have reviewed the 31 potential broadband tower locations provided via email on Friday, December 15, 2017 for the existence of cultural resources within the possible area of potential effect. This information was requested to assist in early planning efforts to evaluate location suitability.

Archaeological Resources:

A search of our records confirmed that no previously documented archaeological resources are located within the tower locations included in Phase A. Based on available information, it appears that most of the proposed tower sites are located on terrain that is steeply sloped, has been previously disturbed or contains severely eroded soils. However, four of the proposed tower sites, BB4 - East Bank (Garten), BB46 - East Lynn II, BB47 - Ada Linville, and BB49 - Jeffrey Mine Complex, appear to have some potential for archaeological sites to be present. These four should, in our opinion, undergo an archaeological survey if selected for tower construction. With the exception of BB4, BB46, BB47 and BB49, it is our opinion that the tower sites are unlikely to affect significant archaeological sites.

Architectural Resources:

We have reviewed the submitted information. It is our understanding the completed towers will stand between 200 and 400 feet in height. Based on 47 CFR Part 1, Appendix C, we applied a 0.75-mile radius around each proposed tower site to identify above-ground resources that are either listed in, eligible for, or potentially eligible for inclusion in the National Register of Historic Places. There are properties over 45 years of age within 0.75 miles of most of the proposed tower locations, and five (5) of the proposed tower locations are within 0.75 miles of resources listed in the National Register. Those include: Tower Site BB4 (John Harriman House – NR# 78002803); Tower Site BB6 (Mason-Drennen House – NR# 98001474); Tower Site BB54 (James Ellwood Jones House – NR# 92000306; Pocahontas Fuel

December 20, 2017 Mr. Hinton

FR#: 18-215-Multi

Page 2

Company Store – NR# 92000330; and Pocahontas Fuel Company Store/Norfolk Coal & Coke Company Store – NR# 92000324); Tower Site BB55 (Ashland Coal Company Store – NR# 05000399); and Tower Site BB59 (Ashland Coal Company Store – NR# 05000399). In addition, several of the proposed tower sites are within 0.75 miles of previously documented architectural resources. Please see the attached table for a summary of properties located within the described 0.75-mile area of potential visual effects.

We appreciate the opportunity to be of service. If you have questions regarding our comments or the Section 106 process, please contact Lora A. Lamarre-DeMott, Senior Archaeologist, or Benjamin M. Riggle, Structural Historian, at (304) 558-0240.

Sincerely,

Susan M. Pierce

Deputy State Historic Preservation Officer

SMP/LLD/BMR

Attachment: MSE AML_Phase A WV architectural resources12_18_17 table

cc: Rob Rice, WV Division of Environmental Protection Rick Buckley, Office of Surface Mining Larry Porter, Phoenix Resources, Inc.

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MSE AML_Phase A WV architectural resources12_20_17	1
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Site Number	County	Latitude	Longitude	PADNAME	DADNIMBED	DADNIMBER A. L. L. C. L.
BB1	Fayette	37°58'47.39"N	81° 7'15.11"W	MINDEN	WV000086	Speciously identified resources, the communities of Minden and Oak Hill, 100+buildings likely over 45 years of age, 2 documented cemeteries, at least 2
BB2	Upshur	39° 1'10.06"N	80°14'16.97"W	Ed Gower Highwall #2	WV003182	unacconnected concertes providentified resources, no communities, approximately 25 buildings likely over 45 years of a see
BB3	Lewis	38°54'19.79"N	80°25'49.92"W	ANNA GOULD HIGHWALL	WV003088	no previously identified resources, no communities, approximately 25 buildings likely over 45 years of ace
BB4	Kanawha	38°13'0.08"N	81°26'31.74"W	EAST BANK (GARTEN)	WV002804	1 NR resource (John Harriman House 78002803) very close to point, 7 previously identified resources, tower site within community of East Bank and portion of Cedar Grove within radius, 100+ buildings over 45 years of age, 1 documented cemetery, at least 1 undocumented cemetery, at
BB5	Fayette	37°5520.40"N	81°16'52.81"W	SHOTGUN HOLLOW	WV000120	13 previously identified resources, small community of Long Branch, approximately 50 buildings over 45 years of age, 2 documented cemeteries, at least 1 undocumented cemetery
BB6	Nicholas	38°16'46.67"N	80°59'39.23"W	DRENNEN (DEAL) LANDSLIDE	WV005907	1 NR resource (Mason-Drennen House 98001474), two previously identified resources, small community of Drennen, approximately 30 buildings over 45 years of age
BB7	Greenbrier	38° 2'41.72"N	80°43'3.81"W	LESLIE (NELSON) DRAINING PORTA WV005167	WV005167	approximately 40 previously identified resources, primarily in communities of Leslie, Crichton and Bellburn, approximately 50 other huildings over 45 years of and
BB8	Upshur	38°53'44.59"N	80°17'10.56"W	ADRIAN (CUTRIGHT) PORTALS	690900AM	2 previously identified resources, no communities, approximately 30 buildings likely over 45 years of age
BB9	Fayette	38° 1'57.01"N	81°17'31.49"W	JOHNSON FORK REFUSE PILE	WV002374	no previously identified resources, no communities, approximately 20 buildings likely over 45 years of age at least 1 underumented communities.
BB10	Nicholas	38°15'55.05"N	81°10'37.34"W	LICK BRANCH HIGHWALL #1	WV003559	I built resource possibly over 45 years of age
BB11	Greenbrier	38° 3'5.95"N	80°42'10.02"W	LESLIE (NELSON) DRAINING PORTA WV005167	WV005167	approximately 100 previously identified resources primarily in communities of Quinwood, Marfrance and Crichton, approximately another 50 buildings over 45 years of age
BB12	Barbour	38°58'42.00"N	79°57'49.45"W	LILBERN PRITT HIGHWALL	WV003731	no previously identified resources, communities of Junior and Gage, approximately 75 buildings over 45 years of age
BB13	Barbour	38°58'18.14"N	79°58'0.20"W	ISLAND RUN HIGHWALL #3	WV003728	1 previously identified resources, communities of Junior and Gage, approximately 25 buildings over 45 years of age
BB14	Barbour	38°58'16.46"N	79°57'58.39"W	ZEBBS CREEK HIGHWALL #2	WV002073	1 previously identified resources, communities of Junior and Gage, approximately 25 buildings over 45 years of age
BB15	Nicholas	38°13'16.55"N	80°33'32.48"W	RICHWOOD "CHAPMAN" BURNING I WV004846	WV004846	approximately 50 previously identified resources, community of LaFrank, 100+ buildings over 45 years of age
BB45	Lincoln	38°13'14.90"N	82°11'49.06"W	Branchland (Six Mile) Portals	WV005193	no previously identified resources, community of Branchland, approximately 100 buildings over 45 years of age
BB46	Wayne	38° 9'52.74"N	82°21'58.41"W	EAST LYNN II	WV000183	no previously identified resources, community of East Lynn, approximately 50 buildings over 45 years of age, at least 2 undocumented cemeteries include one adjacent to tower site
BB47	Lincoln	38°10'44.12"N	82° 3'50.26"W	ADA LINVILLE	WV000073	no previously identified resources, approximately 20 buildings over 45 years of age, at least 4 undocumented cemeteries include one near tower site
BB48	Logan	37°45'7.59"N	81°59'41.43"W	OMAR COMPLEX	WV003919	8 previously identified resources, communities of Superior Bottom, Barnabus, and Omar, approximately 75 buildings over 45 years of age
BB49 RR51	Boone	37°5822.16"N	W1°49'58.65"W			3 previously identified resources, community of Jeffrey, approximately 100 buildings over 45 years of age, 1 documented cemetery and at least 2 undocumented cemeteries
BB52	McDowell	37°2025.79"N	81°47'55.62"W	DRY BRANCH HIGHWALL	WV002473 WV001597	no built resources noted 12 previously identified resources, community of Bradshaw, 100+ buildings over 45 vears of age, at least 1 undocumented cemetery

Site Number	County	Latitude	Longitude	PADNAME	PADNUMBER	PADNUMBER Architectural Resources within 0.75-mile radius tower site
BB53	McDowell	37°16'42.72"N	81°39'0.36"W	BIG BRANCH HIGHWALL	WV003522	no previously identified resources, approximately 5 buildings over 45 years of age
						3 NR resource (James Ellwood Jones House 92000306; Pocahontas Fuel Company Store 92000330; Pocahontas Fuel Company Store 92000324), 20 previously identified resources, communities of Maybenry and
BB54	McDowell	37°22'3.64"N	81°22'23.34"W	MAYBEURY (OAKLEY) LANDSLIDE WV005834		Switchback, approximately 100 other buildings over 45 years of age
7,44	:					resources, communities of Ashland and Crumpler, approximately 30 buildings over
6699	McDowell	37°24'55.49"N	81°20'55.59"W	ASHLAND ""POCA"" LAND COMPLEY WV000377		45 years of age
BB56	McDowell	37°25'51.68"N	81°21'8.30"W	PERSIANNA HIGHWALL	WV001522	3 previously identified resources, community of Crumpler, approximately 50 buildings over 45 years of age, at least 1 undcoumented cemerery
BB57	n coni I	38012197 611M	Will 2 2011100			no previously identified resources, community of Branchland, approximately 100
0500	Lincolli	30 13 22.01 IN	W 1C.0+11 20	Portais		buildings over 45 years of age
8688	Logan	37°48'18.49"N	81°46'50.62"W	STONE HIGHWALL	WV003569	no built resources noted
						1 NR resource (Ashland Coal Company Store 05000399), 2 previously identified
BB59	McDowell	37°24'42.25"N	81°20'24.89"W	LOWER FLATTOP HIGHWALL	WV001633	resources, communities of Cherokee and Ashland, approximately 30 buildings over 45 years of age
BB60	Upshur	39°00'20.2"N	80°11'48.6"W	GASTON HIGHWALL	WV001612	3 previously identified resources, approximately 25 buildings over 45 years of age, 1 documented cemetery and at least 1 undocumented cemetery
BB61	Tucker	39°06'14.1"N	79°25'51.1"W	BEARDEN KNOB HIGHWALL	WV002758	no previously identified resources, community of Canaan Heights, approximately 25 buildings over 45 years of age

Milford Wayne Donaldson, FAIA Chairman

Leonard A. Forsman Vice Chairman

John M. Fowler Executive Director



April 16, 2019

Ms. Glenda Owens Acting Director Office of Surface Mining Reclamation and Enforcement 1951 Constitution Ave., NW, Room 233 Washington, DC 20240

Ref:

Mountain State Broadband Expressway Project

West Virginia

ACHPConnect Log Number: 013603

Dear Ms. Owens:

In response to the recent notification by the Office of Surface Mining Reclamation and Enforcement (OSMRE) the Advisory Council on Historic Preservation (ACHP) will participate in consultation to develop a programmatic agreement for the referenced undertaking. Our decision to participate in this consultation is based on the *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, contained within the regulations, "Protection of Historic Properties" (36 CFR Part 800) implementing Section 106 of the National Historic Preservation Act. The criteria are met for this proposed undertaking because it presents important questions of policy.

Section 800.6(a)(1)(iii) of these regulations requires that we notify you as the head of the agency of our decision to participate in consultation. By copy of this letter, we are also notifying Mr. Roger Calhoun, Field Office Director, and Ms. Michelle Fishburne, Regulatory Analyst, of this decision.

Our participation in this consultation will be handled by Ms. Jaime Loichinger, who can be reached at (202) 517-0219 or via email at jloichinger@achp.gov. We look forward to working with your agency and other consulting parties to reach agreement on appropriate measures to avoid, minimize, or mitigate adverse effects on historic properties.

Sincerely,

John M. Fowler Executive Director

Certified Mail No. 9489 0090 0027 6062 6137 10

June 21, 2018

Ms. Barbara Sargent WV Division of Natural Resources Natural Heritage Program PO Box 67 Ward Road Elkins, WV 26241

Dear Ms. Sargent:

Subject:

West Virginia Broadband Tower Project

Upshur County Development Authority

Greenbrier, Lewis, Randolph, and Upshur Counties, West Virginia

CEC Project 180-282

On behalf of the Upshur County Development Authority (UCDA), Civil & Environmental Consultants, Inc. (CEC) submits this request for review to identify known and likely occurrences of federally protected species and their designated critical habitats, federal candidate species, and state special concern and rare species associated with National Environmental Policy Act (NEPA) reports and state permits for the proposed West Virginia Broadband Tower Project. For this first phase of submissions, proposed tower locations occur in 4 counties. Respective tower locations are depicted on the attached mapping (Figures 1–5). Additional phases of tower pre-planning are scheduled to occur over the next 6 to 12 months, and CEC will provide additional requests for review as phases and sites are finalized.

As proposed, the project will install free-standing towers, ranging from 150 to 300 feet in height, to supply broadband internet connectivity to areas of the state that are currently underserved by private service providers. Each tower's pad and construction area will require approximately 0.25 acres of land disturbance. At each location, access roads will be approximately 25 feet in width, while lengths range between approximately 1,000 and 7,000 linear feet, and fiber-optic lines will be micro-trenched from the tower to the closest existing source. Installation of the fiber-optic lines will require disturbance of approximately 10 feet in width, and lengths range between approximately 900 to 4,500 feet. Wherever possible, UCDA intends to co-locate access roads to existing roads and/or right-of-ways, and incorporate fiber-optic line installation to the newly constructed access roads or to existing roads. Details of each tower's respective access roads and fiber-optic lines is provided in Tables 1 and 2.

The land use at the proposed tower locations varies. Some towers are being constructed in areas of mature-growth forest, while other towers and their associated access roads and fiber-optic lines occur within areas that have been heavily disturbed (e.g., reclaimed mine lands). Because of this, the data presented in Table 3 provides "worst-case" scenarios for land disturbance. These measurements are based on the currently available pre-project planning and are subject to change.

CEC Project 180-282 Page 2 June 21, 2018

CEC and UCDA will work closely with WVDNR in the event that project development requires significant alternation to the potential level of impact for any given site.

We appreciate your timely review of this request. Please contact Linda at lzug@cecinc.com or (412) 249-1627 if you have any questions regarding this request. Thank you very much for your assistance.

Sincerely,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

Ingrid Pearson

Project Scientist, Ecological Services

Linda Zug

Project Manager, Ecological Services

Enclosures

180-282-L-Review Request-6-21-18/P

May 14, 2108

Ms. Amanda Selnick U.S. Fish and Wildlife Service 694 Beverly Pike Elkins, West Virginia

Dear Ms. Selnick:

Subject:

West Virginia Broadband Tower Project

Upshur County Development Authority

Greenbrier, Lewis, Randolph, and Upshur Counties. West Virginia

CEC Project 180-282

On behalf of the Upshur County Development Authority (UCDA), Civil & Environmental Consultants, Inc., (CEC) submits this request for review to identify known and likely occurrences of federally protected species and their designated critical habitats, federal candidate species, and state special concern and rare species associated with National Environmental Policy Act (NEPA) reports and state permits for the proposed West Virginia Broadband Tower Project. For this first phase of submissions, proposed tower locations occur in 4 counties. Respective tower locations are depicted on the attached mapping (Figures 1–5) as per the call between CEC, UCDA, and your office (USFWS) on February 22, 2018. Additional phases of tower pre-planning are scheduled to occur over the next 6 to 12 months, and CEC will provide additional requests for review as phases and sites are finalized.

As proposed, the project will install free-standing towers, ranging from 150 to 300 feet in height, to supply broadband internet connectivity to areas of the state that are currently underserved by private service providers. Each tower's pad and construction area will require approximately 0.25 acres of land disturbance. At each location, access roads will be approximately 25 feet in width, while lengths range between approximately 1,000 and 7,000 linear feet, and fiber-optic lines will be micro-trenched from the tower to the closest existing source. Installation of the fiber-optic lines will require disturbance of approximately 10 feet in width, and lengths range between approximately 900 to 4,500 feet. Wherever possible, UCDA intends to co-locate access roads to existing roads and/or right-of-ways, and fiber-optic lines to the newly constructed access roads or to existing roads. Details of each tower's respective access roads and fiber-optic lines is provided in Tables 1 and 2.

The land use at the proposed tower locations varies widely. Some towers are being constructed in areas of mature-growth forest while other towers and their associated access roads and fiber-optic lines occur within areas that have been heavily disturbed (e.g., reclaimed mine lands). Because of this, the data presented in Table 3 provides "worst-case" scenarios for land disturbance. These measurements are based on the currently available pre-project planning and are subject to change.

Ms. Amanda Selnick CEC Project 180-282 Page 2 May 14, 2018

CEC and UCDA will work closely with USFWS in the event that project development requires significant alternation to the potential level of impact for any given site.

We appreciate your timely review of this request. Please contact Craig Rockey at crockey@cecinc.com or Linda at lzug@cecinc.com if you have any questions regarding this request. Thank you very much for your assistance.

Sincerely,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.

Craig Rockey

Project Manager

Linda Zug

Project Manager

Enclosures

180-282-L-USFWS-5-14-18/P

Tim R. Ferguson

From: Tim M. Rice

Sent: Friday, March 27, 2020 11:17 AM

To: Tim R. Ferguson

Cc: rob

Subject: FW: MSE Backbone Tower Prospective Sites **Attachments:** MSE AML_Phase A-USFWS comms.xlsx

Timothy M. Rice
Senior Engineer
Potesta & Associates, Inc.
125 Lakeview Drive
Morgantown, WV 26508
Office 304-225-2245 Ext. 2007
Fax 304-225-2246
Mobile 304-539-8701
tmrice@potesta.com

From: Robert Hinton <rob@upshurda.com> **Sent:** Friday, March 27, 2020 11:01 AM **To:** Tim M. Rice <tmrice@potesta.com>

Subject: Fw: MSE Backbone Tower Prospective Sites

Tim,

This is what we received from USFW on the first iteration of towers. I'm not sure how applicable these will be since we have revised the list several times since this review. I'm assuming we can enter this, but noting that further refinement of the sites have been done since Dec 2017.

From: Selnick, Amanda <amanda selnick@fws.gov>
Sent: Wednesday, December 20, 2017 3:13 PM
To: Robert Hinton <rob@upshurda.com>

Cc: John Schmidt < john schmidt@fws.gov>

Subject: Re: MSE Backbone Tower Prospective Sites

Hi Robert,

Here are our standard recommendations for the species within the vicinity of the tower sites. I can get into more detail on a tower-by-tower basis and provide more information (including lists of surveyors, protocols, etc., which are also on our website). Not all recommendations may apply depending on whether the site is already disturbed/needs tree removal/has open mine portals.

Note that I didn't include Indiana bat or NLEB for every site (to reduce the amount of text) but all tower sites should consider potential effects to Indiana bat (which has the potential to occur throughout the entire state). We recommend minimizing tree clearing to less than 17 acres (per site) and avoid/minimize effects to caves/mine portals. If any sites propose to remove greater than 17 acres of forest, then you either may assume presence and complete an Indiana Bat Conservation Plan (winter tree clearing), or conduct presence/absence surveys (mist nets or acoustics).

All point locations are in compliance with the final 4(d) rule for NLEB (further than 150ft from known maternity roost trees and further than 1/4-mile from known hibernacula).

Sites BB1 and BB9 are within Indiana bat known-use areas - any trees >5" DBH that need to be removed should be evaluated for potential roosting habitat, and tree clearing of trees >5" DBH should occur in the winter (November 15 - March 31).

Virginia big-eared bats and gray bats may use caves or mine portals year-round, and thus any sites noted with those species should evaluate whether there will be any effects to caves or mine portals.

For aquatic species (crayfish, mussels, or candy darter), presuming all work is above ordinary high water of the closest stream, we recommend employing stringent erosion and sedimentation control best management practices.

For running buffalo clover, we recommend evaluating the site for potential suitable habitat, which includes forested habitats of partial to filtered sunlight, where there is a prolonged pattern of moderate periodic disturbance, such as mowing, trampling, or grazing. Suitable habitat surveys can be completed any time of year. If suitable habitat is present, then we recommend completing presence/absence surveys during the appropriate survey window (May 1 - September 30).

Feel free to call me with any questions.

Thanks,

Amanda Selnick
Student Trainee (Biological Sciences)
U.S. Fish and Wildlife Service
West Virginia Field Office
694 Beverly Pike
Elkins, WV 26241
304-636-6586 x 24
amanda selnick@fws.gov
http://www.fws.gov/westvirginiafieldoffice/index.html

On Fri, Dec 15, 2017 at 5:15 PM, Robert Hinton <rob@upshurda.com> wrote:

All,

We noticed a mistake in the coordinates for sites BB56 and BB57... Please see the corrections in the attached. Also attached is an excel file which will be easier to work with from a GIS perspective. Have a great weekend.

On Fri, Dec 15, 2017 at 3:32 PM, Robert Hinton < rob@upshurda.com > wrote:

Rob,

Attached you will find information for initial plotting of Phase A backbone tower sites. Please feel free to reach out with any questions you may have prior to our video call on December 20.

Please notify me if you have not received an invitation for our December 20 video call.

Thank you,

--

Robert Hinton

Executive Director
Upshur County Development Authority
30 East Main Street
Buckhannon, WV 26201

O- (304) 472 - 1757

C- (304) 613 - 1757

F- (304) 472 - 4998

The information in this message may contain confidential material and is protected from disclosure. If this message has not reached its intended recipient or if you have received this message in error, please be notified that any review, retransmission, retention, dissemination, or other use of this message is strictly prohibited. If you are not the intended recipient, please notify the sender immediately by replying to this message and delete the information permanently from your system.

--

Robert Hinton

Executive Director
Upshur County Development Authority
30 East Main Street
Buckhannon, WV 26201
O- (304) 472 - 1757
C- (304) 613 - 1757
F- (304) 472 - 4998

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The Culture Center 1900 Kanawha Blvd., E. Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org Fax 304.558.2779 • TDD 304.558.3562

February 1, 2018

Mr. Robert Hinton **Executive Director** Upshur County Development Authority P.O. Box 2377 30 East Main Street Buckhannon, WV 26201

RE:

Mountain State Broadband Expressway AML Project

Phase A Sites

18-215-MULTI-1 FR#:

Dear Mr. Hinton:

We have reviewed the additional information that was submitted for the above referenced project. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

Per your request, we have reviewed the 15 alternative potential broadband tower locations provided via email on Monday, January 29, 2018 for the existence of cultural resources within the possible area of potential effect. This information was requested to assist in early planning efforts to evaluate location

Archaeological Resources:

Our records indicate that no previously documented archaeological sites are located at the coordinates provided for each of the potential broadband tower locations. In addition, available information indicates that most of the proposed tower sites are located within areas that have been previously surveyed or have been heavily disturbed. However, the proposed Big Creek Highwall and East Lynn Portals towers are located in areas that have the potential for archaeological sites and, in our opinion, should undergo a Phase I archaeological survey if selected as tower construction locations. The remaining proposed tower sites are, in our opinion, unlikely to contain significant archaeological resources.

Architectural Resources:

We have reviewed the submitted information and compiled a summary table for architectural resources within the potential indirect Area of Potential Effects (APE) around the alternative tower locations. Please see the attached table.

February 1, 2018 Mr. Hinton

FR#: 18-215-Multi-1

Page 2

We appreciate the opportunity to be of service. If you have questions regarding our comments or the Section 106 process, please contact Lora A. Lamarre-DeMott, Senior Archaeologist, or Benjamin M. Riggle, Structural Historian, at (304) 558-0240.

Sincerely,

Susan M. Pierce

Deputy State Historic Preservation Officer

SMP/LLD/BMR

Attachment: Copy of Alternate Sites Phase A_January_30_2018 table

cc: Rob Rice, WV Division of Environmental Protection Rick Buckley, Office of Surface Mining Larry Porter, Phoenix Resources, Inc.



The Culture Center 1900 Kanawha Blvd., E. Charleston, WV 25305-0300

Randall Reid-Smith, Commissioner

Phone 304.558.0220 • www.wvculture.org Fax 304.558.2779 • TDD 304.558.3562

December 20, 2017

Mr. Robert Hinton
Executive Director
Upshur County Development Authority
P.O. Box 2377
30 East Main Street
Buckhannon, WV 26201

RE:

Mountain State Broadband Expressway AML Project

Phase A Sites

FR#: 18-215-MULTI

Dear Mr. Hinton:

We have reviewed the information that was submitted for the above referenced project. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

Per your request, we have reviewed the 31 potential broadband tower locations provided via email on Friday, December 15, 2017 for the existence of cultural resources within the possible area of potential effect. This information was requested to assist in early planning efforts to evaluate location suitability.

Archaeological Resources:

A search of our records confirmed that no previously documented archaeological resources are located within the tower locations included in Phase A. Based on available information, it appears that most of the proposed tower sites are located on terrain that is steeply sloped, has been previously disturbed or contains severely eroded soils. However, four of the proposed tower sites, BB4 - East Bank (Garten), BB46 – East Lynn II, BB47 – Ada Linville, and BB49 – Jeffrey Mine Complex, appear to have some potential for archaeological sites to be present. These four should, in our opinion, undergo an archaeological survey if selected for tower construction. With the exception of BB4, BB46, BB47 and BB49, it is our opinion that the tower sites are unlikely to affect significant archaeological sites.

Architectural Resources:

We have reviewed the submitted information. It is our understanding the completed towers will stand between 200 and 400 feet in height. Based on 47 CFR Part 1, Appendix C, we applied a 0.75-mile radius around each proposed tower site to identify above-ground resources that are either listed in, eligible for, or potentially eligible for inclusion in the National Register of Historic Places. There are properties over 45 years of age within 0.75 miles of most of the proposed tower locations, and five (5) of the proposed tower locations are within 0.75 miles of resources listed in the National Register. Those include: Tower Site BB4 (John Harriman House – NR# 78002803); Tower Site BB6 (Mason-Drennen House – NR# 98001474); Tower Site BB54 (James Ellwood Jones House – NR# 92000306; Pocahontas Fuel

December 20, 2017 Mr. Hinton

FR#: 18-215-Multi

Page 2

Company Store - NR# 92000330; and Pocahontas Fuel Company Store/Norfolk Coal & Coke Company Store - NR# 92000324); Tower Site BB55 (Ashland Coal Company Store - NR# 05000399); and Tower Site BB59 (Ashland Coal Company Store - NR# 05000399). In addition, several of the proposed tower sites are within 0.75 miles of previously documented architectural resources. Please see the attached table for a summary of properties located within the described 0.75-mile area of potential visual effects

We appreciate the opportunity to be of service. If you have questions regarding our comments or the Section 106 process, please contact Lora A. Lamarre-DeMott, Senior Archaeologist, or Benjamin M. Riggle, Structural Historian, at (304) 558-0240.

Susan M. Pierce

Deputy State Historic Preservation Officer

SMP/LLD/BMR

Attachment: MSE AML_Phase A WV architectural resources12_18_17 table

cc: Rob Rice, WV Division of Environmental Protection Rick Buckley, Office of Surface Mining Larry Porter, Phoenix Resources, Inc.



Richardson, Mike <mrichardson@osmre.gov>

Tribal letter for Broadband programmatic agreement

1 message

Richardson, Mike <mri>chardson@osmre.gov>
To: "Pierce, Susan M" <susan.m.pierce@wv.gov>

Thu, Sep 13, 2018 at 1:37 PM

Susan, find attached a copy of one of the letters sent to the tribes for development of the proposed Broadband programmatic agreement. If you have any comments, please let me know. After the 30 day response period for the tribes, I am sure we will be seeking your guidance as we complete the PA. Thanks

Mike Richardson, Physical Scientist Office of Surface Mining Reclamation and Enforcement Charleston Field Office

Phone: 304-347-7162 x 3010 mrichardson@osmre.gov

P.A TRIBAL
LETTERS B

Broadband Tribal P-A letter.pdf



United States Department of the Interior



OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

1027 Virginia Street, East Charleston, West Virginia 25301

SEP 18 2018

Bill John Baker Principal Chief Cherokee Nation P.O. Box 948 Tahlequah, OK 74465

Subject: Initiation of Government-to-Government Consultation with Native American Tribal

Governments pursuant to Section 106 of the National Historic Preservation Act

Mountain State Broadband Expressway Project in West Virginia USDOI – Office of Surface Mining Reclamation and Enforcement

Dear Mr. Baker:

The US Department of Interior's Office of Surface Mining Reclamation and Enforcement (OSMRE) is formally initiating consultation with your Tribe under Section 106 of the National Historic Preservation Act (NHPA) (36 CFR 800.3) for the Mountain State Broadband Expressway Project (Proposed Project), described below. The primary purpose of government-to-government consultation, as described in Federal Executive Order 13175 "Consultation and Coordination with Indian Tribal Governments", is to ensure that Federally Recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed actions that could uniquely or significantly affect Tribes. Early identification of Tribal concerns allows the operator to consider ways to avoid and minimize potential impacts to Tribal resources and/or cultural practices during project planning and development. Earlier this year, consultation with your Tribe was completed for four towers with independent utility as Phase I of this project. This letter requests your Tribes interest in participating in the development of a programmatic agreement that will be used in the consultation process required for the remaining series of towers proposed under this project, utilizing Abandoned Mine Lands Pilot Project Grant (AMLPP) funding.

Proposed Project

OSMRE is providing financial assistance under its AMLPP grant to the Upshur County Development Authority (UCDA) to provide broadband internet access for unserved and underserved areas across West Virginia. The broadband towers will be controlled by a public entity, UCDA, with restrictive covenants placed on the towers into perpetuity to ensure open access and service to these areas. The layout and location for the series of towers are in the planning stages. The towers will ultimately require FCC license approvals. UCDA is not an FCC licensee, but will own and control the towers and facilitate a range of future access that could include microwave backhaul and fixed wireless services. Through coordination with FCC, OSMRE has accepted responsibility as the lead federal agency for the Section 106 consultation process for this undertaking, and is coordinating with FCC to ensure that the towers may be available for future collocations by FCC licensees and can complete Antenna Structure Registration. Because UCDA is not a FCC's licensee, and TCNS is a voluntary process, and as the West Virginia State Historic Preservation

Office does not use the TCNS, the OSMRE is utilizing formal letters for consultation with the Federally Recognized Tribes for West Virginia.

National Historic Preservation Act Consultation

The Proposed Project is subject to review under Section 106 of the National Historic Preservation Act (NHPA), 54 U.S.C. 306108, which requires Federal agencies to take into account the effects of their undertakings on cultural resources. OSMRE will be conducting professional cultural and archaeological reviews in accordance with Section 106 of the National Historic Preservation Act (36 CFR 800) and also consistent with the Nationwide Programmatic Agreement for Review of the Effects on Historic Properties For Certain Undertakings Approved by the Federal Communication Commission (FCC, ACHP, National SHPO, September 2004).

The planning, locations, and construction of the towers for this Project are being conducted in phases. OSMRE is drafting a Programmatic Agreement (PA) to address the potential effects of the project on historic resources. In accordance with 36 CFR § 800.2(c), OSMRE is requesting your input regarding potential cultural resources in the project area and your participation, if applicable, in the development of the PA. Since this project is funded and proposed in the interest of the public, OSMRE regrets that it is not in a position to reimburse your Tribe for any expenses incurred from your review.

The project proposes a series of towers to optimize broadband service throughout the state of WV, and the specific locations of the towers are still under development. Therefore, OSMRE is requesting that your tribe define the counties that are relative to your interests.

We understand that you may have concerns regarding the confidentiality of information on areas or resources of religious, traditional, and cultural importance to the Tribe. Any information provided would be used only to seek ways to avoid, minimize, or mitigate adverse effects to these resources. We would be happy to discuss the project, and any concerns, to develop procedures to ensure the confidentiality of such information is maintained.

If you would like to participate as a consulting party, and in the development of the Programmatic Agreement for the Mountain State Broadband Expressway Project, we respectfully request that you complete the enclosed Project Consultation form. Please forward the Consultation form and/or direct any questions about the Proposed Project to Mike Richardson, Physical Scientist by email at mrichardson@osmre.gov, by phone at 304-347-7162 x 3010, or by mail at the following address:

Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

We would appreciate receiving your comments regarding the proposed project within 30 days of the date of this letter. If comments are not received by October 18, 2018, we will conclude that your Tribe does not have any comments or resources of concern with the proposed project.

Thank you in advance for your coordination and assistance with this project.

Sincerely,

Roger Calhoun

Charleston Field Office Director

Office of Surface Mining Reclamation and Enforcement

Cc: Susan M. Pierce, WV State Historic Preservation Office Robert Hinton, Upshur County Development Authority

Enclosures

Tribal Government to Government Consultation Response Form

[Name of Tribe]	
[Tribal office address]	
Project Name: [Name]	
Federal/State Project Numbers: [Federal/State Proj	iect Numbers]
Please check a response, provide contact information, si designee listed below.	gn, and mail or email this form to OSM
The [Name of Tribe], a federally recognized tribe, w government-to-government relationship for this prop	
Please define the West Virginia counties of interest ((if possible):
Tribal Leader (Please print)	Telephone
Гribal Leader (Signature)	Date
f you have decided to consult, please identify a Tribal R	epresentative for the consultation.
Jame of Formal Tribal Representative (Please print)	Telephone
Name of Formal Tribal Representative (Signature)	Date

Tribal	Contact information:		
	Phone:	_	
	Fax:		
	e-mail:	40	
	Other: (please describe)		

Please mail or email Response Form to:

Mike Richardson Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

Email - mrichardson@osmre.gov



United States Department of the Interior

CE SURFACE AND ENGLISHED STATES

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

1027 Virginia Street, East Charleston, West Virginia 25301

SEP 18 2018

Kim Penrod Director of Cultural Resources The Delaware Nation P.O. Box 825 Anadarko, OK 73005

Subject: Initiation of Government-to-Government Consultation with Native American Tribal

Governments pursuant to Section 106 of the National Historic Preservation Act

Mountain State Broadband Expressway Project in West Virginia USDOI – Office of Surface Mining Reclamation and Enforcement

Dear Ms. Penrod:

The US Department of Interior's Office of Surface Mining Reclamation and Enforcement (OSMRE) is formally initiating consultation with your Tribe under Section 106 of the National Historic Preservation Act (NHPA) (36 CFR 800.3) for the Mountain State Broadband Expressway Project (Proposed Project), described below. The primary purpose of government-to-government consultation, as described in Federal Executive Order 13175 "Consultation and Coordination with Indian Tribal Governments", is to ensure that Federally Recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed actions that could uniquely or significantly affect Tribes. Early identification of Tribal concerns allows the operator to consider ways to avoid and minimize potential impacts to Tribal resources and/or cultural practices during project planning and development. Earlier this year, consultation with your Tribe was completed for four towers with independent utility as Phase I of this project. This letter requests your Tribes interest in participating in the development of a programmatic agreement that will be used in the consultation process required for the remaining series of towers proposed under this project, utilizing Abandoned Mine Lands Pilot Project Grant (AMLPP) funding.

Proposed Project

OSMRE is providing financial assistance under its AMLPP grant to the Upshur County Development Authority (UCDA) to provide broadband internet access for unserved and underserved areas across West Virginia. The broadband towers will be controlled by a public entity, UCDA, with restrictive covenants placed on the towers into perpetuity to ensure open access and service to these areas. The layout and location for the series of towers are in the planning stages. The towers will ultimately require FCC license approvals. UCDA is not an FCC licensee, but will own and control the towers and facilitate a range of future access that could include microwave backhaul and fixed wireless services. Through coordination with FCC, OSMRE has accepted responsibility as the lead federal agency for the Section 106 consultation process for this undertaking, and is coordinating with FCC to ensure that the towers may be available for future collocations by FCC licensees and can complete Antenna Structure Registration. Because UCDA is not a FCC's licensee, and TCNS is a voluntary process, and as the West Virginia State Historic Preservation

Office does not use the TCNS, the OSMRE is utilizing formal letters for consultation with the Federally Recognized Tribes for West Virginia.

National Historic Preservation Act Consultation

The Proposed Project is subject to review under Section 106 of the National Historic Preservation Act (NHPA), 54 U.S.C. 306108, which requires Federal agencies to take into account the effects of their undertakings on cultural resources. OSMRE will be conducting professional cultural and archaeological reviews in accordance with Section 106 of the National Historic Preservation Act (36 CFR 800) and also consistent with the Nationwide Programmatic Agreement for Review of the Effects on Historic Properties For Certain Undertakings Approved by the Federal Communication Commission (FCC, ACHP, National SHPO, September 2004).

The planning, locations, and construction of the towers for this Project are being conducted in phases. OSMRE is drafting a Programmatic Agreement (PA) to address the potential effects of the project on historic resources. In accordance with 36 CFR § 800.2(c), OSMRE is requesting your input regarding potential cultural resources in the project area and your participation, if applicable, in the development of the PA. Since this project is funded and proposed in the interest of the public, OSMRE regrets that it is not in a position to reimburse your Tribe for any expenses incurred from your review.

The project proposes a series of towers to optimize broadband service throughout the state of WV, and the specific locations of the towers are still under development. Therefore, OSMRE is requesting that your tribe define the counties that are relative to your interests.

We understand that you may have concerns regarding the confidentiality of information on areas or resources of religious, traditional, and cultural importance to the Tribe. Any information provided would be used only to seek ways to avoid, minimize, or mitigate adverse effects to these resources. We would be happy to discuss the project, and any concerns, to develop procedures to ensure the confidentiality of such information is maintained.

If you would like to participate as a consulting party, and in the development of the Programmatic Agreement for the Mountain State Broadband Expressway Project, we respectfully request that you complete the enclosed Project Consultation form. Please forward the Consultation form and/or direct any questions about the Proposed Project to Mike Richardson, Physical Scientist by email at mrichardson@osmre.gov, by phone at 304-347-7162 x 3010, or by mail at the following address:

Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

Thank you in advance for your coordination and assistance with this project.

Sincerely,

Roger Calhoun

Charleston Field Office Director

Office of Surface Mining Reclamation and Enforcement

Cc: Susan M. Pierce, WV State Historic Preservation Office Robert Hinton, Upshur County Development Authority

Enclosures

Tribal Government to Government Consultation Response Form

[Name of Tribe]	
[Tribal office address]	
Project Name: [Name]	
Federal/State Project Numbers: [Federal/State Project	ect Numbers]
Please check a response, provide contact information, signessignee listed below.	gn, and mail or email this form to OSMF
The [Name of Tribe], a federally recognized tribe, we government-to-government relationship for this proper	ould like to consult with OSMRE in a osed project.
Please define the West Virginia counties of interest (i	f possible):
The [Name of Tribe] has no interest associated with the is not required.	
Tribal Leader (Please print)	Telephone
Tribal Leader (Signature)	Date
If you have decided to consult, please identify a Tribal Re	epresentative for the consultation.
Name of Formal Tribal Representative (Please print)	Telephone
Name of Formal Tribal Representative (Signature)	Date

Triba	al Contact information:			
	Phone:	-		
	Fax:	_		
	e-mail:	 -		
	Other: (please describe)			

Please mail or email Response Form to:

Mike Richardson Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

Email - mrichardson@osmre.gov



United States Department of the Interior



OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

1027 Virginia Street, East Charleston, West Virginia 25301

SEP 18 2018

Dr. Brice Obermeyer
Director, DTHPO
Delaware Tribe of Indians of Oklahoma
Roosevelt Hall, Room 212,
1200 Commercial Street
Emporia, KS 66801

Subject: Initiation of Government-to-Government Consultation with Native American Tribal

Governments pursuant to Section 106 of the National Historic Preservation Act

Mountain State Broadband Expressway Project in West Virginia USDOI – Office of Surface Mining Reclamation and Enforcement

Dear Dr. Obermeyer:

The US Department of Interior's Office of Surface Mining Reclamation and Enforcement (OSMRE) is formally initiating consultation with your Tribe under Section 106 of the National Historic Preservation Act (NHPA) (36 CFR 800.3) for the Mountain State Broadband Expressway Project (Proposed Project), described below. The primary purpose of government-to-government consultation, as described in Federal Executive Order 13175 "Consultation and Coordination with Indian Tribal Governments", is to ensure that Federally Recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed actions that could uniquely or significantly affect Tribes. Early identification of Tribal concerns allows the operator to consider ways to avoid and minimize potential impacts to Tribal resources and/or cultural practices during project planning and development. Earlier this year, consultation with your Tribe was completed for four towers with independent utility as Phase I of this project. This letter requests your Tribes interest in participating in the development of a programmatic agreement that will be used in the consultation process required for the remaining series of towers proposed under this project, utilizing Abandoned Mine Lands Pilot Project Grant (AMLPP) funding.

Proposed Project

OSMRE is providing financial assistance under its AMLPP grant to the Upshur County Development Authority (UCDA) to provide broadband internet access for unserved and underserved areas across West Virginia. The broadband towers will be controlled by a public entity, UCDA, with restrictive covenants placed on the towers into perpetuity to ensure open access and service to these areas. The layout and location for the series of towers are in the planning stages. The towers will ultimately require FCC license approvals. UCDA is not an FCC licensee, but will own and control the towers and facilitate a range of future access that could include microwave backhaul and fixed wireless services. Through coordination with FCC, OSMRE has accepted responsibility as the lead federal agency for the Section 106 consultation process for this undertaking, and is coordinating with FCC to ensure that the towers may be available for future collocations by FCC licensees and can complete Antenna Structure Registration. Because UCDA is

not a FCC's licensee, and TCNS is a voluntary process, and as the West Virginia State Historic Preservation Office does not use the TCNS, the OSMRE is utilizing formal letters for consultation with the Federally Recognized Tribes for West Virginia.

National Historic Preservation Act Consultation

The Proposed Project is subject to review under Section 106 of the National Historic Preservation Act (NHPA), 54 U.S.C. 306108, which requires Federal agencies to take into account the effects of their undertakings on cultural resources. OSMRE will be conducting professional cultural and archaeological reviews in accordance with Section 106 of the National Historic Preservation Act (36 CFR 800) and also consistent with the Nationwide Programmatic Agreement for Review of the Effects on Historic Properties For Certain Undertakings Approved by the Federal Communication Commission (FCC, ACHP, National SHPO, September 2004).

The planning, locations, and construction of the towers for this Project are being conducted in phases. OSMRE is drafting a Programmatic Agreement (PA) to address the potential effects of the project on historic resources. In accordance with 36 CFR § 800.2(c), OSMRE is requesting your input regarding potential cultural resources in the project area and your participation, if applicable, in the development of the PA. Since this project is funded and proposed in the interest of the public, OSMRE regrets that it is not in a position to reimburse your Tribe for any expenses incurred from your review.

The project proposes a series of towers to optimize broadband service throughout the state of WV, and the specific locations of the towers are still under development. Therefore, OSMRE is requesting that your tribe define the counties that are relative to your interests.

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Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

Thank you in advance for your coordination and assistance with this project.

Sincerely,

Roger Calhoun

Charleston Field Office Director

Office of Surface Mining Reclamation and Enforcement

Cc: Susan M. Pierce, WV State Historic Preservation Office Robert Hinton, Upshur County Development Authority Enclosures

Tribal Government to Government Consultation Response Form

[Name of Tribe]	
[Tribal office address]	
Project Name: [Name]	
Federal/State Project Numbers: [Federal/State Project Numbers: [Federal/State Project Numbers]	ect Numbers]
Please check a response, provide contact information, sig designee listed below.	m, and mail or email this form to OSM
The [Name of Tribe], a federally recognized tribe, wo government-to-government relationship for this proposed	
Please define the West Virginia counties of interest (in	f possible):
Tribal Leader (Please print)	Telephone
Tribal Leader (Signature)	Date
f you have decided to consult, please identify a Tribal Re	epresentative for the consultation.
Name of Formal Tribal Representative (Please print)	Telephone
Jame of Formal Tribal Representative (Signature)	Date

Tribal Contact information:	
Phone:	_
Fax:	_
e-mail:	
Other: (please describe)	

Please mail or email Response Form to:

Mike Richardson Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

Email - mrichardson@osmre.gov



United States Department of the Interior

CONTROL SURFACE AND SURFACE AN

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

1027 Virginia Street, East Charleston, West Virginia 25301

SEP 18 2018

Russell Townsend, THPO Eastern Band of Cherokee Indians Qualla Boundary P.O. Box 455 Cherokee, NC 28719

Subject: Initiation of Government-to-Government Consultation with Native American Tribal

Governments pursuant to Section 106 of the National Historic Preservation Act

Mountain State Broadband Expressway Project in West Virginia USDOI – Office of Surface Mining Reclamation and Enforcement

Dear Mr. Townsend:

The US Department of Interior's Office of Surface Mining Reclamation and Enforcement (OSMRE) is formally initiating consultation with your Tribe under Section 106 of the National Historic Preservation Act (NHPA) (36 CFR 800.3) for the Mountain State Broadband Expressway Project (Proposed Project), described below. The primary purpose of government-to-government consultation, as described in Federal Executive Order 13175 "Consultation and Coordination with Indian Tribal Governments", is to ensure that Federally Recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed actions that could uniquely or significantly affect Tribes. Early identification of Tribal concerns allows the operator to consider ways to avoid and minimize potential impacts to Tribal resources and/or cultural practices during project planning and development. Earlier this year, consultation with your Tribe was completed for four towers with independent utility as Phase I of this project. This letter requests your Tribes interest in participating in the development of a programmatic agreement that will be used in the consultation process required for the remaining series of towers proposed under this project, utilizing Abandoned Mine Lands Pilot Project Grant (AMLPP) funding.

Proposed Project

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Office does not use the TCNS, the OSMRE is utilizing formal letters for consultation with the Federally Recognized Tribes for West Virginia.

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The project proposes a series of towers to optimize broadband service throughout the state of WV, and the specific locations of the towers are still under development. Therefore, OSMRE is requesting that your tribe define the counties that are relative to your interests.

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Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

Thank you in advance for your coordination and assistance with this project.

Sincerely,

Roger Calhoun

Charleston Field Office Director

Office of Surface Mining Reclamation and Enforcement

Cc: Susan M. Pierce, WV State Historic Preservation Office Robert Hinton, Upshur County Development Authority

Enclosures

Tribal Government to Government Consultation Response Form

[Name of Tribe]	
[Tribal office address]	
Project Name: [Name]	
Federal/State Project Numbers: [Federal/State]	Project Numbers]
Please check a response, provide contact information designee listed below.	n, sign, and mail or email this form to OSMR
The [Name of Tribe], a federally recognized tribe government-to-government relationship for this part of the part	e, would like to consult with OSMRE in a proposed project.
Please define the West Virginia counties of interest	est (if possible):
The [Name of Tribe] has no interest associated w is not required.	ith this proposed project and further consultation
Tribal Leader (Please print)	Telephone
Tribal Leader (Signature)	Date
f you have decided to consult, please identify a Triba	al Representative for the consultation.
Jame of Formal Tribal Representative (Please print)	Telephone
ame of Formal Tribal Representative (Signature)	Dete

Triba	l Contact information:		
	Phone:	20	
	Fax:		
	e-mail:	<u> </u>	
	Other: (please describe)		

Please mail or email Response Form to:

Mike Richardson Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

Email - mrichardson@osmre.gov



United States Department of the Interior

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OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

1027 Virginia Street, East Charleston, West Virginia 25301

SEP 18 2018

Glenna Wallace Chief, THPO Eastern Shawnee Tribe of Oklahoma 12705 S. 705 Road Wyandotte, OK 74370-3148

Subject: Initiation of Government-to-Government Consultation with Native American Tribal

Governments pursuant to Section 106 of the National Historic Preservation Act

Mountain State Broadband Expressway Project in West Virginia USDOI – Office of Surface Mining Reclamation and Enforcement

Dear Ms. Wallace:

The US Department of Interior's Office of Surface Mining Reclamation and Enforcement (OSMRE) is formally initiating consultation with your Tribe under Section 106 of the National Historic Preservation Act (NHPA) (36 CFR 800.3) for the Mountain State Broadband Expressway Project (Proposed Project), described below. The primary purpose of government-to-government consultation, as described in Federal Executive Order 13175 "Consultation and Coordination with Indian Tribal Governments", is to ensure that Federally Recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed actions that could uniquely or significantly affect Tribes. Early identification of Tribal concerns allows the operator to consider ways to avoid and minimize potential impacts to Tribal resources and/or cultural practices during project planning and development. Earlier this year, consultation with your Tribe was completed for four towers with independent utility as Phase I of this project. This letter requests your Tribes interest in participating in the development of a programmatic agreement that will be used in the consultation process required for the remaining series of towers proposed under this project, utilizing Abandoned Mine Lands Pilot Project Grant (AMLPP) funding.

Proposed Project

OSMRE is providing financial assistance under its AMLPP grant to the Upshur County Development Authority (UCDA) to provide broadband internet access for unserved and underserved areas across West Virginia. The broadband towers will be controlled by a public entity, UCDA, with restrictive covenants placed on the towers into perpetuity to ensure open access and service to these areas. The layout and location for the series of towers are in the planning stages. The towers will ultimately require FCC license approvals. UCDA is not an FCC licensee, but will own and control the towers and facilitate a range of future access that could include microwave backhaul and fixed wireless services. Through coordination with FCC, OSMRE has accepted responsibility as the lead federal agency for the Section 106 consultation process for this undertaking, and is coordinating with FCC to ensure that the towers may be available for future collocations by FCC licensees and can complete Antenna Structure Registration. Because UCDA is not a FCC's licensee, and TCNS is a voluntary process, and as the West Virginia State Historic Preservation

Office does not use the TCNS, the OSMRE is utilizing formal letters for consultation with the Federally Recognized Tribes for West Virginia.

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Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

Thank you in advance for your coordination and assistance with this project.

Sincerely,

Roger Calhoun

Charleston Field Office Director

Office of Surface Mining Reclamation and Enforcement

Cc: Susan M. Pierce, WV State Historic Preservation Office Robert Hinton, Upshur County Development Authority

Enclosures

Tribal Government to Government Consultation Response Form

[Tribal office address]	
[syree waar only	
Project Name: [Name]	
Federal/State Project Numbers: [Federal/State Project	t Numbers]
Please check a response, provide contact information, sign, designee listed below.	, and mail or email this form to OSMF
The [Name of Tribe], a federally recognized tribe, woul government-to-government relationship for this propose	ld like to consult with OSMRE in a ed project.
Please define the West Virginia counties of interest (if p	possible):
Tribula de Colombia	· · · · · · · · · · · · · · · · · · ·
Tribal Leader (Please print)	Telephone
Tribal Leader (Signature)	Date
If you have decided to consult, please identify a Tribal Repr	resentative for the consultation.
Name of Formal Tribal Representative (Please print)	Telephone

Γrit	oal Contact information:	
	Phone:	
	Fax:	
	e-mail:	
	Other: (please describe)	

Please mail or email Response Form to:

Mike Richardson Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

Email - mrichardson@osmre.gov



United States Department of the Interior

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OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

1027 Virginia Street, East Charleston, West Virginia 25301

SEP 18 2018

Gary Loonsfoot Director, THPO Keweenaw Bay Indian Community 107 Beartown Road Baraga, MI 49908

Subject: Initiation of Government-to-Government Consultation with Native American Tribal

Governments pursuant to Section 106 of the National Historic Preservation Act

Mountain State Broadband Expressway Project in West Virginia USDOI – Office of Surface Mining Reclamation and Enforcement

Dear Mr. Loonsfoot:

The US Department of Interior's Office of Surface Mining Reclamation and Enforcement (OSMRE) is formally initiating consultation with your Tribe under Section 106 of the National Historic Preservation Act (NHPA) (36 CFR 800.3) for the Mountain State Broadband Expressway Project (Proposed Project), described below. The primary purpose of government-to-government consultation, as described in Federal Executive Order 13175 "Consultation and Coordination with Indian Tribal Governments", is to ensure that Federally Recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed actions that could uniquely or significantly affect Tribes. Early identification of Tribal concerns allows the operator to consider ways to avoid and minimize potential impacts to Tribal resources and/or cultural practices during project planning and development. Earlier this year, consultation with your Tribe was completed for four towers with independent utility as Phase I of this project. This letter requests your Tribes interest in participating in the development of a programmatic agreement that will be used in the consultation process required for the remaining series of towers proposed under this project, utilizing Abandoned Mine Lands Pilot Project Grant (AMLPP) funding.

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Office does not use the TCNS, the OSMRE is utilizing formal letters for consultation with the Federally Recognized Tribes for West Virginia.

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The project proposes a series of towers to optimize broadband service throughout the state of WV, and the specific locations of the towers are still under development. Therefore, OSMRE is requesting that your tribe define the counties that are relative to your interests.

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Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

Thank you in advance for your coordination and assistance with this project.

Sincerely,

Roger Calhoun

Charleston Field Office Director

Office of Surface Mining Reclamation and Enforcement

Cc: Susan M. Pierce, WV State Historic Preservation Office Robert Hinton, Upshur County Development Authority

Enclosures

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[Name of Tribe]	
[Tribal office address]	
Project Name: [Name]	
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Please define the West Virginia counties of interest (if	f possible):
The [Name of Tribe] has no interest associated with the is not required.	nis proposed project and further consultation
Tribal Leader (Please print)	Telephone
	1
Tribal Leader (Signature)	Date
If you have decided to consult, please identify a Tribal Re	epresentative for the consultation.
Name of Formal Tribal Representative (Please print)	Telephone

Trib	al Contact information:			
	Phone:			
	Fax:			
	e-mail:	_		
	Other: (please describe)			

Please mail or email Response Form to:

Mike Richardson Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

Email - mrichardson@osmre.gov



United States Department of the Interior



OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

1027 Virginia Street, East Charleston, West Virginia 25301

SEP 18 2018

Dr. Andrea A. Hunter Director, THPO Osage Nation 627 Grandview Avenue Pawhuska, OK 74056

Subject: Initiation of Government-to-Government Consultation with Native American Tribal

Governments pursuant to Section 106 of the National Historic Preservation Act

Mountain State Broadband Expressway Project in West Virginia USDOI – Office of Surface Mining Reclamation and Enforcement

Dear Dr. Hunter:

The US Department of Interior's Office of Surface Mining Reclamation and Enforcement (OSMRE) is formally initiating consultation with your Tribe under Section 106 of the National Historic Preservation Act (NHPA) (36 CFR 800.3) for the Mountain State Broadband Expressway Project (Proposed Project), described below. The primary purpose of government-to-government consultation, as described in Federal Executive Order 13175 "Consultation and Coordination with Indian Tribal Governments", is to ensure that Federally Recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed actions that could uniquely or significantly affect Tribes. Early identification of Tribal concerns allows the operator to consider ways to avoid and minimize potential impacts to Tribal resources and/or cultural practices during project planning and development. Earlier this year, consultation with your Tribe was completed for four towers with independent utility as Phase I of this project. This letter requests your Tribes interest in participating in the development of a programmatic agreement that will be used in the consultation process required for the remaining series of towers proposed under this project, utilizing Abandoned Mine Lands Pilot Project Grant (AMLPP) funding.

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Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

Thank you in advance for your coordination and assistance with this project.

Sincerely,

Roger Calhoun

Charleston Field Office Director

Office of Surface Mining Reclamation and Enforcement

Cc: Susan M. Pierce, WV State Historic Preservation Office Robert Hinton, Upshur County Development Authority

Enclosures

Tribal Government to Government Consultation Response Form

[Name of Tribe]	
[Tribal office address]	
Project Name: [Name]	
Federal/State Project Numbers: [Federal/State Project	t Numbers]
Please check a response, provide contact information, sign designee listed below.	a, and mail or email this form to OSMR
The [Name of Tribe], a federally recognized tribe, wou government-to-government relationship for this propos	
Please define the West Virginia counties of interest (if	possible):
Tribal Leader (Please print)	Telephone
Tribal Leader (Signature)	Date
f you have decided to consult, please identify a Tribal Rep	presentative for the consultation.
Tame of Formal Tribal Representative (Please print)	Telephone

Fribal Contact information: Phone: Fax: e-mail:		
Phone:		
Fax:		
e-mail:	- A - 1	
Other: (please describe)		

Please mail or email Response Form to:

Mike Richardson Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

Email - mrichardson@osmre.gov



United States Department of the Interior



OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

1027 Virginia Street, East Charleston, West Virginia 25301

SEP 18 2018

William Tarrant Director, THPO Seneca Cayuga Nation 23701 S. 655 Road, 10 Hwy Grove, OK 74344

Subject: Initiation of Government-to-Government Consultation with Native American Tribal

Governments pursuant to Section 106 of the National Historic Preservation Act

Mountain State Broadband Expressway Project in West Virginia USDOI – Office of Surface Mining Reclamation and Enforcement

Dear Mr. Tarrant:

The US Department of Interior's Office of Surface Mining Reclamation and Enforcement (OSMRE) is formally initiating consultation with your Tribe under Section 106 of the National Historic Preservation Act (NHPA) (36 CFR 800.3) for the Mountain State Broadband Expressway Project (Proposed Project), described below. The primary purpose of government-to-government consultation, as described in Federal Executive Order 13175 "Consultation and Coordination with Indian Tribal Governments", is to ensure that Federally Recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed actions that could uniquely or significantly affect Tribes. Early identification of Tribal concerns allows the operator to consider ways to avoid and minimize potential impacts to Tribal resources and/or cultural practices during project planning and development. Earlier this year, consultation with your Tribe was completed for four towers with independent utility as Phase I of this project. This letter requests your Tribes interest in participating in the development of a programmatic agreement that will be used in the consultation process required for the remaining series of towers proposed under this project, utilizing Abandoned Mine Lands Pilot Project Grant (AMLPP) funding.

Proposed Project

OSMRE is providing financial assistance under its AMLPP grant to the Upshur County Development Authority (UCDA) to provide broadband internet access for unserved and underserved areas across West Virginia. The broadband towers will be controlled by a public entity, UCDA, with restrictive covenants placed on the towers into perpetuity to ensure open access and service to these areas. The layout and location for the series of towers are in the planning stages. The towers will ultimately require FCC license approvals. UCDA is not an FCC licensee, but will own and control the towers and facilitate a range of future access that could include microwave backhaul and fixed wireless services. Through coordination with FCC, OSMRE has accepted responsibility as the lead federal agency for the Section 106 consultation process for this undertaking, and is coordinating with FCC to ensure that the towers may be available for future collocations by FCC licensees and can complete Antenna Structure Registration. Because UCDA is not a FCC's licensee, and TCNS is a voluntary process, and as the West Virginia State Historic Preservation

Office does not use the TCNS, the OSMRE is utilizing formal letters for consultation with the Federally Recognized Tribes for West Virginia.

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The planning, locations, and construction of the towers for this Project are being conducted in phases. OSMRE is drafting a Programmatic Agreement (PA) to address the potential effects of the project on historic resources. In accordance with 36 CFR § 800.2(c), OSMRE is requesting your input regarding potential cultural resources in the project area and your participation, if applicable, in the development of the PA. Since this project is funded and proposed in the interest of the public, OSMRE regrets that it is not in a position to reimburse your Tribe for any expenses incurred from your review.

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Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

Thank you in advance for your coordination and assistance with this project.

Sincerely,

Roger Calhoun

Charleston Field Office Director

Office of Surface Mining Reclamation and Enforcement

Cc: Susan M. Pierce, WV State Historic Preservation Office Robert Hinton, Upshur County Development Authority

Enclosures

Tribal Government to Government Consultation Response Form

[Name of Tribe]	
[Tribal office address]	
Project Name: [Name]	
Federal/State Project Numbers: [Federal/State Project	t Numbers]
Please check a response, provide contact information, sign designee listed below.	, and mail or email this form to OSMF
The [Name of Tribe], a federally recognized tribe, wou government-to-government relationship for this propose	
Please define the West Virginia counties of interest (if p	possible):
is not required. Tribal Leader (Please print)	Telephone
Tribul Zeuter (Trease print)	receptione
Tribal Leader (Signature)	Date
If you have decided to consult, please identify a Tribal Rep	resentative for the consultation.
Name of Formal Tribal Representative (Please print)	Telephone
Name of Formal Tribal Representative (Signature)	Date

Tribal Contact information:		
Phone:		
Fax:	_	
e-mail:		
Other: (please describe)		

Please mail or email Response Form to:

Mike Richardson Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

Email - mrichardson@osmre.gov



United States Department of the Interior



OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

1027 Virginia Street, East Charleston, West Virginia 25301 SEP 18 2018

Tonya Tipton, THPO Shawnee Tribe P.O. Box 189 Miami, OK 74355

Subject: Initiation of Government-to-Government Consultation with Native American Tribal

Governments pursuant to Section 106 of the National Historic Preservation Act

Mountain State Broadband Expressway Project in West Virginia USDOI – Office of Surface Mining Reclamation and Enforcement

Dear Ms. Tipton:

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Proposed Project

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Thank you in advance for your coordination and assistance with this project.

Sincerely,

Roger Calhoun

Charleston Field Office Director

Office of Surface Mining Reclamation and Enforcement

Cc: Susan M. Pierce, WV State Historic Preservation Office

Robert Hinton, Upshur County Development Authority

Enclosures

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possible):
Telephone
Telephone
Date
presentative for the consultation.
Telephone
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Tribal Contact information:	
Phone:	
Fax:	
e-mail:	
Other: (please describe)	

Please mail or email Response Form to:

Mike Richardson Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

Email - mrichardson@osmre.gov



United States Department of the Interior

OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

1027 Virginia Street, East Charleston, West Virginia 25301

SEP 18 2018



Subject: Initiation of Government-to-Government Consultation with Native American Tribal

Governments pursuant to Section 106 of the National Historic Preservation Act

Mountain State Broadband Expressway Project in West Virginia USDOI – Office of Surface Mining Reclamation and Enforcement

Dear Mr. Bunch:

The US Department of Interior's Office of Surface Mining Reclamation and Enforcement (OSMRE) is formally initiating consultation with your Tribe under Section 106 of the National Historic Preservation Act (NHPA) (36 CFR 800.3) for the Mountain State Broadband Expressway Project (Proposed Project), described below. The primary purpose of government-to-government consultation, as described in Federal Executive Order 13175 "Consultation and Coordination with Indian Tribal Governments", is to ensure that Federally Recognized Tribes are given the opportunity to provide meaningful and timely input regarding proposed actions that could uniquely or significantly affect Tribes. Early identification of Tribal concerns allows the operator to consider ways to avoid and minimize potential impacts to Tribal resources and/or cultural practices during project planning and development. Earlier this year, consultation with your Tribe was completed for four towers with independent utility as Phase I of this project. This letter requests your Tribes interest in participating in the development of a programmatic agreement that will be used in the consultation process required for the remaining series of towers proposed under this project, utilizing Abandoned Mine Lands Pilot Project Grant (AMLPP) funding.

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Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

We would appreciate receiving your comments regarding the proposed project within 30 days of the date of this letter. If comments are not received by October 18, 2018, we will conclude that your Tribe does not have any comments or resources of concern with the proposed project.

Thank you in advance for your coordination and assistance with this project.

Sincerely,

Roger Calhoun

Charleston Field Office Director

Office of Surface Mining Reclamation and Enforcement

Cc: Susan M. Pierce, WV State Historic Preservation Office

Robert Hinton, Upshur County Development Authority

Enclosures

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[Tribal office address]	
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Federal/State Project Numbers: [Federal/State Project	t Numbers]
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The [Name of Tribe], a federally recognized tribe, wou government-to-government relationship for this propos	ald like to consult with OSMRE in a sed project.
Please define the West Virginia counties of interest (if	possible):
The [Name of Tribe] has no interest associated with this is not required. Tribal Leader (Please print)	
Thoat Leader (Flease print)	Telephone
Tribal Leader (Signature)	Date
f you have decided to consult, please identify a Tribal Rep	presentative for the consultation.
Name of Formal Tribal Representative (Please print)	Telephone
Jame of Formal Tribal Representative (Signature)	Data

Trib	al Contact information:	
	Phone:	_
	Fax:	_
	e-mail:	<u>-</u>
	Other: (please describe)	

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Email - mrichardson@osmre.gov



United States Department of the Interior



OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

1027 Virginia Street, East Charleston, West Virginia 25301

SEP 18 2018

Sherri Clemons, THPO Wyandotte Nation 64700 E. Highway 60 Wyandotte, OK 74370

Subject: Initiation of Government-to-Government Consultation with Native American Tribal

Governments pursuant to Section 106 of the National Historic Preservation Act

Mountain State Broadband Expressway Project in West Virginia USDOI – Office of Surface Mining Reclamation and Enforcement

Dear Ms. Clemons:

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Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

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Thank you in advance for your coordination and assistance with this project.

Sincerely,

Roger Calhoun

Charleston Field Office Director

Office of Surface Mining Reclamation and Enforcement

Cc: Susan M. Pierce, WV State Historic Preservation Office Robert Hinton, Upshur County Development Authority

Enclosures

Tribal Government to Government Consultation Response Form

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if possible):
his proposed project and further consultation
-13 proposed project and further consultatio
Telephone
Date
epresentative for the consultation.
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Telephone
Telephone
Telephone

Trib	al Contact information:		
	Phone:		
	Fax:		
	e-mail:		
	Other: (please describe)		

Please mail or email Response Form to:

Mike Richardson Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

Email - mrichardson@osmre.gov



United States Department of the Interior

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OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

1027 Virginia Street, East Charleston, West Virginia 25301

SEP 18 2018

Edith Leoso, THPO Bad River Band of Lake Superior Chippewa Indians P.O. Box 39 Odanah, WI 54861

Subject: Initiation of Government-to-Government Consultation with Native American Tribal

Governments pursuant to Section 106 of the National Historic Preservation Act

Mountain State Broadband Expressway Project in West Virginia USDOI – Office of Surface Mining Reclamation and Enforcement

Dear Ms. Leoso:

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Sincerely,

Roger Calhoun

Charleston Field Office Director

Office of Surface Mining Reclamation and Enforcement

Cc: Susan M. Pierce, WV State Historic Preservation Office

Robert Hinton, Upshur County Development Authority

Enclosures

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[Tribal office address]	
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Federal/State Project Numbers: [Federal/State Project	ect Numbers]
Please check a response, provide contact information, signlesignee listed below.	gn, and mail or email this form to OSM
The [Name of Tribe], a federally recognized tribe, we government-to-government relationship for this prop	
Please define the West Virginia counties of interest (if possible):
Tribal Leader (Please print)	Telephone
Tribal Leader (Signature)	Date
If you have decided to consult, please identify a Tribal R	epresentative for the consultation.
Name of Formal Tribal Representative (Please print)	Telephone

Tribal Contact information:		
Phone:		
Fax:	<u> </u>	
e-mail:	_	
Other: (please describe)		

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Email - mrichardson@osmre.gov



United States Department of the Interior

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OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

1027 Virginia Street, East Charleston, West Virginia 25301 SEP 1 8 2018

Caitlin Totherow, THPO Catawba Indian Nation 1536 Tom Steven Road Rock Hill, SC 29730

Subject: Initiation of Government-to-Government Consultation with Native American Tribal

Governments pursuant to Section 106 of the National Historic Preservation Act

Mountain State Broadband Expressway Project in West Virginia USDOI – Office of Surface Mining Reclamation and Enforcement

Dear Ms. Totherow:

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Proposed Project

OSMRE is providing financial assistance under its AMLPP grant to the Upshur County Development Authority (UCDA) to provide broadband internet access for unserved and underserved areas across West Virginia. The broadband towers will be controlled by a public entity, UCDA, with restrictive covenants placed on the towers into perpetuity to ensure open access and service to these areas. The layout and location for the series of towers are in the planning stages. The towers will ultimately require FCC license approvals. UCDA is not an FCC licensee, but will own and control the towers and facilitate a range of future access that could include microwave backhaul and fixed wireless services. Through coordination with FCC, OSMRE has accepted responsibility as the lead federal agency for the Section 106 consultation process for this undertaking, and is coordinating with FCC to ensure that the towers may be available for future collocations by FCC licensees and can complete Antenna Structure Registration. Because UCDA is not a FCC's licensee, and TCNS is a voluntary process, and as the West Virginia State Historic Preservation

Office does not use the TCNS, the OSMRE is utilizing formal letters for consultation with the Federally Recognized Tribes for West Virginia.

National Historic Preservation Act Consultation

The Proposed Project is subject to review under Section 106 of the National Historic Preservation Act (NHPA), 54 U.S.C. 306108, which requires Federal agencies to take into account the effects of their undertakings on cultural resources. OSMRE will be conducting professional cultural and archaeological reviews in accordance with Section 106 of the National Historic Preservation Act (36 CFR 800) and also consistent with the Nationwide Programmatic Agreement for Review of the Effects on Historic Properties For Certain Undertakings Approved by the Federal Communication Commission (FCC, ACHP, National SHPO, September 2004).

The planning, locations, and construction of the towers for this Project are being conducted in phases. OSMRE is drafting a Programmatic Agreement (PA) to address the potential effects of the project on historic resources. In accordance with 36 CFR § 800.2(c), OSMRE is requesting your input regarding potential cultural resources in the project area and your participation, if applicable, in the development of the PA. Since this project is funded and proposed in the interest of the public, OSMRE regrets that it is not in a position to reimburse your Tribe for any expenses incurred from your review.

The project proposes a series of towers to optimize broadband service throughout the state of WV, and the specific locations of the towers are still under development. Therefore, OSMRE is requesting that your tribe define the counties that are relative to your interests.

We understand that you may have concerns regarding the confidentiality of information on areas or resources of religious, traditional, and cultural importance to the Tribe. Any information provided would be used only to seek ways to avoid, minimize, or mitigate adverse effects to these resources. We would be happy to discuss the project, and any concerns, to develop procedures to ensure the confidentiality of such information is maintained.

If you would like to participate as a consulting party, and in the development of the Programmatic Agreement for the Mountain State Broadband Expressway Project, we respectfully request that you complete the enclosed Project Consultation form. Please forward the Consultation form and/or direct any questions about the Proposed Project to Mike Richardson, Physical Scientist by email at mrichardson@osmre.gov, by phone at 304-347-7162 x 3010, or by mail at the following address:

Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

We would appreciate receiving your comments regarding the proposed project within 30 days of the date of this letter. If comments are not received by October 18, 2018, we will conclude that your Tribe does not have any comments or resources of concern with the proposed project.

Thank you in advance for your coordination and assistance with this project.

Sincerely,

Roger Calhoun

Charleston Field Office Director

Office of Surface Mining Reclamation and Enforcement

Cc: Susan M. Pierce, WV State Historic Preservation Office Robert Hinton, Upshur County Development Authority Enclosures

<u>Tribal Government to Government Consultation Response Form</u>

	[Name of Tribe]	
	[Tribal office address]	
	Project Name: [Name]	
	Federal/State Project Numbers: [Federal/State Project I	Numbers]
Plea desi	ase check a response, provide contact information, sign, gnee listed below.	and mail or email this form to OSMR
•	The [Name of Tribe], a federally recognized tribe, would government-to-government relationship for this proposed	
	Please define the West Virginia counties of interest (if po	ossible):
	The [Name of Tribe] has no interest associated with this is not required.	proposed project and further consultation
		· · · · · · · · · · · · · · · · · · ·
Triba	l Leader (Please print)	Telephone
Γribal	l Leader (Signature)	Date
151		
f you	a have decided to consult, please identify a Tribal Repre	esentative for the consultation.
Vame	of Formal Tribal Representative (Please print)	Telephone
ame	of Formal Tribal Representative (Signature)	Date

Γrit	oal Contact information:	
	Phone:	
	Fax:	_
	e-mail:	_
	Other: (please describe)	2

Please mail or email Response Form to:

Mike Richardson Office of Surface Mining Reclamation and Enforcement Charleston Field Office 1027 Virginia Street, East Charleston, West Virginia 25301

Email - mrichardson@osmre.gov

Appendix C

Appendix C Laws and Executive Orders Relevant to Mountain State Broadband Expressway AML Pilot Project

Federal Laws

National Environmental Policy Act (NEPA)

NEPA, 42 U.S.C. §§ 4321 et seq., requires federal agencies to fully consider the impacts of proposals that would affect the human environment before making a decision to take an action. The NEPA process "help[s] public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment" (40 C.F.R. § 1500.1). NEPA and its implementing regulations do not dictate what decision an agency must make about actions affecting the environment. After the NEPA process has been followed, an agency may choose to take an action with adverse environmental impacts, even if those impacts are severe. NEPA also requires federal agencies to involve the interested and affected public in decision-making processes.

NEPA established the Council on Environmental Quality (CEQ) to ensure federal agencies meet their NEPA obligations. As part of that responsibility, CEQ issued regulations to further clarify agencies' NEPA responsibilities. These regulations are codified at 40 C.F.R. §§ 1500 to 1508. These regulations set forth the process that federal agencies must follow when proposing to take actions that have environmental impacts. CEQ's regulations require each federal agency to adopt procedures to implement NEPA. In 2008, DOI published its final NEPA implementation procedures and are found at 43 C.F.R. Part 46. These regulations supplement CEQ's regulations and set out Departmental procedures for compliance with NEPA.

Pursuant to NEPA and the CEQ regulations, agency processes document the analyses resulting from proposed federal actions, informs decision makers and the public of reasonable alternatives capable of avoiding or minimizing adverse impacts, and serve as a decision-aiding mechanism to ensure that the policies and goals of NEPA are infused into federal agency actions. NEPA documents integrate as many of the natural and social sciences as relevant to pending decisions and based on the potential effects of the proposed actions. The direct, indirect, and cumulative impacts of the proposed action are analyzed at an appropriate level of detail.

Endangered Species Act of 1973, as amended (ESA)

Under the ESA of 1973 as amended, 16 U.S.C. §§ 1531 – 1544, all federal agencies must conserve listed threatened and endangered species and will use their authorities in furtherance of the purposes of the ESA as set forth in 16 U.S.C. §1531(c) (Section 2(c)). Depending on the species, the United States Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NMFS) are charged with implementation and enforcement of the ESA, including development of recovery plans for listed species. These

agencies provide protection for these listed species and their habitats by developing and implementing recovery plans to improve species status, and ultimately "delisting" these species and returning full management authority of the species to the states or tribes when warranted. The USFWS/NMFS can issue permits providing for various activities, including scientific research, enhancement of propagation or survival, and take incidental to conducting other activities, while minimizing potential harm to the listed species.

Additionally, 16 U.S.C. §1536 (a)(1) (Section 7 (a)(1)) of the ESA charges federal agencies to aid in the conservation of listed species, and 16 U.S.C. § 1536 (a)(2) (Section 7 (a)(2)) requires the federal agencies, through consultation with USFWS/NMFS to ensure that "any action authorized, funded or carried out by such an agency is not likely to jeopardize the continued existence of any endangered or threatened species" or destroy or adversely modify their critical habitat.

National Historic Preservation Act (NHPA) of 1966, as amended

The NHPA at 54 U.S.C. §§ 300101-307108, and the implementing regulations at 36 C.F.R. Part 800, require Federal agencies to take into account the effect of their actions on historic properties and provide the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on those effects. Section 106 of the NHPA (54 U.S.C. § 306108), requires federal agencies to initiate an evaluation and consultation if the agency determines that its actions are an undertaking. Pursuant to 36 C.F.R. § 800.16(y), an "undertaking" is defined as a "project, activity or program funded in whole or part under the direct or indirect jurisdiction of a federal agency". For undertakings for which Section 106 is applicable, OSMRE must complete the consultation process to comply with statutory requirements. The ACHP and each state's State Historic Preservation Officer (SHPO) or the tribal government Tribal Historic Preservation Officer (THPO) are the primary entities consulted. If an individual activity with the potential to affect historic resources were planned, the site-specific consultation as required by Section 106 of the NHPA would be conducted with the SHPO or THPO as necessary.

Migratory Bird Treaty Act (MBTA)

The MBTA, as amended, 16 U.S.C. §§ 703-712, prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the USFWS. The MBTA implements four international conservation treaties that the U.S. entered into with Canada in 1916, Mexico in 1936, Japan in 1972 and Russia in 1976. It is intended to ensure the sustainability of populations of all protected migratory bird species.

Bald and Golden Eagle Protection Act (BGEPA).

This law provides special protection for bald and golden eagles. Similar to the Migratory Bird Treaty Act, BGEPA (16 U.S.C. 668 et seq.) prohibits the taking of bald or golden eagles unless permitted by the Department of the Interior. The term "take" in the Act is defined as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." Disturb is defined as any activity that can result in injury to an eagle, or cause nest abandonment or decrease in

productivity by impacting breeding, feeding, or sheltering behavior.

Clean Water Act (CWA)

The CWA, 33 U.S.C. § 1251 et seq. establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The United States Environmental Protection Agency (EPA) developed national water quality criteria recommendations for pollutants in surface waters.

The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained. EPA's National Pollutant Discharge Elimination System (NPDES) permit program controls discharges. Industrial, municipal, and other facilities must obtain NPDES permits if their discharges go directly to surface waters.

Section 404 (33 U.S.C. § 1344) of the CWA prohibits the discharge of dredged or fill material into waters of the United States without a permit from the United States Army Corps of Engineers (USACE) unless the specific activity is exempted in 33 CFR Part 323 or covered by a nationwide permit in 33 CFR Part 330.

As required by Section 401 of the CWA (33 U.S.C. § 1341), an applicant for a permit issued pursuant to Section 404, must also possess a permit from the state in which the discharge originates or will originate, when applicable. The USACE is responsible for reviewing Water Quality Certification applications required by Section 401. The USACE developed the requirements of the Water Quality Certification process to be compliant with the State's water quality policy.

Clean Air Act (CLA)

The CLA, 42 U.S.C. § 7401 et seq. requires EPA to set National Ambient Air Quality Standards (NAAQS) (40 C.F.R.Part 50) for pollutants considered harmful to public health and the environment. EPA has set air quality standards for six common "criteria pollutants": particulate matter (also known as particle pollution), ozone, sulfur dioxide, nitrogen dioxide, carbon monoxide, and lead. The CLA identifies two types of NAAQS. Primary standards provide public health protection, including protecting the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards provide public health welfare protection, including protection against decreased visibility and damage to animals, vegetation, and buildings.

In addition, States are required to adopt enforceable plans to achieve and maintain air quality meeting the air quality standards. State plans also must control emissions that drift across state lines and harm air quality in downwind states.

Farmland Protection Policy Act (FPPA)

The FPPA, 7 U.S.C. § 4202, is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. Farmland includes

prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forest land, pastureland, cropland, or other land, but not water or urban built-up land. The FPPA assures that, to the extent practicable, federal programs are administered to be compatible with state/local units of government, and private programs and policies to protect farmland. Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed or assisted by a federal agency, including providing financing or loans.

Presidential Executive Orders

Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations - Executive Order (EO) 12898 as amended.

EO 12898 promotes the equitable treatment of people of all races, income levels, and cultures with respect to the development and implementation of federal actions, and enforcement of environmental laws, regulations, and policies. EO 12898 requires federal agencies to make environmental justice part of their mission, and to identify and address, when appropriate, disproportionately high and adverse human health and environmental effects of federal programs, policies, and activities on minority and low-income persons or populations.

Flood Plain Management – EO 11988, as amended

EO 11988 requires federal agencies to avoid, to the extent possible, the long- and short-term adverse effects associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. In accomplishing this objective, "each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by flood plains in carrying out its responsibilities."

Protection of Wetlands - EO 11990, as amended.

Executive Order 11990 was signed to "minimize the destruction, loss or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands." To meet those objectives, EO 11990 requires federal agencies to consider alternatives to wetland sites, in planning their actions, and to limit potential damage, if a federal agency cannot avoid an activity affecting a wetland.

Consultation and Coordination with Indian Tribal Governments - EO 13175

This EO directs federal agencies to provide federally recognized tribes the opportunity for government-to-government consultation and coordination in policy development and program activities that may have direct and substantial effects on their tribe. Its purpose is to ensure that

tribal perspectives on the social, cultural, economic, and ecological aspects of agriculture, as well as tribal food and natural-resource priorities and goals, are heard and fully considered in the decision-making processes of all parts of the Federal Government.

Protection of Children from Environmental Health Risks and Safety Risks – EO 13045, as amended.

This EO applies to economically significant rules under EO 12866 that concern an environmental health or safety risk that the Environmental Protection Agency (EPA) has reason to believe may disproportionately affect children. Environmental health risks or safety risks refer to risks to health or safety that are attributable to products or substances that the child is likely to come in contact with or ingest (such as the air we breathe, the food we eat, the water we drink or are exposed to). When promulgating a rule of this description, EPA must evaluate the effects of the planned regulation on children and explain why the regulation is preferable to potentially effective and reasonably feasible alternatives.